YEAR BOOK AUSTRALIA 1995

IAN CASTLES
Australian Statistician

NUMBER 77

AUSTRALIAN BUREAU OF STATISTICS
CANBERRA

ABS Catalogue No. 1301.0 (case bound)

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ISSN 0810-8633

This book is in International B5 format, the text is set in 9 on 10 point Times Roman and printed on 80 gsm Precision Offset paper.

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Preface

Year Book Australia is the principal reference work produced by the Central Office of the Australian Bureau of Statistics (ABS). It provides a comprehensive and detailed statistical review of various aspects of the economy and social conditions in Australia, together with their administrative and legislative background. In addition, it contains descriptive matter dealing with Australia's government, international relations, defence, geography and climate.

The first *Official Year Book of the Commonwealth* was published in 1908, although individual Australian States and colonies had been producing year books for several decades before that. *Year Book Australia 1995* is issued under the authority of the Commonwealth Government.

The statistics contained in this volume are the most recent available at the time of its preparation. More detailed and, in many cases, more recent statistics are available in the publications of the ABS and other organisations. The sources of information are shown throughout and at the end of chapters of the *Year Book*, while the ABS *Catalogue of Publications and Products* (1101.0) lists all current publications of the ABS.

Each year a number of *Special Articles* appear in the *Year Book*, which are listed in the Table of Contents.

I extend my thanks and appreciation to all those officers involved in the preparation of *Year Book Australia 1995* and those organisations which have kindly supplied material for inclusion in this publication.

Australian Bureau of Statistics
Canberra
November 1994

IAN CASTLES
Australian Statistician

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Much of the material contained in the *Year Book* is prepared by the staff responsible for respective fields of statistics in the Australian Bureau of Statistics, whose contribution is appreciated.

Acknowledgments

ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it the wide range of statistics published by the ABS would not be available for general use by the community. Information received by the ABS is treated in strict confidence as required by the Census and Statistics Act.

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Introduction to Year Book Australia and how to use it

Year Book Australia provides a comprehensive overview of the economic and social conditions of contemporary Australia. It is a statistically oriented publication with sufficient background information to establish a context for the statistics and to assist in understanding and interpreting them.

Much of the statistics are derived from the Australian Bureau of Statistics (ABS), the official statistical agency which produces the *Year Book*. However, a great deal of statistics and background information on the various subjects is also contributed by other, predominantly government, organisations. The official nature of the sources of the contents of the *Year Book* ensures a high degree of objectivity and reliability in the picture presented of contemporary Australia.

The *Year Book* also presents some historical and international perspectives of contemporary Australia.

Finding information

The contents pages at the beginning of the *Year Book* and preceding each chapter provide a guide to the broad subjects contained in each chapter. The index assists in locating information on more specific subjects. A list of special, one-off articles which have appeared in previous editions is contained at the end of the *Year Book*.

The tables and graphs in a chapter are numbered and the text is cross-referenced, as necessary, to the table or graph to which it relates.

Directory for further information

While the statistics and descriptive information contained in the *Year Book* provides a comprehensive overview of Australia, they represent only a relatively small part of the total stock of statistics and other information on respective subjects available from the ABS and other organisations. The *Year Book* is aimed primarily at providing a ready and convenient source of reference, both to those familiar and unfamiliar with a particular subject. In other words, because of the range of subjects and limitations on the size of the *Year Book* it aims at breadth rather than depth of information.

However, for those requiring information in greater depth, the *Year Book* also serves as a directory to more detailed sources. To this end the source is shown for each statistical table, graph and map. Where the ABS is the source, the title and catalogue number of the relevant publication is quoted. For other sources the name of the organisation is shown, and the publication title where appropriate. Relevant ABS and other publications are also listed at the end of each chapter, together with a reference to the information services available from the offices of the ABS, listed at the front of the *Year Book*. A useful complementary publication is the ABS *Catalogue of Publications and Products* (1101.0) which lists all current publications and products of the ABS.

The Year Books or Statistical Summaries produced by the ABS for each State or Territory, respectively, provide information similar to that contained in the *Year Book Australia* but focused on the State or Territory concerned.

In many cases, the ABS can also provide information which is not published or which is historical or compiled from a variety of published and unpublished sources. Information of this kind may be obtained through the Information Consultancy Service. This information may be made available in one or more of the following forms: consultancy reports, microfiche, floppy disk, magnetic tape, computer printout or photocopy. Charges are generally made for such information. Inquiries may be made by contacting Information Services in the nearest ABS office.

The annual reports of government departments and agencies also provide a valuable source of more detailed information on the administrative and other aspects of subjects covered in the *Year Book*.

For a variety of reasons it is not possible for all statistics in the *Year Book* to relate to the latest or same year. Readers wishing to obtain or clarify the latest available statistics should contact the relevant source.

This current (77th) edition is the latest in a long series of *Year Books* extending back to the first edition in 1908. This series provides a valuable source of information on the state of Australia at any particular point in this period.

Feedback from readers

The ABS endeavours to keep the balance of the contents of the *Year Book* in line with the ever changing nature of the nation. For this reason comments on the adequacy and balance of the contents of the *Year Book* are welcomed and should be directed to the Editor of the *Year Book* at ABS Central Office, Canberra.

Symbols and abbreviations

The following symbols, where shown in columns of figures or elsewhere in tables, mean:

n.a.	not available
n.y.a	not yet available
—	nil or rounded to zero
. .	not applicable
n.p.	not available for separate publication (but included in totals where applicable)
p	preliminary — figures or series subject to revision
r	figures or series revised since previous issue
n.e.i.	not elsewhere included
n.e.c.	not elsewhere classified
n.e.s.	not elsewhere specified
——	break in continuity of series (where drawn across a column between two consecutive figures)
*	subject to sampling variability too high for most practical purposes.

The following abbreviations are used for the titles of the Australian States and Territories and Australia: NSW (New South Wales), Vic. (Victoria), Qld (Queensland), WA (Western Australia), SA (South Australia), Tas. (Tasmania), NT (Northern Territory), ACT (Australian Capital Territory), Aust. (Australia).

Yearly periods shown as, for example, 1992 refer to the year ended 31 December 1992; those shown as, for example, 1992–93 refer to the year ended 30 June 1993. Other yearly periods are specifically indicated. The range of years shown in the table headings, for example, 1901 to 1992–93, indicates the period covered but does not necessarily imply that each intervening year is included or that the yearly period has remained the same throughout the series.

Values are shown in Australian dollars ($) or cents (c) unless another currency is specified.

Where figures have been rounded, discrepancies may occur between sums of the components items and totals.

Chapter One

Geography and Climate

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GEOGRAPHY OF AUSTRALIA

Position and area

Australia comprises a land area of 7,682,300 square kilometres. The land lies between latitudes 10°41'S. (Cape York) and 43°39'S. (South East Cape, Tasmania) and between longitudes 113°09'E. (Steep Point) and 153°39'E. (Cape Byron). The most southerly point on the mainland is South Point (Wilson's Promontory) 39°08'S. The latitudinal distance between Cape York and South Point is about 3,180 kilometres, while the latitudinal distance between Cape York and South East Cape, Tasmania, is 3,680 kilometres. The longitudinal distance between Steep Point and Cape Byron is about 4,000 kilometres.

1.1 AREA, COASTLINE, TROPICAL AND TEMPERATE ZONES, AND STANDARD TIMES

	Estimated area			*Percentage of total area*		*Standard times*	
State/Territory	*Total*	*Percentage of total area*	*Length of coastline*	*Tropical zone*	*Temperate zone*	*Meridian selected*	*Ahead of GMT(a)*
	km^2		km				hours
New South Wales	801,600	10.43	1,900	. .	100	150°E	10.0
Victoria	227,600	2.96	1,800	. .	100	150°E	10.0
Queensland	1,727,200	22.48	7,400	54	46	150°E	10.0
South Australia	984,000	12.81	3,700	. .	100	142°30'E	9.5
Western Australia	2,525,500	32.87	12,500	37	63	120°E	8.0
Tasmania	67,800	0.88	3,200	. .	100	150°E	10.0
Northern Territory	1,346,200	17.52	6,200	81	19	142°30'E	9.5
Australian Capital Territory	2,400	0.03	(b)35	. .	100	150°E	10.0
Australia	**7,682,300**	**100.00**	**36,735**	**39**	**61**	. .	. .

(a) Greenwich Mean Time. During daylight saving periods, an hour should be added to the times in this column. (b) Jervis Bay Territory.
Source: Bureau of Meteorology.

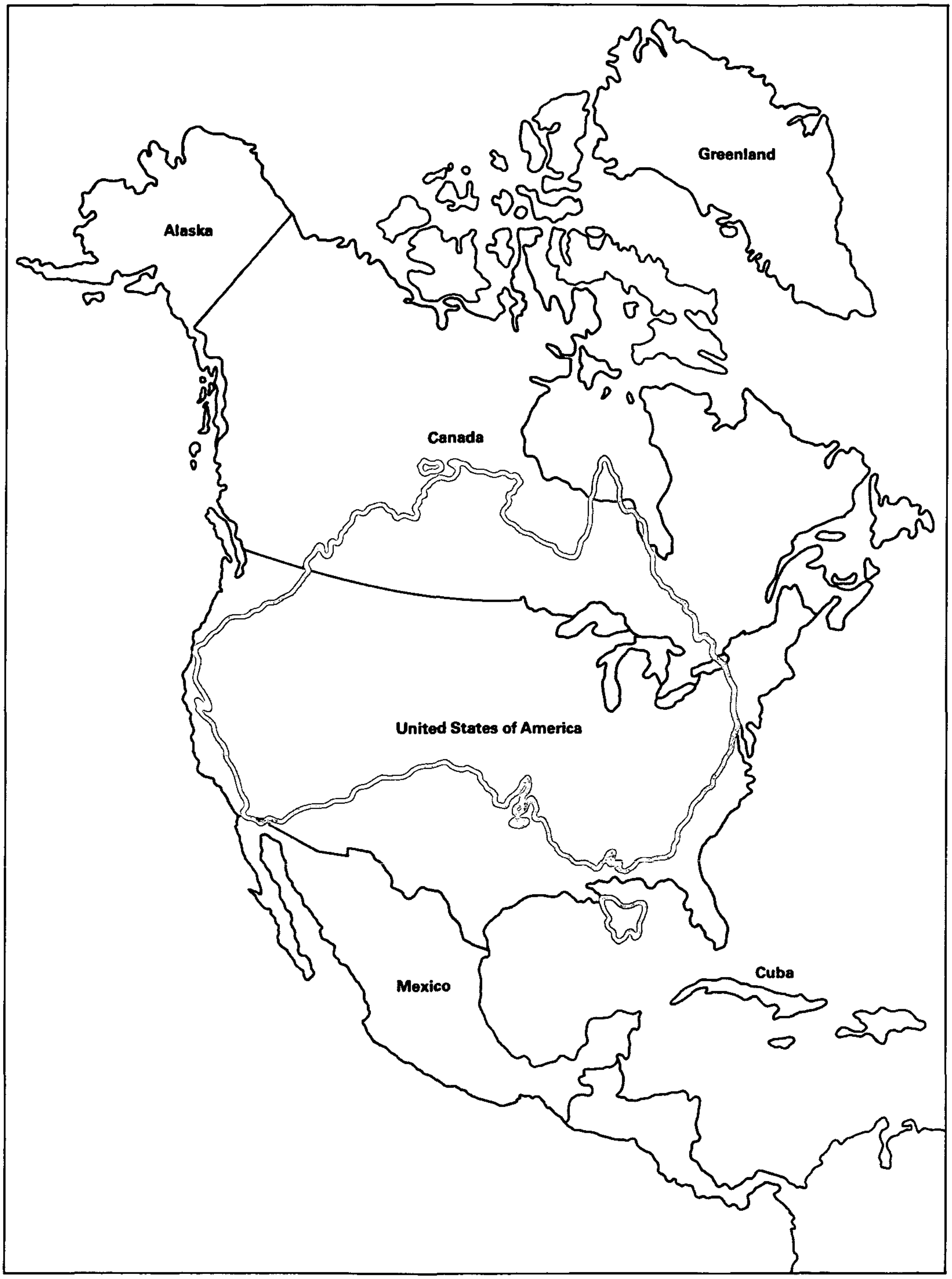
The area of Australia is almost as great as that of the United States of America (excluding Alaska), about 50 per cent greater than Europe (excluding USSR) and 32 times greater than the United Kingdom. The following table and maps show the area of Australia in relation to areas of other continents and selected countries.

1.2 AREAS OF CONTINENTS AND SELECTED COUNTRIES
('000 square kilometres)

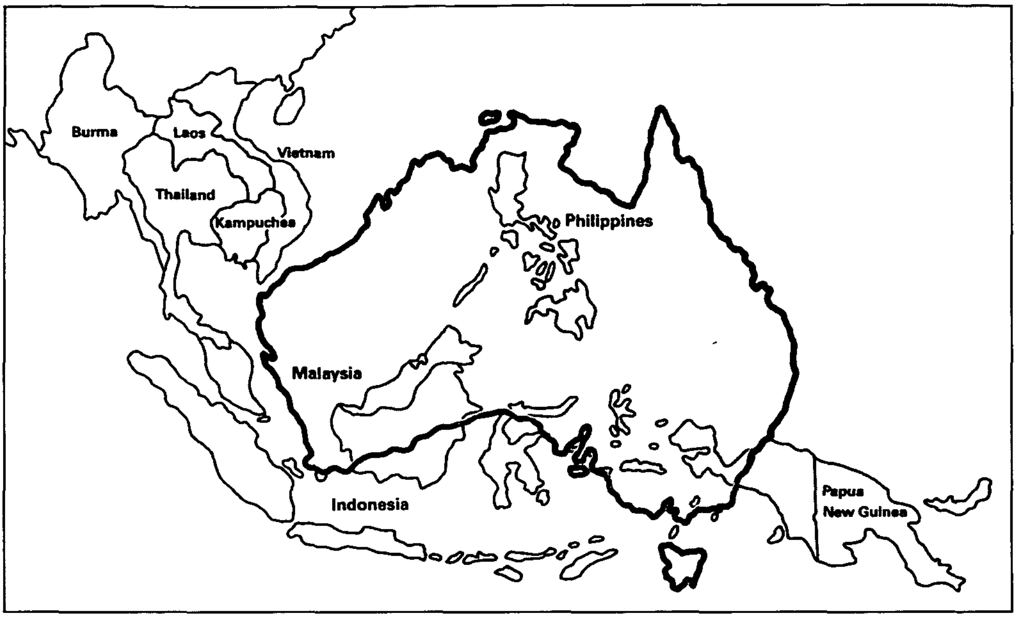
Country	*Area*	*Country*	*Area*
Continents		India	3,288
Asia	44,614		
Africa	30,319	Selected other countries	
North, Central America		Belorus	208
and West Indies	24,247	France	544
South America	17,834	Germany	357
Europe	10,600	Indonesia	1,919
Australia and Oceania	8,504	Japan	372
		Kazakhstan	2,717
Countries (seven largest)		Papua New Guinea	462
Russia	17,073	New Zealand	269
Canada	9,976	Ukraine	604
China	9,590	United Kingdom	244
United States of America	9,363		
Brazil	8,512	**Total land mass excluding Arctic**	
Australia	**7,682**	**and Antarctic continents**	**135,774**

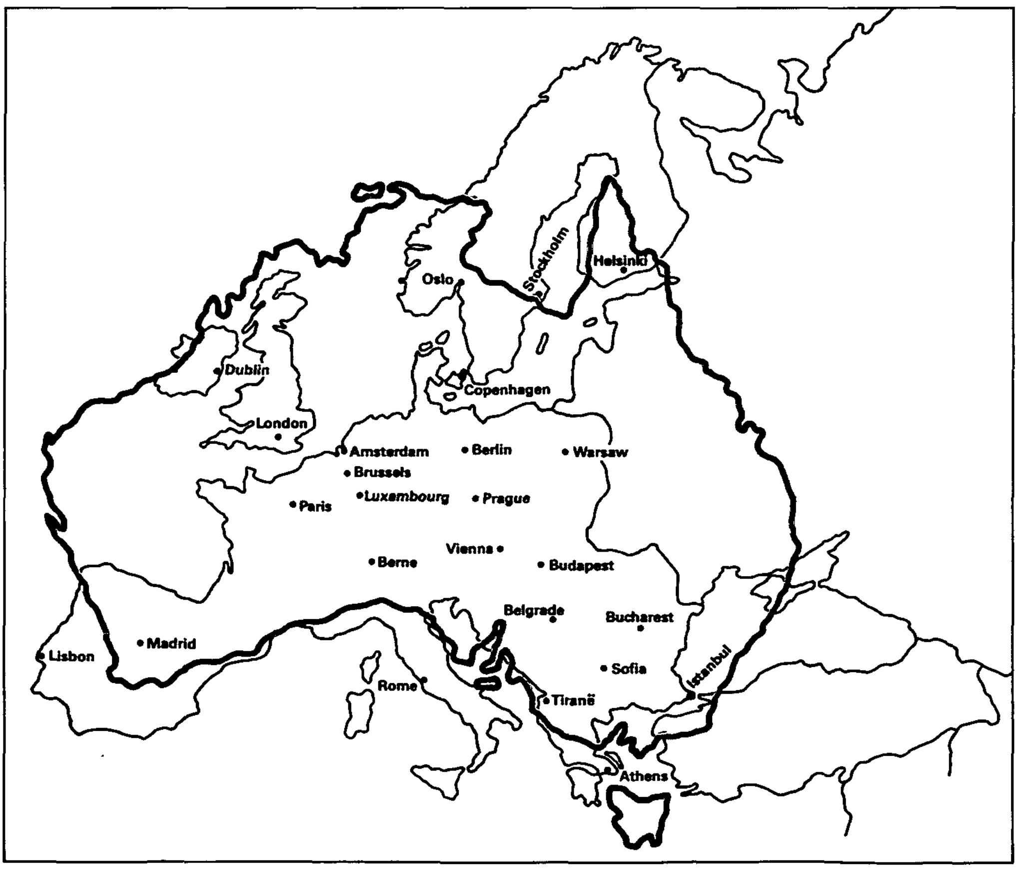
Source: Encyclopedia Britannica and The World Book Encyclopedia.

FIGURE 1.3


Greenland
Alaska
Canada
United States of America
Mexico
Cuba

FIGURES 1.4 AND 1.5





Landforms and their history

Australia is the lowest, flattest and, apart from Antarctica, the driest of the continents. Unlike Europe and North America, where much of the landscape dates back to 20,000 years ago when great ice sheets retreated, the age of landforms in Australia is generally measured in many millions of years. This fact gives Australia a very distinctive physical geography.

The continent can be divided into three parts — the Western Plateau, the Central Lowlands and the Eastern Highlands.

The Western Plateau consists of very old rocks (some over 3,000 million years old), and much of it has existed as a landmass for over 500 million years. Several parts have individual 'plateau' names (for example, Kimberley, Hammersley, Arnhem Land, Yilgarn). In the Perth area, younger rocks along a coastal strip are separated from the rest by the Darling Fault escarpment. The Nullabor Plain is virtually an uplifted sea floor, a limestone plain of Miocene age (about 25 million years).

The Central Lowlands stretch from the Gulf of Carpentaria through the Great Artesian Basin to the Murray–Darling Plains. The Great Artesian Basin is filled with sedimentary rocks which hold water that enters in the wetter Eastern Highlands.

Much of the centre of Australia is flat, but there are numerous ranges (for example, Macdonnels, Musgrave) and some individual mountains of which Ayers Rock (Uluru) is the best known. Faulting and folding in this area took place long ago, the area was worn to a plain, the plain uplifted and then eroded to form the modern ranges on today's plain. In looking at Ayers Rock the remarkable thing is not how it got there, but that so much has been eroded from all around, leaving it there.

In the South Australian part of the Central Lowlands fault movements are more recent, and the area can be considered as a number of blocks that have been moved up and down to form a series of 'ranges' (Mt Lofty, Flinders Ranges) and 'hills' (such as the Adelaide Hills) with the down faulted blocks occupied by sea (for example, Spencer Gulf) or lowlands including the lower Murray Plains.

The Eastern Highlands rise gently from central Australia towards a series of high plateaus, and even the highest part around Mt Kosciusko (2,230 metres) is part of a plateau.

There are a few younger faults and folds, such as the Lake George Fault near Canberra, and the Lapstone Monocline near Sydney.

Some plateaus in the Eastern Highlands are dissected by erosion into rugged hills, and the eastern edges of plateaus tend to form high escarpments. Many of these are united to form a Great Escarpment that runs from northern Queensland to the Victorian border. Australia's highest waterfalls (Wollombi on the Macleay, Wallaman Falls on a tributary of the Herbert, Barron Falls near Cairns, and Wentworth Falls in the Blue Mountains) all occur where rivers flow over the Great Escarpment. For most of its length the Great Divide (separating rivers flowing to central Australia from rivers flowing to the Pacific) runs across remarkably flat country dotted with lakes and airstrips. In eastern Victoria, however, the old plateau has been eroded into separate High Plains (such as Dargo High Plain).

The present topography results from a long landscape history which can conveniently be started in the Permian, about 290 million years ago, when much of Australia was glaciated by a huge ice cap. After the ice melted, parts of the continent subsided and were covered with sediment to form sedimentary basins such as the Great Artesian Basin. By early Cretaceous times, about 140 million years ago, Australia was already so flat and low that a major rise in sea level divided it into three landmasses as the shallow Cretaceous sea spread over the land.

In the following Tertiary times Australia can be regarded as a landscape of broad swells varied by a number of sedimentary basins (Murray, Gippsland, Eucla, Carpentaria, Lake Eyre and other basins). These slowly filled up and some are now sources of coal or oil. The Eastern Highlands were uplifted about this time.

Throughout the Tertiary, volcanoes erupted in eastern Australia. Some individual volcanoes were the size of modern Vesuvius, and huge lava plains covered large areas. Volcanic activity continued up to a few thousand years ago in Victoria and Queensland. Australia's youngest volcano is Mt Gambier in South Australia, about 6,000 years old.

Between 55 and 10 million years ago Australia drifted across the surface of the earth as a plate, moving north from a position once adjacent to Antarctica. There have been many changes in the climate of Australia in the past, but oddly these are not due to changing latitude. Even when Australia was close to the South Pole the climate was warm and wet, and this climate persisted for a long time despite changes in latitude. It was probably under this climate that the deep weathered, iron-rich profiles that characterise much of Australia were formed. Aridity only seems to have set in after Australia reached its present latitude, and the northern part was probably never arid.

Today a large part of Australia is arid or semi-arid. Sand dunes are mostly longitudinal, following the dominant wind directions of a high pressure cell. The dunes are mostly fixed now. Stony deserts or gibber plains (covered with small stones or 'gibbers') are areas without a sand cover and occupy a larger area than the dunefields. Salt lakes occur in many low positions, in places following lines of ancient drainage. They are often associated with lunettes, dunes formed on the downwind side of lakes. Many important finds of Aboriginal prehistory have been made in lunettes. Despite the prevalence of arid conditions today, real aridity seems to be geologically young, with no dunes or salt lakes older than a million years.

The past few million years were notable for the Quarternary ice age. There were many glacial and interglacial periods (over 20) during this time, the last glacial about 20,000 years ago. In Tasmania there is evidence of three different glaciations — the last glaciation, one sometime in the Quaternary, and one in the Tertiary. In mainland Australia there is evidence of only the last glaciation, and the ice then covered only 25 square kilometres, in the vicinity of Mt Kosciusko.

The broad shape of Australia is caused by earth movements, but most of the detail is carved by river erosion. Many of Australia's rivers drain inland, and while they may be eroding their valleys near their highland sources, their lower courses are filling up with alluvium, and the rivers often end in salt lakes which are dry for most of the time. Other rivers reach the sea, and have dissected a broad near-coast region into plateaus, hills and valleys. Many of the features of the drainage pattern of Australia have a very long history, and some individual valleys have maintained their position for hundreds of millions of years. The salt lakes of the Yilgarn Plateau in Western Australia are the remnants of a drainage pattern that was active before continental drift separated Australia from Antarctica.

During the last ice age, sea level was over 100 metres lower than it is today, and rivers cut down to this low level. When sea level rose again the lower valleys were drowned. Some make fine harbours (for example, Sydney Harbour), whilst others have tended to fill alluvium, making the typical lowland valleys around the Australian coast.

Coastal geomorphology is also largely the result of the accumulation of sediment in drowned coasts. In some areas, such as Ninety Mile Beach (Victoria) or the Coorong (South Australia), there are simple accumulation beaches. In much of the east there is a characteristic alternation of rocky headland and long beach, backed by plains filled with river and marine sediments.

The offshore shape of Australia, revealed in isobath contours, results mainly from the pattern of break-up of the super-continent of which Australia was once a part. There is a broad continental shelf around most of Australia, bounded by a steeper continental slope, except in New South Wales where the continental shelf is very narrow. The Queensland coast is bounded by a broad plateau on which the Great Barrier Reef has grown in only the last two million years. In South Australia the continental shelf is grooved by submarine canyons.

The Australian landforms of today are thus seen to result from long-continued processes in a unique setting, giving rise to typical Australian landscapes, which in turn provide the physical basis for the distribution and nature of biological and human activity in Australia.

Rivers and lakes

The rivers of Australia may be divided into two major classes, those of the coastal margins with moderate rates of fall and those of the central plains with very slight fall. Of the rivers of the east coast, the longest in Queensland are the Burdekin and the Fitzroy, while the Hunter is the largest coastal river of New South Wales. The longest river system in Australia is the Murray–Darling which drains part of Queensland, the major part of New South Wales and a large part of Victoria, finally flowing into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The length of the Murray is about 2,520 kilometres and the Darling and Upper Darling together are also just over 2,000 kilometres long. The rivers of the north-west coast of Australia, for example, the Murchison, Gascoyne, Ashburton, Fortescue, De Grey, Fitzroy, Drysdale and Ord, are of considerable size. So also are those rivers in the Northern Territory, for example, the Victoria and Daly, and those on the Queensland side of the Gulf of Carpentaria, such as the Gregory, Leichhardt, Cloncurry, Gilbert and Mitchell. The rivers of Tasmania have short and rapid courses, as might be expected from the configuration of the country.

There are many types of lakes in Australia, the largest being drainage sumps from the internal rivers. In dry seasons these lakes finally become beds of salt and dry mud. The largest are Lake Eyre 9,500 square kilometres, Lake Torrens 5,900 square kilometres and Lake Gairdner 4,300 square kilometres.

Other lake types are glacial, most common in Tasmania; volcanic crater lakes predominantly in Victoria and Queensland; fault angle lakes, of which Lake George near Canberra is a good example and coastal lakes formed by marine damming of valleys.

CLIMATE OF AUSTRALIA

The island continent of Australia features a wide range of climatic zones, from the tropical regions of the north, the arid expanses of the interior, to the temperate regions of the south.

Widely known as 'The Dry Continent', the land mass is relatively arid, with 80 per cent having a median rainfall less than 600 millimetres per year and 50 per cent less than 300 millimetres. Seasonal fluctuations can be great, with temperatures ranging from above 50°C to well below zero. However, extreme minimum temperatures are not as low as those recorded in other continents because of the absence of extensive mountain masses and because of the expanse of the surrounding oceans.

Although the climate can be described as predominantly continental, the insular nature of the land mass produces modifications to the general continental pattern.

Australia can be host to any of nature's disasters, particularly droughts, floods, tropical cyclones, severe storms and bushfires.

Climatic controls

The generally low relief of Australia causes little obstruction to the atmospheric systems which control the climate. A notable exception is the eastern uplands which modify the atmospheric flow.

In the winter half of the year (May–October) anticyclones, or high pressure systems, pass from west to east across the continent and often remain almost stationary over the interior for several days. These anticyclones may extend to 4,000 kilometres along their west–east axes. Northern Australia is then influenced by mild, dry south-east trade winds, and southern Australia experiences cool, moist westerly winds. The westerlies and the frontal systems associated with extensive depressions travelling over the Southern Ocean have a controlling influence on the climate of southern Australia during the winter season, causing rainy periods. Periodic north-west cloud bands in the upper levels of the atmosphere over the continent may interact with southern systems to produce rainfall episodes, particularly over eastern areas. Cold outbreaks, particularly in south-east Australia, occur when cold air of Southern Ocean origin is directed northwards by intense depressions having diameters up to 2,000 kilometres. Cold fronts associated with the southern depressions, or with secondary depressions over the Tasman Sea, may produce large day-to-day changes in temperature in southern areas, particularly in south-east coastal regions.

In the summer half of the year (November–April) the anticyclones travel from west to east on a more southerly track across the southern fringes of Australia directing easterly winds generally over the continent. Fine, warmer weather predominates in southern Australia with the passage of each anticyclone. Heat waves occur when there is an interruption to the eastward progression of the anticyclone (blocking) and winds back northerly and later north-westerly. Northern Australia comes under the influence of summer disturbances associated with the southward intrusion of warm moist monsoonal air from north of the intertropical convergence zone, resulting in a hot rainy season. Southward dips of the monsoonal low pressure trough sometimes spawn tropical depressions, and may prolong rainy conditions over northern Australia for episodes up to three weeks at a time.

Tropical cyclones develop over the seas around northern Australia in summer between November and April. Their frequency of occurrence and the tracks they follow vary greatly from season to season. On average, about three cyclones per season directly affect the Queensland coast, and about three affect the north and north-west coasts. Tropical cyclones approaching the coast usually produce very heavy rain and high winds in coastal areas. Some cyclones move inland, losing intensity but still producing widespread heavy rainfall.

The climate of eastern and northern Australia is influenced by the Southern Oscillation (SO), seesawing of atmospheric pressure between the northern Australian/Indonesian region and the central Pacific Ocean. This oscillation is the second most important cause of climatic variation after the annual seasonal cycle, over eastern and northern Australia. The strength of the Southern Oscillation is determined by the Southern Oscillation Index (SOI) which is a measure of the difference in sea level atmospheric pressure between Tahiti in the central Pacific and Darwin, northern Australia. At one extreme of the oscillation, the pressure is abnormally high at Darwin and abnormally low at Tahiti. Severe and widespread drought over eastern and northern Australia generally accompanies this extreme. These conditions generally commence early in the year, last for about 12 months, and have a re-occurrence period of 2 to 7 years.

The above extreme is generally immediately preceded or followed by the opposite extreme where pressures at Darwin are abnormally low and those at Tahiti are abnormally high. In this case, rainfall is generally above average over eastern and northern Australia.

The SO is linked to sea surface temperatures (SSTs) in the Pacific Ocean. Dry extreme SO years are accompanied by above normal SSTs in the central and/or eastern equatorial Pacific and vice versa. Dry extreme years are called El Nino years. Wet extreme years are called La Nina years.

Rainfall and other precipitation

Annual. The area of lowest rainfall is in the vicinity of Lake Eyre in South Australia, where the median rainfall is only about 100 millimetres. Another very low rainfall area is in Western Australia in the Giles–Warburton Range region, which has a median annual rainfall of about 150 millimetres. A vast region, extending from the west coast near Shark Bay across the interior of Western Australia and South Australia to south-west Queensland and north-west New South Wales, has a median annual rainfall of less than 200 millimetres. This region is not normally exposed to moist air masses for extended periods and rainfall is irregular, averaging only one or two days per month. However, in favourable synoptic situations, which occur infrequently over extensive parts of the region, up to 400 millimetres of rain may fall within a few days and cause widespread flooding.

The region with the highest median annual rainfall is the east coast of Queensland between Cairns and Cardwell, where Tully has a median of 4,048 millimetres (63 years to 1987 inclusive). The mountainous region of western Tasmania also has a high annual rainfall, with Lake Margaret having a median of 3,565 millimetres (76 years to 1987 inclusive). In the mountainous areas of north-east Victoria and some parts of the east coastal slopes there are small pockets with median annual rainfall greater than 2,500 millimetres.

The Snowy Mountains area in New South Wales also has a particularly high rainfall. The highest median annual rainfall for this region is 3,200 millimetres, and it is likely that small areas have a median annual rainfall approaching 4,000 millimetres on the western slopes above 2,000 metres elevation.

The following table shows the area distribution of median annual rainfall.

1.6 AREA DISTRIBUTION OF MEDIAN ANNUAL RAINFALL
(per cent)

Median annual rainfall	*NSW(a)*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*Aust.*
Under 200 mm	8.0	. .	10.2	74.2	43.5	. .	15.5	29.6
200 to 299 mm	20.3	6.3	13.0	13.5	29.6	. .	35.6	22.9
300 to 399 mm	19.0	19.2	12.3	6.8	10.5	. .	9.0	11.2
400 to 499 mm	12.4	11.8	13.5	3.2	4.3	. .	6.6	7.6
500 to 599 mm	11.3	14.1	11.6	1.8	3.1	12.2	5.8	6.6
600 to 799 mm	15.1	24.5	20.5	0.5	4.6	18.2	11.6	10.7
800 to 1,200 mm	11.3	17.7	12.6	. .	3.7	25.0	9.6	7.7
Above 1,200 mm	2.6	6.4	6.3	. .	0.7	44.6	6.3	3.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes Australian Capital Territory.
Source: Bureau of Meteorology.

Seasonal. As outlined above, the rainfall pattern of Australia is strongly seasonal in character with a winter rainfall regime in the south and a summer regime in the north.

The dominance of rainfall over other climatic elements in determining the growth of specific plants in Australia has led to the development of a climatic classification based on two main parameters. The parameters are median annual rainfall and seasonal rainfall incidence.

Evaporation and the concept of rainfall effectiveness are taken into account to some extent in this classification by assigning higher median annual rainfall limits to the summer zones than the corresponding uniform and winter zones. The main features of the seasonal rainfall are:

- marked wet summer and dry winter of northern Australia;
- wet summer and relatively dry winter of south-eastern Queensland and north-eastern New South Wales;
- uniform rainfall in south-eastern Australia — much of New South Wales, parts of eastern Victoria and southern Tasmania;
- marked wet winter and dry summer of south-west Western Australia and, to a lesser extent, much of the remainder of southern Australia directly influenced by westerly circulation; and
- arid area comprising about half the continent extending from the north-west coast of Western Australia across the interior and reaching the south coast at the head of the Great Australian Bight.

Rainday frequency. The frequency of raindays exceeds 150 per year in Tasmania (with a maximum of over 200 in western Tasmania), southern Victoria, parts of the north Queensland coast and in the extreme south-west of Western Australia. Over most of the continent the frequency is less than 50 raindays per year. The area of low rainfall with high variability, extending from the north-west coast of Western Australia through the interior of the continent, has less than 25 raindays per year. In the high rainfall areas of northern Australia the number of raindays is about 80 per year, but heavier falls occur in this region than in southern regions.

Intensity. The figures in table 1.7 represent intensities over only small areas around the recording points because turbulence and exposure characteristics of the measuring gauge may vary over a distance of a few metres. The highest 24 hour (9 a.m. to 9 a.m.) falls are listed in table 1.8. Most of the very high 24 hour falls (above 700 millimetres) have occurred in the coastal strip of Queensland, where a tropical cyclone moving close to mountainous terrain provides ideal conditions for spectacular falls.

The highest annual rainfalls are listed by State in table 1.9.

1.7 HIGHEST RAINFALL INTENSITIES IN SPECIFIED PERIODS

Station	Period of record	Years of complete records	Period in hours 1	3	6	12	24
			mm	mm	mm	mm	mm
Adelaide	1897–1979	79	69	133	141	141	141
Alice Springs	1951–1986	36	75	87	108	133	150
Brisbane	1911–1987	77	88	142	182	266	327
Broome	1948–1983	36	112	157	185	313	353
Canberra	1938–1982	37	40	57	67	76	120
Carnarvon	1956–1982	27	44	63	83	95	108
Charleville	1953–1987	35	42	66	75	111	142
Cloncurry	1953–1981	23	59	118	164	173	204
Darwin (Airport)	1953–1987	35	89	138	214	260	291
Esperance	1963–1979	15	23	45	62	68	79
Hobart	1911–1985	75	28	56	87	117	168
Meekatharra	1953–1982	30	33	67	81	99	112
Melbourne	1873–1986	100	76	83	86	97	130
Mildura	1953–1986	34	49	60	65	66	91
Perth	1946–1983	37	31	37	48	64	80
Sydney	1913–1987	71	121	194	200	244	340
Townsville	1953–1987	34	88	158	235	296	319

Source: Pluviograph records in Bureau of Meteorology archives.

1.8 HIGHEST DAILY RAINFALLS

State/Territory	Station	Date	Amount
			mm
New South Wales	Dorrigo (Myrtle Street)	21.2.1954	809
	Lowanna (Yalamurra)	22.4.1974	662
Victoria	Tanybryn	22.3.1983	375
	Nowa Nowa (Wairawa)	11.3.1906	275
Queensland(a)	Beerwah (Crohamhurst)	3.2.1893	907
	Finch Hatton PO	18.2.1958	878
South Australia	Motpena	14.3.1989	273
	Nilpena	14.3.1989	247
Western Australia	Roebourne (Whim Creek)	3.4.1898	747
	Broome (Kilto)	4.12.1970	635
Tasmania	Cullenswood	22.3.1974	352
	Mathinna	5.4.1929	337
Northern Territory	Roper Valley Station	15.4.1963	545
	Angurugu (Groote Eylandt)	28.3.1953	513

(a) Bellenden Ker (Top Station) has recorded a 24 hour total of 960 mm from 3 p.m. to 3 p.m. on the 3rd and 4th January 1979. The standard daily rainfall period is 9 a.m. to 9 a.m.

Source: Bureau of Meteorology.

1.9 HIGHEST ANNUAL RAINFALLS

State/Territory	*Station*	*Year*	*Amount*
			mm
New South Wales	Tallowwood Point	1950	4,540
Victoria	Falls Creek SEC	1956	3,739
Queensland	Bellenden Ker (Top Station)	1979	11,251
South Australia	Aldgate State School	1917	1,853
Western Australia	Armadale (Jarrahdale PO)	1917	2,169
Tasmania	Lake Margaret	1948	4,504
Northern Territory	Elizabeth Downs	1973	2,966

Source: Bureau of Meteorology.

Thunderstorms and hail. A thunderday at a given location is a calendar day on which thunder is heard at least once. The average annual number of thunderdays varies from 74 per year near Darwin to less than 10 per year over parts of the southern regions. Convectional processes during the summer wet season cause high thunderstorm incidence in northern Australia. The generally high incidence of thunderdays (40–60 annually) over the eastern upland areas is caused mainly by orographic uplift of moist air streams.

Hail, mostly of small size (less than 10 millimetres in diameter), occurs with winter–spring cold frontal activity in southern Australia. Summer thunderstorms, particularly over the uplands of eastern Australia, sometimes produce large hail (greater than 10 millimetres in diameter). Large hail capable of piercing light gauge galvanised iron occurs at irregular intervals and sometimes causes widespread damage.

Snow. Generally, snow covers much of the Australian Alps above 1,500 metres for varying periods from late autumn to early spring. Similarly, in Tasmania the mountains are covered fairly frequently above 1,000 metres in these seasons. The area, depth and duration are highly variable. In some years, snow falls in the altitude range of 500–1,000 metres. Snowfalls at levels below 500 metres are occasionally experienced in southern Australia, particularly in the foothill areas of Tasmania and Victoria, but falls are usually light and short lived. In some seasons, parts of the eastern uplands above 1,000 metres from Victoria to south-eastern Queensland have been covered with snow for several weeks. In ravines around Mount Kosciusko (2,228 metres) small areas of snow may persist through summer but there are no permanent snowfields.

Temperature

Average temperatures. Average annual air temperatures range from 28°C along the Kimberley coast in the extreme north of Western Australia to 4°C in the alpine areas of south-eastern Australia. Although annual temperatures may be used for broad comparisons, monthly temperatures are required for detailed analyses.

July is the month with the lowest average temperature in all parts of the continent. The months with the highest average temperature are January or February in the south and December in the north (except in the extreme north and north-west where it is November). The slightly lower temperatures of mid-summer in the north are due to the increase in cloud during the wet season.

Average monthly maxima. In January, average maximum temperatures exceed 35°C over a vast area of the interior and exceed 40°C over appreciable areas of the north-west. The consistently hottest part of Australia in terms of summer maxima is around Marble Bar in Western Australia (150 kilometres south-east of Port Hedland) where the average is 41°C and daily maxima during summer may exceed 40°C consecutively for several weeks at a time.

In July, a more regular latitudinal distribution of average maxima is evident. Maxima range from 30°C near the north coast to 5°C in the alpine areas of the south-east.

Average monthly minima. In January, average minima range from 27°C on the north-west coast to 5°C in the alpine areas of the south-east. In July, average minima fall below 5°C in areas south of the tropics (away from the coasts). Alpine areas record the lowest temperatures; the July average is as low as -5°C.

Extreme maxima. Temperatures have exceeded 45°C at nearly all inland stations more than 150 kilometres from the coast and at many places on the north-west and south coasts. Temperatures have exceeded 50°C at some inland stations and at a few near the coast. It is noteworthy that Eucla on the south coast has recorded 50.7°C, the highest temperature in Western Australia. This is due to the long trajectory over land of hot north-west winds from the Marble Bar area. Although the highest temperature recorded in Australia was 53.1°C at Cloncurry (Queensland), more stations have exceeded 50°C in western New South Wales than in other areas due to the long land trajectory of hot winds from the north-west interior of the continent.

Extreme maximum temperatures recorded at selected stations, including the highest recorded in each State/Territory, are shown in the following table.

1.10 EXTREME MAXIMUM TEMPERATURES

Station	*°C*	*Date*	*Station*	*°C*	*Date*
New South Wales			Western Australia		
Bourke	52.8	17.1.1877	Eucla	50.7	22.1.1906
Wilcannia	50.0	11.1.1939	Mundrabilla	49.8	3.1.1979
Menindee	49.7	10.1.1939	Forrest	49.8	13.1.1979
Victoria			Madura	49.4	7.1.1971
Mildura	50.8	6.1.1906	Tasmania		
Swan Hill	49.4	18.1.1906	Bushy Park	40.8	26.12.1945
Queensland			Hobart	40.8	4.1.1976
Cloncurry	53.1	16.1.1889	Northern Territory		
Winton	50.7	14.12.1888	Finke	48.3	2.1.1960
Birdsville	49.5	24.12.1972	Jervois	47.5	3.1.1978
South Australia			Australian Capital Territory		
Oodnadatta	50.7	2.1.1960	Canberra (Acton)	42.8	11.1.1939
Marree	49.4	2.1.1960			
Whyalla	49.4	2.1.1960			

Source: Bureau of Meteorology.

Extreme minima. The lowest temperatures in Australia have been recorded in the Snowy Mountains, where Charlotte Pass (elevation 1,760 metres) recorded -23°C on 28 June 1994. Temperatures have fallen below -5°C at most inland places south of the tropics and at some places within a few kilometres of southern coasts. At Eyre, on the south coast of Western Australia, a minimum temperature of -4.3°C has been recorded, and at Swansea, on the east coast of Tasmania, the temperature has fallen as low as -5.0°C.

In the tropics, extreme minima below 0°C have been recorded at many places away from the coasts — as far north as Herberton, Queensland (-5.0°C). Even very close to the tropical coastline, temperatures have fallen to 0°C, a low recording being -0.8°C for Mackay.

1.11 EXTREME MINIMUM TEMPERATURES

Station	*°C*	*Date*	*Station*	*°C*	*Date*
New South Wales			Western Australia		
Charlotte Pass	-23.0	18.6.1994	Booylgoo Springs	-6.7	12.7.1969
Kiandra	-20.6	2.8.1929	Wandering	-5.7	1.6.1964
Perisher Valley	-19.5	23.7.1979	Tasmania		
Victoria			Shannon	-13.0	30.6.1983
Mount Hotham	-12.8	30.7.1931	Butlers Gorge	-13.0	30.6.1983
Omeo	-11.7	15.6.1965	Tarraleah	-13.0	30.6.1983
Hotham Heights	-11.1	15.8.1968	Northern Territory		
Queensland			Alice Springs	-7.5	12.7.1976
Stanthorpe	-11.0	4.7.1895	Tempe Downs	-6.9	24.7.1971
Warwick	-10.6	12.7.1965	Australian Capital Territory		
Mitchell	-9.4	15.8.1979	Gudgenby	-14.6	11.7.1971
South Australia					
Yongala	-8.2	20.7.1976			
Yunta	-7.7	16.7.1976			
Ernabella	-7.6	19.7.1983			

Source: Bureau of Meteorology.

Heat waves. Periods with a number of successive days having a temperature higher than 40°C are relatively common in summer over parts of Australia. With the exception of the north-west coast of Western Australia, however, most coastal areas rarely experience more than three successive days of such conditions. The frequency increases inland, and periods of up to ten successive days have been recorded at many inland stations. This figure increases in western Queensland and north-west Western Australia to more than twenty days in places. The central part of the Northern Territory and the Marble Bar–Nullagine area of Western Australia have recorded the most prolonged heat waves. Marble Bar is the only station in the world where temperatures of more than 37.8°C (100°F) have been recorded on as many as 161 consecutive days (30 October 1923 to 7 April 1924).

Heat waves are experienced in the coastal areas from time to time. During 11–14 January 1939, for example, a severe heat wave affected south-eastern Australia: Adelaide had a record of 47.6°C on the 12th, Melbourne a record of 45.6°C on the 13th and Sydney a record of 45.3°C on the 14th.

The Kimberley district of Western Australia is the consistently hottest part of Australia in terms of annual average maximum temperature. Wyndham, for example, has an annual average maximum of 35.6°C.

Other aspects of climate

Frost can cause serious losses of agricultural crops, and numerous climatic studies have been made in Australia relating to specific crops cultivated in local areas.

Frost frequency depends on location and orography, and even on minor variations in the contour of the land. The parts of Australia which are most subject to frost are the eastern uplands from north-eastern Victoria to the western Darling Downs in southern Queensland. Most stations in this region experience more than 10 nights a month with readings of 0°C (or under) for three to five months of the year. On Tasmania's Central Plateau similar conditions occur for three to six months of the year. Frosts may occur within a few miles of the coasts except in the Northern Territory and most of the north Queensland coasts.

Regions in which frosts may occur at any time of the year comprise most of Tasmania, large areas of the tablelands of New South Wales, much of inland Victoria, particularly the north-east, and a small part of the extreme south-west of Western Australia. Over most of the interior of the continent, and on the highlands of Queensland as far north as the Atherton Plateau, frosts commence in April and end in September. Minimum temperatures below 0°C are experienced in most of the subtropical interior in June and July.

The median frost period over the continent varies from over 200 days per year in the south-eastern uplands areas south of the Hunter Valley, to zero days in northern Australia. In the southern regions of the continent, the annual frost period generally decreases from about 100 days inland to below 50 days towards the coast. However, there are appreciable spatial variations depending mainly on local orography. In Tasmania the frost period exceeds 300 days on the uplands and decreases to 100 days near the coast.

The regions of mainland Australia most prone to heavy frosts are the eastern uplands and adjacent areas extending from Victoria through New South Wales to south-eastern Queensland. Stations above 1,000 metres in altitude in the southern parts of these uplands have more than 100 heavy frosts annually, and in the upland areas below 1,000 metres the annual frequency ranges from 100 to about 20. Over the remainder of southern Queensland, New South Wales and Victoria, although there are great spatial variations, the average annual frequency of heavy frosts typically ranges from about 20 inland to 10 towards the coast.

In Tasmania, uplands above 1,000 metres have more than 100 heavy frosts annually and, in neighbouring areas, the frequency is about 100 decreasing to 20 towards the coasts. Even some coastal stations have a relatively high frequency (Swansea, for example, has 15.7).

The southern half of Western Australia, the whole of South Australia, and the Alice Springs district of the Northern Territory experience heavy frosts. Differences in annual frequencies between places are great but in general the frequency is about 10 inland decreasing towards the coasts. Some places average more than 20 heavy frosts annually, notably Wandering, Western Australia (21.5) and Yongala, South Australia (41.8). At Alice Springs the annual average frequency is 11.9.

Humidity. Australia is a dry continent in terms of the water vapour content or humidity of the air and this element may be compared with evaporation to which it is related. Moisture content can be expressed by a number of parameters, the most commonly known is relative humidity.

The main features of the relative humidity pattern are:

- over the interior of the continent there is a marked dryness during most of the year, notably towards the northern coast in the dry season (May–October);
- the coastal fringes are comparatively moist, although this is less evident along the north-west coast of Western Australia where continental effects are marked;
- in northern Australia, the highest values occur during the summer wet season (December–February) and the lowest during the winter dry season (June–August); and
- in most of southern Australia the highest values are experienced in the winter rainy season (June–August) and the lowest in summer (December–February).

Global radiation. Global (short wave) radiation includes that radiation energy reaching the ground directly from the sun and that received indirectly from the sky, scattered downwards by clouds, dust particles, etc.

A high correlation exists between daily global radiation and daily hours of sunshine. On the north-west coast around Port Hedland, where average daily global radiation is the highest for Australia (640 milliwatt hours), average daily sunshine is also highest, being approximately 10 hours. Sunshine is more dependent on variations in cloud coverage than is global radiation, since the latter includes diffuse radiation from the sky as well as direct radiation from the sun. An example is Darwin where, in the dry month of July, sunshine approaches twice that of the wet (cloudy) month of January but global radiation amounts for the two months are comparable.

Sunshine as treated here refers to bright or direct sunshine. Australia receives relatively large amounts of sunshine although seasonal cloud formations have a notable effect on its spatial and temporal distribution. Cloud cover reduces both incoming and outgoing radiation and thus affects sunshine, air temperature and other climatic elements at the earth's surface.

Most of the continent receives more than 3,000 hours of sunshine a year, or nearly 70 per cent of the total possible. In central Australia and the mid-west coast of Western Australia, totals slightly in excess of 3,500 hours occur. Totals of less than 1,750 hours occur on the west coast and highlands of Tasmania; this amount is only

40 per cent of the total possible per year (about 4,380 hours).

In southern Australia the duration of sunshine is greatest about December when the sun is at its highest elevation, and lowest in June when the sun is lowest. In northern Australia sunshine is generally greatest about August–October prior to the wet season, and least about January–March during the wet season.

Cloud. Seasonal changes in cloudiness vary with the distribution of rainfall. In the southern parts of the continent, particularly in the coastal and low lying areas, the winter months are generally more cloudy than the summer months. This is due to the formation of extensive areas of stratiform cloud and fog during the colder months, when the structure of the lower layers of the atmosphere favours the physical processes resulting in this type of cloud. Particularly strong seasonal variability of cloud cover exists in northern Australia where skies are clouded during the summer wet season and mainly cloudless during the winter dry season. Cloud coverage is greater near coasts and on the windward slopes of the eastern uplands of Australia and less over the dry interior.

Fog. The formation of fog depends on the occurrence of favourable meteorological elements — mainly temperature, humidity, wind and cloud cover. The nature of the local terrain is important for the development of fog and there is a tendency for this phenomenon to persist in valleys and hollows. The incidence of fog may vary significantly over distances as short as one kilometre.

Fog in Australia tends to be greater in the south than the north, although parts of the east coastal areas are relatively fog prone even in the tropics. Incidence is much greater in the colder months, particularly in the eastern uplands. Fog may persist during the day but rarely until the afternoon over the interior. The highest fog incidence at a capital city is at Canberra which has an average of 47 days per year on which fog occurs, 29 of which are in the period of May to August. Brisbane averages 20 days of fog per year. Darwin averages only 2 days per year, in the months of July and August.

Winds. The mid-latitude anticyclones are the chief determinants of Australia's two main prevailing wind streams. In relation to the west–east axes of the anticyclones these streams are easterly to the north and westerly to the south. The cycles of development, motion and decay of low pressure systems to the north and south of the anticyclones result in diversity of wind flow patterns. Wind variations are greatest around the coasts where diurnal land and sea-breeze effects are important.

Orography affects the prevailing wind pattern in various ways such as the channelling of winds through valleys, deflection by mountains and cold air drainage from highland areas. An example of this channelling is the high frequency of north-west winds at Hobart caused by the north-west – south-east orientation of the Derwent River Valley.

Perth is the windiest capital with an average wind speed of 15.6 kilometres per hour; Canberra is the least windy with an average speed of 5.4 kilometres per hour.

The highest wind speeds and wind gusts recorded in Australia have been associated with tropical cyclones. The highest recorded gust was 259 kilometres per hour at Mardie (near Onslow), Western Australia on 19 February 1975, and gusts reaching 200 kilometres per hour have been recorded on several occasions in northern Australia with cyclone visitations. The highest gusts recorded at Australian capitals were 217 kilometres per hour at Darwin and 156 kilometres per hour at Perth.

Droughts. Drought, in general terms, refers to an acute deficit of water supply to meet a specified demand. The best single measure of water availability in Australia is rainfall, although parameters such as evaporation and soil moisture are significant, or even dominant in some situations. Demands for water are very diverse, hence the actual declaration of drought conditions for an area will generally also depend on the effects of a naturally occurring water deficit on the principal local industries.

Since the 1860s there have been nine major Australian droughts. Some of these major droughts could be described as periods consisting of a series of dry spells of various lengths, overlapping in time and space, and totalling up to about a decade. The drought periods of 1895–1903, 1958–68 and 1982–83 were the most devastating in terms of their extent and effects on primary production. The remaining major droughts occurred in 1864–66 (and 1868), 1880–86, 1888, 1911-16, 1918–20 and 1939–45.

In this same period, several droughts of lesser severity caused significant losses over large areas of some States. They occurred in 1922–23 and 1926–29, 1933–38, 1946–49, 1951–52, 1970–73 and 1976.

South-eastern Australia (New South Wales, southern Queensland, Victoria, Tasmania and the settled parts of South Australia) contains about 75 per cent of the nation's population, and droughts affecting this region have a markedly adverse impact on the economy. There have been eight severe droughts in south-eastern Australia since 1888, and these were encompassed within the major Australian droughts specified previously, except for the severe drought in 1972–73. Drought definitions and the area of coverage and length of these droughts, together with related information may be obtained from *Year Book Australia 1988.*

Floods. Widespread flood rainfall may occur anywhere in Australia but it has a higher incidence in the north and in the eastern coastal areas. It is most economically damaging along the shorter streams flowing from the eastern uplands eastward to the seaboard of Queensland and New South Wales. These flood rains are notably destructive in the more densely populated coastal river valleys of New South Wales — the Tweed, Richmond, Clarence, Macleay, Hunter and Nepean–Hawkesbury — all of which experience relatively frequent flooding. Although chiefly caused by summer rains, they may occur in any season.

The great Fitzroy and Burdekin river basins of Queensland receive flood rains during the summer wet seasons. Much of the run-off due to heavy rain in north Queensland west of the eastern uplands flows southward through the normally dry channels of the network of rivers draining the interior lowlands into Lake Eyre. This widespread rain may cause floods over an extensive area, but it soon seeps away or evaporates, occasionally reaching the lake in quantity. The Condamine and other northern tributaries of the Darling also carry large volumes of water from flood rains south through western New South Wales to the Murray and flooding occurs along their courses at times.

Flood rains occur at irregular intervals in the Murray–Murrumbidgee system of New South Wales and Victoria, the coastal streams of southern Victoria and the north coast streams of Tasmania.

WATER RESOURCES

Rainfall, or the lack of it, is the most important single factor determining land use and rural production in Australia. The scarcity of both surface and ground water resources, together with the low rates of precipitation which restrict agriculture (quite apart from economic factors), has led to extensive programs to regulate supplies by construction of dams, reservoirs, large tanks and other storages.

The major topographical feature affecting the rainfall and drainage patterns in Australia is the absence of high mountain barriers. Australia's topographical features range from sloping tablelands and uplands along the east coast Main Divide, through the low plain and marked depression in the interior to the Great Western Plateau.

Only one-third of the Australian land mass drains directly to the ocean, mainly on the coastal side of the Main Divide and inland with the Murray–Darling system. With the exception of the latter, most rivers draining to the ocean are comparatively short but account for the majority of the country's average annual discharge. Surface drainage is totally absent from some arid areas of low relief.

Australia's large area (7.7 million square kilometres) and latitudinal range (3,700 kilometres) have resulted in climatic conditions ranging from alpine to tropical. Two-thirds of the continent is arid or semi-arid, although good rainfalls (over 800 millimetres annually) occur in the northern monsoonal belt under the influence of the Australian–Asian monsoon, and along the eastern and southern highland regions under the influence of the great atmospheric depressions of the Southern Ocean. The effectiveness of the rainfall is greatly reduced by marked alternation of wet and dry seasons, unreliability from year to year, high temperatures and high potential evaporation.

The availability of water resources controls, to a large degree, the possibility and density of settlement; this in turn, influences the quality of the water through production and disposal of waste. Most early settlements were established on the basis of reliable surface water supplies and, as a result, Australia's population is concentrated along the coast, mainly in the comparatively fertile, well-watered east, south-east and far south-west.

As settlement spread into the dry inland grazing country, the value of reliable supplies of underground water was realised. Observations of the disappearance of large quantities of the rainfall precipitated on the coastal ranges of eastern Australia eventually led to the discovery of the Great Artesian Basin which has become a major asset to the pastoral industry. Development, however, has not been without costs. Significant environmental degradation and deterioration in water quality are becoming evident.

1.12 MAJOR GROUND WATER RESOURCES OF STATES/TERRITORIES

		Ground water resource (gigalitres)					
		Major divertible resource					*Abstraction*
State/Territory	*Area of aquifers (km^2)*	*Fresh*	*Marginal*	*Brackish*	*Saline*	*Total*	*during 1983–84*
New South Wales	595,900	881	564	431	304	2,180	242
Victoria	103,700	469	294	69	30	862	146
Queensland	1,174,800	1,760	683	255	144	2,840	962
South Australia	486,100	102	647	375	86	1,210	504
Western Australia	2,622,000	578	1,240	652	261	2,740	355
Tasmania	7,240	47	69	8	—	124	5
Northern Territory	236,700	994	3,380	43	10	4,420	24
Australia	**5,226,440**	**4,831**	**6,877**	**1,833**	**835**	**14,376**	**2,238**

Source: Australian Water Resources Council, 1987.

Permanent rivers and streams flow in only a small part of the continent. The average annual discharge of Australian rivers has been recently assessed at 397 teralitres of which 100 teralitres is now estimated to be exploitable for use on a sustained yield basis. This is small in comparison with river flows on other continents, as indicated in the following broad comparison of rainfall and run-off of the continents.

1.13 RAINFALL AND RUN-OFF OF THE CONTINENTS

Continent	*Area*	*Average yearly rainfall*	*Run-off*	*Run-off*	*Run-off*
	km^2	mm	mm	km^3	%
Africa	30,300,000	690	260	7,900	38
Asia	45,000,000	600	290	13,000	48
Australia	7,700,000	465	57	440	12
Europe	9,800,000	640	250	2,500	39
North America	20,700,000	660	340	6,900	52
South America	17,800,000	1,630	930	16,700	57

Source: Department of Resources and Energy, 1983.

In addition, there is a pronounced concentration of run-off in the summer months in northern Australia while the southern part of the continent has a distinct, if somewhat less marked, winter maximum.

Even in areas of high rainfall, large variability in flow means that, for local regional development, most streams must be regulated by surface storage. However, in many areas evaporation is so great that storage costs are high in terms of yield. Extreme floods also add greatly to the cost of water storage, because of the need for adequate spillway capacity.

The portion of run-off able to be diverted for use is very low compared with other continents, and results from the high variability of stream flow, high rates of evaporation and the lack of storage sites on many catchments. On an Australia-wide basis, only 21.5 per cent of the divertible resource has currently been developed for use; much of the remaining resource is available in remote regions where development is impractical and uneconomic. In areas such as the Murray–Darling Division, where water is scarce, there are few resources not yet developed, and management is focusing on greater efficiency in water use.

Water resources are assessed within a framework comprising four levels:

- the **total water resource** is the volume of water present in the environment, measured as mean annual run-off for surface water, and mean annual recharge for ground water;
- the **divertible resource** is the portion of run-off and recharge which can be developed for use;
- the **developed resource** is the portion of the divertible resource which has been developed for use; and
- **resource utilisation** is a measure of the portion of the developed resource which is actually used.

Emphasis is given to the second level of assessment, the divertible resource, as the prime measure of the resource. The divertible resource is defined as 'the average annual volume of water which, using current technology, could be removed from developed or potential surface water or ground water sources on a sustained basis, without causing adverse effects or long-term depletion of storages'.

1.14 SURFACE WATER RESOURCES OF STATES/TERRITORIES

				Surface water resource (gigalitres)					
		Mean annual	*Mean annual*	*Major divertible resource*					
State/ Territory	*Area (km²)*	*run-off*	*outflow*	*Fresh*	*Marginal*	*Brackish*	*Saline*	*Total*	*Developed resource*
NSW	802,000	42,400	37,200	17,300	—	—	—	16,900	7,970
Vic.	228,000	19,200	18,800	9,050	240	120	—	9,810	5,990
Qld	1,730,000	159,000	158,000	32,700	—	—	—	32,700	3,840
SA	984,000	2,120	1,250	193	109	59	20	384	124
WA	2,520,000	39,900	39,700	10,200	516	856	168	11,700	2,340
Tas.	68,200	52,900	52,900	10,800	—	—	—	10,900	1,020
NT	1,350,000	81,200	79,200	17,700	—	—	—	17,700	59
ACT	2,400	549	549	175	—	—	—	175	106
Total(a)	**7,680,000**	**397,000**	**387,600**	**98,100**	**865**	**1,040**	**190**	**100,000**	**21,500**

(a) Totals rounded.
Source: Australian Water Resources Council, 1987.

Australia's water resources are managed by a large number of resource management agencies, irrigation authorities, metropolitan water boards, local government councils and private individuals. State authorities dominate the assessment and control of water resources as, under the Commonwealth Constitution, primary responsibility for management of water rests with the individual State Governments. The Commonwealth Government is responsible for matters relating to Territories, and participates indirectly through financial assistance or directly in the coordination or operation of interstate projects through bodies such as the Murray–Darling Basin Commission.

A description of the management, main storage and use of water resources across the States and Territories is contained in the chapter, Water Resources, in the 1994 and earlier editions of *Year Book Australia*.

BIBLIOGRAPHY

ACT ELECTRICITY AND WATER. Annual Report

BUREAU OF METEOROLOGY. Climatic Atlas of Australia. Canberra, 1988

BUREAU OF METEOROLOGY. Climatic Averages, Australia. Canberra, 1988

BUREAU OF METEOROLOGY. Selected Rainfall Statistics Australia. Canberra, 1989

DEPARTMENT OF PRIMARY INDUSTRIES AND ENERGY. Review of Australia's Water Resources and Water Use. Water Resources Data Set. Australian Water Resources Council, 1985

DEPARTMENT OF WATER RESOURCES NSW. Annual Report

DEPARTMENT OF WATER RESOURCES VICTORIA. Water Victoria

Encyclopedia Britannica

ENGINEERING AND WATER SUPPLY DEPARTMENT SA. Annual Report

GAFFNEY, D.O. Rainfall deficiency and evaporation in relation to drought in Australia. ANZAAS Congress, Canberra, 1975

LEE, D.M. AND GAFFNEY, D.O. District Rainfall Deciles — Australia. Meteorological Summary, Bureau of Meteorology. Melbourne, 1986

POWER AND WATER AUTHORITY NORTHERN TERRITORY. Annual Report

QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRY, WATER RESOURCES COMMISSION. Annual Report

RIVERS AND WATER SUPPLY COMMISSION. Annual Report

TASMANIAN DEPARTMENT OF RESOURCES AND ENERGY, RIVERS AND WATER SUPPLY COMMISSION. Annual Report

WATER AUTHORITY OF WESTERN AUSTRALIA. Annual Report

The World Book Encyclopedia

Chapter Two

Government

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There are three levels of government in Australia.

The six Australian colonies federated in 1901 to form the Commonwealth of Australia. Most of the Commonwealth Parliament's legislative powers are enumerated in section 51 of the Constitution. Areas of power not specified remain the responsibility of the States and Territories. A system of local government, established under State legislation, creates a third tier of government in Australia. In 1991, Australia had 842 elected members of Parliament, of whom 224 were Commonwealth and 618 State and Territory members.

Both the State and the Commonwealth systems of government derive from the British Westminster system, although many features of the Commonwealth Constitution (including the federal structure) are based on the United States Constitution. Generally, however, the salient features of the Westminster system have been retained. Ministers are members of Parliament, and are required to be accountable and answerable to it. In the twentieth century, Australia has been characterised by a strong party system and adversarial style of politics between the government and opposition.

This chapter outlines the basic features of the constitutional structure of the Commonwealth Parliament and Government and its electoral system, and provides details of the Ministry, and other political leaders.

The Australian Constitution is reproduced in the Year Book from time to time, the latest being the 1992 edition.

A chapter outlining Australia's prehistory to Federation was contained in the 1991 and earlier Year Books.

PARLIAMENTARY GOVERNMENT

Scheme of parliamentary government

Under the Australian Constitution the legislative power of the Commonwealth of Australia is vested in the Parliament of the Commonwealth, which consists of the Queen, the Senate and the House of Representatives. The Queen is represented throughout the Commonwealth by the Governor-General. In each Australian State there is a State Governor, who is the representative of the Queen for the State. The Governor has such powers within the State as are conferred upon him/her by the Letters Patent constituting his/her office, and he/she exercises these powers in accordance with instructions issued to him/her by the Queen, detailing the manner in which his/her duties are to be fulfilled.

No Act of the Parliament of the United Kingdom passed after the commencement of the *Australia Act 1986* extends, or is deemed to extend, to the Commonwealth of Australia or to an Australian State or Territory as part of the law of the Commonwealth, of the State or of the Territory. Further, the restrictions that formerly existed on the legislative powers of the Parliaments of the States were removed by the Act.

In the Commonwealth Parliament the Upper House is known as the Senate, and in the bicameral State Parliaments as the Legislative Council. The Legislature in all States was bicameral until 1922 when the Queensland Parliament became unicameral upon the abolition of the Upper House. In the Commonwealth Parliament the Lower House is known as the House of Representatives; in the State Parliaments of New South Wales, Victoria and Western Australia as the Legislative Assembly; and in the State Parliaments of South Australia and Tasmania as the House of Assembly. The single House of Parliament in Queensland, the Northern Territory and the Australian Capital Territory is known as the Legislative Assembly. The extent of the legislative powers of each of the seven Parliaments is defined by the Australian and State Constitutions, respectively. In those States that have a bicameral legislature, the Legislative Assembly or House of Assembly, as the case may be, is the larger House.

The members of the Parliaments of each State are elected by the people, the franchise extending to Australian citizens who are at least 18 years of age and possess certain residential qualifications. For the Commonwealth Parliament the qualifications for the franchise are identical for both Houses, extending to Australian citizens and British subjects who are on the Commonwealth Electoral Roll and who are not less than 18 years of age.

The Sovereign

On 7 February 1952 the then Governor-General of the Commonwealth of Australia, acting with advice of members of the Federal Executive Council, proclaimed Princess Elizabeth as Queen Elizabeth the Second, Queen of this Realm and of all Her other Realms and Territories, Head of the Commonwealth, Defender of the Faith, Supreme Liege Lady in and over the Commonwealth of Australia. By the *Royal Style and Titles Act 1973,* which Her Majesty assented to in Canberra on 19 October 1973, the Commonwealth Parliament assented to the adoption by Her Majesty, for use in relation to Australia and its Territories, of the Style and Titles set out in the Schedule to that Act. On the same day, also in Canberra, Her Majesty issued a Proclamation, under the Great Seal of Australia, appointing and declaring that Her Majesty's Style and Titles should henceforth be, in relation to Australia and its Territories, 'Elizabeth the Second, by the Grace of God Queen of Australia and Her other Realms and Territories, Head of the Commonwealth'.

The Governor-General

Powers and functions. Under the Australian Constitution, the Governor-General exercises the executive power of the Commonwealth of Australia, and certain other powers and functions conferred by the Constitution that include, among others, the powers to appoint times for holding the sessions of the Parliament, to prorogue Parliament, and to dissolve the House of Representatives; to cause writs to be issued for general elections of members of the House of Representatives; to assent in the Queen's name to a proposed law passed by both Houses of the Parliament; to choose and summon Executive Councillors, who hold office during the Governor-General's pleasure; and to appoint Ministers of State for the Commonwealth of Australia. In addition, the Governor-General, as the Queen's representative, is Commander-in-Chief of the Defence Forces.

Many Acts of the Commonwealth Parliament provide that the Governor-General may make regulations to give effect to the Acts. The Governor-General may also be authorised by statute to issue proclamations, for example, to declare an Act in force. The Governor-General has been given power by statute to legislate for certain of the Australian Territories. Under the provisions of the Constitution, as well as by the conventions of responsible government in British Commonwealth countries, the Governor-General's executive functions are exercised on the advice of Ministers of State.

Holders of office. The present Governor-General is His Excellency the Honourable William George Hayden, AC. Those persons who have held the office of Governor-General from the inception of the Commonwealth of Australia are pictured in *Year Book Australia 1988.*

Administrators. In addition to the holders of the office of Governor-General, certain persons have, from time to time, been appointed by the Queen to administer the Government of the Commonwealth of Australia. These persons are appointed in the event of the death, incapacity, removal from office or absence from Australia of the Governor-General.

Governors of the States

Powers and functions. The Queen is represented in each of the Australian States by a Governor, the office having been constituted by Letters Patent issued under the Great Seal of the United Kingdom on various dates. The Governors of the States exercise prerogative powers conferred on them by these Letters Patent, their commissions of appointment and the Governor's Instructions given to them under the Royal Sign Manual and Signet or other instrument, as specified in the Letters Patent. In addition, they have been invested with various statutory functions by State Constitutions and the Commonwealth *Australia Act 1986,* as well as under the Acts of the Parliaments of the States.

A Governor of a State assents in the Queen's name to Bills passed by the Parliament of the State. Since the enactment of the *Australia Act 1986*, an Act of Parliament of a State that has been assented to by the Governor of the State is no longer subject to disallowance by the Queen or suspension pending signification of the Queen's pleasure. The Governor administers the prerogative of mercy by the reprieve or pardon of criminal offenders within his jurisdiction, and may remit fines and penalties due to the Crown in right of the State. In the performance of his functions generally, particularly those conferred by statute, the Governor of a State acts on the advice of Ministers of State for the State.

2.1 STATE GOVERNORS, HOLDERS OF OFFICE, JANUARY 1994

New South Wales	His Excellency REAR ADMIRAL PETER ROSS SINCLAIR, AO
Victoria	His Excellency JUSTICE RICHARD McGARVIE
Queensland	Her Excellency Mrs MARY MARGUERITE LENEEN FORDE
South Australia	Her Excellency the Honourable DAME ROMA FLINDERS MITCHELL, AC, DBE
Western Australia	His Excellency the Honourable SIR FRANCIS THEODORE PAGE BURT, AC, KCMG, QC
Tasmania	His Excellency GENERAL SIR PHILLIP BENNETT, AC, KBE, DSO
Northern Territory	The Honourable JAMES HENRY MUIRHEAD, AC QC

Source: Department of the Parliamentary Library.

COMMONWEALTH GOVERNMENT

Commonwealth Parliaments and Ministries

The following table shows the number and duration of parliaments since Federation.

2.2 COMMONWEALTH PARLIAMENTS

Number of Parliament	*Date of opening*	*Date of dissolution*
First	9 May 1901	23 November 1903
Second	2 March 1904	5 November 1906
Third	20 February 1907	19 February 1910
Fourth	1 July 1910	23 April 1913
Fifth	9 July 1913	(a)30 July 1914
Sixth	8 October 1914	26 March 1917
Seventh	14 June 1917	3 November 1919
Eighth	26 February 1920	6 November 1922
Ninth	28 February 1923	3 October 1925
Tenth	13 January 1926	9 October 1928
Eleventh	6 February 1929	16 September 1929
Twelfth	20 November 1929	27 November 1931
Thirteenth	17 February 1932	7 August 1934
Fourteenth	23 October 1934	21 September 1937
Fifteenth	30 November 1937	27 August 1940
Sixteenth	20 November 1940	7 July 1943
Seventeenth	23 September 1943	16 August 1946
Eighteenth	6 November 1946	31 October 1949
Nineteenth	22 February 1950	(a)19 March 1951
Twentieth	12 June 1951	21 April 1954
Twenty-first	4 August 1954	4 November 1955
Twenty-second	15 February 1956	14 October 1958
Twenty-third	17 February 1959	2 November 1961
Twenty-fourth	20 February 1962	1 November 1963
Twenty-fifth	25 February 1964	31 October 1966
Twenty-sixth	21 February 1967	29 September 1969
Twenty-seventh	25 November 1969	2 November 1972
Twenty-eighth	27 February 1973	(a)11 April 1974
Twenty-ninth	9 July 1974	(a)11 November 1975
Thirtieth	17 February 1976	8 November 1977
Thirty-first	21 February 1978	19 September 1980
Thirty-second	25 November 1980	(a)4 February 1983
Thirty-third	21 April 1983	26 October 1984
Thirty-fourth	21 February 1985	(a)5 June 1987
Thirty-fifth	14 September 1987	19 February 1990
Thirty-sixth	8 May 1990	8 February 1993
Thirty-seventh	4 May 1993	

(a) A dissolution of both the Senate and the House of Representatives was granted by the Governor-General under section 57 of the Constitution.
Source: Department of the Parliamentary Library.

The following list shows the name of each Commonwealth Government Ministry to hold office since 1 January 1901 and the dates of its term of office.

2.3 COMMONWEALTH GOVERNMENT MINISTRIES, 1901 TO 1991

(i)	BARTON MINISTRY	1 January 1901 to 24 September 1903
(ii)	DEAKIN MINISTRY	24 September 1903 to 27 April 1904
(iii)	WATSON MINISTRY	27 April 1904 to 17 August 1904
(iv)	REID-McLEAN MINISTRY	18 August 1904 to 5 July 1905
(v)	DEAKIN MINISTRY	5 July 1905 to 13 November 1908
(vi)	FISHER MINISTRY	13 November 1908 to 2 June 1909
(vii)	DEAKIN MINISTRY	2 June 1909 to 29 April 1910
(viii)	FISHER MINISTRY	29 April 1910 to 24 June 1913
(ix)	COOK MINISTRY	24 June 1913 to 17 September 1914
(x)	FISHER MINISTRY	17 September 1914 to 27 October 1915
(xi)	HUGHES MINISTRY	27 October 1915 to 14 November 1916
(xii)	HUGHES MINISTRY	14 November 1916 to 17 February 1917
(xiii)	HUGHES MINISTRY	17 February 1917 to 8 January 1918
(xiv)	HUGHES MINISTRY	10 January 1918 to 9 February 1923
(xv)	BRUCE-PAGE MINISTRY	9 February 1923 to 22 October 1929
(xvi)	SCULLIN MINISTRY	22 October 1929 to 6 January 1932
(xvii)	LYONS MINISTRY	6 January 1932 to 7 November 1938
(xviii)	LYONS MINISTRY	7 November 1938 to 7 April 1939
(xix)	PAGE MINISTRY	7 April 1939 to 26 April 1939
(xx)	MENZIES MINISTRY	26 April 1939 to 14 March 1940
(xxi)	MENZIES MINISTRY	14 March 1940 to 28 October 1940
(xxii)	MENZIES MINISTRY	28 October 1940 to 29 August 1941
(xxiii)	FADDEN MINISTRY	29 August 1941 to 7 October 1941
(xxiv)	CURTIN MINISTRY	7 October 1941 to 21 September 1943
(xxv)	CURTIN MINISTRY	21 September 1943 to 6 July 1945
(xxvi)	FORDE MINISTRY	6 July 1945 to 13 July 1945
(xxvii)	CHIFLEY MINISTRY	13 July 1945 to 1 November 1946
(xxviii)	CHIFLEY MINISTRY	1 November 1946 to 19 December 1949
(xxix)	MENZIES MINISTRY	19 December 1949 to 11 May 1951
(xxx)	MENZIES MINISTRY	11 May 1951 to 11 January 1956
(xxxi)	MENZIES MINISTRY	11 January 1956 to 10 December 1958
(xxxii)	MENZIES MINISTRY	10 December 1958 to 18 December 1963
(xxxiii)	MENZIES MINISTRY	18 December 1963 to 26 January 1966
(xxxiv)	HOLT MINISTRY	26 January 1966 to 14 December 1966
(xxxv)	HOLT MINISTRY	14 December 1966 to 19 December 1967
(xxxvi)	McEWEN MINISTRY	19 December 1967 to 10 January 1968
(xxxvii)	GORTON MINISTRY	10 January 1968 to 28 February 1968
(xxxviii)	GORTON MINISTRY	28 February 1968 to 12 November 1969
(xxxix)	GORTON MINISTRY	12 November 1969 to 10 March 1971
(xl)	McMAHON MINISTRY	10 March 1971 to 5 December 1972
(xli)	WHITLAM MINISTRY	5 December 1972 to 19 December 1972
(xlii)	WHITLAM MINISTRY	19 December 1972 to 11 November 1975
(xliii)	FRASER MINISTRY	11 November 1975 to 22 December 1975
(xliv)	FRASER MINISTRY	22 December 1975 to 20 December 1977
(xlv)	FRASER MINISTRY	20 December 1977 to 3 November 1980
(xlvi)	FRASER MINISTRY	3 November 1980 to 7 May 1982
(xlvii)	FRASER MINISTRY	7 May 1982 to 11 March 1983
(xlviii)	HAWKE MINISTRY	11 March 1983 to 13 December 1984
(xlix)	HAWKE MINISTRY	13 December 1984 to 24 July 1987
(l)	HAWKE MINISTRY	24 July 1987 to 4 April 1990
(li)	HAWKE MINISTRY	4 April 1990 to 20 December 1991
(lii)	KEATING MINISTRY	20 December 1991 to 24 March 1993
(liii)	KEATING MINISTRY	24 March 1993

Source: Department of the Parliamentary Library.

In *Year Book Australia 1924*, the names are given of each Ministry up to the Bruce–Page Ministry together with the names of the successive holders of portfolios therein. *Year Book Australia 1953* contains a list which covers the period between 9 February 1923, the date on which the Bruce–Page Ministry assumed power, and 31 July 1951, showing the names of all persons who held office in each Ministry during that period. The names of members of subsequent Ministries are listed in issues of the *Year Book Australia,* 1953 to 1975-76 inclusive, and in successive issues from 1980.

Particulars of the Second Keating Ministry at March 1994 are shown below.

2.4 SECOND KEATING MINISTRY, AT MARCH 1994

Prime Minister	**The Hon. P. J. Keating, MP**
Minister for Aboriginal and Torres Strait Islander Affairs	The Hon. Robert Tickner, MP
Special Minister of State (Vice-President of the Executive Council)	The Hon. Gary Johns, MP
Parliamentary Secretary	*The Hon. Andrew Theophanous, MP*
Minister for Housing and Regional Development (Deputy Prime Minister)	**The Hon. Brian Howe, MP**
Parliamentary Secretary	*The Hon. Mary Crawford, MP*
Minister for Foreign Affairs (Leader of the Government in the Senate)	**Senator the Hon. Gareth Evans, QC**
Minister for Trade	**Senator the Hon. Bob McMullen**
Minister for Development Co-operation and Pacific Island Affairs	The Hon. Gordon Bilney, MP
Minister for Defence (Deputy Leader of the Government in the Senate)	**Senator the Hon. Robert Ray**
Minister for Veterans' Affairs	The Hon. Con Sciacca, MP
Minister for Defence Science and Personnel	The Hon.Gary Punch, MP
Parliamentary Secretary	*The Hon. Arch Bevis, MP*
Treasurer	**The Hon. Ralph Willis, MP**
Assistant Treasurer	The Hon. George Gear, MP
Parliamentary Secretary	*The Hon. Paul Elliott, MP*
Minister for Finance (Leader of the House)	**The Hon. Kim C. Beazley, MP**
Minister for Administrative Services	The Hon. Frank Walker, QC, MP
Minister for Industry, Science and Technology	**Senator the Hon. Peter Cook**
Minister Assisting the Prime Minister for Science	
Minister for Small Business, Customs and Construction	Senator the Hon. Chris Schacht
Parliamentary Secretary	*The Hon. E. J. Lindsay, MP*
Minister for Immigration and Ethnic Affairs	**Senator the Hon. Nick Bolkus**
Minister Assisting the Prime Minister for Multicultural Affairs	
Minister for Employment, Education and Training	**The Hon. Simon Crean, MP**
Minister for Schools, Vocational Education and Training	The Hon. Ross Free, MP
Parliamentary Secretary	*The Hon. Warren Snowdon, MP*
Minister for Primary Industries and Energy	**Senator the Hon. Bob Collins, MP**
Minister for Resources	The Hon. David Bedall, MP
Parliamentary Secretary	*Senator the Hon. Nick Sherry*
Minister for Social Security	**The Hon. Peter Baldwin, MP**
Parliamentary Secretary	*The Hon. Janice Crosio, MP*
Minister for Industrial Relations	**The Hon. Laurie Brereton, MP**
Assistant Minister for Industrial Relations	The Hon. Gary Johns, MP
Minister Assisting the Prime Minister for Public Service Matters	

... continued

2.4 SECOND KEATING MINISTRY, AT MARCH 1994 — *continued*

Minister for Transport	**The Hon. Laurie Brereton, MP**
Parliamentary Secretary	*The Hon. Gary Johns, MP*
Attorney-General	**The Hon. Michael Lavarch, MP**
Minister for Consumer Affairs	The Hon. Jeannette McHugh, MP
Minister for Justice	The Hon. Duncan Kerr, MP
Parliamentary Secretary	*The Hon. Peter Duncan, MP*
Minister for Communications and the Arts	**The Hon. Michael Lee, MP**
Minister for Tourism	**The Hon. Michael Lee, MP**
Minister for the Environment, Sport and Territories (Manager of Government Business in the Senate)	**Senator the Hon. John Faulkner**
Parliamentary Secretary	*The Hon. Warren Snowden, MP*
Minister for Human Services and Health	**The Hon. Carmen Laurence, MP**
Minister Assisting the Prime Minister for the Status of Women	
Minister for Family Services	Senator The Hon. Rosemary Crowley
Parliamentary Secretary	*The Hon. Andrew Theophanous, MP*

NOTE: Cabinet Ministers are shown in bold type. As a general rule, there is one Department in each portfolio. Except for the Department of the Prime Minister and Cabinet and the Department of Foreign Affairs and Trade, the title of each Department reflects that of the Portfolio Minister. There is also a Department of Administrative Services in the Finance portfolio; and a Department of Veterans' Affairs in the Defence portfolio.

Source: Department of the Parliamentary Library.

Mr A.J.G. Downer, MP(LP) is the leader of the Opposition.

2.5 STATE OF THE PARTIES IN THE COMMONWEALTH PARLIAMENT, JUNE 1994

House of Representatives		Senate	
ALP	80	ALP	30
LP	49	LP	30
NPA	16	AD	7
IND	2	NPA	6
		G(WA)	2
		OTHER	1

Source: Department of the Parliamentary Library.

Numbers and salaries of Commonwealth Government Ministers

Under sections 65 and 66, respectively, of the Australian Constitution the number of Ministers of State was not to exceed seven, and the annual sum payable for their salaries was not to exceed £12,000, each provision to operate, however, 'until the Parliament otherwise provides'.

Subsequently, the number and salaries have increased from time to time, and as at 10 March 1994 the number of Ministers was 30 and ministerial salaries ranged from $112,169 for the Prime Minister, to $72,780 for the Deputy Prime Minister, $59,317 for the Treasurer and for the Leader of the Government in the Senate, $52,641 for the Leader of the House, and $49,048 for a Minister other than the above. Where more than one office is held only one salary is payable, that being the higher salary.

All amounts shown in the foregoing paragraphs are in addition to amounts payable as parliamentary salaries and allowances.

PARLIAMENTS AND ELECTIONS

Qualifications for membership and for franchise — Commonwealth Parliament

Any Australian citizen, 18 years of age or over and who is, or is qualified to become, an elector of the Commonwealth Parliament is qualified for membership of either house of the Commonwealth Parliament. Any Australian citizen (or British subject who was on the Commonwealth Roll as at 25 January 1984) over 18 years of age is qualified to enrol and vote at federal elections. Residence in a subdivision for a period of one month before enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory for all eligible persons.

The principal reasons for disqualification of persons otherwise eligible for election as members of either Commonwealth House are: membership of the other House; allegiance to a foreign power; being attainted of treason; being convicted and under sentence for any offence punishable by imprisonment for one year or longer; being an undischarged bankrupt or insolvent; holding an office of profit under the Crown (with certain exceptions); or having a pecuniary interest in any agreement with the public service of the Commonwealth except as a member of an incorporated company of more than 25 persons. Persons convicted of treason and not pardoned, or convicted and under sentence for any offence punishable by imprisonment for five years or longer, or of unsound mind, or persons who are holders of temporary entry permits under the *Migration Act 1958* or are prohibited non-citizens under that Act, are excluded from enrolment and voting.

Commonwealth Parliaments — representation and elections

From the establishment of the Commonwealth of Australia until 1949 the Senate consisted of 36 members, 6 being returned by each of the original federating States. The Australian Constitution empowers the Commonwealth Parliament to increase or decrease the size of the Parliament, and, as the population of Australia had more than doubled since its inception, the Parliament passed the *Representation Act 1948* which provided that there should be 10 Senators from each State instead of six, thus increasing the total to 60 Senators, enlarging both Houses of Parliament and providing a representation ratio nearer to the proportion which existed at Federation. The *Representation Act 1983* further provided for 12 Senators for each State from the first meeting of the thirty-fourth Parliament.

The *Senate (Representation of Territories) Act 1973* made provision for two Senators to be elected from both the Northern Territory and the Australian Capital Territory. Elections for the Territory Senators are held at the same time as general elections for the House of Representatives.

In accordance with the Constitution, the total number of State Members of the House of Representatives must be as nearly as practicable twice the total number of State Senators. Consequent upon the increase in the size of the Senate in 1949, the number of State Members was increased from 74 to 121. In 1955 there were 122 State Members; in 1969, 123; in 1974, 124; in 1977, 121; in 1980, 122. From the first meeting of the thirty-fourth Parliament, there was a further increase of 23 to 145 State Members flowing from the increase in the number of State Senators to 72.

Since the redistribution of electorates in 1949 giving effect to the increase in the size of the House of Representatives, further redistributions have taken place in 1955, 1968, 1974 (Western Australia only), 1977, 1979 (Western Australia only), 1984, when the size of the Parliament was increased again, 1988–89 (Victoria and Western Australia only) and 1991 (New South Wales, Queensland, South Australia, Tasmania and the Australian Capital Territory). Redistributions must be held whenever the representation entitlement of a State changes, when more than one-third of the electorates in a State deviates from the quota by more than 10 per cent for more than two months, or every seven years. The quota (or average number) of electors is the basis for electoral distribution. There may be a deviation from the quota of up to 10 per cent in order to achieve equality of enrolment midway between redistributions. In determining boundaries, Redistribution Committees take account of economic, social and regional interests, means of communication and travel, the trend of population changes, physical features and area, and the existing boundaries of electoral divisions.

The Electoral Commissioner determines the representation entitlements of the States and Territories during the tenth month after the first meeting of a new House of Representatives. Determinations are based on the latest population statistics as provided by the Australian Statistician. The quota is ascertained by dividing the number of people of the Commonwealth by twice the number of Senators representing the States. The population of the Territories and all Senators representing the Territories are excluded from calculation when determining the quota. The population of each State and Territory is then divided by the quota to determine their representation entitlements. If there is a remaining fraction of over half a quota, the State or Territory is entitled to an additional seat. This accounts for the minor fluctuations in the size of the House of Representatives. The representation entitlements of the States at the three most recent determinations are shown in the following table, which also shows the Territorial representation and the total size of the Parliament. Under section 24 of the Constitution, Tasmania remains entitled to the five seats guaranteed to any original State in 1901.

2.6 REPRESENTATION ENTITLEMENTS OF THE STATES AND TERRITORIES

State/Territory	*1981*	*1984*	*1988*	*1991*
State				
New South Wales	43	51	51	50
Victoria	33	39	38	38
Queensland	19	24	24	25
South Australia	11	13	13	12
Western Australia	11	13	14	14
Tasmania	5	5	5	5
Territories				
Northern Territory	1	1	1	1
Australian Capital Territory	2	2	2	2
Total Parliament	**125**	**148**	**148**	**147**

Source: Department of the Parliamentary Library.

From 1922 to 1968 the Northern Territory was represented in a limited capacity by one member in the House of Representatives. In May 1968 the *Northern Territory Representation Act 1922* was amended to give full voting rights to the Member for the Northern Territory effective from 15 May 1968, the day on which the Act received Royal assent.

From 1948 to 1967 the Australian Capital Territory was represented in a limited capacity by one member in the House of Representatives. The Member for the Australian Capital Territory was granted full voting rights on 21 February 1967.

Following the passing of the *Australian Capital Territory Representation (House of Representatives) Act 1973* the Australian Capital Territory was divided into two electoral divisions.

Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. At elections for Senators the whole State constitutes the electorate. For the purpose of elections for the House of Representatives the State is divided into single electorates corresponding in number to the number of members to which the State is entitled.

In 1948, amendments to the *Commonwealth Electoral Act 1918* changed the system of scrutiny and counting of votes in Senate elections from the alternative vote to that of proportional representation. The method of voting for both the Senate and the House of Representatives is preferential.

Particulars of voting at Senate elections and elections for the House of Representatives up to 1984 appear in earlier issues of *Year Book*

Australia. Full details are contained in the *Election Statistics* issued by the Electoral Commissioner following each election.

The numbers of electors and primary votes cast for the major political parties in each State and Territory at the 1993 election for each House of the Commonwealth Parliament were as follows:

2.7 COMMONWEALTH PARLIAMENT ELECTIONS, 13 MARCH 1993

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Australia*
Electors enrolled	3,814,932	2,932,640	1,971,729	1,014,400	1,038,968	327,919	91,563	192,487	11,384,638
HOUSE OF REPRESENTATIVES									
First preference votes									
Australian Labor Party	1,714,512	1,273,974	739,862	358,707	381,143	143,621	43,578	95,993	4,751,390
Liberal Party	1,127,291	1,102,965	571,226	421,687	474,743	129,132	—	61,535	3,888,579
National Party	346,191	137,470	269,152	2,878	2,345	—	—	—	758,036
Country Liberal Party	—	—	—	—	—	—	35,207	—	35,207
Australian Democrats	99,817	101,185	74,278	71,981	31,791	7,653	—	10,355	397,060
Others	260,667	127,221	172,806	68,422	78,571	26,734	—	12,086	746,507
Formal votes	3,548,478	2,742,815	1,827,324	923,675	968,593	307,140	78,785	179,969	10,576,779
Informal votes	113,664	79,811	49,135	39,088	24,992	8,634	2,518	6,240	324,082
Total votes recorded	**3,662,142**	**2,822,626**	**1,876,459**	**962,763**	**993,585**	**315,774**	**81,303**	**186,209**	**10,900,861**
SENATE									
First preference votes									
Australian Labor Party	1,681,528	1,235,344	729,265	359,491	373,247	131,876	43,740	89,380	4,643,871
Liberal Party	—	—	582,766	431,642	472,131	113,347	—	64,318	1,664,204
National Party	—	—	268,809	4,498	17,075	—	—	—	290,382
Liberal–National Party	1,394,111	1,211,046	—	—	—	—	—	—	2,605,157
Country Liberal Party	—	—	—	—	—	—	35,405	—	35,405
Australian Democrats	176,324	109,223	130,405	93,325	39,849	5,162	—	12,656	566,944
Call to Australia	53,445	20,105	11,546	10,762	11,568	1,519	—	—	108,945
The Greens (WA)	—	—	—	—	53,757	—	—	—	53,757
Others	278,671	170,866	127,870	46,257	8,145	56,859	—	17,472	706,140
Formal votes	3,584,079	2,746,584	1,850,661	945,975	975,772	308,763	79,145	183,826	10,674,805
Informal votes	97,534	86,634	38,491	22,390	20,983	8,121	2,312	2,988	279,453
Total votes recorded	**3,681,613**	**2,833,218**	**1,8891,52**	**968,365**	**996,755**	**316,884**	**81,457**	**186,814**	**10,954,258**

Source: Department of the Parliamentary Library.

Parliamentary salaries and allowances

The basic salary payable to a Senator or Member of the House of Representatives was $69,693 at 10 March 1994. In addition, Senators or Members receive an electoral allowance of $24,558 in the case of a Senator or a Member representing an electorate of less than 2,000 square kilometres, $29,202 in the case of a Member representing an electorate of 2,000 square kilometres or more, but less than 5,000 square kilometres, or $35,611 in the case of a Member representing an electorate of 5,000 square kilometres or more.

Referendums

In accordance with section 128 of the Constitution, any proposed law for the alteration of the Constitution, in addition to being passed by an absolute majority of each House of Parliament, (except in circumstances specified in section 128 of the Constitution which permits a referendum to proceed if passed by only one chamber), must be submitted to a referendum of the electors in each State and Territory and must be approved by a majority of the electors in a majority of the States and by a majority of all the voters who voted before it can be presented for Royal assent.

Since 1901, 42 proposals have been submitted to referendums. The consent of the electors has been received in eight cases: the first in relation to the election of Senators in 1906, the second (1910) and third (1928) in respect of State Debts, the fourth in respect of Social Services in 1946 and the fifth in respect of Aboriginals in 1967. The remaining three proposals in relation respectively to Senate casual vacancies, maximum retirement age for justices of the High Court and judges of other Federal Courts, and the right of electors in the Territories to vote in referendums for the alteration of the Constitution, were approved in May 1977. In addition to referendums for alterations of the Constitution, other Commonwealth referendums have been held — two prior to Federation regarding the proposed Constitution and two regarding military service during World War I. A National song poll was held on 21 May 1977. Voting was preferential and after the distribution of preferences Advance Australia Fair became the national song of Australia.

For further details of referendums see *Year Book Australia 1966*, pages 66–68, *Year Book Australia 1974*, pages 90–91, *Year Book Australia 1977–78*, pages 72–73 and *Year Book Australia 1986*, pages 55–56.

The States and Territories

This section contains summarised information; for greater detail refer to State *Year Books*.

2.8 GOVERNMENT LEADERS IN STATES AND TERRITORIES, JUNE 1994

New South Wales	THE HON. J. J. FAHEY, M.P. (LP)
Victoria	THE HON. J. G. KENNETT, M.P. (LP)
Queensland	THE HON. W. K. GOSS, MLA (ALP)
South Australia	THE HON. D. C. BROWN, MP (LP)
Western Australia	THE HON. R. COURT, MLA (LP)
Tasmania	THE HON. R. J. GROOM, MHA (LP)
Northern Territory	THE HON. M. PERRON, MLA (CLP)
Australian Capital Territory	THE HON. R. FOLLETT, MLA (ALP)

Source: Department of the Parliamentary Library.

2.9 OPPOSITION LEADERS IN STATES AND TERRITORIES, JUNE 1994

New South Wales	R. J. CARR, M.P. (ALP)
Victoria	J. M. BRUMBY, M.P. (ALP)
Queensland	R. E. BORBIDGE, MLA (NP)
South Australia	THE HON. L. M. F. ARNOLD, M.P. (ALP)
Western Australia	THE HON. I. TAYLOR MLA (ALP)
Tasmania	THE HON. M. W. FIELD, MHA (ALP)
Northern Territory	B. R. EDE, MLA (ALP)
Australian Capital Territory	K. CARNELL, MLA (LP)

Source: Department of the Parliamentary Library.

2.10 STATE OF THE PARTIES IN THE STATES AND TERRITORIES, JANUARY 1994

New South Wales — *Legislative Assembly*		*Legislative Council*	
ALP	47	ALP	18
LP	31	LP	13
NPA	17	NPA	7
IND	4	IND	2
		AD	2
Victoria — *Legislative Assembly*		*Legislative Council*	
ALP	27	ALP	14
LP	52	LP	24
NPA	9	NPA	6
Queensland — *Legislative Assembly*			
ALP	54		
NPA	26		
LP	9		
South Australia — *House of Assembly*		*Legislative Council*	
ALP	10	ALP	9
LP	37	LP	11
		AD	2
Western Australia — *Legislative Assembly*		*Legislative Council*	
ALP	24	ALP	15
LP	26	LP	14
NPA	6	NPA	3
IND	1	IND	2
Tasmania — *House of Assembly*		*Legislative Council*	
LP	19	LP	1
ALP	11	ALP	1
IND	5	IND	17
Northern Territory — *Legislative Assembly*			
CLP	14		
ALP	9		
IND	2		
Australian Capital Territory — *Legislative Assembly*			
ALP	8		
LP	6		
IND	3		

NOTE: Explanation of abbreviations:
AD — Australian Democrats; ALP — Australian Labor Party; CLP — Country-Liberal Party; IND — Independent; LP — Liberal Party; NPA — National Party of Australia.
Source: Department of the Parliamentary Library.

ACTS OF THE COMMONWEALTH PARLIAMENTS

In the Commonwealth Parliament all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Australian Constitution. In all States, other than South Australia and Tasmania, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly. In South Australia and Tasmania laws are enacted in the name of the Governor of the State, with the advice and consent of the Parliament in the case of South Australia, and of the Legislative Council and House of Assembly in the case of Tasmania. Generally, assent to Bills passed by the Legislatures is given by the Governor-General or State Governor acting on behalf of, and in the name of, the Sovereign. In certain special cases Bills are reserved for the Royal assent. The Parliaments of the States are empowered generally, subject to the Australian Constitution, to make laws in and for their respective States in all cases whatsoever. The power of the States to make laws was enhanced in 1986 by the enactment by the Commonwealth Parliament of the *Australia Act 1986* and the accompanying *Australia (Request and Consent) Act 1986.* Subject to certain limitations they may alter, repeal, or vary their Constitutions. Where a law of a State is inconsistent with a law of the Commonwealth Parliament, the latter law prevails and the former law is, to the extent of the inconsistency, invalid.

The enactment of Commonwealth Parliament legislation

The legislation passed by the Commonwealth Parliament between 1901 and 1973, and which was then still in operation, was published in a consolidated form entitled *Acts of the Parliament 1901–1973.* Since 1974, annual volumes of Acts have also been published. The consolidation contains a chronological table of Acts passed from 1901 to 1973, showing how they are affected by subsequent legislation or lapse of time, together with a table of legislation of the Commonwealth Parliament passed between 1901 and 1973 in relation to the several provisions of the Australian Constitution. Reference should be made to these for complete information.

In 1991 the number of enactments of the Commonwealth Parliament was 121.

NATIONAL ANTHEM AND COLOURS OF AUSTRALIA

Details of the official proclamation issued on 19 April 1984 are as follows:

His Excellency, the Governor-General of the Commonwealth of Australia, issued the following Proclamation on 19 April 1984:

> I, SIR NINIAN MARTIN STEPHEN, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, hereby declare:
>
> (a) that the anthem 'God Save The Queen' shall henceforth be known as the Royal Anthem and be used in the presence of Her Majesty The Queen or a member of the Royal Family;
>
> (b) that the National Anthem shall consist of the tune known as 'Advance Australia Fair' with the following words:
>
> *Australians all let us rejoice,*
> *For we are young and free,*
> *We've golden soil and wealth for toil;*
> *Our home is girt by sea;*
> *Our land abounds in nature's gifts*
> *Of beauty rich and rare,*
> *In history's page, let every stage*
> *Advance Australia Fair.*
> *In joyful strains then let us sing,*
> *Advance Australia Fair.*
>
> *Beneath our radiant Southern Cross*
> *We'll toil with hearts and hands;*
> *To make this Commonwealth of ours*
> *Renowned of all the lands;*
> *For those who've come across the seas*
> *We've boundless plains to share;*
> *With courage let us all combine*
> *To Advance Australia Fair.*
> *In joyful strains then let us sing,*
> *Advance Australia Fair.*
>
> (c) that the Vice-Regal Salute to be used in the presence of His Excellency The Governor-General shall consist of the first four bars and the last four bars of the tune known as 'Advance Australia Fair';
>
> (d) that the National Anthem shall be used on all official and ceremonial occasions, other than occasions on which either the Royal Anthem or the Vice-Regal Salute is used; and
>
> (e) that green and gold (Pantone Matching System numbers 116C and 348C as used for printing on paper) shall be the national colours of Australia for use on all occasions on which such colours are customarily used.

An Australian Republic — Issues and Options

(This article is a reproduction of the summary report, under the same title, of the Republic Advisory Committee, subject to minor changes in presentation for the Year Book.)

Background

The question of whether to retain the monarchy or move to a republic is one which has been debated in Australia since before federation in 1901. The widespread interest in the question in recent times has highlighted the need for information about what a move to a republic might involve.

It was for this purpose that the Republic Advisory Committee was established by the Prime Minister, The Honourable P J Keating MP, on 28 April 1993. The Committee was asked to examine the issues and develop:

> an options paper which describes the minimum constitutional changes necessary to achieve a viable Federal Republic of Australia, maintaining the effect of our current conventions and principles of government.

The Committee was asked specifically not to make recommendations, but did come to a number of conclusions about matters relevant to consideration of the options.

The *Report of the Republic Advisory Committee* was published in 1993 by the Australian Government Printer, Canberra. What follows is a summary of the Report taken from *An Australian Republic, The Options — An Overview* produced by the Committee in the interests of achieving a wide understanding of the issues and options involved if Australia were to become a republic.

What it is about

In looking at the options, the Committee was required by its Terms of Reference to address the following:

- the removal of all references to the monarch in the Constitution;
- the need for an office of an Australian head of state, its creation, and what it might be called;
- how the head of state might be appointed and removed;
- how the powers of a head of state should be made subject to the same conventions and principles as apply to the powers of the Governor-General;
- how the Constitution would need to be changed for Australia to become a republic; and
- the implications for the States.

What it is not about

The other question, i.e. whether Australia should or should not become a republic, is for the community to consider. The Committee has not addressed this question, indeed it was specifically excluded from the Terms of Reference. The Committee's contribution to the broader debate over the republic question is to provide some concrete options for a republic to enable the debate to proceed in an informed way.

In both consultations with the public and written submissions it was apparent to the Committee that many people were concerned about a variety of issues including whether or not there should be a change to the national flag, the powers of the Senate, the role of the States, and Australia's membership of the Commonwealth of Nations, amongst others. These issues are quite separate from the task the Committee was asked to undertake and are in no way affected by the options outlined by the Committee.

The consultation process

At the outset, the Committee prepared and distributed an 'Issues Paper' along with copies of the Australian Constitution. (The Constitution was reproduced in the 1992 Year Book). The Issues Paper provided a background to the issues arising from the Terms of Reference and briefly outlined some of the possible methods of dealing with them. It was designed to serve as a guide to members of the public in preparing submissions to the Committee.

In addition to receiving over 400 written submissions, the Committee conducted public hearings in all capital cities and in major regional centres. The Committee also consulted with a wide range of individuals including Governors, Heads of Government and other leaders of political parties, Ministers, other politicians, Solicitors-General and representatives of trade unions and of organisations representing ethnic communities.

The Committee's task

The Terms of Reference require the Committee to produce an 'options paper' describing the minimum constitutional changes necessary to achieve a viable federal republic of Australia, while maintaining the effect of our current conventions and principles of government.

It is in this respect that the Committee's task has been described as 'minimalist'. Australia is already a state in which sovereignty derives from its people, and in which all public offices, except that at the very top of the system, are filled by persons deriving authority, directly or indirectly, from the people. The only element of the Australian system of government which is not consistent with a republican form of government is the monarchy (which is an hereditary office succession to which is governed by the laws of another country).

If the monarchy were to be replaced with a republican head of state, the Constitution would need to be amended in only three substantive ways:

- First, provisions establishing the office of a new Australian head of state would have to be set out in the Constitution together with a method of appointment and, where necessary, removal.
- Second, a method of dealing with the powers of the head of state, and the existing conventions surrounding the exercise of those powers, would need to be incorporated into the Constitution.
- Third, as the Queen is also head of state of each of the six Australian States, the position of the States would need to be addressed.

The remaining amendments to the Constitution which would be necessary to establish a republic (including removing references to the Queen and the Governor-General) are essentially consequential on those changes.

The Committee was required to describe the 'minimum constitutional changes' necessary to achieve a viable republic, and in doing so, to exclude any which would 'otherwise change our structure of government, including the relationship between the Commonwealth and the States'.

Before summarising the options which the Committee believe satisfy these criteria, it is appropriate to consider briefly the main elements of our existing structure of government.

Our way of government

The Commonwealth of Australia is a federal parliamentary democracy. Under the Constitution, the Parliament, consisting of the Queen, the Senate and the House of Representatives, exercises the legislative power of the Commonwealth. The Queen is the head of state and is represented in Australia by the Governor-General, who is appointed by the Queen acting on the advice of the Prime Minister of Australia.

The House of Representatives is currently made up of 147 members each of whom represents a single electorate. The electorates are distributed between the States and mainland territories in accordance with their populations, subject to a constitutional guarantee that each of the existing States is to have at least five seats.

The Senate was designed as a 'States House'. Each State has the same number of Senators (currently twelve) regardless of population, elected on a State-wide basis by a system of proportional representation. The Northern Territory and the Australian Capital Territory have two Senators each, giving the Senate a current total membership of 76.

The powers of the Senate and the House of Representatives in relation to legislation are, in most respects, equal. The Senate cannot, however, initiate laws appropriating revenue of moneys or laws imposing taxation and cannot amend laws imposing taxation or providing money for the ordinary annual services of the Government. If the Senate does not agree with a bill passed by the House of Representatives, then the Prime Minister can, if certain conditions have been fulfilled, advise the Governor-General to dissolve both the Senate and the House of Representatives for an election.

The description of Australia as a federation indicates that the responsibilities of governing the country are divided between the Governments and Parliaments of the six States, the two self-governing Territories and the Commonwealth. The distribution of powers between the Commonwealth and the States is set out in the Constitution and the High Court adjudicates on whether legislation of the Parliaments is consistent with these provisions.

Australia has a system of 'responsible government'. This means that the government of the nation is conducted by a Prime Minister and Ministers, each of whom administers, and is responsible for, a particular department or departments of government. The Government is responsible to the House of Representatives in that it must have the 'confidence' of the House to remain in office. The Prime Minister is the person who leads the political party, or coalition of parties, which has won a majority in the House of Representatives, or who can otherwise command the support of a majority of its members. Generally, as is the case at the present time, the senior members of the Ministry form the Cabinet, which is the principal decision-making body of the Government.

Unlike some other systems of Government, such as in the United States, the head of government, the Prime Minister, is not the same person as the head of state. In this respect, we are similar to many republics such as Germany, Italy, India and Ireland and constitutional monarchies like the United Kingdom. A head of state like that of Australia is often referred to as a 'non-executive head of state' to distinguish the office from an 'executive head of state', such as the American President.

The Constitution and the reality of modern government

One has only to examine the Commonwealth Constitution to see that, read alone, it is a poor guide to the manner in which Australia is actually governed and can give a misleading impression of the actual powers of both the Queen and the Governor-General. The powers conferred on the Queen and the Governor-General are, on a literal reading, very extensive. Of course these constitutional powers are exercised by the Queen and Governor-General (almost invariably) on ministerial advice, but this important element of our system of responsible government is not set out in the Constitution. The 'real' relationship between the Queen and the Governor-General on the one hand, and the elected Government on the other, is governed by unwritten rules — the so-called 'constitutional conventions'.

Moreover, there is no reference in the Constitution to the Prime Minister or the Cabinet, and while it does refer to Ministers of State, they are said to be appointed by, and to hold office 'during the pleasure of', the Governor-General. There is no specific reference to the need for the Prime Minister or Ministers to command the confidence of the House of Representatives.

Section 1 of the Constitution states that the Legislative power of the Commonwealth is vested in a Federal Parliament which consists of 'the Queen, a Senate and a House of Representatives'. Section 2 goes on to provide that the Queen's representative shall be a Governor-General who holds office 'during her pleasure' and that the Governor-General shall have such 'powers and functions as the Queen may be pleased to assign to him'. The executive power of the Commonwealth is 'vested in the Queen' by section 61 although 'exercisable by the Governor-General as the Queen's representative'. Section 68 says that the Governor-General is commander in chief of the armed forces.

Sections 58 and 59 of the Constitution appear to confer extraordinary powers over Australian affairs on the Queen. Section 58 provides that the Governor-General may give, or withhold, assent to bills passed by both Houses of Parliament. It also provides that he may reserve such bills for the Queen's pleasure. If a bill is reserved for the monarch's approval she has two years to decide whether she will approve it. Moreover, under section 59, the monarch has the right to disallow legislation passed by Parliament and assented to by the Governor-General.

These provisions were appropriate in 1901 because Australia was still a dependent part of the British Empire. They were designed to enable the Imperial Government in London to oversee the conduct of Australian affairs and intervene if the Australian Parliament and Government acted in a way that was unacceptable to the Imperial Government or inconsistent with British interests. They are clearly inappropriate in the Constitution of an independent nation, as Australia now is.

Constitutional conventions

Part of the reason why the Constitution is not an accurate description of the way Australia is governed is that the constitutional conventions which govern the conduct of both the Queen and the Governor-General are not recorded in the Constitution or any other legislative instrument. The conventions, which are unwritten rules not enforceable by the courts, embody many of the essential principles of responsible government. These conventions — for example, that the Government must have the confidence of the popularly elected House of Parliament and that the Queen (and the Governor-General) acts on ministerial advice except in relation to the exercise of the 'reserve' powers — were clearly understood in 1900. The convention debates of the 1890s show that the framers of the Commonwealth Constitution assumed, for example, that the Government of Australia would be administered by Ministers who could command a majority in the House of Representatives. They chose quite deliberately not to set them down in the text of the Constitution itself. The High Court has, however, held that responsible government is implied in the Constitution.

Responsible government in Australia is still carried on in accordance with these constitutional conventions but they are not authoritatively or comprehensively articulated. Many of the conventions are well understood and accepted, but views differ about the content and operation of some, such as the circumstances in which the Governor-General can dismiss the Prime Minister.

The Queen today

Nowadays the only remaining substantive functions the Queen has in respect of Australia are to appoint, and if requested, to remove, the Governor-General. Both functions would only be performed on the advice of the Australian Prime Minister. This was not the case in 1901 when the Governor-General was not merely the local representative of the Queen, but was the representative of the British Government who appointed him to that post.

The Queen does not represent Australia abroad as she does the United Kingdom. When the Queen visits a foreign country, other than as head of the Commonwealth of Nations, she does so as head of state of the United Kingdom only.

The Queen is the head of state of each of the Australian States and the State constitutions all reflect the central role of the Crown as part of the Parliament and Executive of the State. Since 1986, in performing any functions concerning a particular State of Australia, she acts on the advice of the State Premier. Prior to that time she acted on the formal advice of the British Government with respect to State matters, although for the most part the British Government simply relayed the wishes of the relevant State Government.

The Governor-General today

The Governor-General ceased to be a representative of the United Kingdom Government (and to be appointed on the advice of that Government) following Imperial Conferences in 1926 and 1930, and now represents only the Queen in her capacity as head of state of Australia. The Governor-General is a *viceroy* (or deputy head of state) and fulfills a largely symbolic or ceremonial role.

The Governor-General's functions are of three kinds:

- those arising under the Constitution (such as the issuing of writs for an election or appointment of federal judges), or under Commonwealth legislation (such as making regulations or proclamations), in relation to which the Governor-General acts on ministerial advice;
- the so-called 'reserve powers' (rarely exercised constitutional functions in relation to which the Governor-General is entitled, according to convention, to act otherwise than on ministerial advice), which allow the Governor-General to act as a 'constitutional umpire'; and

- the ceremonial and representative functions which at present appear to occupy about 80 per cent of the Governor-General's time.

The Constitution provides that some functions are performed by the 'Governor-General in Council'. This refers to the Governor-General acting with the advice of the Executive Council. (All Ministers and Parliamentary Secretaries are members of the Executive Council, as are Ministers of former governments, although only those currently serving in the Ministry are under summons to attend meetings.)

Other constitutional powers, such as assenting to legislation and exercising the executive power of the Commonwealth, do not require the advice of the Executive Council. However, this distinction is largely formal: these powers are, by convention, only exercised on the advice of responsible Ministers.

Of the powers conferred on the Governor-General by the Constitution, only a few are considered 'reserve powers', that is, powers exercisable in some circumstances on the Governor-General's own discretion, without, or contrary to the advice of Ministers.

These are:

- the power to appoint the Prime Minister;
- the power to dismiss the Prime Minister, and therefore the Government; and
- the power to refuse to follow advice to dissolve the House of Representatives, or both Houses.

The situations in which it is regarded as acceptable for the Governor-General to exercise these powers are governed by the unwritten constitutional conventions.

Does Australia need a head of state?

Against this background, the Committee has considered whether Australia really needs a head of state. To a certain extent, the answer to this question will depend on the value which is given to each of the functions carried out by the Governor-General described above. The issues to be considered are:

- whether it is considered necessary that these functions continue to be performed;
- if so, whether it is necessary or desirable that they continue to be carried out by the occupant of a separate office established for that purpose; or
- whether they could be carried out by someone else, or in some other manner.

It is argued by some that there is no need to incur the expense (about $11 million a year) of a ceremonial head of state: the community role could be performed by other public officials, such as the Speaker of the House of Representatives or the President of the Senate; and the ordinary governmental role could be performed by those persons responsible for giving the advice in accordance with which the Governor-General presently must act. Finally, it is argued that the reserve powers could be done away with by *establishing rules in the Constitution itself* which would make unnecessary the intervention of a 'constitutional umpire'.

The cost of the office is something which can be dealt with outside of the Constitution. Parliament can provide for as lavish, or as spartan, a life-style for the Governor-General (or a republican head of state) as it wishes.

While dispensing with the office of head of state is an option which some Australians may think is worthy of serious consideration, it must be acknowledged that this would be a major departure from our existing system of government. The Committee is not aware of any nation (as opposed to provinces or states within nations) which does not have a head of state and, while the Prime Minister is unquestionably seen as a leader of the nation, there is much to be said for a national figure who stands above the hurly-burly of partisan politics and who can represent the nation as a whole, both to Australians and to the rest of the world.

A new office of head of state

If a new office of head of state is to be established and our current principles of government are to be retained, the functions to be carried out are likely to be similar to those of the Governor-General. Because the new head of state would not be just a representative of the Queen, but Australia's head of state in his or her own right, he or she would occupy a more important and prominent role in Australian life than the Governor-General, even though the duties would remain almost entirely ceremonial. Moreover, the creation of an Australian office of head of state would provide an opportunity to consider the manner in which the functions of the office are to be carried out and to determine what is appropriate for Australia, including the introduction of certainty as to the extent of those functions.

What should the head of state be called?

The office of the head of state in republics around the world is almost invariably titled 'President', but there are other practical and acceptable options which would be consistent with republican status. While many were suggested to the Committee, the two most popular after 'President' were 'Governor-General' and 'Head of State'. Each of these three titles has advantages and disadvantages which are canvassed in the Committee's Report. The Committee is confident, however, that the name selected would soon become accepted.

What qualifications should the head of state have?

It is probably fair to assume that there is some unanimity among Australians about the qualities a head of state should possess: that the person be an eminent Australian who is widely respected and regarded as able to behave in a politically impartial manner. While a person who lacks these qualities would be very unlikely to be chosen, the question arises what (if any) specific qualifications should be set out in the Constitution.

Possible qualifications include a minimum age, residency in Australia for a certain period, Australian citizenship, and those qualifications such as those currently applying to members of the Commonwealth Parliament. The Committee also considered the often suggested option of excluding former politicians from holding the office (whether for all time or for a limited time after leaving Parliament).

What kinds of qualifications are appropriate depends to some extent on the nature of the office and the method by which the head of state is to be appointed. Given the degree of scrutiny likely to be involved in the selection of the head of state, the Committee is inclined to the view that specific qualifications are not necessary beyond the fundamental ones that the person be an adult Australian citizen and not hold another remunerated position while in office.

How long should the term of office be?

The term should be specified, but there are a number of options in regard to its length — any period from four to seven years would seem reasonable. A term of five years would continue the practice established for Governors-General.

Re-appointment could be excluded altogether, allowed but only once (including for a shorter period of, say, three years), or allowed without restriction. Unlimited reappointment might not be appropriate in a republic with our system of government.

Who should perform the functions of the head of state in his or her absence?

The Committee considered the following options:

- keep the system as at present, with the senior, available State Governor being used;
- use another office holder such as the Speaker of the House of Representatives or the Chief Justice of the High Court; or
- create a separate office of 'Deputy Head of State'.

If the head of state is to have functions similar to the Governor-General, and to exercise much the same kind of powers, the first may be considered the most practical option.

How should the head of state be appointed?

At the moment, the Governor-General is chosen by the Prime Minister and appointed by the Queen on the Prime Minister's advice. The Governor-General can be removed by the same process — that is, by the Queen acting on the recommendation of the Prime Minister. Many different methods by which a head of state might be elected were suggested to the Committee, both in written submissions and at public meetings. The overriding theme to emerge was that the office of the head of state should be 'above politics' and the person holding the position should be seen as a 'non-partisan' figure, commanding a wide degree of popular support, and support from all sides of politics.

Appointment by the Prime Minister

Leaving the appointment of the head of state to the Government of day is the option which most closely reflects the current practice. Although Prime Ministers would no doubt continue to appoint appropriately qualified individuals and those appointees would similarly carry out the functions of the office in an even-handed fashion, the *process* of appointment may be viewed as a partisan one if left to the Prime Minister alone.

Appointment by Parliament

Involving the people in the appointment process through their parliamentary representatives is a democratic process and, depending on the particular method selected, can ensure that the person selected has the support of all major parties. Moreover, it would, through the Senate, reflect the federal nature of the Commonwealth.

There are a number of issues to be resolved. These include:

- whether the Houses should vote separately, thereby risking deadlock, or whether the members should vote in a joint sitting;
- whether the vote should require a simple majority of members or whether a 'special majority' should be required to ensure that the person selected would have not only the support of the Government members, but also of a substantial number of non-Government members; and
- whether a single nomination by the Prime Minister or a bipartisan nominating panel should be considered, or a number of nominations from other sources.

A joint sitting of the Houses would be in keeping with the importance of the occasion and could provide a symbol of unity appropriate for the appointment of a head of state who would represent the nation as a whole.

Requiring only a simple majority in each House, or indeed of members of both Houses in a joint sitting could, depending on the relative size of the Government's majority in the House of Representatives and its representation in the Senate, see the Government determine the outcome without the support of any other party, or with the support of only a small number of non-Government Senators.

Adopting a voting procedure which would necessarily require the support of members of more than one political party (e.g. a two-thirds majority) would discourage the nomination of individuals who were not likely to gain that support and would encourage prior consultation between parties on nominees.

A single nomination by the Government would have the advantage of avoiding parliamentary discussion on the relative merits of the candidates which could be seen as divisive and detrimental to the office. Moreover, if a two-thirds majority were required, prior consultation with other parties could be expected. An alternative to a Government nomination would be nomination by an independent commission or group of eminent people with membership on an *ex officio* basis (such as the Chief Justice of the High Court, the Prime Minister and the Leader of the Opposition) or made up of Australians outside the political process.

If having only a single nomination was considered too restrictive, multiple nominations could be allowed, possibly by a specified number of members of Parliament or by a nominating commission. A two-thirds majority requirement would ensure a bipartisan result in the end.

Popular election

The head of state could be elected by the people in a direct election. The argument in favour of such a method is that it is entirely democratic and would give Australians a direct voice in the process.

Another argument made to the Committee is that a direct election would prevent a political appointment, as could occur if the matter was left to politicians. This may not turn out to be the case in practice — indeed a direct election could ensure that the person elected is the nominee of one or other of the major political parties which have the expertise and resources to mount nation-wide political campaigns. A popular election might ensure that the head of state is not a 'political' appointment, but it may well result in the person elected being a 'politician'.

The Committee considered two options which might reduce the partisan nature of a popular election — a ban on political parties endorsing candidates for the head of state and excluding former politicians. It is doubtful whether such provisions would be effective in freeing the election from political campaigning and they may be seen as unduly restricting political freedoms.

The Committee considered that, while the option of popular election of the head of state is one which appears to have significant public support, it should be recognised that it would be expensive (particularly if held separately from a parliamentary election), would almost certainly involve political parties in the endorsement of candidates, and by its nature could discourage suitable candidates from standing. Moreover, the process of popular election may encourage the head of state to believe that he or she has a popular mandate to exercise the powers of that office, including the ability to make public statements and speeches, in a manner which could bring the head of state into conflict with the elected Government.

The Committee is therefore of the view that if popular election is chosen as the method of selecting the head of state, then, if the effect of our current conventions and principles of government is to be maintained, the Constitution should be amended so as clearly to define and delimit the powers of the head of state so that the Australian people know precisely the powers and duties of the head of state they are being called upon to elect.

Appointment by an electoral college

Several federal nations with non-executive heads of state establish electoral colleges to appoint their heads of state. Typically, the electoral college is made up of representatives from the national and State Parliaments. The case for including representatives of the States and Territories in the process for selecting the Commonwealth head of state this way is not, in the view of the Committee, a compelling one.

It would be possible to design a special body with representatives drawn from outside the Commonwealth, State and Territory Parliaments with the task of electing the head of state. Reaching a consensus in the community as to which groups or individuals should participate in such an electoral college would, to say the least, not be a straightforward task.

Summary

In summary, the main options as reflected in the submissions received by the Committee appear to be those involving selection either by a special majority of Parliament or by popular election. Both of these would represent a diminution of the present power of the Prime Minister to select the Governor-General, and an increase in the power of the electors or their representatives to determine the outcome. If the head of state is to be popularly elected however, careful thought would have to be given to the issue of the powers of the head of state in order to ensure that he or she could not become a political rival to the elected Government.

Removal of the head of state

Even though it is unlikely to happen, it is possible that the head of state may become mentally or physically incapacitated, commit a criminal offence or behave in a way which otherwise brings the office into disrepute. If the occupant was not inclined or able to resign, some method should be available to remove the person from office. In determining what the procedure should be there are two main issues to take into account. These are:

- whether the method of removal should reflect the method of appointment; and
- whether it should be necessary to establish specific grounds before the head of state could be dismissed.

The Committee considered that, unless there were practical reasons for not doing so, the method of removal should reflect the method of appointment. The Committee felt that there would be a case for not specifying grounds where the method of removal required an expression of a general dissatisfaction with the head of state, such as a two-thirds vote in the Parliament.

Removal in the case of a head of state appointed by the Prime Minister

The Government alone could have the power to remove the head of state, as is in practice the case with the Governor-General (although the Queen formally exercises the power). This might be considered appropriate only where the head of state is appointed by the Government. Even then it could be seen as jeopardising the impartiality and independence of the office. This, however, is not generally regarded as a disadvantage of the current system. Another option would be to have an independent tribunal establish the grounds for removal before the Government takes action.

Removal in the case of a head of state appointed by Parliament

The most practical option for removing a head of state appointed by Parliament is removal by the same means. As with appointment, there are a number of points to consider, including the majority required for removal; whether the Houses should consider the issue separately (and if so what should their respective roles be) whether the Constitution should provide for a tribunal to assist Parliament; and how the removal process should be initiated. There are particular advantages in having a joint sitting for the purpose of removing the head of state, both to avoid a deadlock and undesirable delay.

Requiring a majority which virtually guaranteed that removal could only occur if support were forthcoming from non-government members (two-thirds or even three-quarters if that were the majority necessary for appointment) would be in keeping with the principle that the office of head of state be kept free of partisan political considerations to the greatest extent possible.

As to the grounds of removal, there is a strong argument that, if two-thirds of the members of Parliament in a joint sitting resolve that the head of state should cease to hold office, that expression of dissatisfaction should be cause in itself for the head of state to be removed without proof of any particular misbehaviour or incapacity.

Removal of a popularly elected head of state

While there is an argument that the electorate should have a say in the removal of a head of state who has been popularly elected, the Committee considers that there are a number of practical reasons why it may not be appropriate. Consideration of sensitive issues such as a person's mental or physical state, or whether he or she behaved in a way that demonstrates unfitness to hold office, is not readily susceptible to a drawn out and expensive referendum process. It would also be cumbersome in circumstances where the head of state is incapacitated, but by reason of that incapacity, is unable to resign.

The Committee believes that removal by a special majority (e.g. two-thirds majority) on the basis of demonstrated unfitness may be one way of providing the necessary degree of protection where a head of state is elected through an expression of popular will.

Removal in the case of a head of state elected by an electoral college

Removal of a head of state by an electoral college by that same process appears to be the logical option but, if the practical problems associated with reconvening such a specially constituted body are judged to be substantial, removal by the Commonwealth Parliament, upon proof of unfitness for office, could be considered.

Powers of the head of state

Clearly the expression 'maintaining the effect of our current conventions and principles of government' in the Terms of Reference means that the head of State would not exercise day-to-day political power. The Committee considers that there are no strong reasons why a new head of state should not continue to exercise the same kind of 'governmental' functions on the advice of the Government of the day as are presently exercised by the Governor-General. In order to eliminate any uncertainty however, the Constitution should provide that in the exercise of these powers the head of state acts on ministerial advice.

The Committee also notes that to eliminate the 'reserve powers' might be regarded as a substantial change in our way of government. This leaves for consideration therefore, the issue of how the reserve powers (and the unwritten constitutional conventions which govern the exercise of those powers) should be dealt with in the Constitution so as to maintain the effect of the existing conventions and principles.

The options considered by the Committee are:

- leaving the powers of the head of state in the same form as are presently set out in the Constitution, but stating in the Constitution that the existing constitutional conventions will continue to apply to the exercise of those powers;

- leaving the powers of the head of state in the same form as are presently set out in the Constitution and formulating the relevant constitutional conventions in an authoritative written form, but not as part of the Constitution;
- leaving the powers of the head of state in the same form as are presently set out in the Constitution and providing that Parliament can make laws (possibly by a two-thirds majority) to formulate the relevant constitutional conventions in a legislative form; and
- 'codifying' the relevant conventions by setting out in the Constitution the circumstances in which the head of state can exercise the reserve powers.

This last option can be done in one of two ways:

- by setting out the most important conventions about which there is general agreement (such as that the head of state appoints as Prime Minister the person the head of state believes can form a government with the support of the House of Representatives), and providing that the remaining (unwritten) conventions are otherwise to continue (i.e. partial codification); or
- by setting out in the Constitution all the circumstances in which the head of state can exercise a reserve power and stating expressly that in all other circumstances the head of state is to act on the advice of the Prime Minister, the Federal Executive Council or some other Minister (i.e. full codification).

The Committee has formulated some draft provisions which illustrate these approaches. These are located in Chapter 6 of the Report.

The Committee has considered the possibility of leaving the provisions conferring powers on the head of state in their present very broad terms, saying nothing about the constitutional conventions and simply assuming that they will continue to apply. The Committee does not regard this as a viable option. Such an approach would lead many people to fear (perhaps justifiably) that the conventions, which grew up around monarchical powers, would not apply in a republic and that as a result, the new head of state would have potentially autocratic powers.

Some provision should therefore be made in the Constitution in relation to the exercise of the head of state's powers. Whether that provision is to be an express incorporation of the existing conventions (without defining them), or some form of codification of those rules which currently depend on convention, it is clearly possible to define the powers of a new head of state in a way that preserves the essential elements of Australian democracy and maintains the present balance between the Government and the head of state.

The Senate, supply and the reserve powers

Any attempt to codify the reserve powers of an Australian head of state must deal, in one way or another, with the question of the Senate and supply. The Committee considered the following approaches to the question of what the head of state should do if faced with a similar situation as occurred in 1975 (when the Senate deferred consideration of the Bills providing money necessary for the Government to carry on governing and the Governor-General dismissed the Prime Minister):

- continue the existing conventions which, while not providing a clear answer to that question (because views differ about the relevant conventions), merely preserves the uncertainty of the current situation;
- rely on a codification provision which allows the head of state to dissolve the House of Representatives if the Government is breaching the Constitution (as it would be if it spent money that had not been appropriated by Parliament), and also dismiss the Prime Minister (and therefore the Government) if the Government persists in the contravention;
- provide in the Constitution for an automatic double dissolution in such circumstances; or
- remove the Senate's power to reject or delay these kinds of bills.

It should be noted that at least the last two of these approaches may be regarded as a substantive change to our present way of government. The removal of the uncertainties would involve resolving a more fundamental question about the relative powers of the House of Representatives and the Senate.

How does the Constitution have to be amended for Australia to become a republic?

It is necessary to amend the Constitution (which, of course, requires the agreement of the people in a referendum) in order to establish a republic in Australia. Changes to the Constitution for this purpose would involve provisions:

- terminating the Queen's role as head of state and establishing a new office of head of state if it is decided to create one;
- dealing with appointment and removal of the new head of state and other matters relevant to the new office;
- dealing with the powers of the new head of state;
- dealing with the position of the States and their links with the Crown; and
- making consequential changes, mostly removing the references to the Queen and replacing the references to the Governor-General with references to the new head of state, and inserting transitional provisions.

The important legal issues considered by the Committee in this regard are as follows:

- whether the method of amending the Constitution provided in section 128 (i.e. a popular referendum requiring approval of a majority of voters nationally and also a majority of voters in four of the six States) can be used to make the necessary changes;
- whether the *Commonwealth of Australia Constitution Act 1990* (the Act of the British Parliament of which our Constitution is a part) needs to be amended in order to create a republic; and
- whether that Act be amended through the referendum process.

The Committee is satisfied, based on advice provided by the Acting Commonwealth Solicitor-General, that section 128 gives the Australian people through a referendum sufficient power to establish a republic. Amendment of the British Act, though not strictly necessary, is legally possible by Australians in Australia and, since that Act contains several references to the British Crown, it may be appropriate to amend it as part of a change to a republican Commonwealth of Australia.

What are the implications for the States?

None of the options referred to above would change the relationship between the Commonwealth and the States. However, there are implications for the States in a move to a republic as the Queen is head of state in the States as well as the Commonwealth of Australia.

There are different views of what might be the legal effect on the States if Australians decided in a referendum to become a republic. Some commentators argue that the Crown's links with the Commonwealth and the States are independent (or even that there are seven separate Crowns) and therefore that removal of the Crown at the Commonwealth level need not affect the States. However, there is an alternative view that there is only one Crown of Australia and its removal at the Commonwealth level, without any special provision for the States, would in effect abolish the Crown at the State level as well.

The Committee accepts the conclusion of the Acting Solicitor-General that, in order to minimise legal debate on these matters, it would be sensible for amendments creating a republic to deal specifically with the position of the States. Just how the Constitution should deal with the States would depend on whether any of the States wished to retain the person who is monarch of the United Kingdom as its head of state, notwithstanding the approval of the change at a nation level in the referendum, and whether that prospect was considered acceptable.

If all of the States decided to conform with a national decision in favour of a republic, the Constitution could be amended so as to prevent the States from recognising a monarch as their head of state. This approach would leave the States to amend their own constitutions, but the amendments could be framed so as to override some of the provisions which currently require special majorities or State referenda for this to be done. The States would need to make provision in their constitutions for the functions previously carried out by the Governor as the monarch's representative. There would also be a need to amend the *Australia Act 1986* to resolve any doubts as to whether it entrenches the monarchy at State level.

The Committee has concluded that, however anomalous it might appear, particularly after a referendum in which the majority of Australians in a majority of States expressed the desire for Australia to become a republic, it would be legally possible for the Constitution to allow a State to remain a monarchy within a federal republic (assuming that the Queen agreed to such an arrangement). In the event that a State decided to retain the monarchy, the committee has concluded that:

- States could be left free to choose their own course (in which case, to avoid legal doubt, it would be advisable to insert some specific provision in the Constitution — e.g. providing for the monarch to remain as head of state in each State but with a mechanism for a State to abandon the monarchy should it decide to do so); and
- if the prospect of States retaining links with the monarchy was considered unacceptable, the amendments described above (abolishing the monarchy at State level) could be made without the cooperation of all States. (In order to prevent a governmental vacuum in a State, it would be necessary to include transitional provisions in the Commonwealth Constitution applying to that State, for instance providing for the incumbent Governor to remain in office).

Other issues relevant to Australia becoming a republic

Among the other issues considered by the Committee were the following:

- whether a change to a republic necessarily involves a change to the name 'Commonwealth of Australia' — the Committee concluded that it does not, and that there does not appear to be a strong case for such a change;
- whether a change to the preamble to the *Commonwealth of Australia Constitution Act 1990* would be necessary or desirable if Australia were to become a republic — the Committee concluded that it is not necessary, as a matter of law, to change the preamble, but that the change to a republic might be an appropriate time to reassess the statements about Australia which are contained in the preamble;
- whether the specific references in the text of the Constitution to the Queen and the Governor-General would have to be removed — the Committee concluded that generally they would;
- what should be done in relation to the 'royal prerogatives' — the Committee concluded that it would be necessary to preserve the powers and rights of Commonwealth and State governments which are presently derived from the common law prerogatives of the Crown and that, based on the advice of the Acting Solicitor-General, this could be achieved by including a provision to that effect in the Constitution; and
- what other aspects of the law and our legal system would need to be modified as a result of a change to a republic — the Committee concluded that consideration would have to be given to changes in the following areas (amongst others):

  - laws and practices relating to royal charters, the use of 'royal' titles etc;
  - a replacement mechanism for filling offices presently filled by commissions from the Crown (such as Defence Force officers and the police); and
  - transitional and consequential provisions to replace references in legislation to the Governor-General (Governor), Crown etc, at the Commonwealth and State level.

The Committee also concluded that a change to a republic need not have any implications for Australia's membership of the Commonwealth of Nations, more than half the members of which are already republics.

Conclusion

The view is often expressed that Australians generally do not know enough about the Australian Constitution, its history and our system of government. The Committee would like to think that its work and the surrounding debate has contributed to a higher level of understanding of, and interest in constitutional issues. Nonetheless, much more needs to be done. The Committee found a common view among the community and its leaders, regardless of particular views held on the republican debate, that Australians should have more opportunity to understand the basic principles of Australian government. The Committee believes that those entrusted with primary and secondary education in particular, should consider the introduction or extension of appropriate courses in the fields of civics and government.

The debate about the republic has awakened interest in many other proposals for constitutional change, such as changes to the role of the States and the powers of the Senate. No doubt the increased public understanding arising from the current republican debate will allow these issues to be considered on a more informed basis. The Committee believes that this is a very healthy trend. Those who demand that the Constitution be defended as though it were holy writ often overlook that most important clause of the Constitution, section 128, which permits the Constitution to be amended by a vote of the Australian people. Nonetheless, the issue of whether Australia should have an Australian head of state is a discrete one, both logically and legally, and deserves consideration on its own merits.

The primary question for Australians to consider in the course of the republic debate is whether Australia should have an Australian citizen chosen by Australians as its head of state, or whether it should retain as its head of state the person who is monarch of the United Kingdom. This is an issue on which views of Australians differ and on which the debate is likely to continue. It is not one which this Committee has been asked to consider, and the Report does not do so.

The Committee has instead addressed a question which is probably just as important — 'What might be involved in a change to a republic in Australia?'. Many have argued that it is only when that question is answered that they will be in a position to make an informed judgment about whether a republican Australia is what they want.

This overview and the full Report will, the Committee hopes, assist in clarifying the issues associated with a change to a republic. The major issues are few — how should the head of state be appointed (and removed if necessary), what sort of powers and functions should the head of state have; what will be the effect of the Queen's role in the States if Australia were to become a republic; and finally, what changes to the Constitution need to be made to achieve this outcome. That is not to say that those issues will not require careful consideration and may not raise complex legal questions. The Committee's Report summarised in this overview demonstrates, however, that there are a number of practical and workable options for addressing these issues, and that the legal complexities are readily soluble.

Concerns have been voiced about the effect that a move to a republic may have on our existing system of parliamentary government. The Report demonstrates that the options addressed will enable a republic to be achieved without making changes which in any way detract from the fundamental constitutional principles on which our system of government is based — federalism, responsible parliamentary government and the separation of powers, and judicial review of legislation and government action. As a Justice of the High Court has remarked:

> To my mind, the final formal end to the role of the monarchy in Australia, if it occurs, need not mean a fundamental change in our constitutional structure or, at least, a fundamental change in the sense in which I am speaking, for I am speaking of the machinery of government and not the history of sentiment. If it were thought desirable to substitute the Governor-General, elected or appointed, as the head of state it would, I think, be possible to achieve that in a manner which would involve little disruption to the present constitutional set-up and may even serve to eliminate some of the difficulties which still remain in discerning the role of the Crown in our federation.

If Australians through the referendum process do decide that they wish to have an Australian citizen as head of state, our existing system of government will be affected only to the extent that Australians desire it.

Those who are anxious that a republic would result in an enhancement of the authority of the Prime Minister will have noted that most of the options canvassed in the report will actually enhance the standing of the head of state. For instance, an Australian head of state appointed (and removable) by a two-thirds majority of a joint sitting of Parliament could be seen as more independent than a

Governor-General who holds office in effect at the pleasure of the Prime Minister.

Others have expressed fears that a new head of state could be freed from the conventions which limit the exercise of vice-regal powers and could therefore have too much power. The Report outlines several methods by which the effect of those conventions could be applied to a new head of state, and perhaps also clarified.

As to the argument that a move to a republic would impinge on the rights and autonomy of the States, the Report demonstrates that no change to Commonwealth – State relations would necessarily arise from such a move. It is even possible for a State to retain the Queen (assuming she were to agree) as its head of state.

This is not to say that a move to a republic is other than an important constitutional change which requires careful consideration. But fears that it must involve substantial and unwelcome change to our political system are not well founded. The establishment of an Australian republic is essentially a symbolic change, with the main arguments, both for and against, turning on questions of national identity rather than questions of substantive change to our political system.

The republic debate will doubtless continue to involve a fair degree of rhetoric from all sides. But in the midst of that rhetoric, and occasional hyperbole, the Committee hopes there will be enough room for a sober discussion of the more practical issues of constitutional law and practice discussed in the Report. That discussion will be enhanced considerably if a genuine effort is made to inform Australians, particularly young Australians, about their Constitution, its history and their system of government generally. If, as time goes on, the debate becomes more informed, the quality of our democracy will be improved regardless of whether a republic is established. All those who participate in that debate owe a responsibility to their fellow citizens to ensure that the debate is one which appeals at least as much to reason as it does to emotions.

The Mabo Case and the Native Title Act

(This article has been contributed by the Native Title Section of the Department of Prime Minister and Cabinet.)

Recognition of native title

In May 1982, Eddie Mabo and four other Meriam people of the Murray Islands in the Torres Strait began action in the High Court of Australia seeking confirmation of their traditional land rights. They claimed that Murray Island (Mer) and surrounding islands and reefs had been continuously inhabited and exclusively possessed by the Meriam people who lived in permanent communities with their own social and political organisation. They conceded that the British Crown in the form of the colony of Queensland became sovereign of the islands when they were annexed in 1879. Nevertheless they claimed continued enjoyment of their land rights and that these had not been validly extinguished by the sovereign. They sought recognition of these continuing rights from the Australian legal system. The case was heard over ten years through both the High Court and the Queensland Supreme Court. During this time, three of the plaintiffs including Eddie Mabo died.

On 3 June 1992, the High Court by a majority of six to one upheld the claim and ruled that the lands of this continent were not terra nullius or land belonging to no-one when European settlement occurred, and that the Meriam people were 'entitled as against the whole world to possession, occupation, use and enjoyment of (most of) the lands of the Murray Islands.'

The decision struck down the doctrine that Australia was terra nullius — a land belonging to no-one. The High Court judgment found that native title rights survived settlement, though subject to the sovereignty of the Crown. The judgment contained statements to the effect that it could not perpetuate a view of the common law which is unjust, does not respect all Australians as equal before the law, is out of step with international human rights norms, and is inconsistent with historical reality. The High Court recognised the fact that Aboriginal people had lived in Australia for thousands of years and enjoyed rights to their land according to their own laws and customs. They had been dispossessed of their lands piece by piece as the colony grew and that very dispossession underwrote the development of Australia into a nation.

The *Native Title Act 1993* is part of the Commonwealth Government's response to that historic High Court decision.

The Native Title Act

The Prime Minister said in December 1993 during the passage of the Native Title Bill through Parliament:

'... as a nation, we take a major step towards a new and better relationship between Aboriginal and non-Aboriginal Australians. We give the indigenous people of Australia, at last, the standing they are owed as the original occupants of this continent, the standing they are owed as seminal contributors to our national life and culture: as workers, soldiers, explorers, artists, sportsmen and women — as a defining element in the character of this nation — and the standing they are owed as victims of grave injustices, as people who have survived the loss of their land and the shattering of their culture.'

The Government was simultaneously presented with an opportunity and a challenge. The opportunity was to improve the relationship between Aboriginal and non-Aboriginal Australians, and recognise their basic property rights. The challenge was how to respond to the land management issues because these property rights were recognised.

The Prime Minister said also during the passage of the legislation through Parliament that the Government made its twin objectives clear in its response to *Mabo*: to do justice to the High Court decision in protecting native title, and to ensure workable, certain land management.

The Act does five things:

- It recognises and protects native title.
- It provides for the validation of any past grants of land that may otherwise have been invalid because of the existence of native title.
- It provides a regime to enable future dealings in native title lands and imposes conditions on those dealings.
- It establishes a regime to ascertain where native title exists, who holds it and what it is, and to determine compensation for acts affecting it.
- It creates a land acquisition fund to meet the needs of dispossessed Aboriginal and Torres Strait Islander peoples who would not be able to claim native title.

In the Act, the Commonwealth has adopted the common law definition of native title. Native title is defined as the rights and interests that are possessed under the traditional laws and customs of Aboriginal and Torres Strait Islander peoples, and that are recognised by common law. Native title will be subject to the general laws of Australia, including State and Territory laws that are consistent with the Act, although native title rights to hunt, fish and carry on other activities may be exercised without the need for a licence or permit where others can carry out the activity only with a licence or permit.

The legislation represents a point of balance that recognises everyone's interests: Aboriginal and Torres Strait Islander peoples who need their property rights and cultural rights recognised and respected; land developers — miners, pastoralists, tourist operators and others — who need access to land and certainty of title; and State and Territory Governments that need to manage land resources.

The Native Title Act came into operation on 1 January 1994. From that time no action may validly be taken in relation to land that is subject to native title except in accordance with the Act. Where land has been subject to certain types of tenure such as freehold, any native title to that land has been extinguished. In such cases, any action in relation to that land, such as the processing of mining applications, may proceed. However, if it is not clear from the tenure history that native title would have been extinguished on the land in question, for example, on vacant Crown land, then the proposed dealings in land would have to proceed with due regard for native title under the Act.

The National Native Title Tribunal

The Act provides for a systematic legal framework to deal with matters affecting native title. The new National Native Title Tribunal has the power to determine uncontested native title and compensation claims and will handle other issues including assisting negotiations and making decisions on proposed grants. The Act gives jurisdiction to the Federal Court to determine contested claims. The Tribunal is based in Perth and there are registries in all capital cities. The Tribunal is headed by Justice Robert French, whose appointment as President commenced on 2 May 1994 for three years. Among other things in a distinguished career, Justice French helped found, and later became Chairman of, the Aboriginal Legal Service in Western Australia.

The procedures of the Tribunal and those of the Federal Court are designed to be fair, just, economical and prompt. Those procedures must take account of the cultural and customary concerns of Aboriginal and Torres Strait Islander peoples, and are not bound by legal forms or rules of evidence. This ensures that there will be sensitivity to traditional laws and customs. At the same time, there are safeguards against frivolous and vexatious claims, which will be rejected, and applications must contain sufficient information about the claims and must specify the area covered.

The Native Title Act provides an innovative and accessible approach to settle native title claims. For example, the Act confirms the potential to settle difficult cases by negotiation and further recognises that agreements might be reached on a regional basis.

The Act also sets out criteria to be satisfied in order to ensure that there is a nationally consistent approach to the recognition of native title so that State and Territory tribunals and processes can be recognised in order to fulfil the functions of the National Tribunal.

Role of the States and Territories

The Act is designed to allow a cooperative regime between the Commonwealth and the States and Territories by enabling their own bodies to be set up to determine native title, compensation claims and whether future dealings in native land can be done. States and Territories can choose, however, to use the Commonwealth regime. States and Territories can enact complementary validating legislation and develop other appropriate processes. At the time of writing there had been some clear developments in this area. Most States and Territories have enacted or introduced legislation intended to validate their past acts. The legislation of several States also makes provision for arrangements to determine whether future dealings in native title land can take place.

Where such State or Territory legislation exists and has been recognised, Aboriginal and Torres Strait Islander peoples will have a choice as to whether they seek determinations of native title and compensation through the Commonwealth or State or Territory systems. Determinations on whether certain grants over native title land can proceed would be made under the State or Territory law.

Compensation

Native title holders are entitled to compensation for the effect of the validation of past acts on their rights. That compensation is payable by the Government that made the past act.

If a future act extinguishes or impairs native title, the native title holders will be entitled to compensation on essentially the same basis as someone who holds a freehold title (or leasehold in the Australian Capital Territory or Jervis Bay Territory), according to the relevant compensation laws.

The National Native Title Tribunal can deal with uncontested claims for compensation and will seek to mediate contested claims. If mediation is unsuccessful, the matter will be referred to the Federal Court.

The Commonwealth has offered to pay the majority of certain costs: three-quarters of the cost of past acts, and, until 1998, half of the continuing costs for State/Territory recognised bodies and alternative provisions to the Commonwealth regime.

Non-claimant applications

Anybody with an interest in land — for example, holders of certain types of lease or an exploration permit — and all governments may wish to know whether native title exists in relation to that land, or whether a claim has been made for a determination about native title. If it cannot be readily established that native title has been extinguished, application can be made to the Tribunal for a determination. These applications are called non-claimant applications, to distinguish them from claims for native title from Aboriginal and Torres Strait Islander peoples who believe they may have native title rights.

If no claim is made within two months of the non-claimant application being publicly advertised, the government in question can issue the lease. Even if native title is later found to have existed, the lease remains valid and any compensation would be payable by the government. Through the non-claimant process, the Act sets up a system where future acts can take place with certainty and the process takes place in a defined time frame.

Compulsory acquisition procedures

Normal government compulsory acquisition procedures, including a right to compensation, can apply to native title land. This means that governments may acquire land from native title holders, just as from other land holders, for public purposes such as infrastructure.

Surrender of native title

The legislation further recognises that native title holders may choose to surrender native title on terms acceptable to them, for example, to exchange it for a statutory title to allow them to engage in tourism or other commercial ventures.

The Land Acquisition Fund

Native title has been widely extinguished by past acts of government, such as the granting of freehold and leasehold title. Many Aboriginal and Torres Strait Islander peoples now live away from their traditional lands and could find it impossible to demonstrate a connection with those lands. In recognition of the fact that many Aboriginal and Torres Strait Islander peoples will not be able to gain native title because of historic dispossession, the Commonwealth Government also established a land acquisition fund under the Act. The fund allows Aboriginal and Torres Strait Islander peoples to acquire and manage land in a way that provides economic, environmental, social or cultural benefits to them.

In the 1994–95 Budget the Commonwealth Government announced that a total of $1,463 million is to be allocated to the fund over ten years. These allocations will be invested so as to accumulate a self-sustaining fund for land acquisition and management.

The Act and mining

There is no provision in the Act for native title holders to veto mining on their land. The Act does, however, provide them with the right to negotiate under certain circumstances. Those circumstances include the compulsory acquisition by governments of native title where it is not for a direct public purpose (for example, building a school or road) but for the purpose of granting the land to a third party such as a property developer; and the creation of a right to mine. In a lot of cases the outcome will most likely be decided between the developer and the relevant Aboriginal or Torres Strait Islander community. Where agreement cannot be reached, the Act provides for an arbitrated determination by the Tribunal and, potentially, a ministerial decision, which overrides the Tribunal's determination. The Act sets out fair and finite time periods for this process.

The Act also allows certain future activities that will have minimal effect on native title to be excluded from the arrangements which give rights to negotiate to native title holders. This will be of special relevance and value to mineral exploration.

State and Territory mining laws that deal with other aspects of the mining regime are unaffected by the Native Title Act. The Act ensures that legislative regimes for economic activities offshore, especially commercial fisheries, and petroleum extraction can be validated.

Mining leases will not extinguish native title, which can be exercised after the grant and any renewals have expired. Future mining grants will not extinguish native title. This provision is in line with existing State practices with respect to mining grants over freehold land. Mining leases may be renewed on the same terms as before.

Pastoral leases

The Act makes provision for Aboriginal people who own or acquire a pastoral lease to choose to claim native title rights where it is determined that the owners would otherwise meet native title criteria apart from the existence of the lease. The pastoral lease would not be given up. Existing covenants and conditions in the lease will continue to apply and prevail over native rights. Valid pastoral leases can be renewed even if native title has survived the lease and the use of the land. For pastoral leases generally, the Act ensures that the existing rights of pastoral lease holders are protected: should any invalidity be found because of native title, the lease will be validated.

The way ahead

The *Native Title Act 1993* and the High Court decision that preceded it are only part of the reconciliation process taking place between indigenous and other Australians. For example, Australia is seeing historic accords between Aboriginal peoples and mining companies that show the way to a new working relationship. Working with the Native Title Act means working with Aboriginal and Torres Strait Islander peoples towards a better social and economic future, within a framework of national equity and fairness for all Australians.

Chapter Three

International Relations

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The basic condition underlying the shaping and conduct of Australia's foreign policy is that Australia is a significant middle-level power with a strong Asia-Pacific orientation.

Australia has a wide spread of regional and global international interests, not least as a major trader and a country of immigration. Trade with the Asia-Pacific region and the rest of the world makes a significant contribution to Australia's prosperity. It is a relatively affluent and resource-rich country in a populous and dynamic region.

Links with the United States, Britain and other European countries remain important factors in Australian foreign policy in terms of cultural tradition, security, strategic interests and trade and investment. At the same time, the political, economic and strategic importance to Australia of countries of Asia-Pacific has led to the development of broader and deeper relationships with them and an increasing foreign policy focus on the region.

The Asia-Pacific region as a whole now accounts for about half of global production and about 40 per cent of global trade. More than 60 per cent of Australian merchandise exports is sold to Asian economies, and North Asia and South East Asia accounted for over 60 per cent of Australia's total growth in merchandise exports between 1983 and 1993. Twelve of Australia's top thirteen markets are members of the Asia-Pacific Economic Cooperation (APEC) group. Awareness of the growing nexus between security and economic development has led successive Australian Governments to promote and maintain friendly and cooperative relations with the countries of the region both as means to secure our strategic interests while at the same time further developing mutually profitable trade and investment links and exchanges of technology with them. Australia gives special attention to its relations with China, Japan, the Republic of Korea, the member countries of ASEAN (the Association of South East Asian Nations), New Zealand, Papua New Guinea and the other South Pacific states.

International issues including economic cooperation, arms control and disarmament, trade access, conflict prevention and resolution, global environmental protection, human rights, status of women, refugees and post-cold war world security have assumed importance together with an increasing recognition of the growing interdependence of the world community. Australia regards as a high priority its participation in the resolution of these global issues not only in the United Nations and other multilateral forums, but also in the regional context through multilateral bodies such as APEC.

South East Asia

Australia maintains wide-ranging relations with the countries of ASEAN (Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand), both bilaterally and as a group. All six countries are members of APEC. The relationship encompasses the entire spectrum of political, economic, trade, cooperation, cultural and defence links, which are enhanced by regular personal contacts at all levels of government, business, academia and the community as a whole. Two-way trade is growing rapidly and now represents 11 per cent of Australia's total trade with the world. ASEAN is Australia's second largest export market and third largest import source.

Indonesia is one of Australia's closest regional neighbours and straddles major sea and air routes. Australia's relationship with Indonesia continues to strengthen and broaden, particularly in the areas of trade, investment, science, defence and culture. Indonesia is Australia's eleventh largest trading partner and, in 1993–94, development cooperation from Australia to Indonesia totalled $134 million, representing Australia's second largest development cooperation program after Papua New Guinea. The development cooperation program for 1994–95 is expected to be of a similar magnitude. The Australian Prime Minister, Paul Keating, built on the solid relationship he established during his first visit to Indonesia in April 1992, when he revisited Indonesia in October 1993 and June 1994.

The Australia-Indonesia Ministerial Forum held its first meeting in Jakarta in November 1992, adding significant new layers of cooperation between Australia and Indonesia. The inaugural meeting agreed to the establishment of two working groups: one on agriculture and food cooperation and the other on trade, industry and investment. Both working groups have had subsequent meetings and progressed on priority areas for cooperation.

A Double Taxation Agreement, an Investment Promotion and Protection Agreement and an

Agreement for the Reciprocal Protection and Enforcement of Copyright, which were signed during the first Ministerial Forum in November 1992, all came into force during July and August 1993. Memorandums of Understanding on Collaboration in Animal/Plant Health and Quarantine Activities and on Cooperation in Industrial Relations were signed during 1993.

The Australian Government continues to raise its concerns over reports of human rights violations, particularly in East Timor, through regular bilateral representations and in multilateral bodies such as the United Nations' Commission on Human Rights.

In November 1993, the Joint Standing Committee on Foreign Affairs and Trade (JCFADT) tabled in Parliament a report titled *Australia's Relations with Indonesia.* The report, which is a significant and comprehensive study of relations between Australia and Indonesia, concluded that the future prospects for relations between the two countries were very promising.

Australia's relations with Thailand remain sound. Australia and Thailand share a range of political, strategic and economic interests. Thailand's impressive progress towards industrialisation and its success in international markets have made it increasingly important to Australia as a trading and investment partner. Cooperation in multilateral trade matters through the Cairns Group is also an important aspect of the relationship. Australia's relationship with Thailand is given added substance through development assistance and cooperation in narcotics control. There was a significant increase in the flow of high-level visits between Australia and Thailand over the past year.

Malaysia and Australia have a long history of close and constructive relations, covering the full range of political, defence, commercial and social links. Education links are particularly strong and have contributed significantly to continuing personal contacts between people, business, academic and government circles. Malaysia and Australia cooperate closely on defence issues.

Australia has a tradition of close interest in and association with Singapore. Relations are broadly based, encompassing the whole range of bilateral areas including trade and investment, defence, education, civil aviation, tourism and cultural relations.

Australia's interests in the Philippines arise from its efforts to further democratic and economic reform, its potential as a growth market for Australian trade and a destination for Australian investment, its strategic placement in the region and its membership of APEC and ASEAN. The successful development cooperation program, Australia's fifth largest, has also contributed to strong ties. Australia has become the largest provider of training to the Philippine armed forces under the Defence Cooperation Program.

Relations between Brunei and Australia are developing steadily, especially in the fields of trade, defence and education.

Relations with Burma slowed significantly after the suppression of the Burmese pro-democracy movement in 1988 and the failure of the State Law and Order Restoration Council to implement the result of the 1990 elections for an assembly to draft a new constitution. While the Australian Government will provide humanitarian assistance in 1994–95 through non-government and United Nations' agencies, government-to-government aid will not be resumed until there is significant progress in the political and human rights situations. Trade and other contacts continue at low levels.

For more than a decade, Australia has felt that its strategic, political and economic interest lie in encouraging Vietnam out of its isolation towards becoming a peaceful, responsible and economically prosperous player in our region. The Cambodian Peace Accords and the resumption of bilateral aid to Vietnam have opened a new phase in Australia-Vietnam relations, with the longstanding political relationship providing a firm foundation for the expansion of trade, investment and other links. Ministerial visits by both nations, a visit to Vietnam by Prime Minister Paul Keating in 1994 and successful joint ventures in the banking, oil and telecommunications sectors also underline this progress. The Development Cooperation Program, doubled in 1994 to $200 million over four years, also emphasises the development of mutually beneficial, long-term economic linkages while also contributing to social and economic development.

Given the relationship's maturity, a dialogue on the continued observance of internationally accepted human rights norms has also become part of our normal bilateral agenda.

Cambodia

The formation of the Government of the Kingdom of Cambodia on 24 September 1993 and the conclusion of the mandate of the United Nations Transitional Authority in Cambodia (UNTAC) marked the formal end of the peace process with which Australia was so closely identified. Australian policy moved to the establishment of a normal bilateral relationship, building on Australia's commitment to support Cambodia and its democratically elected government.

In addition to its support for Cambodia in the international context, bilaterally, Australia implemented a carefully targeted development cooperation program and announced an aid commitment worth $92 million over four years, a defence cooperation program and a cultural relations program. Special emphasis was given to assistance with de-mining, in support of efforts to rid the country of the lethal legacy of the years of conflict left by millions of landmines.

Australia has developed a strong bilateral relationship with Laos, with commercial links and development assistance playing a prominent role. The $42 million Australian aid-funded Mekong River bridge between Laos and Thailand was opened by the Australian, Lao and Thai Prime Ministers on 8 April 1994.

Japan

Japan remains Australia's largest trading partner, with two-way trade in 1993 of $27.5 billion, over 20 per cent of Australia's total trade, and with a surplus of $3.7 billion in Australia's favour. While agriculture, mineral and energy products continue to constitute the bulk of Australian exports to Japan, in 1993 over 33 per cent were manufactured or processed products. Tourism continues to expand, with more than 667,000 Japanese visitors to Australia in 1993. Japan is the third largest source of foreign investment in Australia, behind the EU and USA. While investment from Japan has declined in recent years, the proportion directed to the manufacturing sector has increased.

There is an active agenda of bilateral consultations between Australia and Japan, both at Ministerial and officials' levels. The most significant consultative forum is the Australia-Japan Ministerial Committee (AJMC) meeting which was last held in Tokyo in November 1993. This meeting was marked by free-flowing exchanges on a range of bilateral issues, and excellent rapport among Ministers.

China

1993 reinforced the Australian Government's commitment to building a long-term, cooperative and businesslike relationship with China. Prime Minister Paul Keating and Senator Cook as Minister for Trade both visited China during the year. The visits concentrated on opportunities existing for closer integration between the Australian and Chinese economies and aimed to shift the perception of Australia as primarily a supplier of raw materials, to that of a partner in high value-added manufacturing and services sectors. Total two-way trade increased by 24 per cent from $4.2 billion in 1992 to $5.2 billion in 1993. The Joint Ministerial Economic Commission held in September 1993 agreed to the negotiation of a Trade and Investment Framework to facilitate further economic cooperation.

In areas of difference, such as human rights, Australia sought to engage the People's Republic of China in a practical and constructive dialogue.

Hong Kong

In 1992–93, Hong Kong was Australia's tenth largest trading partner with total bilateral trade of $3.5 billion. Exports to Hong Kong totalled $2.7 billion, making it Australia's eighth largest export market. Of these, services exports including education, legal services and tourism are increasingly important. Some 20,000 Australians live in the territory and Hong Kong is host to over 350 Australian companies. Hong Kong's Governor, the Right Honourable Christopher Patten, visited Australia in February 1994.

Taiwan

Australia's commercial relationship with Taiwan has expanded significantly over recent years with two-way trade reaching $5.1 billion in 1993. Taiwan was Australia's seventh largest export market, valued at $2.8 billion. In the absence of official links with Taiwan, Australia's commercial interests are represented by the Australian Commerce and Industry Office (ACIO) in Taipei. In 1993, the ACIO was signatory to two memoranda of understanding with the Taiwan authorities covering the Promotion of Investment and Technology Transfer and the Protection of Industrial Property. Direct airlinks since 1991 have resulted in tourism from Taiwan becoming a major export earner. Around 100,000 tourists visited Australia from Taiwan in 1993, an increase of 57 per cent over 1992.

Korea

Australia enjoys close and expanding relations with the Republic of Korea based on a dynamic trading relationship and shared political and economic interests in the Asia-Pacific region. The Republic of Korea is Australia's third largest export market, with exports of $4.34 billion in 1993. Australia has been seeking to diversify the economic relationship by placing greater emphasis on exports of manufactures and services and increased two-way investment, while at the same time improving the conditions for increased exports of minerals, energy and agricultural commodities. In 1993 a new Beef Access Agreement for 1993–95 was concluded with Korea, and the first sale of a spot cargo of LNG was made. There is an active agenda of bilateral consultations, both at Ministerial and officials' levels, with Prime Minister Keating's visit to Korea in June 1993 being the highlight of the year. Korean participation in the first National Trade and Investment Outlook Conference in November 1993 was very successful. The Australia-Korea Foundation established successful programs in the cultural, education and media fields.

Since the interruption of diplomatic relations with the Democratic People's Republic of Korea (DPRK) in 1975, Australia has had only limited official contact. In 1993 Australia played a prominent role in working to have the DPRK remain a member of the Nuclear Non-Proliferation Treaty (NPT), and to accept all its obligations under the NPT and its safeguards agreement with the International Atomic Energy Agency. The DPRK announced on 12 March it was withdrawing from the NPT, then announced on 11 June the 'suspension of the effectuation of its withdrawal'.

South Pacific

Australia participates actively in meetings of the South Pacific Forum and is a member of the Forum Secretariat (formerly the South Pacific Bureau for Economic Cooperation), the Forum Fisheries Agency, the South Pacific Commission, the South Pacific Regional Environmental Program (SPREP) and the South Pacific Applied Geoscience Commission. It provides significant financial support to these organisations and to other regional and international programs providing assistance to the South Pacific region. To assist in the preservation and development of indigenous Pacific cultures, Australia has established the South Pacific Cultures Fund. Australia and New Zealand have entered into a non-reciprocal preferential trade agreement (the South Pacific Regional Trade and Economic Cooperation Agreement) in favour of the South Pacific Forum Island States.

Australia is a party to the South Pacific Nuclear Free Zone Treaty (the Treaty of Rarotonga). Australia ratified the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP Convention) on 19 July 1989 and the Convention on the Conservation of Nature in the South Pacific (Apia Convention) on 28 March 1990. The Apia Convention provides for the protection of natural resources through the creation and management of protected areas, the protection of flora and fauna and cooperation and coordination in respect of research and exchange of information. The SPREP Convention and its protocols provide for the protection, development and management of the marine and coastal environment. Both Conventions came into force in 1990 and the first meetings of parties to both Conventions were held in July 1991. Australia signed the Agreement establishing SPREP on 21 September 1993, which established SPREP as a fully autonomous international organisation.

Relations between Australia and New Zealand reflect their shared history, similarities in political and social structure and the importance of the economic links. While Australia and New Zealand still have some differences of view in the defence policy area, specifically in relation to ANZUS, other aspects of the relationship have continued to expand. This has been exemplified in the 1988 Review of the Closer Economic Relations Trade Agreement which provided for free trade in goods from 1 July 1990, the extension of CER into trade in services and increased harmonisation of the commercial environment. The encouragement of political and cultural exchanges through the Australia New Zealand Foundation reflects another dimension in the close relationship. Australia and New Zealand also often work closely in their approaches to the international political and economic environment.

Australia also ratified the Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region on 3 September 1993, and on 6 July 1992, ratified the Convention on the Prohibition of Driftnet Fishing in the South Pacific (Wellington Convention). This Convention came into force in May 1991.

Papua New Guinea

Australia and Papua New Guinea (PNG) enjoy a very close and cooperative bilateral relationship based on shared political, strategic and economic interests and ties that have continued at all levels of society since PNG attained its independence in 1975. In 1992, Australian exports were valued at $883 million and imports $1,115 million, and the total level of Australian investment in PNG was about $1.6 billion.

PNG is the largest single recipient of Australian development assistance, accounting for about one-fifth of the aid program. In 1993–94, Australian development assistance to PNG totalled $338 million, including $244 million in budget support (direct cash transfer), $56 million in program aid and about $38 million in other aid flows.

The 1989 Treaty on Development Cooperation establishes principles, levels and forms of Australia's aid to PNG. The first review of the Treaty was completed during the visit to PNG by the then Minister for Trade and Overseas Development in September 1992. The new arrangements cover the years 1992–93 to 1996–97 and will be based upon a progressive reduction in budget support, which will be phased out by the year 2000. The level of aid will be maintained at the current level in nominal terms as budget support is replaced by jointly programmed aid. The new aid arrangements reflect Australia's continuing commitment to contribute to PNG's development and self-reliance.

The 1987 Joint Declaration of Principles (JDP) provides the framework for bilateral relations between Australia and PNG and covers a broad range of issues including defence, trade, investment, development assistance, consular relations, communications and border administration. An important element of the JDP is its consultative mechanism, the PNG Australia Ministerial Forum. The sixth Forum took place in Mt Hagen, PNG, in December 1993.

The Torres Strait Treaty between Australia and PNG entered into force in February 1985. The Treaty defines the maritime boundaries between PNG and Australia and sets down provisions to protect the traditional ways of life of inhabitants on both sides of the border, to protect the environment, to ensure freedom of navigation and overflight, and regulate the exploitation of resources.

The Americas

Australia continues to have a substantial and wide-ranging political, economic and security relationship with the United States. A formal security treaty has linked the two countries for over 40 years. The US is Australia's second largest trading partner and the largest recipient of Australian overseas investment; it is also the country which is Australia's largest source of foreign investment. The two countries also share many fundamental values and have strong historical and cultural links.

The visit to Australia of President Bush in January 1992 reflected the importance which both countries continue to place on the relationship. Significant contacts have been built up with the Clinton administration. Prime Minister Keating met President Clinton in Washington in September 1993 and again in November at the APEC leaders meeting in Seattle.

Canada is a country comparable with Australia in terms of institutions and traditions, geographical size, and international outlook. This has allowed a close degree of cooperation and interchange of ideas between the two countries.

Australia takes an increasing interest in developments in Latin America. Recent positive political developments in Latin America and substantial economic reforms, including an increasing focus on the Asia-Pacific region and constructive cooperation on multilateral trade, disarmament, environment and Antarctic issues, are fostering closer relations between Australia and many Latin America countries. Australian trade and investment with individual Latin American countries is growing significantly. Relations with the Caribbean are warm, particularly with Commonwealth countries.

Europe

Australia maintains constructive relations with the countries of Western Europe, with the European Union (EU) and its institutions, including the European Parliament.

Bilateral relations with the individual countries of Western Europe continue to be of very considerable importance to Australia. Australia's historical, cultural and social links with Europe underpin a series of relationships which remains one of our leading sources of investment, technology, ideas and culture. Cooperation with European countries on a number of international issues is extensive, and our trade and investment links continue to develop.

The EU is Australia's second most important trading partner, most important source of investment funds and second largest destination for Australian overseas investment, as well as a significant importer of Australian raw materials and an increasingly important market for Australian manufactured products. The establishment of the EU single market and its proposed extension to embrace most of the EFTA countries potentially offers Australia important new commercial opportunities. Tensions caused by trading difficulties in the agricultural sector have been ameliorated by the successful conclusion of the Uruguay Round of trade negotiations, and there is now scope to develop the relationship further in areas of mutual benefit. The EU and Australia signed a science and technology agreement as well as an agreement to promote trade in wine during 1994 and have more generally enhanced business and industry links and cooperation in the areas of the environment, energy and development assistance. There is also regular contact at a senior level on foreign policy issues.

In recent years, revolutionary changes have swept through Central and Eastern Europe and the former Soviet Union. Australia has strongly supported the introduction and development of democratic processes of government and market-oriented economic reform.

In August 1991 Australia entered into diplomatic relations with Latvia, Lithuania and Estonia. With the dissolution of the Soviet Union in December 1991, Australia recognised eleven of the former republics as independent States — Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Recognition of Georgia followed in March 1992. Australia responded to the dissolution of Yugoslavia by recognising Slovenia and Croatia in January 1992 and Bosnia-Herzegovina in May 1992. In response to the dissolution of Czechoslovakia, Australia recognised the Czech Republic and Slovakia in January 1993. In February 1994, Australia recognised the Former Yugoslav Republic of Macedonia.

Countries in this region have pursued their respective political and economic reforms. Where conflicts have arisen, such as in the former Yugoslavia, Australia has been vocal in its support of international peace and humanitarian assistance initiatives.

Signs of positive economic growth are now emerging in Poland, Hungary, the Czech Republic and the Baltic states. Industrial production is increasing, inflation levels are falling and unemployment is stabilising. In particular, Poland is expected to see a four to five per cent growth in GDP in 1994–95. Highly skilled work forces and low wage rates provide the basis for the region to demonstrate its comparative advantages as a low-cost manufacturing and value-added commodity exporting area.

Australia is a member of the Group of 24 countries providing practical assistance to Central European countries. It has a shareholding in the European Bank for Reconstruction and Development. Australia also provides technical assistance to the Newly Independent States (NIS) of the former Soviet Union.

Australia's trade with Central Europe and the NIS has been traditionally based on exports of commodities. However, the abolition of central planning and the move to market-based economies has resulted in substantial disruption to the heavy industries using Australian inputs, and the future of this trade remains uncertain. On the other hand, new opportunities have arisen for sales of Australian manufactures and services, particularly in the construction, telecommunications and resource development sectors.

The Middle East

Australia has substantial trading interests in the area and long-standing friendly relations with the Arab nations, Iran and Israel. Australia's policy towards the Middle East is based on two main premises: a total commitment to Israel's right to exist within secure and recognised boundaries and recognition of the right of self-determination for the Palestinian people, including their right, if they choose, to independence and the possibility of their own independent state. Australia warmly welcomed the decision by Israel and the PLO, in September 1993, to exchange letters of mutual recognition and to sign a Declaration of Principles providing for the gradual introduction of Palestinian self-government in the occupied territories. The Government also welcomed the signing of an agreement in Cairo on 4 May 1994 which provided for implementation of Palestinian self-rule in the Gaza strip and Jericho. Similarly, the Government warmly welcomed the Washington Declaration, signed by Israel and Jordan on 25 July 1994, which effectively ended the state of belligerence which had endured between the two countries since 1948.

Australia contributes a small contingent of HQ staff with the Multinational Force and Observers in the Sinai (MFO). An Australian army officer, Major-General David Ferguson, was appointed MFO Force Commander in April 1994.

Australia continues to observe and encourage the implementation of all Security Council resolutions pertaining to Iraq. Australia continued to deploy a ship to the Multinational Interception Force (MIF) until November 1993, when it was decided that the gap between deployments would be extended to at least nine months. Australia welcomed the decision to terminate the operations of the multinational intercept force in support of the sanctions regime and to replace it with a system of onshore inspections based in Jordan. The Government endorses action taken by the Security Council to permit the purchase by Iraq of food, medicines and essential civilian needs for its population. Australia has sold over one million tonnes of wheat to Iraq and has supplied other foodstuffs and essential civilian needs under the sanctions regime. Australia and Iraq maintain diplomatic relations, though the Embassy in Baghdad is not staffed by Australian personnel.

Africa

Australia maintains a broad range of contacts with African countries and is closely concerned with developmental and humanitarian issues as well as international efforts to assist peace and the establishment of democratic government in Africa.

The ending of apartheid and the inauguration of a democratic non-racial government in South Africa after the elections of April 1994 was warmly welcomed by Australia, which had maintained strong opposition to apartheid over many years. Australia played an active role in assisting the transition to democracy, first through the provision of members of the Commonwealth Observer Mission to South Africa, which was tasked to observe the violence and encourage the peace process, and then by providing observers to participate in Commonwealth and United Nations' observer missions to the elections. Australia is committed to a program of assistance to South Africa of $30 million over 1994–97 to help with infrastructure and human resource development during the post-apartheid period.

In the post-apartheid period, Australia will be looking to establish a new relationship with South Africa across the board, especially in institutional contacts and through renewed trade and investment interest and cooperation in areas of common interest in multilateral forums.

Australia's aid to Africa focuses on southern Africa and on the countries of east Africa and the Horn of Africa. Food aid continues to be important but there is also a renewed interest in development assistance for those countries of the Horn, especially Ethiopia and Eritrea, which have emerged from years of civil war and are now beginning the difficult task of reconstruction.

In particular, the humanitarian and political tragedies of Somalia in 1992 and Rwanda in 1994 called up a strong contribution of Australian aid, both by Government and the Australian public.

Australia contributed substantially to international peacekeeping efforts in Africa to UN operations in Somalia, Mozambique and Rwanda and in the Western Sahara.

South Asia

Countries of the region are continuing programs of economic reform and restructuring, opening up opportunities for Australian trade and investment. At the same time, conflicts in Afghanistan, north and north-east Sri Lanka and Kashmir remain sources of concern. Australia continues to play a constructive role in encouraging the peaceful negotiation of durable political settlements in each case.

Indian Ocean

Australia, as an Indian Ocean littoral state with wide interests in the region, is committed to the development of the concept of an Indian Ocean Zone of Peace (IOZP). For many years Australia has played an active and constructive role in the United Nations' Ad Hoc Committee on the Indian Ocean. The Ad Hoc Committee has so far not succeeded in its attempt to convene an international conference on the Indian Ocean to develop the IOZP concept. Australia maintains a modest aid program to Mauritius and other smaller Indian Ocean states.

The combination of economic reforms, particularly in India, the ending of Cold War rivalries and the re-emergence of South Africa has reawakened interest in the development of the Indian Ocean as a region. Australia seeks to make a constructive contribution to the identification of possible strategies for enhancing economic and security cooperation among the Indian Ocean littoral and island countries.

ANZUS

Following a review in 1983 of the ANZUS Treaty by the Australian Government, including a re-examination with its ANZUS partners at the 1983 ANZUS Council Meeting in Washington, the Government reaffirmed the alliance as fundamental to Australia's national security and foreign and defence policies. The text of the ANZUS Treaty of 1952 can be found in *Treaty Series* No. 2, for 1952, printed by the then Department of External Affairs. In 1984, the New Zealand Government implemented a policy not to permit the entry to New Zealand of nuclear powered warships or of warships (or aircraft) which might carry nuclear weapons. Consequently the United States, at the Australia-United States ministerial talks in August 1986, formally suspended its security obligations to New Zealand under the ANZUS Treaty pending adequate corrective measures. Both the United States and Australia agreed that the relationship between the United States and Australia under the ANZUS Treaty and the rights and obligations assumed by the United States and Australia towards each other under the Treaty would remain constant and undiminished. ANZUS continues to govern the bilateral defence relationship between Australia and the United States, and that between Australia and New Zealand.

Nuclear issues

Australia's strong commitment to effective nuclear disarmament and arms control is reflected in its support for the international non-proliferation regime. Australia ratified the Nuclear Non-Proliferation Treaty (NPT) in 1973 and encourages universal adherence to it. The NPT now has 163 member states.

Australia has continued to encourage new adherents to the NPT and scrupulous fulfilment of the obligation for all Non-Nuclear Weapon States Parties to conclude a safeguards agreement with the International Atomic Energy Agency (IAEA).

Australia is a founding member of the IAEA and provides political and financial support to the organisation. Australia's active participation, including contributions to the IAEA regular budget and to the Technical Assistance and Cooperation Fund, helps the Agency to continue to function in an effective and efficient manner. Australia has been working with other countries through the Agency to strengthen the international nuclear safeguards regime in the light of the lessons of the Gulf War.

The stringent nuclear safeguard conditions applied to exports and subsequent use of Australian uranium are set out as binding international legal obligations in the bilateral nuclear safeguards agreements which customer countries must enter into before any uranium exports from Australia are permitted. These conditions include an undertaking not to use Australian-obligated nuclear material for any military or explosive purpose, and the acceptance of IAEA safeguards in order to verify that undertaking. Australia has concluded 15 bilateral nuclear safeguards agreements covering 23 countries.

Australia is also a member of the Nuclear Energy Agency (NEA) of the Organisation for Economic Co-operation and Development (OECD), which Mexico joined in May 1994, bringing the membership to 25.

Disarmament and arms control

Australia promotes global security and stability by working for arms control and disarmament objectives at the United Nations in New York, the Conference on Disarmament (CD) in Geneva and many other world forums. A key foreign policy objective is to establish and strengthen international arrangements against proliferation of weapons of mass destruction and missile delivery systems capable of carrying them. This contributes to keeping Australia's region and other regions free from any such proliferation, and so contributes to maintaining a positive security environment both in our region and globally.

Australia attaches great importance to the early conclusion of an effective, verifiable Comprehensive Test Ban Treaty (CTBT) that would ban all nuclear testing by all states in all environments for all time. Australia was a key player in facilitating the commencement of formal negotiations in the CD and remains an active participant in the CTBT negotiations in the CD. Australia is also committed to strengthening the NPT and actively working to ensure members vote for its indefinite extension at the 1995 Review and Extension Conference in New York. Through membership of the IAEA, Australia is able to promote non-proliferation policies and contribute to regional and wider nuclear cooperative projects. Australia, together with the other South Pacific countries, was instrumental in negotiating the South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga) which came into effect on 11 December 1986.

The opening for signature of the Chemical Weapons Convention (CWC) on 13 January 1993 saw the achievement of a longstanding Australian objective. Australia was instrumental in accelerating final negotiations for the CWC and in bringing them to a successful conclusion in 1992. This was a significant event because for the first time the global community agreed to ban chemical weapons completely, an act requiring the destruction of all existing stocks of chemical weapons and their production facilities, and providing an effective mechanism to verify compliance with the Convention. Since then, Australia has been actively involved in the Preparatory Commission preparing for the CWC's entry into force, which is expected in 1995. The Australian Government ratified the CWC in 1994 following the enactment of the *Chemical Weapons (Prohibition) Act 1993*, which will give effect to Australia's obligations as a party to the CWC after its entry into force.

Australia has been active in building support for strengthening the Biological Weapons Convention (BWC) through the development of verification arrangements. Australia attaches importance to the BWC as the sole global instrument for the abolition of biological weapons. Biological weapons not only are inhumane but are capable of causing such large-scale casualties that the mere possession of them by one or more countries in a region might seriously erode trust in that region.

Australia also chairs a group of 26 countries called the Australia Group, which works towards harmonising the export licensing measures of member countries over chemicals, biological agents and equipment which can be used in the production of chemical and biological weapons. In 1993 the Group finalised for practical purposes its lists for export controls on these items.

Awareness of chemical weapons issues in South East Asia and the South Pacific has been raised since 1988 through an Australian Chemical Weapons Regional Initiative (CWRI). The CWRI has been valuable in raising regional awareness of various aspects of the CWC and in helping regional countries to prepare for their national implementation of the Convention.

Australia is a strong supporter of the UN Conventional Arms Register and has provided data on our major arms imports and exports. It has also urged its regional neighbours to participate at the Conference on Disarmament and the UN on further multilateral measures to increase transparency in the area of conventional armaments.

Australia, as party to the Inhumane Weapons Convention, has been engaged in preliminary discussions on the strengthening of the Convention, to address in particular the widespread civilian suffering caused by the use of antipersonnel mines, which are covered by Protocol II of the Convention. It has encouraged other Asia-Pacific countries to accede to the Convention.

Australia is a party to the following disarmament and arms control agreements: the Partial Test Ban Treaty, the Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, the Outer Space Treaty, the Sea-Bed Arms Control Treaty, the Nuclear Non-Proliferation Treaty, the Biological Weapons Convention, the Environmental Modification Convention, the Antarctic Treaty, and the Inhumane Weapons Convention, the Moon Treaty and the South Pacific Nuclear Free Zone Treaty.

The Commonwealth

The Commonwealth is an association of 51 countries, drawn from every region of the globe, which now comprises one-quarter of the world's population. Australia seeks, through its Commonwealth membership, to foster international peace and security and political, social and economic advancement. The last Commonwealth Heads of Government Meeting was held in Limassol, Cyprus, in October 1993.

International trade relations

One of Australia's highest priorities is to continue to improve its international economic and trade performance by complementing domestic structural adjustment programs and micro-economic reforms with strategies which advance bilateral, regional and multilateral interests.

International protectionist sentiments of the 1970s and early 1980s sustained pressure for preferential bilateral or regional trade arrangements as a response to domestic trade and economic concerns. Australia has withstood these pressures and maintained a strong commitment to the advancement of a more liberal multilateral trading system as the most effective means of supporting and promoting economic growth.

Central to this commitment has been Australia's participation over the seven years of the Uruguay Round negotiations, continuing participation in the regular work the General Agreement on Tariffs and Trade (GATT) and the development of a trade liberalising agenda in APEC.

The conclusion of the Uruguay Round negotiations on 15 December 1993 and the signing of the Final Act of the Uruguay Round together with the adoption of other agreements in Marrakesh on 15 April 1994 brought to an end the most ambitious and far-reaching multilateral trade negotiations ever undertaken. The successful outcome of the Round can be expected to underpin a boost in international business confidence which will promote faster recovery and improved levels of economic growth, employment and incomes in all participating countries.

In financial terms recent studies by the Industries Commission and the Australian Bureau of Agricultural and Resource Economics suggest that Australia's exports could increase by as much as $5 billion and Australian gross domestic product by as much as $4.4 billion over the next ten years. Globally, it is expected that the Round could deliver increases in economic activity of over $481 billion and in world trade in excess of $1 trillion ($1,000 billion).

As well as tariff cuts averaging around 50 per cent in key trading partners, improved rules in relation to almost every aspect of international trade have been agreed, particularly in relation to agricultural trade. The Cairns Group of 14 agricultural fair traders was instrumental in the success which was achieved in this regard. The final agreement provides a start to wind back the domestic support measures and export subsidy regimes of the European Union and the United States. The outlook for access to both those markets and to third markets for Australian agricultural products has been considerably improved.

Formed in 1986 to counter European opposition to the negotiation of an outcome imposing GATT disciplines on the distortions in international agricultural trade, the Group provided a very effective caucus for liberalisation. The Australian Minister for Trade acted as chairman of the Cairns Group throughout the negotiations and continues to do so.

For the first time services trade will also be subject to rules and disciplines through the General Agreement on Trade in Services (GATS). Rules for the protection of intellectual property are contained in a new agreement on Trade Related Intellectual Property Rights (TRIPs) to reduce the losses suffered by Australian creative and cultural industries because of piracy and counterfeiting. More predictable conditions for Australian companies and individuals wishing to invest offshore will apply under the agreement on Trade Related Investment Measures (TRIMs).

The establishment of the World Trade Organisation (WTO) is another significant aspect of the outcome. Australia strongly supports 1 January 1995 as the date of entry into force of the WTO Agreement and commencement date for the implementation of commitments negotiated in the Round. The WTO will be responsible for facilitating the implementation and operation of all the agreements and legal instruments which constitute the WTO Agreement, including the Plurilateral Trade Agreements, and managing the new committee structure.

The last two decades have seen the economies of the Asia-Pacific region (in this case taken as the Western Pacific region plus North America) emerge as the fastest growing in the world. As this trend is expected to continue, economic commentators have dubbed the next century the 'Pacific Century'. The region accounts for half the world's economic output and more that 40 per cent of world trade. The rapid growth has been accompanied by a process of increased economic interdependence based on the growing complementarity of the economies in the region. It was against this background that Australia launched the Asia-Pacific Economic Cooperation (APEC) process in January 1989.

The APEC initiative reflected Australia's major stake in the dynamism of Asia-Pacific and the development of a more liberal trading environment in the region, both considered critical to Australia's economic future. Membership of APEC began with Australia, New Zealand, the ASEANs, Japan, Korea, the United States and Canada. In 1991 APEC membership was expanded to include the People's Republic of China, Chinese Taipei and Hong Kong. In 1993 Mexico and Papua New Guinea were admitted, and Chile is to be admitted in 1994.

About three-quarters of Australia's exports go to APEC members and around two-thirds of its imports are sourced from APEC economies. Australia's trade with APEC has been growing faster than our overall trade; Australia's trade dependence on APEC has risen from 63.2 per cent in 1982–83 to 70.4 per cent in 1992–93. Australia's primary objectives in greater regional economic cooperation are to enhance the prospects for sustained regional growth and development and to take part in that growth.

The inaugural APEC Leaders Meeting, held in Seattle in November 1993, and the decision to hold another in Indonesia later in 1994 represent endorsement of APEC's agenda at the highest political level.

Law of the Sea

Australia is a signatory to the UN Convention on the Law of the Sea. The Convention includes articles on the system of exploration and exploitation of the deep seabed beyond the limits of national jurisdiction; extension of the territorial sea to 12 nautical miles; establishment of coastal state sovereign rights in the living and non-living resources of an 'exclusive economic zone' of 200 nautical miles; recognition of coastal state sovereign rights over the exploration and exploitation of the natural resource of the continental shelf, defined in terms of the natural prolongation of the land mass; protection and preservation of the marine environment; marine scientific research; and the settlement of disputes. Rights of freedom of navigation and passage through straits and archipelagos, which are important to trading nations such as Australia, are also recognised. The inaugural meeting of the International Seabed Authority will be held in Jamaica on 16 November 1994 (the date of the Convention's entry into force).

The Convention provides for entry into force one year after the sixtieth ratification. On

16 November 1993, Guyana deposited its instrument of ratification of the Convention, bringing the number of ratifications to 60. The Convention will thus enter into force on 16 November 1994 for the 60 ratifying nations. However, to date the ratifiers have all (with the exception of Iceland and Malta) come from the developing world. The unwillingness of industrialised states, including Australia, to ratify has largely been due to their difficulties with Part XI of the Convention, which deals with the deep seabed mining regime. In the course of 1994, informal consultations involving some 80 countries continued under the auspices of the Secretary-General of the United Nations. As a result, negotiations on the text of an agreement which in effect amends Part XI thereby resolving the outstanding differences on the Convention.

Australia is one of the major beneficiaries of the Convention. By reason of Australia's lengthy coastline and broad continental margin, the Convention accords Australia large areas of exclusive economic zone and continental shelf (and consequently significant resource benefits). It also guarantees rights of passage for Australian vessels and provides a significant basis for marine environment protection measures. In addition, the agreement negotiated in the UN Secretary-General's informal consultations meets Australia's concerns on the deep seabed mining regime.

Following the successful outcome of the consultations, the Government decided Australia should sign the agreement after its adoption by the UN General Assembly. The Government also decided that, following the adoption of the agreement, Australia should ratify the Convention (as amended by the agreement) prior to its entry into force on 16 November 1994.

Because of the imminent entry into force of the Convention, the Australian Government has been studying its maritime legislation with a view to implementing the relevant provisions of the Convention. In 1990, Australia extended its territorial sea to 12 nautical miles, in accordance with Article 3 of the Convention. The Maritime Legislation Amendment Act was passed by Parliament in early 1994 and sets the scene for Australia, in accordance with the Convention, to proclaim an exclusive economic zone and a contiguous zone and to adopt the definition of the continental shelf found in Article 76 of the Convention. The Act came into force during August 1994.

International environment

Australia has been closely involved in the development of a wide range of environmental conventions which address problems of an international, often global, dimension which no country can solve unilaterally. Such problems include the depletion of the ozone layer, climate change, desertification, hazardous wastes, and the loss of biological diversity. The importance to Australia of participating in the negotiation of these regimes lies in the fundamental need to protect the ecological life support systems upon which Australia's long-term existence depends. In line with emerging international views, the Australian Government recognises that environmental matters have strong links to other important areas such as trade, development, security and social issues such as population.

Australia participated actively in the United Nations' Conference on Environment and Development (UNCED) at Rio de Janeiro in 1992, a watershed in the emergence of an international consensus on the need to address environment and development concerns within the context of 'sustainable development'. Sustainable development is frequently defined as development which meets the needs of the present without compromising the ability of future generations to meet their own needs. The outcomes of UNCED included Agenda 21 (an action plan to guide governments and international organisations in the pursuit of sustainable development), the Rio Declaration on Environment and Development (a set of 27 principles outlining the rights and responsibilities of states in achieving sustainable development), the Framework Convention on Climate Change, the Convention on Biological Diversity and a Statement of Principles on Forests.

Following UNCED, the United Nations' General Assembly established the Commission on Sustainable Development (CSD) to monitor and promote the implementation of UNCED outcomes, in particular Agenda 21. Australia was elected in 1993 as a founding member of the Commission, which comprises 53 member states, and has been re-elected to the CSD for a second term (1995–97).

Antarctica

Australia has had a long association with Antarctica commencing with early expeditions and continuing with an active scientific program. Antarctica's importance to Australia derives from its geographical proximity, the history of Australian involvement there and Australian administration of the Australian Antarctic Territory. Australia maintains three permanent bases in the Territory: at Casey, Davis and Mawson.

As one of the 12 original signatories, Australia attaches particular significance to the 1959 Antarctic Treaty, which serves important Australian scientific, environmental and security interests. Antarctic Treaty Consultative Meetings (ATCM) are now held annually in one of the Consultative Party States. The eighteenth ATCM was held in Kyoto in April 1994. There are now 42 governments which are parties to the Antarctic Treaty. Of these, 26 are Consultative Parties entitled to participate fully in Consultative Meetings.

Hobart is host to the Commission for the Conservation of Antarctic Marine Living Resources. The Commission and its Scientific Committee meet annually. The Commission is the only international organisation based in Australia.

On 22 May 1989, the Australian Government announced that it was opposed to mining taking place in Antarctica and it would not sign the Convention on the Regulation of Antarctic Mineral Resource Activities but that it would pursue the negotiation of a comprehensive environmental protection regime for Antarctica. On 18 August 1989 the Australian and French Prime Ministers announced that Australia and France would pursue this initiative jointly. Following consultations relating to the comprehensive protection of the Antarctic environment and its dependent and associated ecosystems, the Protocol on Environmental Protection to the Antarctic Treaty was opened for signature in Madrid on 4 October 1991. The Protocol designated Antarctica as a natural reserve devoted to peace and science. It establishes a set of environment principles with which all activities in Antarctica are to be consistent. Mining activities are specifically prohibited. When it enters into force, the Protocol will establish a comprehensive regime for assessing the environmental impact of activities in Antarctica and guidelines for waste disposal, marine pollution, the conservation of fauna and flora and area protection and management.

Consistent with the priority attached to protecting the Antarctic environment, Australia enacted its principal legislation to implement the Protocol in December 1992. Australia was the first country to do so. Australia ratified the Protocol on 6 April 1994. The Protocol will enter into force when all 26 Antarctic Treaty Consultative Parties have ratified the agreement.

Treaties

The texts of bilateral and multilateral treaties to which Australia is a party are printed in the *Australian Treaty Series* (ATS) when they enter into force. Australia's current position in regard to individual treaties may be ascertained by referring to the *Australian Treaty List* (ATS 1989 No. 38) which was up-to-date at 31 December 1989 and supplements to the List which appear annually in *Treaty Action* (No. 1 of ATS each year). Monthly updates are contained in the Department of Foreign Affairs and Trade publication *Insight.*

In addition, the texts of multilateral treaties, in the negotiation of which Australia has participated but to which it has yet to become a party, are printed in annual volumes of *Select Documents on International Affairs.* The foregoing publications are available from Commonwealth Government Bookshops, except *Insight,* which is available from the Department of Foreign Affairs and Trade, Canberra.

Human rights

Human rights issues are prominent on the Government's international agenda, consistent with Australia's strong commitment to the universal protection and promotion of internationally accepted human rights standards. Through its overseas missions, the Government continues to raise with foreign governments cases of alleged serious human rights abuses, such as extrajudicial killings, torture and detention without trial. During 1993, over 500 new cases of alleged human rights abuse were raised with other governments, and ongoing work on cases raised earlier continued. Many of those cases were brought to the Government's attention by the Parliamentary Group of Amnesty International. These representations also involved cases of legal executions, including in such countries as the United States on the basis of Australia's universal opposition to the death penalty.

In addition to direct representations to foreign governments, Australia is an active participant in developments on human rights in the United Nations and maintains close contact with non-governmental human rights organisations, including Amnesty International, the Australian Council for Overseas Aid, the International Commission of Jurists and others.

Status of women

Australia continues to promote women's rights internationally by taking part in programs and meetings of multilateral bodies dealing with the status of women.

The focus of Australian multilateral attention in 1992–93 was the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the position of women employed in the UN Secretariat and violence against women. Throughout 1993, Australia continued to serve on the Commission on the Status of Women, the UN body specifically mandated to deal with the status of women's issues. The highlight of 1993 was the adoption of the UN General Assembly of the Declaration on Violence against Women, a major Australian objective.

Cultural relations

The Department of Foreign Affairs and Trade administers a program of cultural relations overseas in support of Australian foreign policy and economic objectives. Within the context of the program, 'culture' includes all aspects of Australian life, including science and technology, social and economic projects, the arts, Australian studies and sport. Through the program the Department seeks to improve perceptions of Australia and in so doing, promote a favourable environment for the program of Australia's economic and foreign policy goals. The major priority areas for the program are countries in Asia, the Pacific and North America. The Department collaborates closely with other departments, institutions/agencies and individuals in the development of its program.

The Department provides secretariats for the Australia Abroad Council which, inter alia, has undertaken Australian promotions in Korea, Japan and Indonesia, and for the Australia-China Council, the Australia-France Foundation, the Australia-India Council, the Australia-Indonesia Institute, the Australia-Japan Foundation, the Australia-Korea Foundation and the Australia New Zealand Foundation.

Consular services and passports

The Department is responsible to the Minister for Foreign Affairs to assist the welfare and protection of Australian citizens overseas. Consular services to the Australian public are available from Australian diplomatic and consular posts throughout the world.

In recent years, the service has been expanded through arrangements with Canada and the introduction of the Honorary Consul Program.

The Australia Canada Consular Sharing Agreement enables Australian citizens to obtain consular assistance from Canadian diplomatic and consular posts in certain countries where Australia has no representation. The countries where Canada provides consular services to Australians are: Cameroon, Cote d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Morocco, Norway, Peru, Senegal, Tanzania, Tunisia and Zaire. Australia reciprocates with the provision of consular services to Canadians in a comparable range of posts.

In 1993–94, 683,382 passports were issued to eligible Australian citizens. 74.7 per cent of all applications were lodged at Australian post offices. A toll-free passport information and enquiry service is available to the general public and over 496,000 calls were handled in 1993–94. To suppport the Department's consular operations the telephone information service incorporates a facility to handle large numbers of phone enquiries from the public about overseas crises which might involve Australians.

AUSTRALIAN OVERSEAS AID PROGRAM

The objective of Australia's development cooperation program is to promote the sustainable economic and social advancement of people in developing countries in response to Australia's humanitarian concerns and foreign policy and commercial interest. In support of the Australian Government's strategy of closer engagement with Asia, the development cooperation program has a strong focus on developing countries of the Asia-Pacific region.

In 1994–95, Australia's official development assistance (ODA) will total $1,486.5 million. This is an increase of more than $80 million on expenditure in 1993–94 and represents a real increase of 3.6 per cent. This maintains Australia's ODA to Gross National Product (GNP) ratio at 0.34 per cent — the outcome achieved in 1993–94. Australia's ODA/GNP ratio will remain above the average for other OECD donors.

The substantial real increase in Australia's development cooperation program will allow the introduction of several new initiatives in 1994–95 — increased funding of more than $120 million for environment activities, $70 million for emergency and refugee relief activities, a new four-year $350 million commitment to Vietnam, Cambodia and Laos, and an increase of $110 million in funding of health programs.

The aid program is administered by the Australian International Development Assistance Bureau (AIDAB) and is divided into three sub-programs: Country Programs, Global Programs and Corporate Services.

Country programs

Country programming involves a development cooperation strategy which matches recipient country needs with Australia's objectives and capacity to assist. Long-term strategies for the major recipients of Australia's aid are agreed with the partner countries, often during annual High Level Consultations. Additional support to individual countries is also provided through regional organisations and multi-country activities.

3.1 AUSTRALIAN AID FLOWS TO MAJOR RECIPIENTS, 1993–94(a)

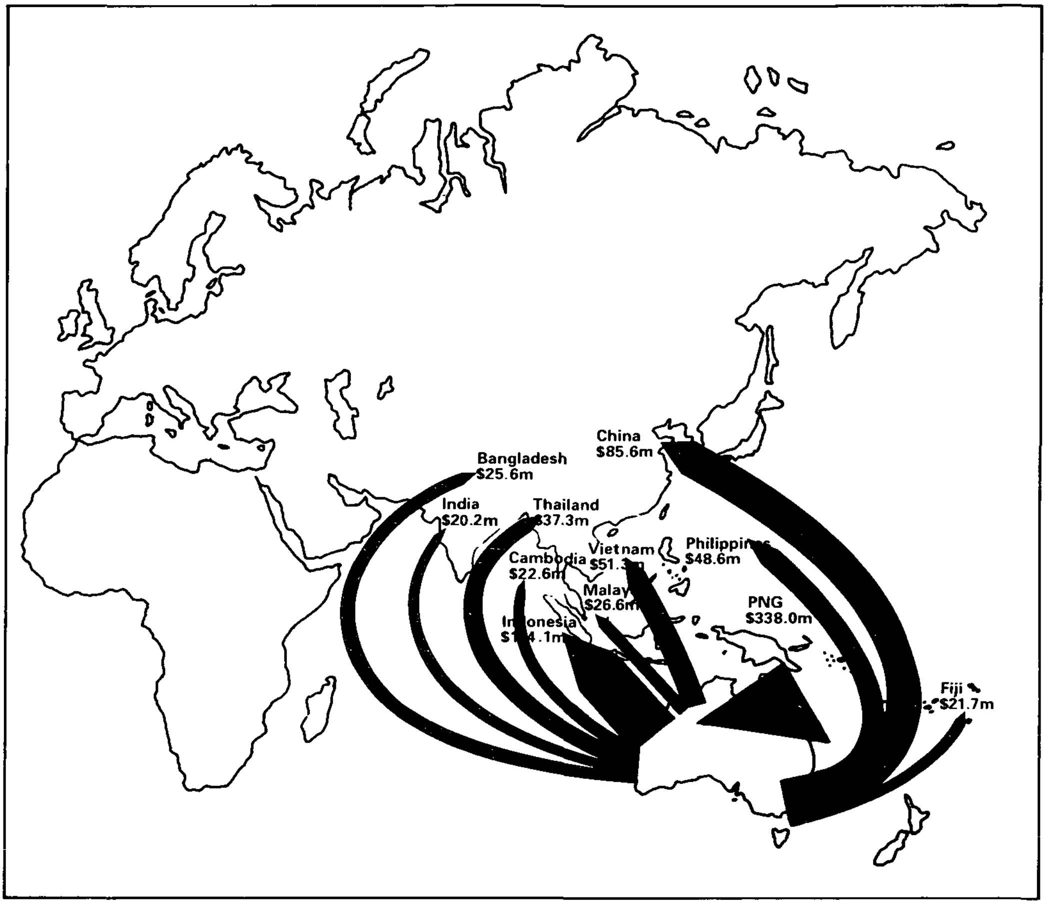
Country	*$ million*
Papua New Guinea	338.0
Indonesia	134.1
China	85.6
Vietnam	51.3
Philippines	48.6
Thailand	37.3
Malaysia	26.6
Bangladesh	25.6
Cambodia	22.6
Fiji	21.7
India	20.2
Laos	17.3
Vanuatu	15.3
Solomon Islands	14.1
Western Samoa	11.9
Tonga	10.8

(a) This includes assistance provided under both Country Programs and Global Programs.
Source: Australian International Development Assistance Bureau (AIDAB).

For the majority of recipient countries, the level of Australia's development cooperation is based on an annual programming figure. For the remainder, multi-year commitments are made. In all cases, a regular cycle is followed which includes planning, implementation and review of activities. This includes careful screening to ensure that activities are environmentally sustainable, and that mechanisms are in place to ensure that the benefits of development cooperation are shared equally between women and men. In addition, Country Programs are evaluated regularly to ensure that the program objectives are being met.

Papua New Guinea. PNG receives the largest share of the Australian aid program, with total flows in 1994–95 expected to be around $327 million, which represents about one-fifth of the total Australian development cooperation program.

3.2 AUSTRALIAN AID FLOWS TO MAJOR RECIPIENTS, 1993–94



Source: Australian International Development Assistance Bureau (AIDAB).

Most of Australia's assistance is in the form of untied budget support. To increase program effectiveness, both governments have agreed to progressively reduce the level of budget support and to introduce a program of activities targeted at development needs in six sectors: health, education and training, infrastructure, law and order, renewable resources and the private sector. As a proportion of the PNG program, programmed activities have increased from three per cent in 1987–88 to over 23 per cent in 1994–95, and will represent 100 per cent by the year 2000.

South Pacific. The South Pacific continues to be an important priority within Australia's development cooperation program. In 1994–95, bilateral, multi-country and regional programs in the South Pacific will total around $133 million. The focus will be on human resource development, institutional strengthening, health and private sector development. Australia is also active in encouraging improved aid coordination and policy dialogue mechanisms in the region as a way of improving the efficiency and effectiveness of Australia's aid.

East Asia. The countries of East Asia are another priority area for Australia's aid program, with total aid flows of around $500 million expected in 1994–95. In Cambodia, Laos and Vietnam, three of the poorest countries in the world, Australian development cooperation concentrates on direct poverty alleviation, reconstruction of basic infrastructure and the development of long-term economic links with Australia. In the 1994–95 budget, the Government announced a new four-year $350 million commitment to these three countries. In the rapidly growing economies of the region, such as Malaysia and Thailand, the developmental focus of cooperation programs increasingly reflects commercial goals and mutual benefit. In China, Indonesia and Philippines, Australian assistance supports human resource development, rural infrastructure development and the fostering of closer economic and trade linkages with Australia. In 1994–95, the Private Sector Linkages Program will continue to promote sustainable development and economic growth in the Asian region through activities which link market-oriented enterprises in Australia and selected developing countries.

Other regions. Australian development cooperation to regions outside the South Pacific and East Asia will total around $214 million in 1994–95.

In 1994–95, over $114 million will be directed to Africa for programs which focus on meeting basic needs. This includes direct development assistance, refugee and emergency aid and assistance through non-government organisations. Other countries benefiting from Australian development cooperation in 1994–95 include Bangladesh ($26.7 million), India ($23.7 million), Pakistan ($6.8 million), and Sri Lanka ($10.3 million).

It is important to note that many of these countries are also primary beneficiaries of development assistance provided by the international development agencies to which Australia contributes.

Global programs

Multilateral development organisations and programs. Australia supports the work of international development institutions as part of its obligations as a good international citizen and as a serious and concerned development partner. These institutions are a major vehicle for Australia's aid to Africa. The Government recognises that multilateral cooperation can bring results that are unachievable in a purely bilateral program, especially for a relatively small donor like Australia. Through supporting these agencies, Australia also contributes to their policies and program directions. To ensure that Australia is achieving its goals through multilateral organisations, close monitoring of the various agencies is undertaken. Contributions to international organisations in 1994–95 will total $274.9 million. United Nations' development agencies will receive $83.7 million, with the largest contributions directed to the World Food Programme ($50 million), the United Nations' Development Program ($17.7 million) and the United Nations' Children's Fund ($5.5 million). Australia's contributions of $155.4 million to the multilateral development banks will go mainly to the concessional lending arms of the World Bank and the Asian Development Bank. Other beneficiaries of Australia's contributions to international organisations in 1994–95 include Commonwealth development activities, international health and environment programs, and international non-government organisations.

Emergencies and refugees. The provision of humanitarian assistance in response to natural and man-made disasters and to meet the needs of refugees and displaced persons is an important element of Australia's development cooperation program. In 1993–94 the scope and number of crises throughout the world continued to be great and Australia responded to many emergency and refugee situations at a total cost of $67.9 million. In 1994–95 Australia will increase emergency and refugee assistance in real terms to $70.9 million. Types of assistance include food aid, temporary shelter materials, medical supplies and accountable cash grants. Australia also supports the general programs of a number of international relief agencies by making contributions to their core budgets. These include the UN High Commissioner for refugees, the UN Relief and Works Agency and the International Committee of the Red Cross. Australia also provides assistance for disaster preparedness and mitigation measures, especially in the South Pacific.

Community programs. The Government actively seeks the involvement of non-government organisations, the academic community and other professional groups in the delivery of the Australian aid program.

In 1994–95, the Government will provide about $90 million directly to non-government organisations (NGOs). This includes overseas development projects, volunteer programs, emergency relief assistance and some development education activities. A key element of this funding is the AIDAB-NGO Cooperation Program, which subsidises development activities designed and implemented by the NGOs themselves.

The direct participation of the academic and research community in the aid program is encouraged by the Government through the support of development-oriented seminars and through the provision of funds to the National Centre for Development Studies at the Australian National University. From 1994–95, the Government will also commission development-related research from other research institutions in Australia.

Commercial programs. The involvement of Australian commercial organisations is a feature of Australia's development cooperation program. The quality of development assistance is increased by using efficient Australian suppliers. The program also offers substantial returns to Australian firms — each dollar provided as aid is estimated to provide well over a dollar of business for Australian firms. AIDAB communicates widely with commercial organisations in order to increase their involvement in and understanding of commercial opportunities under the program.

Expenditure on the Development Import Finance Facility (DIFF) will be increased to $130 million in 1994–95. DIFF provides opportunities for Australian businesses to supply goods and services to developing countries for use in high priority development projects. DIFF aid grants are combined with export credits from the Australian Export Finance and Insurance Corporation (EFIC) to provide concessional, mixed credit finance packages to developing countries for the purchase of Australian capital goods. In 1994–95 the Government will introduce a new 'Green DIFF' initiative, whereby at least $20 million of the DIFF allocation of $130 million will be used for environmental projects.

AUSTRALIAN REPRESENTATION OVERSEAS

As at 30 June 1994, Australia maintained the following diplomatic and consular representation overseas (full details of these missions are available from the Department of Foreign Affairs and Trade, Canberra, ACT, 2600).

3.3 DIPLOMATIC AND CONSULAR REPRESENTATION OVERSEAS

Country	*Post*	*Country*	*Post*
Argentina	Buenos Aires	Mexico	Mexico City
Austria	Vienna	Micronesia, Federated States of	Pohnpei
Bangladesh	Dhaka	Myanmar (Burma)	Rangoon
Belgium	Brussels	Nauru	Nauru
Barbados	Bridgetown	Nepal	Kathmandu
Brazil	Brasilia	Netherlands	The Hague
Brunei	Bandar Seri Begawan	New Caledonia	Noumea*
Cambodia	Phnom Penh#	New Zealand	Wellington
Canada	Ottawa	Nigeria	Lagos
Chile	Santiago	Pakistan	Islamabad
China	Beijing	Papua New Guinea	Port Moresby
	Shanghai*	Philippines	Manila
Cyprus	Nicosia	Poland	Warsaw
Denmark	Copenhagen	Russia	Moscow
Egypt	Cairo	Saudi Arabia	Riyadh
Federal Republic of Germany	Berlin*	Singapore	Singapore
	Bonn	Solomon Islands	Honiara
Fiji	Suva	South Africa	Pretoria
France	Paris	Spain	Madrid
Greece	Athens	Sri Lanka	Colombo
Hong Kong	Hong Kong*	Sweden	Stockholm
Hungary	Budapest	Switzerland	Berne**
India	New Delhi	Syria	Damascus
Indonesia	Jakarta	Thailand	Bangkok
	Bali**	Tonga	Nuku'alofa
Iran	Tehran	Turkey	Ankara
Ireland	Dublin	United Kingdom	London
Israel	Tel Aviv	United States	Washington
Italy	Rome		Honolulu*
Japan	Tokyo		New York*
Jordan	Amman	Vanuatu	Port Vila
Kenya	Nairobi	Vatican	Holy See
Kiribati	Tarawa	Venezuela	Caracas
Korea, Republic of	Seoul	Vietnam	Hanoi
Laos	Vientiane	Western Samoa	Apia
Malaysia	Kuala Lumpur	Yugoslavia	Belgrade
Malta	Malta	Zimbabwe	Harare
Mauritius	Port Louis		

* Consulate-General ** Consulate # Resident mission
Source: Department of Foreign Affairs and Trade.

Australia also maintained five separate permanent missions in:

New York — UN
Geneva — UN
Geneva — Disarmament
Geneva — GATT
Paris — OECD.

Austrade maintained trade missions with diplomatic or consular status in the following cities:

Atlanta*, Auckland*, Bombay*, Dubai*, Frankfurt*, Fukuoka**, Guangzhou*, Houston*, Istanbul*, Los Angeles*, Milan*, Nagoya**, Osaka*, San Francisco*, Sao Paulo*, Sapporo**, Sendai** and Toronto*.

The Department of Immigration and Ethnic Affairs maintained offices with consular status in Berne**, Manchester**, Edinburgh** and Vancouver**.

3.4 AUSTRALIAN HONORARY CONSULATES AS AT 30 JUNE 1994

City	*Country*	*Responsible office*
Barcelona	Spain	Madrid
Bogota	Colombia	Caracas
Boston	United States of America	New York
Bucharest	Romania	Belgrade
Chicago	United States	Los Angeles
Denver	United States	Los Angeles
Guadalajara	Mexico	Mexico City
Guayaquil	Ecuador	Caracas
Kiev	Ukraine	Moscow
Kuching	Malaysia	Kuala Lumpur
Lae	Papua New Guinea	Port Moresby
Monterrey	Mexico	Mexico City
Montevideo	Uruguay	Buenos Aires
Papeete	French Polynesia	Noumea
Port of Spain	Trinidad and Tobago	Kingston
Prague	Czech Republic	Warsaw
Pusan	Republic of Korea	Seoul
Sao Paulo	Brazil	Brasilia
Sevilla	Spain	Madrid
Vladivostock	Russia	Moscow
Zagreb	Croatia	Vienna

Source: Department of Foreign Affairs and Trade.

Australia's involvement and activities in the United Nations, 1945–95

1995, the fiftieth anniversary of the United Nations, also marks 50 years of Australian membership. Throughout the history of the organisation, Australia's involvement has been underpinned by a bipartisan commitment to multilateralism and the ideals that the United Nations represents. This commitment derives from Australia's international status as a medium-sized power and the recognition that international regimes provide Australia with a higher degree of protection and influence than it could otherwise hope to achieve. Support for the purposes and principles of the UN Charter is consequently a central element of Australia's foreign policy. Of these, high priority is attached to support for the UN's role in improving international security, in encouraging respect for human rights and in promoting international cooperation for economic and social development. Australia is also very conscious that global problems such as environmental degradation, HIV/AIDS and drug trafficking can be effectively addressed only at the international level.

Australia was a founding member of the UN and played an active role in the drafting of the UN Charter at the San Francisco Conference of 1945. The Australian delegation, led by External Affairs Minister, Dr Herbert Evatt, championed the rights of middle and smaller powers vis-a-vis the permanent members of the Security Council. Through Dr Evatt's efforts, Australia was successful in broadening the role of the General Assembly relative to the Security Council and in arguing that the UN's sphere of action should encompass an economic and social, as well as a security, agenda. Dr Evatt also sought to have limits placed upon the veto power of the permanent members, but the great powers conceded little ground on this point.

In the ensuing years, Australia has continued to make a constructive contribution to the United Nations. Australia has served four terms on the Security Council, in 1946–47, 1956–57, 1973–74 and 1985–86. During the first of these terms Australia provided the Council's first President, Norman Makin. In 1948, Dr Evatt was elected President of the General Assembly and presided over the adoption of the Universal Declaration of Human Rights.

Australia cooperated closely with the UN in the decolonisation process, one of the UN's great success stories, and was one of the architects of the international trusteeship systems (Chapter XII of the Charter). In 1975, a long period of Australian membership of the trusteeship council came to an end with the independence of Papua New Guinea. Australia was also a longstanding member of the Special Committee on Decolonisation, withdrawing in January 1985 following UN recognition of the Cocos (Keeling) Islands' decision to integrate with Australia.

Throughout its 50 year history, Australia has been one of the leading voices in the UN on human rights issues, not only in defence of fundamental human rights accepted by the international community as universal, but also in expanding the body of human rights treaties in specific areas and in improving the effectiveness of the UN's monitoring machinery on human rights. In suppport of these aims, Australia continues to play an active role in the UN Commission on Human Rights and is a strong supporter of the work of the expert UN bodies dealing with the implementation of international human rights conventions. Justice Elizabeth Evatt is currently a member of the Human Rights Committee and Professor Philip Alston chairs the Committee on Economic, Social and Cultural Rights. Justice Michael Kirby was recently named UN Special Representative for Human Rights in Cambodia.

International security is also an issue on which Australia has been very active, most notably through the UN Conference on Disarmament. Australia made a major contribution to the successful negotiation of a Chemical Weapons Convention and has taken a leading role in attempts to secure a Comprehensive Test Ban Treaty for nuclear weapons. Achieving the indefinite extension of the Nuclear Non-Proliferation Treaty will continue to be a major foreign policy goal for Australia.

As evidenced by its long history of contributions to UN peacekeeping operations, Australia strongly supports the UN's role in this area and has welcomed the rapid expansion of the UN's peacekeeping responsibilities following the end of the Cold War. In February 1994, Australia was providing personnel for the UN Peacekeeping Force in Cyprus, the UN Truce Supervision Organisation in the Middle East, the UN operation in Somalia and the Mission for the Referendum in Western Sahara. Australia played a pivotal role in the resolution of the conflict in Cambodia, one of the UN's major recent success stories. The concept of a UN-led interim authority to prepare the country for democratic elections was an Australian initiative, and Australia made important contributions of personnel and equipment to the resultant UN transitional administration. Senator Evans' book *Cooperating for Peace*, launched at the forty-eighth session of the General Assembly in 1993, has been Australia's main contribution to the debate on enhancing international security stimulated by the Secretary-General's publication of *An Agenda for Peace.*

Australia contributes financially to the United Nations through timely payment of its assessed share of the regular budget, currently 1.51 per cent of the total, and through payments to the budgets of the various UN agencies. In 1992–93, Australia contributed $22.8 million to the UN's core budget and $40.9 million for peacekeeping. Australia's peacekeeping contribution is expected to rise to around $70 million in 1993–94. Australia also makes substantial voluntary contributions to UN development activities, humanitarian appeals and for specific human rights purposes.

Australia has been an active participant in the work of the UN Economic and Social Council since its inception, and Australia's Ambassador to the UN, Richard Butler, is currently President of the Council. In 1994, Australia was a member of six of the Council's subsidiary bodies: the Statistical Commission; the Commission on Human Rights; the Commission on the Status of Women; the Commission on Narcotic Drugs; the Commission on Sustainable Development; and the Commission on Crime Prevention and Criminal Justice. Australia also plays a prominent role in the UN's Economic and Social Commission for Asia and the Pacific, which is based in Bangkok.

Australia is a member of 16 UN Specialised Agencies and in 1994 was serving on the governing bodies of six of these: the International Civil Aviation Organisation; the International Labour Organisation; the International Telecommunication Union; the UN Educational, Scientific and Cultural Organisation; the Universal Postal Union; and the World Meteorological Organisation.

Australia is also currently serving on the governing bodies of a number of other UN organisations and programs, including the UN High Commissioner for Refugees, the UN's Children's Fund, the UN Conference on Trade and Development, the World Food Program and the UN Environment Program.

Australia accepts the compulsory jurisdiction of the International Court of Justice and plays an active role in bodies concerned with the development of international law. In 1993, Sir Ninian Stephen was elected as a judge on the International Tribunal for Crimes in the former Yugoslavia, while Professor James Crawford is a member of the UN International Law Commission.

The fiftieth anniversary of the UN has intensified interest world-wide in reforming the UN's structures and operations to enable it to meet the challenges of the post-cold war world. Australia stands strongly committed to reform in a wide range of areas, including improving humanitarian relief coordination, the composition and functioning of the Security Council, restructuring of the Secretariat and management of peace operations, and will continue to seek opportunities to make a constructive contribution to the reform process.

BIBLIOGRAPHY

AUSTRALIA-CHINA COUNCIL. Annual Report, 1992–93

AUSTRALIA-FRANCE FOUNDATION, Annual Report, 1992–93

AUSTRALIA-INDIA COUNCIL, Annual Report, 1992–93

AUSTRALIA-INDONESIA INSTITUTE. Annual Report, 1992–93

AUSTRALIA JAPAN FOUNDATION. Annual Report, 1992–93

AUSTRALIA-KOREA FOUNDATION, Annual Report, 1992–93

AUSTRALIA NEW ZEALAND FOUNDATION. Annual Report, 1991–92

AUSTRALIAN CENTRE FOR INTERNATIONAL AGRICULTURAL RESEARCH. Annual Report, 1991–92

DEPARTMENT OF FOREIGN AFFAIRS AND TRADE. Annual Report, 1992–93

DEPARTMENT OF FOREIGN AFFAIRS AND TRADE. Australia and the United Nations

Chapter Four

Defence

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This chapter outlines Australia's defence policy. It presents an overview of the Defence organisation and how it operates and it lists some planned equipment and personnel changes.

Australia enjoys a very good security environment. Relationships with its allies and neighbours are sound and it faces no foreseeable military threat.

Because Australia is a large island continent, any potential aggressor against it would have to possess considerable sea, land and air forces. In the current security environment, such a threat is considered unlikely. In the foreseeable future, any actions against Australia would more likely be small-scale military actions with limited objectives.

POLICY

The central elements of Australia's defence policy are:

- maintaining and developing capabilities for self-reliant defence; with an emphasis on a defensive strategy focusing on Australia's northern maritime approaches;
- promoting strategic stability and security in Australia's region; including through building effective defence relations with the region. Australia's defence cooperation with regional countries includes extensive maritime surveillance activity and exercises, training and personnel exchanges, the Five Power Defence Arrangements with Malaysia and Singapore (along with the United Kingdom and New Zealand) and the Joint Declaration of Principles with Papua New Guinea; and
- the maintenance of strong alliances; Australia receives significant benefits from the alliance with the US, which contributes to Australia's national defence capacity, and Australia's ability to promote regional and global security. Australia also places a priority on promoting closer defence relations with New Zealand.

Australia's defence policy is outlined in *The Defence of Australia* (1987) and *Strategic Review 1993*. *Strategic Review 1993* is the successor to *Australia's Strategic Planning in the 1990's (ASP 90)*. It marks the first major step in the adaptation of Australia's defence and strategic policies to the major changes now underway in the regional and global security environment following the end of the Cold War. The Government plans to publish a new Defence White Paper in the latter part of 1994.

THE DEFENCE ORGANISATION

The Defence organisation is only one of the instruments available to the Government in maintaining a secure Australia. Through its various activities, the Defence organisation complements and supports diplomatic, economic, social and commercial activities.

The mission of the Defence organisation, which comprises the Australian Defence Force (ADF) and the Department of Defence, is to promote the security of Australia, and to protect its people and its interests.

The ADF is the uniformed element of the Defence organisation, and consists of the Royal Australian Navy (RAN), the Australian Army, and the Royal Australian Air Force (RAAF). The ADF is structured to deal with the types of contingencies which could arise in the short term, while providing a basis for expansion should a major threat arise over the longer term.

Australia's military strategy for the defence of Australia is based on the concept of defence-in-depth. This utilises a comprehensive array of defensive and offensive capabilities with range, endurance and mobility, to prevent an adversary from successfully attacking Australia in its air and sea approaches, gaining a foothold on any part of Australia's territory, or extracting concessions from Australia by use of military force. The defence-in-depth strategy determines force structure, with an emphasis on the following capabilities: intelligence to detect any threat; maritime and air surveillance and an interception capacity in Australia's northern approaches; mobile ground forces to protect northern Australia; and a capacity to support dispersed operations across Australia's north.

The ADF also has non-defence functions, especially in peacetime. ADF resources are used for civil tasks of national importance — such as coastal surveillance, fisheries protection and search and rescue. They may be made available to State Governments.

In recent years the ADF has been involved in a number of multinational — including UN peacekeeping — operations. Contributions to UN peacekeeping serve to demonstrate Australia's commitment to UN ideals, including the peaceful resolution of international conflicts, and offer training and operational benefits to the ADF.

The Department of Defence is the civilian element of the Defence organisation. It supports the Government in the development, implementation and evaluation of defence policy and programs. It provides policy, procurement, scientific, logistic, financial and other support services to the ADF, and a range of services to government agencies and industry.

PLANNING

To provide a management framework for its activities, the Defence organisation works to a 10 year planning 'horizon'. Proposals are brought forward and examined in detail prior to submission to the Government for consideration as new policy initiatives. This is a rolling horizon, reviewed each year in the light of changing strategic circumstances, government directions, changing economic prospects and other relevant factors.

The primary documents which explain current Defence plans are the Defence Corporate Plan and *Strategic Review 1993*. The Plan is updated each year and sets out corporate goals and strategies for the next five years. It specifies what Defence aims to achieve and identifies criteria which indicate if those aims have been met. The 1987 Defence White Paper and *Strategic Review 1993* represent government policy guidance for defence development.

The Defence Report, published annually, is a report to the Minister for Defence on the activities of the Defence organisation over the previous financial year.

Changing directions

As a result of the 1987 Defence White Paper and subsequent reviews (the Force Structure Review, The Defence Force and the Community Report, the Defence Regional Support Review, and reviews of Defence logistics), there have been, and will be, a number of significant changes in the Defence organisation by the year 2000.

They are all aimed at making the best use of Defence resources, and in particular improving the combat capability of the ADF. A number of them will also increase the ADF presence in the west and north of Australia.

The most significant changes are outlined below. More detail may be found in four documents: the Force Structure Review, the Ready Reserve Program, the Report of the Interdepartmental Committee on *The Defence Force and the Community* and *Strategic Review 1993*.

Defence planning for the 1990s aims to achieve a balance between investment in new and improved capabilities, technology and infrastructure, and investment in personnel training. It places a heavy emphasis on improving combat capability, with the need for a significant level of investment in new equipment and facilities to meet strategic priorities. A reduction in the numbers of Regular service personnel and civilians will reduce costs and allow the reallocation of resources to areas of greater priority.

The future distribution of the Defence budget between investment, operating costs and personnel is expected to be about 27 per cent, 30 per cent and 43 per cent, respectively.

The Navy is acquiring new surface combatants and submarines. The first Collins Class Submarine was launched in August 1993 and by the beginning of next century, there will be six Collins Class submarines based at HMAS Stirling in Western Australia. As well, the Navy will have six destroyers/frigates and 12 offshore patrol vessels. Current planning is for six frigates to be based at HMAS Stirling.

More Regular Army units will be based in the north of Australia. This process began with the Second Cavalry Regiment's move to Darwin in 1992. An armoured regiment with one Regular Army tank squadron, a composite aviation squadron, and an infantry battalion will also move to Darwin by the year 2000.

By 1996, the Ready Reserves will replace most of the Regular combat and combat support units in southern Queensland.

The Air Force has recently completed a program, begun in the 1980s, of re-equipping and redeploying its fighter force. Two squadrons of F/A-18s are now based at RAAF Tindal in the Northern Territory. RAAF Tindal is complemented by three northern Australian 'bare bases' — forward locations to which aircraft can be deployed as required. These are at Exmouth (RAAF Base Learmouth), Derby (RAAF Base Curtin), and Weipa (RAAF Base Scherger). Combined with the air to air refuelling capacity now operational in the Air Force (four B707 tankers), the bare bases give the F/A-18s considerable operational flexibility and endurance in northern Australia.

DEFENCE PROGRAMS

The Defence organisation, its resources and activities are divided into eight major programs.

Forces Executive

The objective of this Program is to provide central ADF command of operations and activities, and policy direction in the areas of force structure and capability, personnel practices, Reserve service, ordinance, health, public information, defence housing, emergency management and ADF superannuation.

The program supports the role of the Chief of the Defence Force as the Commander of the ADF and the principal military adviser to Government. It provides overall direction for the ADF on the priorities for force structure and capability development, in accordance with government strategic and financial guidance. The major functional areas provide military, policy, planning, communications, force development, health and logistics direction to the ADF. In addition, the program provides advice and funding for joint training establishments, Emergency Management Australia, public information activities, ADF Superannuation and Defence Housing.

Navy

The objective of the Navy is to provide maritime forces capable of conducting effective maritime operations in the pursuit of Australia's security interests using permanent and reserve forces and capable of expanding in a timely manner in response to warning of more substantial conflict.

The Royal Australian Navy emphasises contribution to raising joint forces, surveillance and patrol operations in the immediate sea approaches as well as developing capabilities through joint and combined exercises.

Army

The objective of the Army is to provide land forces capable of conducting effective land operations in pursuit of Australia's security interests using both regular and reserve forces and capable of expanding in a timely manner against warning of more substantial conflict. The Army must be able to provide forces capable of resolving high risk terrorist incidents in support of the civil authorities and be able to conduct protracted and dispersed operations in harsh terrain where the existing infrastructure and resources are sparse.

Air Force

The objective of the RAAF is to provide forces capable of conducting effective air operations in pursuit of Australia's security interests using both permanent and reserve forces and capable of expanding in a timely manner against warning of more substantial conflict.

The RAAF has significant national responsibilities for surveillance of Australia's air and sea approaches; the destruction of hostile air, surface and sub-surface forces in times of conflict; participation with Army and Navy in the completion of joint tasks; contributing to enhanced regional security and international stability; and supporting the civilian community.

Strategy and Intelligence

The objective of this Program is to provide the Government with the defence policy options most relevant to Australia's strategic circumstances to ensure that defence programs and force structure are consistent with the Government's strategic policies and priorities. It also provides intelligence services for Defence and other government departments and organisations.

Strategy and Intelligence Program is involved in policy development in the areas of international and regional defence relations, long-term defence planning, intelligence functions and defence cooperation activities with regional neighbours. It also covers the analysis of capability issues and the development of new major investment program. Much of the work of the Program aims to guide and improve corporate level performance. The Program coordinates departmental work on strategic guidance and force structure planning.

Acquisition and Logistics

The objective of this Program is to realise the Government's priorities for the development of Australia's defence capabilities through the economic acquisition of capital equipment and facilities that meet endorsed operational requirements. The Program also provides logistic support for the ADF and encourages the involvement of Australian industry where appropriate.

Australia is proceeding with a program of major defence equipment acquisitions costing more than $29 billion over the coming decade and beyond, and the Acquisition and Logistics Program is central to these initiatives.

The following table shows expenditure for selected major items of capital equipment for 1992–93.

4.1 EXPENDITURE ON MAJOR ITEMS OF CAPITAL EQUIPMENT, 1992–93 ($ million)

Project	*Estimate*	*Actual*
Collins class submarines	755.7	703.7
ANZAC ships	487.7	431.8
Australian frigates	84.3	97.3
Seahawk helicopters	37.2	41.4
F/A-18 Hornet fighter	113.8	92.7
Black Hawk helicopters	19.0	16.1
F-111 avionics update	83.1	117.3
Chinook capability	15.3	16.4
Jindalee Operational Radar Network	164.8	123.1
Wheeled Fighting Vehicle	23.3	19.3
HF and VHF single channel radios (Raven)	85.8	62.8
Small arms replacement project	24.5	24.0
Army light field vehicles	12.5	12.8

Source: Department of Defence.

Budget and Management

The objective of the Program is to develop policy and deliver corporate services that optimise the cost-effective management of Defence resources. This applies in particular to resource management and financial systems, the allocation of civilian and service personnel, civilian personnel management, program evaluation and management audit, the security of personnel, projects and computing, and legal services.

Science and Technology

This Program is the research and development arm of the Department of Defence, and is the second largest R&D organisation in Australia. The role of the Defence Science and Technology Organisation (DSTO) is to help set national security policy; contribute to new or enhanced defence capabilities; help sustain existing defence equipment and procedures; and transfer the results of Defence research to industry in a timely manner.

DSTO's activities cover most of the physical sciences and also includes organic and protective chemistry, the food sciences, degradation of materials by the environment, man-made interaction and systems engineering. DSTO's research ranges from the frontiers of high technology to everyday problems — from lasers to boots.

Backed up by its national and international networks, joint projects, substantial technology base and some outstanding facilities, DSTO is able to assist the ADF, defence industry and the wider community to extend and make best use of technology and their resources. Many of DSTO's inventions can be adapted for civilian use. In recent years, the organisation has formed partnerships and joint ventures with Australian industry, resulting in valuable support for the economy.

AUSTRALIA'S DEFENCE CONTRIBUTION TO UN ACTIVITIES

During 1993, Australia participated in eight separate UN operations (Cambodia, Somalia, Afghanistan, Western Sahara, Israel, the Sinai, the Arabian Gulf and the Red Sea) involving over 2,000 ADF personnel. Primary involvements were in the UN mandated operation Restore Hope in Somalia and the UN Transitional Authority in Cambodia

(UNTAC). Both of these operations were completed during the year with relative peace and security being restored to Baidoa in Somalia, and the successful return of Cambodia to democratically elected government.

The ADF has established a small Peacekeeping Centre at Williamstown, New South Wales to conduct peacekeeping training for Australian and regional participants, and become the repository for peacekeeping expertise and experience.

Australia will continue to contribute to UN activities on a case-by-case basis. In future, the number of such commitments is likely to be significantly higher than previously.

RESOURCES

Budget and expenditure

The 1994–95 Defence budget of $9,637 million continues the planned level of Defence outlays and will enable Defence to maintain its capital investment programs, exercises, deployments and training activities.

The Defence share of GDP for 1994–95 is estimated to be 2.1 per cent. Defence outlays are estimated to be 8.0 per cent of 1994–95 Commonwealth outlays, compared with an estimated 2.3 per cent of GDP and 8.6 per cent of Commonwealth outlays in 1993–94.

The proportion of Defence expenditure spent in Australia continues at a high level reflecting greater local industry involvement and increased self-reliance. Some 89 per cent of total Defence expenditure is estimated to be spent in Australia during 1993–94, including 66 per cent of capital equipment expenditure. Current levels of expenditure compare favourably with the 76 per cent spent in Australia during 1984–85, which included only 25 per cent of all capital equipment expenditure.

The following table shows the actual outlay by each program of the Department of Defence in 1992–93.

4.2 DEFENCE OUTLAY, 1992–93 ($'000)

Program	
Forces Executive	527,732
Navy	1,382,982
Army	2,040,428
Air Force	1,687,566
Strategy and Intelligence	205,505
Acquisition and Logistics	2,684,321
Budget and Management	409,457
Science and Technology	219,890
Total	**9,157,881**

Source: Department of Defence.

Personnel

Although the Defence organisation has its policy and administrative centre in Canberra, most of its personnel are located in some 600 units and establishments throughout Australia.

The ADF has some 62,000 Regular personnel and 26,600 Reserves, while the Department of Defence has some 22,000 civilians.

Of the civilian employees in the Defence organisation, some 13,700 work directly for the ADF, some 3,000 are in the Defence Science and Technology Organisation (DSTO), over 1,200 are in regional offices, and some 4,000 are in the central office.

Women represent 12.5 per cent of the ADF. Some 90 per cent of ADF positions are now available to women. The 1992 Year Book contained an account of the widening roles of women in the ADF.

4.3 DEFENCE SERVICE AND CIVILIAN PERSONNEL, BY EMPLOYMENT CATEGORY AND SEX AS AT 30 JUNE 1993

	Males	*Per cent*	*Females*	*Per cent*
Navy				
Trained force				
Officers	2,095	13.9	270	1.8
Other ranks	10,176	67.7	1,378	9.1
Training force				
Officers	445	3.0	134	0.9
Other ranks	454	3.0	89	0.6
Total	*13,170*	*87.6*	*1,871*	*12.4*
Army				
Trained force				
Officers	4,020	14.3	484	1.7
Other ranks	19,781	70.5	2,200	7.9
Training force				
Officers	537	1.9	93	0.3
Other ranks	856	3.1	83	0.3
Total	*25,194*	*89.8*	*2,860*	*10.2*
Air Force				
Trained force				
Officers	3,126	16.2	426	2.2
Other ranks	12,710	65.7	2,460	12.7
Training force				
Officers	353	1.8	80	0.4
Other ranks	110	0.6	80	0.4
Total	*16,299*	*84.3*	*3,046*	*15.7*
Australian Defence Force				
Trained force				
Officers	9,241	14.8	1,180	1.9
Other ranks	42,667	68.3	6,038	9.7
Training force				
Officers	1,335	2.1	307	0.5
Other ranks	1,420	2.3	252	0.4
Total	*54,663*	*87.5*	*7,777*	*12.5*
Civilians				
Senior executive staff	99	0.4	5	—
Other staff	15,118	68.4	6,883	31.2
Total	*15,217*	*68.8*	*6,888*	*31.2*
Reserves				
Navy	1,169	4.4	190	0.7
Army	19,854	74.5	4,102	15.4
Air Force	1,109	4.2	216	0.8
Total	*22,132*	*83.1*	*4,508*	*16.9*
Ready Reserves				
Navy	46	2.0	1	—
Army	2,054	87.1	70	3.0
Air Force	186	7.9	—	—
Total	*2,286*	*97.0*	*71*	*3.0*

Source: Department of Defence.

The Ready Reserve Program

The formation of the Ready Reserve was one of the key recommendations of the Force Structure Review. The Review recommended that greater use be made of the nation's reserve forces, and that in particular a new form of service — the Ready Reserve — be created.

The Ready Reserve is designed to ensure that Australia enters the 21st century with a defence force relevant to our strategic and security needs. It is the result of an innovative and imaginative look at the way the ADF can best use its most precious resource — its people.

The Program aims to provide the ADF with a mix of capabilities. It is designed to improve the ADF's readiness whilst at the same time providing long-term sustainability.

The Ready Reserve Program complements the Total Force Concept by reinforcing the depth of trained units and personnel available to meet contingencies in the defence of Australia. It strengthens the ADF's ability to respond decisively to emergencies by adding a pool of highly trained personnel, capable of rapid mobilisation.

The Ready Reserve Program expects to recruit 4,100 personnel by 1996 — 3,200 for the Army, and 450 each for the Navy and RAAF. The response to recruiting from civilian sources has more than met the annual intake numbers for 1992 and 1993. In effect the Ready Reserve provides the ADF with a third manning option. The Ready Reserve operates at a lower level of readiness and training than regular members of the ADF, but at a higher level of readiness and training than the conventional reserves.

The Program recruits high calibre candidates to undergo intensive full-time training for one year. Each Ready Reservist makes a commitment to follow-on training and deployment on short notice operations for four years part time after the training year has been completed. The Program encourages its recruits to undertake tertiary or vocational training by providing a tax exempt education assistance scheme of approximately $5,000 per annum. The Program also provides recruits with a job search allowance of $1,000. The Program encourages highly trained permanent members of the ADF to serve part time in the Ready Reserves following completion of their permanent service.

Employer support is critical to the viability of the Program. An employer support scheme has been introduced which provides payment of an amount equivalent to adult male average weekly earnings for up to four weeks per year to employers who grant their employees leave, in addition to annual leave, for part-time Ready Reserve service.

The Program is a unique opportunity for the ADF to strengthen the relationship between the Defence organisation and the Australian community in the interests of national defence.

BIBLIOGRAPHY

THE COMMERCIAL SUPPORT PROGRAM MANUAL. This document identifies the scope for in-house improvements and contracting out and develops management and financial evaluation methodologies.

DEFENCE OF AUSTRALIA 1987. A government policy information paper tabled in Parliament in 1987. The Government plans to publish a new Defence White Paper in the latter part of 1994.

DEFENCE COMMUNICATIONS CORPORATE PLAN 1991–2001. This document proposes strategies for ensuring Defence communications systems can take advantage of new and emerging technologies while continuing to meet current and unforeseen user demands.

THE DEFENCE CORPORATE PLAN. An annual document providing guidance to programs on the basis for program planning.

DEFENCE LOGISTICS REDEVELOPMENT PROGRAM. A program to rationalise supply support and warehousing for the Australian Defence Force.

DEFENCE REGIONAL SUPPORT REVIEW. A review undertaken to recommend the most effective and economical means of providing administrative support to the Australian Defence and the Department of Defence in regional areas.

THE DEFENCE REPORT 1992–93. A report to the Minister for Defence published annually on Defence Program achievements, resources and other matters.

THE EQUAL EMPLOYMENT OPPORTUNITY PLAN. A document which seeks to identify and remove unjustified discrimination against women and members of designated groups in their employment and career opportunities.

FORCE STRUCTURE REVIEW. A government plan for the phased restructuring of the ADF over the next 10 years to use allocated resources more effectively.

PROGRAM PERFORMANCE STATEMENTS 1991–92. A Budget paper published in support of the annual Budget, giving detailed information on plans and resources by Program and Sub-Program.

READY RESERVE PROGRAM 1991. This scheme is a unique means for the Australian Defence Force and the Australian community to cooperate more fully in the defence of Australia.

REPORT OF THE INTERDEPARTMENTAL COMMITTEE ON THE WRIGLEY REVIEW: THE DEFENCE FORCE AND THE COMMUNITY. An examination of how the Australian Defence Force could draw the maximum support possible from Australian industry and from the wider community consistent with operational requirements.

STRATEGIC REVIEW 1993. A key government planning document released in its unclassified version in February 1994. It marks the first major step in the adaptation of our defence and strategic policies to the major changes now underway in the regional and global security environment following the end of the Cold War.

Chapter Five

Demography

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The principal source of demographic data is the Census of Population and Housing, which in recent times (since 1961) has been conducted at five-yearly intervals. The most recent was in 1991, of which some results are included in this issue of the Year Book. Compulsory registration of births, deaths and marriages also provides valuable information, as do the details supplied by incoming and outgoing overseas travellers. In addition, various surveys are conducted from time to time on specific topics. Divorce data are compiled from court records; administrative records provide data on other aspects such as refugees and interstate migration.

POPULATION SIZE AND GROWTH

For an historic perspective of Australia's demographic characteristics *see Year Book Australia 1988.*

As shown in table 5.1, the estimated resident population at 30 June 1993 was 17.7 million, an increase of one per cent over the previous year. The total increase of 178,900 since 1992 comprised 143,800 from natural increase and 35,100 from overseas migration. The natural increase component was above the peak level of 1990–91, while overseas migration was at the lowest level since 1975–76.

5.1 ESTIMATED RESIDENT POPULATION AND COMPONENTS OF GROWTH

		Annual rate of growth (%)		
Year ended 30 June	*Population ('000)*	*Natural increase*	*Net overseas migration*	*Total(a)*
1972	13,303.7	1.24	0.58	1.81
1977	14,192.2	0.82	0.41	1.13
1982	15,184.2	0.84	0.86	1.75
1987	16,263.9	0.79	0.74	1.53
1988	16,532.2	0.77	0.92	1.65
1989	16,814.4	0.79	0.95	1.71
1990	17,065.1	0.79	0.74	1.49
1991	17,284.0	0.83	0.51	1.28
1992	17,482.6	0.78	0.37	1.15
1993	17,661.5	0.82	0.20	1.02

(a) The difference between the total and the sum of the component rates is due to distribution of the intercensal discrepancy.
Source: Australian Demographic Statistics (3101.0).

Net overseas migration gain, moderate for most of the 1970s, increased sharply at the end of that decade following changes in migration intake targets and Australia's acceptance of a large number of Indo-Chinese refugees as settlers. Very high intakes were recorded in 1980–81 and 1981–82, after which they fell back to previous levels. In the latter half of the 1980s there was a strong resurgence, and the overseas migration gains of 1987–88 and 1988-89 were amongst the highest recorded this century. Since 1989 they have fallen back significantly.

From year to year overseas migration gains are continuing to be more volatile than natural increase and, because of their size, are setting the pattern for trends in total population growth. From a peak of 1.8 per cent in 1981–82, the total growth rate slumped to 1.2 per cent in the middle of the 1980s as the migration intake declined. In the latter part of the decade, the sharp rise in net migration resulted in a recovery in total growth to 1.7 per cent in 1989. In the 1990s the total growth rate has fallen back again as the migration intake has eased. The total growth of one per cent in the year ended 30 June 1993, was the lowest since the year ended 30 June 1976, which also recorded a one per cent growth.

The most recent projections of the Australian population show it growing from 17.7 million in 1993 to 19.0 million in the year 2000, 20.0 million in 2005 and 21.0 million some time between 2009 and 2011. These projections assume that fertility will either remain constant at current levels (1.9 births per woman) or rise to replacement level (2.1 births per woman) and that the annual net gain from overseas migration will rise during the 1990s before levelling off at a constant 70,000 or 100,000 per year. Mortality rates are assumed to continue to fall at all ages.

Population growth in selected countries over the five year period 1986 to 1991 is shown in table 5.2. Australia's average annual rate of population growth, at 1.6 per cent, was greater than the rates of growth in Canada (1.3%), the United States of America (1.0%) and New Zealand (0.8%) but lower than those in Indonesia (2.3%) and Papua New Guinea (2.1%). The average population density of two persons per square kilometre is very low by international standards. The low figure masks the concentration of people along the coast and the high level of urbanisation. Again, there are similarities between Canada and Australia in that both countries are characterised by large areas not conducive to dense settlement.

5.2 POPULATION LEVELS, GROWTH RATES AND DENSITY, SELECTED COUNTRIES 30 JUNE 1991

	Population			
	'000	*Average annual rate of growth (%) 1986–91*	*Area ('000 km²)*	*Population density (persons/km²)*
Australia	17,284	1.6	7,713	2
Canada	26,992	1.3	9,976	3
China	1,155,795	1.5	9,597	120
Indonesia	187,765	2.3	1,905	99
Japan	123,921	0.4	378	328
Korea	43,268	1.0	99	437
New Zealand	3,380	0.8	271	12
Papua New Guinea	3,772	2.1	463	8
United Kingdom	57,367	0.2	244	235
United States of America	252,688	1.0	9,809	26

Source: Australian Demographic Statistics (3101.0) and United Nations Demographic Yearbook.

Population distribution

Most of the Australian population is concentrated in two widely separated coastal regions. By far the largest of these, in terms of area and population, lies in the south-east and east, stretching in an unbroken crescent from South Australia through Victoria, Tasmania and New South Wales to Queensland. The smaller of the two regions is in the south-west of Western Australia. Neither region ever extends inland by more than two or three hundred kilometres. They are separated by two to three thousand kilometres of sparsely populated country which makes up about three-quarters of the total land area. It comprises the whole of the Northern Territory and parts of all five mainland States.

In both coastal regions the population is further concentrated into urban centres. In June 1992, 71.5 per cent of the Australian population lived in the State/Territory capitals (including the national capital and Darwin) and six other major cities of 100,000 persons or more (capital city statistical divisions and statistical districts).

After New South Wales and Victoria, which had populations of 6.0 million and 4.5 million, respectively at 30 June 1993, the State and Territory populations were, in order of size, Queensland (3.1 million), Western Australia (1.7 million), South Australia (1.5 million), Tasmania (0.5 million), the Australian Capital Territory (0.3 million) and the Northern Territory (0.2 million) (table 5.3).

Demographic factors currently acting on the relative size of the States/Territories are above average rates of natural increase in Queensland, Western Australia and the two Territories, above average per capita overseas migration gains in New South Wales and Western Australia and high per capita interstate migration gains in Queensland and the Australian Capital Territory. State/Territory population growth rates in the year ended June 1993 were, in order of size, Queensland (2.7%), Australian Capital Territory (1.6%), Western Australia (1.2%), New South Wales (0.8%), Northern Territory (0.7%), Tasmania (0.4%), South Australia (0.4%) and Victoria (0.3%).

5.3 ESTIMATED RESIDENT POPULATION OF AUSTRALIA

30 June	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
1972	4,795,106	3,661,254	1,898,478	1,214,628	1,082,017	400,308	92,081	159,792	13,303,664
1977	5,001,888	3,837,364	2,129,839	1,286,119	1,204,366	415,032	103,938	213,688	14,192,234
1982	5,303,580	3,992,870	2,424,586	1,331,108	1,338,899	429,845	130,314	233,045	15,184,247
1987	5,616,736	4,210,111	2,675,107	1,392,764	1,496,248	449,226	158,205	265,477	16,263,874
1988	5,707,309	4,262,569	2,739,907	1,404,909	1,535,167	451,148	159,026	272,129	16,532,164
1989	5,776,283	4,320,164	2,827,637	1,419,029	1,578,434	455,258	161,179	276,432	16,814,416
1990	5,834,021	4,378,592	2,899,283	1,432,056	1,613,049	462,188	163,728	282,211	17,065,128
1991	5,898,731	4,420,373	2,960,951	1,446,299	1,636,067	466,802	165,493	289,320	17,284,036
1992	5,958,716	4,448,818	3,030,456	1,456,424	1,657,081	469,848	167,091	294,159	17,482,593
1993	6,008,578	4,462,064	3,112,597	1,461,721	1,677,616	471,735	168,266	298,891	17,661,468

Source: Australian Demographic Statistics (3101.0) and Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0).

With the continuing urban development of the 20th century, capital cities have been the consistent choice for settlement of the majority of overseas immigrants, as well as receiving centres in the general internal movement of population from rural to urban areas which persisted until recent times. This trend towards increasing urbanisation continued until the mid-1970s, after which a slight decline has been recorded.

Table 5.4 shows that at the 1991 Census, 85.3 per cent of the population lived in urban areas. However, between the 1981 and 1991 Censuses, the proportion of the population living in rural areas actually increased from 14.2 per cent to 14.6 per cent, while the proportion of State populations living in the capital cities of Sydney, Melbourne and Brisbane declined slightly. Parallel with this has been an emerging trend since the 1970s towards selective rapid growth of smaller coastal towns in Queensland and New South Wales which have favoured the development of retirement, recreation and tourist amenities.

5.4 URBAN-RURAL DISTRIBUTION OF PERSONS(a)
(per cent(b))

Census	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
				URBAN					
1921	67.8	62.3	52.1	60.0	59.3	50.5	36.2	—	62.1
1947	71.9	71.0	59.7	69.4	64.6	58.9	23.4	89.7	68.7
1954	82.6	81.3	73.0	74.5	71.0	65.9	65.9	93.3	78.7
1961	85.1	84.8	75.9	78.8	73.2	70.4	39.6	96.0	81.7
1966	86.4	85.5	76.4	82.4	75.7	70.3	53.4	96.1	82.9
1971	88.6	87.7	79.4	84.6	81.5	74.2	64.1	97.8	85.6
1976	88.7	87.9	80.2	84.9	83.5	74.9	66.4	98.4	86.0
1981	88.2	87.8	79.1	84.9	84.6	75.1	74.2	99.0	85.7
1986	87.9	87.4	78.9	84.6	84.7	74.5	71.7	99.1	85.4
1991	87.7	87.0	79.9	85.1	85.7	72.3	67.6	98.6	85.3
				RURAL					
1921	31.6	37.3	47.5	39.4	39.1	49.2	62.1	99.7	37.4
1947	27.9	28.9	40.1	30.3	34.9	40.9	75.4	10.4	31.1
1954	17.2	18.4	26.8	25.2	28.7	33.9	32.7	6.7	21.0
1961	14.6	15.0	24.0	20.8	26.4	29.4	59.9	4.0	18.1
1966	13.4	14.4	23.5	17.5	23.9	29.6	46.1	3.9	16.9
1971	11.3	12.2	20.4	15.3	18.2	25.7	35.4	2.2	14.3
1976	11.1	12.1	19.7	15.0	16.3	24.9	33.0	1.6	13.9
1981	11.8	12.1	20.8	15.1	15.3	24.8	25.3	1.0	14.2
1986	12.0	12.5	21.0	15.3	15.0	25.4	27.7	0.9	14.5
1991	12.3	13.0	20.0	14.8	14.2	27.6	31.6	1.4	14.6

(a) Census counts by place of enumeration, except 1991 where counts on an actual location basis have been used. Excludes full-blood Aboriginal people prior to 1961. (b) Urban and rural proportions do not add up to 100 per cent as the proportion of migratory population is not included.

Source: Population Growth and Distribution, Australia (2822.0).

Australia's two dominant population centres — Sydney (3.7 million) and Melbourne (3.2 million) — both in the south-east, accounted for 39.1 per cent of the total population in June 1993 (table 5.5). The next largest city is Brisbane (1.4 million). Sydney and Melbourne have traditionally been the favoured ports of entry for overseas arrivals and are the capitals of the two most populous States — New South Wales and Victoria, respectively. In these and every other State and Territory, the capital city is the largest population centre. Most capitals are many times the size of the next largest town. All capitals, with the exception of the national capital, Canberra, are located on the coast.

5.5 ESTIMATED RESIDENT POPULATION OF CAPITAL CITIES
('000)

	1977	1982	1987	1988	1989	1990	1991	1992	1993
				POPULATION (PERSONS)					
Sydney	3,168.1	3,318.7	3,528.5	3,591.0	3,622.9	3,643.7	3,672.9	3,699.8	3,719.0
Melbourne	2,740.8	2,833.8	3,004.5	3,043.6	3,086.6	3,126.9	3,156.7	3,177.9	3,187.5
Brisbane	1,012.2	1,128.7	1,238.4	1,264.5	1,300.2	1,330.9	1,358.0	1,385.5	1,421.7
Adelaide	933.9	962.5	1,011.9	1,021.1	1,033.5	1,044.6	1,057.2	1,065.8	1,070.2
Perth	851.8	952.4	1,079.6	1,110.5	1,147.4	1,175.4	1,188.5	1,205.3	1,221.3
Hobart	165.8	172.2	183.3	184.2	185.9	189.0	191.0	192.3	193.3
Darwin	—	61.8	77.0	75.9	76.0	76.5	76.7	77.2	77.4
Canberra	212.6	231.9	263.9	270.1	274.2	279.7	288.2	294.1	298.6
Total	**9,085.2**	**9,662.0**	**10,387.1**	**10,560.9**	**10,726.7**	**10,866.7**	**10,989.5**	**11,098.1**	**11,189.0**
				PROPORTION OF STATE POPULATION (PER CENT)					
Sydney	63.3	62.6	62.8	62.9	62.7	62.5	62.3	62.1	62.0
Melbourne	71.4	71.0	71.4	71.4	71.4	71.4	71.4	71.4	71.4
Brisbane	47.5	46.6	46.3	46.2	46.0	45.9	45.9	45.7	45.6
Adelaide	72.6	72.3	72.7	72.7	72.8	72.9	73.1	73.1	73.2
Perth	70.7	71.1	72.2	72.3	72.7	72.9	72.7	72.7	72.9
Hobart	39.9	40.1	40.1	40.8	40.8	40.9	40.9	40.9	41.0
Darwin	—	47.4	48.7	47.7	47.2	46.7	46.3	46.1	45.7
Canberra	99.5	99.5	99.4	99.3	99.2	99.1	99.6	99.9	99.9
Total	**64.0**	**63.6**	**63.9**	**63.9**	**63.8**	**63.7**	**63.6**	**63.5**	**63.4**

Source: Australian Demographic Statistics (3101.0) and unpublished ABS data.

Aboriginal and Torres Strait Islander population

The repeal in 1967 of the provision in section 127 of the Constitution, requiring the exclusion of full-blood Aboriginals in reckoning the numbers of people in the population, has had a substantial impact on demographic matters generally.

At the 1991 Census, 265,459 Aboriginal and Torres Strait Islander people were counted in Australia, representing 1.6 per cent of the total population. The count shows an increase of 37,814 (16.6%) over the 227,645 Aboriginal and Torres Strait Islander people counted in 1986.

Aboriginal and Torres Strait Islander people were more concentrated in the northern and central parts of Australia and northern New South Wales. However, they comprised only a small proportion of the population in all States and Territories, except the Northern Territory, where more than one in five people were of Aboriginal or Torres Strait Islander origin.

5.6 ABORIGINAL AND TORRES STRAIT ISLANDER PERSONS(a): STATE/TERRITORY DISTRIBUTION

	1991				
State/Territory	*Number*	*Per cent of Australian indigenous population*	*Per cent of State's total population*	*1976 Number*	*1986 Number*
New South Wales	70,019	26.4	1.2	40,450	59,011
Victoria	16,735	6.3	0.4	14,760	12,611
Queensland	70,124	26.4	2.4	41,343	61,268
South Australia	16,232	6.1	1.2	10,714	14,291
Western Australia	41,779	15.7	2.6	26,126	37,789
Tasmania	8,885	3.3	0.2	2,942	6,716
Northern Territory	39,910	15.0	22.7	23,750	34,739
Australian Capital Territory	1,775	0.7	0.6	828	1,220
Australia	**265,459**	**100.0**	**1.6**	**160,913**	**227,645**

(a) Census counts by place of usual residence.
Source: 1991 Census — Australia's Aboriginal and Torres Strait Islander Population (2740.0).

Twenty-eight per cent of the Aboriginal and Torres Strait Islander population lived in capital cities and just under 20 per cent in rural and remote areas, with 50 per cent in towns and rural localities. Within some States there were significant variations in the regional distribution of indigenous people. In Victoria, almost half of the Aboriginal and Torres Strait Islander population was counted in Melbourne, while in Queensland and Western Australia between 75 and 80 per cent were counted in areas outside of the capital city.

In Queensland, South Australia, Western Australia and the Northern Territory, a large proportion of the Aboriginal and Torres Strait Islander population was counted in localities and communities with a total population between 200 and 999 people. In the Northern Territory over 26 per cent were counted in such localities.

There were marked differences in the age structure of the indigenous and non-indigenous populations. The major differences were in the younger and older ages. Of the total indigenous population, almost 40 per cent were children aged less than 15 years and almost 15 per cent were aged less than 5 years. These figures compare with 22 per cent and 7 per cent, respectively for the non-indigenous population.

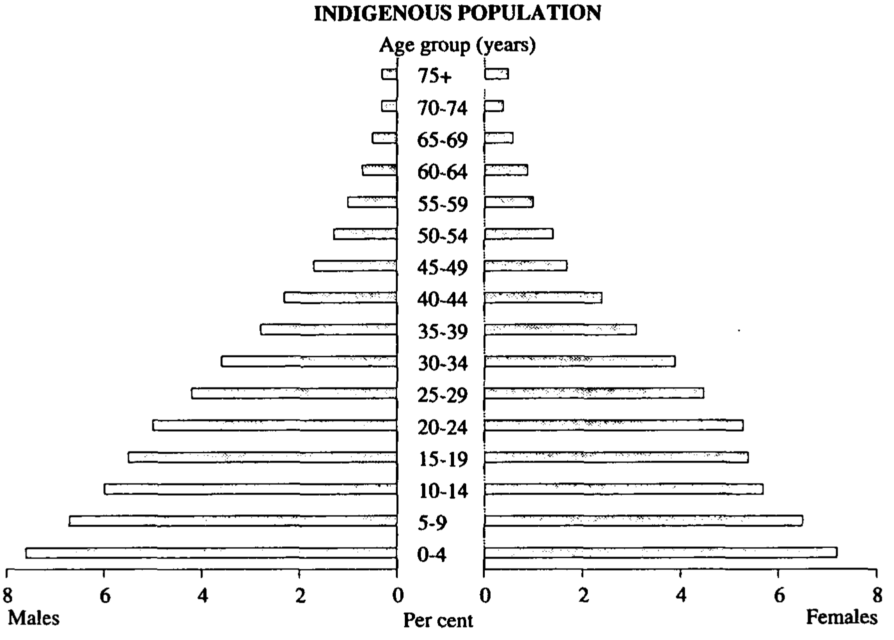
In the older age groups, the difference is even greater. Only 6 per cent of indigenous people were aged over 55 years compared with 20 per cent of the non-indigenous population. The age distributions were generally similar in all States and Territories and have changed relatively little since 1986. These differences are illustrated in graph 5.7.

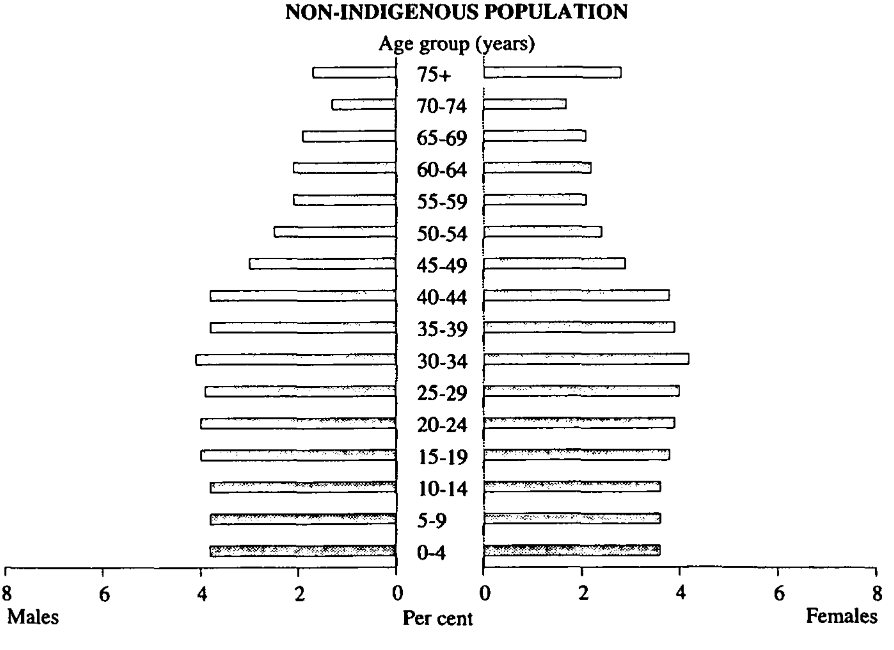
When comparing the age profile of the urban and rural Aboriginal and Torres Strait Islander populations, in those States/Territories with a large remote area population (Queensland, South Australia, Western Australia and the Northern Territory), there was a slightly higher proportion of people aged 55 years outside the capital cities.

Age/sex profile

The sex ratio of the population is expressed as the number of males per 100 females. This ratio declines with age: it is about 105 at birth, but, leaving aside inward or outward migration, higher male mortality gradually erodes the difference so that the numbers of males and females would tend to be about the same soon after age 60. From then on, due to continuing mortality differentials in favour of females, the female population begins to exceed males and this excess increases towards older ages. The overall sex ratio of the population has been declining since the 1950s as the overseas migration intake has become less male dominated (*see* Overseas Migration section of this chapter). In 1993 the Australian population had 99.2 males for every 100 females.

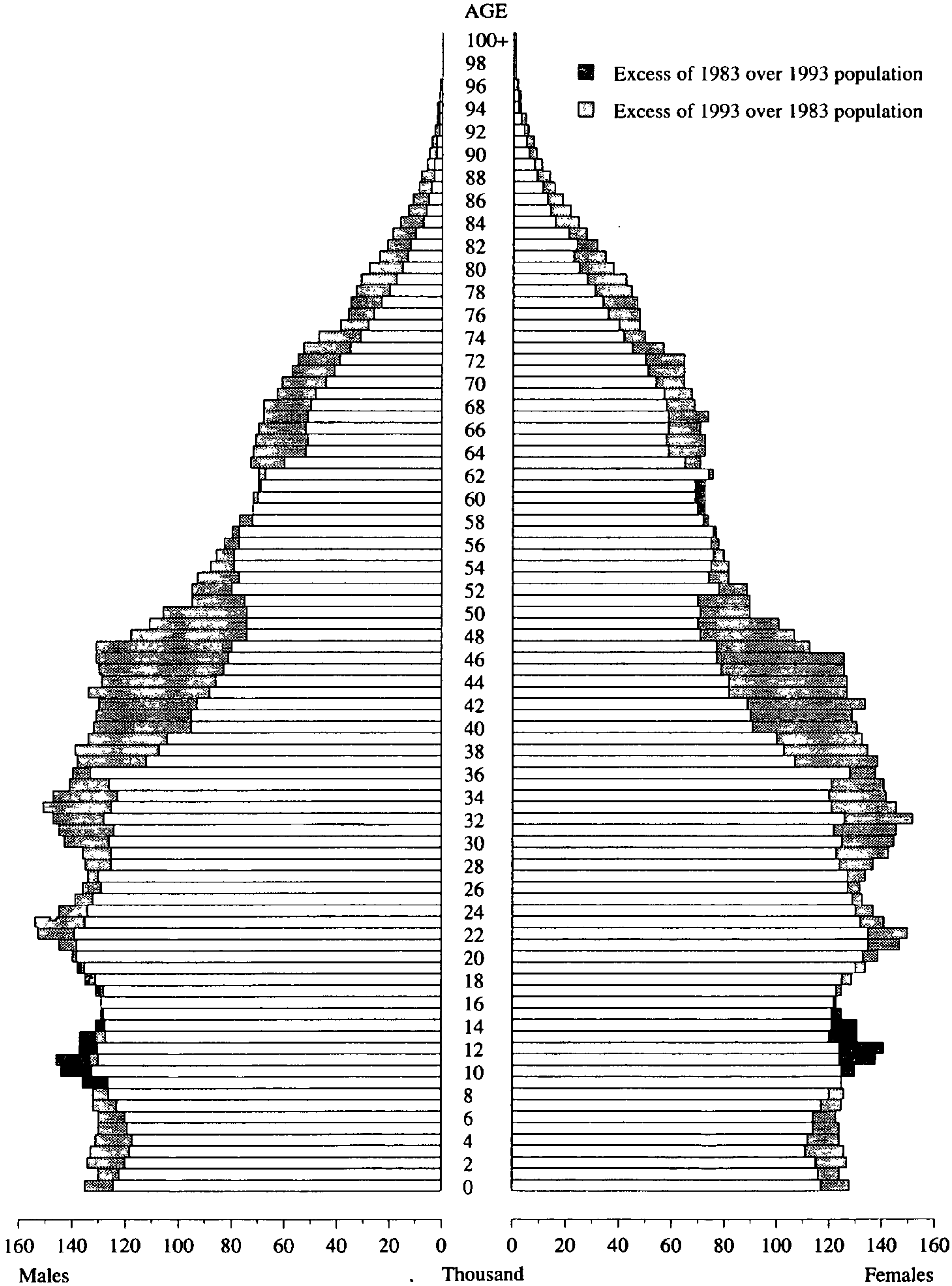
5.7 INDIGENOUS AND NON-INDIGENOUS PERSONS AGE AND SEX PROFILE, 1991





Source: 1991 Census — Australia's Aboriginal and Torres Strait Islander Population (2740.0).

5.8 ESTIMATED RESIDENT POPULATION OF AUSTRALIA 30 JUNE 1983 AND 1993 (PRELIMINARY)



Source: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0).

The age distribution of the population is shown in graph 5.8 in the form of an age–sex pyramid, comparing the years 1983 and 1993. The low birth rates of the depression years of the 1930s, the increased death rate during World War II, the prolonged 'baby boom' from the end of World War II to the early 1960s, and the declining birth rate over the last twenty years are all reflected in the profile.

The median age of the population at 30 June 1993 was 33.0 years. It has been rising consistently since the beginning of the 1970s as a result of lower birthrates as well as lower mortality rates at most ages. (The proportion of the population aged 65 years and over has risen from 9.9% in 1982 to 11.7% in 1993.) In descending order, the median ages of the State/Territory populations at 30 June 1992 were South Australia (33.9), New South Wales (33.2), Victoria (32.8), Tasmania (32.8), Queensland (32.1), Western Australia (31.9), Australian Capital Territory (29.7) and the Northern Territory (27.2). All States/Territories have been steadily rising.

As a consequence of changes in the age distribution, the aged-dependency ratio (population aged 65 and over per 100 population of working ages 15 to 64) has increased from 15.1 in 1982 to 17.2 in 1992, while the child-dependency ratio (population aged under 15 per 100 population of working ages) has declined sharply from 37.7 to 32.6 during the same period. The combined effect is that the total dependency ratio has declined from 52.8 in 1982 to 49.8 in 1992.

5.9 SEX RATIOS, PERCENTAGE AGE DISTRIBUTION AND MEDIAN AGES OF THE POPULATION

					Sex ratios(a) at ages
30 June	0–14	15–44	45–64	>64	Total
1972	104.9	105.6	99.8	72.6	101.0
1977	104.9	104.1	100.5	72.3	100.2
1982	104.7	103.4	100.8	72.6	99.7
1987	105.2	102.7	102.7	73.4	99.7
1988	105.3	102.5	102.9	73.7	99.6
1989	105.3	102.3	103.0	74.1	99.5
1990	105.4	102.1	103.1	74.5	99.5
1991	105.5	101.8	103.0	75.0	99.4
1992	105.4	101.7	103.0	75.5	99.3
1993	105.4	101.6	103.0	76.0	99.3
				Per cent of population aged	
	0–14	15–44	45–64	>64	Median ages(b)
1972	28.5	43.1	19.9	8.4	27.6
1977	26.5	44.5	19.9	9.1	28.7
1982	24.7	46.4	19.1	9.9	29.9
1987	22.7	47.6	19.0	10.7	31.3
1988	22.4	47.8	19.0	10.8	31.6
1989	22.2	47.8	19.0	11.0	31.8
1990	22.0	47.8	19.1	11.1	32.1
1991	21.9	47.5	19.3	11.3	32.4
1992	21.8	47.1	19.7	11.5	32.7
1993	21.7	46.7	20.0	11.7	33.0

(a) Males per 100 females. (b) The median age is the age at which half of the population is older and half is younger.

Source: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0).

5.10 DEPENDENCY RATIOS(a) FOR CHILDREN AND THE AGED, AT 30 JUNE

Age group (years)	*1972*	*1977*	*1982*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*
0–14	45.19	41.17	37.67	34.02	33.50	33.13	32.89	32.78	32.63
>64	13.32	14.09	15.08	16.05	16.22	16.42	16.58	16.89	17.19
Total	**58.52**	**55.26**	**52.75**	**50.07**	**49.72**	**49.55**	**49.47**	**49.67**	**49.82**

(a) A dependency ratio is the ratio of the dependant population (aged 0 to 14 and 65 and over) per 100 population of working ages (15 to 64 years).
Source: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0).

HOUSEHOLDS

The incidence of household formation in Australia has been exceeding population growth rates, in part due to the average number of persons per household declining from 3.3 in 1971 to 2.7 in 1991. Much of the decline in the number of persons per household can be attributed to reductions in completed family size together with the ageing of the population. With increasing longevity, more elderly people are maintaining separate households. At the same time there have been changing social attitudes to divorce, people living alone, de facto relationships and households formed by groups of unrelated young people. There has been continuing growth in one and two-person households, rising from 47.2 per cent of all households in 1981 to 52.9 per cent at the 1991 Census.

5.11 PERSONS(a) IN PRIVATE HOUSEHOLDS

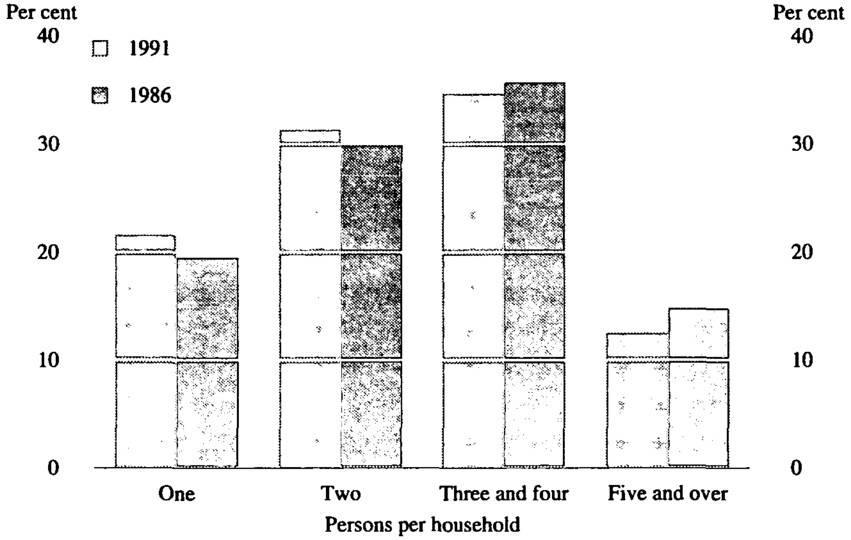
Year	*Persons in private households*	*Private households*	*Persons per private household*
1971	12,155,386	3,670,554	3.31
1976	12,942,708	4,140,521	3.12
1981	13,918,445	4,668,909	2.98
1986	14,920,230	5,187,422	2.88
1991	16,259,948	5,825,518	2.79

(a) Census counts, place of enumeration.
Source: 1991 Census – Australia in Profile (2821.0).

FAMILIES

Figures from the 1986 Census indicate that 77 per cent of households contain families. In the 1991 Census this had decreased to 73 per cent. Only a small proportion of households include more than one family, about 2.4 per cent at the 1986 Census, which declined further to 1.5 per cent at the 1991 Census. The 1992 Family Survey indicated that 51.7 per cent of families had dependent children. Among families with dependent children, 36.6 per cent had one child and 63.4 per cent had two or more dependent children. Single parent families comprised 13.0 per cent of total families and were mostly composed of parent and dependent children (61.3%); the balance included an additional adult family member (38.7%).

5.12 PROPORTION OF HOUSEHOLDS BY SIZE



Source: 1991 Census - Australia in Profile (2821.0).

5.13 FAMILY TYPE AND COMPOSITION, 1992

Family type	*Number*	*Per cent*
Families without dependent children		
Couple	1,619,981	33.9
Couple and adult family member	434,877	9.1
Related adults	255,189	5.3
Families with dependent children		
Couple and 1 dependent child	497,521	10.4
Couple and 2 or more dependent children	1,218,961	25.5
Couple and 1 dependent child and adult family member	193,494	4.1
Couple and 2 or more dependent children and adult family member	121,406	2.5
Single parent and 1 dependent child	185,776	3.9
Single parent and 2 or more dependent children	170,041	3.6
Single parent and 1 dependent child and adult family member	51,258	1.1
Single parent and 2 or more dependent children and adult family member	26,643	0.6
Total families	**4,775,147**	**100.0**

Source: Unpublished ABS data from the Survey of Families, Australia, 1992.

BIRTHS AND DEATHS

Registration of births and deaths has been compulsory in Australia since 1856. The total number of these registrations is available for each year since the 1860s and more detailed information since the 1910s.

5.14 BIRTHS, DEATHS AND NATURAL INCREASE

Year	*Births*	*Deaths*	*Natural increase*
1972	264,969	109,760	155,209
1977	226,291	108,790	117,501
1982	239,903	114,771	125,132
1987	243,959	117,321	126,638
1988	246,193	119,866	126,327
1989	250,853	124,232	126,621
1990	262,648	120,062	142,586
1991	257,247	119,146	138,101
1992	264,151	123,660	140,491

Source: Births, Australia (3301.0) and Deaths, Australia (3301.0).

Births

Recent fertility levels in Australia have been lower than at any time since records began. In 1992 the total fertility rate was 1.9 per woman. Australia's current fertility rates align with those in several other similar 'more developed' countries in Europe, North America and Japan (table 5.15).

5.15 TOTAL FERTILITY RATES SELECTED COUNTRIES

	Total fertility rate(a)	
Country		*Latest year*
Australia	1.9	(1992)
New Zealand	2.1	(1991)
Canada	1.8	(1991)
United States of America	2.0	(1991)
United Kingdom	1.9	(1991)
China	2.3	(1985–90)
Japan	1.7	(1991)
Korea, Republic of	1.7	(1985–90)
Indonesia	3.2	(1985–90)
Papua New Guinea	5.0	(1985–90)

(a) The total fertility rate is the sum of the age-specific birthrates. It represents the number of children that would be born to a female who experienced, throughout her child-bearing life, the age-specific rates for the years shown.
Source: Births, Australia (3301.0) and United Nations Demographic Yearbook.

Despite an overall fertility decline, the number of births has been increasing steadily during the 1980s and 1990s because of increasing numbers of women of reproductive age. The number of births registered in 1992 (264,151) has continued this pattern. The record number of births registered in Australia occurred in 1971 (276,361).

In the 1970s, fertility declines became obvious across all age groups, falling rapidly between 1972 and 1980, and marginally since then. This decline has been attributed to demographic, social, economic and attitudinal changes in the 1970s, which individually or collectively influenced fertility behaviour during this period. Between 1972 and 1987, the total fertility rate declined by 32 per cent, but since 1987 the rate has shown little change. Declines in the age-specific fertility rates between 1982 and 1992 occurred in women aged under 30 years, particularly in those in the 20 to 24 years age group. Age-specific fertility rates for women aged 30 to 44 years increased with the 35 to 39 years age group recording the greatest percentage increase at 50 per cent (table 5.16).

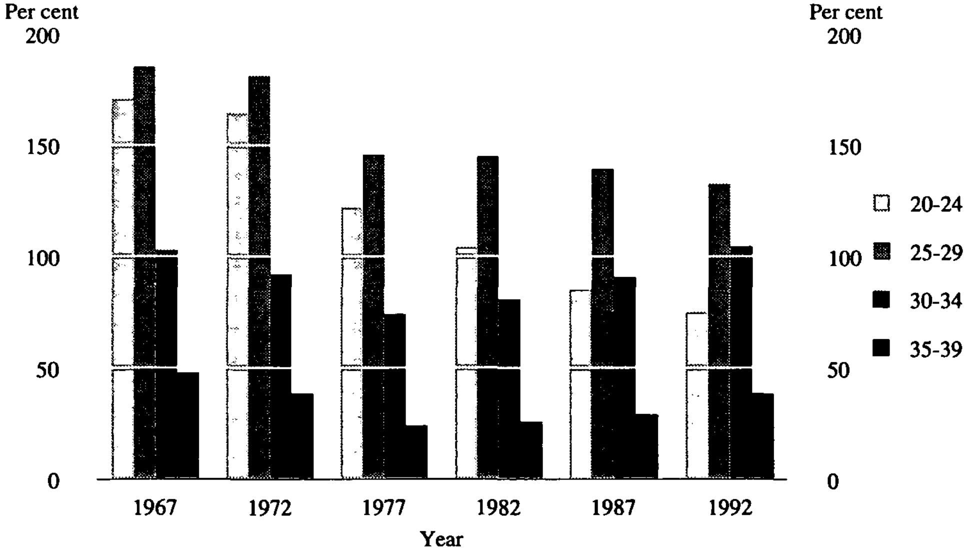
In 1982, 73 per cent of all births were to mothers aged under 30 years. By 1992 the corresponding percentage was 60 per cent. The 25 to 29 years age group remains the peak fertility group.

5.16 AGE-SPECIFIC BIRTHRATES AND TOTAL FERTILITY RATE

	Age group (years)							Total fertility rate
	15–19(a)	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49(b)*	
Year	(per '000 women)							(per woman)
1972	53.2	164.6	180.9	92.0	38.4	10.0	0.7	2.70
1977	32.1	122.0	145.7	74.1	23.9	5.0	0.3	2.02
1982	27.4	104.0	145.0	80.6	25.6	4.5	0.2	1.94
1987(c)	20.6	85.0	139.6	90.6	28.9	4.8	0.3	1.85
1988(c)	20.3	81.5	136.9	93.3	30.5	4.6	0.2	1.84
1989(c)	20.6	78.4	135.4	96.1	32.6	5.0	0.2	1.84
1990(c)	22.1	79.4	137.9	101.7	34.7	5.5	0.2	1.91
1991(c)	22.1	75.0	132.0	100.2	36.0	5.5	0.2	1.86
1992	21.9	74.9	132.6	104.6	38.4	6.1	0.3	1.90

(a) Includes births to mothers aged less than 15. (b) Includes births to mothers aged 50 and over. (c) Rates for 1987 to 1991 have been revised due to the finalisation of population estimates based on 1991 Census results.
Source: Births, Australia (3301.0).

5.17 AGE-SPECIFIC BIRTHRATES, SELECTED AGE GROUPS



Source: Births, Australia (3301.0).

5.18 TOTAL CONFINEMENTS BY NUPTIALITY AND PREVIOUS ISSUE TO THE CURRENT MARRIAGE OF MOTHER (NUPTIAL BIRTHS)

	Ex-nuptial confinements		*Married mothers with number of previous issue to the current marriage of*							
Year	*Number*	*% of total*	*0*	*1*	*2*	*3*	*4*	*>4*	*Not stated*	*Total*
1972	25,411	9.7	91,683	74,996	39,092	17,177	7,122	6,885	—	262,366
1977	23,134	10.3	78,588	70,859	34,596	11,032	3,438	2,612	10	224,269
1982	32,679	13.8	83,300	69,963	34,670	11,631	3,193	2,016	2	237,454
1987	43,418	18.0	80,241	68,730	33,472	10,793	2,873	1,742	2	241,271
1988	46,293	19.0	79,841	68,432	33,419	10,650	2,856	1,699	3	243,193
1989	50,321	20.3	81,357	67,459	33,066	10,856	2,874	1,687	3	247,623
1990	56,850	21.9	84,228	68,301	34,026	11,179	3,089	1,761	1	259,435
1991	58,603	23.1	81,179	67,055	32,231	10,300	2,811	1,680	2	253,861
1992	62,667	24.0	80,821	69,467	32,644	10,522	2,843	1,702	3	260,669

Source: Births, Australia (3301.0).

Concurrent with the downward movement that has occurred in the levels of fertility, family formation patterns have changed. An increasing proportion of total births has been occurring outside registered marriage, and for those occurring within marriage, the number of births per mother is declining.

The proportion of females having three or more children in their marriage is continuing to decline. However, the substantial rate of decline observed between 1972 and 1982 in the proportion of nuptial confinements to women with larger families has since slowed considerably. Of the nuptial confinements registered in 1992, 76 per cent resulted in first or second born children.

The median age of mothers and fathers has risen steadily since 1972.

5.19 CONFINEMENTS: MEDIAN AGE OF PARENTS

	Median age of mother					*Median age of father*	
Year	*First nuptial*	*All nuptial*	*Ex-nuptial*	*Paternity acknowledged*	*Total*	*All nuptial*	*Paternity acknowledged*
1972	24.5	25.8	21.0	n.a.	25.5	28.5	n.a.
1977	24.6	26.5	21.5	22.9	26.1	29.1	26.4
1982	25.5	27.3	22.2	23.0	26.8	29.9	26.1
1987	26.8	28.3	23.6	24.1	27.7	30.8	26.8
1988	27.1	28.6	23.7	24.2	27.9	31.0	27.0
1989	27.3	28.8	23.9	24.5	28.2	31.2	27.2
1990	27.6	29.0	24.0	24.5	28.3	31.4	27.3
1991	27.8	29.3	24.1	24.5	28.5	31.6	27.3
1992	28.0	29.5	24.3	24.6	28.7	31.8	27.4

Source: Births, Australia (3301.0).

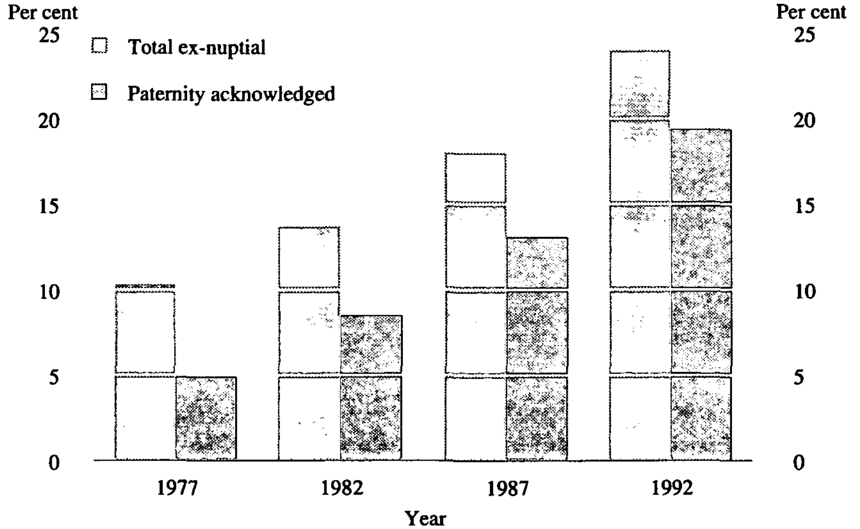
The long established upward trend in the proportion of births that are ex-nuptial is continuing. In 1992, 24 per cent of all births registered were ex-nuptial. This compares with 14 per cent in 1982. While the percentage of births that are ex-nuptial is increasing, the percentage of these births where paternity has been acknowledged has also increased substantially, from 62 per cent in 1982 to 81 per cent in 1992 (table 5.20).

5.20 EX-NUPTIAL BIRTHS

		Paternity acknowledged	
Year	*Ex-nuptial*	*Number*	*% of ex-nuptial births*
1972	25,659	n.a.	n.a.
1977	23,314	11,119	47.7
1982	32,958	20,435	62.0
1987	43,806	31,972	73.0
1988	46,768	34,773	74.4
1989	50,788	38,572	75.9
1990	57,407	44,257	77.1
1991	59,223	47,064	79.5
1992	63,368	51,349	81.0

Source: Births, Australia (3301.0).

5.21 EX-NUPTIALITY OF BIRTHS
(percentage of total births)



Source: Births, Australia (3301.0).

Deaths

In comparison with other countries, Australia ranks amongst those with the lowest mortality levels and the highest expectations of life.

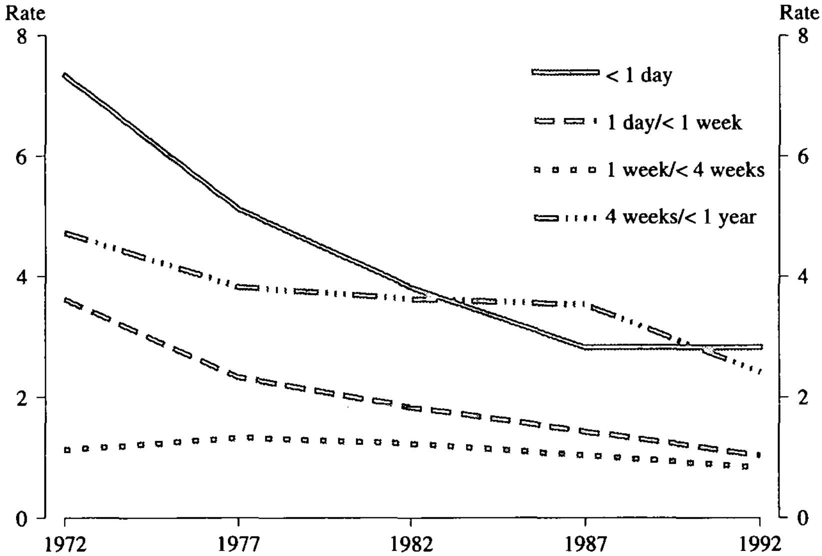
The number of deaths registered in 1992 was 123,660, an increase of 3.8 per cent from the previous year which, in terms of the crude death rate, resulted in a slight increase from 6.9 to 7.1 per thousand population. Generally, there has been a levelling of the crude death rate following two decades of consistent falls.

5.22 INFANT MORTALITY RATES AND EXPECTATION OF LIFE AT BIRTH, SELECTED COUNTRIES, RECENT YEARS

	Infant mortality		Life expectancy at birth		
	Rate	Year	Males	Females	Year
Australia	7.0	1992	74.5	80.4	1992
New Zealand	8.3	1991	71.9	78.0	1988–90
Canada	6.8	1990	73.0	79.8	1985–87
United States of America	8.9	1991	71.8	78.6	1989
United Kingdom	7.4	1991	72.4	78.0	1987–89
China	32.0	1985–90	68.0	70.9	1985–90
Japan	4.4	1991	75.9	81.8	1990
Korea	25.0	1985–90	66.9	75.0	1989
Indonesia	75.0	1985–90	58.5	62.0	1985–90
Papua New Guinea	59.0	1985–90	53.2	54.7	1985–90

Source: Deaths, Australia (3302.0) and United Nations Demographic Year Book.

5.23 INFANT MORTALITY RATES BY AGE



Source: Deaths, Australia (3302.0).

Mortality trends, as measured by the crude death rate, are distorted by changes in the age structure of the population over time. Australian crude death rates standardised for age show a continuing decline in mortality levels since the early 1970s. Using the age structure of the estimated resident population of persons as at 30 June 1986 as the standard, the adjusted death rate fell from 12.7 per thousand in 1972 to 10.7 per thousand in 1982 and to 8.4 per thousand in 1992 for males; and from 7.7 in 1972 to 6.1 in 1982 and to 5.1 in 1992 per thousand for females during the same period.

The decline in death rates is a result of continuing improvements to community health care, public awareness of health issues and advances in medical science and technology.

In Australia, as in most other countries, females have lower death rates than males. Age-specific rates show this difference occurring across all age groups. In 1992, for example, the female death rate in many age groups was about half that of males. The relative difference between death rates for males and females was greatest in the age range 25 to 29 years where in 1992 the female rate was less than one-third that of males. The overall effect of these differences in death rates has been to increase the proportion of females in the older age groups of the population.

5.24 AGE-SPECIFIC DEATH RATES(a)

	Age group (years)																		
Period	*0*	*1–4*	*5–9*	*10–14*	*15–19*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*50–54*	*55–59*	*60–64*	*65–69*	*70–74*	*75–79*	*80–84*	*>84*
MALES																			
1972	18.9	1.0	0.4	0.4	1.5	1.7	1.3	1.4	2.2	3.5	6.1	9.7	16.4	27.1	41.1	64.9	100.3	147.1	238.6
1977	14.0	0.7	0.4	0.4	1.5	1.8	1.4	1.3	1.9	3.1	5.6	8.8	14.0	22.7	36.1	55.2	83.9	129.5	208.7
1982	11.8	0.7	0.4	0.4	1.3	1.6	1.4	1.3	1.6	2.5	4.5	7.5	12.7	20.0	33.1	52.0	82.8	124.8	217.1
1987	9.9	0.5	0.2	0.3	1.0	1.5	1.3	1.3	1.5	2.1	3.5	6.1	10.9	17.2	27.9	45.3	71.4	111.4	192.0
1988	9.7	0.5	0.2	0.3	1.1	1.6	1.5	1.4	1.5	2.3	3.4	6.0	10.1	17.2	27.2	45.0	72.4	110.9	189.0
1989	8.8	0.4	0.2	0.3	1.0	1.4	1.5	1.4	1.7	1.9	3.3	5.7	9.9	16.6	27.3	45.2	72.6	114.0	200.0
1990	9.1	0.5	0.2	0.2	0.9	1.4	1.4	1.4	1.5	2.1	3.1	5.4	9.5	16.0	26.2	41.2	67.5	104.8	183.9
1991	7.9	0.4	0.2	0.2	0.9	1.3	1.3	1.3	1.6	2.0	3.1	5.2	8.9	15.4	24.9	39.3	65.5	105.5	175.
1992	7.9	0.4	0.2	0.2	0.8	1.2	1.3	1.4	1.5	2.0	3.0	5.1	8.7	15.2	25.0	39.8	66.4	104.4	180.5
FEMALES																			
1972	14.4	0.8	0.3	0.3	0.5	0.6	0.6	0.9	1.3	2.2	3.6	5.5	8.4	12.7	20.3	34.6	59.6	102.3	188.8
1977	10.9	0.6	0.3	0.2	0.6	0.5	0.5	0.7	1.1	1.9	3.0	4.8	7.0	11.2	17.2	28.6	50.3	86.9	166.4
1982	9.2	0.5	0.2	0.2	0.4	0.5	0.5	0.5	0.8	1.5	2.5	4.2	6.3	10.1	16.0	25.7	45.3	79.7	171.2
1987	7.4	0.3	0.2	0.1	0.4	0.5	0.5	0.5	0.8	1.3	2.1	3.5	5.5	8.6	13.9	24.0	41.0	72.2	152.2
1988	7.5	0.4	0.2	0.2	0.4	0.5	0.5	0.6	0.8	1.2	2.1	3.4	5.5	8.7	13.9	23.5	41.1	71.7	149.5
1989	7.1	0.4	0.2	0.2	0.4	0.5	0.5	0.6	0.8	1.3	2.1	3.3	5.3	8.7	13.8	24.2	40.8	72.9	159.9
1990	7.2	0.3	0.1	0.2	0.4	0.4	0.5	0.5	0.8	1.1	1.9	3.3	5.0	8.1	13.4	22.8	39.2	67.2	149.6
1991	6.3	0.3	0.1	0.1	0.4	0.4	0.5	0.5	0.8	1.1	1.9	3.1	4.8	8.0	13.0	21.9	38.0	64.9	143.5
1992	6.0	0.4	0.2	0.1	0.3	0.4	0.4	0.6	0.7	1.1	1.8	3.1	4.9	7.8	12.7	21.7	38.0	67.3	148.9

(a) Deaths per 1,000 mid-year population.
Source: Deaths, Australia (3302.0).

Concurrent with the decline in death rates over the last two decades there has been a rise in life expectancy at birth, increasing for males from 71.3 years to 74.1 years between the periods 1982 and 1992, and correspondingly for females from 78.2 years to 80.4 years. Female life expectancy at birth has exceeded that of males throughout the period, with the difference varying from six to seven years. Contributing to the increase in life expectancy at birth is the reduction in the age-specific death rate for those under one year, falling from 11.8 per thousand and 9.2 per thousand for males and females, respectively in 1982 to 7.9 and 6.0, respectively in 1992.

5.25 LIFE EXPECTANCY AT VARIOUS AGES
(years)

	At age									
	0		1		25		45		65	
Year	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1972	68.6	75.4	68.9	75.5	46.2	52.2	27.6	33.2	12.6	16.4
1977	70.0	76.9	70.0	76.8	47.3	53.4	28.7	34.3	13.4	17.4
1982	71.3	78.2	71.1	78.0	48.2	54.5	29.5	35.2	13.7	18.0
1987	73.1	79.5	72.8	79.1	49.8	55.6	31.0	36.3	14.7	18.7
1988	73.1	79.5	72.8	79.1	49.9	55.6	31.2	36.3	14.8	18.8
1989	73.3	79.6	73.0	79.2	49.9	55.7	31.2	36.3	14.7	18.7
1990	73.9	80.1	73.6	79.7	50.5	56.1	31.8	36.8	15.2	19.0
1991	74.4	80.4	74.0	79.9	50.8	56.3	32.1	37.0	15.5	19.3
1992	74.5	80.4	74.1	79.9	50.9	56.3	32.1	37.0	15.4	19.2

Source: Deaths, Australia (3302.0).

Changes in levels of mortality and age-specific death rates reflect trends in the incidence of specific causes of death. The three most prevalent causes of death at the present time are cancer, ischaemic heart disease and cerebrovascular disease or stroke which in 1992 collectively accounted for 61.1 per cent of deaths registered.

Detailed information on causes of death is contained in the chapter, Health.

MARRIAGES AND DIVORCES

Registered marital status of the population

Marital status details in this chapter relates to registered marital status only, which refers to formally registered marriages for which the partners hold (or held) a marriage certificate.

Between 1983 and 1993 the total population aged 15 and over increased by 18.8 per cent. Of these, the numbers of persons never married, married, widowed and divorced increased by 29.6, 11.7, 10.8 and 63.4 per cent, respectively.

The disproportionate increase in the population of divorced persons is a reflection of the increase in divorce following introduction of the Family Law Act in 1975. However, since the beginning of the 1980s there has been a steady decline in the rate of growth of the divorced population.

5.26 ESTIMATED RESIDENT POPULATION AGED 15 AND OVER BY MARITAL STATUS AND SEX AT 30 JUNE
('000)

	Never married	Married	Widowed	Divorced	Total
		MALES			
1983	1,832.5	3,572.4	141.0	220.3	5,766.2
1987	2,069.9	3,735.8	148.1	274.0	6,227.8
1988	2,126.4	3,787.1	152.2	286.2	6,352.0
1989	2,175.7	3,848.1	156.4	297.1	6,477.2
1990	2,216.7	3,898.6	160.0	309.4	6,584.7
1991	2,243.0	3,940.2	165.2	323.9	6,672.4
1992p	2,280.3	3,967.6	167.3	341.8	6,757.0
1993p	2,313.4	3,988.8	169.2	360.1	6,831.6
		FEMALES			
1983	1,386.3	3,582.2	636.5	271.3	5,876.3
1987	1,601.6	3,748.4	660.9	337.8	6,348.8
1988	1,659.2	3,800.5	667.8	353.7	6,481.2
1989	1,708.3	3,862.5	673.7	367.8	6,612.3
1990	1,751.6	3,912.5	677.9	383.4	6,725.4
1991	1,791.4	3,953.0	681.3	400.5	6,826.2
1992p	1,826.7	3,982.8	686.8	421.5	6,917.8
1993p	1,857.7	4,005.8	692.0	443.2	6,998.8

Source: Estimated Resident Population by Marital Status, Age and Sex, Australia (3220.0).

The number of females exceed males in all categories except the never married. This arises principally from mortality differences in the higher age groups. The effect is particularly noticeable in the widowed category where females far outnumber males.

In the 'never married' category, males exceed females because of higher sex ratios (number of males per 100 females) of the population at younger ages and also because of the customary difference in age between bride and groom at first marriage.

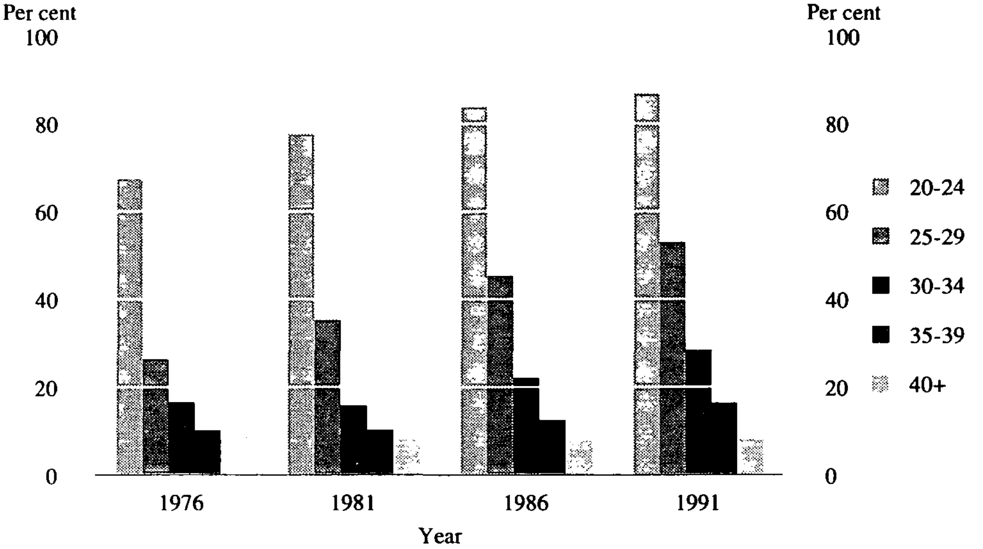
Marriages

The number of marriages occurring in Australia reached a peak of 117,637 in 1971 which, despite a growing population, has not yet been surpassed. The 1971 peak was followed by a rapid decline in numbers which coincided with increasing incidence of de facto relationships. Although this decline levelled off in the latter half of the 1970s and numbers have recovered since then (there were 114,752 marriages in 1992), the crude marriage rate has continued to drop. In 1992 it was 6.6 per thousand mean population, a fall from 8.7 in 1972 and 7.7 in 1982.

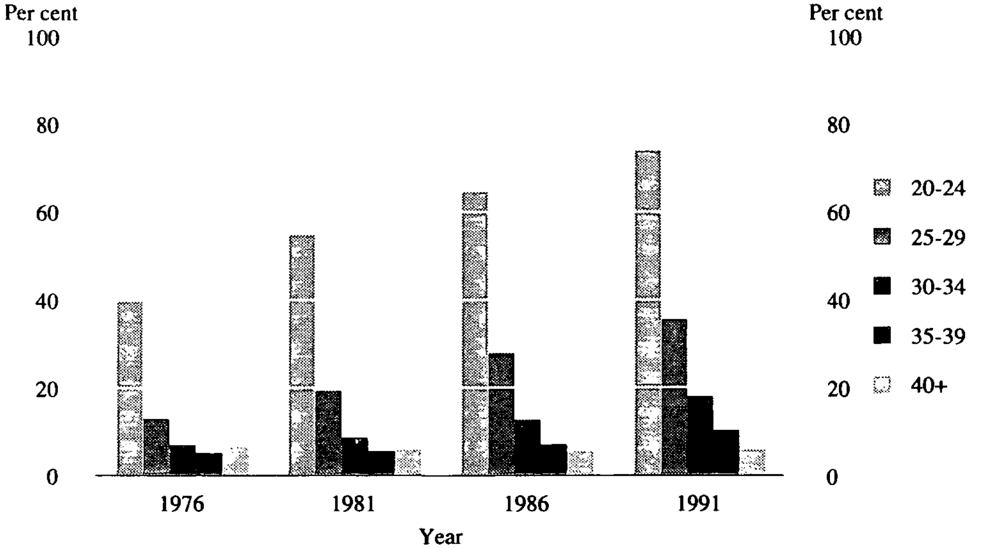
The passing of the Family Law Act in 1976 had a significant effect on the composition of marriages. Prior to the Act approximately 80–85 per cent of marriages were first marriages for both partners, but after 1976 this proportion fell to 65–70 per cent. In 1992 the figure was 67.2 per cent (table 5.28).

5.27 PROPORTION OF PERSONS NEVER MARRIED BY AGE GROUP, AT 30 JUNE

Males



Females



Source: Estimated Resident Population by Marital Status, Age and Sex, Australia (3220.0).

5.28 MARRIAGES REGISTERED: RELATIVE PREVIOUS MARITAL STATUS AND CRUDE MARRIAGE RATE

	Both partners never married		One or both partners previously married			
Year	*Number*	*Per cent*	*Number*	*Per cent*	*All marriages*	*Crude marriage rate*
1972	96,925	85.0	17,104	15.0	114,029	8.7
1977	72,133	68.8	32,785	31.2	104,918	7.4
1982	79,633	67.9	37,642	32.1	117,275	7.7
1987	76,706	67.2	37,407	32.8	114,113	7.0
1988	78,400	67.1	38,416	32.9	116,816	7.1
1989	78,850	67.3	38,326	32.7	117,176	7.0
1990	78,782	67.4	38,177	32.6	116,959	6.9
1991	76,811	67.5	37,058	32.5	113,869	6.6
1992	77,092	67.2	37,660	32.8	114,752	6.6

Source: Marriages, Australia (3306.0).

Since 1971 there has been a reversal in the postwar trend towards younger marriages. The median age at first marriage for both males and females is now rising, having increased from 23.3 years in 1972 to 26.9 years in 1992 for males and from 21.0 to 24.7 years for females. The median age for second and subsequent marriages is also rising (table 5.29).

5.29 MEDIAN AGES OF BRIDEGROOMS AND BRIDES, PREVIOUS MARITAL STATUS

	Median age of bridegrooms				Median age of brides			
Year	*Never married*	*Widowers*	*Divorced*	*Total*	*Never married*	*Widows*	*Divorced*	*Total*
1972	23.3	57.8	38.1	23.8	21.0	51.1	33.9	21.4
1977	23.8	58.4	35.9	25.2	21.4	50.9	32.2	22.5
1982	24.6	59.4	36.1	26.1	22.4	51.5	33.1	23.6
1987	25.9	60.6	38.6	27.6	23.8	52.4	35.1	25.2
1988	26.1	60.9	38.9	27.8	24.0	52.4	35.3	25.4
1989	26.3	61.0	39.3	28.0	24.2	52.6	35.6	25.7
1990	26.5	61.4	39.6	28.2	24.3	52.3	36.0	25.9
1991	26.7	61.9	39.7	28.4	24.5	53.6	36.1	26.0
1992	26.9	61.6	40.1	28.7	24.7	53.2	36.5	26.3

Source: Marriages, Australia (3306.0).

The first marriage ratio enables a comparison of the proportion of each age group of the population of either sex marrying for the first time. The first marriage ratios for both sexes are declining up to age 24, reflecting the increasing median age at first marriage. The index of total first marriages, which is the cumulative total of first marriage ratios at each age, has been declining throughout the last two decades. It shows that the falling crude marriage rate cannot be attributed to changes in the age structure of the population. There has been a real reduction in the propensity to marry in the Australian community (table 5.30).

The decline in first marriage ratios under the age of 25 and the increase in the median age at first marriage over the last decade reflects the increasing incidence of couples living together before getting married. Analysis of current trends in marriage is qualified by the absence of any time series data on the formation of de facto relationships. However, there is evidence, based on data available from the ABS' Family Surveys in 1982 and 1992, that the number of de facto relationships is growing. In 1982 there were 168,600 de facto couples, representing five per cent of all couples. In 1992, the number of de facto couples had increased to 344,400 (8% of total couples).

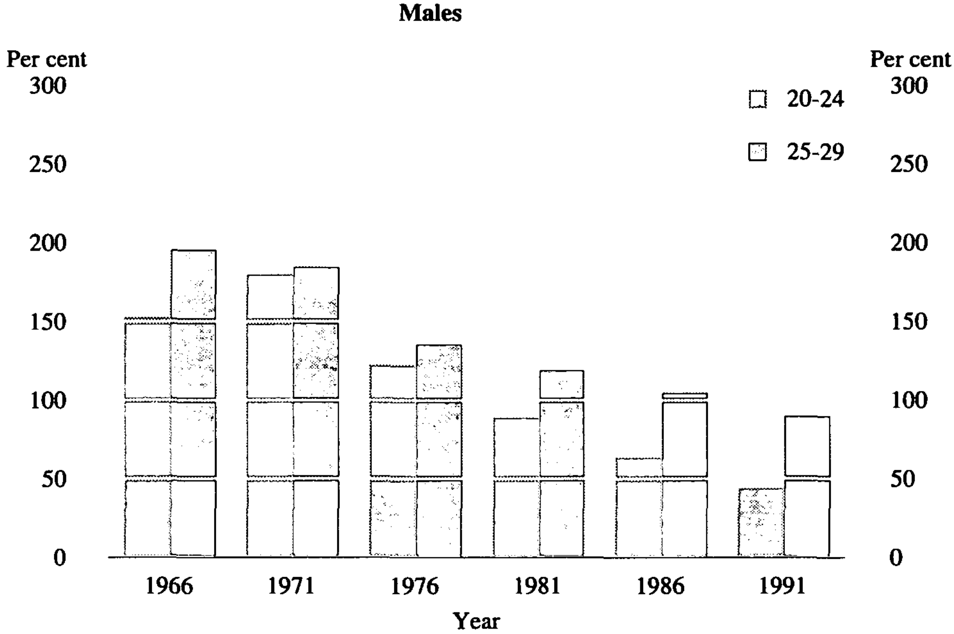
5.30 FIRST MARRIAGE RATIOS(a)

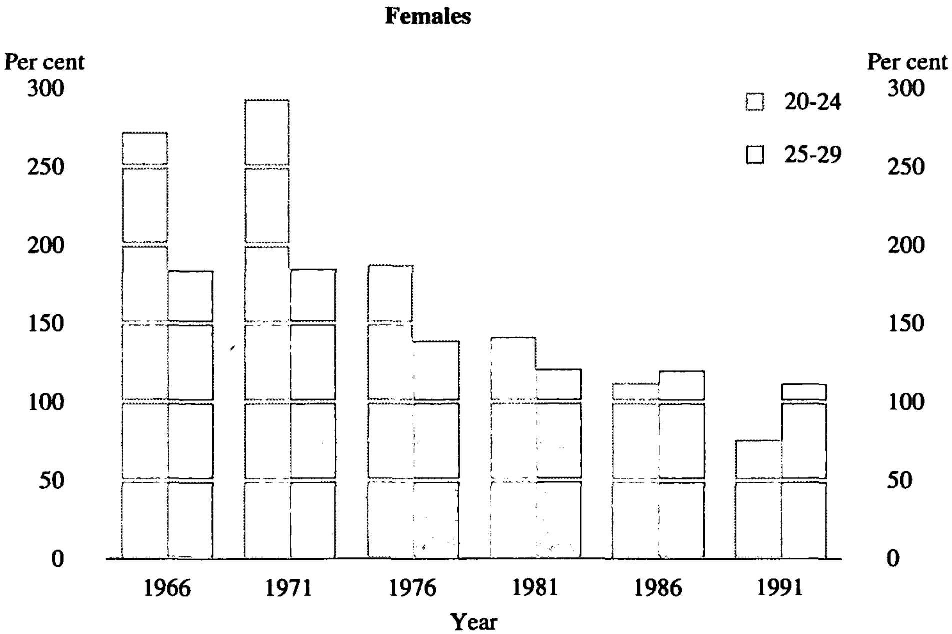
Period	Cumulative ratios of age groups(b) To 19	20–24	25–29	30–34	35–39	>39	Index of total first marriages (c)
			BRIDEGROOMS				
1972	75.6	528.3	209.9	61.1	23.2	31.6	929.6
1977	41.3	377.1	175.6	52.9	19.8	29.2	695.9
1982	24.1	336.3	220.6	68.5	22.8	25.7	698.0
1987	11.4	247.3	241.6	90.6	27.4	25.3	643.6
1988	12.4	240.1	248.8	96.7	30.8	23.1	651.9
1989	10.7	233.9	248.2	100.8	32.0	26.0	651.5
1990	9.8	221.0	254.3	101.4	33.2	25.8	645.5
1991	8.5	206.3	250.2	102.5	34.4	24.9	626.8
1992	7.2	193.8	255.1	109.0	35.1	25.2	625.3
			BRIDES				
1972	308.0	480.2	96.4	27.4	11.0	15.5	938.6
1977	199.8	355.3	89.3	26.6	11.3	16.5	698.8
1982	131.0	389.1	129.6	34.3	11.7	10.9	706.6
1987	68.5	349.1	173.2	50.8	15.8	12.5	669.9
1988	64.3	345.4	184.0	55.2	16.3	11.2	676.3
1989	57.5	335.0	189.1	60.0	18.3	12.5	672.3
1990	50.3	324.7	194.6	61.9	18.1	12.3	661.9
1991	43.4	306.6	196.5	61.8	18.7	12.1	639.1
1992	37.1	296.1	205.3	65.9	19.7	12.7	636.8

(a) Per 1,000 mid-year population of males and females of each age, except for age group to 19, where only males and females aged 15 to 19 years have been included in the calculations. (b) Ratios for each age group are calculated by summing the ratios for single years. (c) The sum of all single year ratios.

Source: Marriages, Australia (3306.0).

5.31 FIRST MARRIAGE RATES(a): SELECTED AGE GROUPS, CENSUS YEARS





(a) The number of first marriages per 1,000 population of single persons, of the appropriate ages, as at 30 June.

Source: Marriages, Australia (3306.0).

Divorces

Divorce in Australia comes under the jurisdiction of the *Family Law Act 1975*. This Act, which came into operation on 5 January 1976, provides for a single ground for divorce, namely irretrievable breakdown of marriage, which is established by a minimum one-year separation of the husband and wife. Passing of the Act provided easier and faster access to divorce for either party by its removal of the need to prove fault, together with a reduction of the separation period from five years to one year. In 1976 the number of divorces granted peaked at 63,230. Since then the numbers granted have varied, declining to a post-1976 low of 39,417 in 1986 but since then have slowly increased. In 1992 the number of divorces granted was 45,665.

The median duration of marriage of divorcing couples decreased from 12.1 years in 1972 to 10.5 years in 1992.

5.32 DIVORCES

Year	*Number*
1972	15,584
1977	45,150
1982	44,088
1987	39,725
1988	41,007
1989	41,383
1990	42,635
1991	45,630
1992	45,665

Source: Divorces, Australia (3307.0).

There is currently a tendency for divorce to occur in the early years of marriage and at an early age. The proportion of divorces taking place within the first five years of marriage was 21 per cent in 1992 and within the first 10 years it was 48 per cent (table 5.33).

5.33 DIVORCES: DURATION OF MARRIAGE (per cent)

	Duration of marriage (years)						*Median duration of marriage*
Years	*<5*	*5–9*	*10–14*	*15–19*	*>19*	*Total*	*(years)*
			AT DATE DECREE MADE ABSOLUTE				
1972	10.0	30.8	19.2	14.2	25.8	100.0	12.1
1977	17.3	28.7	18.6	12.5	23.0	100.0	10.9
1982	20.3	28.0	20.0	13.0	18.8	100.0	10.4
1987	22.1	26.9	17.3	14.4	19.3	100.0	10.2
1988	21.4	28.1	17.3	14.2	19.1	100.0	10.1
1989	20.9	28.3	17.1	13.9	19.8	100.0	10.2
1990	20.9	28.5	17.3	13.1	20.2	100.0	10.1
1991	21.3	27.4	17.6	13.1	20.6	100.0	10.3
1992	21.0	26.8	18.4	12.9	20.9	100.0	10.5
			AT DATE OF FINAL SEPARATION				
1972				— not available —			
1977	36.9	24.2	14.9	10.7	13.4	100.0	7.4
1982	36.2	24.3	16.3	10.9	12.3	100.0	7.6
1987	38.3	21.7	15.4	11.8	12.8	100.0	7.3
1988	38.5	22.1	15.1	11.8	12.6	100.0	7.3
1989	37.9	22.3	14.9	12.0	12.7	100.0	7.3
1990	38.2	22.4	14.4	11.7	13.0	100.0	7.3
1991	37.7	22.5	14.4	12.0	13.4	100.0	7.4
1992	37.8	22.5	14.4	11.7	13.6	100.0	7.4

Source: Divorces, Australia (3307.0).

The highest divorce rates for males occurred in the 25 to 29 year age group (21.0 per thousand married men), while for females they occurred in the under 25 year age group (22.3 per thousand married women). The incidence of divorce in 1992 was 11.5 per thousand married population. After a period between 1982 and 1987 in which a significant decline occurred (from 12.5 to 10.6 per thousand married population), the rate seems to be achieving some stability (table 5.34).

5.34 AGE-SPECIFIC DIVORCE RATES PER 1,000 MARRIED POPULATION

	Age group (years)									
Year	*<25*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*50–54*	*55–59*	*>59*	*Total*
					HUSBAND					
1982	13.5	22.9	20.6	17.1	14.9	11.6	8.3	5.8	2.3	12.5
1987	12.3	18.7	17.8	15.1	13.1	10.8	7.9	5.1	2.2	10.6
1988	12.6	19.3	18.3	15.6	13.3	11.0	8.0	5.2	2.1	10.8
1989	13.2	19.1	17.9	15.3	13.4	11.1	8.1	5.5	2.1	10.8
1990	13.6	19.7	18.2	15.8	13.6	11.5	8.5	5.6	2.0	10.9
1991	16.7	21.1	19.4	16.8	14.4	12.3	8.9	5.8	2.2	11.6
1992	16.2	21.0	19.3	17.1	14.6	12.1	9.2	5.9	2.2	11.5
					WIFE					
1982	17.7	23.0	18.4	15.7	12.9	9.7	6.4	4.0	1.8	12.5
1987	16.6	18.9	16.1	13.8	11.8	9.2	5.7	3.5	1.5	10.6
1988	17.0	19.6	16.6	14.1	12.0	9.5	5.7	3.6	1.4	10.8
1989	17.5	19.5	16.2	14.1	12.3	9.3	6.1	3.6	1.4	10.8
1990	19.7	20.2	16.4	14.2	12.5	9.6	6.3	3.6	1.3	10.9
1991	22.9	21.5	17.6	15.2	13.2	10.5	6.5	3.8	1.4	11.6
1992	22.3	22.1	17.4	15.4	13.2	10.5	6.8	3.7	1.4	11.5

Source: Divorces, Australia (3307.0).

The current low median duration between marriage and final separation combined with the increasing average interval between marriage and first birth (*see* Births section above) is having the effect of reducing the proportion of divorcing couples with children. The proportion of divorces in which children were involved declined from 61.6 per cent in 1982 to 52.9 per cent in 1992. The average number of children per divorce fell from 2.0 in 1982 to 1.9 in 1992 (table 5.35).

5.35 DIVORCES: PERCENTAGE DISTRIBUTION OF THE NUMBER OF CHILDREN OF THE MARRIAGE

Year	0	1	2	3	4 or or more	Total divorces	Total children	Average number of children(a)
			— per cent —			no.	no.	no.
1972	33.2	23.6	23.4	12.1	7.7	15,584	22,061	2.1
1977	36.3	23.2	24.4	10.8	5.3	45,150	57,878	2.0
1982	38.4	21.6	26.2	10.3	3.5	44,088	53,010	2.0
1987	41.4	21.7	25.1	9.0	2.8	39,725	44,050	1.9
1988	42.5	21.5	24.7	8.7	2.7	41,007	44,395	1.9
1989	44.7	20.4	23.7	8.7	2.6	41,383	43,317	1.9
1990	44.4	20.5	23.8	8.6	2.8	42,635	44,913	1.9
1991	45.8	20.1	23.2	8.4	2.5	45,630	46,697	1.9
1992	47.1	19.9	22.2	8.2	2.6	45,665	45,704	1.9

(a) Divorces involving one or more children.
Source: Divorces, Australia (3307.0).

Remarriages

In the decade to 1992, the number of remarriages (that is, marriages involving one or more previously married parties) remained steady but on a higher plateau than in the 1970s. The 1992 total of 37,660 remarriages, which represented 32.8 per cent of all marriages, is similar to the number of remarriages in 1982 which was 37,642 or 32.1 per cent of all marriages (table 5.36).

The reason for the sudden rise in remarriages at the beginning of the 1980s was brought about by growth in the numbers of marriages in which one or both parties were divorced at the time of marriage and was an after-effect of the *Family Law Act 1975* (*see* Divorces section above).

Set against rising population numbers, the current plateau in the number of remarriages is resulting in declining remarriage rates. The remarriage rate for males was 54.3 per thousand widowed and divorced male population in 1992, down from 79.6 in 1982. The female rate has fallen from 30.0 in 1982 to 23.9 in 1992. Again (*see* Marriages section above) the absence of data on de facto unions of people previously married impedes analysis of current trends. The discrepancy between male and female remarriage rates is caused by longer female survival and therefore greater numbers of females at older ages.

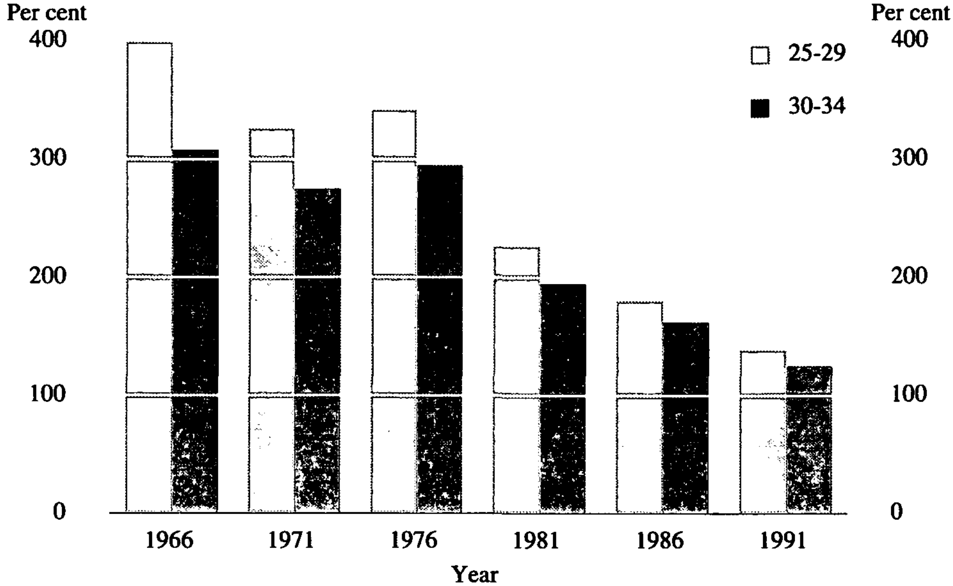
5.36 MARRIAGES IN WHICH ONE OR BOTH PARTNERS HAVE BEEN PREVIOUSLY MARRIED

Year	Both partners divorced		One partner divorced		Other(a)		Total number
	Number	Per cent	Number	Per cent	Number	Per cent	
1972	2,961	17.3	10,450	61.1	3,693	21.6	17,104
1977	9,809	29.9	19,968	60.9	3,008	9.2	32,785
1982	12,208	32.4	22,865	60.7	2,569	6.8	37,642
1987	12,401	33.2	22,583	60.4	2,423	6.5	37,407
1988	12,709	33.1	23,359	60.8	2,348	6.1	38,416
1989	12,471	32.5	23,496	61.3	2,359	6.2	38,326
1990	12,802	33.5	23,239	60.9	2,136	5.6	38,177
1991	12,298	33.2	22,649	61.1	2,111	5.7	37,058
1992	12,940	34.4	22,706	60.3	2,014	5.3	37,660

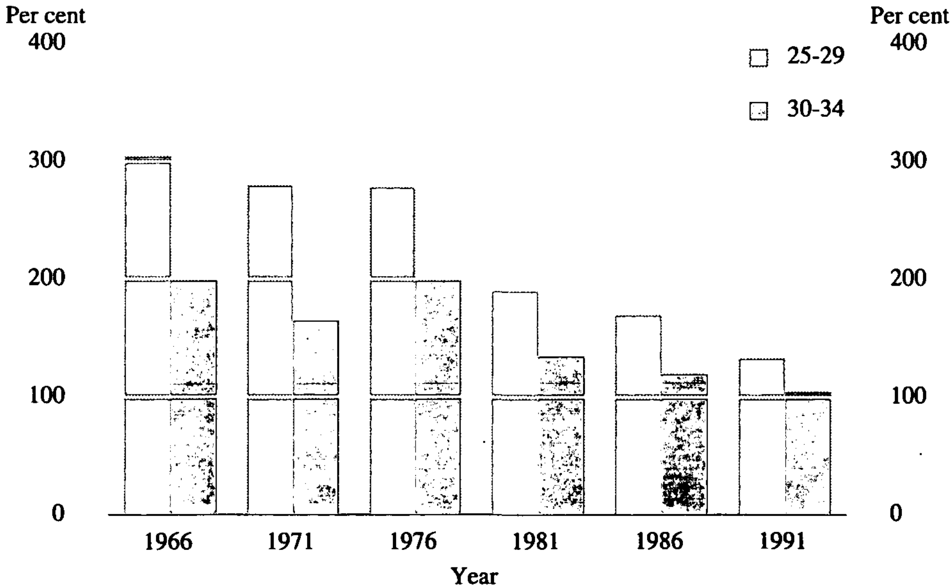
(a) Includes 'not stated' previous marital status.
Source: Marriages, Australia (3306.0).

5.37 REMARRIAGE RATES(a): SELECTED AGE GROUPS

Males



Females



(a) The number of remarriages per 1,000 population of divorced and widowed persons, of the appropriate ages, as at 30 June.

Source: Marriages, Australia (3306.0).

OVERSEAS MIGRATION

Statistics of overseas arrivals and departures are compiled from passenger cards which are collected from all incoming and outgoing travellers under the *Migration Act 1958.* Earlier statistics were obtained from shipping and plane manifests required under various Acts.

Until the 1960s, total net gains (that is, the excess of total arrivals over total departures) provided a satisfactory measure of the population gain from international migration. In recent years, however, because of the large increase in short-term movements (9.2 million in 1992), distortions arising from seasonality of these movements have become very large. For the purpose of estimating the population of Australia and the States and Territories, therefore, the migration component of population growth has been measured since 1 July 1971 by reference to permanent and long-term movements only. Net overseas migration is estimated to have directly contributed 44.5 per cent of the total population increase between 1982 and 1992.

5.38 OVERSEAS MIGRATION: NET PERMANENT AND LONG-TERM MOVEMENT

	1982	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*
Arrivals							
Permanent	107,170	128,290	151,550	131,060	121,560	116,650	94,250
Long-term	88,040	93,330	102,320	106,980	112,490	120,590	126,210
Total	*195,200*	*221,620*	*253,860*	*238,050*	*234,050*	*237,230*	*220,450*
Departures							
Permanent	22,490	20,420	20,320	24,830	30,370	29,900	28,140
Long-term	69,850	77,360	84,450	95,210	107,110	113,810	115,520
Total	*92,340*	*97,770*	*104,760*	*120,040*	*137,470*	*143,710*	*143,660*
Net permanent and long-term migration	**102,860**	**123,850**	**149,100**	**118,010**	**96,580**	**93,520**	**76,790**
Category jumping(a)	-150	12,200	23,700	11,500	600	-11,900	-32,300
Net overseas migration gain	102,710	136,050	172,800	129,510	97,180	81,620	44,490

(a) Adjustment for changes in travel intentions from short-term to permanent or long-term or vice versa.
Source: Australian Demographic Statistics (3101.0) and Overseas Arrivals and Departures, Australia (3404.0).

Birthplace of the population

At the 1947 Census, the proportion of the population (excluding full-blood Aboriginals) born in Australia had risen to its highest level (90.2%) since the beginning of European settlement and 97.9 per cent of the Australian population were either born in Australia or the United Kingdom, Ireland or New Zealand. In that Census, the largest non-British overseas-born group, the Italians, comprised only 0.4 per cent of the population (33,600).

Since 1947, not only has the decline of the overseas-born population been reversed, but significant changes have taken place in the composition of that group. The progressive removal of immigration restrictions based on country of origin, race or colour between 1949 and 1973, together with the extension of assisted migration schemes to non-British groups and refugees, have ensured a greater diversity of ethnic origin among the Australian population. Overseas-born persons from the United Kingdom, Ireland and New Zealand combined, increased only slightly as a proportion of the total population between 1947 and 1992, from 7.7 per cent to 8.7 per cent. However, overseas-born persons from other countries increased from 2.1 per cent to 14.3 per cent during the same period. Overseas countries of birth contributing 0.1 per cent or more of the total population — apart from the United Kingdom, Ireland and New Zealand — increased in number from 4 in 1947 to 39 in 1992.

The largest overseas-born group at the present time remains those born in the United Kingdom and Ireland, comprising 1,235,400 or 7.1 per cent of the population in 1992. By comparison, the second largest overseas-born group, New Zealanders, comprised only 1.6 per cent of the Australian population in 1992 (285,100). Six of the first eleven largest overseas-born groups are European, the exceptions being New Zealand, Viet Nam, Philippines, Malaysia and Lebanon. Although Europe remains the region of origin of the majority of the overseas-born population, the number of European-born persons has declined as a proportion of the total Australian population from 15.5 per cent in 1982 to 13.7 per cent in 1992, while persons born in other regions have increased their share.

5.39 MAJOR COUNTRIES OF BIRTH OF THE POPULATION AT 30 JUNE ('000)

Country of birth	*1982*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*
Australia	11,976.2	12,762.8	12,900.3	13,041.2	13,179.5	13,318.8	13,468.4
Overseas							
UK and Ireland	1,198.4	1,192.3	1,208.0	1,225.8	1,238.6	1,244.3	1,235.4
New Zealand	187.9	232.0	253.4	280.2	287.2	286.4	285.1
Italy	283.8	273.2	272.9	272.5	271.7	272.0	269.4
Former Yugoslav Republics	157.2	160.9	163.7	166.1	167.3	168.0	169.4
Greece	152.9	147.6	148.2	148.2	147.9	147.4	146.5
Viet Nam	54.6	93.1	97.5	103.9	114.3	124.8	132.9
Germany	117.7	120.9	121.2	121.3	121.2	120.4	119.9
Netherlands	102.3	100.5	100.6	100.6	100.4	100.9	99.9
Philippines	19.5	42.2	53.6	64.2	71.5	79.1	83.5
Malaysia	36.3	54.2	60.7	69.2	75.7	79.9	82.8
Lebanon	53.5	63.6	68.8	72.3	75.3	78.5	79.4
Other	843.9	1,020.6	1,083.2	1,149.0	1,214.5	1,263.6	1,310.0
Total overseas	*3,208.0*	*3,501.1*	*3,631.8*	*3,773.3*	*3,885.6*	*3,965.3*	*4,014.2*
Total	**15,184.2**	**16,263.9**	**16,532.2**	**16,814.4**	**17,065.1**	**17,284.0**	**17,482.6**

Source: Estimated Resident Population by Country of Birth, Age and Sex, Australia (3221.0).

Of the three Asian regions (north-east, South East and southern) it is the people born in South East Asia who comprise the greatest numbers in the Australian population. In 1992 there were 417,700 South East Asian people, an increase of 237,200 or 131 per cent since 1982. However, the group with the highest percentage increase over the same period is north-east Asia, which has risen by 267 per cent from 61,600 in 1982 to 226,200 in 1992. This increase has mainly comprised people from China and Hong Kong. The numbers of people from southern Asia (India, Pakistan, Sri Lanka, etc.) have increased by 97 per cent from 64,400 in 1982 to 126,700 in 1992. Predominant countries of birth of Australia's Asian populations are Viet Nam (132,900), China (91,700), Philippines (83,400), Malaysia (82,800), Hong Kong (74,300) and India (70,300).

In June 1992, the median age of the overseas-born population was 42.5 years, almost 10 years older than the median (32.7 years) for the population as a whole. The median age of the Australian-born population was 29.1 years. Overseas-born population groups from recent source countries, for example, Lebanon, South Africa, and those in South East Asia and South America are noticeably younger than those from European sources.

At the 1991 Census, 75.6 per cent of persons had been born in Australia. Of these, 74.1 per cent reported Australia as the birthplace of both their parents. This implies that 56.0 per cent of the total population of Australia are at least second generation Australians. A further 14.6 per cent of the Australian-born population (11.0% of the total population) had one parent born in Australia.

5.40 BIRTHPLACE OF PARENTS OF AUSTRALIA-BORN PERSONS, 1991(a)

Birthplace of parents	*Numbers*	*Per cent*
Both parents born in Australia	9,419,384	74.1
One parent born in Australia, the other		
Born overseas	1,754,519	13.8
Not stated	98,013	0.8
One parent born overseas, the other		
Not stated	19,573	0.2
Both parents born overseas	1,359,014	10.7
Not stated	63,768	0.5
Total	**12,714,271**	**100.0**

(a) Census counts, place of usual residence.
Source: 1991 Census, unpublished ABS data.

Migration to Australia

Migration to Australia is regulated by the *Migration Act 1958* which came into force on 1 June 1959. Any person entering Australia after the introduction of the Act without having been granted an entry permit or who is not within an exempted class is a prohibited non-citizen. Exempted persons include New Zealand citizens, overseas-born children of Australian citizens, diplomatic and consular representatives of other countries, and seamen and air crew who enter Australian ports while on leave.

During the last decade, migrants from the United Kingdom and Ireland have remained the most numerous group of settlers, although they have declined in absolute numbers and as a proportion of total settler arrivals. In 1982 they comprised 32.5 per cent of settler arrivals, however, by 1992 this contribution had fallen to 13.0 per cent. At the same time the number of settlers from other European sources, such as Poland, Germany, and the Netherlands have also declined, although the numbers from the former Yugoslav Republics and the former USSR and Baltic States have increased. Settlers from Europe and the former USSR in total accounted for 26 per cent of all settler arrivals in 1992. Despite a fall in settlers from these more traditional sources, the overall number of settler arrivals in Australia increased markedly during the early 1980s, before beginning to decline from 1988. There have, however, been peaks and troughs during the past decade, coinciding with economic boom and recession years. These have occurred most notably in 1984 when the number of settlers arriving in Australia totalled only 73,110, contrasting with 1988 when 151,550 settlers arrived.

During the 1980s through to the early 1990s, settlers from South East, north-east and southern Asia have increased substantially. In 1982, European-born settlers accounted for 54.5 per cent of arrivals in Australia, compared with only 3.3 per cent from north-east Asia. By 1992, north-east Asia alone accounted for 18.3 per cent of total settler arrivals compared with 26.3 per cent from Europe. Hong Kong sourced settlers have contributed most to the overall increase from the three Asian regions. In 1991, Hong Kong born settlers numbered 14,490 and accounted for 61.7 per cent of north-east Asian arrivals. The level of Vietnamese-born settlers arriving in Australia has been consistently high since 1982 when the intake was 8,380 compared to 7,390 in 1992, accounting for 42.3 per cent of South East Asian arrivals. Indian-born settlers have increased from 1,620 in 1982 to 5,110 in 1992 accounting for 54.4 per cent of arrivals from southern Asia. Other notable countries belonging to the three Asian regions from where settler arrivals have increased between 1982 and 1992 were China, the Philippines, Taiwan and Malaysia.

5.41 BIRTHPLACE OF SETTLER ARRIVALS(a)

Birthplace	*1972*	*1977*	*1982*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*
United Kingdom and Ireland	50,200	21,750	34,800	24,030	29,030	26,490	23,530	18,940	12,290
Hong Kong	350	1,400	1,350	4,260	7,010	7,400	10,520	14,490	9,820
Viet Nam	—	2,410	8,380	6,270	5,780	10,050	13,730	10,670	7,390
New Zealand	3,270	6,580	9,810	15,360	24,870	17,340	8,970	6,730	7,310
India	—	970	1,620	2,870	3,210	2,990	3,760	5,790	5,110
Philippines	—	1,900	3,090	8,960	10,480	6,940	6,150	6,480	4,930
China	350	1,020	1,070	3,090	3,540	3,440	3,270	3,390	3,360
Former USSR and Baltic States	150	670	240	260	660	1,530	1,200	1,550	3,320
Former Yugoslav Republics	7,220	1,860	1,520	3,290	3,330	2,180	1,830	2,300	3,000
Sri Lanka	—	600	540	2,970	3,380	2,010	3,120	2,800	2,490
Taiwan	—	30	140	970	1,390	2,910	3,140	3,710	2,220
Malaysia	—	2,040	2,120	5,070	7,670	6,920	6,210	4,380	2,170
Fiji	—	420	720	2,660	2,770	2,510	2,510	2,460	1,940
Poland	610	260	6,190	1,960	1,880	1,590	1,570	1,820	1,540
United States of America	4,710	1,090	1,960	1,890	2,040	1,960	1,980	1,710	1,530
South Africa	1,300	2,230	3,060	4,140	3,660	2,680	2,150	1,700	1,240
Lebanon	2,260	8,870	830	3,870	3,500	2,270	2,610	2,420	1,120
Germany, Fed. Rep.	2,100	960	4,040	1,470	1,430	1,150	970	860	730
Italy	4,400	1,590	830	580	500	340	340	310	290
Greece	4,160	1,390	660	940	740	520	350	300	230
Other	31,390	17,600	24,200	33,380	34,680	27,840	23,650	23,840	22,220
Total	**112,470**	**75,640**	**107,170**	**128,290**	**151,550**	**131,060**	**121,560**	**116,650**	**94,250**
				PERCENTAGE					
United Kingdom and Ireland	44.6	28.8	32.5	18.7	19.2	20.2	19.4	16.2	13.0
Hong Kong	0.3	1.9	1.3	3.3	4.6	5.6	8.7	12.4	10.4
Viet Nam	—	3.2	7.8	4.9	3.8	7.7	11.3	9.1	7.8
New Zealand	2.9	8.7	9.2	12.0	16.4	13.2	7.4	5.8	7.8
India	—	1.3	1.5	2.2	2.1	2.3	3.1	5.0	5.4
Philippines	—	2.5	2.9	7.0	6.9	5.3	5.1	5.6	5.2
China	0.3	1.3	1.0	2.4	2.3	2.6	2.7	2.9	3.6
Former USSR and Baltic States	0.1	0.9	0.2	0.2	0.4	1.2	1.0	1.3	3.5
Former Yugoslav Republics	6.4	2.5	1.4	2.6	2.2	1.7	1.5	2.0	3.2
Sri Lanka	—	0.8	0.5	2.3	2.2	1.5	2.6	2.4	2.6
Taiwan	—	—	0.1	0.8	0.9	2.2	2.6	3.2	2.4
Malaysia	—	2.7	2.0	4.0	5.1	5.3	5.1	3.8	2.3
Fiji	—	0.6	0.7	2.1	1.8	1.9	2.1	2.1	2.1
Poland	0.5	0.3	5.8	1.5	1.2	1.2	1.3	1.6	1.6
United States of America	4.2	1.4	1.8	1.5	1.3	1.5	1.6	1.5	1.6
South Africa	1.2	2.9	2.9	3.2	2.4	2.0	1.8	1.5	1.3
Lebanon	2.0	11.7	0.8	3.0	2.3	1.7	2.1	2.1	1.2
Germany, Fed. Rep.	1.9	1.3	3.8	1.1	0.9	0.9	0.8	0.7	0.8
Italy	3.9	2.1	0.8	0.5	0.3	0.3	0.3	0.3	0.3
Greece	3.7	1.8	0.6	0.7	0.5	0.4	0.3	0.3	0.2
Other	27.9	23.3	22.6	26.0	22.9	21.2	19.5	20.4	23.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Permanent arrivals only.

Source: Overseas Arrivals and Departures, Australia (3404.0) and unpublished ABS data.

Since 1979, family immigration has increased in importance, with migration of family members now amounting to over 40 per cent of settler arrivals. Non-visaed migrants continue to be a major contributor to Australian settlement. These are primarily New Zealand citizens migrating under the Trans-Tasman Travel Arrangement under which Australian and New Zealand citizens may enter each country without the need to obtain visas or entry permits. Other non-visaed migrants include children born to Australian citizens overseas, persons who have acquired Australian citizenship overseas and residents of the external Australian Territory of Norfolk Island. Settlers from New Zealand accounted for 9.2 per cent of total permanent settlement in 1982, peaking at 24,870 in 1988 (16.4 per cent) and falling to 7.8 per cent in 1992.

The age composition of settlers has been younger than that of Australia's population for some time and reflects the predominance of young families arriving in Australia. Persons aged 65 years and over represented 3.9 per cent of migrants arriving in 1987, which contrasts with the proportion of this age group of Australia's total population in the same year, which was 10.7 per cent. In 1992, only 2.6 per cent of settlers were aged 65 years and over, whereas the proportion of the total population had risen to 11.5 per cent.

5.42 PERMANENT ARRIVALS, DISTRIBUTION BY AGE AND SEX
(per cent)

	Age group (years)							
Year	*0–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*>64*	*Total number*
			MALES					
1972	29.6	24.7	24.5	11.4	4.7	2.7	2.4	57,820
1977	33.0	21.3	22.0	10.9	5.1	4.1	3.6	37,650
1982	32.4	18.1	25.4	14.1	4.3	2.6	3.2	55,370
1987	29.2	16.6	26.9	14.9	4.9	3.8	3.7	63,800
1988	29.3	15.6	26.6	16.4	5.4	3.5	3.1	75,720
1989	28.7	16.7	25.8	16.2	5.8	3.8	3.1	64,490
1990	28.4	15.5	28.7	16.2	5.2	3.4	2.6	60,570
1991	27.9	13.2	30.7	17.6	4.9	3.4	2.2	57,640
1992	27.7	13.5	31.6	16.3	5.2	3.3	2.4	46,040
			FEMALES					
1972	29.3	26.3	22.2	9.5	5.0	4.4	3.3	54,650
1977	30.1	21.2	22.5	9.4	6.2	5.9	4.8	37,990
1982	30.5	18.9	26.2	12.3	4.0	4.2	4.0	51,800
1987	27.0	18.0	27.6	13.1	4.8	5.2	4.2	64,490
1988	27.8	17.4	27.5	14.4	4.9	4.6	3.5	75,830
1989	26.6	18.5	26.9	14.6	5.4	4.5	3.6	66,570
1990	26.3	18.1	28.8	14.5	5.0	4.2	3.1	61,000
1991	25.7	16.8	31.8	14.5	4.8	3.8	2.7	59,010
1992	24.7	17.5	32.3	13.9	4.9	3.9	2.8	48,210

Source: Unpublished ABS data.

Despite the comparative youthfulness of the settlers, their median age has been rising. Since 1982, when the numbers of migrants under the 'family reunion' category began to increase, the median age of settlers has risen from 23.2 years to 27.7 years in 1992. At the younger ages, declines have taken place in the proportion of settlers in the 15 to 24 year age group while there has been an increase in the proportion of settlers in the 25 to 44 year age group. This trend appears to have continued into the early 1990s. In 1992, settlers in the 15 to 24 year age group decreased by 14 per cent and those in the 25 to 44 year age group increased by 2.9 per cent compared to 1991.

The sex ratio (number of male settlers per 100 female settlers) tends to be high in years of large intake, and falls as intake declines. There was a rise in the sex ratio in the first half of the 1980s as settler arrivals increased, but in the last five years the sex ratio has remained below 100.0. In 1992 the sex ratio was 95.5 males per 100 females. In 1992, males predominated in the 0 to 14 year age group and the 35 to 44 year age group.

5.43 PERMANENT ARRIVALS: SEX RATIOS(a) BY AGE

	Age group (years)							
Year	*0–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*>64*	*Total*
1972	106.9	99.1	117.1	126.8	101.0	65.6	74.9	105.8
1977	108.8	99.2	97.0	115.7	81.5	68.9	74.5	99.1
1982	113.5	102.0	103.5	122.4	115.1	66.0	86.4	106.9
1987	106.8	91.6	96.3	112.3	101.6	72.2	85.7	98.9
1988	105.3	89.9	96.7	113.8	111.1	75.6	89.1	99.9
1989	104.7	87.2	92.8	107.8	104.2	80.1	84.4	96.9
1990	107.4	85.0	98.7	111.2	102.3	80.5	83.2	99.3
1991	106.0	76.9	94.5	119.2	101.4	87.1	79.5	97.7
1992	107.0	73.8	93.6	112.0	100.0	81.3	81.8	95.5

(a) The number of males per 100 females.
Source: Unpublished ABS data.

Refugees

Since 1945, Australia has accepted more than 470,000 refugees or displaced persons, including 170,000 from Europe who were displaced by World War II and its aftermath. Australia presently accepts refugees from about 40 countries. The high profile Indo-Chinese refugee program which has been a feature of recent years is continuing into the 1990s. Australia's intake of refugees in 1992–93 was 10,939 persons, an increase of 53 per cent on the previous financial year. This was a reflection of the large increase in numbers from the former Yugoslav Republics (3,133) and the former USSR and Baltic States (1,605), which together made up 43 per cent of Australia's total refugee intake for 1992–93. Refugees from Asian regions were in similar numbers to the previous year, although their proportion of total refugee arrivals was down from 76 per cent in 1982–83, to 44 per cent in 1991–92 and 29 per cent in 1992–93.

Australia is one of 97 countries which have become party to an international convention and protocol on the status of refugees and, in so doing, have taken on certain international legal obligations to assist refugees. The final determination of a refugee's status and the decision to accept refugees for resettlement in Australia rests with the Australian Government. Australia is also a member of the Executive Committee of the United Nations High Commission for Refugees (UNHCR). Australia's response to refugee situations is twofold. Through aid programs directed principally through UNHCR, refugees are offered protection and assistance in countries of first refuge. Those refugees for whom other durable solutions are not feasible may be offered resettlement (in Australia) if they have relatives in Australia, other close ties with Australia or the potential for successful settlement in their own right. Such refugees must also be presented to Australia by the UNHCR as being registered or otherwise eligible for resettlement.

5.44 BIRTHPLACE OF REFUGEE ARRIVALS(a), YEARS ENDED 30 JUNE

Birthplace	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*
Romania	455	280	311	38	82	9
Former USSR and Baltic States	187	475	1,065	97	18	1,605
Former Yugoslav Republics	9	4	5	—	337	3,133
Iran	471	521	321	338	318	97
Iraq	12	33	58	98	1,231	1,333
Lebanon	392	91	484	1,147	230	8
Indonesia	44	36	17	15	130	446
Cambodia	898	1,217	172	35	14	5
Laos	602	352	241	301	197	23
Viet Nam	3,753	3,851	5,679	3,136	1,561	1,902
Chile	613	361	109	2	2	—
El Salvador	1,001	1,492	1,848	1,460	1,194	343
Ethiopia	97	62	111	111	210	493
Other	2,542	2,093	1,527	967	1,633	1,542
Total	**11,076**	**10,868**	**11,948**	**7,745**	**7,157**	**10,939**

(a) Includes arrivals under the Special Humanitarian Program instituted late in 1981.
Source: Department of Immigration, Local Government and Ethnic Affairs.

Permanent departures

An important component constraining population growth is the level of population loss due to emigration. Between 1982 and 1992, total permanent departures numbered 262,090 persons or an average of 23,826 per year, a level which is 22.1 per cent of the total permanent arrivals over this period. The ratio of permanent departures to permanent arrivals in 1992 was 29.9 per cent, the highest ratio since 1984.

5.45 PERMANENT DEPARTURES AND ARRIVALS

	Permanent departures				
Year	*Former settlers*	*Other residents*	*Total*	*Permanent arrivals*	*Ratio of departures to permanent arrivals*
1972	33,170	12,710	45,880	112,470	0.41
1977	14,170	8,590	22,760	75,640	0.30
1982	13,350	9,140	22,490	107,170	0.21
1987	11,010	9,400	20,410	128,290	0.16
1988	10,480	9,840	20,320	151,550	0.13
1989	11,940	12,890	24,830	131,060	0.19
1990	14,220	16,150	30,370	121,560	0.25
1991	15,870	14,030	29,900	116,650	0.26
1992	14,040	14,090	28,140	94,250	0.30

Source: Overseas Arrivals and Departures, Australia (3404.0).

Of the two categories of permanent departures, that is, 'former settlers' and 'other residents', it has been under the first category that there has been the greatest outflow of persons. Between 1982 and 1992, 'former settlers' represented 53.1 per cent of all permanent departures. The departure of 'other residents' has fluctuated from a low of 8,860 in 1986 to a record high level of 16,150 persons in 1990 falling to 14,090 in 1992.

INTERNAL MIGRATION

Information on internal migration (migration from one part of Australia to another) has been available from the population censuses since 1971. During the census, people are asked to state their place of usual residence on census night and also on the same date one year ago and five years ago. Comparison of these addresses has provided data on interstate migration and also (for the 1986 and 1991 Censuses only) intrastate movement. Movers are classified by age, sex, birthplace and other selected characteristics. The census also provides data on where people recently arrived from overseas are now living.

Between censuses, data on interstate migration are estimated, at quarterly intervals, from information on interstate changes of address advised to the Health Insurance Commission in the process of administering Medicare. (No comprehensive data are compiled on intrastate migration between censuses.) Prior to 1986, postcensal interstate migration estimates were based on changes of address advised to the Department of Social Security by recipients of the Family Allowance.

Interstate migration has had an important influence on the distribution of Australia's population amongst the States and Territories. Historically, it has been much more important than fertility or mortality and in many periods more important than overseas migration. Net interstate migration tends to be volatile in nature and large gains and losses have been recorded by all States. The table below presents estimates of net interstate migration for the financial years 1981–82 and 1986–87 to 1991–92. There has been a trend over the past decade in most States for net interstate levels to follow a cyclical pattern. From a peak in 1981–82, they contracted towards the middle of the decade before rising to another peak in 1988–89. Levels for subsequent years have been below this peak for most States with the exception of Victoria.

5.46 NET INTERSTATE MIGRATION ('000)

Year ended 30 June	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
1982	- 19,584	- 14,429	35,453	- 4,875	3,558	- 2,022	2,069	- 170
1987	- 9,524	- 13,105	19,718	- 3,977	6,576	- 1,508	- 120	1,940
1988	- 13,340	- 14,423	27,720	- 1,240	4,274	- 1,924	- 3,129	2,062
1989	- 37,974	- 12,504	47,062	- 221	5,017	203	- 1,469	- 114
1990	- 35,983	- 7,829	38,102	- 252	3,012	2,790	- 1,170	1,330
1991	- 17,206	- 14,853	29,709	1,545	- 1,791	816	- 1,152	2,932
1992	- 11,961	- 22,537	36,455	- 817	- 1,303	- 132	- 1,286	1,581
1993	- 15,002	- 30,081	51,626	- 4,975	174	- 1,370	- 1,981	1,609

Source: Australian Demographic Statistics (3101.0).

New South Wales has experienced substantial net losses, particularly to Queensland, but also to Western Australia and the Australian Capital Territory. The loss of 37,974 in the year ended June 1989 was the largest ever recorded by any State or Territory over a 12 month period.

Victoria has experienced net losses throughout the period. The most popular destinations are Queensland and New South Wales.

Queensland has made major net gains, consistently ranking as the favourite destination for Australians moving interstate. Its net gain of 51,626 in the year ended June 1993 was the highest ever recorded by any State or Territory over a 12 month period.

South Australia has experienced small net gains and losses. It is frequently the State with the smallest net interstate movement per head of population.

Western Australia recorded considerable net gains in the second half of the 1980s when it ranked as the second most popular destination for Australians moving interstate. Since 1990 the number of interstate arrivals has fallen. The small net loss in 1990–91 was the State's first loss since the 1960s.

Tasmania has experienced small net gains and losses following the regular cyclical pattern mentioned above.

The Northern Territory made consistent net gains in the first half of the 1980s but has experienced small losses in more recent years. The Australian Capital Territory has made small net gains throughout the period. For both Territories, the levels of net interstate movement per head of population are high.

During the fifteen years from 1971 to 1991, the flow of persons interstate increased. Census data indicate that for the four five-year periods, 1971–76, 1976–81, 1981–86 and 1986–91, the number of interstate movers was 569,500, 651,200, 716,555 and 779,966, respectively.

Proportional to total population (mobility rate), the number of interstate movers numbered 46 per thousand in the 1971–76 intercensal period, rising to 49 per thousand during 1976–81 and 50 per thousand in the 1981–86 period, before falling to 47 per thousand during 1986–91.

Interstate mobility rates by age have revealed a clear and consistent life cycle pattern in the propensity of persons to move interstate. Data for 1971–76, 1976–81, 1981–86 and 1986–91 show that there was, initially, an above average rate for the five to nine year age group (because of the high mobility of their parents). This was followed by a period of below average mobility in the early teenage years. Mobility was highest at ages 20 to 39 years, after which it steadily declined with age. The highest mobility rates occurred at ages 25 to 29 years and the lowest at ages 65 and over. Females were generally less likely to move interstate than males, with differences being most pronounced during the child-rearing ages from 25 to 45 years.

5.47 INTERSTATE MOVERS BY AGE, MOBILITY RATES(a) AND SEX RATIOS(b)

Age group (years)	*Number of interstate movers*				*Mobility rates*			
	1971–76	*1976–81*	*1981–86*	*1986–91*	*1971–76*	*1976–81*	*1981–86*	*1986–91*
1–4	. .	. .	. .	. .	. .	. .	. .	. .
5–9	69,810	75,603	69,830	76,555	56	61	60	61
10–14	49,979	59,096	62,803	61,143	40	46	49	50
15–19	49,899	53,025	59,331	62,130	41	42	45	47
20–24	83,239	89,139	92,223	91,554	75	72	72	69
25–29	99,102	100,337	110,169	108,725	88	85	85	82
30–34	64,271	85,729	89,571	100,377	68	72	73	73
35–39	42,174	55,606	73,719	78,440	52	57	60	61
40–44	27,380	34,104	44,539	61,355	38	42	45	49
45–49	22,328	21,948	27,629	37,223	29	30	34	37
50–54	17,993	19,155	19,134	25,420	24	25	27	31
55–59	12,933	16,929	18,700	19,730	21	23	26	28
60–64	11,008	14,769	18,214	19,683	20	25	26	28
>64	19,402	25,745	30,693	37,631	16	18	19	20
Total	**569,518**	**651,185**	**716,555**	**779,966**	**46**	**49**	**50**	**47**
Sex ratios								
Interstate movers	106	107	107	104				
Total population	100	100	100	99				

(a) Interstate movers per 1,000 population of Australian residents enumerated in the Census at the end of the period. (b) The number of males per 100 females.

Source: 1991 Census — unpublished ABS data.

CITIZENSHIP

The granting of citizenship is controlled by the *Australian Citizenship Act 1948*. Prior to 26 January 1949, persons who were naturalised became British subjects but with the introduction of the Act, all such persons automatically became Australian citizens.

Citizenship may be acquired by birth in Australia provided that at the time of birth one of the parents is an Australian citizen or legal resident of Australia, by birth abroad to an Australian parent, or by grant of citizenship to a person resident in Australia under conditions prescribed in the Act. All persons are now eligible for Australian citizenship provided that they have resided in Australia for at least two years, are of good character, have an adequate knowledge of English and of the responsibilities and privileges of citizenship, and intend to reside permanently in Australia.

At the 1981 Census, 88.7 per cent of the population were Australian citizens, with 11.9 per cent of these being born overseas. At the 1991 Census the proportion of the population who were Australian citizens had fallen to 87.7 per cent, but the share of those born overseas who have Australian citizenship increased to 12.2 per cent.

5.48 COUNTRY OF CITIZENSHIP(a)

	1981		*1986*		*1991*	
	Persons	*%*	*Persons*	*%*	*Persons*	*%*
Australia						
Born in Australia	11,393,861	78.2	11,917,624	76.4	12,725,164	75.5
Born overseas	1,537,212	10.5	1,919,474	12.3	2,051,589	12.2
Other	1,645,257	11.3	1,765,058	11.3	2,073,787	12.3
Total	**14,576,330**	**100.0**	**15,602,156**	**100.0**	**16,850,540**	**100.0**

(a) Census counts, place of enumeration.
Source: Census 91 — unpublished ABS data.

RELIGION

Details on religious affiliation have been collected in all Australian censuses. However, since the 1933 Census, it has been clearly stated on the census form that answering the question on religion is not obligatory. By 1991, 23.4 per cent of persons were reported as either having 'no religion' or did not answer the question.

Census data show that the Australian population is predominantly Christian with the majority associating themselves with the two major groups, Catholic and Anglican (27.3% and 23.8%, respectively at the 1991 Census).

5.49 MAJOR RELIGIOUS GROUPS(a)
(per cent of population)

Year	*Catholic*	*Anglican*	*Other Christian*	*Total Christian*	*Non-Christian*	*No religion*	*Not stated*	*Total*
1971	27.0	31.0	28.2	86.2	0.8	6.7	6.4	100.0
1976	25.7	27.7	25.2	78.6	0.9	8.3	12.1	100.0
1981	26.0	26.1	24.3	76.4	1.4	10.8	11.4	100.0
1986	26.1	23.9	23.0	73.0	2.0	12.7	12.3	100.0
1991	27.3	23.8	22.8	74.0	2.6	12.9	10.5	100.0

(a) Census counts, place of enumeration.
Source: Census 1991 — Australia in Profile (2821.0).

The remainder of the Christian population, amounting to 23 per cent of the total population at the 1991 Census, is dispersed between several other groups, with only three denominations comprising more than 2.0 per cent of the population: the Uniting Church (8.2%), Presbyterian (4.3%) and Orthodox (2.8%).

There has been a substantial increase in the proportion of persons of non-Christian religions since 1981, from 1.4 per cent to 2.6 per cent in 1991. At the 1991 Census, Muslims comprised 33 per cent of the non-Christian religions, Buddhists 31 per cent and Jews 17 per cent.

BIBLIOGRAPHY

ABS Publications

Australia in Profile (1991 Census) (2821.0)

Australian Aboriginal and Torres Strait Islander Population (1991 Census) (2740.0)

Australian Demographic Statistics (3101.0)

Australia's Families — Selected Findings from the Survey of Families, Australia, 1992 (4418.0)

Births, Australia (3301.0)

Deaths, Australia (3302.0)

Divorces, Australia (3307.0)

Estimated Resident Population by Country of Birth, Age and Sex, Australia (3221.0)

Estimated Resident Population by Marital Status, Age and Sex, Australia (3220.0)

Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0)

Marriages, Australia (3306.0)

Overseas Arrivals and Departures, Australia (3401.0, 3402.0, 3404.0)

Population Growth and Distribution, Australia (2822.0)

Other Publications

United Nations Demographic Yearbook, 1991

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Ethnic & Cultural Diversity in Australia

(This article has been contributed by Dr James Jupp, Director, Centre for Immigration and Multicultural Studies, Australian National University.)

As 1995 has been designated as the UN International Year of Tolerance it is appropriate to reflect on the multiculturalism of Australia and the fact that its ethnic and cultural diversity has evolved largely without the major problems encountered in some other countries.

Various measures can be used to indicate the extent and characteristics of Australia's ethnic and cultural diversity. However, they are far from straightforward or uncontroversial.

This article presents some of these measures as well as discussing their difficulties and limitations.

At various times different countries seek, through population censuses, to measure ethnic and cultural diversity in terms of birthplace, language, religion and the like. The Indian Census, based on the most multicultural major society in the world, measures language, religion and caste. All are the basis for official policies aimed at equitable distribution of power and resources. The United Kingdom Census, in contrast, measures language use only for Welsh and Scottish Gaelic and religion only for Northern Ireland. British attempts to measure ethnicity based on recent immigration have been frustrated by political objections. A substitute measure of 'households headed by those born in the New Commonwealth with Pakistan' has been substituted. Birthplace data has also been used in the United Kingdom over many years. In Canada and the United States at various times measures of race, language use or ethnic origin have all been incorporated into census data.

In Australia, as elsewhere, what is measured by the census is determined by political and sometimes administrative imperatives, rather than by the intrinsic or long-term interest of the data in isolation. During the operation of the White Australia Policy between 1901 and 1966, the census recorded in great detail all those of non-European or partly non-European race. Such information is no longer recorded. In 1933, after a small influx of southern Europeans, a census question was inserted on knowledge of English. So few spoke any other language that the question was dropped until 1976. As immigrant settlement and much welfare and educational policy is now based on language needs, this information has become much more important for official purposes than it was in 1933. It is probable that in response to user demand a language question will become a permanent feature of the Australian Census as about 15 per cent of the population now normally uses a language other than English in the home.

Because of rather different priorities, a voluntary religious question has been in most Australian censuses since colonial times. Immigration policy was generally based on balancing the English, Scots and Irish, and Protestants and Catholics, in the proportions in which they occurred in the British Isles. Most nineteenth century Australians subscribed to one denomination or another and most social welfare and much education was delivered through these denominations. Australia thus has the best recorded history of religious variety of any English-speaking society. In the United States an interpretation of the Constitution has prohibited any questioning of religion in the census. As a bizarre result most American Jews appear as of 'Russian' ethnicity, which is rather ironic as their ancestors were usually fleeing from Russian persecution. In Great Britain only one religious census has been held, in 1851. Perhaps because it showed a crisis in attendance and church capacity for the established Church of England in the new urban areas, it was never repeated.

In recent Australian censuses, compulsory questions have been asked on birthplace and language, while the question on religion has always been optional. In 1986 a question on 'ancestry' was also asked, bringing out the interesting fact that almost 40 per cent of Australians described themselves as 'English' while only half that proportion saw themselves as 'Australians'. This question was similar to one previously asked in Canada and the United States. It was useful for locating ethnic groups which are not tied to a single birthplace, such as Chinese, or those forming a minority within a particular birthplace, such as Maoris. It was less useful in locating those of Celtic origin, such as Scots and Irish, many of whom preferred to call themselves 'Australian'.

Because of a clause in the Constitution (section 127), data on full-blood Aborigines was not collected until after the deletion of this section by referendum in 1967, as opposed to people of mixed Aboriginal origin, who were included in the census. This amendment is often wrongly credited with giving Aborigines citizenship or the vote, which it did not. It did allow a much more sophisticated analysis of the Aboriginal population than hitherto, laying the basis for further public policy over a range of functions.

Difficulties in locating ethnicity

The traditional questions in Australian censuses on religion and birthplace present only limited problems of interpretation. Many states have changed their boundaries over time, most recently those previously making up the Soviet Union and Yugoslavia. Thus most of those categorised as 'Austrians' in pre-1914 censuses were of Croatian ethnicity and came from the Austrian-ruled Dalmatian coast. Other subject areas, such as Poland or Ukraine, appear as birthplaces because respondents have declared them as such. Birthplace data is not a substitute for ethnicity data. Most Italians in Australia were born in Italy, but many Greeks were born outside Greece, for example. The majority of Chinese Australians were not born in China but in Hong Kong or other South East Asian states.

In the past most Australians declared adherence to a denomination, usually Protestant or Catholic. Religious data was of great interest to the churches and also to educational and welfare agencies. More recently there has been an expansion of non-Christian denominations where the notion of denominational exclusiveness may not be so rigid. Many Chinese, for example, may not state a religion because they do not adhere to a particular temple but worship within the home. More importantly, the numbers declaring 'no religion' or not answering, have increased to a quarter of all respondents. Religious data can be used, with care, in tracing remote ancestry (such as German Lutherans) or ethnicities which are coterminous with religions, such as Sikhs or Jews. The most important change in recent years has been the replacement of Anglicans by Catholics as the largest single denomination. Such data has never indicated active adherence, nor does it now.

Birthplace and religious data is useful in measuring likely ethnic strength and concentration, especially in the first generation of immigrants. There is a tendency in Australia, as elsewhere, for organisations representing groups to exaggerate their numerical followings in order to gain political significance or to impress funding agencies. Hard census data counters this and provides a base for rational measurement of services and entitlements. This does not prevent interested parties from questioning the census process itself. Claims that respondents are 'afraid' to call themselves, for example, Muslims or Macedonians may well be true in limited cases. But the overall picture is reasonably sound, and certainly as much so as in any other census system.

Birthplace data in itself does not tell us much about the ethnic background of those who were born in Australia. As a normal immigration pattern is for arrivals to be in their mid-twenties and to produce most of their children after arrival, this presents problems in assessing the dimensions of ethnic groups. The Australian Census also asks details of parental birthplaces and this can be used to measure the size of the second generation. In 1991 there were 1,107,119 born in the United Kingdom, but a further 1,417,164 with one or both parents born in the United Kingdom. The longer resident a migration 'wave' has been, the larger the second generation proportion of the total ethnic group. The second generation outnumbers the first for Italian and Greek birthplaces but is outnumbered by the first for Yugoslav and Viet Nam birthplaces. As assimilation and language loss is more marked in the Australian-born, such information is relevant in assessing the likely needs of an ethnic group.

Birthplace data must always be modified by other information if a meaningful analysis of ethnicity is being attempted. Of major birthplace groups, New Zealand is at least 12 per cent Maori and Polynesian, Yugoslavia has fallen into its component ethnicities, Viet Nam has sent a large Chinese migrant contingent as have Malaysia and Singapore. Arrivals from the Lebanon (68,787 first and 67,453 second generation in 1991) may be Catholics, Orthodox, Shi'a Muslims, Sunni Muslims, Druze or Armenians, each with differing loyalties and orientations. Those from India have, until recently, been mostly English-speaking Christian Anglo-Indians, with many of those speaking Hindi coming from Fiji. There are very few sources of Australian immigrants which are not ethnically mixed. Moreover, it is common for minorities to emigrate, often to escape persecution. Only a handful from Iraq are Arab Muslims while the great majority are Christians.

Changes in the classification procedures for the 1991 Census led to the widest range of birthplaces and religions yet recorded. The major (over 20,000) birthplaces of those born overseas, and their second generation, are set out in the following table.

TABLE 1 BIRTHPLACES AND SECOND GENERATION(a) OF PEOPLE WITH MAIN ENGLISH-SPEAKING(b) AND NON-ENGLISH SPEAKING ORIGINS, 1991

Country	*First generation*	*Second generation*
	MAIN ENGLISH SPEAKING ORIGINS	
United Kingdom	1,107,119	1,417,164
New Zealand	264,094	167,249
Ireland	51,642	95,168
South Africa	49,009	23,034
United States of America	43,783	31,945
Papua New Guinea(c)	23,576	10,886
Canada	22,502	17,029
	NON-ENGLISH SPEAKING ORIGINS	
Italy	253,332	326,989
Yugoslavia	160,479	120,671
Greece	136,028	150,913
Viet Nam	121,813	25,105
Germany	111,975	137,621
Netherlands	94,692	139,567
China	77,799	28,580
Philippines(c)	73,144	22,587
Malaysia	71,665	23,103
Lebanon	68,787	67,453
Poland	68,496	53,161
India(c)	60,598	36,801
Hong Kong	57,510	14,330
Malta	53,858	76,588
Sri Lanka(c)	37,263	12,262
Egypt	33,140	29,017
Indonesia	32,688	14,966
Fiji	30,100	11,678

For footnotes *see* end of table.

TABLE 1 BIRTHPLACES AND SECOND GENERATION(a) OF PEOPLE WITH MAIN ENGLISH-SPEAKING(b) AND NON-ENGLISH SPEAKING ORIGINS — *continued*

Country	*First generation*	*Second generation*
	NON-ENGLISH SPEAKING ORIGINS	
Turkey	27,770	14,659
Hungary	27,046	24,273
Chile	24,042	7,137
Singapore(c)	24,021	9,537
Cyprus	22,031	20,157
Austria	21,586	25,642
Korea	20,383	2,514

(a) Second generation includes those with one or both parents born in that country. (b) Limited to countries of first generation over 20,000. (c) A majority of settlers from these countries use English as their home language. In the case of Papua New Guinea the majority are of Australian or European origin.
Source: Census of Population and Housing.

The above table indicates that those arriving in Australia from the 'older' migration countries have already produced a considerable second generation. Such groups include those from the United Kingdom, Italy, Greece, Germany, the Netherlands, Malta, Ireland and Austria. In all of these the second generation outnumbers the first. This reflects the fact that under the restrictive immigration policy in place before 1975 admissions were largely restricted to Europeans. It also reflects the decline in such admissions caused by rising living standards in Europe and the replacement of such intakes by those from Asia once this became possible. Among smaller groups where the second generation outnumbers the first, are those coming as refugees after World War II, including Latvians, Ukrainians, Lithuanians and Estonians.

Birthplaces on a regional basis is another way of illustrating shifts in the origins of the population since 1975. Table 2 shows birthplaces on a regional basis by percentage of the total population.

TABLE 2 NUMBER AND PERCENTAGE OF THE TOTAL POPULATION BORN IN EACH REGION IN 1971, 1986 AND 1991

	1971		*1986*		*1991*	
Region	*Number*	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*
Australia	10,026,244	78.6	12,110,457	77.6	12,725,162	75.5
Oceania	97,927	0.8	264,421	1.7	351,464	2.1
United Kingdom & Ireland	1,088,210	8.5	1,127,196	7.2	1,174,860	7.0
Southern Europe	669,450	5.2	670,002	4.3	662,331	3.9
USSR/Rest of Europe	453,085	3.6	448,247	2.9	462,454	2.7
North America	42,873	0.3	62,819	0.4	75,067	0.4
Latin America	12,879	0.1	53,640	0.3	71,955	0.4
Africa(a)	33,709	0.3	77,914	0.5	99,058	0.6
Southern Asia	39,960	0.3	84,305	0.5	110,494	0.7
East Asia	28,113	0.2	88,293	0.6	199,515	1.2
South East Asia	38,440	0.3	240,560	1.5	377,844	2.2
Middle East(a)	44,352	0.3	129,984	0.8	167,587	1.0
Total(b)	**12,755,638**	**100.0**	**15,602,279**	**100.0**	**16,850,334**	**100.0**

(a) Africa excludes Egypt; Middle East includes Egypt. (b) Includes unstated birthplaces.
Source: Bureau of Immigration Research Statistics Section (1993), (author's calculations).

Cultural diversity and ethnic groups

Birthplace has been collected in Australian censuses since 1871 and was produced for British and a few other birthplaces well before that. Indicators of ethnic origin were also provided for non-Europeans until 1966 and have been published for Aborigines and Torres

Strait Islanders since 1971. There is a wealth of information about non-Europeans although much of it is based on racial categories which many social scientists would now regard as very dubious. Because of the historic obsession with race those of mixed descent were also classified as such although they may have been culturally quite assimilated to the Anglo-Australian mainstream. Indigenous people choosing to identify themselves as having Aboriginal or Torres Strait Islander origin are so classified in recent census enumerations. Perhaps partly because they are based on self-identification, Aboriginal (and particularly Torres Strait Islander) counts have been volatile in recent censuses, although this is much less apparent in the latest census. New Zealand has followed the same path in enumerating Maoris under the *Maori Affairs (Amendment) Act of 1974*. The definition of indigenous peoples becomes very important when a special legal or constitutional status is extended to them. In New Zealand, Maoris have been entitled to four members of parliament since 1867. In Australia, Aborigines and Torres Strait Islanders form the constituency for elections to the regional level of the Aboriginal and Torres Strait Islander Commission.

No other ethnic minorities in Australia now have the special status of indigenous people nor do they suffer under the legal discrimination which non-Europeans experienced in the past. Their definition is thus mostly of concern to themselves and has no legal implications. However, many services are now delivered on an 'ethnic-specific' basis under the Commonwealth Access and Equity approach which seeks to equalise opportunities to enjoy public provision. In this delivery, language is usually taken as the most important 'barrier' to equity. However, 'cultural barriers' are often mentioned in official formulations, though rarely spelled out very specifically. As already argued, birthplace is often an inadequate measure of ethnicity. Most societies are multicultural and those emigrating to Australia are frequently drawn from ethnic minorities in their own birthplace. Moreover, many ethnic groups have large diasporas, of which the most extensive are those of British, Irish or Chinese origin.

The size of an ethnic group can never be definitively determined because the concept of an ethnic group is elastic. There is an element of choice in immigrant situations where the only division is between citizens and non-citizens. Once Australia abandoned racial classification of immigrants, which it finally did in 1973, there was no official reason for delimiting ethnic groups.

Birthplace became an unsatisfactory surrogate for ethnicity, to be joined by religion in many cases and, from 1976, by language. To illustrate varying definitions of an ethnic group, some 1991 figures of birthplace, religion and language are given in the following table.

TABLE 3 MEASURES OF SELECTED ETHNICITIES IN 1991: BIRTHPLACE, RELIGION AND LANGUAGE ('000)

Ethnicity	*Birthplace*		*Religion*		*Language*	
Italian	Italy	253	n.a.		Italian	419
Greek	Greece	136	Greek Orthodox	357	Greek	286
Chinese	China & Hong Kong	135	n.a.		Chinese	262
Vietnamese	Viet Nam	122	Buddhist	137	Viet	110
Polish	Poland	69	n.a.		Polish	67
Indian	India	61	Hindu	43	Indian languages	39
German	Germany	112	n.a.		German	113
Maltese	Malta	54	n.a.		Maltese	53
Dutch	Netherlands	95	n.a.		Dutch	47
Turkish	Turkey	28	Muslim	147	Turkish	42
Jewish(a)	n.a.		Jews	73	Yiddish	10
Arabic	Arabian States	120	Muslim	147	Arabic	163

(a) The largest number of Jews were born in Australia and the largest number spoke English as their mother tongue.
NOTE: n.a. indicates that a characteristic is shared with too many others to be useful, for example, Catholicism.
Source: Census of Population and Housing.

Clearly there are many different dimensions to ethnicity. Even an attempt at tabulation of measures, as above, raises many difficulties. Nor does the 1991 Census ask for self-identification, other than for Aborigines. However, in a single departure, the 1986 Census followed American and Canadian precedent in asking respondents to nominate their ancestry, allowing for dual ethnicities such as Anglo-Indian or Greek–Australian. Results were tabulated on the basis of the first ethnicity in a dual definition. This resulted in various major proportions as shown in the following table.

TABLE 4 MOST COMMONLY REPORTED ANCESTRIES IN 1986

Ancestry	*Number*	*Per cent*
English(a)	5,561,563	35.6
Australian	2,905,824	18.6
Italian	507,186	3.3
Irish(a)	377,590	2.4
Scottish(a)	339,795	2.2
Greek	293,020	1.9
'British'(a)	285,119	1.8
English-Irish(a)	258,857	1.7
German	233,320	1.5
Australian-English(a)	194,288	1.2
English-Scottish(a)	183,008	1.2
Chinese	172,483	1.1
Aboriginal	153,012	1.0
Dutch	149,687	1.0
All others(b)	3,987,404	25.4

(a) 'Anglo-Celtic'. (b) Includes 'Not stated' (6.8%).
Source: Census of Population and Housing.

This attempt to get Australians to nominate their ancestry showed that over 46 per cent classed themselves as 'Anglo-Celtic', including a considerable number of English, Irish and Scottish mix. To these might be added most who called themselves simply 'Australian'. This gives an 'Anglo-Australian' total of about two-thirds of the population. One mystery in the figures is the low percentage prepared to call themselves Irish or Scottish. It is probable that many of these preferred to be Australian, as calculations by Dr Charles Price, the leading expert in ethnic composition, estimated that 17 per cent of the population were of Irish and 12 per cent of Scottish descent in 1988. The figures for other ancestries, including small groups, were much closer to Dr Price's estimates. It seems from the 1986 figures that Australians of British or Irish descent, who make up by far the largest component of the population, do not attach much significance to their ancestry, while those from non-British minorities are more precise. This, at least, is what common sense would suggest. It is also clear that those who decry the term 'Anglo-Celtic' are overlooking a large part of the population which does descend from mixtures of the English, Scottish and Irish settlers of the past.

Ethnic concentrations

In all societies there is a tendency for immigrant and ethnic minority groups to concentrate in particular areas. These are often wrongly termed 'ghettos', suggesting isolation from the majority, poor and even criminal characteristics and undesirability. However, there are few recent instances of such deprived concentrations in Australia, compared, for example, with the situation in the United States or the United Kingdom. Immigrants to Australia have been carefully selected although social deprivation can be found amongst many refugees and some relatives of previous settlers. There are few slum areas in Australian cities comparable to those found in Europe and North America, and none comparable to those found in the rest of the world. The worst housing and living conditions are those of Aborigines in rural and outback areas, which are often far worse than for any other identifiable group in Australian society. This low incidence of slum ghettos reflects the relative affluence of Australia since the 1880s and the newness of much housing. There are, undeniably, suburbs of relative deprivation on the outskirts of the major cities. These are not necessarily inhabited by ethnic minority groups.

Australians have a long history of opposition to 'ghettos' which can be traced back for over a century. Certainly, on the goldfields the large Chinese populations had often been confined to certain areas by official decree. But when a group of destitute Italians arrived in New South Wales in 1881, they were told by the New South Wales Government that there could be no public assistance for them if they sought to settle together: 'the customs of the country and other circumstances render it undesirable, indeed almost impossible, for them to settle down altogether in one locality. Even if this were practicable it would not be for their own good to do so'. (*Address to the Italian Immigrants*, Sydney, 21st April 1881).

The Irish were believed to concentrate in urban ghettos, as they had done so in the United States and Britain. However, inspection of nineteenth century census data suggests that most Irish lived in rural areas until the 1890s. There were only a small number of metropolitan concentrations in areas such as Surry Hills and Paddington in Sydney or North Melbourne or Richmond in Melbourne. Even in those areas there was always a considerable mixing of British immigrant origins. The only areas with a Catholic majority were small rural settlements such as Boorowa (New South Wales) and Koroit (Victoria). A stronger ethnic concentration in rural areas was of Germans in South Australia. Until the implementation of the White Australia Policy in 1901, there were strong concentrations of Chinese and Pacific Islanders in parts of North Queensland.

The German Lutheran villages of South Australia represent almost the only survival of these nineteenth century concentrations, along with the Chinatowns of Melbourne, Sydney and Brisbane. More recent rural settlements began to develop from the early twentieth century, although they were always limited by the itinerant character of many immigrant workers. Italians have been the most numerous non-British settlers, shaping the character of several sugar towns in North Queensland (such as Ingham), in the Murrumbidgee Irrigation Area (Griffith) and along the Murray (Cobram). Other small groups concentrating before World War II included Albanians around Shepparton (Victoria) and Croatians in the Swan Valley (Western Australia). These small settlements were strengthened after the War, with the beginning of the immigration program in 1947. Subsequent settlements were also mainly of southern Europeans, though there was some Dutch settlement in areas such as northern Tasmania, King Island and in Gippsland.

It was in the cities that very large concentrations began to build up after 1947, reviving once again dormant fears of 'ghettos'. Earlier concentrations of Jews had existed for many years, especially in St Kilda, Carlton and Caulfield in Melbourne and in Bondi in Sydney. Because of the impact of White Australia, the Chinatowns were dying out though there has been a continuous Chinese presence in Little Bourke Street, Melbourne for 140 years. A small Lebanese community had its centre in Redfern, Sydney, but many of its members were hawkers and shopkeepers in rural areas, as were many Chinese and Jews. Otherwise, Australian cities were very monocultural apart from the divide between Catholics and Protestants. Even that division was not very clear cut, although Protestants tended to be concentrated by the 1940s in middle class areas such as Camberwell in Melbourne or the North Shore in Sydney, while Catholics were more commonly found in working class areas.

These settlements were usually very small but aroused hostile comment because of their visibility. The displaced person arrivals from 1947 did not form such visible communities. They were initially housed in rural camps such as Bonegilla, Bathurst or Greta (New South Wales) or in construction camps for public works such as the hydro-electric schemes of Tasmania or the Snowy Mountains. Although they eventually tended to settle in particular suburbs, they did not do so in large enough numbers to attract attention. Nor did they develop visible commercial centres comparable to the Chinatowns or the small Italian shopping centres in Carlton (Melbourne) or Leichhardt (Sydney).

Most of these small settlements provided a nucleus for much larger concentration as the post-1947 immigration program got under way.

But this proved to be a temporary phase. While Italians initially settled in Leichhardt and Carlton, they soon spread outwards, with much larger populations eventually to be found in the Drummoyne area of Sydney and the Coburg area of Melbourne. New areas opened up, including those close to migrant hostels in the big cities, though not in most rural areas. This became particularly important as these hostels were increasingly limited to refugees from countries which had no previous major presence in Australia. The location of hostels was very important in establishing the Vietnamese communities in Cabramatta (Sydney), Springvale and Footscray (Melbourne), Darra (Brisbane) and Woodville (Adelaide).

Most postwar non-British immigrants have gone initially into industrial employment and many have stayed there. Consequently, the largest communities are based on industrial suburbs. These often develop a multicultural character, rather than being dominated by one or even a few ethnic groups. Most important in this development have been the so-called 'green field' industrial sites to the west of Melbourne and Sydney. Similar sites to the north and south of Adelaide attracted mainly British migrants, who were given special concession in the allocation of public housing in the 1950s and 1960s. More typically, British migrants, like the Dutch and Germans, gravitated to the new outer residential suburbs on the opposite fringe from industrial development, especially in eastern and bayside Melbourne, the Sydney North Shore and the south-eastern suburbs of Perth.

The stages of settlement vary in the major cities. As the metropolitan city with the lowest proportion of non-British migrants, Brisbane showed an older pattern of concentration in the inner suburbs of West End (Greek), Fortitude Valley (Chinese) and Newstead (Italian). This was broken by Vietnamese settlement around the Wacol migrant camp and by Aboriginal concentration in the public housing of Inala. Newcastle, another major city with a small migrant population, shows a similar pattern with concentrations in the older areas such as Hamilton. Elsewhere there is a very wide spread in working class suburbs, with a developing settlement in some important middle-class areas as well. The Jewish population of Australia is very heavily concentrated in middle-class areas such as Caulfield and St Kilda in Melbourne and Waverley and Ku-ring-gai in Sydney. The larger Muslim population, in contrast, lives overwhelmingly in industrial areas such as Canterbury and Auburn in Sydney or Brunswick and Coburg in Melbourne.

Bearing these variations in mind, the normal settlement patterns for non-British migrants follow three stages: firstly, settlement in inner-city areas or near migrant hostels; secondly, movement outwards along public transport routes; and thirdly, dispersal into more middle-class areas particularly for the younger generation. Some ethnic groups, most notably the Maltese, have settled in and remain in, outer industrial suburbs with little movement. Some, like the Dutch and Germans rarely passed through the first stage but went directly to outer residential suburbs. Many Chinese students settle near universities while middle-class Hong Kong and Japanese migrants go directly to middle-class suburbs. But the bulk of immigrants from southern Europe, Indochina, the Middle East and Latin America, follow the stages outlined above. Institutions and shopping centres tend to lag behind residential movement, so that the main Italian shopping centres are still Lygon Street, Carlton or Norton Street, Leichhardt. More recently arrived groups such as the Vietnamese still live close to their commercial and institutional centres in suburbs such as Cabramatta or Bankstown in Sydney or Richmond, Springvale and Footscray in Melbourne.

The concentration of various groups can be gauged by figures for local government areas in the major cities (and by Statistical Local Areas in the unified City of Brisbane). Some of the largest concentrations are of British migrants in suburbs such as Elizabeth, Salisbury, Tea Tree Gully and Noarlunga in Adelaide or Armadale, Kalamunda, Gosnells and Wanneroo in Perth. But these attract little attention and they are not included in the following table which is based on language use. The Dutch, Germans, Chinese, Filipinos, Indians and Sri Lankans are widely distributed in residential suburbs. The most concentrated Chinese groups are those from Viet Nam who often settle in the same areas as Vietnamese, which other Chinese do not. Aborigines in Sydney, Brisbane, Adelaide and Perth tend to be found on the outskirts, particularly in areas with public housing. Like many other ethnic groups they often have social centres in the inner-city but do not necessarily live close to these.

TABLE 5 LOCAL GOVERNMENT AREAS OR CENSUS DISTRICTS (BRISBANE) WITH OVER 45 PER CENT USING A LANGUAGE OTHER THAN ENGLISH (LOTE) AT HOME IN 1991

LGA/CD	*% LOTE*	*Main LOTE*	*%*	*Second main LOTE*	*%*
Sydney					
Fairfield	63.2	Vietnamese	9.8	Chinese	8.7
Canterbury	60.4	Arabic	14.2	Greek	13.0
Marrickville	55.5	Greek	11.3	Chinese	6.1
Ashfield	52.5	Italian	11.9	Chinese	11.5
Botany	51.9	Greek	10.5	Spanish	6.3
Burwood	51.2	Chinese	10.7	Arabic	7.0
Rockdale	45.0	Greek	10.2	Arabic	6.3
Sydney(a)	46.1	Chinese	10.0	Japanese	2.6
Auburn	59.4	Arabic	12.0	Chinese	10.2
Melbourne					
Sunshine	58.7	Maltese	8.3	Italian	5.8
Keilor	50.1	Italian	12.6	Maltese	5.6
Footscray	51.6	Vietnamese	10.4	Italian	5.8
Whittlesea	51.0	Italian	15.5	Macedonian	11.2
Coburg	49.8	Italian	20.4	Arabic	6.4
Brunswick	54.1	Italian	15.8	Greek	11.7
Preston	46.8	Italian	18.6	Greek	8.1
Northcote	46.2	Greek	15.4	Italian	11.5
Richmond	47.6	Greek	10.8	Chinese	10.5
Oakleigh	50.4	Greek	15.0	Italian	7.9
Adelaide					
Thebarton	45.6	Greek	22.2	Italian	11.6
Brisbane					
Darra-Sumner	53.5	Vietnamese	28.0	Polish	4.9

(a) Sydney has a very high 'Not stated' group.
Note: Percentages are for the population five years and older. Total LOTE includes 'Not stated'.
Source: Census of Population and Housing.

The potential political impact of such heavy migrant concentrations has yet to show much result at the national level, although it is apparent in some State Parliaments. A ranking of federal electorates with over one-quarter of Non-English Speaking Background (NESB 1) people, the southern European-born and South East Asian-born percentage is given in the following table.

TABLE 6 SELECTED FEDERAL ELECTORATES SHOWING THE PERCENTAGE OF NON-ENGLISH SPEAKING BACKGROUND, SOUTHERN EUROPEAN-BORN AND SOUTH EAST ASIAN-BORN IN 1991 (per cent)

Electorate	*NESB1*	*Southern European-born*	*South East Asian-born*
Fowler	44.5	8.4	19.6
Grayndler	39.0	13.4	7.2
Watson	38.6	13.1	5.2
Prospect	37.7	11.4	10.0
Maribyrnong	35.9	20.5	5.6
Hotham	35.7	11.2	10.2
Blaxland	34.6	8.0	7.8
Reid	34.2	5.4	6.7
Gellibrand	33.8	14.5	9.4

For footnotes *see* end of table.

TABLE 6 SELECTED FEDERAL ELECTORATES SHOWING THE PERCENTAGE OF NON-ENGLISH SPEAKING BACKGROUND, SOUTHERN EUROPEAN-BORN AND SOUTH EAST ASIAN-BORN IN 1991 — *continued*
(per cent)

Electorate	*NESB*	*Southern European-born*	*South East Asian-born*
Lowe	31.0	12.1	3.0
Kingsford-Smith	30.6	8.0	6.3
Melbourne	30.5	9.2	10.0
Holt	30.4	8.1	4.9
Calwell	30.2	14.5	3.0
Wills	29.0	17.0	1.7
Batman	28.8	18.2	2.7
Scullin	28.3	20.5	2.2
Barton	27.5	11.7	2.6

Note: Percentages are of total population, not electors.
Source: Kopras (1993); Tables 20, 21 and 22.

These electorates were all won by the Australian Labor Party in 1993, except for Wills, which was held by an Independent having previously been represented by Prime Minister Bob Hawke. Lowe was won from the Liberals. All these electorates are in Sydney (9) or Melbourne (9). Despite their ethnic composition, only one (Calwell) is represented by an MP born in a non-English-speaking country.

Managing diversity

The ethnic diversification of Australia over the past 50 years has caused few serious social problems. The serious social disadvantages of Aboriginal people have had more political impact and attracted more programs and funding than those of immigrants, where the largest public expenditures have been on teaching English. The main problem has been encountered in recent years by those unable to speak English and finding it difficult to gain employment in a high unemployment economy. This problem was not faced in the same way by arrivals before 1975 except in short-lived depressions. Another problem has been the persistence of xenophobic attitudes often traceable to Australia's past, and particularly opposition to Asian immigration. A further issue has been public scepticism about multiculturalism and especially about periodic disputes between a small number of organised ethnic groups.

To deal with such issues all Australian governments, national, State and Territory, have adopted multicultural policies and set up relevant institutions. Among the most important of these have been the Office of Multicultural Affairs, created within the Department of Prime Minister and Cabinet in 1987. State Governments have set up ethnic affairs commissions in most cases or allocated resources for equivalent sub-departments. The Department of Immigration and Ethnic Affairs retains a responsibility for funding ethnic-specific welfare agencies and migrant resource centres. A major institution has been the Special Broadcasting Service, whose multilingual television coverage has recently been expanded outside the capital cities. All these provisions are designed to maintain social harmony and to integrate ethnic groups within Australian society on the basis of tolerance and citizenship. The absence of serious social conflict suggests that this strategy has been a success, although the control and planning of immigration is an important factor, as is the absence of other major social tensions in Australian society.

REFERENCES

AUSTRALIAN BUREAU OF STATISTICS (1984), The measurement of ethnicity in the Australian census of population and housing, Canberra, ABS

BUREAU OF IMMIGRATION AND POPULATION RESEARCH (1993), Statistical Focus: Birthplace and Related Data from the 1991 Census, Canberra, BIPR Statistics Section

BURNLEY, I., ENCEL, S. AND McCALL, G. (eds.) (1985), Immigration and Ethnicity in the 1980s, Melbourne, Longman Cheshire

CENSUS APPLICATIONS (1991), Birthplace, Language, Religion 1971–1986, Canberra, AGPS for Bureau of Immigration Research

JUPP, J. (ed), (1988), The Australian People, Sydney, Angus and Robertson

JUPP, J. (ed), (1991), 'Managing Ethnic Diversity: How does Australia compare?' in Castles, F.G. (ed) Australia Compared, Sydney, Allen & Unwin, pp 38-54

JUPP, J. and McROBBIE, A. (1989), Australian Languages: an Introductory Atlas, Canberra, Centre for Immigration and Multicultural Studies

JUPP, J. and YORK, B. (1994), Birthplaces of the Australian People: Commonwealth Censuses, 1911–1991, Canberra, Centre for Immigration and Multicultural Studies

JUPP, J., YORK, B. and McROBBIE, A. (1990), Metropolitan Ghettos and Ethnic Concentrations Wollongong, Centre for Multicultural Studies

KOPRAS, A. (1993), Comparisons of 1991 Census Characteristics: Commonwealth Electoral Divisions, Canberra, Department of the Parliamentary Library

PRICE, C.A. (ed), (1991), Australian National Identity, Canberra, Academy of the Social Sciences in Australia

Chapter Six

Labour

Contents

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The information relating to labour which is presented in this chapter covers a wide range of aspects. Labour statistics are important economic indicators — changes in measures of employment, unemployment, earnings, overtime, job vacancies and industrial disputes provide insights into the performance of the economy, and the effects of economic policy settings. But labour statistics are also very much about people — their entry to the labour force, participation in it, whether they are employed or not; how much they earn, what other benefits they receive, how many hours they work; their mobility between jobs, the training they receive, and their retirement from employment.

This chapter looks first of all at the size and composition of the labour force, including age, sex, labour force status and birthplace.

It goes on to cover employed persons — demographic characteristics, occupation, industry, private and public sector, hours worked and other characteristics of their working lives. Next comes statistics on unemployment (and unemployment rates), demographic characteristics of the unemployed, their job search experience and job vacancies.

The section on persons not in the labour force which follows provides information about those persons who are marginally attached to the labour force, and therefore are potential participants in it. These include discouraged jobseekers.

Next, the chapter looks at those persons who have retired from full-time work and the intentions of older persons to retire.

The section dealing with earnings commences with a brief discussion on the ways in which awards are set, and notes some important wage decisions in most recent years. Increases in award rates and average weekly earnings are presented, along with details of award coverage and the distribution and composition of earnings.

As well as wages and salaries, employees receive and employers pay for a range of additional benefits. Leave entitlements are widespread. Superannuation is an area that has seen marked change in recent years. Other employee benefits, and costs to employers of employing labour are set out in detail.

The chapter moves on to examine hours worked, including overtime. Statistics about the extent, cause and duration of the current historically low levels in industrial disputation are presented, followed by details of trade union size and membership.

This is followed by statistics on training expenditure by employers, and details of how workers obtain training. The chapter concludes with information on the range of Commonwealth government employment and training programs presently available.

THE LABOUR FORCE

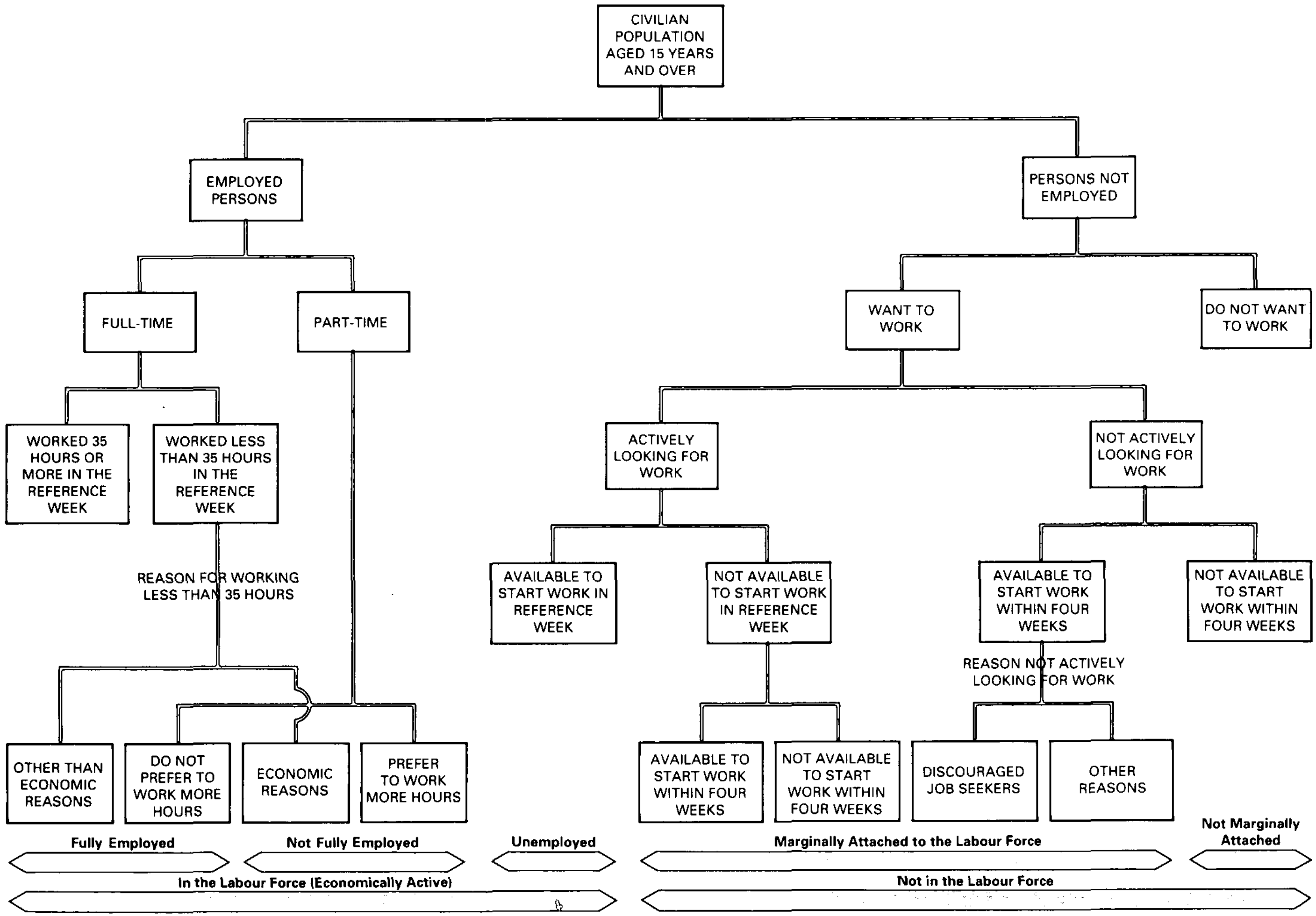
Labour force statistics are collected in a monthly population survey of a large sample of dwellings across Australia. The survey provides timely estimates of the labour force status of the Australian population, together with basic demographic data to enable various characteristics of the employed and unemployed to be analysed.

Fundamental to the measurement of employment and unemployment is the concept of the labour force. The labour force is defined as those persons aged 15 and over who during a particular week are either employed or unemployed. The labour force represents the total official supply of labour available to the labour market during a given week.

The Australian labour force conceptual framework is set out schematically in diagram 6.1.

This section presents some summary statistics on the civilian labour force drawn from the ABS monthly Labour Force Survey and associated supplementary surveys. Set out below is a range of characteristics such as whether persons are employed, unemployed or not in the labour force, together with demographic information (that is, age, sex, marital status, etc.). Further details concerning the scope, coverage and survey methods (as well as more detailed statistics) of the labour force and supplementary surveys can be found in the publications listed at the end of this chapter.

6.1 THE AUSTRALIAN LABOUR FORCE FRAMEWORK



Characteristics of the labour force

The size and composition of the labour force is not static over time. Changes in the labour force are caused by an increase/decrease in labour force participation or in the population aged 15 and over.

The contribution to labour force growth due to population increase has been declining steadily since 1987–88, whereas the contribution due to labour force participation is more variable. In 1991–92 and 1992–93, labour force participation had a downward effect on the labour force.

6.2 LABOUR FORCE: COMPONENTS OF CHANGE
(per cent)

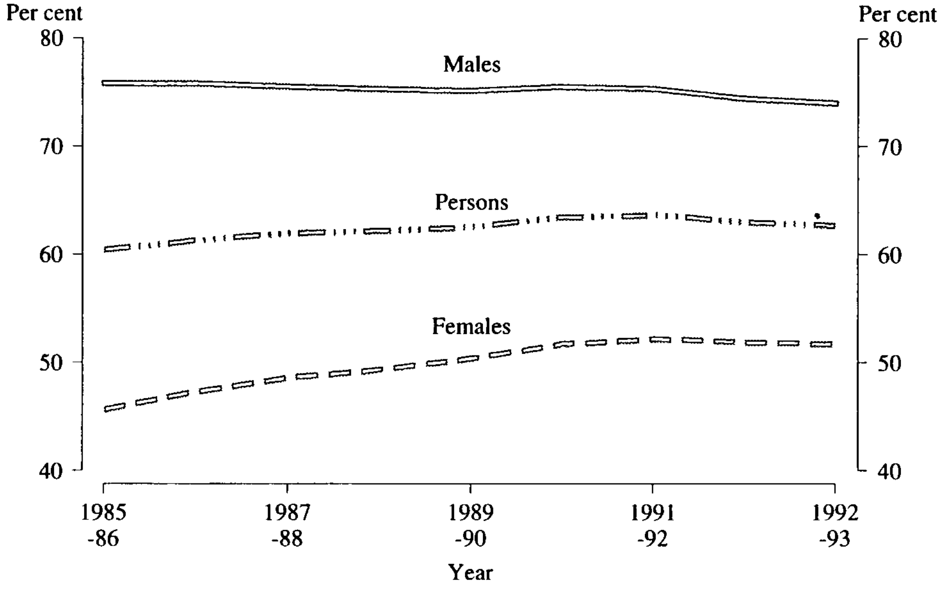
	Males			*Females*			*Persons*		
		Percentage points change due to			*Percentage points change due to*			*Percentage points change due to*	
Annual average(a)	*Percentage change in labour force*	*Population growth*	*Labour force participation*	*Percentage change in labour force*	*Population growth*	*Labour force participation*	*Percentage change in labour force*	*Population growth*	*Labour force participation*
1987–88	1.7	2.1	-0.4	3.5	2.1	1.4	2.4	2.1	0.3
1988–89	1.9	2.1	-0.2	4.1	2.0	2.0	2.8	2.1	0.7
1989–90	2.4	1.9	0.5	4.7	1.8	2.8	3.3	1.9	1.4
1990–91	1.6	1.8	-0.2	2.6	1.7	0.8	2.0	1.7	0.3
1991–92	0.3	1.6	-1.2	1.0	1.6	-0.7	0.6	1.6	-1.0
1992–93	0.7	1.3	-0.7	1.1	1.5	-0.3	0.9	1.4	-0.5

(a) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

The participation rate is one of the most important measurements of the labour force. It represents the proportion of the working age population who are in the labour force. Analysis of the participation rates provides the basis for monitoring changes in the size and composition of labour supply, particularly in terms of age, sex and marital status. The annual average participation rate for males has declined from 75.3 per cent in 1987–88 to 74.0 per cent in 1992–93. For females, the participation rate has increased steadily from an average of 49.4 per cent in 1987–88 to 52.2 per cent in 1990–91, but fell (to 51.7%) in 1992–93 (graph 6.3).

The following two tables provide more detailed information on the labour force status of persons. Table 6.4 presents the age and sex composition of the total labour force and shows that, in 1992–93, the labour force participation rate for 15 to 19 year olds stood at 55.2 per cent compared with 62.7 per cent overall. Table 6.5 shows changes in labour force status over time, with the steady increase in the female participation rate up to 1990–91 being a notable feature.

6.3 PARTICIPATION RATES, ANNUAL AVERAGE



Source: The Labour Force, Australia (6203.0).

6.4 CIVILIAN LABOUR FORCE, BY AGE, ANNUAL AVERAGE(a), 1992–93

	Number ('000)					Participation rate (%)				
		Females					Females			
Age group (years)	Males	Married	Not married	Total	Persons	Males	Married	Not married	Total	Persons
15–64	4,959.9	2,125.3	1,461.7	3,587.0	8,546.9	83.7	59.5	65.1	61.7	72.8
15–19	367.1	10.6	340.6	351.2	718.2	55.1	57.3	55.1	55.2	55.2
20–24	640.3	142.0	399.7	541.7	1,182.0	88.0	66.4	80.1	76.0	82.1
25–34	1,319.8	600.6	318.5	919.1	2,238.9	93.6	60.8	75.4	65.1	79.4
35–44	1,249.9	735.0	206.5	941.5	2,191.5	93.7	70.0	72.8	70.6	82.1
45–54	931.4	498.8	147.3	646.1	1,577.5	89.2	64.2	67.8	65.0	77.4
55–59	277.2	103.0	32.5	135.5	412.7	72.6	36.6	35.9	36.4	54.7
60–64	174.2	35.2	16.6	51.8	226.0	48.5	14.4	14.7	14.5	31.5
>64	74.9	14.3	10.4	24.6	99.6	8.5	3.0	1.5	2.1	4.9
Total	**5,034.9**	**2,139.5**	**1,472.1**	**3,611.6**	**8,646.5**	**74.0**	**52.8**	**50.1**	**51.7**	**62.7**

(a) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

6.5 CIVILIAN POPULATION AGED 15 AND OVER: LABOUR FORCE STATUS

Annual average(a)	Employed	Unemployed: Looking for full-time work	Unemployed: Looking for part-time work	Unemployed: Total	Labour force	Not in the labour force	Civilian population aged 15 years and over	Unemployment rate	Participation rate
	'000							%	
				MALES					
1987–88	4,354.4	310.7	34.3	345.0	4,699.4	1,540.8	6,240.2	7.3	75.3
1988–89	4,494.3	263.4	32.4	295.9	4,790.2	1,580.6	6,370.8	6.2	75.2
1989–90	4,622.2	248.2	34.4	282.6	4,904.7	1,587.7	6,492.4	5.8	75.5
1990–91	4,562.9	377.0	44.0	421.0	4,983.9	1,623.1	6,606.9	8.4	75.4
1991–92	4,459.2	497.5	44.2	541.7	5,000.9	1,710.7	6,711.6	10.8	74.5
1992–93	4,446.8	537.7	50.3	588.0	5,034.9	1,767.6	6,802.4	11.7	74.0
				FEMALES					
1987–88	2,901.9	183.1	82.4	265.5	3,167.4	3,244.9	6,412.3	8.4	49.4
1988–89	3,056.9	160.9	78.3	239.2	3,296.0	3,246.8	6,542.8	7.3	50.4
1989–90	3,218.1	154.8	77.6	232.4	3,450.5	3,212.4	6,662.9	6.7	51.8
1990–91	3,245.9	202.0	90.5	292.6	3,538.5	3,238.4	6,776.9	8.3	52.2
1991–92	3,224.9	253.7	93.4	347.2	3,572.1	3,314.6	6,886.7	9.7	51.9
1992–93	3,250.4	261.5	99.7	361.2	3,611.6	3,376.1	6,987.7	10.0	51.7

(a) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

The labour force participation rate for the overseas born in the Australian labour force at May 1993 was 59.9 per cent compared with the participation rate of 64.8 per cent for the Australian born. The participation rate for overseas-born persons born in other than main English-speaking countries was 56.8 per cent. Persons born in New Zealand had the highest participation rate (75.9%).

6.6 CIVILIAN LABOUR FORCE BY BIRTHPLACE, MAY 1993

	Employed: Full-time workers ('000)	Employed: Total ('000)	Unemployed: Looking for full-time work ('000)	Unemployed: Total ('000)	Labour force ('000)	Unemployment rate (%)	Participation rate (%)
Born in Australia	4,383.7	5,791.2	552.5	660.4	6,451.6	10.2	64.8
Born outside Australia	1,518.8	1,924.4	233.2	272.5	2,196.9	12.4	59.9
Main English-speaking countries	653.0	850.1	74.6	86.7	936.8	9.3	64.6
Other countries	865.8	1,074.3	158.6	185.8	1,260.1	14.7	56.8
Oceania	158.3	206.3	20.6	25.5	231.8	11.0	74.1
New Zealand	131.1	169.9	15.4	18.6	188.5	9.9	75.9
Europe and the former USSR	923.4	1,170.3	119.0	138.0	1,308.3	10.5	57.4
Germany	47.5	58.0	6.1	7.4	65.3	11.3	58.1
Greece	47.8	57.3	6.6	7.7	64.9	11.8	46.9
Italy	94.3	117.4	7.7	9.1	126.5	7.2	47.2
Netherlands	34.5	44.7	5.4	6.0	50.7	11.8	51.7
UK and Ireland	470.5	612.4	55.1	63.4	675.7	9.4	61.5
Former Yugoslav Republics	90.6	105.4	12.4	14.2	119.7	11.9	61.3
The Middle East and North Africa	58.7	72.0	24.0	27.1	99.1	27.4	52.6
Lebanon	17.4	24.2	12.0	12.2	36.4	33.6	50.2

continued ...

6.6 CIVILIAN LABOUR FORCE BY BIRTHPLACE, MAY 1993 — *continued*

	Employed		Unemployed				
	Full-time workers ('000)	*Total ('000)*	*Looking for full-time work ('000)*	*Total ('000)*	*Labour force ('000)*	*Unemployment rate (%)*	*Participation rate (%)*
South East Asia	140.7	173.8	36.1	42.3	216.1	19.6	61.7
Malaysia	31.2	41.2	*3.9	4.9	46.1	10.7	60.7
Philippines	31.7	39.9	5.9	6.7	46.7	14.4	65.3
Viet Nam	41.6	48.9	19.2	21.4	70.4	30.5	65.2
North-east Asia	73.7	92.5	10.7	12.3	104.8	11.7	54.1
China	40.6	49.3	6.7	7.6	56.9	13.3	64.9
The Americas	55.7	70.2	9.9	12.0	82.2	14.6	68.6
Other	108.3	139.3	12.8	15.3	154.6	9.9	69.6
India	33.8	41.4	*2.9	*3.3	44.7	*7.4	68.1

Source: The Labour Force, Australia (6203.0).

Statistics on labour force status of persons undertaking tertiary education are contained in the chapter on Education.

EMPLOYMENT

Broadly, persons are considered to be employed if they are doing any work at all, regardless of the number of hours worked. In the statistics, employment is presented according to the demographic characteristics of employed persons, their occupation and industry, hours worked and whether they are full-time or part-time workers. Data for employed wage and salary earners by whether they work in the private or government sector, and estimates for apprentices and qualified tradespersons are also included in this section.

By relating employment levels to population levels, the magnitude of job growth in the economy can be evaluated. The measure relating these two levels is the employment/population ratio. Its usefulness lies in the fact that while movements in the employment level reflect net changes in the levels of persons holding jobs, movements in the ratio reflect net changes in the number of jobholders relative to changes in the size of the population. While a rise in employment may not appear as a rise in the ratio because of continuing population growth, a decrease in employment will always appear as a fall in the ratio. In recent years the greatest change in employment/population ratios has been in the 15 to 19 age group. Since reaching a peak of 51.8 per cent in 1989–90, the employment/population ratio for 15 to 19 year olds has declined rapidly (while school retention rates have increased) and stood at 41.7 per cent in 1992–93.

6.7 EMPLOYED PERSONS: EMPLOYMENT/POPULATION RATIOS(a)
(per cent)

Annual average(b)	Age group (years) 15–19	20–24	25–34	35–44	45–54	55–59	60–64	>64	Total
					MALES				
1987–88	49.1	79.7	88.8	90.3	84.8	70.5	43.5	9.0	69.8
1988–89	51.7	81.7	89.0	90.8	85.4	69.8	45.4	9.0	70.6
1989–90	53.0	81.9	89.8	90.8	86.5	71.3	46.2	9.1	71.2
1990–91	47.5	77.4	86.7	89.4	85.8	70.5	45.9	8.9	69.1
1991–92	42.7	73.1	84.3	86.8	83.5	66.0	43.8	8.8	66.4
1992–93	41.0	72.3	83.0	85.9	82.8	64.4	41.2	8.3	65.4
					FEMALES				
1987–88	47.6	68.9	58.0	62.6	53.5	30.2	12.7	2.7	45.3
1988–89	49.2	70.3	59.2	65.2	55.6	31.2	14.6	2.3	46.7
1989–90	50.7	71.0	61.7	68.2	57.6	31.3	15.0	2.2	48.3
1990–91	46.3	69.5	60.8	67.5	59.2	34.2	15.7	2.5	47.9
1991–92	42.4	66.3	59.8	66.8	59.2	34.1	14.5	2.4	46.8
1992–93	42.3	65.4	59.0	65.5	60.8	34.6	14.2	2.1	46.5
					PERSONS				
1987–88	48.4	74.3	73.4	76.6	69.5	50.7	27.9	5.4	57.4
1988–89	50.5	76.0	74.1	78.1	70.9	50.8	29.8	5.1	58.5
1989–90	51.8	76.5	75.8	79.6	72.4	51.6	30.5	5.1	59.6
1990–91	46.9	73.5	73.8	78.5	72.8	52.6	30.8	5.3	58.3
1991–92	42.5	69.8	72.1	76.8	71.7	50.3	29.2	5.2	56.5
1992–93	41.7	68.9	71.0	75.7	72.1	49.7	27.7	4.8	55.8

(a) Employment/population ratio for any group is the number of employed persons expressed as a percentage of the civilian population aged 15 and over in the same group. (b) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

Employed persons, that is, employers, self-employed persons, wage and salary earners and unpaid family helpers, are those who, during the reference week, worked for one hour or more for pay, profit, commission or payment in kind in a job or a business, or on a farm. While estimates of self-employed persons have increased relatively steadily from a low of 708,400 in 1987–88 to 823,400 in 1992–93, estimates for wage and salary earners increased from 6,080,100 in 1987–88 to 6,661,800 in 1989–90, before declining to 6,416,600 in 1992–93.

6.8 EMPLOYED PERSONS: STATUS OF WORKER
('000)

Annual average(a)	Employers	Self-employed	Wage and salary earners	Unpaid family helpers	Total
1987–88	365.2	708.4	6,080.1	65.5	7,219.2
1988–89	367.4	734.4	6,371.9	66.5	7,540.3
1989–90	372.4	736.0	6,661.8	60.6	7,830.9
1990–91	368.4	763.2	6,589.6	67.1	7,788.3
1991–92	349.7	801.0	6,446.4	73.3	7,670.4
1992–93	342.1	823.4	6,416.6	82.2	7,664.4

(a) Averages calculated on quarterly estimates.
Source: The Labour Force, Australia (6203.0).

A measure of the relative importance of an industry is the number of persons employed by that industry and the work effort of those employed persons as measured by hours worked. Taken together, employment and hours worked by industry serve as an indicator of labour input to that industry. In 1992–93, average weekly hours worked by all employed persons stood at 34.4. Employed males worked an average of 39.0 hours per week while for females the weekly average hours worked was 28.0. All of these measures were lower than the equivalent figures for 1991–92.

6.9 EMPLOYED PERSONS BY INDUSTRY AND AVERAGE WEEKLY HOURS WORKED ANNUAL AVERAGE(a), 1992–93

	Number ('000)			*Average weekly hours worked*		
Industry	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Agriculture, forestry, fishing and hunting	284.5	121.4	405.9	49.7	29.7	43.7
Mining	79.9	8.7	88.7	42.1	34.2	41.3
Manufacturing	806.1	309.0	1,115.2	40.1	32.7	38.0
Food, beverages and tobacco	130.7	64.0	194.8	39.8	32.6	37.4
Metal products	150.5	25.0	175.5	40.1	31.8	38.9
Other manufacturing	524.9	220.1	745.0	40.1	32.9	38.0
Electricity, gas and water	86.9	12.0	98.9	35.7	32.0	35.2
Construction	465.1	70.7	535.8	40.0	20.3	37.4
Wholesale and retail trade	879.5	729.4	1,608.9	40.3	27.0	34.3
Transport and storage	295.0	77.6	372.7	41.6	32.0	39.6
Communication	80.2	35.3	115.5	35.8	30.7	34.2
Finance, property and business services	453.2	417.3	870.5	41.2	30.1	35.9
Public administration and defence	223.3	146.6	369.9	36.2	30.4	33.9
Community services	493.3	966.9	1,460.2	38.2	29.3	32.3
Recreation, personal and other services	276.0	346.4	622.3	37.6	27.0	31.7

(a) Averages calculated on quarterly estimates.
Source: The Labour Force, Australia (6203.0).

6.10 EMPLOYED PERSONS BY OCCUPATION, ANNUAL AVERAGE(a), 1992–93 ('000)

Occupation(b)	*Males*	*Married females*	*All females*	*Persons*
Managers and administrators	651.3	175.1	221.9	873.2
Professionals	595.3	278.1	441.1	1,036.4
Para-professionals	240.7	132.8	217.0	457.7
Tradespersons	1,022.1	70.7	119.7	1,141.8
Clerks	288.1	638.7	981.2	1,269.3
Salespersons and personal service workers	429.0	380.8	778.9	1,207.9
Plant and machine operators, and drivers	459.0	57.4	80.3	539.3
Labourers and related workers	737.4	267.8	401.4	1,138.8

(a) Averages calculated on quarterly estimates. (b) Classified according to the *Australian Standard Classification of Occupations* (ASCO), 1986.
Source: The Labour Force, Australia (6203.0).

Full-time workers are those who usually work 35 hours or more a week or who worked 35 hours or more during the reference week of the Labour Force Survey. Part-time workers are those who usually work less than 35 hours a week and who did so during the reference week. In 1992–93, there were 3,997,200 males employed full time (89.9% of male employment), whereas the number of females employed full time stood at 1,894,900 (58.3% of female employment), both a little lower than in 1991–92.

6.11 EMPLOYED PERSONS: FULL-TIME AND PART-TIME WORKERS BY AGE
ANNUAL AVERAGE(a), 1992–93
('000)

	Age group (years)								
	15–19	*20–24*	*25–34*	*35–44*	*45–54*	*55–59*	*60–64*	*>64*	*Total*
				MALES					
Full-time workers	153.0	448.3	1,097.1	1,091.4	819.0	222.5	121.7	44.3	3,997.2
Part-time workers	120.0	77.4	73.4	54.4	45.2	23.8	26.2	29.2	449.6
Total	**273.0**	**525.6**	**1,170.5**	**1,145.7**	**864.2**	**246.3**	**148.0**	**73.4**	**4,446.8**
				FEMALES					
Full-time workers	94.8	337.4	533.5	473.9	356.9	66.3	23.4	8.6	1,894.9
Part-time workers	174.7	128.6	299.4	399.6	247.8	62.3	27.4	15.8	1,355.5
Total	**269.5**	**466.0**	**832.9**	**873.4**	**604.7**	**128.6**	**50.8**	**24.4**	**3,250.4**

(a) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

Tables 6.12, 6.13 and graph 6.14 provide various views of the distribution of employed wages and salary earners between industries, the private and public sectors, and States and Territories. It should be noted that these statistics are obtained from the Survey of Employment and Earnings conducted among employers and, as such, are complementary to but not compatible with, those from the household-based Labour Force Survey. While the latter provides better estimates of overall employment movements at Australia and State/Territory levels, the former provides other dissections by industry and sector.

The number of employed wage and salary earners in Australia in the private and public sectors is shown in graph 6.14. The number of employed wage and salary earners in the private sector grew steadily for a number of years to 4,591,900 in December 1989. Since then there has been a fall of 11.0 per cent in the level of employment in the private sector to 4,085,800 in September 1993.

The number of employees in the public sector has also fallen over this time period, from 1,729,900 in December 1989 to 1,654,200 in September 1993 (4.4%).

6.12 EMPLOYED WAGE AND SALARY EARNERS: INDUSTRY BY SECTOR ('000)

	Private sector				Public sector			
Industry	*Sept. 1990*	*Sept. 1991*	*Sept. 1992*	*Sept. 1993*	*Sept. 1990*	*Sept. 1991*	*Sept. 1992*	*Sept. 1993*
Agriculture, forestry, fishing and hunting(a)	. .	. .	. .	. .	7.6	7.4	5.2	4.7
Mining	77.2	72.4	72.5	61.7	6.1	5.4	4.8	3.9
Manufacturing	996.4	878.9	875.2	863.9	33.0	25.1	24.2	20.0
Electricity, gas and water	1.7	3.2	3.1	2.8	112.0	106.3	97.7	88.3
Construction	248.4	229.0	211.8	210.9	45.2	48.0	42.4	40.6
Wholesale and retail trade	1,246.6	1,200.4	1,191.3	1,154.9	4.2	3.4	2.8	2.1
Transport and storage	167.7	151.8	151.3	164.6	131.7	123.3	112.8	101.9
Communication	0.9	1.4	1.1	1.1	128.4	120.4	117.3	104.7
Finance, property and business services	681.5	635.8	653.9	643.2	115.7	106.7	105.1	98.4
Public administration and defence(b)	—	—	—	—	312.4	318.5	320.6	329.3
Community services	507.9	532.8	549.9	549.4	826.9	838.8	836.6	837.8
Health	234.0	246.3	250.2	262.5	294.7	299.0	277.7	280.8
Education	115.8	125.1	118.7	103.9	397.6	399.0	419.1	410.8
Other	67.3	69.5	79.3	72.1	108.9	114.0	113.7	117.0
Recreation, personal and other services	439.7	445.2	447.0	433.2	25.3	23.9	22.1	22.7
Total all industries	**4,367.9**	**4,151.0**	**4,156.9**	**4,085.8**	**1,748.6**	**1,727.4**	**1,691.5**	**1,654.2**

(a) Out of scope of survey for private sector. (b) Excludes members of permanent defence forces and employees of overseas embassies, consulates etc.

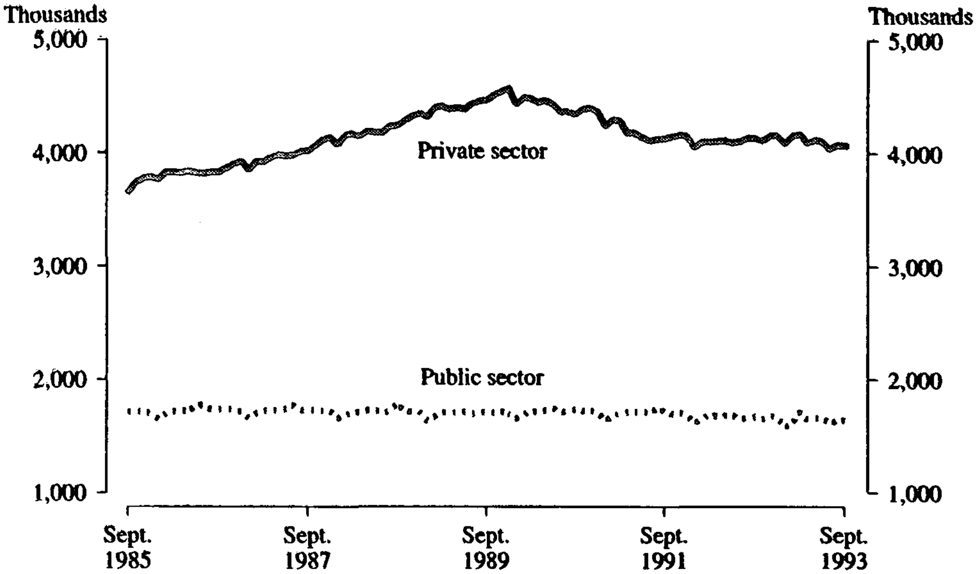
Source: Employed Wage and Salary Earners, Australia (6248.0).

6.13 EMPLOYED WAGE AND SALARY EARNERS: BY SECTOR, SEPTEMBER 1993 ('000)

Sector	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Private	1,431.7	1,074.9	652.1	328.4	400.2	103.4	34.6	60.4	4,085.8
Public	532.9	399.6	276.2	142.4	161.4	47.0	20.3	74.5	1,654.2
Commonwealth	118.0	90.5	46.1	25.9	22.8	7.7	3.7	54.1	368.9
State	361.4	262.9	196.4	107.4	126.2	34.8	15.4	20.3	1,124.8
Local	53.5	46.2	33.6	9.1	12.4	4.4	1.2	—	160.5
Total	**1,964.6**	**1,474.5**	**928.3**	**470.8**	**561.6**	**150.5**	**54.9**	**134.9**	**5,740.0**

Source: Employed Wage and Salary Earners, Australia (6248.0).

6.14 EMPLOYED WAGE AND SALARY EARNERS, BY SECTOR



Source: Employed Wage and Salary Earners, Australia (6248.0).

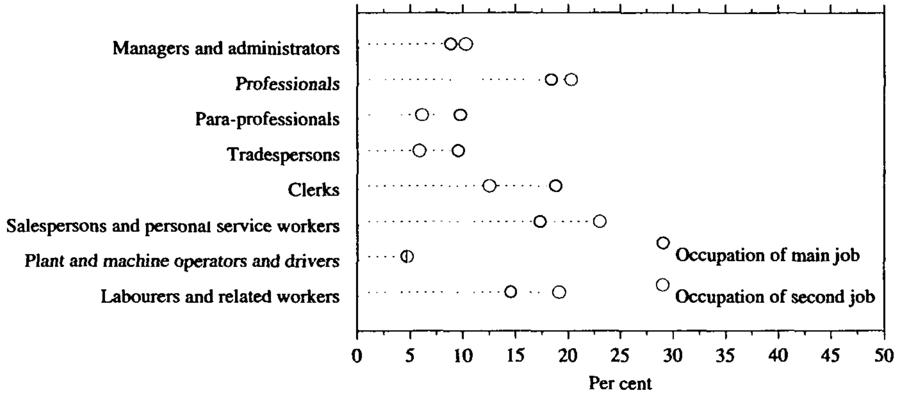
Multiple jobholders

In July 1991, there were 331,600 persons aged 15 and over who were multiple jobholders. To be classified as a multiple jobholder a person had to be a wage and salary earner in at least one of their jobs.

During the period August 1979 to July 1991, the Recreation, personal and other services industry consistently had the highest proportion of multiple jobholders to persons employed (whether in their main or second job) in that industry, followed by Agriculture, forestry, fishing and hunting and Community services. Over the same period, Manufacturing had the lowest proportion of multiple jobholders to persons employed in the Manufacturing industry.

Of the 331,600 multiple jobholders in July 1991, 31 per cent worked in the same industry in both their main and second job. For those multiple jobholders whose main job was in the Community services industry, 58 per cent had their second job in the same industry. This compared to 15 per cent of persons whose main and second job was in the Recreation, personal and other services industry.

6.15 MULTIPLE JOBHOLDERS: OCCUPATION OF MAIN JOB AND SECOND JOB, JULY 1991



Source: Multiple Jobholding, Australia (6216.0).

6.16 MULTIPLE JOBHOLDERS: SELECTED CHARACTERISTICS, BY NUMBER PROPORTION OF EMPLOYED PERSONS AND PROPORTION OF THE LABOUR FORCE, JULY 1991

	Number ('000)			Proportion of employed persons (%)			Proportion of labour force (%)		
Characteristics	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Marital status									
Married	109.0	110.0	219.1	3.7	5.6	4.4	3.4	5.2	4.2
Not-married	54.2	58.4	112.5	3.6	4.8	4.2	3.1	4.2	3.6
Birthplace and period of arrival									
Born in Australia	130.2	134.4	264.6	4.0	5.5	4.6	3.6	5.1	4.2
Born outside Australia	33.0	34.0	67.0	2.8	4.5	3.5	2.5	4.0	3.1
Born in main English-speaking countries	17.8	17.3	35.1	3.5	4.9	4.1	3.2	4.5	3.7
Born in other countries	15.2	16.7	31.9	2.3	4.1	3.0	2.0	3.6	2.6
Arrived before 1981	23.0	24.5	47.5	2.7	4.5	3.4	2.4	4.2	3.1
Arrived 1981 to survey date	10.0	9.5	19.5	3.2	4.4	3.7	2.6	3.7	3.0
Age group (years)									
15–19	9.8	12.6	22.4	3.4	4.5	3.9	2.6	3.5	3.1
20–24	21.3	21.7	42.9	4.1	4.7	4.4	3.5	4.1	3.8
25–34	49.8	47.9	97.7	4.2	5.8	4.8	3.8	5.3	4.4
35–44	47.1	56.7	103.8	4.1	6.5	5.1	3.8	6.1	4.8
45–54	24.7	25.2	49.9	3.0	4.7	3.7	2.9	4.4	3.5
>54	10.5	4.3	14.9	2.2	2.3	2.2	2.0	2.2	2.1
Total	**163.2**	**168.4**	**331.6**	**3.7**	**5.3**	**4.3**	**3.3**	**4.8**	**3.9**

Source: Multiple Jobholding, Australia (6216.0).

Career experience

In February 1993, some 4.9 million of Australia's 6.3 million wage and salary earners had worked with their current employer for one year or more. Almost all of these employees (96%) reported some change(s) in their work in the 12 months prior to the survey.

The changes in work most commonly reported were 'more responsibility' (42%), 'new, different or extra duties' (39%) and 'used different computer based equipment or packages' (32%).

Full-time employees reported more changes in work than part-time employees, and female employees reported proportionally higher levels of change in all categories except for 'using different machinery tools or equipment'. For part-time employees, 84 per cent of whom were female, 'changed hours' and 'received training or studied' were the most common changes in work.

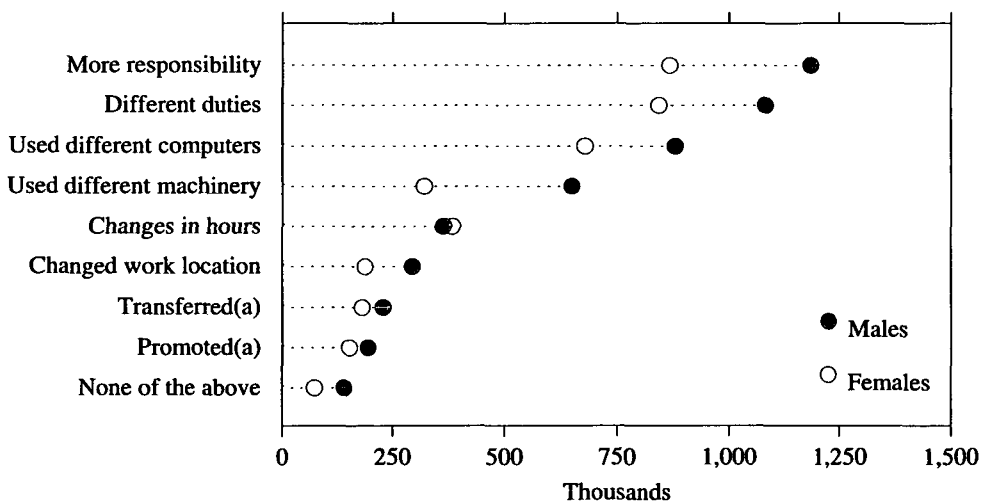
Of all the employees who had worked with their current employer for one year or more, 7 per cent had been promoted in the last 12 months and 8 per cent had transferred to another position with their employer. Part-time employees reported a lower rate of promotion and transfer (2% and 4%, respectively) compared with full-time employees (8% and 9%, respectively).

Along with the changes occurring in the workplace, 42 per cent of the 4.6 million wage and salary employees (excluding owner-managers) who had worked with their current employer for one year or more reported that their work performance had been formally appraised in the last 12 months.

The industries where performance appraisal was most common were:

- finance, property and business services (60%);
- electricity, gas and water (50%); and
- public administration and defence (49%).

6.17 CHANGES IN THE WORK SITUATION OF EMPLOYEES(a), BY SEX, FEBRUARY 1993



(a) Excludes 307,000 owner-managers who were not asked whether they had been promoted or transferred.
Source: Career Experience, Australia (6254.0).

6.18 EMPLOYEES WHO HAVE WORKED WITH THEIR CURRENT EMPLOYER FOR ONE YEAR OR MORE: SELECTED CHARACTERISTICS, FEBRUARY 1993
('000)

	Full time		*Part time*		*Total*		
	Males	*Females*	*Males*	*Females*	*Males*	*Females*	*Total*
All changes in work with current employer in the last twelve months	**2,668.3**	**1,379.8**	**143.3**	**751.1**	**2,811.6**	**2,131.0**	**4,942.5**
Promoted(a)	197.0	139.9	*1.1	16.1	198.0	156.0	354.0
Transferred(a)	228.4	155.0	*3.3	29.3	231.7	184.3	416.0
Changes in hours	8.5	7.9	10.6	41.0	19.1	48.9	68.0
Used different computers	866.0	537.8	17.2	145.1	883.2	682.9	1,566.1
Used different machinery	633.8	227.6	18.5	96.3	652.3	323.9	976.2
Changed work location	285.9	152.0	11.0	40.0	296.9	192.0	488.9
Different duties	1,054.4	638.6	31.5	209.2	1,085.9	847.9	1,933.8
More responsibility	1,154.4	672.1	32.5	198.5	1,186.9	870.7	2,057.6
None of the above	138.5	55.8	5.1	21.0	143.7	76.8	220.4
Length of time with current employer							
1 and under 2 years	268.8	183.3	41.5	128.8	310.4	312.1	622.5
2 and under 3 years	304.5	210.2	35.0	130.9	339.5	341.1	680.6
3 and under 5 years	558.6	342.7	36.0	200.1	594.6	542.8	1,137.5
5 and under 10 years	621.4	360.4	16.9	175.0	638.3	535.4	1,173.7
10 years or more	915.0	283.2	13.9	116.4	928.8	399.5	1,328.4
Whether work performance formally appraised by current employer in the last twelve months(a)							
Formally appraised	1,055.2	648.3	35.6	218.3	1,090.8	866.6	1,957.4
Not formally appraised	1,281.4	638.3	93.7	476.1	1,375.0	1,114.4	2,489.5
Don't know	120.5	47.1	5.0	16.1	125.5	63.1	188.6

(a) Excludes persons working in their own limited liability company (that is, owner-managers).
Source: Career Experience, Australia (6254.0).

Persons employed at home

In March 1992, 307,900 persons aged 15 and over, or 4.0 per cent of employed persons, were employed at home. These people worked more hours at home than elsewhere. In 1989, 266,600 persons (3.5% of employed persons) were employed at home.

The number of females employed at home in March 1992 (206,700) was more than double the number of males employed at home (101,200).

The most common reason for commencing to work at home was 'to open/operate own/family business (with spouse)'. This was given as the reason by 26 per cent of persons employed at home. Other common reasons were 'wanted office at home/no overheads/no rent' (16%) and 'children too young/preferred to look after children' (16%).

Two-thirds of persons employed at home (206,500) usually worked less than 35 hours a week at home, while an estimated 82,200 persons worked 40 hours and over. Some 43 per cent of males employed at home worked 40 hours and over compared with 18 per cent of females.

The largest occupation group for persons employed at home was Clerks (39%), with the great majority being female (113,400 females and 7,600 males).

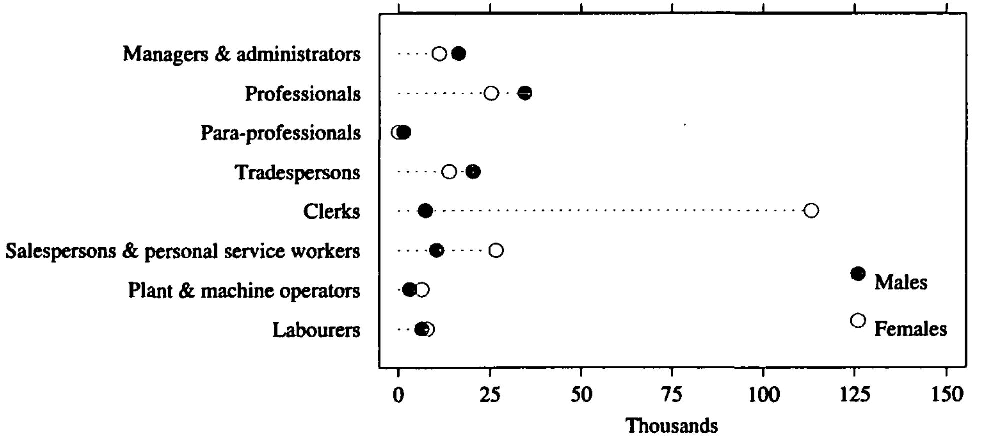
6.19 EMPLOYED PERSONS: WHETHER OR NOT EMPLOYED AT HOME ('000)

	April 1989			March 1992		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
Worked no hours at home	3,475.5	2,457.6	5,933.0	3,232.3	2,434.8	5,667.1
Worked some hours at home(a)	1,088.2	662.0	1,750.2	1,226.9	810.5	2,037.4
Usually worked less hours at home than elsewhere	849.6	398.5	1,248.1	971.3	515.6	1,486.8
Persons employed at home	80.3	186.2	266.6	101.2	206.7	307.9
Total	**4,563.7**	**3,119.6**	**7,683.3**	**4,459.2**	**3,245.3**	**7,704.4**

(a) Includes persons comprising farmers (ASCO unit groups 1401 and 8201) who worked more hours at home than away and persons who worked less than one hour at home.

Source: Persons Employed at Home, Australia (6275.0).

6.20 PERSONS EMPLOYED AT HOME: OCCUPATION, MARCH 1992



Source: Persons Employed at Home, Australia (6275.0).

6.21 PERSONS EMPLOYED AT HOME: MAIN REASON BEGAN WORKING AT HOME AND SIMILAR PREVIOUS WORK EXPERIENCE, MARCH 1992
('000)

Main reason began working at home	Had done this type of work before: At home only	Had done this type of work before: Elsewhere	Had done this type of work before: Total	Had not done this type of work before	Males	Females	Persons
Wanted office at home/no overheads/no rent	6.7	19.0	25.7	25.0	27.3	23.4	50.8
Did not want to travel to work	*0.4	*2.0	*2.4	3.5	*1.7	4.3	5.9
Flexible working hours	*1.9	4.5	6.4	11.7	6.4	11.7	18.1
Children too young/preferred to look after children	4.2	17.6	21.8	27.5	*0.9	48.4	49.3
Reached retirement age	*0.3	*2.7	*3.0	*2.8	4.9	*1.0	5.8
No other work available	*3.1	4.3	7.4	10.1	8.2	9.3	17.5
To help spouse	*0.4	7.3	7.8	23.7	*0.6	30.9	31.5
To open/operate own/family business (with spouse)	5.2	28.3	33.4	46.5	26.0	53.9	79.9
Other(a)	6.0	12.3	18.4	30.7	25.2	23.9	49.1
Total	**28.2**	**98.1**	**126.4**	**181.6**	**101.2**	**206.7**	**307.9**

(a) Includes 'Unable to find suitable child-care' and 'Family trust company'.
Source: Persons Employed at Home, Australia (6275.0).

6.22 PERSONS EMPLOYED AT HOME: CHARACTERISTICS OF JOB AT HOME AND NUMBER OF HOURS USUALLY WORKED AT HOME, MARCH 1992
('000)

	Number of hours usually worked at home: <20	20–29	30–34	35–39	>39	Total
MALES						
Whether all hours usually worked at home						
All hours usually worked at home	11.9	*3.1	*1.6	4.3	21.9	42.8
Some hours usually worked at home	11.1	11.6	8.4	5.3	22.1	58.5
Whether job worked at home was main job						
Main job	14.4	11.9	10.0	9.1	43.4	88.7
Second job	8.6	*2.7	*0.1	*0.5	*0.6	12.5
Total	**23.0**	**14.7**	**10.0**	**9.5**	**44.0**	**101.2**
FEMALES						
Whether all hours usually worked at home						
All hours usually worked at home	83.2	17.4	5.9	5.8	30.5	142.8
Some hours usually worked at home	32.8	14.5	4.9	3.9	7.7	63.9
Whether job worked at home was main job						
Main job	103.4	31.2	10.1	9.7	37.9	192.4
Second job	12.6	*0.8	*0.7	*—	*0.3	14.3
Total	**116.0**	**32.0**	**10.8**	**9.7**	**38.2**	**206.7**
PERSONS						
Whether all hours usually worked at home						
All hours usually worked at home	95.1	20.5	7.5	10.0	52.4	185.6
Some hours usually worked at home	43.9	26.1	13.3	9.2	29.8	122.4
Whether job worked at home was main job						
Main job	117.8	43.1	20.1	18.8	81.3	281.1
Second job	21.2	3.5	*0.7	*0.5	*0.9	26.8
Total	**139.0**	**46.7**	**20.8**	**19.3**	**82.2**	**307.9**

Source: Persons Employed at Home, Australia (6275.0).

UNEMPLOYMENT

Broadly, persons are considered to be unemployed if they satisfy three criteria — not employed, available for work, and taking active steps to find work.

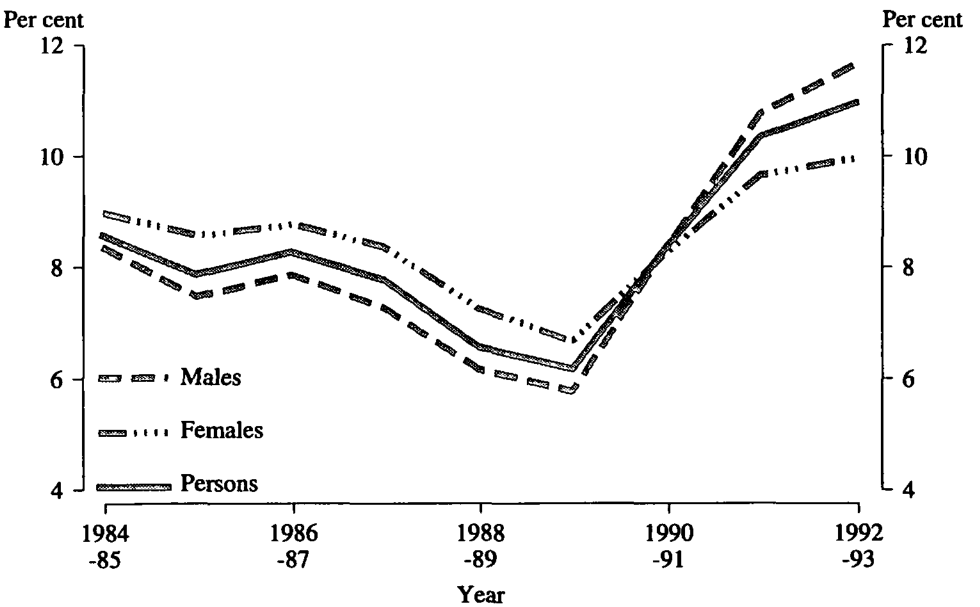
The two most important unemployment measures are the number of persons unemployed and the unemployment rate.

The number of unemployed increased from an average of 610,500 in 1987–88 to 949,300 in 1992–93.

The unemployment rate is defined as the number of unemployed expressed as a percentage of the labour force. The annual average unemployment rate for males rose significantly between 1989-90 and 1992–93 from 5.8 per cent to 11.7 per cent. For females, the unemployment rate rose from 6.7 per cent to 10.0 per cent over the same period (graph 6.23). The seasonally adjusted estimate of the unemployment rate for males has been generally declining since July 1993 and stood at 10.1 per cent in May 1994. For females, the rate increased from 9.9 per cent in July 1993 to 10.7 per cent in November 1993 before falling back to 9.3 per cent in May 1994.

By examining particular groups and characteristics of the unemployed, various economic and social aspects of unemployment can be analysed. While the above aggregate unemployment rates are important overall indicators, full-time and part-time unemployment levels and rates for different age groups by sex and marital status, shown in table 6.24, provide additional perspectives.

6.23 UNEMPLOYMENT RATE, ANNUAL AVERAGE



Source: The Labour Force, Australia (6203.0).

6.24 UNEMPLOYED PERSONS: AGE AND WHETHER LOOKING FOR FULL-TIME OR PART-TIME WORK, ANNUAL AVERAGE(a), 1992–93

	Number unemployed ('000)				Unemployment rate (%)			
Age group (years)	Males	Married females	All females	Persons	Males	Married females	All females	Persons
LOOKING FOR FULL-TIME WORK								
Aged 15–19	*66.3*	**3.4*	*51.2*	*117.5*	*30.1*	*43.8*	*35.1*	*32.1*
Looking for first job	35.8	*1.3	31.8	67.6	. .	. .	. .	. .
Attending school	4.4	n.a.	2.9	7.3	n.a.	n.a.	n.a.	n.a.
Attending a tertiary educational institution full time	3.4	n.a.	3.4	6.8	n.a.	n.a.	n.a.	n.a.
Aged ≥19	*471.4*	*93.7*	*210.3*	*681.7*	*10.9*	*8.1*	*10.5*	*10.8*
20–24	107.4	14.4	63.0	170.5	19.3	13.9	15.7	17.8
Looking for first job	13.5	*2.7	14.8	28.3	. .	. .	. .	. .
25–34	143.4	31.3	60.7	204.1	11.6	9.2	10.2	11.1
35–44	101.4	28.8	49.2	150.6	8.5	7.8	9.4	8.8
45–54	64.8	16.0	31.8	96.6	7.3	5.8	8.2	7.6
>54	54.3	3.2	5.7	60.0	12.3	4.6	5.4	11.0
Aged 15–64	*536.8*	*97.0*	*261.5*	*798.3*	*12.0*	*8.3*	*12.2*	*12.0*
Total	**537.7**	**97.1**	**261.5**	**799.2**	**11.9**	**8.3**	**12.1**	**11.9**
LOOKING FOR PART-TIME WORK								
Aged 15–19	*27.8*	*0.5*	*30.5*	*58.2*	*18.8*	*17.4*	*14.8*	*16.5*
Attending school	18.5	n.a.	20.1	38.6	21.9	n.a.	18.3	19.8
Attending a tertiary educational institution full time	6.6	n.a.	7.4	14.0	22.3	n.a.	16.1	18.5
Aged ≥19	*22.6*	*45.6*	*69.3*	*91.9*	*6.4*	*4.7*	*5.5*	*5.7*
20–24	7.2	3.7	12.7	19.9	8.5	9.8	9.0	8.8
Attending a tertiary educational institution full time	4.5	n.a.	5.2	9.7	12.5	n.a.	11.5	12.0
25–34	5.9	18.0	25.5	31.4	7.4	6.9	7.9	7.8
35–44	2.8	14.9	18.9	21.7	5.0	4.1	4.5	4.6
>44	6.7	9.1	12.1	18.8	5.1	3.0	3.3	3.8
Aged 15–64	*49.7*	*46.0*	*99.5*	*149.2*	*10.6*	*4.8*	*6.9*	*7.8*
Total	**50.4**	**46.1**	**99.7**	**150.1**	**10.1**	**4.8**	**6.9**	**7.7**

(a) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

The number of persons unemployed for 52 weeks or more doubled between 1987–88 and 1992–93, increasing from 169,100 to 340,400. Some 35.9 per cent of all unemployed persons in 1992–93 had been unemployed for 52 weeks or more (table 6.25). *See* later article on the long-term unemployed.

6.25 UNEMPLOYED PERSONS: DURATION OF UNEMPLOYMENT

	Duration of unemployment (weeks)					
Annual average(a)	*Under 4*	*4 and under 13*	*13 and under 26*	*26 and under 52*	*52 and over*	*Total*
1987–88	115.9	143.7	88.3	93.6	169.1	610.5
1988–89	113.6	128.8	72.6	74.3	145.7	535.0
1989–90	118.7	135.2	72.2	72.3	116.6	515.0
1990–91	132.2	185.4	128.1	117.2	150.7	713.6
1991–92	123.5	180.8	144.4	181.8	258.4	888.9
1992–93	122.6	174.3	135.1	176.9	340.4	949.3

(a) Averages calculated on monthly estimates.
Source: The Labour Force, Australia (6203.0).

Job search experience

An estimated 90 per cent of unemployed persons looking for full-time work in July 1993 were registered with the Commonwealth Employment Service (CES) compared with 37 per cent of those looking for part-time work.

In July 1993, 83 per cent of unemployed persons were registered with the CES, the highest percentage recorded since the first job search survey was first run in November 1986.

In July 1993, the most commonly reported main difficulty in finding work was 'no vacancies at all' which was nominated by 216,300 persons or 25 per cent of the unemployed. This is a fall of seven percentage points since July 1992.

The proportion of unemployed persons who reported their main difficulty in finding work was that they were 'considered too young or too old by employers' increased over the past two years from 12 per cent in June 1991 to 17 per cent in July 1993. For the 169,700 unemployed persons aged 45 and over, nearly half reported age-related reasons as their main difficulty in finding work.

Other common difficulties reported were 'no vacancies in line of work' (16%), 'lacked necessary skills or education' (10%) and 'insufficient work experience' (10%).

Unemployed persons without post-school qualifications had, on average, been unemployed for 15 weeks more than those with post-school qualifications (65 weeks compared to 50 weeks).

There were 331,200 persons (38% of total unemployed) whose current period of unemployment, as at July 1993, was one year or more. For this group, the most frequently reported main difficulties in finding work were 'no vacancies at all' (26%) and 'age' (22%).

Of all the persons reporting 'language difficulties' as the main difficulty in finding work, 74 per cent had been unemployed for one year or more. Similarly, 50 per cent of the 147,000 persons whose reported main difficulty was age-related had been unemployed for one year or more.

6.26 UNEMPLOYED PERSONS(a): MAIN DIFFICULTY IN FINDING WORK AND DURATION OF CURRENT PERIOD OF UNEMPLOYMENT, JULY 1993

	Duration of current period of unemployment (weeks)						
Main difficulty in finding work	*Under 4*	*4 and under 13*	*13 and under 26*	*26 and under 52*	*52 and over*	*Total*	*Average duration*
			— '000 —				(weeks)
No vacancies at all	19.3	34.3	29.9	46.2	86.7	216.3	60.4
No vacancies in line of work	19.6	34.5	20.9	29.8	38.3	143.0	38.6
Considered too young or too old by employers	8.0	18.3	17.2	29.6	73.8	147.0	82.3
Lacked necessary skills or education	6.7	10.3	13.9	21.5	34.6	86.9	61.6
Insufficient work experience	4.6	13.6	14.3	23.2	27.1	82.7	53.0
Own ill health or disability	4.7	4.4	*3.6	4.4	18.1	35.1	100.4
Too far to travel, transport problems	*2.6	7.6	6.4	9.8	12.9	39.4	49.9
Language difficulties	*0.5	*1.2	*1.0	*2.8	16.5	22.2	105.2
Unsuitable hours	*4.0	4.6	*3.1	4.7	6.1	22.4	41.6
Difficulties with child-care, other family responsibilities	*3.6	*1.6	*1.7	*2.0	4.8	13.6	59.4
Other difficulties(b)	*1.6	7.2	4.6	5.2	9.7	28.3	47.6
No difficulties reported	18.0	9.4	*2.4	*1.8	*2.6	34.3	12.8
Total	**93.1**	**146.9**	**119.0**	**181.0**	**331.2**	**871.3**	**59.4**

(a) Excludes persons who had been stood down. (b) Includes persons who reported difficulties with ethnic background.
Source: Job Search Experience of Unemployed Persons, Australia (6222.0).

6.27 UNEMPLOYED PERSONS: ACTIVE STEPS TAKEN TO FIND WORK AND WHETHER LOOKING FOR FULL-TIME OR PART-TIME WORK, JULY 1993 ('000)

	Looking for full-time work			*Looking for part-time work*			*Total*		
Active steps taken to find work	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Registered with the CES and									
Took no other active steps	*1.8	*2.5	4.3	*0.4	*—	*0.4	*2.1	*2.5	4.7
Contacted prospective employers	456.4	189.4	645.8	10.0	26.3	36.4	466.4	215.8	682.2
Took other active steps	17.1	10.7	27.8	*2.2	*3.9	6.2	19.3	14.7	34.0
Total	*475.2*	*202.7*	*677.9*	*12.6*	*30.2*	*42.9*	*487.9*	*232.9*	*720.8*
Not registered with the CES and									
Contacted prospective employers	30.5	40.3	70.8	21.4	45.7	67.1	52.0	86.0	137.9
Took other active steps	*2.2	5.0	7.2	*2.3	*3.1	5.3	4.5	8.0	12.5
Total	*32.8*	*45.3*	*78.0*	*23.7*	*48.7*	*72.4*	*56.5*	*94.0*	*150.5*
Total	**508.0**	**248.0**	**756.0**	**36.3**	**79.0**	**115.3**	**544.3**	**327.0**	**871.3**

Source: Job Search Experience of Unemployed Persons, Australia (6222.0).

In the 12 months to July 1992, an estimated 1,453,000 persons started a job for wages or salary (lasting two weeks or more). Of these persons, 423,800 had changed employer to start the job.

Of the persons who started a job for wages or salary, 39 per cent obtained their job by approaching the employer without prior knowledge that the job was available, while 37 per cent approached the employer knowing that the job was available. The remaining 24 per cent of jobs had been obtained as a result of the employer approaching the jobseeker.

Younger persons were more inclined to approach an employer for a job than older persons. An estimated 78 per cent of those aged 15 to 34 years approached an employer for a job compared with 70 per cent of persons aged 35 years and over.

6.28 PERSONS WHO STARTED A WAGES OR SALARY JOB IN THE PREVIOUS TWELVE MONTHS: AGE, WHETHER OUT OF WORK PRIOR TO STARTING JOB AND WHETHER JOB STARTED WAS IN PREFERRED OCCUPATION, JULY 1992
('000)

Whether job started was in preferred occupation	*Age group (years)*						
	15–19	*20–24*	*25–34*	*35–44*	*45–54*	*>54*	*Total*
OUT OF WORK PRIOR TO STARTING JOB							
Job was in preferred occupation	132.5	134.5	164.8	109.8	51.1	18.5	611.3
Job was not in preferred occupation	52.3	54.0	57.0	37.9	15.9	3.6	220.7
Preferred occupation not specified	9.4	5.5	5.5	*3.4	*1.7	*0.8	26.3
Did not have a preferred occupation	60.6	34.2	41.9	20.9	8.5	4.7	170.9
Total	**254.8**	**228.2**	**269.3**	**172.0**	**77.2**	**27.6**	**1,029.2**
CHANGED EMPLOYER TO START JOB							
Job was in preferred occupation	34.6	70.4	114.3	70.2	30.3	6.4	326.3
Job was not in preferred occupation	7.2	16.3	18.6	8.6	*3.2	*1.5	55.4
Preferred occupation not specified	*0.4	*1.5	*1.9	*1.7	*0.6	*0.5	6.6
Did not have a preferred occupation	9.4	5.9	8.6	7.2	*3.4	*1.0	35.5
Total	**51.6**	**94.2**	**143.4**	**87.7**	**37.5**	**9.5**	**423.8**
TOTAL							
Job was in preferred occupation	167.1	205.0	279.2	180.0	81.4	24.9	937.6
Job was not in preferred occupation	59.5	70.3	75.7	46.5	19.1	5.1	276.2
Preferred occupation not specified	9.9	7.0	7.4	5.0	*2.3	*1.3	32.9
Did not have a preferred occupation	69.9	40.1	50.5	28.2	11.9	5.6	206.3
Total	**306.4**	**322.4**	**412.7**	**259.7**	**114.7**	**37.0**	**1,453.0**

Source: Successful and Unsuccessful Job Search Experience, Australia (6245.0).

The long-term unemployed

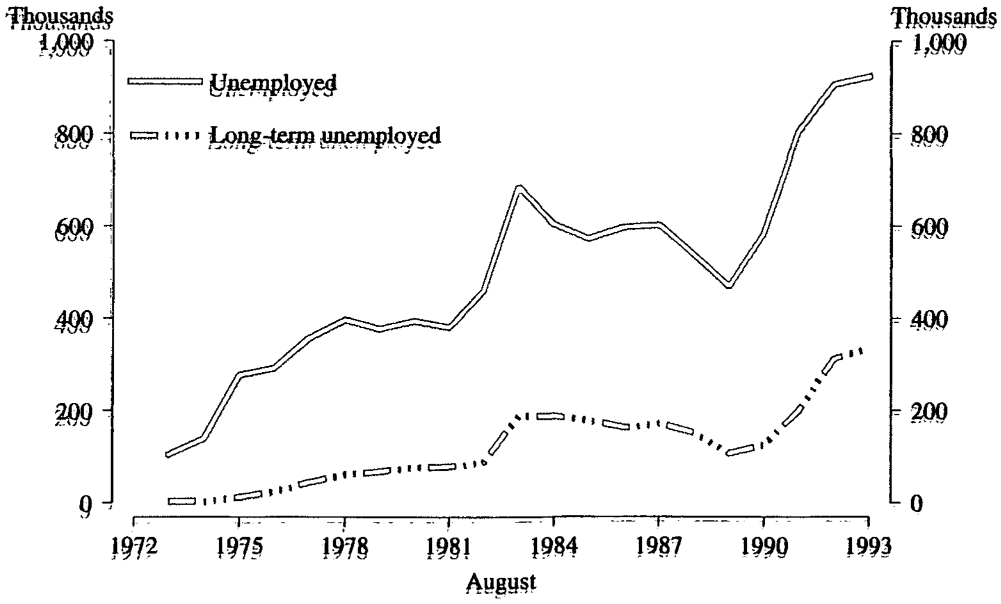
The number of long-term unemployed persons (that is, those unemployed for 52 weeks or more) in Australia trebled between August 1989 and August 1993, increasing from 108,200 to 337,700. In March 1993, the number of long-term unemployed reached an unprecedented peak of 370,900.

While the 1990–91 recession saw a dramatic increase in the number of long-term unemployed, the emergence and growth of long-term unemployment has been evident since the early 1970s. In August 1973, long-term unemployment represented 3.6 per cent of all unemployed persons. This proportion had increased to 36.5 per cent by August 1993.

Strong employment growth between 1983 and 1990 initially failed to make significant inroads into the number of long-term unemployed. A large proportion of the employment growth went to new entrants and re-entrants to the labour force, especially women. It was only in the late 1980s, under the pressure of very strong employment growth, that the number of long-term unemployed decreased substantially. This fall in long-term unemployment was interrupted by the onset of the 1990–91 recession.

In August 1993, males had higher long-term unemployment rates than females across all age groups. For females, the long-term unemployment rate was highest for those aged 15 to 24 years. Young males also had high long-term unemployment rates, although the rate was highest for older males. Of unemployed males aged 45 years and over, almost 60 per cent were long-term unemployed.

6.29 UNEMPLOYED AND LONG-TERM UNEMPLOYED PERSONS AGED 15 YEARS AND OVER



Source: Australia's Long-term Unemployed: A Statistical Profile (6255.0).

The average duration of unemployment (the average length of the current spell of unemployment for all unemployed persons within a particular group) tended to increase with age for both unemployed and long-term unemployed males and females.

Overall, the average duration of unemployment for all unemployed persons was longer for males than for females, whereas the average duration of unemployment for the long-term unemployed was longer for females than for males.

In August 1993 there were 506,100 other family members living in the same households as the 337,700 long-term unemployed. Of these other family members, 248,000 were dependent children.

There were 135,000 married couple families that had at least one partner long-term unemployed in June 1993. Of these, 17,500 had both partners long-term unemployed. Both the husband and the wife had significantly higher long-term unemployment rates where their partner was long-term unemployed.

6.30 LONG-TERM UNEMPLOYED MARRIED COUPLE FAMILIES: NUMBER AND RATES HUSBANDS AND WIVES AGED 15 YEARS AND OVER, JUNE 1993

Labour force status of partner	*Husband* '000	*Husband* Rate (%)	*Wife* '000	*Wife* Rate (%)
Employed	18.2	1.0	20.0	1.1
Unemployed less than 12 months	7.4	8.9	3.8	7.3
Long-term unemployed	17.5	42.3	17.5	40.5
Not in the labour force	64.7	6.3	3.4	3.3
Total	**107.8**	**3.6**	**44.7**	**2.1**

Source: Australia's Long-term Unemployed: A Statistical Profile (6255.0).

There were 15,800 long-term unemployed sole parents in August 1993. The long-term unemployment rate for female sole parents was 6.0 per cent. This compares with a long-term unemployment rate of 2.4 per cent for wives with dependants. For male sole parents, the long-term unemployment rate was 9.7 per cent. However, male sole parents represented only 11.5 per cent of all sole parents.

In August 1993, Tasmania (5.4%) and Victoria (5.2%) were the States with the highest long-term unemployment rates. These high long-term unemployment rates were evident in both Melbourne and Hobart as well as throughout the remainder of these States. In contrast, while the long-term unemployment rate was below the national average in Sydney (3.0%), the remainder of New South Wales experienced a long-term unemployment rate (5.2%) similar to Victoria and Tasmania. The long-term unemployment rate in Adelaide (4.6%) was also well above the national average of 3.9 per cent, although the rest of South Australia experienced a rate of only 2.2 per cent.

In August 1993, the highest regional long-term unemployment rates were experienced throughout most of Victoria and Tasmania, and along the coastal areas of northern New South Wales and the south-eastern regions of Queensland.

In February 1993, long-term unemployment rates were significantly higher among people without post-school qualifications than for those who had them. People who had not completed the highest level of secondary school had the highest long-term unemployment rate (6.5%).

6.31 UNEMPLOYMENT AND LONG-TERM UNEMPLOYMENT RATES FOR PERSONS AGED 15 TO 69: EDUCATIONAL ATTAINMENT, FEBRUARY 1993
(per cent)

	Unemployment rate	*Long-term unemployment rate*
MALES		
With post-school qualifications	8.8	3.1
Without post-school qualifications	16.6	7.0
Total	**12.7**	**4.9**
FEMALES		
With post-school qualifications	9.6	2.7
Without post-school qualifications	12.5	3.6
Total	**11.4**	**3.2**
PERSONS		
With post-school qualifications	9.1	2.9
Without post-school qualifications	14.8	5.5
Total	**12.1**	**4.2**

Source: Australia's Long-term Unemployed: A Statistical Profile (6255.0).

Over the last decade, the proportion of long-term unemployed people with post-school qualifications increased from 21.1 per cent to 36.1 per cent. This increase coincided with an increase in the proportion of the labour force with post-school qualifications. However, the increase in the proportion of long-term unemployed people with post-school qualifications has been much greater, primarily since the onset of the 1990–91 recession.

6.32 UNEMPLOYMENT AND LONG-TERM UNEMPLOYMENT RATES FOR PERSONS AGED 15 YEARS AND OVER: BIRTHPLACE, AUGUST 1993
(per cent)

	Unemployment rate	*Long-term unemployment rate*
Australia	10.0	3.4
Main English-speaking background countries(a)	9.2	2.9
Non-English-speaking background countries	16.0	7.3
Total	**10.7**	**3.9**

(a) Comprises the United Kingdom, Ireland, Canada, South Africa, United States of America and New Zealand.
Source: Australia's Long-term Unemployed: A Statistical Profile (6255.0).

In August 1993, migrants from other than main English-speaking background countries experienced a higher long-term unemployment rate than either people born in Australia or migrants from main English-speaking background countries.

Recent arrivals have much higher unemployment and long-term unemployment rates, but these rates decrease as their period of residence increases. In fact, migrants who arrived since the onset of the 1990–91 recession had an extremely high unemployment rate (32.2%) and long-term unemployment rate (11.0%).

In May 1994 the Commonwealth Government handed down a White Paper, *Working Nation* which detailed a plan of action designed to restore full employment to Australia, with a particular focus on the long-term unemployed. Information on these initiatives is contained in the section, Government Employment and Training Programs, at the end of this chapter.

JOB VACANCIES

Job vacancy statistics taken together with unemployment statistics assist in the assessment of the demand for labour.

A job vacancy is a job available for immediate filling and for which recruitment action has been taken by the employer.

The estimated number of job vacancies in Australia peaked at 72,500 in February 1989 and then fell rapidly to a low of 24,300 in May 1992. The number of job vacancies has increased from that point to the current level of 45,900 in February 1994.

6.33 JOB VACANCIES ('000)

Month	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
February 1989	26.6	21.2	10.0	2.5	7.4	1.3	1.0	2.5	72.5
February 1990	24.3	15.5	7.7	4.1	4.5	1.2	1.0	2.6	60.9
February 1991	11.9	4.0	6.2	1.9	2.1	0.7	0.5	1.7	29.0
February 1992	10.6	6.7	5.3	1.5	1.4	0.6	0.4	1.2	27.6
February 1993	10.0	7.3	4.9	1.4	4.3	0.4	0.5	1.0	29.8
February 1994	18.1	11.3	6.4	2.7	4.7	0.8	0.4	1.5	45.9

Source: Job Vacancies and Overtime, Australia (6354.0).

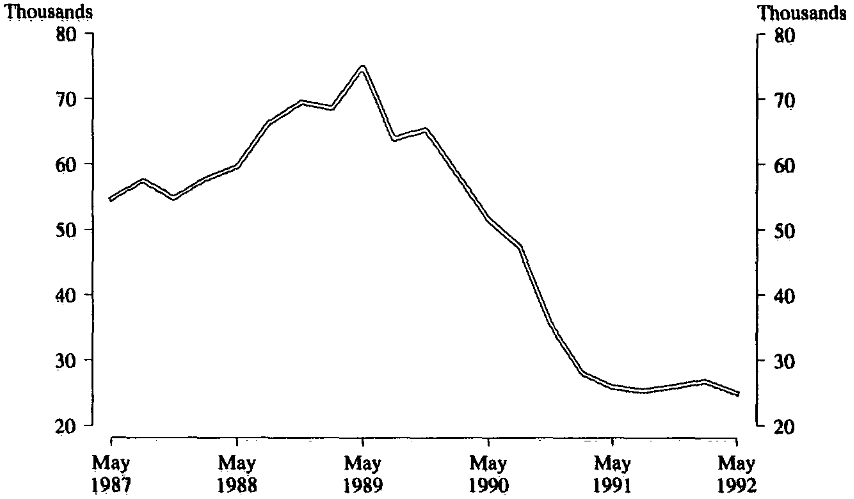
6.34 JOB VACANCY RATES(a) (per cent)

Month	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
February 1989	1.2	1.3	1.2	0.5	1.5	0.9	1.7	1.9	1.2
February 1990	1.2	1.0	0.9	0.9	0.9	0.8	1.8	2.2	1.1
February 1991	0.6	0.3	0.7	0.4	0.5	0.5	0.9	1.5	0.5
February 1992	0.5	0.4	0.6	0.3	0.2	0.4	0.6	0.9	0.5
February 1993	0.5	0.5	0.5	0.3	0.8	0.3	0.8	0.8	0.5
February 1994	0.9	0.7	0.7	0.6	0.9	0.6	0.7	1.1	0.8

(a) Job vacancy rate is calculated by expressing the number of job vacancies as a percentage of the number of employees plus vacancies.

Source: Job Vacancies and Overtime, Australia (6354.0).

6.35 JOB VACANCIES



Source: Job Vacancies and Overtime, Australia (6354.0).

PERSONS NOT IN THE LABOUR FORCE

Persons not in the labour force represent that group of the population who, during the reference week of a labour survey, are neither employed nor unemployed — *see* diagram 6.1. Interest in this group centres primarily around their potential to participate in the labour force and their reasons for their current labour force status.

Of the 3.8 million persons aged 15 to 69 years not in the labour force at September 1993, 24 per cent reported marginal attachment to the labour force and therefore were potential participants in it. An estimated 73 per cent of these potential labour force participants were female.

Marginal attachment to the labour force includes 'discouraged jobseekers'. These are persons who wanted to work and were available to start work but were not looking for work because they believed they would not be able to find a job. This was either because they believed that jobs were not available, or that they would not be acceptable to employers because of their age, their lack of skills/education, or difficulties with language or ethnic background.

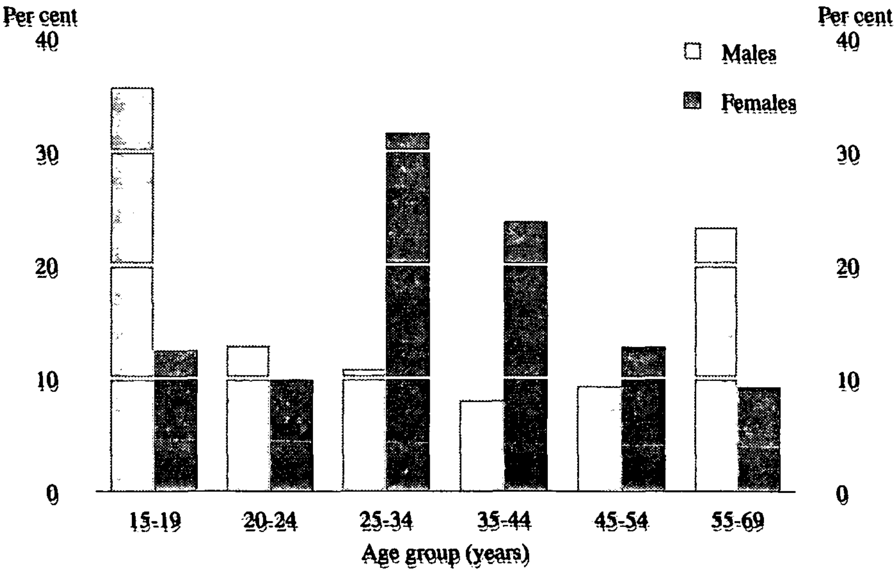
In September 1993 there were 147,400 discouraged jobseekers — similar to the level of 145,600 in September 1992.

6.36 CIVILIAN POPULATION AGED 15 TO 69: LABOUR FORCE STATUS ('000)

	September 1989	September 1990	September 1991	September 1992	September 1993
Persons in the labour force	8,316.3	8,514.2	8,591.5	8,647.5	8,744.6
Persons not in the labour force	3,567.1	3,550.1	3,643.9	3,738.1	3,756.4
With marginal attachment to the labour force	708.4	752.5	819.3	846.4	907.8
Wanted to work and were actively looking for work	55.3	57.6	46.7	59.1	58.3
Were available to start work within four weeks	27.7	31.5	24.2	33.8	34.8
Were not available to start work within four weeks	27.6	26.1	22.5	25.3	23.5
Wanted to work but were not actively looking for work and were available to start work within four weeks	653.1	694.9	772.7	787.3	849.5
Discouraged jobseekers	76.1	100.9	138.2	145.6	147.4
Other	577.0	594.1	634.5	641.7	702.0
Without marginal attachment to the labour force	2,858.7	2,797.6	2,824.6	2,891.7	2,848.7
Civilian population aged 15 to 69	**11,883.4**	**12,064.3**	**12,235.4**	**12,385.7**	**12,501.0**

Source: Persons Not in the Labour Force, Australia (6220.0).

6.37 PERSONS NOT IN THE LABOUR FORCE WITH MARGINAL ATTACHMENT TO THE LABOUR FORCE, AGE AND SEX, SEPTEMBER 1993



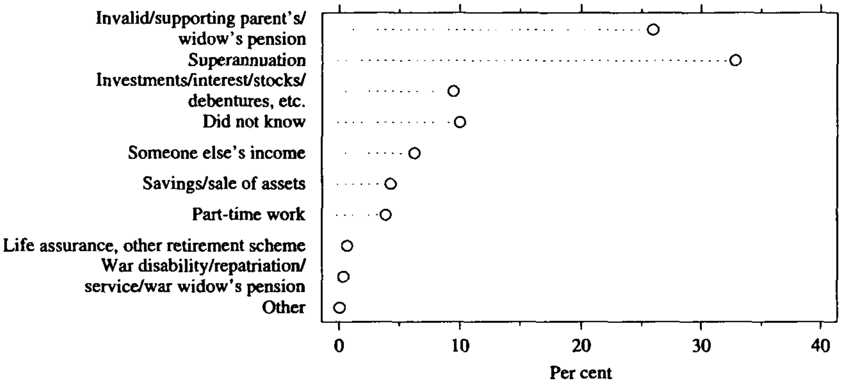
Source: Persons Not in the Labour Force, Australia (6220.0).

RETIREMENT AND RETIREMENT INTENTIONS

In October 1992 the Australian population included 5,235,400 persons aged 45 and over. Of these, 2,800,100 (53%) had retired from full-time work and 1,740,400 (33%) intended to retire from full-time work. A further 455,000 persons (9%) had never worked full time and did not intend to work full time and 234,600 (4%) who were working did not intend to retire from full-time work.

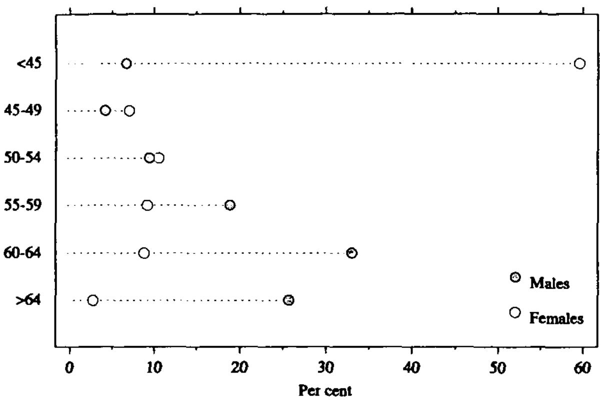
Of the 1,740,400 persons aged 45 and over who intended to retire from full-time work, 39 per cent of males and 22 per cent of females expected superannuation or life assurance to be their main source of income. A pension or benefit was expected to be the main source of income for 27 per cent of males and 29 per cent of females.

6.38 PERSONS AGED 45 AND OVER WHO INTENDED TO RETIRE FROM FULL-TIME WORK EXPECTED MAIN SOURCE OF INCOME AT RETIREMENT, OCTOBER 1992



Source: Retirement and Retirement Intentions, Australia (6238.0).

6.39 PERSONS AGED 45 AND OVER WHO HAD RETIRED FROM FULL-TIME WORK AGE AT RETIREMENT BY SEX, OCTOBER 1992



Source: Retirement and Retirement Intentions, Australia (6238.0).

6.40 PERSONS AGED 45 AND OVER(a): RETIREMENT STATUS, OCTOBER 1992 ('000)

	Had retired	*Intended to retire*	*Did not intend to retire*	*Never had a full-time job and did not intend to work full time*	*Total(a)*
Age group (years)					
45–49	269.5	755.7	68.9	35.7	1,130.6
50–54	265.8	496.6	60.4	40.8	864.2
55–59	339.2	306.0	46.2	42.2	735.3
60–64	462.0	152.9	28.9	57.3	702.2
65–69	544.6	22.4	18.0	71.0	656.8
>69	918.9	6.8	12.1	208.1	1,146.2
Total	**2,800.1**	**1,740.4**	**234.6**	**455.1**	**5,235.4**
Marital status					
Married	1,948.8	1,393.8	179.9	260.5	3,786.2
Not-married	851.2	346.6	54.7	194.6	1,449.2
Total	**2,800.1**	**1,740.4**	**234.6**	**455.1**	**5,235.4**
Birthplace					
Born in Australia	1,978.9	1,121.6	156.4	279.6	3,539.8
Born outside Australia	821.1	618.8	78.1	175.5	1,695.6
Born in main English-speaking countries	366.7	269.2	26.1	35.1	697.6
Born in other countries	454.4	349.6	52.0	140.4	998.0
Total	**2,800.1**	**1,740.4**	**234.6**	**455.1**	**5,235.4**
Males	1,121.3	1,224.4	183.2	21.1	2,553.8
Females	1,678.8	516.0	51.3	434.0	2,681.5
Persons	**2,800.1**	**1,740.4**	**234.6**	**455.1**	**5,235.4**

(a) Includes a small number of persons whose retirement status could not be determined.
Source: Retirement and Retirement Intentions, Australia (6238.0).

6.41 PERSONS AGED 45 AND OVER WHO HAD RETIRED OR INTENDED TO RETIRE(a): SOURCE OF INCOME IN RETIREMENT, OCTOBER 1992 ('000)

Main/expected main source of income at retirement	*Had retired*	*Intended to retire*	*Total*
Superannuation	195.7	574.2	769.9
Life assurance, other retirement schemes	9.1	16.5	25.6
Invalid, age, sole parent's, widow's pension	510.0	456.5	966.5
War disability, repatriation, service, war widow's pension	134.6	9.6	144.2
Sickness, special and other benefits	115.8	14.0	129.7
Rent, farm, business, property	50.0	54.2	104.2
Investments, interest, stocks, debentures, etc.	195.4	169.4	364.7
Savings, sale of assets	123.7	79.0	202.7
Part-time work	80.4	71.7	152.1
Someone else's income	271.1	112.4	383.5
Accumulated leave, compensation	12.2	*1.4	13.6
Other	18.9	4.0	23.0
Not asked	1,083.2	177.5	1,260.8
Total	**2,800.1**	**1,740.4**	**4,540.5**

(a) Includes a small number of persons whose retirement status could not be determined.
Source: Retirement and Retirement Intentions, Australia (6238.0).

WAGE RATES, EARNINGS, COSTS OF LABOUR AND HOURS OF WORK

Industrial conciliation and arbitration

Legal rates of pay for some 80 per cent of Australian wage and salary earners, as at May 1990, are prescribed in awards and determinations of Commonwealth and State industrial tribunals or in collective agreements registered with them. Some of the major decisions handed down by the Australian Industrial Relations Commission and its predecessor, the Australian Conciliation and Arbitration Commission have been:

- In October 1985, the Commission awarded an increase of 3.8 per cent to operate from the beginning of the first pay period to commence on or after 4 November 1985.
- In July 1986, the Commission awarded a 2.3 per cent increase, effective from 1 July 1986 in all States, except Queensland where it was effective from 7 July 1986.
- In March 1987, a two tier wage fixing system superseded the CPI-based indexation. The first tier was a flat increase of $10 per week payable to all employees. The second tier was a percentage increase of up to four per cent, a maximum rate set by the Commission, negotiable between employees and employers.
- In February 1988, the Commission awarded a flat $6 which was effective from 5 February 1988. In September 1988, the Commission again handed down a decision which allowed for a pay increase which was to be paid in two parts. The first part was an increase of three per cent which was payable from 1 September 1988 and the second was an increase of $10 which was not to be available less than six months after the first increase. Both increases were based on the Structural Efficiency Principles as laid down by the Commission.
- In August 1989, the Commission handed down a decision allowing for a pay increase to be paid in two parts. The first part allowed for an increase of $15 (or 3% whichever was the greater) for skilled workers, $12.50 for semi-skilled workers and $10 for unskilled workers. The second part was an increase of the same amount which was not to be available less than six months after the first increase. Both increases were based on the Structural Efficiency Principles as laid down by the Commission.
- In April 1991, a 2.5 per cent increase was awarded to all States, subject to application to and ratification by the Commission.
- In December 1993, an $8.00 increase was granted to all workers covered by minimum rates awards who have not entered into the enterprise bargaining process.

On 9 July 1992 the *Industrial Relations Legislation Amendment Act 1992* was assented to. This Act freed the way for employers and employees to engage in negotiating enterprise-based awards and agreements which on application are registered with the Federal Industrial Relations Commission.

Since this date all States have introduced their own forms of legislation allowing enterprise bargaining in a variety of ways and covering numerous issues. Federal legislation was further amended to better allow enterprise bargaining in non-unionised workplaces from the end of March 1994.

Award rates of pay indexes

The award rates of pay indexes are based on a representative sample of award classifications, designed to measure trends in rates payable under awards, determinations and collective agreements. The indexes are based on the industry and occupation structures existing in May 1985. Estimates of award rates of pay for each component of the series are expressed as index numbers based on June 1985 = 100.0. Wage variations from enterprise bargaining awards and agreements are generally excluded from award rates of pay indexes.

Table 6.42 shows changes in the index for full-time adult males and females by industry as at June 1991 to 1993. In the 12 months to June 1993, the index rose by 0.8 per cent for full-time adult males and 0.9 per cent for full-time adult females.

6.42 WEEKLY AWARD RATES OF PAY INDEXES
FULL-TIME ADULT EMPLOYEES, BY INDUSTRY, JUNE
(Reference base June 1985 = 100.0)

	Males			Females		
Industry	*1991*	*1992*	*1993*	*1991*	*1992*	*1993*
Mining	137.7	139.7	140.0	. .	. .	. .
Manufacturing	135.7	140.3	141.5	138.9	143.2	144.6
Food, beverages, tobacco	133.8	138.0	138.9	134.3	138.2	138.7
Textiles; Clothing, and footwear	144.9	149.6	151.5	145.0	149.1	151.9
Metal products, machinery and equipment	135.7	139.8	141.2	132.4	141.9	142.9
Basic metal products	133.1	137.8	138.9	. .	. .	. .
Fabricated metal products; Other machinery and equipment	137.6	142.2	143.2	. .	. .	. .
Transport equipment	133.8	138.1	140.2	. .	. .	. .
Other manufacturing(a)	138.8	143.9	144.9	140.2	145.2	145.9
Construction	132.4	136.0	136.7	. .	. .	. .
Wholesale and retail trade	135.7	142.7	143.8	135.2	141.4	143.0
Wholesale trade	135.0	140.4	141.6	134.8	139.6	140.7
Retail trade	136.3	144.8	145.8	135.4	142.3	144.2
Finance, property and business services	129.8	135.0	136.6	131.3	135.7	137.1
Community services	132.5	137.1	138.4	137.1	141.4	142.2
Total all industries(b)	**133.4**	**137.9**	**139.0**	**135.6**	**140.1**	**141.4**

(a) Includes wood, wood products and furniture; non-metallic mineral products; and miscellaneous manufacturing. (b) Excludes employees in the defence forces; agriculture; services to agriculture; and employees in private households employing staff.
Source: Award Rates of Pay Indexes, Australia (6312.0).

Average weekly earnings

Weekly total earnings include award, over-award and overtime pay while weekly ordinary time earnings relate only to that part of total earnings attributable to award, standard or agreed hours of work.

Table 6.43 shows the average weekly ordinary time earnings (AWOTE) of both males and female employed wage and salary earners over the six years ending November 1988 to November 1993. For males the AWOTE increased by 25.1 per cent from $512.70 to $641.20 over this period and for females by 25.8 per cent from $426.80 to $537.00. The slightly higher growth in AWOTE for females has resulted in the ratio of female to male AWOTE increasing from 83.2 per cent to 83.7 per cent over the six years to November 1993.

6.43 AVERAGE WEEKLY EARNINGS OF EMPLOYEES
($)

	Males			Females			Persons		
	Full-time adults		All males	Full-time adults		All females	Full-time adults		All employees
Pay period ending on or before	Average weekly ordinary time earnings	Average weekly total earnings	Average weekly total earnings	Average weekly ordinary time earnings	Average weekly total earnings	Average weekly total earnings	Average weekly ordinary time earnings	Average weekly total earnings	Average weekly total earnings
1988 — November	512.7	558.9	505.2	426.8	439.6	328.7	484.9	520.2	430.1
1989 — November	547.0	595.9	540.0	454.5	467.6	349.3	516.6	553.8	457.2
1990 — November	589.2	635.8	578.2	488.9	501.2	377.9	555.6	590.6	490.6
1991 — November	612.2	654.2	589.7	514.8	527.4	393.2	578.8	610.7	501.3
1992 — November	623.9	670.3	599.5	520.7	532.9	395.8	586.8	621.0	504.1
1993 — November	641.2	692.8	619.0	537.0	550.8	408.6	604.2	642.5	521.5

Source: Average Weekly Earnings, States and Australia (6302.0).

Composition and distribution of earnings

Statistics on the composition and distribution of average weekly earnings and hours for various categories of employees by occupation groups, industries and sectors provide an additional perspective on earnings.

Table 6.44 shows the distribution of average weekly earnings across different occupations and categories of employees in May 1993. The highest weekly total earnings for full-time adult employees were recorded in the following major occupation groups: Managers and administrators (males $929.20, females $708.40); Professionals (males $866.20, females $707.00); and Para-professionals (males $738.80, females $666.60).

6.44 AVERAGE WEEKLY TOTAL EARNINGS, MAJOR OCCUPATION GROUPS, BY CATEGORY OF EMPLOYEE, MAY 1993
($)

	Full-time employees								
	Managerial	Non-managerial			Total				
Occupation	Adult	Adult	Junior	Total	Adult	Junior	Total	Part-time employees	All employees
				MALES					
Managers & administrators	936.80	783.00	*—	783.00	929.20	*—	929.20	290.20	921.20
Professionals	1,032.30	797.70	288.60	795.30	866.20	288.60	864.30	331.80	804.30
Para-professionals	865.30	723.90	370.30	720.60	738.80	370.30	735.70	272.40	705.20
Tradespersons	537.30	616.20	306.60	580.30	610.20	306.60	577.40	245.40	565.30
Clerks	683.30	591.80	312.80	582.10	602.60	312.80	593.60	237.50	560.30
Salespersons & personal service workers	679.70	572.40	306.40	557.30	595.40	306.40	582.30	158.80	464.20
Plant & machine operators, & drivers	529.80	663.70	340.10	661.60	660.20	340.10	658.10	176.70	623.70
Labourers & related workers	610.10	538.70	282.90	524.80	540.20	282.90	526.60	181.10	446.00
Total	**876.20**	**639.60**	**304.30**	**622.90**	**689.80**	**304.30**	**674.50**	**209.40**	**621.30**

... continued

6.44 AVERAGE WEEKLY TOTAL EARNINGS, MAJOR OCCUPATION GROUPS, BY CATEGORY OF EMPLOYEE, MAY 1993 — *continued*

	Full-time employees								
	Managerial	*Non-managerial*			*Total*				
Occupation	*Adult*	*Adult*	*Junior*	*Total*	*Adult*	*Junior*	*Total*	*Part-time employees*	*All employees*
				FEMALES					
Managers & administrators	709.60	691.70	*—	691.70	708.40	*—	708.40	289.30	665.10
Professionals	774.70	696.90	340.30	695.70	707.00	340.30	706.00	312.50	581.00
Para-professionals	750.30	661.30	304.00	658.70	666.60	304.00	664.00	368.60	537.10
Tradespersons	387.80	458.90	253.10	413.30	455.70	253.10	412.40	229.60	360.20
Clerks	504.20	504.30	298.90	490.40	504.30	298.90	491.40	254.30	421.10
Salespersons & personal service workers	561.30	471.90	291.00	448.30	478.40	291.00	455.60	191.40	291.40
Plant & machine operators, & drivers	*—	435.00	331.70	431.90	435.00	331.70	431.90	204.80	388.10
Labourers & related workers	497.80	440.90	299.40	437.30	441.10	299.40	437.50	206.50	301.60
Total	**653.70**	**540.00**	**290.60**	**524.50**	**553.10**	**290.60**	**538.60**	**239.90**	**414.60**
				PERSONS					
Managers & administrators	895.40	761.70	*—	761.70	888.40	*—	888.40	289.60	870.00
Professionals	970.00	750.50	307.50	748.80	799.80	307.50	798.30	317.80	696.70
Para-professionals	838.60	701.10	349.50	698.10	713.40	349.50	710.50	354.40	626.10
Tradespersons	530.30	603.60	298.10	565.20	598.20	298.10	563.00	237.50	541.90
Clerks	578.00	531.20	301.40	518.00	535.40	301.40	523.10	252.70	457.10
Salespersons & personal service workers	651.90	520.50	295.20	498.80	539.90	295.20	519.50	185.10	351.50
Plant & machine operators, & drivers	529.80	636.60	336.80	633.80	634.10	336.80	631.40	185.00	592.20
Labourers & related workers	605.00	513.10	285.20	502.40	514.60	285.20	504.00	196.70	390.10
Total	**824.70**	**601.50**	**298.30**	**585.00**	**641.20**	**298.30**	**625.70**	**232.40**	**526.40**

Source: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0).

Table 6.45 presents the components of average weekly earnings and hours for full-time adult non-managerial employees, by industry and sector.

In 1993, payment by measured result, over-award pay and overtime were more significant for full-time adult non-managerial males than females, as a percentage of total weekly earnings.

Payment by measured result was most predominant in the Mining industry (males $126.60, females $46.60). Male employees in the Manufacturing industry, and female employees in the Finance, property and business industry received higher average over-award pay ($20.00 and $14.00, respectively) than employees in any other industry. Significant amounts of overtime earnings were recorded for full-time adult non-managerial males in the Mining, Transport and storage, and Construction industries ($160.40, $103.70 and $99.00, respectively). Overtime payments to females were highest in the Transport and storage industry ($33.90).

In May 1993, females in the private sector earned 80.6 per cent, on average, of their male counterparts' total weekly earnings. In the public sector, female employees received 90.2 per cent of total male earnings.

6.45 COMPOSITION OF AVERAGE WEEKLY TOTAL EARNINGS AND AVERAGE WEEKLY TOTAL HOURS PAID FOR: FULL-TIME ADULT NON-MANAGERIAL EMPLOYEES, BY INDUSTRY AND SECTOR, MAY 1993

	Average weekly total earnings ($)						Average weekly total hours paid for		
	Average weekly ordinary time earnings								
	Award or agreed base rate of pay	Payment by measured result	Over-award pay	Total ordinary time	Overtime	Total	Ordinary time	Over-time	Total
MALES									
Industry									
Mining	725.40	126.60	*13.80	865.80	160.40	1,026.20	38.4	6.5	44.9
Manufacturing	496.70	9.00	20.00	525.70	85.60	611.30	37.9	4.0	41.9
Electricity, gas & water	614.00	*0.90	1.30	616.20	61.50	677.70	37.0	2.5	39.5
Construction	564.40	*3.10	5.90	573.40	99.00	672.40	37.9	4.3	42.1
Wholesale trade	505.60	*9.30	19.30	534.10	43.10	577.20	38.5	2.0	40.5
Retail trade	429.90	*20.70	17.60	468.30	31.70	500.00	38.5	1.8	40.2
Transport & storage	567.80	*8.30	*5.40	581.50	103.70	685.30	38.5	4.6	43.1
Communication	606.70	*2.10	*—	608.80	69.30	678.20	36.6	2.6	39.2
Finance, property & business services	572.90	*9.90	8.20	591.00	30.40	621.50	38.2	1.4	39.6
Public administration & defence	572.60	*—	2.70	575.20	33.20	608.50	37.5	1.5	38.9
Community services	656.20	*0.20	3.10	659.50	30.70	690.20	37.5	1.1	38.6
Recreation, personal & other services	533.10	*5.10	8.30	546.50	22.30	568.90	38.9	1.1	40.0
Sector									
Private	522.60	14.50	15.00	552.10	69.50	621.70	38.2	3.2	41.5
Public	622.10	1.70	*2.00	625.80	47.40	673.20	37.3	1.9	39.2
Total	**557.20**	**10.00**	**10.50**	**577.80**	**61.80**	**639.60**	**37.9**	**2.7**	**40.7**
FEMALES									
Industry									
Mining	630.10	46.60	*7.80	684.50	30.60	715.10	38.8	*1.6	40.4
Manufacturing	441.60	5.10	11.20	458.00	28.10	486.10	37.7	1.5	39.3
Electricity, gas & water	539.60	*0.40	*1.20	541.20	*17.90	559.10	36.4	*0.8	37.3
Construction	457.30	*0.30	*3.60	461.20	*11.20	472.40	38.2	*0.6	38.7
Wholesale trade	462.70	*4.70	10.30	477.70	17.10	494.80	38.1	0.9	39.1
Retail trade	403.60	*1.60	4.70	409.90	13.20	423.00	37.9	0.8	38.7
Transport & storage	522.90	*2.00	*1.90	526.80	33.90	560.70	37.9	1.6	39.5
Communication	543.20	*4.00	*0.30	547.50	30.80	578.40	36.1	1.4	37.5
Finance, property & business services	496.20	*2.20	14.00	512.40	10.00	522.40	37.6	0.5	38.1
Public administration & defence	559.00	*—	*0.70	559.70	10.00	569.70	36.8	0.4	37.2
Community services	592.90	*0.20	2.20	595.30	7.40	602.60	37.3	0.3	37.5
Recreation, personal & other services	458.30	*0.30	6.40	465.00	14.50	479.60	38.5	0.8	39.2
Sector									
Private	473.50	2.80	9.60	485.90	15.00	500.90	37.9	0.8	38.6
Public	595.40	*0.30	*0.40	596.10	10.80	607.00	37.0	0.4	37.4
Total	**518.40**	**1.90**	**6.20**	**526.50**	**13.50**	**540.00**	**37.5**	**0.7**	**38.2**

... continued

6.45 COMPOSITION OF AVERAGE WEEKLY TOTAL EARNINGS AND AVERAGE WEEKLY TOTAL HOURS PAID FOR: FULL-TIME ADULT NON-MANAGERIAL EMPLOYEES, BY INDUSTRY AND SECTOR, MAY 1993 — *continued*

	Average weekly total earnings ($)						*Average weekly total hours paid for*		
	Average weekly ordinary time earnings								
	Award or agreed base rate of pay	*Payment by measured result*	*Over-award pay*	*Total ordinary time*	*Overtime*	*Total*	*Ordinary time*	*Over-time*	*Total*
	PERSONS								
Industry									
Mining	717.50	120.00	13.30	850.80	149.70	1,000.50	38.5	6.1	44.5
Manufacturing	482.60	8.00	17.70	508.30	70.80	579.10	37.8	3.4	41.2
Electricity, gas & water	606.10	*0.90	1.30	608.30	56.90	665.10	36.9	2.3	39.3
Construction	551.90	*2.80	5.60	560.30	88.70	649.00	37.9	3.8	41.7
Wholesale trade	493.10	*7.90	16.60	517.60	35.50	553.10	38.4	1.7	40.1
Retail trade	419.00	*12.80	12.20	444.00	24.00	467.90	38.2	1.4	39.6
Transport & storage	560.60	*7.30	*4.90	572.80	92.50	665.30	38.4	4.1	42.5
Communication	590.40	*2.60	*0.10	593.10	59.50	652.50	36.5	2.3	38.8
Finance, property & business services	529.30	*5.60	11.50	546.40	18.80	565.20	37.9	0.9	38.8
Public administration & defence	567.50	*—	1.90	569.40	24.50	594.00	37.2	1.1	38.3
Community services	619.30	*0.20	2.60	622.00	17.10	639.10	37.4	0.6	38.0
Recreation, personal & other services	495.80	*2.70	7.40	505.80	18.40	524.20	38.7	0.9	39.6
Sector									
Private	504.20	10.10	13.00	527.30	49.10	576.40	38.1	2.3	40.4
Public	611.50	1.20	*1.40	614.00	32.90	646.90	37.2	1.3	38.5
Total	**542.40**	**6.90**	**8.90**	**558.20**	**43.30**	**601.50**	**37.8**	**1.9**	**39.7**

Source: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0).

Non-wage benefits

In addition to wages and salaries, a large majority of employees receive one or more non-wage benefits, such as leave, holiday costs, low-interest finance, goods and services, housing, electricity, telephone, transport, medical, union dues, club fees, entertainment allowance, shares, study leave, superannuation or children's education expenses.

By their nature, it is difficult to collect data on the value of most non-wage benefits. The statistics presented in this section therefore relate to the incidence of non-wage benefits, and not to their value.

The proportion of full-time employees (excluding those attending school) receiving one or more employment benefits has remained about 96–97 per cent each year since 1988.

The non-wage benefits most widely available to employees are leave benefits and superannuation (table 6.46). The proportion of employees receiving a superannuation benefit (that is, belonging to a superannuation scheme or fund arranged by their employer) has increased steadily in recent years (rising to 88% in 1992 and 92% in 1993 for full-time employees). Details of coverage by industry, occupation and status of worker are shown in the following section on superannuation.

The following provide different views of non-wage benefits: number of employees receiving them, by weekly earnings (table 6.47) and by occupation (table 6.48), and a comparison of selected benefits received in the public and private sectors (graph 6.49).

6.46 EMPLOYEES IN MAIN JOB(a): TYPE OF BENEFIT RECEIVED AND PROPORTION OF FULL-TIME AND PART-TIME EMPLOYEES RECEIVING THEM
(per cent)

Type of benefit received	Working full time		Working part time		Total employees	
	August 1988	August 1992	August 1988	August 1992	August 1988	August 1992
Superannuation	49.4	88.0	9.6	54.1	42.4	80.3
Holiday leave	92.2	91.5	31.4	32.7	81.5	78.1
Sick leave	91.5	91.1	31.3	33.4	80.9	77.9
Long-service leave	73.8	78.4	22.8	26.2	64.8	66.5
Goods and services	15.1	17.6	15.3	19.2	15.1	18.0
Transport	18.0	20.1	5.7	5.6	15.8	16.8
Telephone	9.5	9.9	4.2	3.6	8.6	8.4
Holiday expenses	4.3	4.7	0.7	0.9	3.7	3.8
Medical	39	3.9	0.7	1.1	3.3	3.3
Housing	3.9	3.8	1.3	1.0	3.5	3.2
Low-interest finance	3.5	3.6	0.5	0.9	2.9	3.0
Study leave	2.1	3.0	1.4	2.3	2.0	2.9
Shares	3.2	3.4	1.0	0.9	2.8	2.8
Union dues/prof. association	2.7	3.4	0.5	0.5	2.3	2.8
Electricity	2.4	2.6	1.2	1.4	2.2	2.4
Entertainment allowance	2.1	2.3	*0.1	*0.2	1.8	1.8
Club fees	1.5	1.9	*0.3	0.3	1.3	1.5
Child care/education expenses	0.4	0.3	*0.3	*0.2	0.3	0.3
No benefits	3.9	2.6	45.3	28.9	11.2	8.6

(a) Excluding those attending school.
Source: Employment Benefits, Australia (6334.0).

6.47 FULL-TIME EMPLOYEES IN MAIN JOB: TYPE OF BENEFIT RECEIVED, BY WEEKLY EARNINGS, AUGUST 1992
('000)

	Weekly earnings in main job ($)							
	Under 160	160 and under 320	320 and under 480	480 and under 640	640 and under 800	800 and under 960	960 and over	Total
Total	**78.5**	**473.2**	**1,604.5**	**1,343.8**	**645.6**	**295.8**	**325.9**	**4,767.4**
Superannuation	31.3	354.9	1,411.6	1,226.7	600.8	275.6	296.6	4,197.6
Holiday leave	38.6	387.0	1,482.3	1,262.6	614.9	280.8	296.8	4,362.9
Sick leave	36.8	384.3	1,470.4	1,259.9	612.9	282.1	296.7	4,343.1
Long-service leave	18.6	269.0	1,221.4	1,133.3	567.8	255.4	274.1	3,739.5
Goods and services	12.8	94.3	325.4	228.0	91.7	37.4	51.2	840.8
Transport	18.8	54.4	191.7	268.2	170.5	98.6	155.6	957.8
Telephone	15.7	34.0	73.5	118.5	81.3	51.9	95.2	470.1
Holiday expenses	*1.5	10.7	50.8	71.2	36.6	20.0	31.4	222.2
Medical	*1.5	10.5	35.3	56.7	28.5	16.3	37.7	186.6
Housing	13.1	26.5	36.9	38.3	25.8	15.2	24.7	180.3
Low-interest finance	*1.4	9.5	46.8	51.3	25.7	11.7	25.7	172.1
Study leave	*1.5	9.3	25.6	53.0	26.0	15.4	13.3	144.2
Shares	*3.1	9.1	34.8	43.4	23.2	15.4	32.5	161.6
Union dues/prof. association	4.0	8.3	25.2	32.6	29.7	18.8	44.8	163.3
Electricity	13.1	22.8	30.6	22.8	13.6	7.9	14.9	125.7
Entertainment allowance	*0.6	*1.2	8.6	25.9	20.0	17.4	34.9	108.5
Club fees	*1.6	*2.8	9.9	17.8	14.4	11.9	29.9	88.4
Child care/education expenses	*0.1	*1.1	*1.6	*2.2	3.6	*2.0	*3.2	13.9
No benefits	14.7	28.6	36.9	25.0	8.3	3.5	5.7	122.7

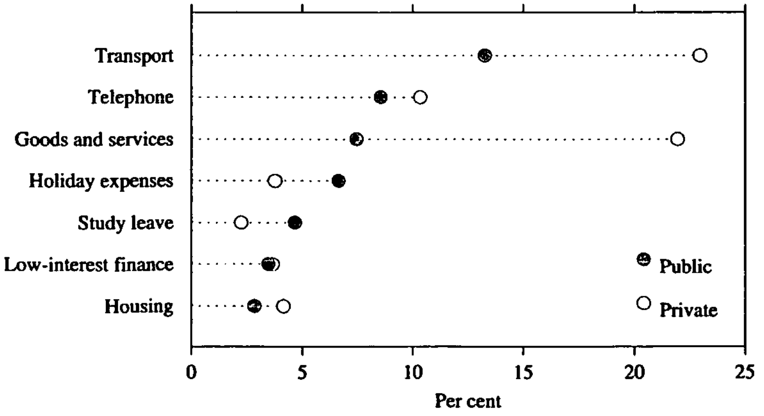
Source: Employment Benefits, Australia (6334.0).

6.48 ALL EMPLOYEES: TYPE OF BENEFIT RECEIVED AND OCCUPATION IN MAIN JOB, AUGUST 1992 ('000)

	Occupation								
Type of benefit received	*Managers and administrators*	*Professionals*	*Para-professionals*	*Tradespersons*	*Clerks*	*Sales persons and personal service workers*	*Plant & machine operators, & drivers*	*Labourers and related workers*	*Total*
Total	**424.8**	**758.1**	**343.0**	**805.6**	**860.2**	**502.5**	**412.4**	**660.8**	**4,767.4**
Superannuation	365.2	684.1	315.6	698.1	791.4	422.3	369.7	551.2	4,197.6
Holiday leave	375.7	712.0	328.2	732.1	824.8	447.0	372.2	571.0	4,362.9
Sick leave	373.9	713.3	327.4	728.2	823.3	442.1	369.7	565.3	4,343.1
Long-service leave	305.8	642.5	311.5	603.1	734.0	345.7	325.9	471.0	3,739.5
Goods and services	89.9	76.2	32.6	141.1	130.7	178.7	69.5	122.1	840.8
Transport	230.2	157.5	61.1	163.4	82.7	126.5	62.1	74.4	957.8
Telephone	142.3	86.9	36.9	68.7	46.0	41.5	22.7	25.1	470.1
Holiday expenses	22.5	29.3	17.1	26.9	43.8	39.0	20.2	23.4	222.2
Medical	26.2	35.6	13.4	17.6	53.1	15.3	12.8	12.7	186.6
Housing	37.2	37.1	14.2	21.9	15.8	12.0	15.7	26.3	180.3
Low-interest finance	26.4	21.8	4.8	11.8	68.0	28.5	6.5	4.3	172.1
Study leave	11.9	47.3	19.4	13.7	33.6	8.6	*2.1	7.6	144.2
Shares	35.3	22.8	4.5	19.7	35.6	15.8	16.4	11.4	161.6
Union dues/prof. association	34.0	60.7	8.0	16.5	9.4	13.7	10.1	10.8	163.3
Electricity	26.5	25.4	6.2	19.1	11.1	8.3	10.0	19.2	125.7
Entertainment allowance	46.0	20.5	4.0	4.1	7.7	24.1	*0.8	*1.3	108.5
Club fees	29.8	26.5	*3.3	4.0	10.0	12.1	*1.1	*1.6	88.4
Child care/education expenses	4.2	4.4	*1.2	*1.1	*1.6	*0.4	*0.2	*0.7	13.9
No benefits	8.3	11.9	5.2	24.3	13.5	14.2	14.4	31.0	122.7

Source: Employment Benefits, Australia (6334.0).

6.49 PROPORTION OF FULL-TIME EMPLOYEES IN MAIN JOB RECEIVING SELECTED BENEFITS, PUBLIC AND PRIVATE SECTORS, AUGUST 1992



Source: Employment Benefits, Australia (6334.0).

Superannuation

Over recent years superannuation has assumed a major role in Australian industrial relations and government labour and social welfare policy. Less than a decade ago superannuation was available as an employment benefit only to a select group of occupations and industries. Most workers had to rely on personal savings and the age pension for income in their retirement. In response to the expected increase in age pension liabilities as Australia's population ages, moves were made by the Government for workers to be more reliant on superannuation in retirement.

In the 1986 National Wage Case a three per cent productivity-linked pay rise was awarded, payment of which was deferred through superannuation. As a consequence the number of employees covered by superannuation increased dramatically over subsequent years. In 1992 the Superannuation Guarantee Charge was introduced, which aimed to extend superannuation coverage to all employees and progressively increase the level of superannuation contributions.

This section incorporates statistics on superannuation from two ABS surveys. One is an annual survey of businesses regarding labour costs (a biennial survey from 1991–92), in which data is collected on employer superannuation costs. The other is a supplementary survey to the Labour Force Survey which provides data on the characteristics of workers in relation to superannuation. Due to the different sources and methods, the level of coverage differs slightly in the two surveys thus affecting the compatibility of the resulting statistics.

Table 6.50 shows details of superannuation costs in the private sector by industry. These costs have increased 84 per cent over the period 1986–87 to 1991–92 to be $1,196 per employee. Superannuation costs per employee vary considerably between industries, reflecting differences in the mix of occupations and employment conditions. In the Mining industry superannuation costs are nearly five times the costs in the Recreational, personal and other services industry.

Table 6.51 shows the growth in the percentage of employees covered by superannuation in each industry up to 1991–92. Since the introduction of productivity (or award) superannuation the percentage covered has grown from 44 per cent to 77 per cent. This figure is expected to increase further with the introduction of the Superannuation Guarantee Charge from 1 July 1992.

6.50 SUPERANNUATION: COST TO EMPLOYERS, PRIVATE SECTOR

	Mining	*Manufacturing*	*Electricity, gas and water*	*Construction*	*Wholesale and retail trade*	*Transport, storage and communication*	*Finance, property and business services*	*Public administration and defence*	*Community services*	*Recreation, personal and other services*	*Total*
TOTAL COST TO EMPLOYERS ($ million)											
1986–87	124	666	9	158	491	119	640	. .	233	*57	2,497
1987–88	114	732	12	226	563	112	830	. .	283	*98	2,969
1988–89	133	813	11	263	645	110	612	. .	328	99	3,014
1989–90	132	995	5	389	745	139	843	. .	365	135	3,747
1990–91	166	1,089	9	328	879	166	1,172	. .	443	200	4,452
1991–92	166	1,125	8	351	921	190	1,358	. .	525	205	4,849
COST TO EMPLOYERS PER EMPLOYEE ($)											
1986–87	1,551	668	1,568	792	464	775	1,038	. .	554	*185	650
1987–88	1,546	736	1,964	1,012	494	748	1,334	. .	592	*190	707
1988–89	1,775	785	2,086	1,015	533	740	925	. .	668	227	697
1989–90	1,902	997	2,201	1,530	605	847	1,290	. .	815	308	880
1990–91	2,336	1,169	2,611	1,534	755	996	1,770	. .	987	524	1,101
1991–92	2,603	1,295	2,763	1,734	793	1,081	1,928	. .	1,055	542	1,196

Source: Labour Costs, Australia (6348.0).

6.51 SUPERANNUATION: EMPLOYEES COVERED, PRIVATE AND PUBLIC SECTORS (per cent)

	Mining	*Manufacturing*	*Electricity, gas and water*	*Construction*	*Wholesale and retail trade*	*Transport, storage and communication*	*Finance, property and business services*	*Public administration and defence*	*Community services*	*Recreation, personal and other services*	*Total*
1986–87	73.6	45.1	79.9	45.3	23.9	62.9	41.0	74.2	39.2	13.1	41.6
1987–88	77.2	55.3	85.2	49.3	23.2	66.8	46.3	76.8	42.3	13.2	44.0
1988–89	80.7	62.2	96.8	56.2	28.3	77.8	47.1	87.5	69.4	20.7	54.8
1989–90	85.2	78.8	97.1	68.5	48.0	79.6	59.3	89.4	79.8	29.9	66.7
1990–91	86.6	84.7	95.7	72.9	60.0	85.1	71.3	93.7	84.8	48.3	75.5
1991–92	92.1	87.2	98.4	75.9	63.3	86.5	74.2	94.9	84.3	50.7	77.4

Source: Labour Costs, Australia (6348.0).

Table 6.52 shows that, of those persons employed in November 1993, 6,145,500 (or 80%) were covered by superannuation, that is, belonged to a superannuation scheme to which contributions were being made either by an employer or personally. The percentage of employees covered by superannuation was 89 per cent compared with 55 per cent of employers and 36 per cent of self-employed persons.

The Para-professionals occupation group had the highest level of coverage (93%), followed by Professionals (87%). The occupation groups with the lowest levels of superannuation coverage were Managers and administrators (70%) and Salespersons and personal service workers (72%). Males recorded higher levels of superannuation coverage than females across all occupation groups.

Table 6.53 shows that some 93 per cent of full-time employees were covered by superannuation compared with 71 per cent of part-time employees. Some 95 per cent of permanent employees were covered by superannuation compared with 64 per cent of casual employees.

An estimated 96 per cent of employees who belonged to a trade union were covered by superannuation. In contrast, 84 per cent of employees who did not belong to a trade union were covered.

As shown in table 6.54 for those employees making personal contributions, superannuation was expected to be the main source of income after retirement for 42 per cent of the 888,300 employees aged 45 to 74 personally contributing to superannuation schemes. A further 21 per cent expected a government pension to be their main source of income. Fewer part-time employees (20%) compared with full-time employees who contribute personally to a superannuation scheme (44%) expected superannuation to be their main source of income after retirement. Superannuation was less likely to be the main source of income for lower income earners. Of employees earning less than $200 per week, 11 per cent nominated superannuation as their expected main income compared with 54 per cent of employees earning $600 or more per week.

6.52 SUPERANNUATION: COVERAGE OF EMPLOYED PERSONS AGED 15 TO 74, BY STATUS OF WORKER AND OCCUPATION, NOVEMBER 1993 ('000)

	Covered			Not covered			Total		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Status of worker									
Employers	140.7	42.4	183.0	91.4	58.3	149.6	232.0	100.6	332.6
Self-employed	244.7	62.5	307.1	327.0	208.2	535.3	571.7	270.7	842.4
Employees	3,238.1	2,412.0	5,650.1	341.7	392.4	734.0	3,579.7	2,804.4	6,384.1
Payment in kind/unpaid family helpers	*1.6	*3.7	*5.3	32.1	41.7	73.8	33.7	45.4	79.1
Occupation									
Managers and administrators	493.2	134.6	627.8	171.7	103.8	275.5	664.9	238.4	903.3
Professionals	525.6	402.9	928.5	78.7	62.2	140.9	604.3	465.1	1,069.5
Para-professionals	232.7	211.1	443.8	15.5	16.6	32.1	248.2	227.7	475.9
Tradespersons	879.1	75.7	954.8	180.0	37.2	217.2	1,059.1	112.9	1,172.0
Clerks	258.7	855.5	1,114.2	18.0	153.5	171.5	276.7	1,009.0	1,285.7
Salespersons & personal service workers	304.9	497.6	802.5	103.0	204.6	307.6	407.9	702.2	1,110.1
Plant and machine operators and drivers	394.5	64.7	459.2	70.9	21.9	92.9	465.4	86.6	552.1
Labourers and related workers	536.4	278.3	814.7	154.2	100.7	255.0	690.7	379.0	1,069.7
Total	**3,625.0**	**2,520.5**	**6,145.5**	**792.1**	**700.6**	**1,492.7**	**4,417.1**	**3,221.1**	**7,638.2**

Source: Superannuation, Australia (6319.0).

6.53 SUPERANNUATION: COVERAGE OF EMPLOYEES AGED 15 TO 74, BY SELECTED CHARACTERISTICS, NOVEMBER 1993 ('000)

	Covered			Not covered			Total		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Usual gross weekly pay in current job ($)									
Under 200	86.2	287.1	373.3	110.8	215.5	326.3	196.9	502.6	699.5
200 and under 240	48.5	117.3	165.8	19.7	30.7	50.5	68.2	148.1	216.3
240 and under 280	64.7	142.2	206.9	18.1	23.8	42.0	82.8	166.0	248.8
280 and under 320	80.6	147.0	227.6	18.6	23.8	42.4	99.2	170.7	269.9
320 and under 360	137.6	181.2	318.8	19.9	21.0	40.8	157.4	202.1	359.6
360 and under 400	201.5	212.3	413.8	24.2	17.9	42.2	225.7	230.3	456.0
400 and under 440	287.5	211.3	498.7	23.3	17.6	41.0	310.8	228.9	539.7
440 and under 480	239.9	187.6	427.5	15.1	9.4	24.5	255.0	197.0	452.0
480 and under 520	274.2	191.6	465.8	16.0	7.7	23.7	290.3	199.3	489.6
520 and under 560	222.4	128.3	350.7	13.5	*4.6	18.1	235.9	132.9	368.8
560 and under 600	180.4	92.1	272.4	8.7	*3.0	11.7	189.0	95.0	284.1
600 and under 640	187.6	99.4	287.0	8.6	*2.4	11.0	196.2	101.8	298.0
640 and under 680	148.7	78.2	226.9	*3.6	*2.0	*5.6	152.3	80.2	232.5
680 and under 720	141.8	60.1	201.9	*5.8	*0.9	*6.7	147.6	61.0	208.5
720 and under 760	106.1	58.5	164.6	*3.3	*1.1	*4.3	109.4	59.6	169.0
760 and under 800	113.3	47.7	161.0	*3.3	*1.6	*4.9	116.6	49.3	165.9

... continued

6.53 SUPERANNUATION: COVERAGE OF EMPLOYEES AGED 15 TO 74, BY SELECTED CHARACTERISTICS, NOVEMBER 1993 — *continued*
('000)

	Covered			*Not covered*			*Total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
800 and under 840	106.2	44.4	150.6	*2.2	*0.9	*3.1	108.3	45.3	153.6
840 and under 880	79.0	19.0	98.0	*2.0	*0.3	*2.3	81.0	19.3	100.4
880 and under 920	56.3	16.7	73.0	*2.0	*—	*2.0	58.3	16.7	75.0
920 and under 960	53.3	11.4	64.6	*0.9	*—	*0.9	54.1	11.4	65.5
960 and under 1,000	65.7	12.2	77.9	*1.8	*0.9	*2.7	67.5	13.2	80.7
1,000 and under 1,040	70.7	12.3	83.0	*2.7	*0.2	*2.9	73.4	12.5	85.9
1,040 and under 1,080	65.8	8.4	74.2	*1.2	*0.2	*1.4	67.0	8.6	75.6
1,080 and over	154.9	16.2	171.1	*6.0	*0.9	*6.9	160.9	17.1	178.0
Did not know	65.4	29.6	95.0	10.4	*5.9	16.4	75.8	35.6	111.4
Status ('000)									
Full-time	3,088.9	1,602.7	4,691.6	228.0	113.4	341.4	3,316.9	1,716.1	5,033.1
Part-time	149.1	809.3	958.4	113.7	278.9	392.6	262.8	1,088.2	1,351.0
Permanent	2,861.0	1,907.0	4,768.0	125.2	108.0	233.1	2,986.2	2,015.0	5,001.2
Casual	377.0	505.0	882.0	216.5	284.4	500.9	593.6	789.4	1,382.9
Trade union membership ('000)									
Member of a trade union	1,444.9	910.9	2,355.8	48.5	52.7	101.2	1,493.4	963.6	2,457.0
Not a member of a trade union	1,752.2	1,483.0	3,235.2	286.4	333.8	620.2	2,038.6	1,816.8	3,855.4
Did not know	40.9	18.2	59.1	*6.8	*5.8	12.6	47.7	24.0	71.7
Total	**3,238.1**	**2,412.0**	**5,650.1**	**341.7**	**392.4**	**734.0**	**3,579.7**	**2,804.4**	**6,384.1**
Average usual gross weekly pay in current job ($)	617	441	542	358	215	281	593	409	512

Source: Superannuation, Australia (6319.0).

6.54 EMPLOYEES AGED 45 TO 74 COVERED BY A SUPERANNUATION SCHEME: USUAL GROSS WEEKLY PAY IN (ALL) JOBS AND EXPECTED MAIN SOURCE OF INCOME AFTER CEASING FULL-TIME WORK, NOVEMBER 1993 ('000)

	Makes personal contributions							
	Superannuation	*Invalid age, sole parent's widow's pension*	*Investments, interest, stocks, debentures, etc.*	*Dependent on someone else's income, pension, super annuation*	*Other*	*Did not know*	*Employer or business contributions only*	*Total(a)*
Usual gross weekly pay in all jobs ($)								
Under 200	*2.3	*5.4	*0.5	*5.9	*2.0	*3.6	72.9	93.0
200 and under 240	*2.1	*4.2	*0.7	*1.8	0.2	*2.6	26.9	38.5
240 and under 280	*2.6	*6.8	*1.3	*2.6	*2.1	*1.0	35.3	51.7
280 and under 320	*1.8	*4.8	*2.2	*4.4	*2.6	*2.3	31.8	50.4
320 and under 360	*4.1	9.9	*1.9	*3.7	*2.1	*3.8	46.9	72.9
360 and under 400	14.4	17.3	*1.3	*3.2	*4.6	7.8	50.2	99.6
400 and under 440	15.9	22.0	*1.3	*6.9	*4.6	10.6	57.4	120.3
440 and under 480	19.4	17.7	*5.5	*4.6	*3.3	9.1	40.7	101.2
480 and under 520	24.3	22.5	*3.9	*4.5	*6.7	8.2	43.2	115.2
520 and under 560	20.0	16.2	*2.8	*3.9	*2.8	*4.4	26.9	77.5
560 and under 600	16.5	11.0	*1.1	*1.2	*1.4	8.2	23.3	63.2
600 and under 640	25.3	11.1	*4.8	*2.2	*5.0	*6.3	27.0	82.3
640 and under 680	22.1	8.1	*2.8	*2.2	*2.9	*5.7	16.1	60.7
680 and under 720	17.3	*5.6	*2.3	*2.3	*4.5	*6.0	17.6	56.4
720 and under 760	22.7	*4.8	*1.7	*2.2	*3.2	*3.6	8.0	47.5
760 and under 800	19.7	*3.3	*1.4	*0.7	*2.5	*3.8	10.3	42.9
800 and under 840	17.8	*1.8	*2.7	*1.2	*4.3	*5.0	13.9	47.5
840 and under 880	17.5	*1.4	*1.9	*1.0	*2.8	*2.3	*5.0	32.5
880 and under 920	11.9	*2.5	*1.6	*0.8	*0.9	*3.2	*2.5	24.4
920 and under 960	11.4	*3.1	*1.1	*0.5	*2.5	*0.3	*4.0	23.0
960 and under 1,000	9.0	*1.3	*2.4	*0.5	*3.2	*3.0	9.5	29.8
1,000 and under 1,040	12.5	*2.5	*5.1	*0.5	*2.8	*3.7	9.4	37.6
1,040 and under 1,080	15.5	*1.7	*2.7	*0.6	*1.2	*3.2	*4.5	29.9
1,080 and over	35.2	*1.3	*6.2	*0.2	*4.5	*2.7	21.2	75.0
Did not know	9.0	*1.9	*1.6	*1.2	*1.6	*4.1	24.8	44.7
Status								
Full-time	352.5	166.0	52.9	36.9	66.0	102.6	429.3	1,226.3
Part-time	17.9	22.5	7.6	22.1	8.4	12.0	200.0	291.4
Total	**370.3**	**188.5**	**60.5**	**58.9**	**74.4**	**114.7**	**629.3**	**1,517.6**
Average usual gross weekly pay ($)	752	514	750	478	669	648	490	593

(a) Includes persons who reported that they would never cease full-time work, persons who had already ceased full-time work and persons who had never worked full time.
Source: Superannuation, Australia (6319.0).

Labour costs

Labour costs are those costs incurred by employers in the employment of labour. Labour costs can be split into those payments for time actually worked by employees and additional labour costs incurred by employers. These extra costs are referred to as on-costs.

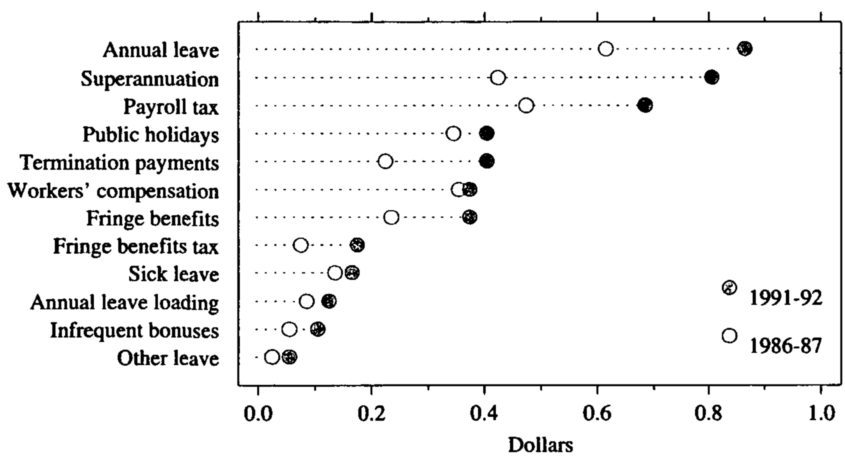
On-costs as a percentage of total labour costs increased from 23.7 per cent in 1986–87 to 25.4 per cent in 1991–92. Hence payment for time worked accounted for less than 75 per cent of the total labour costs bill in 1991–92.

Graph 6.55 shows the relative size of components of on-costs and how on-costs per hour worked in the private sector have increased from 1986–87 to 1991–92. The three highest on-costs for employers are annual leave, superannuation contributions and payroll tax. Since 1986–87 large percentage increases have occurred in superannuation contributions, termination payments and fringe benefits. By contrast workers' compensation costs recorded the smallest increase over the period.

Graph 6.56 shows how the non-earnings components of labour costs in the private sector have increased in the period 1986–87 to 1991–92. Over the past six years these costs have increased by nearly 48 per cent compared to earnings which have increased by 35 per cent.

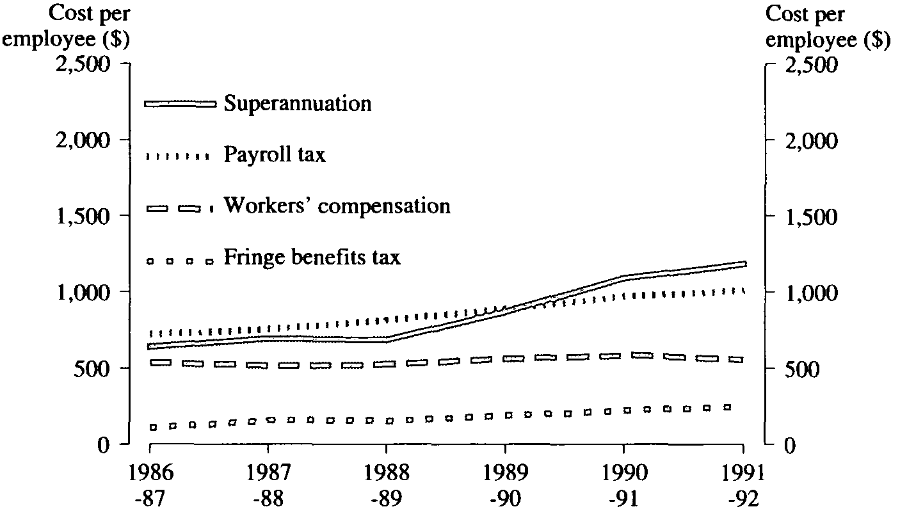
Table 6.57 details labour costs by industry for 1991–92. The Mining industry continues to incur the highest costs per employee, with the Recreation, personal and other services industry incurring the lowest labour costs per employee.

6.55 ON-COSTS PER HOUR WORKED, PRIVATE SECTOR



Source: Labour Costs, Australia (6348.0).

6.56 AVERAGE LABOUR COSTS PER EMPLOYEE: PRIVATE SECTOR



Source: Labour Costs, Australia (6348.0).

6.57 LABOUR COSTS BY INDUSTRY, 1991–92
($)

Type of labour cost	*Mining*	*Manufac-turing*	*Elect-ricity, gas & water*	*Con-struc-tion*	*Whole-sale & retail trade*	*Trans-port, storage & commun-ication*	*Finance, property & business services*	*Public admin-istration & defence*	*Com-munity services*	*Recre-ation, personal & other services*	*Total*
COSTS PER HOUR WORKED											
Earnings	29.39	18.05	22.38	17.75	15.08	20.24	20.20	19.27	20.61	14.38	18.59
Payments for time worked	24.22	15.18	17.61	15.11	13.11	16.50	16.48	16.08	17.16	12.97	15.59
Other earnings	5.17	2.87	4.77	2.65	1.97	3.73	3.72	3.19	3.44	1.41	3.00
Annual leave	1.62	0.93	1.35	0.81	0.68	1.14	1.05	1.14	1.67	0.54	1.07
Sick leave	0.37	0.22	0.50	0.18	0.13	0.36	0.22	0.38	0.35	0.09	0.25
Other leave	0.19	0.07	0.27	0.07	0.04	0.14	0.07	0.23	0.22	0.02	0.11
Public holidays	0.66	0.46	0.69	0.48	0.34	0.52	0.57	0.64	0.55	0.22	0.48
Annual leave loading	0.29	0.16	0.21	0.12	0.10	0.19	0.14	0.19	0.20	0.09	0.15
Infrequent bonuses	0.11	0.10	0.01	*0.07	0.10	0.03	0.20	0.01	*0.01	*0.07	0.08
Termination payments	1.03	0.65	1.49	0.66	0.29	1.14	0.55	0.43	0.38	0.24	0.54
Fringe benefits	0.91	0.27	0.25	0.26	0.30	0.21	0.92	0.15	0.08	0.14	0.32
Other labour costs	4.41	2.43	4.66	2.65	1.56	3.67	2.80	1.80	1.95	1.23	2.30
Superannuation(a)	1.55	0.79	2.45	1.30	0.57	1.98	1.26	1.08	0.97	0.53	1.02
Payroll tax	1.64	0.91	1.38	0.60	0.58	1.05	0.92	0.26	0.58	0.40	0.73
Workers' compensation	0.79	0.60	0.72	0.63	0.27	0.54	0.18	0.39	0.35	0.24	0.40
Fringe benefits tax	0.43	0.13	0.12	0.12	0.14	0.10	0.43	0.07	0.04	0.06	0.15
Total labour costs	**33.80**	**20.48**	**27.04**	**20.40**	**16.64**	**23.90**	**23.00**	**21.07**	**22.55**	**15.62**	**20.89**
Of which											
On-costs	9.58	5.29	9.43	5.29	3.53	7.40	6.52	4.99	5.39	2.65	5.30

For footnotes *see* end of table.

6.57 LABOUR COSTS BY INDUSTRY, 1991-92 — *continued*
($)

Type of labour cost	*Mining*	*Manufacturing*	*Electricity, gas & water*	*Construction*	*Wholesale & retail trade*	*Transport, storage & communication*	*Finance, property & business services*	*Public administration & defence*	*Community services*	*Recreation, personal & other services*	*Total*
AVERAGE COSTS PER EMPLOYEE											
Earnings	52,608	30,883	36,585	30,066	20,965	33,460	31,120	29,144	27,406	17,341	27,581
Payments for time worked	43,354	25,981	28,789	25,586	18,227	27,287	25,386	24,319	22,826	15,635	23,126
Other earnings	9,254	4,903	7,796	4,481	2,738	6,174	5,734	4,825	4,580	1,706	4,455
Annual leave	2,906	1,596	2,214	1,374	939	1,884	1,620	1,730	2,218	652	1,585
Sick leave	660	382	815	301	177	599	346	577	463	113	369
Other leave	335	124	440	119	50	232	106	352	298	26	167
Public holidays	1,180	785	1,120	806	473	852	873	972	725	269	711
Annual leave loading	515	275	347	205	139	314	210	295	262	105	228
Infrequent bonuses	191	167	14	*117	141	45	310	12	*10	*81	118
Termination payments	1,843	1,111	2,442	1,122	399	1,893	845	656	501	294	798
Fringe benefits	1,625	463	403	437	419	355	1,424	232	103	165	478
Other labour costs	7,896	4,155	7,617	4,480	2,171	6,066	4,315	2,718	2,589	1,486	3,413
Superannuation(a)	2,773	1,345	4,003	2,201	796	3,272	1,944	1,632	1,296	635	1,516
Payroll tax	2,944	1,565	2,253	1,010	805	1,729	1,422	393	774	484	1,086
Workers' compensation	1,415	1,028	1,173	1,063	373	899	280	584	470	290	586
Fringe benefits tax	764	217	189	206	197	167	669	109	48	77	225
Total labour costs	**60,504**	**35,038**	**44,203**	**34,546**	**23,137**	**39,527**	**35,435**	**31,862**	**29,994**	**18,827**	**30,995**
Of which											
On-costs	17,150	9,058	15,413	8,960	4,910	12,240	10,049	7,542	7,169	3,192	7,869

(a) Additional public sector costs met from consolidated revenue funds are not shown in this table.
Source: Labour Costs, Australia (6348.0).

Hours of work and work patterns

Statistics of hours and patterns of work are essential for the study of economic activity, productivity, working conditions, living standards and the quality of life of working people. In this section, a range of data has been brought together on work patterns and hours of work.

The average weekly hours worked in 1992–93 by various categories of employed persons, and in different industries are shown in tables 6.58 and 6.59.

6.58 EMPLOYED PERSONS: AGGREGATE AND AVERAGE WEEKLY HOURS WORKED(a) ANNUAL AVERAGE(b), 1992–93

		Females			
	Males	Married	Not married	Total	Persons
Aggregate weekly hours worked (million)	178.1	57.1	36.7	93.9	272.0
By full-time workers	171.5	42.0	30.7	72.7	244.1
By part-time workers	6.7	15.2	6.1	21.2	27.8
Average weekly hours worked	40.3	28.6	29.7	29.0	35.5
By full-time workers	43.1	39.3	37.9	38.7	41.7
By part-time workers	15.1	16.2	14.1	15.6	15.4
By wage and salary earners	38.9	28.5	29.7	29.0	34.5
By other than wage and salary earners	46.3	28.9	29.2	28.9	40.5
Average weekly hours worked by persons who worked one hour or more in the reference week	42.2	30.0	31.0	30.4	37.3
By full-time workers	45.2	41.5	39.7	40.7	43.8
By part-time workers	15.8	17.1	14.7	16.3	16.2

(a) The estimates refer to actual hours worked not hours paid for. (b) Averages calculated on quarterly estimates.
Source: The Labour Force, Australia (6203.0).

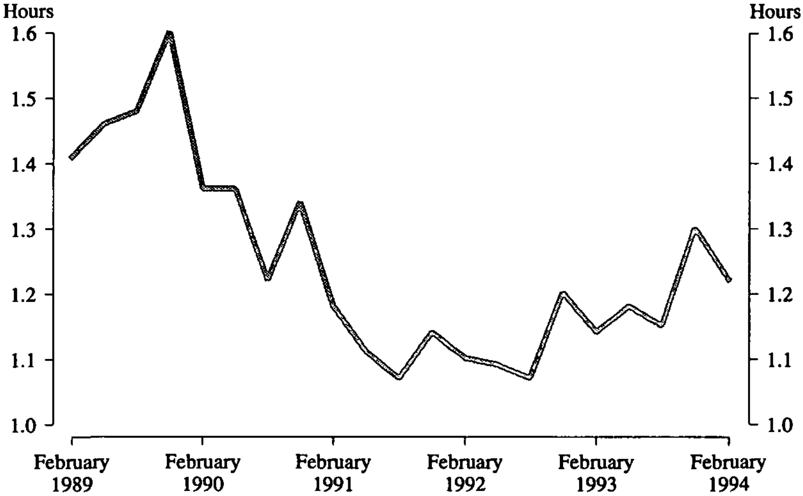
6.59 EMPLOYED PERSONS: AVERAGE WEEKLY HOURS WORKED(a) BY INDUSTRY ANNUAL AVERAGE(b), 1992–93

		Females		
Industry	Males	Married	Total	Persons
Agriculture, forestry, fishing and hunting	49.7	29.9	29.7	43.7
Agriculture and services to agriculture	50.2	—	30.0	44.1
Forestry and logging, fishing and hunting	43.0	—	23.6	39.1
Mining	42.1	30.2	34.2	41.3
Manufacturing	40.1	32.1	32.7	38.0
Food, beverages and tobacco	39.8	—	32.6	37.4
Metal products	40.1	—	31.8	38.9
Other manufacturing	40.1	—	32.9	38.0
Electricity, gas and water	35.7	29.3	32.0	35.2
Construction	40.0	18.2	20.3	37.4
Wholesale and retail trade	40.3	29.3	27.0	34.3
Wholesale trade	42.0	—	31.5	38.7
Retail trade	39.4	—	25.9	32.5
Transport and storage	41.6	30.1	32.0	39.6
Communication	35.8	30.0	30.7	34.2
Finance, property and business services	41.2	27.8	30.1	35.9
Public administration and defence	36.2	29.0	30.4	33.9
Community services	38.2	28.0	29.3	32.3
Recreation, personal and other services	37.6	27.5	27.0	31.7
All industries	**40.3**	**28.6**	**29.0**	**35.5**

(a) The estimates refer to actual hours worked not hours paid for. (b) Averages calculated on quarterly estimates.
Source: The Labour Force, Australia (6203.0).

Changes in the amount of overtime worked by employees and the percentage of employees working overtime are important indicators of changing economic and labour market conditions. The amount of overtime worked declined from 7.5 hours in February 1989 to 7.0 hours in February 1992 and has subsequently increased to 7.3 hours in February 1994. A similar pattern is evident in the percentage of employees working overtime.

6.60 AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE



Source: Job Vacancies and Overtime, Australia (6354.0).

6.61 OVERTIME BY INDUSTRY

Industry	*February 1989*	*February 1990*	*February 1991*	*February 1992*	*February 1993*	*February 1994*
AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE WORKING OVERTIME						
Mining	11.9	10.8	11.6	10.3	10.4	10.7
Manufacturing	8.6	8.4	7.9	7.8	8.7	8.5
Electricity, gas and water	7.8	7.7	7.7	8.1	7.9	8.2
Construction	8.7	8.7	11.1	9.2	9.0	9.9
Wholesale trade	6.3	7.0	6.7	6.7	7.3	7.5
Retail trade	4.6	4.2	4.6	4.4	4.7	4.5
Transport and storage; Communication	8.6	8.0	7.7	8.0	8.0	7.9
Public administration and defence(a)	5.9	6.5	5.2	5.0	6.1	5.0
Community services	6.0	6.2	6.5	5.7	5.5	5.6
Other(b)	5.7	4.5	4.9	5.4	4.9	5.4
All industries	**7.5**	**7.3**	**7.1**	**7.0**	**7.3**	**7.3**

For footnotes *see* end of table.

6.61 OVERTIME BY INDUSTRY — *continued*

Industry	*February 1989*	*February 1990*	*February 1991*	*February 1992*	*February 1993*	*February 1994*
PERCENTAGE OF EMPLOYEES WORKING OVERTIME						
Mining	45.3	52.6	49.5	40.8	48.4	41.7
Manufacturing	34.7	36.4	30.4	31.5	32.5	34.8
Electricity, gas and water	24.5	27.4	24.3	23.6	24.3	23.1
Construction	29.0	31.0	25.8	24.2	21.6	25.2
Wholesale trade	16.5	18.4	17.0	18.6	19.7	21.5
Retail trade	16.2	15.7	13.7	12.3	12.2	12.7
Transport and storage; Communication	29.8	28.2	28.5	26.1	25.9	32.3
Public administration and defence(a)	14.4	14.7	15.0	14.4	12.0	14.0
Community services	5.7	6.4	6.8	7.0	6.4	6.6
Other(b)	11.8	10.1	8.6	7.4	7.1	8.0
All industries	**18.9**	**18.7**	**16.5**	**15.9**	**15.7**	**16.8**

(a) Excludes permanent defence forces. (b) Includes finance, property and business services and recreation, personal and other services.
Source: Job Vacancies and Overtime, Australia (6354.0).

Working arrangements

Two-thirds of employees (4.2 million) had little flexibility in when they started and finished work, as their start and finish times were fixed. Of these employees, 3.3 million had no say in setting these fixed times.

An estimated 2.2 million employees did not have fixed start and finish times, and 1.3 million of these employees had the flexibility of being able to choose their start and finish times on a day-to-day basis. More male employees had this flexibility than female employees, with 23 per cent and 18 per cent, respectively.

Rostered days off are a feature of the working conditions for 1.7 million employees (28% of employees). Rostered days off were most common among permanent full-time employees (37%), with a higher proportion of males than females in this category reporting that they were entitled to a rostered day off (40% of males and 32% of females).

6.62 ALL EMPLOYEES: WHETHER START OR FINISH WORK TIMES WERE FIXED, FULL-TIME OR PART-TIME STATUS IN MAIN JOB AND WHETHER EMPLOYMENT WAS PERMANENT OR CASUAL, AUGUST 1993 ('000)

	Permanent			*Casual*			*Total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
FULL-TIME EMPLOYEES IN MAIN JOB									
Start and finish times not fixed	1,013.5	403.5	1,417.1	152.5	56.5	208.9	1,166.0	460.0	1,626.0
Daily variation is available	650.8	269.6	920.4	103.1	31.3	134.5	753.9	301.0	1,054.9
Daily variation is not available	362.8	133.9	496.6	49.3	25.2	74.5	412.1	159.0	571.1
Start and finish times are fixed	1,869.5	1,098.9	2,968.4	127.7	68.0	195.7	1,997.2	1,166.9	3,164.1
Times were negotiated with employer	316.8	196.2	513.1	37.3	21.7	59.0	354.1	217.9	572.1
Times were not negotiated with employer	1,552.6	902.7	2,455.3	90.4	46.3	136.7	1,643.0	949.0	2,592.1
Total	**2,883.0**	**1,502.4**	**4,385.5**	**280.2**	**124.5**	**404.7**	**3,163.2**	**1,626.9**	**4,790.1**

... continued

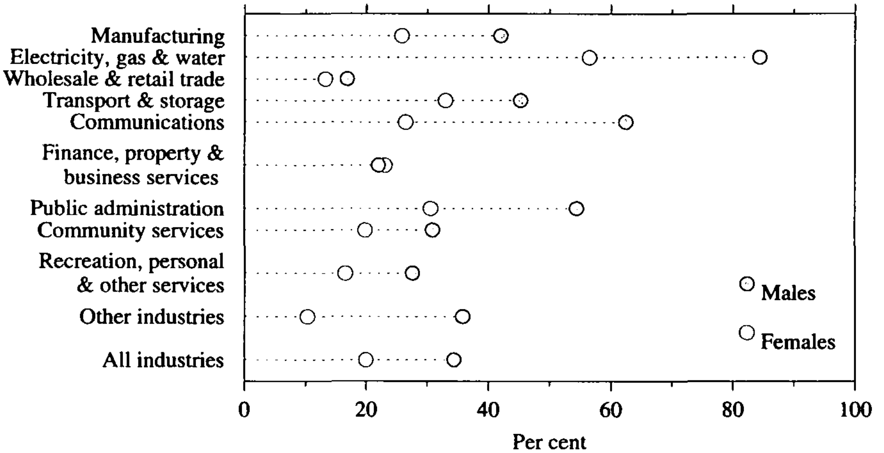
6.62 ALL EMPLOYEES: WHETHER START OR FINISH WORK TIMES WERE FIXED, FULL-TIME OR PART-TIME STATUS IN MAIN JOB AND WHETHER EMPLOYMENT WAS PERMANENT OR CASUAL, AUGUST 1993 — *continued*
('000)

	Permanent			*Casual*			*Total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
PART-TIME EMPLOYEES IN MAIN JOB									
Start and finish times not fixed	18.9	102.9	121.8	132.6	286.8	419.3	151.5	389.7	541.1
Daily variation is available	10.3	65.0	75.3	54.7	139.5	194.1	65.0	204.5	269.5
Daily variation is not available	8.6	37.9	46.5	77.9	147.3	225.2	86.4	185.2	271.7
Start and finish times are fixed	38.9	342.2	381.1	165.3	445.8	611.0	204.2	788.0	992.2
Times were negotiated with employer	12.3	96.3	108.6	32.8	119.6	152.4	45.1	215.9	261.0
Times were not negotiated with employer	26.6	245.9	272.6	132.4	326.2	458.6	159.1	572.1	731.2
Total	**57.8**	**445.1**	**502.9**	**297.8**	**732.6**	**1,030.4**	**355.6**	**1,177.6**	**1,533.3**
TOTAL									
Start and finish times not fixed	1,032.4	506.4	1,538.9	285.0	343.2	628.3	1,317.5	849.7	2,167.1
Daily variation is available	661.1	334.6	995.7	157.8	170.8	328.6	818.9	505.4	1,324.3
Daily variation is not available	371.3	171.8	543.1	127.2	172.5	299.7	498.6	344.3	842.8
Start and finish times are fixed	1,908.4	1,441.1	3,349.5	292.9	513.8	806.8	2,201.4	1,954.9	4,156.3
Times were negotiated with employer	329.1	292.5	621.6	70.1	141.3	211.4	399.2	433.8	833.0
Times were not negotiated with employer	1,579.3	1,148.6	2,727.9	222.8	372.5	595.4	1,802.1	1,521.1	3,323.2
Total	**2,940.8**	**1,947.5**	**4,888.4**	**578.0**	**857.1**	**1,435.0**	**3,518.8**	**2,804.6**	**6,323.4**

Source: Working Arrangements, Australia, August 1993 (6345.0).

Eighty per cent of employees in the Electricity, gas and water industry reported having a rostered day off — 84 per cent of males and 56 per cent of females in the industry, followed by the Communications industry (54%) where the ratio for males (62%) was considerably higher than for females (26%). Other industries varied between 44 per cent of employees in Public administration and defence to 12 per cent in Agriculture, forestry, fishing and hunting.

6.63 EMPLOYEES ENTITLED TO A ROSTERED DAY OFF AS A PROPORTION OF ALL EMPLOYEES BY INDUSTRY, AUGUST 1993



Source: Working Arrangements, Australia, August 1993 (6345.0).

Of the 4.8 million full-time employees, 39 per cent worked overtime on a regular basis, with a higher proportion of males working overtime regularly (42%) compared with females (33%). A lower proportion of part-time employees worked overtime regularly (10% of males and 11% of females).

Those full-time employees most likely to work overtime regularly were employees in the occupations Managers and administrators (62% of males and 57% of females) and Professionals (57% of males and 65% of females).

6.64 ALL EMPLOYEES WHO REGULARLY WORKED OVERTIME OR WERE SHIFT WORKERS IN THEIR MAIN JOBS: FULL-TIME OR PART-TIME STATUS AND WHETHER EMPLOYMENT WAS PERMANENT OR CASUAL, AUGUST 1993
('000)

	Permanent			*Casual*			*Total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
FULL-TIME EMPLOYEES IN MAIN JOB									
Overtime regularly worked	1,238.5	517.3	1,755.9	85.9	28.1	113.9	1,324.4	545.4	1,869.8
Overtime not regularly worked	1,644.5	985.1	2,629.6	194.3	96.4	290.7	1,838.8	1,081.5	2,920.3
On shift work in last 4 weeks	433.9	168.2	602.2	22.6	12.4	35.0	456.5	180.6	637.1
No shift work in last 4 weeks	2,449.1	1,334.2	3,783.3	257.6	112.1	369.7	2,706.6	1,446.3	4,153.0
Total	**2,883.0**	**1,502.4**	**4,385.5**	**280.2**	**124.5**	**404.7**	**3,163.2**	**1,626.9**	**4,790.1**
PART-TIME EMPLOYEES IN MAIN JOB									
Overtime regularly worked	9.7	78.7	88.4	24.4	47.9	72.3	34.1	126.6	160.7
Overtime not regularly worked	48.1	366.4	414.5	273.4	684.7	958.1	321.6	1,051.0	1,372.6
On shift work in last 4 weeks	10.5	84.0	94.5	46.8	97.9	144.8	57.3	181.9	239.3
No shift work in last 4 weeks	47.3	361.1	408.4	251.0	634.6	885.6	298.3	995.7	1,294.0
Total	**57.8**	**445.1**	**502.9**	**297.8**	**732.6**	**1,030.4**	**355.6**	**1,177.6**	**1,533.3**
TOTAL									
Overtime regularly worked	1,248.2	596.1	1,844.3	110.2	76.0	186.2	1,358.5	672.1	2,030.5
Overtime not regularly worked	1,692.6	1,351.4	3,044.1	467.7	781.1	1,248.8	2,160.4	2,132.5	4,292.9
On shift work in last 4 weeks	444.5	252.2	696.6	69.4	110.3	179.8	513.9	362.5	876.4
No shift work in last 4 weeks	2,496.4	1,695.3	4,191.7	508.6	746.7	1,255.3	3,005.0	2,442.1	5,447.0
Total	**2,940.8**	**1,947.5**	**4,888.4**	**578.0**	**857.1**	**1,435.0**	**3,518.8**	**2,804.6**	**6,323.4**

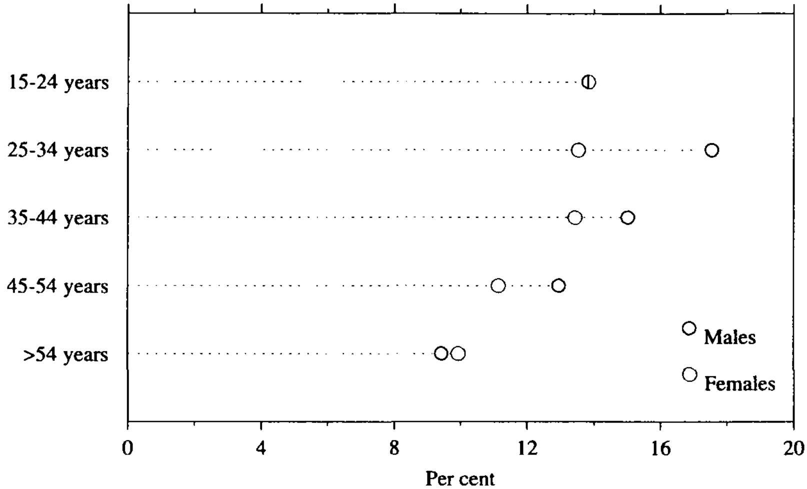
Source: Working Arrangements, Australia, August 1993 (6342.0).

In August 1993, some 876,400 employees (513,900 males and 362,500 females) had worked shift work in the previous four weeks. This represented 14 per cent of employees (15% of males and 13% of females).

Of the 513,900 male shift workers, 433,900 (89%) were full-time employees. Of the 362,500 female shift workers, 180,600 (50%) were full-time employees.

Male employees aged 25 to 34 were the group most likely to have worked shift work in the previous four weeks (18%), while male and female employees aged 55 or more were the least likely to have worked shift work in the previous four weeks (9% and 10% respectively).

6.65 PROPORTION OF MALE AND FEMALE EMPLOYEES WHO HAD WORKED SHIFT WORK IN THE PREVIOUS FOUR WEEKS, AUGUST 1993



Source: Working Arrangements, Australia, August 1993 (6342.0).

INDUSTRIAL RELATIONS

Industrial disputes

This section presents statistics of industrial disputes involving the loss of 10 working days or more at the establishments where stoppages occurred. Working days lost refer to working days lost by workers directly or indirectly involved in disputes at the establishments where the stoppages occurred. In the tables which follow, except for table 6.72, the statistics relate to industrial disputes which occurred in each year, irrespective of the year in which they may have started or ended.

Over the period 1970 to 1993, the reported number of working days lost in any one year varied between 6.3 million (in 1974) and 0.6 million (in 1993). The number has been consistently less than two million since 1982.

6.66 INDUSTRIAL DISPUTES

	Number of disputes(a)		*Employees involved ('000)*		
Year	*Commenced in year*	*Total(a)*	*Newly involved(b)*	*Total(a)*	*Working days lost ('000)*
1988	1,502	1,508	893.9	894.4	1,641.4
1989	1,391	1,402	706.4	709.8	1,202.4
1990	1,189	1,193	725.9	729.9	1,376.5
1991	1,032	1,036	1,178.9	1,181.6	1,610.6
1992	726	728	871.3	871.5	941.2
1993	607	610	489.2	489.6	635.8

(a) Prior to September 1991 disputes affecting more than one industry and/or State have been counted as separate disputes in each industry and State and in the Australian total. (b) Comprises workers involved in disputes which commenced during the year and additional workers involved in disputes which continued from the previous year.

Source: Industrial Disputes, Australia (6321.0).

In 1993 there were 610 disputes reported involving 489,600 employees and the loss of 635,800 working days. The number of disputes was the lowest recorded for a calendar year since 1942 (602). The number of working days lost was the lowest reported for a calendar year since 1963 when 581,600 working days were lost.

6.67 INDUSTRIAL DISPUTES: WORKING DAYS LOST AND NUMBER OF EMPLOYEES INVOLVED (DIRECTLY AND INDIRECTLY)

Source: Industrial Disputes, Australia (6321.0).

6.68 INDUSTRIAL DISPUTES: WORKING DAYS LOST BY INDUSTRY ('000)

	Mining		Manufacturing						
Year	*Coal*	*Other*	*Metal products, machinery and equipment*	*Other*	*Construction*	*Transport and storage; Communication*	*Community services*	*Other industries (a)*	*All industries*
1988	471.3	97.4	309.5	117.4	207.9	75.0	111.4	251.5	1,641.4
1989	164.8	34.2	201.1	186.7	117.0	70.7	224.1	203.9	1,202.4
1990	150.5	86.7	536.3	133.4	62.2	129.9	199.2	78.3	1,376.5
1991	129.6	37.1	664.0	169.3	120.7	98.1	201.1	190.7	1,610.6
1992	76.8	50.8	121.4	154.6	38.4	82.4	238.9	177.7	941.2
1993	78.6	14.4	160.4	77.7	13.1	15.6	147.5	128.7	635.8

(a) Agriculture, etc.; Electricity, etc.; Wholesale and Retail trade; Finance, etc.; Public administration, etc.; Recreation and personal services.

Source: Industrial Disputes, Australia (6321.0).

Working days lost per thousand employees decreased from 158 in 1992 to 108 in 1993. The Coal mining industry continued to report the highest number of working days lost per thousand employees (table 6.69) — 3,256 in 1993.

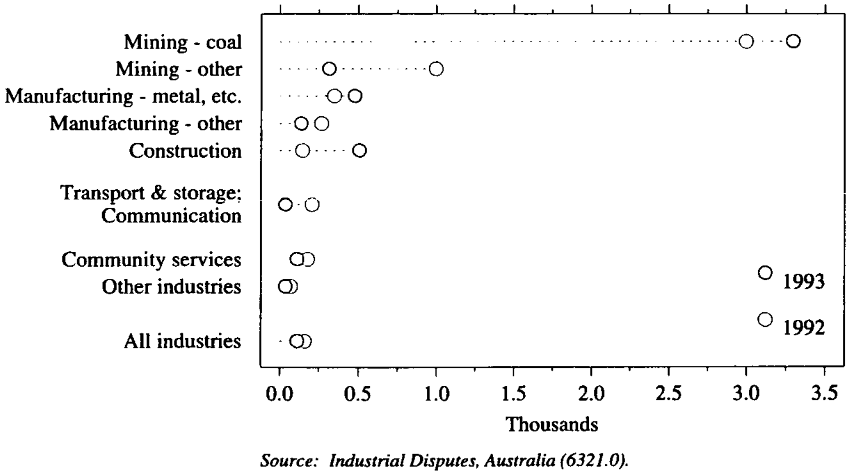
6.69 INDUSTRIAL DISPUTES: WORKING DAYS LOST PER THOUSAND EMPLOYEES BY INDUSTRY

	Mining		Manufacturing						
Year	*Coal*	*Other*	*Metal products, machinery and equipment*	*Other*	*Construction*	*Transport and storage; Communication*	*Community services*	*Other industries (a)*	*All industries*
1988	15,548	1,777	750	183	725	177	90	83	269
1989	5,505	642	473	283	374	160	176	65	190
1990	4,879	1,631	1,293	212	204	299	151	25	217
1991	4,507	735	1,820	296	428	237	150	63	265
1992	r2,970	r997	352	274	152	r214	175	60	158
1993	3,256	317	479	140	51	42	107	44	108

(a) Includes: Agriculture, etc.; Electricity, etc.; Wholesale and Retail trade; Finance, etc.; Public administration, etc.; Recreation and personal services.

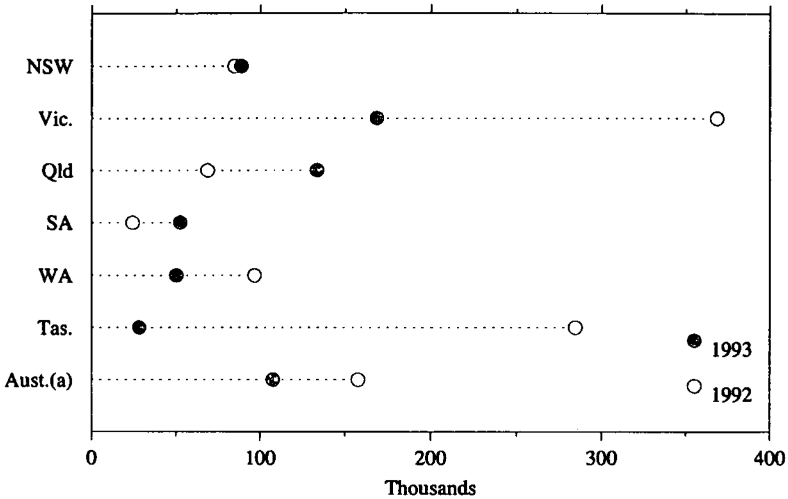
Source: Industrial Disputes, Australia (6321.0).

6.70 INDUSTRIAL DISPUTES: WORKING DAYS LOST PER THOUSAND EMPLOYEES BY INDUSTRY



Source: Industrial Disputes, Australia (6321.0).

6.71 INDUSTRIAL DISPUTES: WORKING DAYS LOST PER THOUSAND EMPLOYEES, STATES AND AUSTRALIA



(a) Includes the Northern Territory and the Australian Capital Territory.
Source: Industrial Disputes, Australia (6321.0).

Industrial disputes which lasted over one and up to and including two days accounted for 42 per cent of all time lost in 1993. The major reported cause of disputes that ended in 1993 was Managerial policy (including award restructuring) (table 6.72). This cause accounted for 271,200 working days lost (44%). Resumption without negotiation was the main reported method of settlement of disputes that ended in 1993 (64%).

6.72 INDUSTRIAL DISPUTES ENDING DURING EACH YEAR: DURATION, CAUSE AND METHOD OF SETTLEMENT, WORKING DAYS LOST ('000)

	1991	*1992*	*1993*
	CAUSE OF DISPUTE		
Wages	37.8	23.2	137.0
Hours of work	3.9	0.3	3.5
Leave, pensions, compensation	22.6	15.0	12.3
Managerial policy	869.4	224.0	271.2
Physical working conditions	60.8	27.2	18.9
Trade unionism	31.2	47.2	10.8
Other(a)	597.4	606.1	169.9
Total	**1,623.1**	**943.0**	**623.4**

For footnotes *see* end of table.

6.72 INDUSTRIAL DISPUTES ENDING DURING EACH YEAR: DURATION, CAUSE AND METHOD OF SETTLEMENT, WORKING DAYS LOST — *continued*
('000)

	1991	*1992*	*1993*
DURATION OF DISPUTE			
Up to and including 1 day	182.5	674.4	142.8
Over 1 and up to and including 2 days	835.1	102.4	262.8
Over 2 and less than 5 days	463.4	73.7	142.6
5 and less than 10 days	53.7	30.9	40.1
10 and less than 20 days	65.5	16.7	32.3
20 days and over	22.9	44.9	2.8
Total	**1,623.1**	**943.0**	**623.4**
METHOD OF SETTLEMENT(b)			
Negotiation	161.2	107.3	100.0
State legislation	80.8	18.8	14.3
Federal and joint Federal–State legislation	548.5	27.9	110.0
Resumption without negotiation	825.6	783.5	396.0
Other methods(c)	6.9	5.5	3.0
Total	**1,623.1**	**943.0**	**623.4**

(a) Includes disputes not elsewhere categorised. (b) Method directly responsible for ending the stoppage of work. (c) Includes 'Mediation', 'Filling the places of workers on strike or locked out'; 'Closing establishments permanently'; 'Dismissal or resignation of employees'.
Source: Industrial Disputes, Australia (6321.0).

Trade unions

In recent years a number of union amalgamations has seen the total number of unions decrease and a trend towards larger unions. The number of trade unions with less than 1,000 members has decreased from 124 in 1991 to 89 in 1993. Unions with membership of 50,000 or more have increased their percentage of total union membership from 57.6 per cent in 1991 to 75.7 per cent in 1993.

6.73 NUMBER OF UNIONS AND MEMBERSHIP, BY SIZE OF UNION

	30 June 1991			*30 June 1992*			*30 June 1993*		
Size of union (number of members)	*Number of unions*	*Number of members ('000)*	*Cumulative % of total members*	*Number of unions*	*Number of members ('000)*	*Cumulative % of total members*	*Number of unions*	*Number of members ('000)*	*Cumulative % of total members*
Under 1,000	124	38.9	1.2	104	31.4	1.0	89	27.2	1.0
1,000 and under 5,000	68	166.1	6.1	51	122.0	4.9	44	109.5	4.6
5,000 and under 20,000	39	417.8	18.4	34	336.1	15.6	22	201.5	11.3
20,000 and under 50,000	25	810.4	42.4	18	601.6	34.8	12	391.8	24.3
50,000 and over	19	1,949.5	100.0	20	2,044.0	100.0	21	2,269.9	100.0
Total	**275**	**3,382.6**		**227**	**3,135.1**		**188**	**3,000.1**	

Source: Trade Union Statistics, Australia (6323.0).

A survey conducted in August 1992 found that of the 6,334,800 employees aged 15 and over, 2,508,800 were trade union members (in connection with their main job).

The survey revealed that trade union membership declined from 50 per cent in 1982 to 40 per cent in 1992.

The Electricity, gas and water, and Communications industry groups were the most unionised with 77 per cent of employees being trade union members while the Agriculture, forestry, fishing and hunting industry group, with 13 per cent, was the least unionised.

6.74 PROPORTION OF ALL EMPLOYEES WHO WERE TRADE UNION MEMBERS BY INDUSTRY AND WHETHER PERMANENT OR CASUAL EMPLOYEE, AUGUST 1992
(per cent)

	Males			*Females*			*Persons*		
Industry	*Permanent employee*	*Casual employee*	*Total*	*Permanent employee*	*Casual employee*	*Total*	*Permanent employee*	*Casual employee*	*Total*
Agriculture, forestry, fishing and hunting	16.2	12.7	14.7	*13.8	*3.3	*6.9	15.8	9.4	12.6
Mining	63.7	*10.7	61.7	*17.7	11.1	*16.4	60.3	*11.2	57.6
Manufacturing	50.5	21.6	48.2	38.6	16.7	33.6	47.8	19.1	44.4
Electricity, gas and water	80.8	*24.8	80.1	59.5	*34.9	56.5	78.4	*30.8	77.2
Construction	55.1	23.4	47.2	*9.7	*—	*5.9	50.7	19.4	42.4
Wholesale and retail trade	19.4	19.5	19.4	30.2	20.5	25.7	23.5	20.2	22.3
Transport and storage	71.1	31.9	65.1	40.8	*7.5	33.8	65.3	25.6	58.8
Communication	84.0	*41.1	83.7	68.8	*7.0	61.6	79.8	*11.5	77.1
Finance, property and business services	31.8	7.7	28.0	33.9	7.1	28.8	32.9	7.4	28.4
Public administration and defence	70.1	*7.2	68.1	53.4	*12.0	48.0	64.4	*10.6	60.7
Community services	61.1	17.0	56.1	55.2	16.3	46.9	57.3	16.4	49.9
Recreation, personal and other services	27.9	16.2	23.5	23.9	18.2	20.5	26.1	17.5	21.8
Total	**48.1**	**18.4**	**43.4**	**42.9**	**16.5**	**34.8**	**46.0**	**17.2**	**39.6**

Source: Trade Union Members, Australia (6325.0).

TRAINING

In recent years there has been an increasing national focus on vocational training as an element of labour market reform. The need to improve skill levels is recognised as crucial to improving Australia's economic performance. Against this background several training surveys have been conducted by the ABS to support analysis of training issues and the development and evaluation of training policies and programs. Most recently the ABS conducted three training surveys. The Training Expenditure Survey is an employer survey which measures the expenditure by employers on the formal training of their employees, the results of which are summarised below. The results of the Training Practices Survey on how and why employers train employees and the Survey of Training and Education, a household survey, will be available later in 1994.

Training expenditure by employers

This section presents estimates of the expenditure by employers on the formal training of their employees, and of the paid time employees spent receiving formal training, obtained from a survey covering the September quarter 1993. This survey was also conducted in the September quarter of 1990. Formal training is defined as all training activities which have a structured plan and format designed to develop job related skills and competence. Informal training, (that is, unstructured on-the-job training, being shown how to do things as the need arises or learning by doing a job), was excluded from the scope of the survey.

Total expenditure on formal training during 1 July to 30 September 1993 by Australian employers was estimated at $1.1 billion. This represents an increase of 18 per cent from the expenditure reported for the same period in 1990 ($943 million).

On average, employers spent the equivalent of 2.9 per cent of gross wages and salaries on formal training during the three month period. The corresponding figure for 1990 was 2.6 per cent. Large organisations (those with 100 or more employees) spent 3.2 per cent of gross wages and salaries on training employees, whereas small employers (those with 1 to 19 employees) spent 1.7 per cent of gross wages and salaries. The average expenditure on training per employee, in the period July to September 1993 was $192. The average time each employee spent receiving formal training during the three months was 5.6 hours, a decrease from 5.9 hours in 1990.

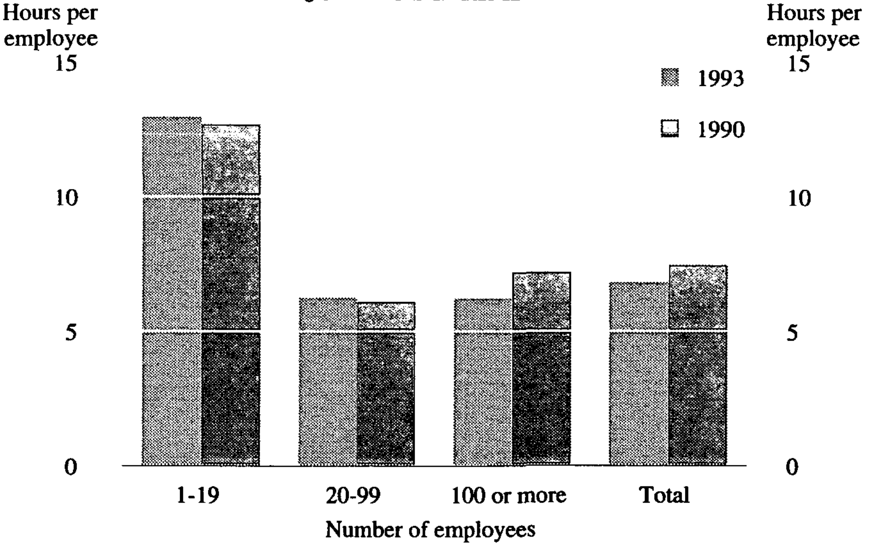
In both 1990 and 1993, the private sector reported a higher total expenditure on training than the public sector. In 1993, organisations in the private sector spent $660 million, compared with $448 million by the public sector (the comparable figures for 1990 were $525 million and $418 million, respectively).

6.75 TRAINING EXPENDITURE BY EMPLOYER SIZE, JULY TO SEPTEMBER 1993

	1–19 employees	*20–99 employees*	*100 or more employees*	*Total*
Total training expenditure (% of gross wages and salaries)	1.7	2.7	3.2	2.9
Average training expenditure per employee ($)	86	180	236	192
Average training hours per employee	4.11	5.30	6.17	5.55
Employers reporting training expenditure(a) (% of all employers)	18.0	80.3	97.9	24.6
Total training expenditure ($ million)	112.3	177.8	818.8	1,108.9

(a) The percentage of employers is based on the statistical unit for the survey.
Source: Employer Training Expenditure, Australia (6353.0).

6.76 AVERAGE HOURS SPENT BY EMPLOYEES ON TRAINING JULY TO SEPTEMBER



Source: Employer Training Expenditure, Australia (6353.0).

The industries which recorded the largest percentage of gross wages and salaries spent on training were the Communication (5.4%), Mining (5.1%) and Basic metal products manufacturing industries (5.0%). On the other hand, the industry which spent the lowest proportion of gross wages and salaries on training was the Restaurants, hotels and clubs industry (1.6%).

The average number of hours spent on training ranged from 2.6 hours in the Entertainment and recreational services industry, to 16.0 hours in the Basic metal products manufacturing industry.

Employees in the Mining industry spent, on average, more time receiving training in 1993 (13.9 hours) than in 1990 (10.7 hours). The Insurance industry also recorded an increase — from 6.0 hours to 10.0 hours over the same period.

A number of industries showed a decrease in the time employees spent training. For example, employees in the Construction industry received 5.9 hours of training in 1993 and 9.0 hours in 1990.

6.77 AVERAGE TRAINING EXPENDITURE BY INDUSTRY, JULY TO SEPTEMBER 1993

Industry	*Percentage of gross wages and salaries*	*Dollars per employee*	*Hours per employee*
Mining	5.1	687	13.9
Manufacturing	2.6	204	6.5
Electricity, gas and water	4.4	383	10.0
Construction	1.8	135	5.9
Wholesale and retail trade	2.4	117	4.2
Transport and storage	2.7	223	5.7
Communication	5.4	452	9.2
Finance, property and business services	3.2	228	5.4
Public administration and defence	3.2	238	6.0
Community services	2.9	193	5.6
Recreation, personal and other services	1.9	82	3.1
Total	**2.9**	**192**	**5.6**

Source: Employer Training Expenditure, Australia (6353.0).

6.78 TRAINING EXPENDITURE BY INDUSTRY, JULY TO SEPTEMBER

Source: Employer Training Expenditure, Australia (6353.0).

In July to September 1993, the largest amount of gross wages and salaries was spent on Management and professional training ($20 per employee). This was only a slight increase from 1990 when the corresponding figure was $19 per employee.

Two fields of training reported a decline in spending since the 1990 survey. These were Technical and para-professional training ($13 per employee was spent in 1990 and $11 in 1993) and Trade and apprenticeship training ($13 per employee in 1990 and $10 in 1993). This reduction in spending on Trade and apprenticeship training reflects the decline in the number of apprentices employed in Australian organisations over that period.

Trade and apprenticeship training was also the field of training where employees on average spent the largest amount of time training (1.07 hours per employee). The second highest amount of time was spent in Management and professional training (0.93 hours per employee).

Table 6.79 illustrates that overall, during the three month reference period, employees spent more time receiving in-house training (3.60 hours per employee) than external training (1.96 hours per employee).

The only field of training where employees spent more time receiving external training, rather than in-house training, was Trade and apprenticeship training. This is due to attendance at TAFE (an external training body) by employees completing an apprenticeship or a post-trade certificate.

6.79 AVERAGE PAID TRAINING TIME: FIELDS OF TRAINING BY TYPE OF TRAINING JULY TO SEPTEMBER 1993
(hours per employee(a))

Fields of training(b)	*In-house*	*External*	*Total*
Induction	0.34	*0.01	0.35
General supervision	0.24	0.06	0.30
General computing	0.36	0.15	0.52
Health and safety	0.24	0.10	0.34
Management and professional	0.48	0.44	0.93
Technical and para-professional	0.44	0.15	0.59
Trade and apprenticeship	0.29	0.78	1.07
Clerical, sales	0.59	0.11	0.70
Plant and machinery	0.33	0.05	0.38
Other	0.28	0.11	0.38
Total	**3.60**	**1.96**	**5.55**

(a) The total time receiving formal training averaged over the total number of employees. (b) Formal training was classified according to the main content of the course or program.
Source: Employer Training Expenditure, Australia (6353.0).

GOVERNMENT EMPLOYMENT AND TRAINING PROGRAMS

The Commonwealth Government, often in conjunction with State and Territory Governments, provides a wide range of labour market programs to assist the efficient functioning of the labour market, to encourage and assist individuals and industry to improve the productivity and skills of the work force, and to improve the skills and employment prospects of people disadvantaged in the labour market.

The Commonwealth Government, the State and Territory Governments and the industrial parties are working in cooperation to develop a 'training culture' in Australia, recognising the importance of vocational education and training for the efficiency and productivity of the Australian economy. This 'training culture' revolves around a notion of 'life-long learning', including the availability of career paths and on-going skills formation for all Australians. A key element of the 'training culture' is the implementation of a nationally consistent competency-based training system. This system aligns vocational education and training delivery, assessment and certification arrangements to competency standards developed by the industry parties.

On 4 May 1994 the Commonwealth Government handed down a White Paper on Employment and Growth entitled *Working Nation* which detailed a plan of action designed to restore full employment to Australia. The paper included a number of programs to be introduced from 1 July 1994 to assist the long-term unemployed to find work. These programs were in addition to the existing range of programs, some of which were also enhanced or modified.

The following section describes the programs which existed prior to the White Paper. Following that, there is a brief description of new programs and strategies introduced in the White Paper.

There is a degree of interrelationship between individual programs and with some of the provisions contained in the chapter, Social Security and Welfare.

More detail on each of the programs can be obtained from the Department of Employment, Education and Training Annual Report.

6.80 EXPENDITURE ON TRAINING AND LABOUR MARKET PROGRAMS, 1993–94

Type of program	*Allocation ($m)*	*Numbers*
Entry Level Training		
Support of Apprentices	136.6	n.a.
Support for Traineeships	89.7	n.a.
Special Trade Training	44.7	n.a.
Skills Enhancement		
Adult Language and Literacy	20.7	n.a.
National Skills Shortages	2.5	n.a.
Australian Vocational Certificate Training System Professional Development	5.0	n.a.
Employment Assistance		
JOBSTART	356.7	154,000
Employment Incentive Scheme	5.0	n.a.
Contracted Placement	8.3	3,300
Post Placement Support	0.5	500
Work Experience for People	5.1	2,700
Post Placement/Training Support for People with Disabilities	0.4	700
Interpreter Services	2.2	n.a.
Job Search Assistance	26.5	51,500
Mobility Assistance	15.0	n.a.
Training Assistance		
JOBTRAIN	159.0	68,200
Special Intervention	122.3	36,150
Accredited Training for Youth	74.4	11,000
Landcare and Environment Action Program	65.3	10,000
Advanced English for Migrants Program	4.9	4,800
Skillshare	177.2	n.a.
Disadvantaged Young People Services	2.8	n.a.
JOBSKILLS	145.9	10,000
Self Employment Assistance	63.7	5,000
Community Activity Program	3.0	7,000
Labour Adjustment Assistance		
Industry-based Measures	30.0	n.a.
Region-based Measures	12.0	n.a.
Enterprise-based Measures	30.0	n.a.
Aboriginal Employment and Training Assistance	43.7	n.a.

Source: Department of Employment, Education and Training.

Entry Level Training

The Commonwealth encourages and assists individuals and industry to improve the productivity and skills of the work force by providing support for apprentices and trainees and through specially targeted trade training programs.

Trade apprentices. The apprenticeship system has been the principal source of supply of skilled workers to the Australian labour market and, with the Australian Traineeship System, has provided significant employment and structured training opportunities for school leavers.

Through Entry Level Training Funding, incentives and support are provided to employers and apprentices within the framework of the State/Territory apprentices systems.

The aim of Entry Level Training Funding is to maintain or improve the quality of, and equity of access to, apprentice training for young people and, having regard to labour market conditions, maintain or increase the numbers of apprentices undergoing and completing that training.

Assistance is provided in a number of ways:

- Apprentice Training Incentive (ATI) was introduced on 1 January 1988. Employers who indenture apprentices in an approved trade are able to apply for grants in respect of the commencement ($1,500), re-establishment ($1,000) and completion ($1,500) of an apprenticeship.

Other incentive payments available in 1993–94 comprise:

- $2,000 for taking on a young person classified by the Commonwealth Employment Service (CES) as disadvantaged in the labour market;
- $2,000 for each 'additional' first year apprentice recruited;
- $2,000 for the second and subsequent female apprentices employed in non-traditional trades; and
- $3,000 for each first year apprentice employed by group training companies.

Other payments associated with Entry Level Training Funding are:

- Off the Job Training Subsidy;
- The Disabled Apprentice Wage Subsidy;
- Living Away from Home Allowance; and
- Fares Assistance.

Non-trade traineeships. The Australian Traineeship System (ATS) seeks to enhance the long-term employment and career prospects of young people through fundamental improvements in training arrangements for non-trades employment, by developing broadly-based and structured entry level vocational training.

It achieves this through provision of financial incentives to employers and by training providers to employ and train young people as trainees, and through assistance to trainees needing to live away from home in order to take up or continue a traineeship.

Traineeships are generally for a 12 month period and involve on-the-job training and a minimum of 13 weeks formal vocational instruction (off-the-job component) in a TAFE college or other approved training centre.

The trainee is paid a trainee wage for the duration of the traineeship which is set with reference to the relevant junior rates for the time spent on the job. Since the inception of the system, over 80,500 young people have commenced traineeships in a wide range of industries and occupations. Of these, over 16,700 trainees commenced during 1992–93.

A range of financial support is available to assist with the development and operation of traineeships:

- a Training Fee of $2,000 per approved trainee to assist employers to offset the cost of providing on-the-job training.
- Other incentive payments available in 1993–94 comprise:

  (i) $2,000 for taking on a young person classified by the CES as disadvantaged in the labour market;

  (ii) $1,000 for each 'additional' trainee recruited; and

  (iii) $300 re-establishment grant for each unemployed trainee recruited to complete their training.

Other payments associated with the operation of traineeships are:

- Off the Job Training Subsidy;
- Living Away from Home Allowance; and

- Fares Assistance.

Special trade training. The Special Trade Training Program seeks to provide young people with appropriate work force skills through innovative approaches to traditional entry level training, and to ensure that skills acquired are not lost to the national skills base. This is achieved through targeted assistance which:

- increases the access of disadvantaged groups, including women, to structured training opportunities;
- expands the availability of structured training opportunities for young people wishing to enter the work force;
- enables unemployed apprentices and trainees to complete or continue their training; and
- provides assistance to employers in financial difficulties to retain apprentices in training.

The program achieves these ends through:

- Special Assistance Program, which provides a range of measures to assist young people to maintain or complete their training so that skills are not lost to the economy; and
- Special Equity Measures, which are directed towards testing, developing and introducing new approaches to traditional apprentice training.

There are a number of Commonwealth programs which aim to enhance the skills of the Australian work force.

The Skills Enhancement scheme provides assistance to:

- raise the quality of in-house training; and
- minimise the effect of current and emerging skills shortages of national significance.

The National Skills Shortages Program provides short-term training assistance to individuals and industry in occupations where skilled labour is in short supply. The program provides:

- refresher training for persons with basic qualifications or experience but whose skills need updating;
- bridging training for overseas qualified persons seeking recognition of their qualifications in Australia; and
- skills upgrading of existing employees.

In recent years the program has assisted training in a large number of areas of identified national skills shortages, including:

- physiotherapists/occupational therapists;
- specialist nurses;
- the computer industry; and
- specialist welders.

An additional mechanism to stimulate industry's commitment to training, the Training Guarantee, has applied since 1 July 1990. The scheme requires employers with an annual national payroll of $222,000 (1992–93, indexed by average weekly earnings), or more to spend one per cent of payroll (1.5% from 1 July 1992) on eligible training as broadly defined in the legislation. Under regulation, provision exists for exemption of the building and construction industry in those States/Territories where appropriate levies exist. A similar regulation exempts shearing and related occupations.

Employers who do not meet this obligation directly will be required to pay the shortfall to the Australian Taxation Office. Funds collected in this way will be paid into a Training Guarantee Fund. Commonwealth administrative costs will be recovered from the Training Guarantee Fund and any excess will be distributed through the States and Territories for training purposes.

Support for training activities in industry. In recognition of the pressures upon the training systems resulting from industry restructuring, the Commonwealth has instituted measures designed to encourage a cooperative national effort in the improvement of vocational education and training arrangements. Financial assistance can be provided to industry to:

- upgrade work force skills to meet structural and technological change;
- pilot test new and innovative training arrangements;
- facilitate industry restructuring through award restructuring processes; and
- develop national curricula and competency-based training and assessment procedures.

To this end the Commonwealth provides a range of support measures to assist organisations, including:

- Institutional Development Grants to employer and union organisations to enable them to employ Training Liaison Officers to facilitate new entry level training arrangements.
- Assistance to Group Training Companies, which employ apprentices and trainees under the ATS. Group Training Companies aim to increase training opportunities for apprentices and trainees, generally with small and medium size companies which would not be able to recruit apprentices and trainees in their own right. This is achieved by indenturing apprentices/trainees to a central body, such as an employer organisation or a training company formed specifically for the purpose. The Commonwealth provides joint assistance (with State and Territory Governments) to group training companies to offset their administrative costs.
- Project funding is also provided towards the cost of innovative local projects developed by group training companies, which have the potential to increase employment and training opportunities for apprentices and trainees employed with group training companies.

Since 1987, the Commonwealth has provided assistance to establish industry-based skills centres as a joint funding venture with industry, State and Territory Governments. To date, 55 skills centres have been established.

Training advisory and service organisations. Support is provided for a network of Industry Training Advisory Bodies (ITABs) which are autonomous, industry based and incorporated as companies or associations with membership representing employer and employee associations, the Commonwealth Government and State and Territory Governments. There are 180 National and State/Territory Industry Training Advisory Bodies covering 36 major industries representing more than 75 per cent of the private sector work force.

The primary role of these Industry Training Advisory Bodies is to act as the authoritative voice on training matters within their industries and advise governments on the training implications of workplace reform, work practices and award restructuring. A secondary role is to initiate research into training matters and coordinate the development of training solutions to identified or emerging training needs.

The Commonwealth Government supports the National Training Board (NTB) whose role is to assist industry develop national competency standards and to endorse standards that are put forward to Competency Standards Bodies. Competency standards endorsed by the NTB are the benchmarks for curriculum development, course accreditation, delivery and assessment of training, and certification of skills. By the end of 1993, the NTB had endorsed competency standards covering 46 per cent of the work force.

Training Services Australia (TSA) provides a range of public training courses and consultancy services designed to improve the level and effectiveness of human resource development activity in Australian industry and government. TSA operates training centres and offers training consultancy services on a cost recovery basis in all capital cities except Darwin and Adelaide.

Workplace Literacy Program. In 1991 the Commonwealth announced the establishment of the Workplace English Language and Literacy (WELL) Program. WELL is managed jointly by the Department of Employment, Education and Training and the Department of Immigration and Ethnic Affairs in consultation with the Department of Industrial Relations.

The objective of the WELL program is to provide workers with English literacy and English as a Second Language (ESL) skills that are sufficient to enable them to meet the demands of their current employment and their future employment and training needs. This is achieved by assistance with the direct costs of training provision and by assistance with the development of appropriate training resources.

For 1994, priority was to be given to the automotive, building and construction, foodprocessing, tourism and hospitality, timber, health, metals, textile, clothing and footwear, and transport industries.

The total funding available for WELL program assistance in 1993–94 was in excess of $11 million.

Eligibility requirements for labour market programs and assistance

General access to programs is on the basis of duration of registration with the Commonwealth Employment Service (CES).

Disadvantaged clients generally have earlier access to programs. Disadvantaged clients include:

- Aboriginal and Torres Strait Islander people;
- people with disabilities;
- jobseekers aged 50 years or older;
- homeless people;
- ex-offenders; and
- spouses of Newstart Allowance recipients.

For access to Skillshare the following clients are also regarded as disadvantaged:

- jobseekers whose literacy and/or English language ability adversely affects their employment prospects;
- retrenched workers from an Office of Labour Market Adjustment (OLMA) designated region or industry; and
- sole supporting parents.

Immediate access (upon registration with the CES) to basic program elements is provided to:

- Jobs, Education and Training (JET) clients referred by a Department of Social Security JET Adviser;
- Disability Reform Package (DRP) clients who have an activity plan endorsed by a joint DSS/DEET Disability Panel; and
- Labour Adjustment Program (LAP) clients who are retrenched workers in OLMA designated industries.

Details of the duration of registration required for eligibility for each of the labour market programs for each category of client are available from the Department of Employment, Education and Training.

Employment Access Program

The Program comprises a number of measures aimed at assisting jobseekers who are disadvantaged in the labour market to gain access to and secure long-term employment.

There are four program components under the Employment Access Program:

- Employment Assistance;
- Job Search Assistance;
- Mobility Assistance; and
- Training Assistance.

Employment Assistance has six elements:

- JOBSTART;
- Contracted Placement;
- Post Placement Support;
- Work Experience for People with Disabilities;
- Post Placement Support for People with Disabilities; and
- Interpreter Service.

JOBSTART is a wage subsidy program that provides access to employment for jobseekers, who have experienced long periods of unemployment or face other disadvantages in obtaining work. Under the program, employers receive subsidy payments for set periods up to 20 weeks as an incentive for engaging and improving the employment prospects of these disadvantaged jobseekers. Wage subsidy rates vary according to age, length of unemployment and other disadvantages.

Employers are required to pay the relevant award rates and abide by all award conditions. The position must normally be available for continuous employment for at least three months after expiration of the agreed subsidy period.

Contracted Placement assists jobseekers who have been unemployed for three years or more and have been unable to use Commonwealth Employment Service (CES) services effectively, or benefit from labour market program assistance.

A fee for service is paid to an agency contracted by the CES to assess the jobseeker's needs, to design and implement an action plan for the jobseeker, to provide relevant assistance, place the jobseeker in employment and assist the jobseeker to retain that employment.

Post Placement Support provides support services to formerly long-term unemployed clients, who require assistance and support during the first few weeks or months of returning to employment.

Agencies can be contracted to assist clients to remain employed by providing post placement advice and contact services, including retraining if required.

The Work Experience for People with Disabilities program aims to provide fully subsidised placements in the private sector or with community agencies, for Disability Reform Package clients (*see* chapter, Social Security and Welfare) with a high level of disability. These people whose disability makes them uncompetitive for immediate placement in wage subsidy programs such as JOBSTART, have activity plans developed with Disability Panels.

While wage subsidy is the main form of assistance, employers may also be reimbursed up to $2,000 for costs associated with lease, hire or modification of special equipment.

Services provided include assistance with workplace familiarisation, supervision on new equipment, travel to work arrangements, meals and work break arrangements and regular contacts for advice and encouragement both while the client participates in labour market programs training or while in employment. Services are purchased on a fee-for-service basis from agencies, particularly those with interests in special groups with disabilities.

Interpreter services to CES clients with English language difficulties and/or a hearing impairment aim to ensure that these clients fully understand the types of assistance available to them through the CES and any reciprocal obligations on their part. Any client considered by the CES as not able to understand spoken and/or written English is eligible for interpreter assistance.

Job Search Assistance is designed to improve jobseekers chances of finding work by developing their job hunting knowledge, skills and techniques.

Job Search Assistance has two elements:

- Self Help Job Search materials comprising a kit and video; and
- Job Clubs.

The Self Help Job Search materials aim to provide self help advice to CES clients from the beginning of their job search.

Job Clubs combine training in job search techniques with the opportunity for intensive real job search activity in a supportive atmosphere.

Mobility Assistance. The main aim of Mobility Assistance is to contribute to the efficient functioning of the labour market by giving jobseekers fair access to jobs which are not locally available, whilst also helping employers to obtain workers with appropriate skills.

Applicants for all forms of Mobility Assistance must be registered with the CES, but each element of the program then has specific eligibility requirements.

- Fares assistance or petrol allowance is available for travel on public transport for jobseekers to attend interviews.
- Relocation assistance is available where unemployed jobseekers have an offer of permanent work in a new location.
- Post Placement Fares Assistance is available to assist people who have been unemployed for 24 months or more and find permanent work in a location which requires excessive fares or travel time.
- Jobsearch Relocation Assistance can be provided to people who have been unemployed for 12 months or more and who are willing to move to a new area to find employment. People who find work under this provision are automatically eligible for relocation assistance.
- Immediate Minor Assistance is a one-off payment available for any registered person who finds a job, but is unable to take it up because of inability to meet the costs involved, for example, to buy special equipment, or pay union dues.

Training Assistance. The Training Assistance component has five elements:

- JOBTRAIN;
- Special Intervention;
- Accredited Training for Youth;
- Landcare and Environment Action Program (LEAP); and
- Advanced English for Migrants.

JOBTRAIN seeks to improve the employment prospects of long-term unemployed and especially disadvantaged jobseekers by providing formal training aimed at opportunities in the local labour market, or the acquisition of durable skills for work force participation.

JOBTRAIN provides for the CES to contract and buy special courses and places on existing courses to meet the needs of local jobseekers and skill needs of the local labour market. Training providers include TAFE and community-based organisations, private training agencies and industry bodies.

While on courses, participants may receive Formal Training Assistance, comprising their Job Search Allowance or Newstart Allowance, plus ancillary allowances to help meet training costs. Those aged 21 years or over also receive a $30 per week training component.

Assistance with child care is available for sole parents (with children under 16 years) who participate in JOBTRAIN.

Special Intervention is designed to help jobseekers make the transition to work or training through the provision of a professional assessment of barriers to employment or vocational training faced by individual jobseekers, and assistance to help overcome those barriers. Special Intervention addresses four main barriers: English as a second language needs; literacy (including numeracy) problems; outdated work skills; and employment-related personal development needs.

Accredited Training for Youth involves the offer to all young people who have been unemployed for a year or more of a place in an accredited training course, followed by a JOBSTART wage subsidy. Each young person is given a JOBSTART card at the completion of their course, so that they can directly approach the employers of their choice.

Landcare and Environment Action Program (LEAP) provides unemployed people aged 15 to 20 years with formal training and practical experience in landcare, environment, cultural heritage and conservation activities.

Aboriginal employment and training

The broad objectives of the Aboriginal Employment Development Policy (AEDP) are to enable Aboriginal and Torres Strait Islander people to achieve by the year 2000:

- employment equity with other Australians;
- income equity with other Australians;
- equitable participation in primary, secondary and tertiary education; and
- a reduction of welfare dependency to a level commensurate with that of other Australians.

The AEDP emphasises that employment and training opportunities should be provided for Aboriginal and Torres Strait Islander people in areas where they live and in accordance with the Government's commitment to Aboriginal and Torres Strait Islander self determination. Two programs which implement the AEDP are TAP Training for Aboriginal and Torres Strait Islander People and the Community Development Employment Projects/Scheme (CDEP).

TAP achieves its objective by:

- providing assistance to those Aboriginal and Torres Strait Islander people whose needs are not met by general labour market programs and services and, in particular, providing equitable levels of assistance to Aboriginal and Torres Strait Islander women and young people;
- assisting major public and private sector employers to develop strategies for Aboriginal and Torres Strait Islander recruitment and career development;
- targeting training at those industries or significant regional employers where there is potential for increased Aboriginal and Torres Strait Islander employment, in particular, those which are located in places where Aboriginal and Torres Strait Islander people live; and
- increasing Aboriginal and Torres Strait Islander participation in on- and off-the-job training and industry-accredited training (including training in both work-related skills and the basic skills of employment), with a particular emphasis on training which is likely to lead to long-term job security and career achievement.

Training and employment assistance is available under programs through the Aboriginal and Torres Strait Islander Commission (ATSIC). The ATSIC programs provide training required by Aboriginal and Torres Strait Islander communities and organisations, and the funding and priority of training needs are determined by the Regional Councils.

Other training programs are supported more directly by ATSIC. They include the Inwork Traineeship Program which is aimed at young unemployed people and the Full Time Professional Study Grants Scheme which enables Aboriginal and Torres Strait Islander organisations to sponsor a member of staff to undertake full-time study at an approved educational institution.

The Community Development Employment Projects (CDEP) scheme provides Aboriginal and Torres Strait Islander communities, or specific interest groups within such communities, the means to undertake community development activities designed and valued by the community or group, and which involve the employment of community members.

CDEP offers Aboriginal and Torres Strait Islander communities in remote and rural locations, small rural towns and urban areas where there are no or limited alternative employment prospects, the opportunity to pursue community goals of self management, acquisition of administrative and work skills, improvement of community economies, facilities and infrastructure, and development of outstations and homelands. A significant number of communities have established projects which generate additional income for their community.

To participate in CDEP, unemployed members of a community or group elect to forego their entitlement to Job Search (JS) or New Start (NS) allowances to undertake productive activity in return for a wage at least equivalent to their otherwise JS/NS entitlement. Communities choosing to participate in CDEP receive grants from the Aboriginal and Torres Strait Islander Commission comprising wages, 'on-costs' (to assist communities meet administrative and other costs such as workers compensation, insurance and payroll tax) and 'support' (to assist with capital costs).

In 1992–93, 219 communities and organisations participated in the CDEP scheme, providing employment opportunities to more than 22,000 Aboriginals and Torres Strait Islanders who would otherwise have been reliant on JS/NS allowances.

Community-based employment and training strategies

SkillShare. The objective of the SkillShare program is to assist long-term unemployed people and other disadvantaged unemployed people to obtain and retain employment or to proceed to further education or training through the provision of skills training, employment-related assistance (including personal support and referral) and enterprise activities by incorporated community-based organisations with a demonstrated capacity to deliver such services.

Each project is managed by a community organisation known as a 'sponsor' which receives annual core funding to develop a range of activities linked to employment, training or education-related outcomes for the SkillShare target group. Sponsors are required to secure a contribution towards project operating costs from the local community.

Three broad types of activities and services are offered by SkillShare projects:

- *Structured Skills Training.* All projects offer vocational training relevant to the needs of the local labour market.
- *Open Access Activities.* All projects offer services to the target group including volunteer referral services, job search training, motivational and personal development activities.
- *Enterprise Activities.* Projects may develop enterprise activities to help unemployed people to self-employment and to develop project-based enterprise activities which provide training to participants in a commercial environment. All funds generated by an enterprise activity are reinvested back into the project.

Disadvantaged Young People Services Program (DYP). The objective of the program is to assist young people, currently not attracted to, and uncompetitive in, mainstream programs to secure and maintain employment, by providing assistance relevant to their particular needs.

The program funds community-based organisations to establish and operate 'mentor/broker' services for particularly disadvantaged young people aged 15 to 20 who require personal support and follow-through assistance during a period of training and transition to employment. Disadvantaged young people include those in insecure accommodation and unstable domestic situations; with specific learning difficulties; from particular social and cultural groups (for example, Aboriginal youth, young people of non-English speaking backgrounds); who have been unemployed for more than six months; who are leaving institutional care; and/or who have drug or alcohol-related dependencies.

Although not part of the SkillShare Program, the DYP Services have been shown to benefit from an association with SkillShare projects.

Community Activity Program, to be implemented in 1993–94, aims to assist unemployed people, particularly the long-term unemployed, to gain valuable work experience and to develop, or maintain, work-related skills through community service.

New Enterprise Incentive Scheme (NEIS). The objective of NEIS is to assist unemployed people to establish and operate new and viable self-employment ventures.

The scheme provides a structured and comprehensive package of support emphasising training and business advice prior to approval, and post-approval mentor support.

The five elements of the assistance package are:

- business advice and assessment;
- training in business plan development and business skills;
- assistance with negotiating access to loans or grants for start-up capital;
- income support for up to one year; and
- mentor support during the first year of business operation.

Proposed businesses must be new, independent, reputable, legal, assessed as viable and meeting an unsatisfied demand.

An evaluation of the program finalised during 1991–92 showed that for every 1,000 NEIS participants assisted, at least 420 were still in business 12 months after program assistance ceased; up to 490 whose businesses had not survived were in other employment or training; and a further 294 new full- and/or part-time jobs were created in NEIS businesses.

JOBSKILLS aims to improve the long-term employment prospects of the unemployed by equipping them with new skills through work experience and training.

Brokers are contracted to arrange work experience placements and training for participants. Participants receive a mix of supervised work experience, structured training both on- and off-the-job, and the opportunity to develop and practise new skills in a work environment over a 26 week period.

Labour Adjustment Assistance for Restructuring

The Office of Labour Market Adjustment provides labour market assistance through packages which are principally directed at workers in particular regions, industries and enterprises where employment is affected by structural adjustment or downturns in the economic and business cycle.

Assistance is provided through three components: Industry–Labour Adjustment Packages; Regional Initiatives; and Enterprise-Based Measures.

Industry–Labour Adjustment Packages have been developed for workers retrenched from industries that have been adversely affected by tariff reductions and industry restructuring.

Regional initiatives are designed to address the impact of structural change on specific geographical labour markets. Packages of initiatives contain active employment, education and training related measures designed to assist the region to respond to structural and cyclical changes, minimise the adverse impact of structural change on individuals and increase local employment opportunities.

Funding is provided to develop the infrastructure and capacity of regional communities to manage and monitor structural change and to develop strategies aimed at developing the skills of the community.

During 1993–94, regional initiatives were funded in over 120 regions across Australia, in each State and the Northern Territory.

Enterprise-based measures are provided by three programs:

- Training and Skills (TASK) Program;
- Assistance to Firms Implementing Change (ATFIC); and
- Employee Skills Upgrade.

The Training and Skills (TASK) program is designed to reduce the loss and wastage of skilled employees, during periods of economic downturn and industrial restructuring, by assisting employers to retain their staff. Training assistance is provided to allow employers to keep their work force and upgrade their skills with a view to improving enterprise productivity, and reducing the level of skill shortages which emerge during an economic upturn.

Under TASK, assistance is available to enterprises which face major retrenchments or movement to short-time or down-time arrangements, to help them limit the shedding of labour and maintain or improve the skill levels of their employees.

Assistance to Firms Implementing Change is designed to assist firms expand, restructure and develop effective business and human resource planning practices and to retain, expand and increase the skills of their work force.

Employee Skills Upgrade is a two year pilot program, which commenced in 1991-92 to assist companies to overcome their skills shortages by upgrading the skills of existing employees and backfilling their positions with suitable unemployed people. Support from the program is provided for eligible companies to engage consultants or managing agents to develop training plans for the upgrading of skills. Assistance for the backfilling of positions is provided through the Employment Access Program (JOBTRAIN and JOBSTART).

1994 White Paper on Employment and Growth

The following provides a brief description of the major elements of labour market and training initiatives announced in the 1994 White Paper on Employment and Growth. The description does not aim to provide a listing of all modifications to established labour market and training programs. Rather it aims to provide an outline of major new programs and strategies to be implemented from 1 July 1994. Further details can be obtained by reference to the White paper.

The Government will increase its total spending on labour market programs from $1.4 billion in 1993–94 to $2.2 billion in 1995–96, the first full year of the Job Compact. Some 645,000 program commencements a year will be funded by 1995–96. Much of this assistance will be focused on the long-term unemployed, but additional assistance will also be provided in entry level training, in measures for young people, for women, for Aboriginal and Torres Strait Islander peoples, for people with disabilities and in enhanced service delivery.

The **Job Compact**, the largest single component of initiatives, is designed to reduce the number of long-term unemployed people by improving their skills and their competitiveness in the job market through case management, training and work experience in a substantial job.

The Job Compact focuses on people aged 18 years and over who have been in receipt of unemployment allowance for 18 months or more and will include:

- more intensive case management;
- training and support to ensure that the unemployed person is job ready;
- a job for 6 to 12 months (primarily in the private sector) under one of the established programs;
- a training wage which combines employment with training leading to recognised and transferable skills;
- new work opportunities which will encourage local proposals for employment generation, especially in regions where other employment opportunities are limited;
- intensive job search assistance and referral to suitable vacancies at the end of the Job Compact job, to maximise the employment outcomes for those assisted; and
- stronger penalties for jobseekers who do not meet their obligations under the Job Compact.

Other labour market assistance comprises training places for those in the Job Compact, additional assistance for people unemployed for less than 12 months (particularly those assessed as being at high risk of becoming long-term unemployed) and further assistance to long-term unemployed persons not covered by the Job Compact arrangements.

A **National Training Wage** is to be introduced. This will enable adults to access traineeships for the first time and will also simplify and expand the existing traineeship arrangements for entry-level training.

At the end of the period of training, participants will receive a certificate of skill competency under either the Australian Vocational Certificate Training System or the certificate of competency applying to the industry concerned.

In addition, employers who take on unemployed under the National Training Wage will be eligible for subsidies as set out below.

Duration of jobseeker's unemployment	*Subsidy rates and duration*
Less than 12 months and at 'high risk'	$120pw for 13 weeks
From 12 to 18 months	$120pw for 13 weeks
From 18 to 36 months	$230pw for the first 13 weeks, then $115pw for the next 26 weeks
36 months or over	$260pw for the first 13 weeks, then $130pw for the next 26 weeks

Entry Level Training. A number of measures have been introduced aimed at improvements in vocational training and pathways into employment, including:

- measures to increase institutional training places;
- additional pre-vocational training places;
- funding for additional curriculum and materials development;
- measures to increase apprenticeship places;
- measures to increase traineeship places; and
- increased funding for off-the-job training.

There are some young people, for whom remedial vocational assistance is essential, who fall out of the educational/vocational training system into unemployment. The **Youth Training Initiative** is aimed at taking early action to prevent unemployed people under the age of 18 years from entering the ranks of the long-term unemployed. This action includes:

- Youth Training Allowance to replace Job Search Allowance; and
- funding for labour market job placements, case management and training.

Women. Some spouses of Job Search or Newstart Allowance recipients are to be activity tested in their own right. Those assessed as being at high risk of becoming long-term unemployed will be accorded the same unemployment duration as their partner. The remainder will be able to access the labour market services available to short-term unemployed people.

In addition to labour market places that will be available to **Aboriginal and Torres Strait Islander** people, the following measures are being taken:

- expansion of community development employment projects;
- enhancements to community development employment projects; and
- expansion of community economic initiatives schemes.

Increased places will be made available for both the Disability Service Program and the Commonwealth Rehabilitation Service.

BIBLIOGRAPHY

ABS Publications

Average Weekly Earnings, Australia, Preliminary (6301.0)

Average Weekly Earnings (Historical 1941–1990) (6350.0)

Average Weekly Earnings, States and Australia (6302.0)

Award Coverage, Australia (6315.0)

Award Rates of Pay Indexes, Australia (6312.0)

Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

Distribution and Composition of Employee Earnings and Hours, Australia, Preliminary (6305.0)

Employed Wage and Salary Earners, Australia (6248.0)

Employer Training Expenditure, Australia (6353.0)

Employment Benefits, Australia (6334.0)

Employment, Underemployment and Unemployment, Australia, 1966–1983 (6246.0)

A Guide to Labour Statistics (6102.0)

How Workers Get Their Training, Australia (6278.0)

Industrial Disputes, Australia (6322.0) — annual

Industrial Disputes, Australia (6321.0) — monthly

Information Paper: Measuring Employment and Unemployment (6279.0)

Job Search Experience of Unemployed Persons, Australia (6222.0)

Job Vacancies and Overtime, Australia (6354.0)

Labour Costs, Australia (6348.0)

The Labour Force, Australia (6203.0)

The Labour Force, Australia, Historical Summary, 1978–1989 (6204.0)

The Labour Force, Australia, Preliminary (6202.0)

Labour Force Projections, Australia (6260.0)

Labour Force Status and Educational Attainment, Australia (6235.0)

Labour Force Status and Other Characteristics of Families, Australia (6224.0)

Labour Force Status and Other Characteristics of Migrants, Australia (6250.0)

Labour Statistics, Australia (6101.0)

Multiple Jobholding, Australia (6216.0)

Participation in Education, Australia (6272.0)

Persons Not in the Labour Force, Australia (6220.0)

Retirement and Retirement Intentions, Australia (6238.0)

BIBLIOGRAPHY — *continued*

Statistics On Wages, Earnings, Income And Labour Costs — A Guide To Their Concepts, Measurements And Usage (Occasional Paper No. 1986/1)

Successful and Unsuccessful Job Search Experience, Australia (6245.0)

Superannuation, Australia (6319.0)

Trade Union Members, Australia (6325.0)

Trade Union Statistics, Australia (6323.0)

Transition from Education to Work, Australia (6227.0)

Working Arrangements, Australia (6345.0)

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Seven

Social Security and Welfare

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COMMONWEALTH GOVERNMENT SOCIAL SECURITY SERVICES

On 1 July 1947, with the passage of the *Social Services Consolidation Act 1947*, all Acts providing social service benefits were amalgamated into the *Social Security Act 1947*. This Act was repealed and replaced with the *Social Security Act 1991* which commenced on 1 July 1991.

The main social security payments provided by the Commonwealth under the 1991 Act for 1992–93 and the date on which each payment came into effect are listed below.

7.1 SOCIAL SECURITY PAYMENTS, 1992–93

Type of payment	*Amount paid in 1992–93 ($m)(a)*	*Date of operation*
The Retired		
Age Pension	10,324	1 July 1909
Wife Pension	222	5 October 1972
People with Disabilities and the Sick		
Disability Support Pension	3,027	12 November 1991
Rehabilitation Allowance	14	1 March 1983
Sickness Allowance	370	1 July 1945
Mobility Allowance	18	1 April 1983
Child Disability Allowance	133	15 November 1987
Wife Pension	810	5 October 1972
Carer Pension(b)	101	1 November 1985
The Unemployed		
Newstart Allowance	3,598	1 July 1991
Job Search Allowance	3,893	1 July 1991
Special Benefit	280	1 July 1945
Families with Children		
Basic Family Payment(c)	2,074	1 January 1993
Additional Family Payment(d)	2,124	1 January 1993
Sole Parent Pension	2,869	1 March 1989
Double Orphan Pension	2	26 September 1973
Widowed Persons		
Widowed Person Allowance	1	1 March 1989
Class 'B' Widow Pension	535	30 June 1942

(a) Amounts include expenditures on applicable supplementary payments such as Pharmaceutical Allowance, Bereavement Allowance and Rent Assistance. (b) Includes carers of age pensioners and other income support recipients. (c) Basic Family Payment was called Family Allowance until January 1993. (d) Additional Family Payment replaced Family Allowance Supplement in January 1993.
Source: Department of Social Security.

An outline, together with associated statistics, of each of the social security payments in effect during the 1992–93 financial year is given below. Details of new payments to be introduced as a result of announcements made in the 1993–94 budget and the 1994 White Paper on Employment and Growth are given in the section Recent Changes to Social Security Arrangements.

Payments for the retired

Age pension is payable to men and women who have reached the ages of 65 and 60 respectively. (From July 1995, the age pension age for women will be gradually increased to 65.) Age pension is generally subject to residence qualifications and income and assets tests.

A wife pension is payable to the wife of an age pensioner. There is no residence qualification, but income and assets tests apply.

Pensioners with dependent children receive basic and additional family payment subject to the maintenance income test where applicable.

They are also eligible for pharmaceutical allowance, bereavement allowance, rent assistance and fringe benefits such as the Pensioner Concession Card. Further details of such payments and benefits are given in subsequent sections.

From December 1993, age pensioners requiring small loans may use the Government sponsored Home Equity Loans Scheme for Aged Pensioners to access some of the savings tied up in their homes while retaining a sizeable proportion of the equity. Repayments will not have to be made until pensioners have permanently vacated their homes.

From 1 July 1994, all older people of age pension age whose taxable incomes are below the pension cut-out point will receive a Seniors' Health Card. This will entitle them to concessional pharmaceuticals, hearing aids, dental health and optometry services.

7.2 AGE PENSIONERS, 30 JUNE

Age group (years)	*1991*	*1992*	*1993*
60–64	175,269	192,664	202,606
65–69	329,223	360,490	396,747
70–74	288,553	296,923	308,299
>74	582,804	596,091	608,030
Total	**1,375,849**	**1,446,168**	**1,515,682**
Number of wife pensioners	26,537	30,902	33,520
		— $'000 —	
Total payments during year(a)	9,179,001	9,887,085	10,545,924

(a) Includes allowances, rent assistance, and wife pensions where applicable.
Source: Department of Social Security.

Payments for people with disabilities and the sick

Disability Support Pension is paid to a person aged 16 or over who has a physical, intellectual or psychiatric impairment of at least 20 per cent and who is assessed as being unable to work full time at full award wages, or be retrained for such work, for at least two years. Disability Support Pension cannot be granted to a person over pension age, but those already receiving it when they reach that age can continue. It is subject to residency qualifications. It is not taxable for people of work force age.

Disability Support Pension for people over 21 is paid at the same rate as age pension and is subject to the same income and assets tests, except for permanently blind recipients who are not subject to either the income or assets test. Junior rates apply to those under 21. These are in line with the rates paid to sickness allowees but with a supplement of up to $67 a fortnight. Junior rates are not subject to parental income or assets tests.

Disability support pensioners, and people whose claims for Disability Support Pension are rejected, can seek help from disability panels to gain access to rehabilitation, training, labour market programs or labour force re-entry. Disability panels consist of officers from the Department of Social Security, the Commonwealth Employment Service and the Commonwealth Rehabilitation Service.

Women whose husbands are disability support pensioners are eligible for a wife pension.

Carer pension is payable to a person providing constant care on a long-term basis to a social security pensioner or allowee who has a severe disability or who is frail aged. The carer must live in, or adjacent to, the home of the person cared for and care for the person at home. Since July 1993, carer pensioners are eligible for the Jobs, Education and Training (JET) Program and are able to participate in work, education or training to a limit of 10 hours a week. Carer pension is paid at the same rate as age pension and is subject to the same income and assets test arrangements.

7.3 DISABILITY SUPPORT PENSIONERS 30 JUNE

Age group (years)	*1991*	*1992*	*1993*
16–19	7,700	8,303	8,622
20–39	68,110	84,843	91,660
40–59	173,807	197,206	214,588
>59	84,617	88,206	91,702
Total	**334,234**	**378,558**	**406,572**
Number of			
Wife pensioners	94,006	101,731	108,327
Carer pensioners(a)	10,158	12,630	15,045
		— $'000 —	
Total payments during year(b)	3,243,315	3,657,402	3,952,391

(a) Includes carers of disability support pensioners and age pensioners. (b) Includes allowances, rent assistance, and wife and carer pensions where applicable.
Source: Department of Social Security.

Sickness Allowance is paid to people over school leaving age but below age pension age who are temporarily unable to work or meet the activity requirements for Job Search or Newstart Allowance. To be eligible the person must have suffered a loss of income as a result of being unable to work, and be unable to work for more than eight hours a week. This excludes people on full sick pay. Payment of Sickness Allowance is generally limited to 12 months, although it may be extended in certain circumstances.

Job Search and Newstart allowees who are incapacitated for short periods (6 or 13 weeks respectively) remain on those payments. Job Search allowees aged under 18 who become incapacitated for any period of time remain on that allowance rather than transferring to Sickness Allowance.

Sickness Allowance is paid at the same rate as Job Search and Newstart Allowances, but sickness allowees also receive pharmaceutical allowance of $5.20 a fortnight. The rates for allowees with children and couples aged 21 and over are the same as for age pension. The rate for single allowees without children is lower than the single rate of pension. A range of rates applies to allowees under 21. Sickness Allowance is subject to the allowance income and assets tests, and some allowees under 18 are also subject to a parental income and assets test.

7.4 SICKNESS ALLOWANCE, YEAR ENDED 30 JUNE

	1991	*1992*	*1993*
Number of new grants	121,300	159,002	159,975
Recipients at end of year	71,397	44,172	46,579
Average number during year	76,088	52,239	44,131
Amount paid during year ($'000)	650,612	444,855	370,181

Source: Department of Social Security.

Mobility Allowance is a non-means tested payment to people aged 16 or more who have a disability which would prevent them using public transport without substantial assistance. It is payable only to people engaged for at least eight hours a week in paid work, sheltered employment, voluntary work or vocational training or looking for work as part of an activity plan agreed with a disability panel.

Mobility Allowance is not payable if a sales tax exemption has been received for a new motor vehicle purchased within the previous two years or where a person has received a 'gift' vehicle from the Department of Veterans' Affairs.

The rate of Mobility Allowance at December 1993 was $50.50 a fortnight. Recipients have the option of receiving it in the form of a lump sum equivalent to six months' worth of fortnightly payments. At June 1993, 16,160 people were receiving Mobility Allowance. Outlays in 1992–93 were $17.8 million.

Child Disability Allowance may be paid to a parent or guardian of a child under 16 years or a full-time student aged 16 to 24 who lives in the family home and, because of a physical, intellectual or psychiatric disability, requires substantially more care and attention than would a child of the same age who did not have a disability.

Child Disability Allowance is not payable for a student who receives a social security pension or allowance in their own right, although disability support pensioners aged under 21 may receive Youth Disability Supplement of the same amount. Child Disability Allowance is not subject to income or assets tests and the residency qualifications are the same as for Basic Family Payment.

At June 1993, Child Disability Allowance was paid for 66,800 children. The rate of payment at December 1993 was $67 a fortnight. Outlays in 1992–93 were $133.2 million.

Other payments. Pensioners or allowees with dependent children receive basic and additional family payment, subject to the maintenance income test where applicable. They are also eligible for pharmaceutical allowance, bereavement payment and rent assistance where these apply. Those entering education or employment may also be eligible for special supplements or one-off payments.

Payments for the unemployed

Income support for the unemployed comprises two separate payments. **Job Search allowance** for those aged 18 years and over who have been unemployed for less than 12 months and to unemployed people aged 16 and 17 (and to some 15 year olds) and **Newstart allowance** for those who have been unemployed for a year or more and who are aged 18 years and over.

To be eligible for Job Search or Newstart allowances, a person must be unemployed and be capable and willing to undertake suitable paid work. A Job Search allowance or Newstart allowance recipient must also be registered with the Commonwealth Employment Service, must be taking reasonable steps to obtain work and must not be unemployed due to industrial action.

Income support for the unemployed is linked to active job search and participation in labour market programs designed to encourage an early return to the work force. Job Search allowees who approach 12 months unemployment must apply separately for the payment of Newstart allowance if they still require income support. The payment of Newstart allowance depends on the recipient entering into an activity agreement with the Commonwealth Employment Service on Job Search, employment and/or training activities. The activity agreement sets out a course of action designed to improve the recipient's job prospects and is tailored to the needs of the client and the local labour market.

Recipients of Job Search allowance or Newstart allowance must be permanent residents of Australia. Eligibility is subject to an income test and an assets test. In addition, Job Search allowance for under 18 year olds dependent on their parents is subject to tests on parental income and assets.

Special benefits may be granted to persons not qualified for any other payment but who are unable to earn a sufficient livelihood for themselves and their dependents and are in hardship. The rate at which special benefit is payable may not exceed the rate of Job Search or Newstart allowance that would have been paid if the claimant was qualified to receive either of those allowances.

Recipients of Job Search or Newstart allowance or special benefit may also be eligible for supplementary payments including additional payment for dependent children, guardian allowance, rent assistance or remote area allowance. Job Search allowance or special benefit for under 18 year olds is payable at a higher rate to single young people who are homeless or have established independence from parental support.

7.5 JOB SEARCH AND NEWSTART ALLOWANCE (JSA/NSA), SPECIAL BENEFIT
YEAR ENDED 30 JUNE

	1991	*1992*	*1993*
JSA/NSA			
Number of new benefits granted	1,242,200	1,677,320	1,876,237
June average number on benefit	676,705	851,831	913, 770
Average number on benefit at end of each week during year	535,947	771,352	882,979
Special benefit			
Number of new benefits granted	166,400	181,513	137,290
June average number on benefit	29,811	34,792	28,854
Average number on benefit at end of each week during year	30,021	34,895	31,910
		— $'000 —	
Amount paid during year(a)			
JSA/NSA	4,561,353	6,736,363	7,491,410
Special Benefit	261,748	304,105	280,474

(a) Includes additional allowances.
Source: Department of Social Security.

Payments for families with children

Basic family payment (formerly family allowance) is payable, subject to income and assets tests, to a person in respect of dependent children under 16 years or dependent full-time students aged 16 to 24 years who are not in receipt of a pension, benefit or allowance in their own right or a prescribed education scheme payment. An additional allowance, also subject to income and assets tests, is payable in respect of multiple (three or more) births until the children turn six years. Hardship provisions exist to assist those who do not meet the assets test but are in genuine hardship. Payments are usually made to the mother and are indexed each January to maintain their real value. Approved charitable, religious or government institutions are paid family allowance for children in their care.

Generally, to be granted family payment, the person and the child must be in Australia and be Australian citizens, or have been given permission to remain in Australia permanently. At June 1993 there were 1,933,696 families receiving basic family payment. Expenditure on basic family payment for 1992–93 was $2.1 billion (table 7.6).

7.6 BASIC FAMILY PAYMENT, 30 JUNE 1993

Number of children and students in family									*Number of families*
	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
1	242,307	179,505	135,620	62,291	69,705	21,092	9,068	11,335	730,923
2	247,098	190,274	137,487	66,920	77,084	22,406	7,966	12,948	762,183
3	107,252	81,496	60,621	24,685	33,416	9,682	3,794	5,608	326,554
4	30,322	21,114	17,235	5,906	9,001	2,649	1,384	1,531	89,142
5	6,324	4,052	3,664	1,096	1,826	562	445	300	18,269
6	1,636	1,075	966	258	489	128	131	71	4,754
7	414	288	300	63	112	34	60	16	1,287
8	125	96	95	12	32	10	16	4	390
9	42	26	39	7	11	1	6	1	133
>9	14	14	16	5	5	2	3	2	61
Total families	**635,534**	**477,940**	**356,043**	**161,243**	**191,681**	**56,566**	**22,873**	**31,816**	**1,933,696**
No. of children in families	1,225,066	918,677	688,742	301,399	373,295	109,430	45,533	62,266	3,724,408
Amount paid during year($'000)(a)	710,247	516,994	400,832	170,525	207,781	60,777	6,698	(b)	2,073,854

(a) Amount paid includes payments to approved institutions in Australia. (b) ACT expenditure included in NSW.
Source: Department of Social Security, Family Payment Quarterly Survey, June 1993.

Additional family payment. In January 1993, additional pension, benefit or allowance paid in respect of children, family allowance supplement, guardian allowance and rent assistance for eligible families with children were combined into additional family payment. The system of family payments for children was simplified and more of the assistance was directed to the primary care-givers, usually mothers. As a result of the integration of family payments, all sole parent additional family payment recipients are now in receipt of guardian allowance.

Additional family payment is paid in addition to basic family payment. It is paid free of income and assets tests to pensioners, allowees and beneficiaries with dependent children (as they have already passed income and assets tests as a condition of entitlement to their income support payment). It is also paid free of income and assets tests to student parents who receive a prescribed education scheme payment. Additional family payment is paid subject to an income and assets test to other low income families with dependent children. As for basic family payment, additional family payment is not paid in respect of children who are receiving a means-tested income support payment in their own right.

Levels of payment are age related and adjusted annually. Rent assistance is also available to recipients of additional family payment if they pay rent other than to a public housing authority. The number of families in receipt of additional family payment at June 1993 was 810,219. The amount paid during 1992–93 was $2.1 billion.

Sole parent pension may be paid to a person who has a child under 16 years or a child attracting child disability allowance, and who is:

- a natural or adopted child; and
- in the person's legal custody; or has been in the person's care and control for 12 months and likely to remain so permanently or indefinitely.

Sole parent pension may be paid to:

- a person who is not a member of a couple (including widowed, divorced, separated or unmarried persons);
- a person whose legal or de facto partner has been in gaol for at least 14 days; and
- a person who is unable to live with his or her partner or de facto partner in the matrimonial home because of the spouse's or de facto partner's long-term illness or infirmity.

To qualify for sole parent pension, clients must also meet residency requirements and are expected to undertake action to obtain maintenance where it is reasonable to expect them to do so.

Sole parent pension is subject to income and assets tests with the maximum rate payable being identical to the age pension. The pension is indexed on a six monthly basis. Persons receiving sole parent pension may also be eligible for additional family payment for each dependent child,. guardian allowance and rent assistance. Employment and education entry payments are also available.

At June 1993 there were 298,444 recipients of sole parent pension. Total expenditure on sole parent pension for 1992–93 was $2.9 billion (table 7.7).

Jobs, Education and Training Program for sole parents. In conjunction with the Departments of Employment, Education and Training, and Human Services and Health, the Department of Social Security administers the Jobs, Education and Training (JET) Program. The JET Program aims to improve the financial situation of sole parent pensioners by aiding their entry or re-entry into the work force. JET provides an integrated program of assistance for sole parents in the form of individual counselling and support, and access to training, education, job search assistance and child care. Participation in the program is voluntary.

The JET Program is open to all sole parent pensioners, widow pensioners, carer pensioners and certain sole parents receiving special benefit. Three groups of sole parent pensioners are especially encouraged to take advantage of JET assistance: teenage sole parent pensioners, those who have received the pension for over a year and whose youngest child is at least six years old, and those who will lose eligibility for the pension within two years due to their youngest child turning 16 years.

An Employment Entry Payment (EEP) of $100 is available to sole parent pensioners who start work and earn more than $386.40 per fortnight, or who receive an increase in wages which makes their wages more than $386.40 per fortnight.

The amount of the wages must be above the limit for at least four weeks (the limit is indexed twice yearly), and an EEP must not have been paid to the pensioner in the last 12 months.

Sole parent pensioners who study full or part time in AUSTUDY-approved courses may receive the AUSTUDY Pensioner Education Supplement of $60 per fortnight and an annual Education Entry Payment of $200.

See table 7.8 for statistics on the JET Program.

7.7 SOLE PARENT PENSIONERS, BY AGE AND TYPE, 30 JUNE

	1991	*1992*	*1993*
		— number —	
Age group (years)			
Under 20	10,026	9,975	9,903
20–29	92,989	98,208	100,462
30–39	109,849	120,582	125,881
40–49	46,373	51,630	55,141
50–59	6,271	6,617	6,849
>59	212	216	208
Type of pensioner			
Females			
Unmarried mothers	49,623	52,625	53,709
Widows	9,412	9,052	8,269
Divorcees	20,208	18,025	15,236
Separated wives	153,478	170,214	182,836
Separated de facto wives	19,383	20,868	20,865

... *continued*

7.7 SOLE PARENT PENSIONERS, BY AGE AND TYPE, 30 JUNE — *continued*

	1991	*1992*	*1993*
Males			
Widowers	864	976	953
Divorcees	1,102	1,232	1,127
Separated husbands	10,092	12,389	13,534
Separated de facto husbands	956	1,097	1,109
Other	602	750	806
Number of pensions	**265,720**	**287,228**	**298,444**
		— $'000 —	
Total payments during year(a)	2,686,319	3,056,545	2,869,473

(a) Until January 1993 total expenditure included additional payments such as Additional Pension for children, Guardian Allowance and Rent Assistance. From January 1993, expenditure on additional payments made in respect of children was transferred to the Family Payment sub-program.
Source: Department of Social Security, Basic Pension Survey, June 1993.

7.8 JET PROGRAM

	1990 –91	*1991 –92*	*1992 –93*
SPPs entering JET program	31,919	46,823	49,185
Referred to the CES	20,245	29,086	36,075
Places in DEET labour market programs	r11,804	12,471	20,486
Entering education	3,481	8,552	11,574
Starting a job	4,269	8,726	13,100

Source: Department of Social Security.

Child Support Scheme. Stage 1 of the Child Support Scheme commenced in June 1988 with the establishment of the Child Support Agency (CSA) in the Australian Taxation Office. Under Stage 1 of the Scheme, maintenance orders and agreements made, registered or approved by the courts and registered with the CSA can be enforced by the Agency.

Stage 2 of the Scheme, which began on 1 October 1989, replaced the system of court ordered child maintenance. Instead, the custodian can apply to the CSA which will assess the amount of child support payable using a formula set out in legislation. Stage 2 is prospective in that it applies only to people who separate or have a child born on or after 1 October 1989.

Under both Stage 1 and Stage 2, the Agency can collect child support from liable parents and these payments are distributed to custodians by the Department of Social Security. Alternatively, custodians can collect child support privately, providing, where the custodian receives Additional Family Payment from the Department of Social Security, it is at least the amount payable under the formula or court order. (Prior to 1 January 1993, DSS clients were required to have child maintenance payable under court orders or agreements collected by the Agency.)

Double orphan pension

Double orphan pension is payable free of income and assets tests to guardians of, or institutions caring for, children under 16 years, or dependent full-time students aged 16 to 24 years whose parents are both dead or one parent is dead and the other is missing, imprisoned or in an institution. The basic family payment residence test applies. The pension may also be paid to persons caring for refugee children. The rate is indexed annually.

As at June 1993, there was a total of 1,370 recipients of double orphan pension paid in respect of 1,698 children. Total expenditure on double orphan pension for 1992–93 was $1.6 million.

Provisions for special circumstances

Widowed person allowance provides short-term assistance for persons whose partners die, and who are not eligible for sole parent pension. It allows a period of adjustment to make funeral arrangements, settle financial matters or to seek employment. The allowance may be granted to a person who, immediately before his or her spouse's death, was either legally married or living in a de facto relationship with that person.

There is no age restriction on the payment of widowed person allowance but the allowance cannot be paid concurrently with another pension, benefit or allowance. Widowed persons with dependent children generally qualify for sole parent pension immediately.

The allowance is payable for up to 14 weeks after the date of the spouse's death, although payment can be extended if a widow is pregnant at the time of her spouse's death. Otherwise, the allowance is paid under the same conditions as other pensions.

At June 1993 there were 83 recipients of widowed person allowance. Total expenditure on widowed person allowance for 1992–93 was $0.9 million.

Class 'B' widow pension. Gradual phasing out of the Class 'B' widow pension began from July 1987. From that date, no new grants were made except to women who were aged at least 50 at that date or at least 65 and received sole parent pension or one of its pre-runners which would have made them eligible before that date.

It was payable to a widow who was either at least 50 years of age or, after having reached the age of 45, ceased to receive a Class 'A' pension by reason of ceasing to have a qualifying child or student.

At June 1993 there were 64,633 recipients of Class 'B' widow pension. Expenditure on Class 'B' widow pension for the year to June 1993 was $535 million.

7.9 WIDOW 'B' PENSIONERS/WIDOWED PERSON ALLOWEES, BY AGE AND TYPE, AT 30 JUNE

	1991	*1992*	*1993*
		— number —	
Aged group (years)			
Under 50	1,883	114	141
50–59	50,613	48,047	43,020
>59	21,628	20,905	21,472
Total	*74,124*	*69,066*	*64,633*
Widowed person allowance(a)	315	342	83
		— $'000 —	
Total payments during year(a)	577,256	566,551	535,583

(a) Until November 1992 pensioners coded pension type 32 (former wife pensioners who become widowed) were included in the widowed person allowance statistics. From November 1992 these pensioners have been included in the Widow 'B' pension statistics.
Source: Department of Social Security, Basic Pension Survey, June 1993.

Fringe benefits

The Commonwealth Government provides eligible Department of Social Security clients with a range of fringe benefits. Eligibility for the various concessions is linked to three cards: the Pensioner Concession Card (PCC), the Health Benefits Card (HBC) and the Health Care Card (HCC).

All pensioners and older, long-term recipients of other forms of income support are issued with a Pensioner Concession Card, formerly known as the Pensioner Health Benefits Card. From 1 April 1993, the separate income and assets test for this card was abolished, extending eligibility to all part pensioners. At 30 June 1993, there were 2,398,810 holders of Pensioner Concession or Pensioner Health Benefits Cards entitling them to Commonwealth and State fringe benefits.

The Health Benefits Card is issued to recipients of Sickness Allowance. There is no separate income and assets test for this card.

The Health Care Card is issued to recipients of Job Search and Newstart Allowance and recipients of Special Benefit (except those older, long-term recipients eligible for the PCC), maximum Additional Family Payment recipients, Child Disability Allowance and Mobility Allowance recipients. Low income earners are also eligible, subject to an income test.

Commonwealth concessions attached to these cards include:

- pharmaceutical concessions — all card holders pay $2.60 per prescription up to a 'safety net' of $135.20 per year, after which further prescriptions are free;
- free hearing aids provided by Australian Hearing Services (since 1 November 1991, pensioners are charged an annual fee of $25 to cover repairs, maintenance and batteries (PCC and HBC only);
- telephone allowance of $52.80 per year, paid by the Department of Social Security (PCC only);
- concessions on Australian National Railways travel (PCC only);
- free postal redirection for one month after changing address (PCC and HBC only); and
- free postage for communication material for blind pensioners.

State and Territory Governments, local government authorities and private organisations also provide certain concessions, usually attached to the PCC. Potentially the most valuable of these are public transport concessions and reductions in local government rates, motor vehicle registration and utility payments such as energy.

Pharmaceutical allowance

Pharmaceutical allowance is paid to all pensioners, older long-term recipients of income support and recipients of Sickness Allowance to compensate them for expenditure on pharmaceuticals listed under the Pharmaceutical Benefits Scheme (PBS). The amount paid to a social security recipient over the course of the year is equal to the level of the PBS 'safety net' limit. The allowance is paid fortnightly, but advance payments of the first 10 instalments (a total of $50) are available to those with high pharmaceutical usage and private income of less than $10 per week. From January 1992, pension clients are able to receive advance payments of up to seven times the fortnightly rate of pharmaceutical allowance at any time if they meet the eligibility criteria. These criteria include continued eligibility for pharmaceutical allowance, and the expenditure on pharmaceuticals must not be less than the amount of pharmaceutical allowance received in the entitlement period.

Bereavement allowance

Bereavement allowance is payable to eligible age, carer or disability support pensioners, in respect of the death of their spouse or the person receiving care. The allowance is equivalent to 14 weeks payment that would have been made to the spouse for that period. Allowances are available in lump sum form to assist with funeral and associated expenses. The estate of a deceased single pensioner is credited with one extra fortnightly instalment of pension following death.

Financial Information Service (FIS)

This service in the Department of Social Security gives information that will help current and future pensioners improve their standard of living in retirement by using their own money to best advantage. FIS has branches with specialist staff in six Social Security Area Offices and 104 Social Security Regional Offices throughout Australia. In addition, it provides a visiting service to regional centres, direct telephone access to the service and an interpreter service. FIS officers can provide advice on the social security, veteran's affairs and tax treatment of investments and information and discuss financial strategies and types of investments with clients and referral to appropriate financial counselling services. They do not recommend particular investments or arrange investments for clients.

International agreements and payment of pensions abroad

Australia has social security agreements with Italy, Canada, Spain, Malta, Ireland, The Netherlands, Austria, Portugal, Cyprus, the United Kingdom and New Zealand. These agreements ensure that people who have moved between the countries do not suffer disadvantages in social security coverage, usually by arranging for both countries to pay a part pension to the person on retirement or other contingency.

Before the end of 1993–94, agreements should be ready for signature with Norway and Finland. A revised agreement with New Zealand should also be signed before June 1994.

Further agreement negotiations will be held with Germany, Belgium, the United Kingdom (revision) and the United States. When these agreements have been concluded, more than 50 per cent of Australia's migrant population will be covered by social security agreements.

Under Australia's domestic social security legislation, some pensions may be paid abroad. These are age pensions and certain categories of sole parent, widow and wife pensions. Other pensions are either not payable abroad or are payable for 12 months' absence only.

Recent changes to social security arrangements

The following provides a brief description of newly implemented and impending social security payments announced in the 1993–94 budget and the 1994 White Paper on Employment and Growth. The description does not aim to provide a listing of all modifications to established pensions and benefits. Rather it aims to provide an outline of major new payment types and of the payments that will be phased out. Further details of changes to social security arrangements, and the rationale for program changes, can be obtained by reference to the Annual Report of the Department of Social Security and the Government White Paper on Employment and Growth.

Mature Age Allowance (MAA), implemented in March 1994, is paid to long-term unemployed persons aged 60 and over but below age pension age. To be eligible, persons must have been on income support for 12 months or more and eligible for the Newstart Allowance. Recipients of the allowance are paid age pension rates and payments are subject to age pension income and assets tests. Fringe benefit entitlements are the same as for pensioners. Mature Age Partner Allowance is payable, under pension conditions, to the spouse of an MAA recipient. MAA was implemented in recognition of the difficulties faced by older unemployed people in the prevailing labour market. The payment will be reviewed in 1994–95 in the light of changing labour market conditions.

Home Child Care Allowance (HCCA), from 29 September 1994, will be paid to eligible couple families where a partner cares for children at home. The payment replaces (and increases the value of) the Dependant Spouse Rebate for couples with dependent children administered through the taxation system. Payments will be made directly to the person who is at home with the children. Dependent partners, with children, whose incomes are below $10.85 a fortnight will receive the full $60.00 a fortnight. Those with incomes of up to $250.00 a fortnight will receive a part payment. Dependant partners of Job Search, Newstart, Sickness Allowance and Special Benefit recipients will generally not be eligible for HCCA as they will receive the new Partner Allowance in their own right.

Partner Allowance also from 29 September 1994, will be available to the partners of Job Search, Newstart and Sickness Allowance and Special Benefit recipients. Previously, partnered allowees received a married rate of allowance which included an amount for the support of a dependent spouse. Under the new arrangement, the married rate of payment will be abolished, and Partner Allowance (at half the married rate) will be paid directly to the dependent partner. From 1 July 1995, Partner Allowance will only be paid to partners of JobSearch/Newstart/Sickness Allowance and Special Benefit recipients and pensioners who were born before 1 July 1955 and have no dependent children and little or no recent work experience. Younger spouses without children will need to qualify for a payment (for example, Job Search Allowance) in their own right. Recipients of the partner allowance will not be activity tested.

Parenting Allowance (which will incorporate Home Child Care Allowance) will be introduced from 1 July 1995. It will replace Partner Allowance for those partners of allowees with dependent children under 16 years. This allowance will also be available to the partners of pensioners, to the partners of low income earners, and to partnered people with low personal income who have children under 16 years. The maximum rate of payment will be the same as the half married rate of allowance (currently $263.30 a fortnight) and subject to income and assets tests. A non-taxable payment of $60 a fortnight will be payable irrespective of assets and the main earner's income; only parenting allowees own income will reduce this base payment.

The Partner and Parenting Allowances are being introduced as part of the restructuring of income support for couples. The social security system currently assumes unemployed couples consist of one main jobseeker (usually the husband) and a dependent partner. The dependent partner is not required to seek work. The White Paper measures, which include liberalising the allowance income test and abolishing the joint income test, will provide increased financial incentives for each member of an unemployed couple to maximise their work force capacity.

Youth Training Allowance (YTA) will, from 1 January 1995, replace the Job Search Allowance for under 18 year olds as part of a wider Youth Training Initiative (YTI). The YTI seeks to ensure that young people do not become long-term unemployed by providing access to entry level training, additional labour market program places and case management through the Commonwealth Employment Services (CES) commencing no later than 13 weeks after registration.

YTA will be paid directly to young people at the three AUSTUDY basic rates of payment ('at home', 'away from home', and 'independent/homeless'). The 'at home' and 'away from home' rates will be subject to parental income and assets tests. The new arrangements will not affect young people already receiving Job Search Allowance on 1 January 1995.

Wife Pension will no longer be granted from 1 July 1995. Existing wife pensioners at 1 July 1995 will continue to receive Wife Pension; however, future pensioner spouses will need to apply for another income support payment (for example, Parenting or Partner Allowance, Job Search or Newstart Allowance, Sickness Benefit, Carer Pension, Disability Support Pension).

COMMONWEALTH GOVERNMENT ASSISTANCE THROUGH WELFARE ORGANISATIONS

Supported Accommodation Assistance Program (SAAP)

SAAP is a Commonwealth/State funded, State administered program which aims to provide a range of supported accommodation and related support services to assist people who are either permanently homeless or temporarily homeless as a result of a crisis, including women and children escaping domestic violence, to move towards independent living. Examples include refuges, halfway houses and support services such as counselling, referral and advocacy services.

SAAP provides funds for equipment and recurrent costs for services. Capital housing funds for the program are available under the complementary Crisis Accommodation Program (CAP) within the Commonwealth State Housing Agreement.

7.10 SUPPORTED ACCOMMODATION ASSISTANCE PROGRAM FUNDING ($ million)

	Commonwealth	*States*	*Total*
1989–90	72.9	48.1	121.0
1990–91	81.0	50.5	131.5
1991–92	90.3	69.9	160.2
1992–93	95.6	73.6	169.2
1993–94	103.3	80.1	183.4

Source: Department of Human Services and Health.

Commonwealth capital funding provided under CAP in each of the first three years of the program was $39.7 million. The allocations for 1992–93 and 1993–94 were $5.4 million and $43.4 million, respectively.

Services for homeless young people

Under the Youth Social Justice Strategy, this program is part of a four-year comprehensive package of measures aimed at assisting disadvantaged young people who are homeless and in crisis by offering a range of support services including accommodation.

Capital housing funds for this initiative are available under the Crisis Accommodation Program (CAP) within the Commonwealth State Housing Agreement.

7.11 YOUTH SOCIAL JUSTICE STRATEGY FUNDING ($ million)

	Commonwealth	*States*	*Total*
1989–90	2.2	2.2	4.4
1990–91	4.4	4.7	9.1
1991–92	5.2	5.2	10.5
1992–93	5.3	5.3	10.6
1993–94	5.4	5.4	10.8

Source: Department of Human Services and Health.

The Job Placement and Employment Training (JPET) Program was announced in the 1992–93 budget with funding of $10.2 million over two years. JPET has funded 42 pilot projects providing employment and training assistance specifically designed to increase the opportunities, skills and independence of homeless young people.

For further information on other government funded housing assistance programs, *see* the section on Commonwealth and State government housing assistance and housing in the chapter, Construction and Housing.

Children's Services Program

The goal of the Children's Services Program is to assist families with dependent children to participate in the work force and the general community by ensuring that child care is affordable for low and middle income families and by improving the supply and quality of child care.

The Program's three main objectives are to improve the supply, affordability and quality of child care. These objectives are being achieved as follows.

Since 1983, the number of funded child care places has increased from 46,000 to almost 193,000 in June 1992. These comprise 40,300 community long day care places, 53,200 private long day care places, 45,500 family day care places, 4,100 occasional care places, 1,600 Multifunctional Centre and Multifunctional Aboriginal Children's Service places, and 48,200 outside school hours care places.

7.12 CHILDREN UNDER 12 YEARS OF AGE WHO USED FORMAL CARE, JUNE 1993

Type of formal care	*Number*
Before or after school care program	85,800
Long day care centre	146,700
Family day care	80,700
Occasional care	50,000
Preschool	236,900
Other formal care	30,000
Total(a)	**596,200**

(a) Sum of individual counts exceed the total because some children use more than one type of formal care.
Source: Child Care, Australia, June 1993 (4402.0).

7.13 CHILDREN UNDER 12 YEARS OF AGE: TYPE OF CARE BY WEEKLY FAMILY INCOME JUNE 1993 ('000)

	Weekly family income									
Type of care	*Less than $160*	*$160 to $319*	*$320 to $479*	*$480 to $639*	*$640 to $799*	*$800 to $1,039*	*$1,040 to $1,279*	*$1,280 and over*	*Don't know/ not stated*	*Total*
Formal care										
Before and after school care program	*0.1	6.5	9.3	9.1	10.7	13.9	12.2	22.5	*1.6	85.8
Long day care centre	*1.9	22.4	21.4	25.0	20.6	20.2	13.5	18.2	*3.6	146.7
Family day care	*1.0	9.7	12.9	8.2	8.9	16.0	13.2	8.0	*2.8	80.7
Occasional care	*0.4	5.8	12.3	7.6	5.8	7.6	*4.5	4.8	*1.0	50.0
Preschool	*4.1	32.6	43.3	44.1	30.0	33.9	17.8	20.5	10.7	236.9
Other formal care	*0.1	*2.6	*3.7	5.3	*4.1	*2.9	*3.6	5.8	*1.9	30.0
Total(a)	**7.6**	**74.6**	**96.6**	**94.8**	**77.0**	**89.2**	**61.3**	**75.1**	**20.1**	**596.2**

(a) As children may use more than one type of formal care the categories will not add to Total children who used formal care.
Source: Child Care, Australia, June 1993 (4402.0).

In 1993–94, an estimated 31,000 additional places were funded, of which 15,500 were long day care. By 1996–97, an estimated 300,000 places will be funded under the Children's Services Program.

The Federal Government assists low and middle income families with their child care costs through an income-related fee relief system. Child Assistance is available to eligible families using private and community-based services. The threshold for maximum Childcare Assistance is linked with the Additional Family Payment cut-off point and indexed annually.

It is estimated that in 1993–94, 170,000 low and middle income families will receive assistance with their child care costs through the Childcare Assistance system. It is expected that 52 per cent of these users will be eligible for maximum Childcare Assistance.

The Federal Government is encouraging employers to become more involved in the provision of child care for their employees and provides Fringe Benefit Tax exemptions as incentives for employers. From 1 July 1994, a 30 per cent Childcare rebate is available for work-related child care expenses up to a ceiling of $110 a week for one child and $220 a week for two or more children.

Three independent Work and Child Care Advisory Services, one each in New South Wales, Queensland and Victoria, aim to make the process of employer provided care as smooth as possible by assisting employers, unions and staff to examine child care options and needs.

The Federal Government is committed to funding quality child care services which are well managed, responsive to families' needs, culturally relevant and developmentally appropriate for children.

Direct partnerships with local government, community groups and employers, available from 1 July 1994 in all States and Territories, provide interest free loans over 20 years for capital construction. Grants are also available for local government and community groups.

The Government has supported quality child care through funding the provision of support, training and advice to services, including those providing services for children with special needs such as Aboriginal and Torres Strait Islander children and children with disabilities.

Additional Commonwealth funding to December 1994 will enable commercial and employer sponsored centres, as well as community centres, to provide the extra level of care required for children with additional needs.

Youth Activities Services for 11 to 16 year olds living in disadvantaged areas and Family Resource Centres, established to help local agencies improve the effectiveness and quality of services to families in high-need areas, are other major initiatives under this Program.

The quality improvements and accreditation system, administered by the Childcare Accreditation Council, commenced on 1 January 1994.

The National Child Protection Council was created by the Commonwealth Government in 1991 as part of its response to the National Committee on Violence Report. The Council was established to focus the attention of all levels of government and the community on the need to reduce the incidence of child abuse and neglect, and to develop a coordinated national approach for the prevention of child abuse and neglect.

Emergency Relief Program

The Emergency Relief (ER) Program provides funds, as supplementary grants to approved agencies, to be used for emergency financial assistance to families and individuals in crisis. Assistance is usually provided through cash relief, purchase vouchers or payments to creditors.

Reflecting the flexibility required to respond to the large number of individual crisis situations, funds under the ER program are delivered through some 900 established agencies operating through about 1,200 outlets Australia wide. These agencies are predominantly community based with the provision of emergency relief being only one part of a broader social welfare or community service role.

The allocation of funds throughout Australia takes into account the distribution of main client groups, in particular Social Security recipients and Aborigines.

7.14 EMERGENCY RELIEF PROGRAM APPROPRIATIONS
($)

1991–92	16,342,000
1992–93	(a)32,973,0009
1993–94	19,630,000

(a) Includes $12.6 million in December 1992 for Christmas Appeals Matching Grants.
Source: Commonwealth Department of Housing, Health and Community Services.

People with disabilities

The *Disability Services Act 1986* (DSA) was introduced to expand opportunities for the participation of people with disabilities in the Australian community. Under the Act, the Commonwealth Government provides grants for the provision of services to support people with disabilities, particularly in the labour market.

Until recently, both the Commonwealth and States and Territories were involved in providing accommodation and support services and employment services for people with a disability. This situation led to not only overlap of services in some areas, but also gaps in the range of services available. The Commonwealth/State Disability Agreement (CSDA) was introduced to clarify government responsibilities and rationalise the provision of services for people with a disability.

Under the CSDA, the Commonwealth is responsible for the administration of employment programs for people with a disability while State and Territory Governments administer accommodation and other support services.

By 1 July 1993, all States and Territories had implemented the CSDA, and passed legislation complementary to the DSA.

In 1992–93, the Federal Government provided $385.1 million to organisations to provide services to people with disabilities, comprising $111.9 million for employment services, $112.7 million for accommodation services by States and Territories under CSDA, and $160.5 million for accommodation and community participation services not yet under CSDA.

In 1993, 36,598 people accessed the Commonwealth Disability Services Program, which provided 714 types of service.

Two complementary employment service types are funded under the Disability Service Act. These take account of the differing circumstances, needs, aspirations and abilities of people with a disability.

Competitive Employment Training and Placement (CETP) Services are specialist job placement agencies that place people with a disability, usually with lower support needs, into open employment at award wages. These services provide individualised on-the-job training and support which decreases over time (usually within two years) until the person with a disability can continue in the job independently. CETP services monitor the progress of the person in the job and can reintroduce training and support if needed, for example, if the nature of the job changes and new skills are required. CETP services usually help people to achieve economic power and financial independence and work in ordinary working environments.

Supported employment services are provided mainly to people with higher support needs who would not be able to work for full award or productivity-based wages in a competitive employment situation without ongoing support.

The Department of Health, Housing and Community Services administers the Commonwealth Rehabilitation Service (CRS) which provides vocational and social rehabilitation services for working age people with disabilities. The major criterion for acceptance into a rehabilitation program is the expectation of significant gain towards vocational or independent living goals.

Services are provided from and arranged through a network of some 150 regional locations in metropolitan and country locations.

Programs may include:

- employment, vocational mobility and other independent living, training and education courses;
- assessment services, occupational therapy, physiotherapy, speech therapy and counselling services; and
- aids and appliances, and home, vehicle and workplace modifications, and associated accommodation and training allowances as

appropriate, where required as part of a rehabilitation program.

In 1992–93, 32,179 people received rehabilitation assistance from the CRS. Expenditure on rehabilitation services in 1992–93 was $107.8 million.

Home and Community Care Program (HACC)

HACC is jointly funded by the Commonwealth Government and the State and Territory Governments. HACC funds organisations and community groups which provide basic maintenance and support services for the frail aged and people with disabilities to enable them to remain living at home. Support is also provided to the carers of these people.

The Program aims to enhance the independence, security and quality of life of frail aged and younger people with disabilities by avoiding their inappropriate admission to long-term residential care. It achieves this by facilitating and promoting the development of cost-effective community care alternatives which are appropriate and which can flexibly respond to individual needs.

Services funded under the Program include home help and personal care; home maintenance and modification; food services; community-based care; transport services; community paramedical services; community nursing; assessment and referral; education and training for service providers and users; information and coordination.

Over 3,500 projects are funded throughout Australia, some providing a specific focus on the needs of younger people with disabilities, those with a non-English speaking background, Aboriginal and Torres Strait Islanders, those with dementia or the carers of the frail aged and younger people with disabilities.

7.15 HOME AND COMMUNITY CARE (HACC) EXPENDITURE(a)
($ million)

Year	*Commonwealth*	*States/ Territories(b)*	*Total*
1987–88	169.4	126.9	296.3
1988–89	205.1	144.5	349.6
1989–90	242.1	165.8	407.9
1990–91	278.9	188.2	467.1
1991–92	315.8	205.7	521.5
1992–93	342.2	222.7	564.9

(a) Includes unmatched money and planning and development but excludes running costs. (b) Estimated expenditure required for matching Commonwealth outlays and may vary to the actual cash expenditure due to the effect of recoupments in respect of previous years.
Source: Commonwealth Department of Human Services and Health.

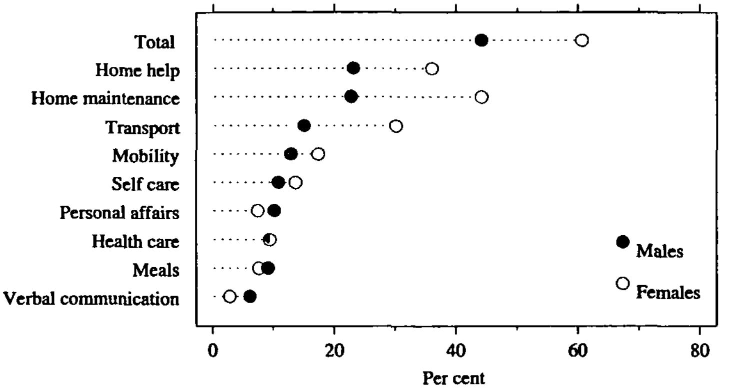
There are a number of particular community care services aimed at specific categories of people. The Commonwealth Respite for Carers Program, which funds initiatives to support carers of frail, elderly people and younger people with disabilities. Expenditure in 1992-93 was $6.7 million. Community Aged Care Packages, which provide personal care services to people in the community who would otherwise require entrance to hostels. Expenditure in 1992–93 was $3.3 million. In addition to the range of mainstream services provided in 1992–93, the Home and Community Care (HACC) Program provided funding for specific projects for special needs groups such as Aboriginal and Torres Strait Islander people ($6.9 million), people from non-English speaking backgrounds ($11.2 million), Carers ($6.1 million), and people with dementia ($10.2 million).

In 1993 it was estimated that 3,176,700, or 18.0 per cent of the Australian population, had one or more disabilities. Of these, 95.0 per cent lived in households and 5.0 per cent lived in establishments. Of the persons living in households, 18.7 per cent lived alone. As age increased, the proportion of persons living alone also increased. In the 0 to 24 year age group in households, 2.5 per cent of persons with a disability lived alone compared with 39.9 per cent in the 75 year and over age group.

Graph 7.16 shows the types of activities for which persons aged 5 to 59 with a disability reported a need for help in 1988. There were 1,478,900 persons with a disability living in households who reported a need for help in one or more activities and, of these, 1,161,800 persons reported receiving help with at least one activity. The most frequently reported activity requiring help was in the area of home maintenance (953,500 persons). This represented 64.5 per cent of all persons with a disability who reported any need for help. A similar pattern of needs emerged for those with disabilities aged 60 and over.

Persons with a disability and older persons often need help from carers, who may be family, friends and neighbours. There were 577,500 principal carers aged 15 years or more who cared for a person with a handicap, representing 4.2 per cent of the total population. Of these, 425,200 persons (73.6 %) cared for a person living in the same household and 152,300 persons (26.4%) cared for a person living outside their household. Females provided the majority of care (64.4%) both for persons living in the same household and persons living outside the household, and this was consistent throughout all States and Territories.

7.16 ACTIVITIES FOR WHICH A DEMAND FOR HELP WAS REPORTED BY DISABLED PERSONS AGED 5 TO 59 YEARS LIVING IN HOUSEHOLDS, 1988



Source: Disabled and Aged Persons, Australia, Preliminary Results, 1988 (4118.0).

Hearing Services Program

Australian Hearing Services (AHS) is a statutory authority within the portfolio of Human Services and Health. Its role is to assist people with a hearing impairment and to reduce the incidence of hearing problems within the community. AHS fits the majority of hearing aids in Australia.

AHS provides hearing services to eligible people, who include holders of Pensioner Concession Cards, Commonwealth Seniors Health Cards (from July 1994), those under 21 years of age, eligible veterans, Commonwealth rehabilitation clients and certain compensation cliamants. Services are delivered through a national network of 52 full-time hearing centres, some 70 visiting centres in rural and remote areas, and over 80 approved private hearing aid businesses across Australia.

In 1992–93, AHS provided services to over 145,000 adults and children and fitted in excess of 86,000 hearing aids.

The AHS head office at Chatswood, New South Wales, provides equipment training and ancillary operations to support the delivery of services through the hearing centres. AHS staff also conduct noise and audiological research, evaluate new devices and techniques, advise on measures to prevent hearing loss and report on environmental and occupational noise problems.

Residential care for aged people

The aim of the Commonwealth Government's Aged Residential Care Program is to ensure that frail aged people have access to residential support and care services appropriate to their needs. Support is provided by the Commonwealth for two main types of residential care — nursing homes and hostels. Nursing homes provide services for people who need continuous professional nursing and personal care, while hostels provide a wide range of personal care services for less dependent aged people.

Two key objectives of the aged residential care program are to provide a range of accommodation and care services to meet the assessed needs of aged people, and to promote their quality of life.

7.17 COMMONWEALTH EXPENDITURE ON NURSING HOMES AND HOSTELS, 1992–93
($ million)

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*ACT*	*NT*	*Aust.*
Nursing homes for aged (recurrent)	653.2	429.9	233.6	166.3	134.6	46.4	12.1	4.8	1,680.9
Hostels (recurrent)	82.9	69.2	58.3	30.3	23.3	7.0	2.3	0.9	274.8
Nursing homes and hostels (capital)	54.1	45.9	48.9	18.7	16.9	9.2	0.8	2.2	196.9

Source: Commonwealth Department of Housing, Health and Community Services.

7.18 APPROVED NURSING HOMES, HOSTELS AND BEDS AT 1 OCTOBER 1993

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*ACT*	*NT*	*Aust.*
Approved nursing homes and beds for aged									
Nursing homes	489	428	200	155	113	54	6	6	1,451
Beds	29,057	16,938	12,152	6,879	6,082	2,131	557	179	73,975
Approved hostels and places									
Hostels	420	313	235	150	153	42	12	7	1,333
Places	17,932	13,229	11,015	6,060	5,112	1,315	575	124	55,362

Source: Commonwealth Department of Housing, Health and Community Services.

Future directions. The 1986 Nursing Homes and Hostels Review identified a number of areas where the provision of services for the aged could be improved. In particular, the Review recommended that aged people be supported in their own homes, in their own communities, as far as possible, and by residential services only where other support systems are not appropriate to meet their needs. The Review encouraged the development of a wider range of services including home and community support services, supported accommodation, hostel and nursing home care. This objective was endorsed by the 1991 Mid Term Review of the Aged Care Reform Strategy.

In line with these recommendations, increased emphasis is now given in the planning of services to the level of need of the frail aged. In broad terms, this translates into nursing homes for the most frail older people and, for those who are less dependent, hostels or community services. This is being achieved through the use of a national aged care assessment program which ensures that aged people receive appropriate care based on their individual physical, medical, psychological and social needs and the needs of their carers.

Accordingly, the Government aims to provide 92.5 resident places per 1,000 persons aged 70 years and over across all States and Territories, comprising 40 nursing home and 52.5 hostel places. Community care, both through Community Aged Care Packages and other community support services, is provided for frail aged people who prefer to remain in their own homes. The Government aims to provide 7.5 Community Aged Care Package places per 1,000 persons aged 70 and over and to ensure growth and effective targeting of the joint Commonwealth/State Home and Community Care (HACC) Program.

Hostel funding. To facilitate the equitable redistribution of resources to alternative, less institutionalised forms of residential care, hostel resources have been substantially enhanced through capital and recurrent funding.

The Commonwealth Government has committed substantial resources to the expansion of hostel services as an integral part of its residential aged care program. Since 1986, the Government has raised the level of subsidy available for residents of approved age care hostels. Refinement of recurrent funding to increase the equity of subsidies and benefit financially disadvantaged people resulted in an expanded range of subsidy levels. From November 1993, the rate of subsidy for personal and respite care ranged from $22.05 to $34.05 per day.

Major adjustments have also been made to the planning and funding mechanisms for hostels. Unnecessary restrictions on organisations' access to funds have been removed by allowing greater flexibility to raise funds themselves via borrowings and entry contributions from people with the capacity to contribute to the cost of their own accommodation.

Increasing the capacity of organisations to raise funds has allowed the Commonwealth to target capital subsidies to financially disadvantaged people and other disadvantaged groups more comprehensively. For example, significantly increased subsidies have been made available to provide accommodation for financially disadvantaged members of the community. Indeed, the Commonwealth now pays a capital grant of up to $50,550 for each hostel place which must be provided to a financially disadvantaged person.

The subsidy for general places varies depending on the proportion of financially disadvantaged people aged more than 70 in the area from which the hostel will draw its residents — the higher the percentage of financially disadvantaged residents, the higher the general place rate subsidy. This approach acknowledges that the greater the proportion of financially disadvantaged residents in a specific hostel population, the lower the number of people able to make an adequate entry contribution. Recurrent funding reflects this concern of the Government to ensure that less well off people can gain access to hostels and that hostels that provide places for financially disadvantaged people receive support. Care subsidies for financially disadvantaged people are $3.25 more than for non-financially disadvantaged residents, at all levels of care, from January 1993.

While the residential care program focuses mainly on long-term residential care, there are provisions under the program for assistance to those aged and disabled people who wish to stay in the community.

A number of pilot projects have illustrated the potential of such an approach in enabling those people with higher and more complex care needs and most at risk of needing residential care to remain in the community, through providing the necessary care services in the home. Given the suitability of this service model, the Government announced its commitment to develop Community Aged Care Services Packages as a service alternative in the aged care program. Over 100 places were available in 1992–93 for this initiative with provision for substantial growth in later years.

In addition, short-term or respite care is available which not only allows carers a break from their responsibilities, but also provides support for frail aged people who are caring for themselves.

Domiciliary Nursing Care Benefit (DNCB) is available to assist people who choose to care at home for a person who is very frail, or perhaps has severe dementia, someone with a long-term illness or a person with a disability, who is assessed as requiring the level of care available in a nursing home. The basic criteria for payment of the benefit are that the person being cared for must be aged 16 years or over, and live in the same residence as the carer. Certification must also be provided by a doctor that continuing nursing care is needed and a registered nurse that the carer is providing adequate care. The benefit is indexed annually. The benefit continues to be paid when the person being cared for is in overnight respite care for up to 42 days per calendar year.

The Aged Care Assessment Program is a joint Commonwealth/State program aimed at ensuring that frail aged people have access to available residential care and community services appropriate to their needs, through the operation of the multidisciplinary Aged Care Assessment teams (ACATs).

A network of 123 ACATs operates throughout Australia to which all people over the age of 70 have access. Some of the teams' responsibilities include determination of nursing home and hostel admission eligibility, development and maintenance of admission waiting lists, acting as an interface between aged care services and the health care system, the arrangement for respite services and the provision of advice to older people about aged care services in general. Funding is provided by the Commonwealth through State health authorities which manage the program on a day-to-day basis and also contribute resources to the operation of ACATs. The Commonwealth Government contributed $34 million to this program in 1993–94.

VETERANS' AFFAIRS

The Repatriation Commission was established under the *Repatriation Act 1920*. With the repeal of that Act on 22 May 1986, the Commission has continued in existence under the *Veterans' Entitlements Act 1986*. At present, the Commission consists of three full-time members. The functions of the Commission are set out in section 180 of the Veterans' Entitlements Act and include:

- granting pensions, allowances and other benefits in accordance with the provisions of the Act;
- establishing, operating and maintaining hospitals and other institutions for the treatment of eligible persons;
- arranging the provision of treatment and other services for eligible persons;
- advising the Minister and providing him with information on matters relating to the Act;
- performing other functions conferred on the Commission by the Act or other Acts; and
- administering the Act subject to the control of the Minister.

The Department of Veterans' Affairs provides the administrative machinery through which the Commission operates. The central office of the Department is in Canberra. There is a branch office in the capital city of each State and Territory, under the control of the Deputy Commissioner. There is a Veterans' Advice Network office in each branch office and in 13 other centres throughout Australia.

Repatriation benefits are provided under the Veterans' Entitlements Act in respect of service with the Australian Defence Forces in World War I, World War II, Korean and Malayan operations, Australian contingent of the British Commonwealth Far East Strategic Reserve, Viet Nam and South East Asia conflict and for service in the Regular Defence Forces on or after 7 December 1972. Certain civilians may also be eligible for benefits, as are Australian members of certain designated peacekeeping, observing and monitoring forces who had peacekeeping service overseas and, from July 1994, Australian mariners of World War II. Under the *Papua New Guinea (Members of the Forces Benefits) Act 1957*, indigenous inhabitants of Papua New Guinea who served in the Australian Forces in World War II and members of the Royal Papuan Constabulary and New Guinea Police Force who served in that conflict are eligible for compensatory type benefits. Members of other Commonwealth countries' forces and other allied veterans are not eligible for compensatory-type benefits in respect of their service, unless they were domiciled in Australia immediately before their enlistment. They may, however, qualify for income support payments such as the service pension.

Qualification for receiving subsidised housing loans generally depends on service with the Australian Defence Forces in World War I, World War II, or specified service in Korea, Malaya, South East Asia, Namibia, or the Middle East in respect of the Kuwaiti crisis, and for service in the Regular Defence Forces on or after

7 December 1972 provided the person's first service in the Forces was before 15 May 1985. Certain civilians may also be eligible.

More detailed information on repatriation allowances, benefits and services is available from the Department.

7.19 VETERANS' AFFAIRS, TOTAL EXPENDITURE
($'000)

Class	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*	*1993–94*
Pensions and allowances	3,193,754	3,406,254	3,688,330	3,796,623	3,862,309	3,918,205
Other services and benefits	199,471	174,908	151,169	101,580	70,158	57,389
Medical treatment	531,257	600,207	662,581	716,499	766,576	1,004,732
Departmental running costs	186,122	199,713	191,852	195,649	196,406	215,467
RGH operating costs	410,436	456,757	499,253	507,398	484,562	360,184
AWM operating costs	12,640	14,185	16,313	15,069	15,059	13,534
Capital expenditure	25,087	18,878	14,690	8,851	20,591	30,179
Total expenditure	**4,558,767**	**4,870,902**	**5,224,188**	**5,341,669**	**5,415,661**	**5,599,690**

NOTE: Because of changes in the treatment of some items of expenditure, strict comparisons over the years should not be made without knowledge of these changes.
Source: Department of Veterans' Affairs.

Benefits Program

The principal objective of the Benefits Program is to compensate veterans and their dependants for the effects of war or defence service. Benefits are administered under three sub-programs, the Compensation Sub-program, the Income Support Sub-program and the Housing Assistance Sub-program.

Compensation Sub-program. The main benefits provided under this sub-program are the disability pension and the war/defence widow's/widower's pension.

The disability pension is a compensatory payment for incapacity due to eligible war, defence or peacekeeping service. General rate disability pensions range from 10 per cent up to and including 100 per cent, depending on the degree of war-caused or defence-caused incapacity. Higher rates of pension (intermediate rate and special rate) are payable if the degree of incapacity suffered from war or defence-caused injury or disease is determined to be at least 70 per cent and the veteran is totally and permanently incapacitated from accepted disabilities alone as to render him/her incapable of undertaking remunerative work for periods aggregating more than 20 hours per week for the intermediate rate or eight hours for the special rate.

An Extreme Disablement Adjustment, equal to 150 per cent of the general rate, is payable to severely disabled veterans who are 65 years of age or over.

The war/defence widow's/widower's pension is payable to the widow or widower of a veteran:

- whose death has been accepted as war-caused or defence-caused;
- who at the time of his or her death was receiving or entitled to receive a special rate disability pension or the Extreme Disablement Adjustment; or
- who at the time of his/her death was receiving a pension which had been increased due to certain amputations or amputations and blindness.

As from 1 January 1993, war widow's/widower's pension is also available to the widows/widowers of former prisoners of war.

Orphan's pension is payable to the children of these veterans.

7.20 NUMBER OF DISABILITY AND WAR WIDOWS' PENSIONS

Recipient	30 June 1993	30 June 1994	Variation %
Veterans	156,923	156,286	- 0.4
Wife's and wife widows	89,652	84,626	- 5.9
Children	6,965	6,406	- 8.7
War widows	82,422	85,207	3.3
Orphans	546	502	- 8.8
Other dependants	1,005	946	- 6.2
Total	**337,513**	**333,973**	**- 1.1**

Source: Department of Veterans' Affairs.

7.21 NUMBER OF DISABILITY PENSIONS FOR INCAPACITATED VETERANS, 30 JUNE 1994

Pension	World War I	World War II(a)	Korea, Malaya and FESR(b)	Special Overseas Service	Peace-time forces	Miscel-laneous	Total
General Rate — from 10% to 100% assessed disability	127	101,608	3,837	9,287	18,536	133	133,528
Intermediate Rate	—	727	28	110	75	2	942
Special Rate (T & PI or equivalent)	34	14,617	879	2,125	1,075	16	18,746
Extreme Disablement Adjustment	8	3,002	34	3	14	9	3,070
Total	**169**	**119,954**	**4,778**	**11,525**	**19,700**	**160**	**156,286**

(a) Includes Interim Forces. (b) Far East Strategic Reserve.
Source: Department of Veterans' Affairs.

7.22 DISABILITY AND WAR WIDOWS PENSIONS: NUMBER AND EXPENDITURE

Year	Number of disability pensions in force at 30 June				Annual expenditure(a) to 30 June ($'000)
	Incapacitated veterans	Dependants of incapacitated veterans	Dependants of deceased veterans	Total	
1989	163,660	120,325	76,360	360,345	1,123,624
1990	161,546	114,625	77,911	354,082	1,219,647
1991	159,579	108,478	79,494	347,551	1,340,420
1992	157,790	102,953	81,125	341,868	1,396,192
1993	156,923	96,948	83,642	337,513	1,445,308
1994	156,565	91,722	86,224	334,511	1,508,446

(a) Includes associated allowances.
Source: Department of Veterans' Affairs.

A number of specific need allowances are available to certain incapacitated veterans. They include attendant allowance, specific disability (section 27) allowance, clothing allowance, recreation transport allowance, vehicle assistance scheme benefits, temporary incapacity allowance and loss of earnings allowance. Decoration allowance is also available. Various payments intended to assist with funeral and other bereavement expenses are also available.

7.23 SPECIFIC NEED ALLOWANCES

	Number of recipients at 30 June		
Benefit	*1992*	*1993*	*1994*
Attendant allowance	992	998	1,003
Section 27 (items 1–6)	60	60	56
Section 27 (items 7–15)	1,225	1,203	1,196
Clothing allowance	2,166	2,052	1,950
Recreation transport allowance	3,068	3,018	3,013
Decoration allowance	1,350	1,353	1,343
Vehicle assistance scheme	(a)62	60	64

(a) The data source has changed and previously published data are not comparable.
Source: Department of Veterans' Affairs.

The Veterans' Children Education Scheme provides assistance with education and training for the children of special rate disability pensioners and certain other incapacitated veterans and deceased veterans whose death has been accepted as war-caused or defence-caused or who were receiving special rate disability pension or a section 27 allowance (items 1–6) at the time of death. *See* tables 7.24 and 7.25. A similar scheme applies to eligible children of Australian mariners.

Income-support Sub-program. The main benefit paid under this sub-program is the service pension. This is an income and assets tested pension similar to the age and disability support pensions payable by the Department of Social Security. The pension is payable to veterans with qualifying service at age 60 (males) or 55 (females). Veterans with qualifying service may be paid the pension at any age if they are permanently incapacitated for work. Qualifying service generally means service in an area and at a time when danger from hostile enemy forces was incurred by the veteran.

Veterans of other Commonwealth and allied countries may also qualify for the service pension for service in wars or war-like conflicts in which Australia has engaged. Veterans of Commonwealth forces must have served outside the country of enlistment or be entitled to the award of a campaign medal for service within that country. Allied veterans must have served in formally raised forces. The veteran must be an Australian resident with at least ten years residency. Service pension is also available to Australian, other Commonwealth and allied mariners of World War II.

7.24 VETERANS' CHILDREN EDUCATION SCHEME, EXPENDITURE ($'000)

	Cost of education of beneficiaries						
Year	*NSW(a)*	*Vic.*	*Qld*	*SA(b)*	*WA*	*Tas.*	*Aust.*
1988–89	1,568.9	1,017.6	1,061.4	333.8	359.3	259.2	4,600.4
1989–90	1,492.2	975.3	971.6	294.0	361.9	268.8	4,363.4
1990–91	1,470.3	975.6	1,015.4	290.4	459.6	308.7	4,520.0
1991–92	1,475.8	1,068.2	1,201.6	289.6	542.5	358.8	4,936.5
1992–93	1,612.4	1,092.7	1,198.1	310.1	644.8	413.6	5,271.7
1993–94	1,749.3	1,170.2	1,303.8	348.5	771.6	463.5	5,806.9

(a) Includes Australian Capital Territory. (b) Includes Northern Territory.
Source: Department of Veterans' Affairs.

7.25 VETERANS' CHILDREN EDUCATION SCHEME, NUMBER RECEIVING BENEFITS AT 30 JUNE 1994

Type of training	*NSW(a)*	*Vic.*	*Qld*	*SA(b)*	*WA*	*Tas.*	*Aust.*
At school							
Primary(c)	153	94	197	51	132	53	680
Secondary	393	254	324	88	186	134	1,379
Total at school	*546*	*348*	*521*	*139*	*318*	*187*	*2,059*
Tertiary professional	127	110	98	20	68	25	448
Technical	43	—	43	12	6	5	109
Total	**716**	**458**	**662**	**171**	**392**	**217**	**2,616**

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Not in receipt of an education allowance.
Source: Department of Veterans' Affairs.

From 1 April 1993, all service pensioners became eligible for 'fringe benefits', provided by the Commonwealth Government, which include medical and hospital treatment, pharmaceutical benefits and the payment of a telephone allowance.

A number of supplementary benefits are also available under the sub-program. These include:

- rent assistance;
- additional pension in respect of dependent children;
- remote area allowance;
- carer's pension;
- guardian allowance;
- bereavement payment; and
- pharmaceutical allowance.

The following tables show the total number of pensions in force as at 30 June 1994, and the annual expenditure.

7.26 NUMBER OF SERVICE PENSIONS, 30 JUNE 1994

Class	*World War I*	*World War II*	*Korea, Malaya and FESR(a)*	*Special Overseas Service*	*British Common-wealth*	*Allied Forces*	*Miscel-laneous*	*Total*
Veterans								
Old age	263	158,456	5,845	1,428	25,943	4,026	2,690	198,651
Permanently incapacitated	—	4	1,551	3,903	273	92	2	5,825
Tuberculosis(b)	1	306	6	1	3	—	—	317
Total	*264*	*158,766*	*7,402*	*5,332*	*26,219*	*4,118*	*2,692*	*204,793*
Wife's and widows	388	113,840	5,113	3,781	19,934	3,258	1,870	148,184
Total	**652**	**272,606**	**12,515**	**9,113**	**46,153**	**7,376**	**4,562**	**352,977**

(a) Far East Strategic Reserve. (b) Eligibility on these grounds ceased on 2 November 1978.
Source: Department of Veterans' Affairs.

7.27 SERVICE PENSIONS: NUMBER AND EXPENDITURE

	Pensions in force as at 30 June			*Annual expend-iture(a) ($'000)*
	Veterans	*Wife's and widows*	*Total*	
1989	229,097	167,342	396,439	2,048,138
1990	223,164	163,184	386,348	2,164,449
1991	218,398	159,511	377,909	2,325,077
1992	215,010	156,603	371,613	2,377,619
1993	210,406	152,742	363,148	2,389,886
1994	204,793	148,184	352,977	2,382,307

(a) Includes associated allowances.
Source: Department of Veterans' Affairs.

Housing Assistance Sub-program (Defence Service Homes Scheme). The Defence Service Homes (DSH) Scheme provides financial benefits to recognise the contribution of certain men and women who have served Australia in either peacetime or wartime. The benefits include housing loan interest subsidies, comprehensive homeowners' insurance cover at competitive rates as well as home contents insurance.

The Scheme was established in 1918 as the War Service Homes Scheme. In 1972 its name was changed to the Defence Service Homes Scheme to recognise the extension of eligibility to those with qualifying peacetime service.

In 1985, the Government decided to sell the DSH mortgage portfolio and the Westpac Banking Corporation became the Scheme's lender on 19 December 1988. Under the Agreement between the Commonwealth and Westpac, the Commonwealth subsidises Westpac for the low-interest loans provided. The subsidy is paid directly to Westpac and represents the difference between the fixed concessional interest rate paid by the borrower and the agreed benchmark interest rate.

Since 1918 the DSH Act has made provision for Defence Service Homes Insurance. Building insurance is available to the owner of a home that is or was the subject of assistance under the DSH Scheme for as long as the DSH client retains ownership of the home. This benefit is also available to those who obtain assistance under the Australian Defence Force Home Loans Assistance Scheme. On 1 July 1991 DSH contents insurance, a comprehensive insurance package underwritten by Mercantile Mutual Insurance (Australia) Ltd, became available to veterans and the service community.

The maximum loan available under the DSH Scheme is $25,000 repayable over 25 years. The interest rate is fixed at 6.85 per cent for the term of the loan. Loans can be used to buy a home or strata unit, build or extend a home, buy a right of residence in a retirement village, refinance an existing mortgage, or repair or modify an existing home.

7.28 DEFENCE SERVICE HOMES SCHEME

	1988–89	*1989-90*	*1990–91*	*1991-92*	*1992-93*	*1993-94*
Subsidised loans						
Loans granted	10,390	9,123	9,316	9,043	9,158	7,639
Interest subsidy ($m)	40.7	165.3	139.7	89.3	54.3	37.5
Number of loan accounts at 30 June	130,093	129,580	130,000	119,500	113,741	107,124
Building insurance						
Number of homes insured at 30 June	175,044	173,639	169,294	163,316	157,510	147,853

Source: Department of Veterans' Affairs.

Health program

Health care treatment is provided for all disabilities which have been accepted as service-related, and for pulmonary tuberculosis and cancer not related to service. In addition, and subject to certain conditions, health care treatment in Australia is provided for most non-service-related disabilities for: incapacitated veterans receiving disability pensions at or above the maximum (100%) general rate; World War II veterans and mariners receiving both service pension at any rate and disability pension at the 50 per cent rate or higher; veterans, mariners or nurses who served in World War I; veterans who were detained by the enemy; war widows and certain other dependants of deceased male veterans whose deaths have been accepted as service related, and of deceased Special Rate pensioners; certain service pensioners; and returned servicewomen of World War II.

The needs of the veteran population are changing as veterans and their dependants and carers age. The veteran community has indicated to the Government that its most important needs are to remain healthy and self-reliant in their own homes and within their local communities for as long as possible. In response to these identified needs, and, in keeping with the Government's Aged Care Reform strategy, the Department provides services that support and encourage veteran, and other entitled persons to remain living independently in their own homes and to maintain and improve their health and quality of life. Examples of the Department's commitment to the health and independence of the veteran community include:

- Joint Venture Schemes — provides 'seeding' grants to ex-service organisations for a range of practical and social support projects which are intended to become self-supporting in subsequent years and are administered by volunteers from the veteran community.
- Day Clubs — provide regular diversional therapy and socialisation for frail, aged veterans and war widows, and simultaneously, respite for their carers. The day clubs are established and sponsored by ex-service organisations and run by volunteers.
- Veterans' Health Week — provides encouragement for veterans and war widows to take an active role in their health by promoting a wide range of health information and healthy activities. It provides an early annual impetus for veteran and war widow involvement in health activities that they can continue throughout the year.
- Veterans' Quality of Life (VQL) Program — the positive messages of Veterans' Health Week are reinforced year round by the VQL packages. The packages focus on the delivery of health education services for the veterans and general communities, and cover topics such as healthy eating, continence management, home safety and keeping fit.

Treatment for veterans is provided in three Repatriation General Hospitals (in Victoria, Queensland and South Australia), a Repatriation Auxiliary Hospital (New South Wales), Anzac Hostel in Victoria, Repatriation Artificial Limb and Appliance Centres (RALACs) and the Vietnam Veterans Counselling Service (VVCS).

In addition to the Repatriation facilities, and subject to certain criteria, entitled persons are treated in State and private metropolitan and country hospitals and nursing homes at departmental expense. During 1992–93 the paid bed days for entitled persons in public hospitals was 451,673 and for private hospitals, 284,552.

In those States where the Repatriation General Hospital is no longer operated by the Department of Veterans' Affairs, hospital care is provided through the Repatriation Private Patient Scheme. This means that entitled beneficiaries can obtain treatment at a public hospital as a Repatriation private patient, in shared accommodation, with a doctor of their choice. According to medical need, if treatment cannot be provided within a reasonable time, the Department may approve admission to a private hospital. The former Repatriation hospitals will remain available for treatment if beneficiaries choose to go there.

Under arrangements with State Governments, entitled persons requiring custodial, psychiatric care for a service-related disability are treated at departmental expense in State psychiatric hospitals.

General medical practitioner services are provided through the Local Medical Officer (LMO) Scheme. There were 18,286 Repatriation LMOs in the scheme as at 1 June 1994. During 1993–94 LMO consultations totalled 3,306,816.

Entitled persons may also be provided with dental treatment through the Local Dental Officer (LDO) Scheme which comprised 6,477 LDOs as at 1 June 1994. In addition, the services of approximately 789 dental prosthetists were also available to eligible beneficiaries. During 1993–94, 575,613 dental services were undertaken.

Optometrical services, including the provision of spectacles; the services of allied health professionals and a comprehensive range of aids, appliances and dressings may be provided to entitled persons.

In addition, entitled persons may be provided with pharmaceuticals through the Repatriation Pharmaceutical Benefits Scheme.

Repatriation General Hospitals

The Repatriation General Hospitals (RGHs) are teaching hospitals providing short-term treatment during an acute episode of illness. They also provide outpatient services and assessment of need for domiciliary and other community support facilities through Aged and Extended Care Departments (AECDs).

The RGHs contribute to State health care services by treating members of the general community where capacity exists after the needs of entitled persons have been met. Limits on the level of available beds for community patients are determined by the Repatriation Commission.

RGH Hobart was integrated on 1 July 1992 and RGH Concord on 1 July 1993. Heidelberg Repatriation Hospital in Melbourne is scheduled for integration on 1 January 1995.

In Western Australia the State Government indicated that it had no place for RGH Hollywood in the State health system. The Commonwealth's second preference to integration was to sell the hospital, and after an exhaustive tender process, Hollywood was sold to the Ramsay Health Care Group on 24 February 1994. A similar situation exists in Queensland, where RGH Greenslopes is currently being sold. It is anticipated that the hospital will be transferred to the successful tenderer in early January 1995.

Negotiations are continuing to settle the future of the remaining hospital, RGH Daw Park in South Australia, and it is anticipated that Daw Park will be transferred to the South Australian health system by 1 July 1995.

The following table gives details of in-patients (including community patients) treated at remaining RGHs. The figures shown refer to treatment episodes, for example, a person who is admitted to hospital twice during a year is counted twice.

7.29 REPATRIATION GENERAL HOSPITALS: IN-PATIENTS TREATED, 1993–94

	Vic.	*Qld*	*SA*	*WA(a)*	*Aust.*
Admissions	22,761	15,767	10,179	9,781	58,488
Separations	22,800	15,751	10,179	9,861	58,591
Daily average occupied beds	414	321	222	251	1,208

(a) Hollywood became a private hospital on 24 February 1994. Data up to date of sale.
Source: Department of Veterans' Affairs.

Repatriation Auxiliary Hospitals

The Repatriation Auxiliary Hospitals (RAHs) provide slow stream rehabilitation of patients; maintenance care of patients awaiting nursing home admissions and respite care for a limited number of patients. Community patients are admitted to spare capacity in some RAHs subject to maximum limits determined by the Repatriation Commission.

The following table gives details of in-patients (including community patients) treated at RAHs. The figures shown refer to treatment episodes, for example, a person who is admitted to hospital twice during a year is counted twice.

Repatriation Auxiliary Hospital Macleod (Victoria) was decommissioned in January 1993. Repatriation Auxiliary Hospital Kenmore was decommissioned on 29 April 1994.

7.30 REPATRIATION AUXILIARY HOSPITALS: IN-PATIENTS TREATED 1993–94

	NSW	*Qld*	*Total*
Admissions	1,922	275	2,197
Separations	1,949	338	2,287
Daily average occupied beds	134	49	183

Source: Department of Veterans' Affairs.

Anzac Hostel provides minimal nursing supervision in a residential setting to eligible persons. The daily average occupied beds figure for 1993–94 was 19.

Artificial limbs and appliances

Entitled veterans and war widows receive free artificial limbs, appliances and surgical footwear, through the Department's Health Program, from Repatriation Artificial Limb and Appliance Centres (RALACs) or commercial sources.

The Department administers the Government's Artificial Limb Scheme which provides limbs to Australian residents who require them. Limbs can be provided through the RALACs or commercial limb manufacturers. Amputees can access these manufacturers through some 80 prescribing clinics Australia wide.

RALACs are located in each State capital with sub-centres only in Newcastle and Albury. A mobile workshop operates in Victoria to provide services to remote locations.

The following table gives details of production by all centres and commercial firms as a result of orders placed by the Department.

7.31 REPATRIATION ARTIFICIAL LIMB AND APPLIANCE PRODUCTION, 1993–94 (numbers)

	Entitled veterans	*Community patients*	*Total*
Artificial arms	10	80	90
Artificial legs	371	1,249	1,620
Appliances	854	179	1,033
Artificial limb repairs	1,716	5,418	7,134
Appliance repairs	755	131	886
Custom footwear	4,205	388	4,593
Depth footwear	1,951	87	2,038
Footwear repairs	11,006	39	11,045

Source: Department of Veterans' Affairs.

Vietnam Veterans Counselling Service

The Vietnam Veterans Counselling Service (VVCS) has centres in Canberra, Harris Park (Sydney), South Melbourne, Brisbane, Townsville, Adelaide, Perth, Hobart and Darwin. Regional centres have been established in Launceston and Albury/Wodonga. The service is intended to provide counselling to veterans and their families, as well as working with the ex-service community to promote acceptance of veterans, particularly Viet Nam veterans, by the community.

The service is staffed by psychologists and social workers with detailed knowledge and experience about Viet Nam service and its impact on veterans and their families, especially the impact of post-traumatic stress.

A Country Outreach Program was introduced in 1988 to extend the VVCS service to rural areas and access to counselling has been improved through provision of a 008 toll free telephone service.

The following table shows the increasing usage of the service.

7.32 VIETNAM VETERANS COUNSELLING SERVICE

	1991–92	*1992–93*	*1993–94*
Counselling sessions	34,996	34,252	38,492
Including:			
Face to face	12,850	12,334	10,932
Telephone (including 008)	13,180	9,995	10,391
Group	290	259	308
Country outreach	8,676	11,664	16,861

Source: Department of Veterans' Affairs.

The Office of Australian War Graves

The Office of Australian War Graves has two main functions. Its major area of responsibility is the implementation of government policy for the perpetual commemoration of eligible Australian veterans whose postwar deaths are related to their war service.

It also maintains on behalf of the Commonwealth War Graves Commission, War

Cemeteries and other commemorations in Australia, Papua New Guinea, Solomon Islands (Guadalcanal) and Norfolk Island. This responsibility is covered by a formal agreement between Australia and the Commonwealth War Graves Commission which was signed on 1 January 1975.

The Office maintains 19,520 war graves in 76 war cemeteries and 900 civil cemeteries. It also maintains 179,000 postwar commemorations. In 1993–94 it commemorated 6,421 veterans who died of war-related causes.

The Office provides an information service to those wishing to visit any of the 102,000 Australian war dead who are buried or memorialised in Australia and overseas. The Office has records relating to the Commonwealth dead of World War II, the Australian dead of World War I and the post-World War II conflicts.

Full details of the operations of the Office of Australian War Graves are contained in its Annual Report.

HOUSEHOLD INCOME AND EXPENDITURE

Household expenditure

The ABS conducts surveys of household expenditure at regular intervals to provide an up-to-date picture of the levels and patterns of expenditure by Australia's households.

The latest Household Expenditure Survey for which results are available was conducted in respect of 1988–89. Recent editions of the Year Book have included tables and other material describing the results of that survey. Results from the 1993–94 survey will be available early in 1995.

Household income

Surveys of household income have been conducted by the ABS at approximately four-yearly intervals since 1969. The latest survey was conducted from October to December 1990. Information was collected on income from the following sources: wages and salaries; own business; government cash benefits; superannuation; interest; rent and dividends; and other regular sources.

Income information and details of family relationships were collected for each individual aged 15 years and over. Survey results show income levels and distributions for individuals, parts of families, families and households.

The following tables relate to 'income units' based on a restricted form of family groups. The income unit includes only those individuals living together and related to each other as spouses or as parent/dependent child. In this way, grown-up offspring who are not full-time students are treated as separate income units. Similarly, aged parents and other relatives living in the household are treated as separate income units.

Income distribution before and after tax. Table 7.33 presents data on the distribution of gross income for all income units across quintile groups. These quintile groups rank income units into five equal groups in ascending order according to their gross weekly income at the time of the survey.

Income units in the bottom two quintiles had mean gross weekly incomes of $134 and $274 compared with incomes of $672 and $1,302 for the fourth and fifth quintiles, respectively.

Income units in the bottom quintile were predominantly one-person units, such as aged pensioners and the young unemployed. Almost three-quarters of the units in the bottom quintile were dependent on government pensions and benefits for their income. The second quintile is predominantly made up of one-person units and married couple units without children. Over half these units were dependent on government pensions and benefits and about a third on wages and salaries or other earned incomes.

In contrast, income units in the fourth and fifth quintiles were predominantly married couple income units with dependent children living off income from wages and salaries or from their own business. Almost 75 per cent of income units in the top quintile were married couple income units with both partners employed.

To give a clearer picture of the monetary resources available after allowing for income tax, table 7.34 presents the same information for income units, based on net income, that is, after the deduction of income tax.

Income units in the bottom two quintiles had mean net weekly incomes of $133 and $258 compared with net incomes of $542 and $947 for the fourth and fifth quintiles respectively.

Compared with the distribution of gross weekly incomes, the proportion of income units dependent on government pensions and benefits, who are less likely to be paying tax, decreased in the lowest two quintiles and increased in the third quintile.

Income distribution over the life cycle. The above outline of type of income unit and source of income reflects to some extent the distribution of income units into life cycle groups. A more direct examination of the level and distribution of net income over life cycle groups is shown in table 7.35.

The eight life cycle groups that feature in table 7.35 present a simplified view of the common life cycle from young single persons, through to partnering and child rearing to the 'empty nest' years and retirement. While the categories do not cover all possible life cycle groups they do represent almost 80 per cent of all income units in Australia in 1990.

At the broad level, it can be seen that level of income for the income unit is closely related to whether the income unit comprises a couple or a single person. The increase in income is marked when young single person income units marry and combine their income. Married couples aged under 35 and without children, who are in the second stage of the life cycle, are at the peak of income receipts — they have a mean net weekly income of $723. This reflects a high level of labour force participation, with over 78 per cent having two income earners. Income then falls in the early stages of child rearing, reflecting the common practice of having one partner stay at home with the children. For married couple income units with the oldest child aged under 5 years, the mean net weekly income declined to $591 per week. Income increases again as the children get older and many women return to work. By the time the eldest child has reached 15 to 20 years of age, the mean net weekly income of the married couple parents has increased again to an average of $718 per week.

Income decreases again as people go into early retirement in the 55 to 64 year age group and even more markedly after people reach the age of 65. The mean net weekly income for the retired married couple over the age of 65 years was $379 while the single aged income unit received $200 per week.

Table 7.35 also illustrates the relationship between life cycle groups and the nature of housing occupancy. For example, the rate of home ownership increases steadily across each life cycle group before declining for the last group. As a result, housing costs for groups in the later years of life should be considerably less than those for the young and middle aged couples who may have high rents or mortgage repayments. For many households the marked increase in home ownership in later life provides a significant offset to the decline in income occurring at that time.

Table 7.35 also shows the strong relationship between life cycle groups, fluctuating income levels and the sources from which income is derived. The life cycle groups with low levels of net income, such as young single persons, married couples aged over 55 years and aged single persons, have high proportions of income units dependent on government pensions and benefits for most of their income.

7.33 SELECTED CHARACTERISTICS OF INCOME UNITS, BY GROSS WEEKLY INCOME QUINTILE GROUP, OCTOBER-DECEMBER 1990

Characteristics of income units	*Gross weekly income quintile*					*All income units*
	Lowest	*Second*	*Third*	*Fourth*	*Highest*	
	— dollars per week —					
Upper boundary of quintile group	200	349	529	844	n.a.	n.a.
Mean income	134	274	436	672	1,302	563
Median income	148	271	434	665	1,143	434
	— per cent of income units —					
Principal source of gross income						
Wages or salary	12.0	34.6	78.2	83.8	82.9	58.3
Own business, trade or profession	2.4	4.6	6.3	9.1	10.6	6.6
Other private income	13.3	8.4	8.1	6.1	6.5	8.5
Government pensions and benefits	72.3	52.3	7.3	1.0	—	26.6
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Type of income unit						
Married couple						
With dependent children	4.2	10.3	20.7	40.4	53.4	25.8
Without dependent children	6.1	34.2	21.3	26.4	37.8	25.1
All married couples	*10.3*	*44.5*	*42.0*	*66.8*	*91.2*	*50.9*
One-parent	4.5	11.1	4.8	3.1	0.6	4.8
One-person	85.1	44.4	53.2	30.1	8.2	44.3
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Number of earners						
Nil	83.1	56.8	12.7	5.4	2.2	32.1
One	16.2	40.9	80.6	60.4	23.0	44.2
Two	0.6	2.4	6.7	34.3	74.8	23.7
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Percentage contribution of government pensions and benefits to gross income						
Nil and less than 1	24.4	38.8	67.6	57.5	67.6	51.2
1 and less than 20	1.4	4.6	19.5	38.7	31.8	19.2
20 and less than 50	2.0	4.6	5.9	2.9	0.6	3.2
50 and less than 90	14.8	20.0	4.0	0.6	—	7.9
90 and over	57.5	32.0	2.9	*0.3	—	18.6
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Nature of housing occupancy						
Owners	34.0	38.8	26.1	30.0	33.9	32.5
Purchasers	5.8	8.5	17.9	33.8	46.7	22.5
Renters						
Government	8.0	7.5	3.6	2.3	1.0	4.5
Private	13.2	15.2	19.9	18.2	11.6	15.6
Resident relative	12.7	14.2	15.7	5.3	0.5	9.7
Other	4.3	3.3	4.8	4.4	3.3	4.0
Total renters	*38.1*	*40.1*	*44.0*	*30.2*	*16.5*	*33.8*
Rent-free	19.5	11.2	10.9	5.2	2.4	9.9
Total(a)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

(a) Includes income units whose nature of housing occupancy was not reported.
Source: Survey of Income and Housing Costs and Amenities: Income Units, Australia, 1990 (6523.0).

7.34 SELECTED CHARACTERISTICS OF INCOME UNITS, BY NET WEEKLY INCOME(a) QUINTILE GROUP, OCTOBER–DECEMBER 1990

	Net weekly income quintile					All income units
Characteristics of income units	*Lowest*	*Second*	*Third*	*Fourth*	*Highest*	
	— dollars per week —					
Upper boundary of quintile group	189	312	436	655	n.a.	n.a.
Mean net income	133	258	376	542	947	451
Median net income	148	259	376	537	857	375
	— per cent of income units —					
Principal source of gross income						
Wages or salary	13.9	39.8	74.0	81.5	82.5	58.3
Own business, trade or profession	2.5	4.5	6.0	9.4	10.7	6.6
Other private income	13.4	7.9	7.7	6.8	6.7	8.5
Government pensions and benefits	70.3	47.8	12.4	2.2	*0.1	26.6
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Type of income unit						
Married couple						
With dependent children	4.0	7.8	19.2	43.6	54.5	25.8
Without dependent children	5.8	30.0	23.8	26.5	39.8	25.1
All married couples	*9.8*	*37.8*	*43.0*	*70.1*	*94.2*	*50.9*
One-parent	3.9	10.7	5.4	3.7	0.5	4.8
One-person	86.3	51.5	51.6	26.2	5.2	44.3
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Number of earners						
Nil	81.3	52.1	17.2	6.9	2.5	32.1
One	18.2	45.7	77.7	61.6	17.9	44.2
Two	0.6	2.1	5.2	31.5	79.5	23.7
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Percentage contribution of government pensions and benefits to net income						
Nil and less than 1	26.5	44.8	65.8	53.0	60.4	50.0
1 and less than 20	1.3	3.8	16.4	40.1	38.4	20.0
20 and less than 50	2.0	3.4	5.4	4.5	1.0	3.3
50 and less than 90	14.0	17.8	6.9	1.5	*0.2	8.1
90 and over	56.3	30.2	5.6	0.8	—	18.6
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Nature of housing occupancy						
Owners	33.1	36.2	27.1	31.7	34.6	32.5
Purchasers	5.8	7.6	18.5	34.2	46.6	22.5
Renters						
Government	7.8	6.8	4.0	2.6	1.1	4.5
Private	13.0	15.9	20.1	17.9	11.2	15.6
Resident relative	13.4	16.3	14.5	3.6	0.6	9.7
Other	4.4	3.8	4.4	4.3	3.2	4.0
Total renters	*38.6*	*42.8*	*43.1*	*28.5*	*16.0*	*33.8*
Rent-free	19.9	12.2	10.2	4.7	2.3	9.9
Total(b)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

(a) Income after tax has been deducted. (b) Includes income units whose nature of housing occupancy was not reported.
Source: Survey of Income and Housing Costs and Amenities: Income Units, Australia, 1990 (6523.0).

7.35 LIFE CYCLE GROUPS BY SELECTED CHARACTERISTICS, OCTOBER–DECEMBER 1990

Net weekly income and characteristics of income units	*One-person units aged under 35*	*Married couple without dependent children, reference person aged under 35*	*Married couple with dependent children and age of eldest child*			*Married couple without dependent children, reference person aged*		*One-person units aged 65 and over*
			Under 5	*5–14*	*15–20*	*55–64*	*65 and over*	
Net weekly income ($)				— '000 —				
1 — 99	145.1	*2.0	11.1	20.5	8.6	12.7	6.7	19.0
100 — 199	401.8	5.3	7.3	12.0	8.0	23.0	27.5	515.2
200 — 299	433.0	17.4	20.3	36.7	29.4	100.9	244.4	137.3
300 — 399	558.3	26.6	57.1	99.4	61.7	99.9	161.1	26.3
400 — 499	261.6	33.4	90.4	165.0	62.4	75.6	63.6	12.3
500 — 599	90.2	37.4	81.5	155.8	70.8	48.1	19.9	11.0
600 — 699	32.4	57.0	64.0	147.7	68.6	47.1	17.2	*3.2
700 — 799	13.5	65.7	40.5	122.1	68.6	34.1	12.4	*2.7
800 — 899	*4.6	57.9	30.3	101.7	63.7	17.0	6.4	*1.3
900 — 999	*2.3	42.3	19.4	63.7	38.9	15.9	7.4	*1.8
1,000 — 1,099	*2.7	19.8	14.5	41.1	30.8	8.2	*3.8	*1.2
1,100 — 1,199	—	14.9	8.5	16.5	20.7	6.7	*3.7	*0.5
1,200 — 1,299	*1.1	6.5	*4.3	14.5	10.6	*3.3	*1.9	—
1,300 — 1,399	—	*4.0	*1.5	7.4	10.8	*4.6	*0.9	*0.6
1,400 — 1,499	—	*1.2	*1.0	4.9	5.5	*1.8	*0.5	—
1,500 and over	*2.6	*3.9	*4.4	16.1	17.9	8.1	6.0	*0.8
Total	*1,949.3*	*395.3*	*456.2*	*1,025.1*	*577.1*	*507.0*	*583.3*	*733.4*
				— dollars per week —				
Mean net income	298	723	591	653	718	505	379	200
Median net income	299	735	555	613	669	421	305	166
				— per cent of income units —				
Principal source of gross income								
Wages or salary	78.5	88.3	79.6	76.5	74.1	46.8	4.2	*0.6
Own business, trade or profession	2.9	6.5	9.4	12.2	13.3	11.4	2.5	1.1
Other private income	4.9	*1.1	1.8	2.8	5.1	20.7	23.5	16.7
Government pensions and benefits	13.7	4.1	9.2	8.4	7.6	21.0	69.9	81.6
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Number of earners								
Nil	17.0	4.2	9.7	8.2	9.1	35.3	88.7	97.3
One	83.0	17.6	50.0	37.6	26.9	37.1	7.5	2.7
Two	. .	78.2	40.3	54.2	64.0	27.6	3.9	. .
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

... continued

7.35 LIFE CYCLE GROUPS BY SELECTED CHARACTERISTICS OCTOBER–DECEMBER 1990 — *continued*

Net weekly income and characteristics of income units	*One-person units aged under 35*	*Married couple without dependent children, reference person aged under 35*	*Married couple with dependent children and age of eldest child*			*Married couple without dependent children, reference person aged*		*One-person units aged 65 and over*
			Under 5	*5–14*	*15–20*	*55–64*	*65 and over*	
	— per cent of income units —							
Percentage contribution of government pensions and benefits to net income								
Nil and less than 1	84.5	92.2	15.5	11.0	37.9	70.4	17.8	11.8
1 and less than 20	0.5	2.3	72.9	75.8	51.8	3.8	4.6	1.7
20 and less than 50	1.1	*1.2	2.3	4.7	2.7	4.5	7.9	4.6
50 and less than 90	1.9	*1.1	1.1	2.1	2.0	9.3	31.8	27.6
90 and over	11.9	3.3	8.2	6.4	5.6	12.0	37.9	54.2
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Nature of housing occupancy								
Owners	1.6	6.3	13.7	28.5	45.8	76.5	81.4	64.5
Purchasers	5.5	44.8	53.4	48.8	41.4	12.3	6.5	3.5
Renters								
Government	0.7	1.4	4.0	5.0	2.9	3.4	3.7	7.9
Private	24.3	35.9	18.8	11.2	6.8	3.9	3.2	5.6
Resident relative	33.6	1.5	1.3	*0.2	—	*0.1	*0.3	3.5
Other	8.1	4.6	3.6	3.5	1.6	*0.9	*0.7	2.6
Total renters	*66.6*	*43.4*	*27.7*	*19.9*	*11.2*	*8.4*	*8.0*	*19.6*
Rent-free	25.2	4.3	4.5	2.1	1.1	2.0	3.4	11.0
Total(a)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

(a) Includes income units whose nature of housing occupancy was not reported.
Source: Unpublished ABS data from the 1990 Survey of Income and Housing Costs and Amenities.

BIBLIOGRAPHY

ABS Publications

1981 Survey of Handicapped Persons, Australia (4343.0)

1982 Family Survey, Australian Families (4408.0)

1982 Family Survey, Information Paper, Sample File on Magnetic Tape (4412.0)

1984 Survey of Ex-service Personnel and Widows (4404.0)

Australian National Accounts: National Income and Expenditure (5204.0)

Australia's Aged Population, 1982 (4109.0)

Carers of the Handicapped at Home, Australia, 1988 (4122.0)

Commonwealth Government Finance, Australia (5502.0)

BIBLIOGRAPHY — *continued*

Disabled and Aged Persons, Australia, Preliminary Results, 1988 (4118.0)

Domestic Care of the Aged, Australia, 1988 (4121.0)

Household Expenditure Survey, Australia: Detailed Expenditure Items, 1988–89 (6535.0)

Household Expenditure Survey, Australia: The Effects of Government Benefits and Taxes on Household Income, 1988–89 (6537.0)

Household Expenditure Survey, Australia: Household Characteristics, 1988–89 (6531.0)

Household Expenditure Survey, Australia: States and Territories, 1988–89 (6533.0)

Household Expenditure Survey, Australia: Summary of Results, 1988–89 (6530.0)

Information Paper: Household Expenditure Survey, Australia, 1988–89 (6527.0)

Information Paper: Household Expenditure Survey, Australia: Unit Record File on Magnetic Tape, 1988–89 (6544.0)

Information Paper: Output from the 1990 Survey of Income and Housing Costs and Amenities (4136.0)

Information Paper: 1990 Survey of Income and Housing Costs and Amenities, Unit Record File on Magnetic Tape and Floppy Disk (6543.0)

Monthly Summary of Statistics, Australia (1304.0)

Social Indicators, Australia, No 4, 1984 (4101.0)

State and Local Government Finance, Australia (5504.0)

Survey of Income & Housing Costs and Amenities: Income Units, Australia, 1990 (6523.0)

Survey of Income & Housing Costs and Amenities: Persons with Earned Income, Australia, 1990 (6546.0)

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Eight

Health

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This chapter provides information on various aspects of the health of the Australian population and the activities of the Commonwealth relating to health. There is, however, government responsibility for health at the State/Territory and local levels. There are constitutional limits on the Commonwealth Government's role in the health care field, and the primary responsibility for planning and provision of health services is with the State and Territory Governments.

At the national level, health services in Australia are administered by the Commonwealth Government. The Government appoints three Ministers to the Portfolio of Health. The Minister for Health exercises overall responsibility over the Commonwealth Department of Human Services and Health, represents the portfolio in Cabinet and has particular responsibility for Budget matters and major policy decisions. The other two Ministers have responsibility for Family Services and Veterans' Affairs, respectively. The Commonwealth Government is primarily concerned with the formation of broad national policies, and influences policy making in health services through its financial arrangements with the State and Territory Governments, through the provision of benefits and grants to organisations and individuals, and through the regulation of health insurance.

The direct provision of health services, broadly speaking, is the responsibility of the State and Territory Governments. Each has a Minister who is responsible to the Government of the particular State or Territory for the administration of its health authorities. In some, the responsibility for health services is shared by several authorities whilst in others, one authority is responsible for all these functions.

Health care is also delivered by local government, semi-voluntary agencies, and profit making non-governmental organisations.

Information on the activities of government and other bodies on health-related matters is provided later in this chapter.

HEALTH STATUS

Morbidity

Recent and long-term conditions. The 10 most prevalent medical conditions reported by Australians in the 1989–90 National Health Survey are presented in table 8.1. Disorders of refraction and accommodation ranked highest, affecting 31.7 per cent of the population, followed by headache due to unspecified or trivial cause (12.3%) and arthritis (11.4%). Overall, some 83.7 per cent of the population experienced at least one medical condition.

8.1 PERSONS: SELECTED RECENT OR LONG-TERM CONDITIONS(a), 1989–90
(per cent)

	Age group (years)									Persons	
	<5	5–14	15–24	25–44	45–64	65–74	>74	Males	Females	%	'000
Disorders of refraction & accommodation	0.5	6.5	15.8	24.3	67.5	70.6	63.9	28.6	34.8	31.7	5,390.3
Headache – due to unspecified or trivial cause	0.5	6.9	15.5	16.6	13.6	8.8	7.6	9.8	14.8	12.3	2,091.1
Arthritis	**	0.3	1.7	5.9	23.2	41.1	45.6	8.9	13.9	11.4	1,935.5
Hayfever	1.6	6.7	13.4	13.4	10.5	8.1	6.3	9.4	11.2	10.3	1,752.9
Common cold	22.7	12.8	10.4	8.0	6.3	6.0	5.7	9.8	9.5	9.6	1,633.1
Back trouble (unspecified)	**	0.5	7.4	13.4	14.2	9.2	7.1	9.8	8.5	9.1	1,552.9
Hypertension	**	**	0.6	3.3	19.8	37.0	36.6	7.6	10.5	9.0	1,537.3
Asthma	9.6	16.1	10.4	6.3	5.8	6.9	4.2	8.7	8.3	8.5	1,444.1
Injuries	7.1	9.3	10.4	7.5	6.0	6.4	7.1	8.8	6.8	7.8	1,328.8
Eczema, dermatitis	17.2	6.1	6.9	7.4	5.2	5.6	5.0	6.1	8.2	7.2	1,221.8

(a) Conditions experienced in the two weeks prior to interview or conditions which have lasted or are expected to last for six months or more.

Source: 1989–90 National Health Survey, Health Status Indicators, Australia (4370.0), unpublished ABS data.

The pattern of conditions affecting males and females was similar. With the exception of the common cold, injuries, unspecified back trouble and asthma, however, females were slightly more likely than males to report the listed conditions.

As shown in table 8.1, prevalence of specific conditions differed markedly by age group. Disorders of refraction and accommodation, arthritis and hypertension were more prevalent in older age groups. The prevalence of disorders of refraction and accommodation and hypertension peaked in the 65 to 74 years age group, at 70.6 per cent and 37.0 per cent, respectively. Arthritis was most prevalent among those aged 75 years and over (45.6%).

The common cold, asthma, eczema and dermatitis were particularly prevalent among children. Of all age groups, children under 5 years of age were most likely to report the common cold (22.7%) and eczema or dermatitis (17.2%). Those aged 5 to 14 years were the most likely to report asthma (16.1%).

Hospitalisation. In 1989–90, an estimated 2.3 million people, representing 13.5 per cent of the Australian population, had at least one hospital episode in the last 12 months. Of these, two-thirds (66.7%) reported their most recent episode as being in a public hospital; the remaining third (33.0%) used private hospitals (table 8.2).

The most common reasons for the most recent hospital episode reported were diseases of the digestive system (13.7%), diseases of the genitourinary system (11.0%), pregnancy supervision/childbirth (10.5%) and injury and poisoning (10.2%).

8.2 PERSONS WHO HAD A HOSPITAL EPISODE, 1989–90(a)
(per cent)

Reason for most recent episode(b)	Age group (years)									Persons	
	<5	5–14	15–24	25–44	45–64	65–74	>74	Males	Females	%	'000
Diseases of the digestive system	18.4	15.3	15.1	9.3	15.1	17.3	12.0	16.5	11.2	13.4	306.9
Diseases of the genitourinary system	3.9	5.8	6.4	12.6	16.0	11.6	10.0	7.1	13.7	11.0	250.9
Pregnancy supervision/childbirth	. .	. .	19.2	23.2	**	. .	. .	. .	17.9	10.5	239.3
Injury and poisoning	10.2	18.4	18.8	7.5	8.1	6.6	7.8	16.1	6.1	10.2	234.0
Diseases of the respiratory system	30.1	27.7	9.6	4.9	5.7	7.5	8.5	12.1	8.0	9.7	221.8
Diseases of the musculoskeletal system and connective tissue	*2.3	6.6	8.1	8.9	12.5	11.5	11.0	12.9	6.8	9.3	213.8
Diseases of the circulatory system	*1.1	**	*1.2	4.1	15.7	20.9	21.4	10.7	7.2	8.7	198.4
Diseases of the nervous system and sense organs	14.2	15.2	3.3	2.8	6.1	8.6	14.2	6.8	6.6	6.7	153.3
Neoplasms	**	**	81.3	3.0	8.0	8.9	8.0	4.9	4.1	4.4	101.3
Complications of pregnancy, childbirth and the puerperium	. .	. .	4.2	7.5	**	. .	. .	. .	5.3	3.1	71.6
Type of hospital											
Public	85.2	75.0	70.1	61.7	59.3	71.1	71.8	68.1	65.8	66.7	1,528.1
Private	14.8	24.9	29.5	38.1	40.5	28.5	27.9	31.5	34.0	33.0	755.3
Not known	**	**	*0.5	*0.2	**	**	**	*0.4	*0.2	0.3	5.9
Total persons who had a hospital episode(c)	**11.4**	**7.3**	**12.2**	**14.0**	**14.1**	**20.2**	**25.7**	**11.2**	**15.7**	**13.5**	**2,289.3**

(a) In the twelve months prior to interview. (b) Condition groups based on chapter headings of the International Classification of Diseases, Ninth Revision (ICD9). (c) Each person may have reported more than one reason for hospitalisation.

Source: 1989–90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

More females (15.7%) than males (11.2%) reported having a hospital episode in the 12 months prior to survey interview. This difference is largely attributable to the number of female hospital episodes associated with pregnancy supervision or childbirth. For females, the most frequently cited reasons for most recent hospital episode were pregnancy supervision or childbirth (17.9%), diseases of the genitourinary system (13.7%) and diseases of the digestive system (11.2%). For males, diseases of the digestive system (16.5%), injury and poisoning (16.1%) and diseases of the musculoskeletal system and connective tissue (12.9%) were the most common reasons.

One in four people aged 75 years and over (25.7%) had a hospital episode in the 12 months prior to interview. With the exception of the under 5 years age group, the proportion of people reporting a hospital episode increased with age. Reasons for the most recent hospital episode varied markedly with age. In particular, for those aged 65 years and over the most frequently cited reason was diseases of the circulatory system, and among those aged 15 to 44 pregnancy supervision and childbirth rated highest.

Dental health

Based on results of the 1989–90 National Health Survey, approximately 4.2 million people (32.0%) aged 15 years and over had dentures or false teeth. Some 12.6 per cent had full sets in both jaws.

Females (35.6%) were more likely than males (28.3%) to report having dentures or false teeth and the likelihood of having dentures or false teeth increased markedly with age, up to 89.3 per cent of those aged 75 years and over (table 8.3).

8.3 PERSONS AGED 15 YEARS AND OVER WHO HAD DENTURES OR FALSE TEETH, 1989–90 (per cent)

	Age group (years)							*Persons*	
	15–24	*25–44*	*45–64*	*65–74*	*>74*	*Males*	*Fe-males*	*%*	*'000*
Has dentures or false teeth									
Full sets in both jaws	**	2.6	19.3	40.5	60.4	9.3	15.8	12.6	1,672.9
Other(a)	1.5	14.0	34.3	38.7	28.9	19.0	19.8	19.4	2,571.8
Total with dentures or false teeth	*1.5*	*16.6*	*53.6*	*79.2*	*89.3*	*28.3*	*35.6*	*32.0*	*4,244.7*
Does not have dentures or false teeth	98.5	83.4	46.4	20.8	10.7	71.7	64.4	68.0	9,020.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**13,265.0**

(a) Includes those who have a full set in upper or lower jaw, and those who have partial sets in either or both jaws.
Source: 1989–90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

An estimated 0.9 million people aged two years and over had a dental consultation in the two weeks prior to survey interview. The most common types of treatments or services provided were teeth filled (33.5%), check up (27.1%) and teeth/dentures cleaned or polished (25.0%) (table 8.4).

8.4 PERSONS AGED 2 YEARS AND OVER WHO HAD A DENTAL CONSULTATION(a), 1989–90
(per cent)

	Age group (years)								Persons	
Treatment/service	*2–14*	*15–24*	*25–44*	*45–64*	*65–74*	*>74*	*Males*	*Females*	*%*	*'000*
Teeth extracted	4.0	6.3	7.9	9.3	*5.7	**	7.4	6.1	6.7	58.6
X-ray	6.4	16.8	23.5	19.3	12.3	**	16.0	16.0	16.0	140.4
Teeth/dentures cleaned or polished	*19.1	28.9	28.8	26.8	19.1	*22.4	25.0	25.0	25.0	219.3
Fluoride treatment or coating	15.9	14.1	9.7	3.7	*3.3	**	10.0	11.0	10.5	92.4
Teeth filled	17.3	27.3	46.5	44.2	28.8	*16.3	37.8	30.0	33.5	293.6
Check up	44.5	29.6	20.0	15.8	15.9	*11.6	25.5	28.4	27.1	237.4
Other treatment	22.8	30.9	21.7	33.8	46.5	61.9	25.8	29.7	27.9	244.8
No treatment	*1.3	**	*1.2	*1.1	**	**	*1.3	1.1	1.2	10.5
Total who had a dental consultation(b)	**7.5**	**4.8**	**5.1**	**4.9**	**4.6**	**2.0**	**4.8**	**5.8**	**5.3**	**876.0**

(a) In the two weeks prior to interview. (b) Each person may have reported more than one type of treatment or service and therefore components do not add to totals.
Source: 1989–90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

Males (37.8%) were more likely to have had teeth filled than females (30.0%) and less likely to have had a check up (25.5% of males compared with 28.4% of females). Type of treatment or service provided varied with age. The most common treatment for those aged 2 to 24 years was a check up, for those aged 25 to 74 years, teeth filled and for those aged 75 years and over, teeth/dentures cleaned or polished.

There is a widely held perception that oral health has improved rapidly in recent decades, the result of successful approaches to the prevention of dental caries, as evidenced in contemporary child populations. However, this perception is narrow as it neglects the epidemiological profile of other ages and of other diseases and their consequences.

The burden of dental caries, although reduced in children and young adults, still has a significant impact on some children, most adults and many older adults. Dental caries remains one of several prevalent oral diseases, while additional oral problems are also receiving increased attention within the community and the dental profession.

Indices are used to describe individuals' experience of dental caries (decayed, missing or filled teeth) in primary teeth (dmft) and permanent teeth (DMFT). The dmft and DMFT indices are counts of decayed, missing or filled teeth.

From table 8.5 it can be seen that there has been a reduction in mean caries experience in the primary dentition of 6 year olds and the permanent dentition of 12 year olds. In addition it can be seen that an increasing percentage of 6 and 12 year olds have no caries experience, as measured by the percentage who have a dmft or DMFT equal to zero.

8.5 CHILDREN AGED 6 YEARS AND 12 YEARS: MEAN NUMBER OF TEETH WITH CARIES EXPERIENCE, AND PERCENTAGE WITH NO CARIES EXPERIENCE

	Age 6 years		Age 12 years	
Year	*dmft(a)*	*no dmft(b)*	*DMFT(a)*	*no DMFT(b)*
1977	3.1	33.5	4.8	10.4
1992	2.0	52.9	1.2	53.8

Note: dmft — decayed, missing or filled deciduous teeth; DMFT — decayed, missing or filled permanent teeth.
(a) Mean number of teeth with caries experience. (b) Percentage of teeth with no caries experience.
Source: Child Dental Health Survey, Australian Institute of Health and Welfare, Dental Statistics and Research Unit 1992.

Caries experience in adults has remained widespread and extensive. Table 8.6 indicates that dental caries was experienced in more than half of the teeth of dentate (some natural teeth) adults aged 35 years and above. Caries experience increases rapidly across the younger age groups to reach approximately 19 teeth with caries experience in middle age. This level of caries experience increases only slightly across older age groups.

Among young adults caries experience is dominated by filled teeth. However, missing teeth increase to be the dominant expression of caries experience by the 45 to 54 years age group. Untreated decayed teeth show minimal variation across adult age groups.

8.6 MEAN NUMBER OF TEETH IN DENTATE PERSONS WITH CARIES EXPERIENCE, 1987–88

	Age group (years)						
DMFT	*<15*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*>64*
Filled	0.8	4.1	9.1	10.6	9.2	7.5	6.0
Missing	—	0.4	3.1	6.8	9.9	13.6	16.8
Decayed	0.4	1.4	1.8	1.4	1.4	1.3	1.4
Total	**1.2**	**5.9**	**13.9**	**18.8**	**20.4**	**22.4**	**24.2**

Note: DMFT — decayed, missing or filled permanent teeth.
Source: National Oral Health Survey, 1987–88, Australian Institute of Health and Welfare, Dental Statistics and Research Unit.

The prevalence of edentulism (no natural teeth) is presented in table 8.7. There was a high rate of edentulism among adults and older adults. However, edentulism has decreased markedly in all age cohorts, particularly among middle-aged adults.

8.7 PREVALENCE OF EDENTULISM (TOTAL TOOTH LOSS) (per cent)

	Age group (years)							
Year	*<15*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*>74*
1979	—	1.3	5.4	14.0	26.5	40.2	60.7	78.6
1989–90	—	0.6	1.4	5.7	14.9	28.9	43.2	63.4
1992–93	—	—	1.0	5.4	10.7	22.6	38.9	52.8

Source: 1979 Special Supplementary Survey; 1989–90 National Health Survey, Health Related Actions, Australia (4375.0); Australian Institute of Health and Welfare, Dental Statistics and Research Unit; 1992–93 Telephone Interview Survey, Australian Institute of Health and Welfare, Dental Statistics and Research Unit.

Injury

Results of the 1989–90 National Health Survey show that 14.1 per cent of the population had an illness or injury due to an accident. 27.3 per cent of persons who had an illness or injury due to an accident said the accident occurred during sport, recreation or exercise. However, for males the highest proportion of accidents occurred at work (30.7%), while for females 31.5 per cent reported the accident occurred at home or at the home of friends or relatives. Place of accident differed markedly by age group. Of all employed people aged 15 to 64 years, 16.3 per cent reported illness or injury resulting from an accident, and 29.4 per cent of these (representing 4.8% of all employed people) reported the accident occurred at work (table 8.8).

8.8 PERSONS WHO REPORTED ILLNESS/INJURY(a) RESULTING FROM AN ACCIDENT, 1989–90 (per cent)

	Age group (years)									*Persons*	
Accident place	*<5*	*5–14*	*15–24*	*25–44*	*45–64*	*65–74*	*>74*	*Males*	*Fe-males*	*%*	*'000*
At work	. .	. .	14.9	26.1	35.7	22.6	11.2	30.7	11.7	22.7	541.9
During sport, recreation, or exercise	**	42.3	45.4	31.1	16.1	11.2	7.9	29.9	23.8	27.3	652.3
At home or home of friends/relatives	83.5	30.3	15.9	16.9	20.4	40.2	48.4	18.2	31.5	23.8	569.0
On path, road or highway	*6.6	8.9	17.2	23.1	24.1	18.8	24.6	16.3	26.0	20.4	487.4
At school or other educational institution	**	16.0	4.9	1.3	*0.8	0.4	0.5	2.4	3.5	2.9	68.3
None of these	9.9	*2.6	1.6	1.6	2.9	6.7	7.4	2.5	3.5	2.9	69.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**2,388.4**

(a) Recent and/or long-term illness or injury.
Source: 1989–90 National Health Survey, Accidents, Australia (4384.0), unpublished ABS data.

At 7,489, the number of external causes of deaths registered in 1992 was three per cent lower than the number in 1991 and 16 per cent lower than the highest number on record (8,942 in 1971). Injury deaths accounted for 6.1 per cent of all deaths, and occurred at a crude rate of 42.8 per cent per 100,000 mean population, the lowest on record. Allowing for changes in the age and sex distribution of the Australian population, the rate for 1992 was 43 per cent below the equivalent rate in 1971.

The major external causes of death for males and females are shown in table 8.9. Suicides and motor vehicle traffic accidents were the leading external causes, accounting for 31 per cent and 28 per cent, respectively of all deaths due to external causes. Despite a slight decline in the number of deaths registrations attributed to suicide in 1992, the proportion of all injury deaths due to suicide remained at 31 per cent. For the second year in succession, the number of registered deaths due to motor vehicle traffic accidents (2,066) was lower than the number of suicides (2,294). There are notable differences in the burden of injury deaths between the sexes. The overall crude death rate for males (60.0 per 100,000) is more than double the female rate (25.8 per 100,000). Suicide deaths account for a significantly greater proportion of all injury deaths in males and occur at a rate that is nearly four times the rate for females (table 8.10). In contrast, while accidental fall deaths occur at similar rates in both sexes, they are the second leading external cause of death in females (22.6% of deaths) but only account for 8.7 per cent of injury deaths in males.

8.9 EXTERNAL CAUSES OF DEATH, 1992

Cause of death	*Number*	*Percentage*	*Crude death rate(a)*
	MALES		
Suicide	1,820	34.8	20.9
Motor vehicle traffic accidents	1,408	26.9	16.2
Accidental falls	455	8.7	5.2
Homicide	196	3.8	2.2
Drowning and submersion	216	4.1	2.5
Poisoning by drugs/medications	140	2.7	1.6
Other	995	19.0	11.4
All external causes	**5,230**	**100.0**	**60.0**
	FEMALES		
Suicide	474	21.0	5.4
Motor vehicle traffic accidents	658	29.1	7.5
Accidental falls	511	22.6	5.8
Homicide	123	5.4	1.4
Drowning and submersion	75	3.3	0.9
Poisoning by drugs/medications	62	2.8	0.7
Other	356	15.8	4.1
All external causes	**2,259**	**100.0**	**25.8**
	PERSONS		
Suicide	2,294	30.6	13.1
Motor vehicle traffic accidents	2,066	27.6	11.8
Accidental falls	966	12.9	5.5
Homicide	319	4.3	1.8
Drowning and submersion	291	3.9	1.7
Poisoning by drugs/medications	202	2.7	1.2
Other	1,351	18.0	7.7
All external causes	**7,489**	**100.0**	**42.8**

(a) Deaths per 100,000 mean population.
Source: Derived from ABS causes of death data.

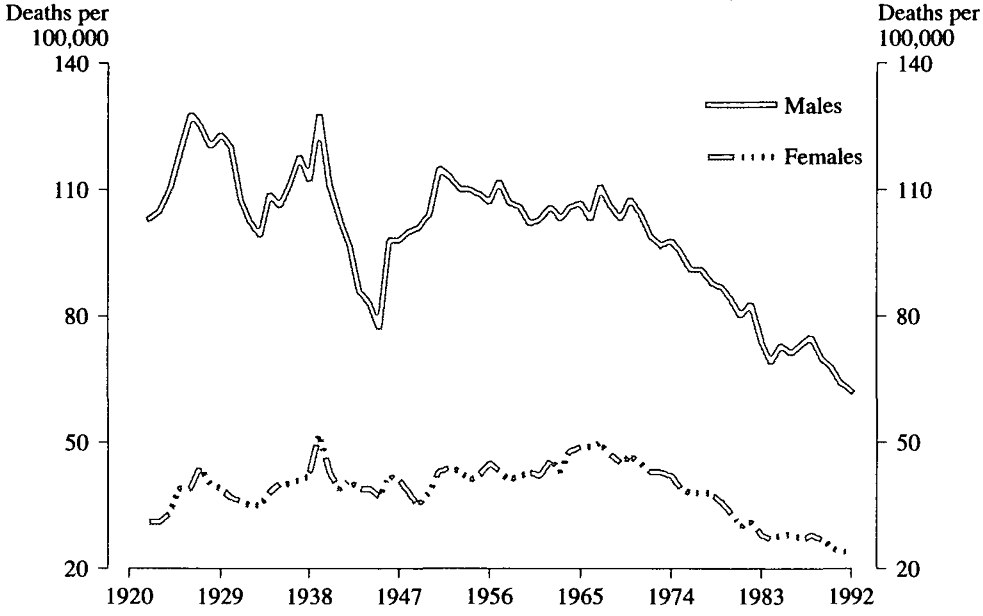
8.10 AGE SPECIFIC SUICIDE DEATH RATES(a), 1992

	Age group (years)							
	15–24	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*>74*	*Total*
Males	27	30	25	26	23	27	30	21
Females	6	7	7	6	7	7	8	5
Total	**17**	**19**	**16**	**16**	**15**	**16**	**16**	**13**

(a) Deaths per 100,000 mean population of same age and sex.
Source: Causes of Death, 1992 (3303.0).

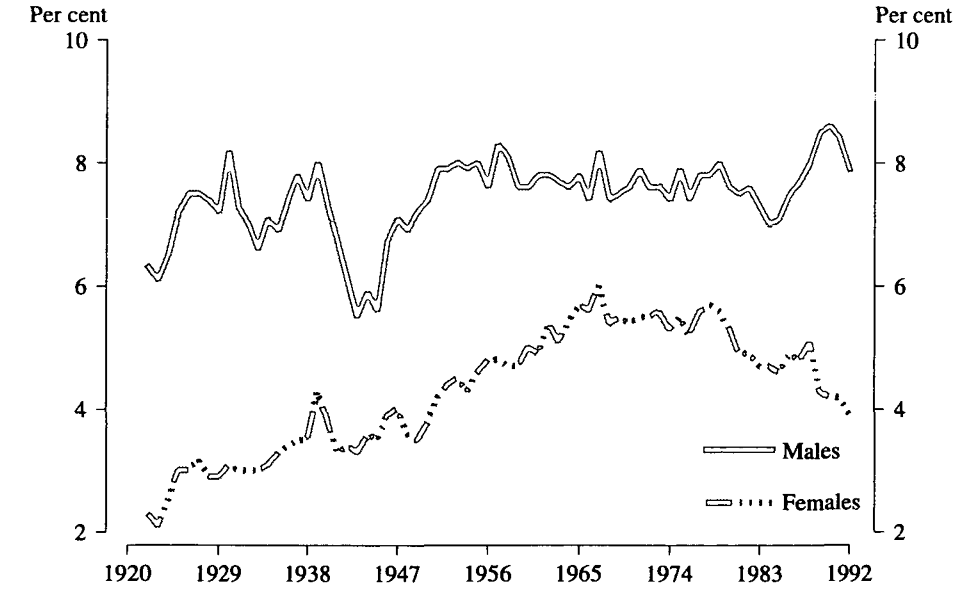
Injury mortality rates over the period 1922 to 1992 are shown in graph 8.11. The rates have been standardised using the 1988 Australian population as the reference. Sustained reductions in both male and female rates have occurred since around 1970. Graph 8.12 tracks the proportion of all deaths that have been attributed to injury since 1922. For males, injury has consistently accounted for about six to eight per cent of all deaths. For females, there was a prolonged gradual increase in the proportion which turned around during the 1970s.

8.11 INJURY MORTALITY AGE-STANDARDISED RATES, BY SEX



Source: Australian Institute of Health and Welfare.

8.12 PROPORTIONS OF ALL DEATHS DUE TO INJURY, BY SEX

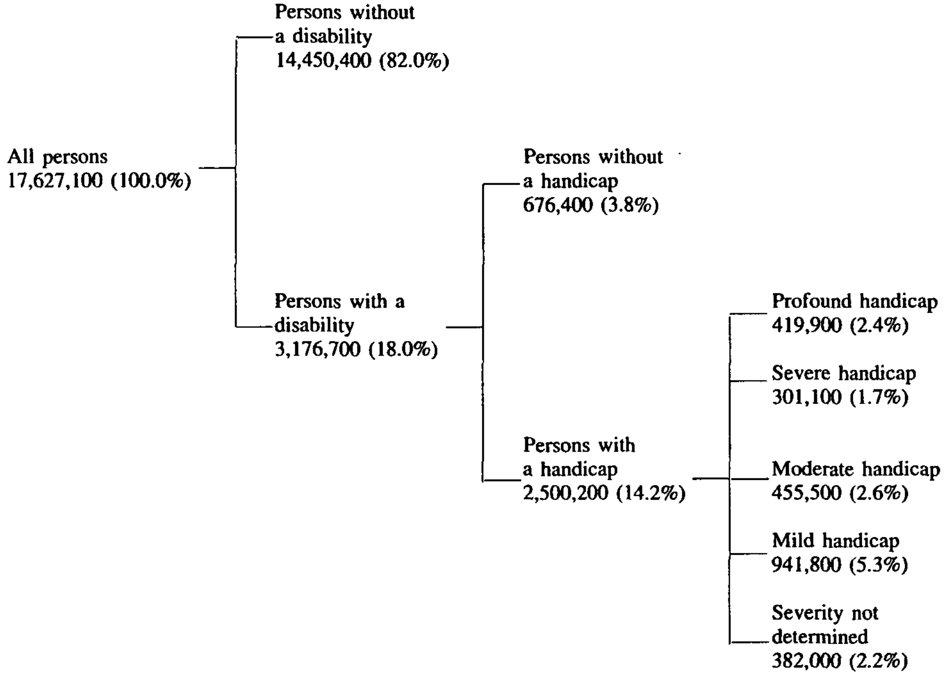


Source: Australian Institute of Health and Welfare.

Disability

Based on the results of the Survey of Disability, Ageing and Carers conducted by the ABS in 1993, there were an estimated 3,176,700 persons, or 18.0 per cent of the Australian population who had a disability and, of these, 2,500,200 or 78.7 per cent were also classified as having a handicap. The distribution of the population according to disability, handicap and severity of handicap is illustrated in the diagram 8.13.

8.13 NUMBER OF PERSONS WITH A DISABILITY AND/OR HANDICAP, 1993



It was estimated that 44.2 per cent of the 2,762,900 persons aged 60 years or more had a disability, showing the high correlation of age with disability.

The survey also found that there were 577,500 persons aged 15 years or more (4.2% of the Australian population aged 15 years or more) who were principal carers.

Congenital malformations

Major congenital malformations include defects arising during embryonic development, such as spina bifida, congenital heart defects, cleft lip and palate, and also chromosomal abnormalities such as Down syndrome.

Among all births in Australia in 1991 and 1992, there were 4,588 (1.8%) and 4,500 (1.7%) infants, respectively, born with major congenital malformations detected at, or soon after, birth.

The most frequently notified groups of malformations were the musculoskeletal system, congenital heart defects, genital malformations and chromosomal abnormalities (table 8.14). The most common specific malformations were congenital dislocation of the hip, ventricular septal defect, hypospadias, Down syndrome, and cleft lip and palate.

8.14 MAJOR CONGENITAL MALFORMATIONS BY ANATOMICAL SYSTEM(a)

	Number		*Rate per 10,000 births*	
Anatomical system	*1991*	*1992*	*1991*	*1992*
Nervous system	403	384	15.6	14.5
Eye	104	79	4.0	3.0
Ear, face and neck	49	40	1.9	1.5
Heart	808	894	31.2	33.7
Circulatory system	367	377	14.2	14.2
Respiratory system	156	115	6.0	4.3
Cleft palate/lip	367	389	14.2	14.6
Digestive system	330	332	12.8	12.5
Genital organ	764	727	29.5	27.4
Urinary system	472	431	18.2	16.2
Limbs	429	408	16.6	15.4
Other musculoskeletal	1,166	1,006	45.1	37.9
Integument	33	29	1.3	1.1
Chromosomal	584	548	22.6	20.6
Other and unspecified	120	117	4.6	4.4
All fetuses and infants	**4,588**	**4,500**	**177.3**	**169.4**

(a) Infants may be included in more than one anatomical system.
Source: Australian Institute of Health and Welfare, National Perinatal Statistics Unit.

Communicable diseases

Under the National Notifiable Diseases Surveillance System, State and Territory health authorities submit reports of communicable disease notifications for compilation by the Commonwealth Department of Human Services and Health. Case definitions for the diseases have varied from State to State and with time, as have the diseases included in the system. Since 1991, 44 diseases have been included, as recommended by the National Health and Medical Research Council.

Campylobacteriosis, a bacterial disease transmitted by contaminated food or water, has been the most commonly reported disease in recent years (table 8.15).

8.15 NOTIFIABLE DISEASES, CASES NOTIFIED

Disease	*1988*	*1989*	*1990*	*1991*	*1992*
Arbovirus infection(a)	897	2,809	2,008	199	303
Dengue(b)	(c)	(c)	(c)	46	366
Ross River(b) infection	(c)	(c)	(c)	3,532	5,630
Botulism	(c)	(c)	(c)	(c)	—
Brucellosis	16	20	46	28	29
Campylobacteriosis	4,082	4,279	5,683	8,672	9,135
Chancroid	4	3	13	—	5
Cholera	2	—	1	—	3
Chlamydial infection(a)	268	504	5	4,044	6,293
Diphtheria	61	1	7	8	14
Donovanosis	133	99	91	72	78
Gonococcal infection	4,079	3,153	1,919	2,530	2,908
Haemophilus influenzae type b infection	(c)	(c)	(c)	549	501
Hepatitis A	600	460	530	2,195	2,109
Hepatitis B	1,683	3,017	2,970	3,652	5,219
Hepatitis C	(c)	(c)	(c)	4,116	8,812
Hepatitis(a)	69	43	707	338	70

For footnotes *see* end of table.

8.15 NOTIFIABLE DISEASES, CASES NOTIFIED — *continued*

Disease	*1988*	*1989*	*1990*	*1991*	*1992*
HIV infection(d)	(c)	(c)	(c)	53	n.a.
Hydatid infection	15	15	16	44	38
Legionnellosis	67	104	90	110	185
Leprosy	20	34	31	13	16
Leptospirosis	104	99	121	169	159
Listeriosis	(c)	(c)	(c)	44	38
Lymphogranuloma venereum	—	—	—	—	3
Malaria	601	770	882	790	712
Measles	248	169	880	1,380	1,425
Meningococcal infections	126	204	295	285	292
Mumps	(c)	(c)	(c)	(c)	23
Ornithosis	21	25	23	136	94
Pertussis	153	614	862	337	739
Poliomyelitis	—	—	—	—	—
Q fever	424	353	431	595	543
Rabies	—	—	—	—	—
Rubella(e)	2	—	2	620	3,810
Salmonellosis(a)	3,484	4,492	4,564	5,440	4,614
Shigellosis	581	779	610	902	694
Syphilis	3,056	2,099	1,643	2,053	2,695
Tetanus	5	11	6	7	14
Tuberculosis	1,165	1,351	684	590	970
Typhoid	40	57	70	88	50
Viral haemorrhagic fever	—	—	—	—	—
Yellow fever	—	—	—	—	—
Yersiniosis(a)	172	241	433	515	567

(a) Not elsewhere classified. (b) Dengue and Ross River virus infection were included in 'Arbovirus infection' from 1988–90. (c) Not notifiable. (d) Data on diagnosis of HIV infections are included in tables 8.16 and 8.17. (e) Notified only as Congenital Rubella Syndrome from 1988–90.
Source: National Notifiable Diseases Surveillance System of the Communicable Diseases Network of Australia and New Zealand.

HIV and AIDS

HIV and AIDS surveillance is conducted by the National Centre in HIV Epidemiology and Clinical Research in collaboration with the State and Territory health authorities and the Commonwealth of Australia.

A total of 17,475 HIV diagnoses had been reported to 30 June 1993. Of these, 4,258 cases had been diagnosed as having AIDS and 2,786 of those had died (table 8.16). 10,747 people who were diagnosed as having HIV reported the source of exposure to the virus. Of these, 81.7 per cent reported male homosexual/bisexual contact as the exposure category (table 8.17). There were a total of 1,177 reports of HIV diagnosis, 568 reports of AIDS and 472 deaths from AIDS in the 12 month period July 1992 to June 1993.

8.16 DIAGNOSES OF HIV INFECTION AND AIDS, AND DEATHS FROM AIDS TO 30 JUNE 1993

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
HIV diagnoses									
Female	485	129	71	37	42	3	6	10	783
Male	9,128	2,847	1,207	510	619	65	67	138	14,581
Sex not reported	2,028	65	—	—	—	—	—	—	2,093
Total(a)	*11,649*	*3,048*	*1,281*	*547*	*662*	*68*	*73*	*148*	*17,476*
AIDS diagnoses									
Female	87	20	16	11	9	2	—	2	147
Male	2,410	895	358	163	183	24	17	52	4,102
Total(a)	*2,502*	*918*	*375*	*174*	*192*	*26*	*17*	*54*	*4,258*
AIDS deaths									
Female	49	10	11	4	3	1	—	2	80
Male	1,536	629	253	101	121	15	9	36	2,700
Total(a)	*1,588*	*641*	*265*	*105*	*124*	*16*	*9*	*38*	*2,786*

(a) Persons whose sex was reported as transsexual are included in the totals.
Source: Communicable Diseases Intelligence, Department of Health, Housing and Community Services.

8.17 DIAGNOSES OF HIV INFECTION FOR WHICH EXPOSURE CATEGORY WAS REPORTED TO 30 JUNE 1993

Exposure category	*Male*	*Female*	*Total(a)*	*Per cent*
Male homosexual/bisexual contact	8,782	—	8,782	81.7
Male homosexual/bisexual contact and ID use	303	—	303	2.8
ID use	379	119	519	4.8
Heterosexual	29	18	49	0.5
Not further specified	350	101	470	4.4
Heterosexual contact	418	272	697	6.5
Sex with ID user	8	11	19	0.2
Sex with bisexual male	—	13	13	0.1
From specified country	16	13	29	0.3
Sex with person from specified country	21	11	32	0.3
Sex with person with medically acquired HIV	3	4	7	0.1
Sex with HIV-infected person, exposure not specified	13	10	23	0.2
Not further specified	357	210	574	5.3
Haemophilia/coagulation disorder	190	2	192	1.8
Receipt of blood transfusion, blood components or tissue	96	64	160	1.5
Total adults/adolescents(a)	*10,168*	*457*	*10,653*	*99.1*
Children under 13 years at diagnosis of HIV				
Mother with/at risk for HIV infection	12	11	24	0.2
Haemophilia/coagulation disorder	51	—	51	0.5
Receipt of blood transfusion, blood components or tissue	13	4	19	0.2
Total children(a)	*76*	*15*	*94*	*0.9*
Total(a)	**10,244**	**472**	**10,747**	**100.0**
Other/undetermined(b)	4,334	311	6,728	—

(a) Total column includes cases for which sex was not reported. (b) The 'other/undetermined' category includes 6,696 adults/adolescents and 32 children. Nineteen people whose sex was reported as transsexual are included with adults/adolescents. The 'other/undetermined' category was excluded from the calculation of the percentage of cases attributed to each exposure category.
Source: Australian HIV Surveillance Report, October 1993, National Centre in HIV Epidemiology/Clinical Research.

Healthy lifestyles and risk factors

Diet and nutrition. Results of the 1989–90 National Health Survey show that an estimated five million Australians aged 18 years or over had changed their diet during the previous two years, representing 41 per cent of the adult population. Selected reasons for change in diet presented in table 8.18 show that the most frequently cited reason for change was to improve general health (29.8%). A further 15.1 per cent did so in order to lose weight, 5.6 per cent due to change in activity levels and 5.0 per cent due to ageing or physical growth. One in four (25.5%) of those who changed their diet did so due to specific conditions, high cholesterol (8.7%) chief among them.

While the pattern of reasons for change in diet was generally similar for males and females, females were markedly more likely to cite losing weight (18.1%) than were males (11.6%). Reasons for change in diet differed with age, with specific conditions more frequently cited by older people while younger people appeared to be more concerned with improving their general health.

People reporting a dietary change were more likely to increase the amount of vegetables, fresh fruit, fish and breakfast cereals in their diets, while decreasing the amount of bread, fat on meat, fried foods, butter or margarine, cheese or cream, salt, sugar and cakes, pastries or desserts. Some 53.6 per cent of those who changed their diet reduced their intake of fried foods and 53.1 per cent reduced their intake of fat on meat (table 8.19).

Statistics on the apparent per capita consumption of main foodstuffs are contained in the chapter, Agriculture.

8.18 PERSONS AGED 18 YEARS AND OVER WHO CHANGED THEIR DIET(a), BY REASON FOR CHANGE IN DIET(b), 1989–90
(per cent)

	Age group (years)							*Persons*	
Reason for change in diet	*18–24*	*25–44*	*45–64*	*65–74*	*>74*	*Males*	*Fe-males*	*%*	*'000*
Medical condition									
High cholesterol	*0.6	5.4	16.7	15.4	7.6	9.4	8.1	8.7	439.6
Diabetes mellitus & high blood sugar	*0.4	0.8	2.7	5.4	6.2	2.0	1.8	1.9	94.9
Obesity	0.7	1.5	2.5	3.2	*1.9	1.6	2.0	1.8	92.5
Other diseases of digestive system	1.1	1.4	2.0	3.5	4.0	1.6	2.0	1.8	91.3
Hypertension	**	1.1	3.5	2.8	*1.3	2.0	1.5	1.7	88.0
Heart disease	**	0.4	2.4	3.9	4.2	2.0	0.7	1.3	66.2
Total(c)	*8.9*	*18.7*	*38.8*	*43.4*	*37.6*	*25.8*	*25.2*	*25.5*	*1,290.5*
Lose weight	15.1	16.7	15.1	10.6	7.2	11.6	18.1	15.1	763.1
Improve general health	31.1	36.7	24.6	17.4	12.6	28.9	30.6	29.8	1,507.7
Ageing/physical growth	6.7	1.3	4.3	12.8	26.2	5.8	4.3	5.0	252.1
Change in activity levels	10.7	4.5	4.2	5.3	6.7	7.5	4.0	5.6	284.7
Other reasons	27.6	22.0	13.0	10.4	9.7	20.2	17.8	18.9	957.9
Total(d)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**5,057.3**

(a) Includes persons who had changed the kind and/or amount of food eaten and those who reported some other change(s) for their diet in the previous two years. (b) Provision was made in the survey to record only one reason for changing diet. (c) Includes other medical conditions. (d) Includes reason not stated.

Source: 1989–90 National Health Survey, Lifestyle and Health, Australia (4366.0).

8.19 PERSONS AGED 18 YEARS AND OVER WHO CHANGED THEIR DIET(a), BY TYPE AND CHANGE IN AMOUNT OF FOOD, 1989–90
(per cent)

	Change in amount of food				
Type of food	*Increased*	*Decreased*	*Stayed the same*	*Does not consume(b)*	*Total*
Vegetables	49.2	7.4	43.1	0.3	100.0
Fresh fruit (incl. fruit juices)	49.8	6.6	42.1	1.5	100.0
Fish	35.1	9.8	47.5	7.6	100.0
Bread	16.4	27.1	55.4	1.1	100.0
Breakfast cereals	20.5	14.3	45.5	19.6	100.0
Fat on meat	1.9	53.1	18.8	26.2	100.0
Fried foods	5.2	53.6	25.9	15.2	100.0
Butter or margarine	4.2	35.9	55.6	4.3	100.0
Cream or cheese	10.1	38.2	44.6	7.1	100.0
Salt	3.1	43.9	35.2	17.9	100.0
Sugar	2.9	37.8	41.9	17.3	100.0
Cakes, pastries or desserts	5.9	44.2	36.6	13.3	100.0

(a) Includes persons who had changed the kind and/or amount of food eaten or those who reported some other change(s) to their diet in the previous two years. (b) Includes persons who reported they had ceased consuming selected foods during the previous two years.
Source: 1989–90 National Health Survey, Health Risk Factors, Australia (4380.0).

Body mass. Based on information provided by respondents to the 1989-90 National Health Survey about their height and weight, people were grouped according to body mass. According to standards adopted by the National Health and Medical Research Council, 48.2 per cent of Australian adults were of acceptable weight (table 8.20). 11.8 per cent were underweight, 27.8 per cent were overweight and 8.7 per cent were obese.

The proportions of people in various body mass categories differed by sex and age. Males (35.3%) were more likely to be overweight than females (20.5%); females (17.2%) were more likely to be underweight than males (6.2%). Those aged 45 to 74 years were more likely to be overweight or obese than those in other age groups. More than one in three people (35.2%) in this group were overweight and over one in ten (11.7%) were obese.

Physical activity. An estimated eight million persons aged 18 years and over engaged in some form of exercise for recreation, sport or fitness in the previous two weeks, representing 64.2 per cent of the adult population. The proportions of people who engaged in low, medium or high levels of exercise, classifications based on intensity, frequency and duration of exercise, are presented in table 8.20. Low level exercise (32.2%) was most commonly reported. A further 16.6 per cent reported medium level exercise and 15.4 per cent, high level exercises. Males were more likely to engage in high (19.7%) or medium level exercise (17.0%) than females (11.2% and 16.3%, respectively).

Exercise patterns also differed by age. Younger people were more likely to engage in some form of exercise than those in the middle or older age groups. In particular, those aged 18 to 24 years were more likely to engage in high or medium level exercise than their older counterparts. For all age groups, except those aged 15 to 24 years, walking was the most common form of exercise.

Use of tobacco and alcohol. In 1989–90, over 3.5 million people aged 18 years and over smoked, representing 28.4 per cent of the adult population (table 8.20). A further 23.2 per cent reported that they were ex-smokers. More males than females smoked (32.1% and 24.7%, respectively) and of females, 57.4 per cent reported they had never smoked compared with 39.1 per cent of males. The proportion of smokers was highest in younger age groups; 36.0 per cent of those aged 18 to 24 reported being smokers compared with 26.0 per cent of those aged 45 to 64 years, and only 8.1 per cent of those aged 75 years and over.

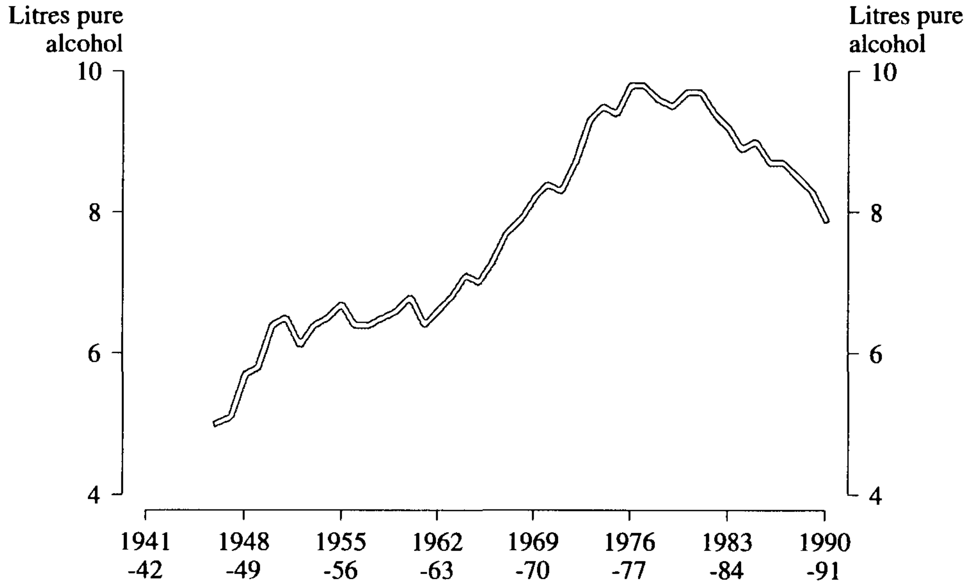
Alcohol risk levels, based on average daily consumption during the week prior to interview in the 1989-90 National Health Survey, are presented in table 8.20. Some 11.1 per cent of the adult population rated as consuming at moderate or high risk levels. The majority (51.4%) consumed at levels regarded as constituting a low risk of health. A further 37.5 per cent did not consume alcohol during the reference week. Males were markedly more likely to be in the high (7.1%) or medium (7.8%) risk categories than females (1.6% and 5.9%, respectively). The likelihood of being in a high/medium risk category decreased with age.

8.20 SELECTED HEALTH RISK FACTORS OF PERSONS AGED 18 YEARS AND OVER, 1989-90
(per cent)

	Age group (years)							*Persons*	
Health risk factor	*18–24*	*25–44*	*45–64*	*65–74*	*>74*	*Males*	*Females*	*%*	*'000*
Body mass(a)									
Underweight	22.1	11.8	6.2	8.6	15.2	6.2	17.2	11.8	1,467.9
Acceptable weight	53.0	50.9	43.2	43.7	45.6	47.7	48.7	48.2	5,999.1
Overweight	15.9	26.6	35.9	33.4	23.3	35.3	20.5	27.8	3,463.1
Obese	3.7	8.2	12.2	10.4	6.1	8.2	9.1	8.7	1,077.3
Not available	5.3	2.6	2.5	3.9	9.9	2.5	4.5	3.5	436.8
Exercise level(b)									
Did not exercise	25.3	34.4	40.6	37.0	51.3	35.4	36.2	35.8	4,454.0
Low	31.7	33.7	31.2	31.0	28.7	27.9	36.3	32.2	4,006.6
Medium	19.1	16.9	15.8	16.4	11.6	17.0	16.3	16.6	2,066.6
High	24.0	14.9	12.5	15.6	8.4	19.7	11.2	15.4	1,917.0
Total who exercised	*74.7*	*65.6*	*59.5*	*63.0*	*48.7*	*64.6*	*63.8*	*64.2*	*7,990.2*
Smoker status									
Smoker	36.0	32.3	26.0	16.5	8.1	32.1	24.7	28.4	3,530.7
Ex-smoker	10.4	21.0	28.1	36.0	31.2	28.8	17.8	23.2	2,891.2
Never smoked	53.7	46.6	45.9	47.5	60.7	39.1	57.4	48.4	6,022.2
Alcohol risk level(c)									
Did not consume alcohol	36.6	32.2	37.6	49.2	60.7	26.5	48.2	37.5	4,666.7
Low	49.6	55.9	50.9	43.4	37.0	58.6	44.3	51.4	6,392.6
Medium	7.9	7.4	7.0	5.0	1.9	7.8	5.9	6.8	848.9
High	6.0	4.5	4.5	2.3	*0.5	7.1	1.6	4.3	535.9
Total who consumed alcohol	63.4	67.8	62.4	50.8	39.3	73.5	51.8	62.5	7,777.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**12,444.2**

(a) Derived from self-reported height and weight. (b) Based on intensity, frequency and duration of exercise undertaken for recreation, sport or fitness in the two weeks prior to interview. (c) Based on average daily consumption during week prior to interview.
Source: 1989–90 National Health Survey, Health Risk Factors, Australia (4380.0) and unpublished ABS data.

8.21 ESTIMATED PER CAPITA CONSUMPTION OF PURE ALCOHOL



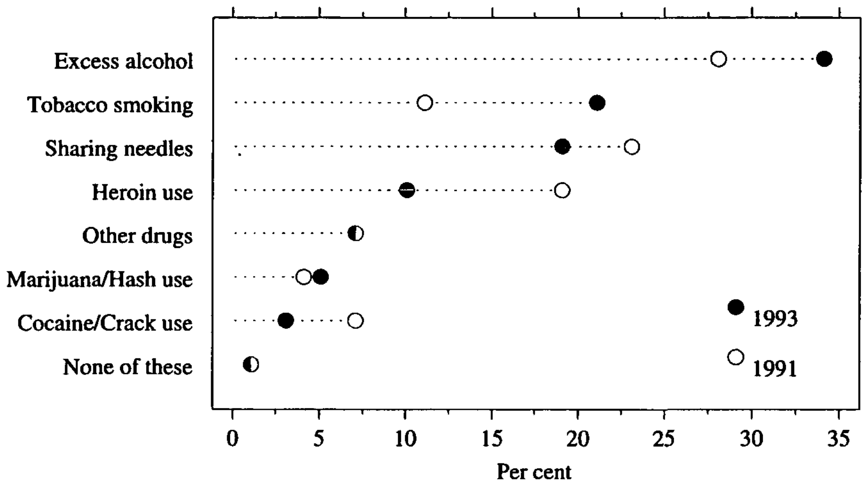
Source: Department of Health, Housing and Community Services based on data from ABS Apparent Consumption of Foodstuffs, Australia (4315.0).

Since 1985, the legally obtained drugs — tobacco and alcohol, as opposed to the illicit drugs — have been recognised by the National Drug Strategy as areas of priority. This shift in emphasis has seen a marked increase in public awareness of the problems caused by both tobacco and alcohol and the importance of these substances in the public mind.

Between 1985 and 1993, the proportion of persons aged 16 years and over who mentioned alcohol as being 'part of the drug problem' increased from 15 per cent to 41 per cent, while mentions of tobacco increased from 9 per cent to 24 per cent.

The 1991 and 1993 National Drug Strategy national drug household surveys provide another measure of the community's concern with 34 per cent and 21 per cent of respondents stating that 'excess alcohol' was the drug issue of most concern for the community in general (graph 8.22).

8.22 MAIN DRUGS OF MOST SERIOUS CONCERN FOR COMMUNITY



Source: 1991 and 1993 National Drug Household Surveys.

Use of illicit drugs. The prevalence of illicit drug use, since 1985, has remained relatively stable with the exception of amphetamine use which has increased marginally among some population groups as opposed to the community overall.

However, from 1985 to 1991, there was a marked decline in the proportion of persons believing 'use of illicit drugs' to be the most serious problem facing the Australian community today.

Use of medications. From information recorded in the 1989–90 National Health Survey, an estimated 70.4 per cent of the population used some form of medication during the previous two weeks (table 8.23). Pain relievers (35.4%), vitamin and mineral supplements (23.3%), skin ointments (18.2%), medication for cough or cold (12.0%) and medication for fluid, heart, blood pressure (10.8%) were the most commonly reported medications used.

While the pattern of medication types used by males and females was similar, females (76.2%) were markedly more likely than males (64.5%) to have used medication. Some 41.9 per cent of females reported using pain relievers, 27.5 per cent vitamin and mineral supplements and 19.2 per cent skin ointments, compared with 28.9 per cent, 19.1 per cent and 17.1 per cent, respectively for males.

With the exception of those under five years of age, the proportion of people who used medication increased with age from 54.8 per cent of 5 to 14 year olds to 91.2 per cent of those aged 75 years and over. The pattern of medication types used varied with age. For example, pain relievers were the most commonly reported medication for all age groups under 65 years. For those aged 65 years and over, medications for fluid, heart and blood pressure were the most commonly reported, with pain relievers ranked second.

8.23 PERSONS WHO USED MEDICATION, 1989–90
(per cent)

	Age group (years)									Persons	
Type of medication	<5	5–14	15–24	25–44	45–64	65–74	>74	Male	Female	%	'000
Vitamin and mineral supplements	14.7	18.1	22.4	26.2	26.1	25.1	22.7	19.1	27.5	23.3	3,960.0
Medication for cough or cold	26.6	15.0	12.1	9.8	9.1	9.1	9.4	11.9	12.0	12.0	2,030.9
Medication for allergy	3.7	7.0	5.5	6.4	6.3	5.9	3.2	5.4	6.5	6.0	1,010.8
Skin ointments	24.8	14.0	17.7	17.2	17.4	22.9	26.0	17.1	19.2	18.2	3,088.7
Stomach medicines or laxatives	2.7	2.1	3.9	6.5	11.9	19.1	22.7	6.4	9.1	7.8	1,317.0
Medications for fluid, heart, blood pressure	**	**	0.3	3.2	22.5	46.4	54.2	8.8	12.8	10.8	1,842.4
Pain relievers	27.9	20.7	34.4	40.3	40.2	38.6	40.8	28.9	41.9	35.4	6,021.2
Sleeping medications	2.7	0.2	1.1	2.7	8.1	17.2	23.4	3.4	6.5	5.0	844.8
Tranquillisers or sedatives	*0.2	*0.1	0.3	1.8	4.5	6.7	5.8	1.7	2.7	2.2	376.4
Other medications	12.4	12.0	14.6	14.7	25.3	39.5	43.8	16.1	22.0	19.1	3,242.2
Total persons who used medication(a)	**65.6**	**54.8**	**64.5**	**70.2**	**78.3**	**88.1**	**91.2**	**64.5**	**76.2**	**70.4**	**11,952.7**

(a) Persons may have used more than one type of medication, and therefore components do not add to totals.
Source: 1989–90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

Sun protection. Results from the 1989–90 National Health Survey indicate that two-thirds of the population (66.3%) usually used some form of protection. Some 58.2 per cent usually used sunscreens, with those of SPF 15 or 15+ most commonly reported (table 8.24). Females were more likely to use SPF 15 or 15+ sunscreen (48.8%) than males (39.3%) and less likely to be unprotected from the sun (26.5% of females compared with 40.9% of males).

The proportion of people not usually protected from the sun increased with age, from 11.8 per cent of those aged under 5 years to 53.0 per cent of those aged 75 years and over, while the age groups most likely to use SPF 15 or 15+ sunscreen were those aged 5 to 14 years (69.4%) followed by those aged under 5 years (65.3%).

8.24 PERSONS WHO USUALLY USE SUNSCREEN, 1989–90
(per cent)

	Age groups (years)									Persons	
Sun protection factor	<5	5–14	15–24	25–44	45–64	65–74	>74	Males	Females	%	'000
Usually uses sunscreen											
SPF 2–3	**	**	*0.1	*0.1	*0.1	**	**	*0.1	0.1	0.1	11.9
SPF 4–7	*0.4	1.1	4.0	2.8	1.3	*0.4	**	1.6	2.4	2.0	340.0
SPF 8–14	2.6	4.9	7.2	5.5	2.7	1.1	*0.3	3.9	4.9	4.4	752.8
SPF 15, 15+	65.3	69.4	46.7	45.1	29.3	19.1	9.0	39.3	48.8	44.1	7,485.8
Depends/varies	*0.3	0.8	1.7	1.2	0.8	*0.4	**	0.9	1.1	1.0	170.8
Don't know	5.5	7.1	7.0	6.3	7.0	7.4	5.1	6.2	7.1	6.6	1,127.5
Protected by clothes, hat etc.	1.7	0.7	0.6	1.9	4.4	9.6	11.9	3.4	2.4	2.9	492.7
Not exposed to strong sun	12.6	0.4	1.5	3.1	7.2	11.1	20.5	3.7	6.7	5.2	880.9
Not protected	11.8	15.5	31.3	34.0	47.2	50.9	53.0	40.9	26.5	33.7	5,726.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**16,988.8**

Source: 1989–90 National Health Survey, Summary of Results, Australia (4364.0), unpublished ABS data.

Childhood immunisation. Immunisation is recommended for all Australian children as a protection against childhood diseases such as diphtheria, tetanus, whooping cough, poliomyelitis, rubella, measles and mumps. Immunisation programs are implemented in all States and Territories of Australia. The childhood immunisation schedule, as recommended by the National Health and Medical Research Council, is available from the Commonwealth Department of Human Services and Health. Hepatitis B vaccine is currently offered to neonates born to mothers belonging to community groups in which the carrier rate for Hepatitis B is estimated to exceed five per cent. In addition, four vaccines for the prevention of Haemophilus influenzae type b (Hib) infections have been approved for use in Australia.

Results of the 1989-90 National Health Survey show that of children aged six years and under, just over half (52.9%) were identified as being fully immunised at the time of the survey against all of the following conditions: diphtheria, tetanus, whooping cough, polio, measles and mumps, that is, they had received the recommended number of vaccinations for each of these conditions appropriate to their age. A further 29.5 per cent were recorded as being partly immunised (that is, they had received less than the recommended vaccinations for their age for at least one of the conditions), 3.6 per cent were not immunised (against any of the conditions) and the immunisation status was not known for a further 14.1 per cent (the immunisation status may be known for some but not all of the conditions). Table 8.25 shows the extent of different types of immunisation.

8.25 CHILDREN AGED 0 TO 6 YEARS: TYPE OF CONDITION BY IMMUNISATION STATUS(a), 1989-90
(per cent)

	Immunisation status					
Type of immunisation	*Fully immunised*	*Partly immunised*	*Not immunised*	*Not known if immunised*	*Total*	*'000*
Diphtheria/tetanus	86.3	5.5	3.7	4.5	100.0	1,747.7
Whooping cough	70.9	19.3	5.4	4.5	100.0	1,747.7
Polio	72.1	15.9	5.8	6.1	100.0	1,747.7
Measles(b)	86.0	. .	11.0	3.0	100.0	1,484.8
Mumps(b)	80.5	. .	14.9	4.5	100.0	1,484.8

(a) Immunisation status is defined as the degree to which the recommended course of vaccinations for a particular disease has been received (as appropriate to the age of the children). (b) Excludes children aged less than one year.
Source: 1989-90 National Health Survey, Children's Immunisation, Australia (4379.0).

Immunisation status of children differed according to family characteristics (table 8.26). A higher proportion of children in married couple families were fully immunised than children in other family types. For all the conditions covered in the survey, children's immunisation status differed according to the family's gross annual income, with lower income families tending to report lower proportions of fully immunised children. The highest proportions of fully immunised children were recorded by families with income in the range $70,000 to $119,999.

8.26 FULLY IMMUNISED(a) CHILDREN AGED 0 TO 6 YEARS: TYPE OF CONDITION BY TYPE OF FAMILY AND GROSS ANNUAL INCOME OF FAMILY, 1989–90
(per cent)

	Family type				
Type of condition	*Married couple families(b)*	*Single parent families*	*Other(c)*	*Total*	*'000*
Diphtheria/tetanus	87.0	81.8	82.1	86.3	1,508.9
Whooping cough	71.9	63.7	61.3	70.9	1,238.7
Polio	73.1	65.3	63.8	72.1	1,260.8
Measles(d)	86.8	82.0	67.3	86.0	1,276.9
Mumps(d)	81.7	73.0	63.7	80.5	1,195.7

	Gross annual income of the family ($)							
	Less than 10,000	*10,000–29,999*	*30,000–49,999*	*50,000–69,999*	*70,000–119,999*	*120,000 or more*	*Total*	*'000*
Diphtheria/tetanus	80.4	85.0	87.6	89.3	90.4	81.9	86.3	1,508.9
Whooping cough	62.3	68.7	73.3	73.0	76.8	67.2	70.9	1,238.7
Polio	60.4	69.5	74.0	77.3	77.4	71.3	72.1	1,260.8
Measles(d)	73.1	83.9	88.1	88.9	91.5	85.0	86.0	1,276.9
Mumps(d)	64.9	78.0	84.0	82.4	85.1	79.3	80.5	1,195.7

(a) Those children who had received all the vaccinations for a condition appropriate to their age. (b) Includes de facto relationships. (c) Includes children living with other relatives. (d) Excludes children aged less than one year.
Source: 1989–90 National Health Survey, Children's Immunisation, Australia (4379.0).

Immunisation status of children also differed according to characteristics of parents. Children of parents aged 25 to 34 years, and of parents born in Australia, were more likely to be fully immunised than children of parents in other age groups and of parents born overseas. Children of parents unemployed at the time of the survey were less likely to be fully immunised than those of employed parents or parents not in the labour force. In addition, parents who had obtained post-school qualifications reported slightly higher proportions of fully immunised children for all conditions.

Mortality

Causes of death. Information relating to crude death rates and life expectancy is contained in the chapter, Demography.

Causes of death in Australia are classified according to the ninth revision of the International Classification of Diseases (ICD) produced by the World Health Organization.

The major causes of the 123,660 deaths in the community in 1992 remained diseases of the circulatory system (accounting for 44.4%), neoplasms (26.2%), diseases of the respiratory system (8.1%) and accidents, poisonings and violence (6.1%). In 1992, less than one per cent of all deaths were due to infectious and parasitic diseases (table 8.27).

8.27 CAUSES OF DEATH IN EACH AGE GROUP, 1992

	Age group (years)									
Causes of death	*<1*	*1–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*>74*	*Total (a)*
					NUMBER					
Infectious & parasitic diseases	17	26	13	32	44	43	93	177	449	894
Neoplasms	8	129	147	378	1,095	2,674	5,722	10,081	12,170	32,404
Endocrine, nutritional & metabolic diseases & immunity disorders	29	28	36	181	234	213	385	817	1,655	3,578
Diseases of the nervous system & sense organs	50	81	74	54	74	98	202	459	1,567	2,659
Diseases of the circulatory system	18	27	66	165	614	1,698	4,655	11,852	35,813	54,912
Diseases of the respiratory system	41	31	32	38	98	242	848	2,683	6,055	10,068
Diseases of the digestive system	3	7	8	54	148	308	523	841	2,070	3,962
Congenital anomalies	498	93	33	36	36	23	27	28	31	805
All other diseases(b)	839	18	84	201	128	147	291	799	3,669	6,176
Signs, symptoms & ill-defined conditions	298	23	31	33	27	27	34	38	201	712
Accidents, poisonings & violence	42	368	1,406	1,399	1,023	768	614	696	1,169	7,489
All causes	**1,843**	**831**	**1,930**	**2,571**	**3,521**	**6,241**	**13,394**	**28,471**	**64,849**	**123,660**
					RATE(c)					
Infectious & parasitic diseases	6	1	—	1	2	2	6	15	56	5
Neoplasms	3	4	5	13	41	136	390	833	1,529	185
Endocrine, nutritional & metabolic diseases & immunity disorders	11	1	1	6	9	11	26	68	208	20
Diseases of the nervous system & sense organs	19	2	3	2	3	5	14	38	197	15
Diseases of the circulatory system	7	1	2	6	23	86	318	980	4,501	314
Diseases of the respiratory system	16	1	1	1	4	12	58	222	761	58
Diseases of the digestive system	1	—	—	2	6	16	36	70	260	23
Congenital anomalies	189	3	1	1	1	1	2	2	4	5
All other diseases(b)	318	1	3	7	5	7	20	66	461	35
Signs, symptoms & ill-defined conditions	113	1	1	1	1	1	2	3	25	4
Accidents, poisonings & violence	16	10	51	49	39	39	42	58	147	43
All causes	**698**	**23**	**70**	**91**	**133**	**317**	**914**	**2,353**	**8,150**	**707**

For footnotes *see* end of table.

8.27 CAUSES OF DEATH IN EACH AGE GROUP, 1992 — *continued*

	Age group (years)									Total
Causes of death	*<1*	*1–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*>74*	*(a)*
	PERCENTAGE(d)									
Infectious & parasitic diseases	0.9	3.1	0.7	1.2	1.2	0.7	0.7	0.6	0.7	0.7
Neoplasms	0.4	15.5	7.6	14.7	31.1	42.8	42.7	35.4	18.8	26.2
Endocrine, nutritional & metabolic diseases & immunity disorders	1.6	3.4	1.9	7.0	6.6	3.4	2.9	2.9	2.6	2.9
Diseases of the nervous system & sense organs	2.7	9.7	3.8	2.1	2.1	1.6	1.5	1.6	2.4	2.2
Diseases of the circulatory system	1.0	3.2	3.4	6.4	17.4	27.2	34.8	41.6	55.2	44.4
Diseases of the respiratory system	2.2	3.7	1.7	1.5	2.8	3.9	6.3	9.4	9.3	8.1
Diseases of the digestive system	0.2	0.8	0.4	2.1	4.2	4.9	3.9	3.0	3.2	3.2
Congenital anomalies	27.0	11.2	1.7	1.4	1.0	0.4	0.2	0.1	—	0.7
All other diseases(b)	45.5	2.2	4.4	7.8	3.6	2.4	2.2	2.8	5.7	5.0
Signs, symptoms & ill-defined conditions	16.2	2.8	1.6	1.3	0.8	0.4	0.3	0.1	0.3	0.6
Accidents, poisonings & violence	2.3	44.3	72.8	54.4	29.1	12.3	4.6	2.4	1.8	6.1
All causes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Total includes 9 deaths where age is not known. (b) Includes 846 deaths from conditions originating in the perinatal period and 1,861 deaths from diseases of the genitourinary system. (c) Rates are per 100,000 of population at risk, except for children under one year of age which are per 100,000 live births registered. (d) Percentage of all deaths within each age group.
Source: Causes of Death, Australia (3303.0).

The relative importance of groups of causes of death varies with age. The majority of infant deaths (65.3% in 1992) occur within less than 28 days of birth. Most of these neonatal deaths are due to conditions present from birth. For those aged from 1 to 34 years external causes (accidents, poisonings and violence) predominate. In the 35 to 44 year old age group, neoplasms (31.1%) join external causes (29.1%) as a major cause of death. From 45 onwards neoplasms and diseases of the circulatory system are the two major causes of death, with the latter the major cause after the age of 65.

As well as differing by age, the relative importance of certain causes of death varies by sex, as exemplified in graph 8.12.

The perinatal death rate for Australia decreased from 9.63 per 1,000 total births in 1991 to 9.44 in 1992. The three main causes of perinatal deaths were Hypoxia, birth asphyxia and other respiratory conditions (36.2%), Other conditions originating in the perinatal period (27.6%) and Congenital anomalies (20.4%). 45.8 per cent of all perinatal deaths did not mention any condition in the mother as contributing to the death. Where maternal conditions were reported, 25.0 per cent of all perinatal deaths were reported as being due to Complications of placenta, cord and membranes.

8.28 CAUSE OF PERINATAL DEATHS, 1992

	Number of deaths			Rate		
Cause of death	Fetal	Neonatal	Perinatal	Fetal(a)	Neonatal (b)	Perinatal (a)
Conditions in fetus/infant						
Slow fetal growth, fetal malnutrition and immaturity	89	149	238	0.34	0.56	0.90
Birth trauma	2	17	19	0.01	0.06	0.07
Hypoxia, birth asphyxia and other respiratory conditions	651	258	909	2.45	0.98	3.42
Fetal and neonatal haemorrhage	12	46	58	0.05	0.17	0.22
Haemolytic disease of fetus or newborn	11	9	20	0.04	0.03	0.08
Other conditions originating in the perinatal period	569	124	693	2.14	0.47	2.61
Congenital anomalies	153	359	512	0.58	1.36	1.93
All other causes	7	53	59	0.02	0.20	0.22
Conditions in mother						
Maternal conditions which may be unrelated to present pregnancy	156	83	239	0.59	0.31	0.90
Maternal complications of pregnancy	153	303	456	0.58	1.15	1.72
Complications of placenta, cord and membranes	537	90	627	2.02	0.34	2.36
Other complications of labour and delivery	19	18	37	0.07	0.07	0.14
No maternal condition reported	628	521	1,149	2.37	1.97	4.33
All causes						
1992	1,493	1,015	2,508	5.62	3.84	9.44
1991	1,478	1,012	2,490	5.71	3.93	9.63
1990	1,590	1,122	2,712	6.02	4.27	10.27
1989	1,451	1,058	2,509	5.75	4.22	9.95
1988	1,473	1,164	2,637	5.95	4.73	10.65
1987	1,432	1,159	2,591	5.84	4.75	10.56

(a) Per 1,000 births registered (live births and stillbirths) weighing 500 grams or more at birth. (b) Per 1,000 live births registered weighing 500 grams or more at birth.
Source: Perinatal Deaths, Australia (3304.0).

HEALTH CARE DELIVERY

Medicare

The Health Insurance Act provides for a Medicare Benefits Schedule which lists a schedule fee applicable to each medical service. The Schedule covers services attracting Medicare benefits rendered by legally qualified medical practitioners, certain prescribed services rendered by approved dentists and optometrical consultations by optometrists. Medical services in Australia are generally delivered by either private medical practitioners on a fee-for-service basis, or medical practitioners employed in hospitals and community health centres. The Schedule is constantly reviewed through ongoing consultations with the medical profession and it is updated twice yearly to reflect current medical practice.

Medicare benefits are payable at the rate of 85 per cent of the schedule fee services except those for private in-patients in hospitals.

Public hospitals

In 1991–92 there were 1,041 acute care hospitals, 50 public psychiatric hospitals, 1,444 nursing homes, and 1,198 hostels in Australia. A more important indicator of the supply of health care facilities is the number of beds per 1,000 population. Excluding beds in public psychiatric hospitals, there were 4.4 hospital beds available for acute care per 1,000 population in Australia in 1991–92. This followed a steady decline from 1985–86 to

1991–92, when the ratio of available beds fell by four per cent a year, from 4.1 to 3.1 beds per 1,000 population.

The number of beds available in public psychiatric hospitals in Australia decreased from 2.3 per 1,000 population in 1970 to 0.4 in 1991–92. During the 1970s and early 1980s, the supply contracted by six per cent per year. Between 1985–86 and 1987–88, the annual rate of decrease was almost 20 per cent. This rapid reduction in beds resulted from moves to de-institutionalise patients requiring both acute and long-term psychiatric care. Since 1987–88, the reduction in bed supply has continued at two per cent a year.

Use of hospitals. Rates of admission to acute hospitals have fluctuated over the last two decades, an increase during the 1970s was followed by a slight decline in the early 1980s. From 1982–83 to 1988–89, admissions per 1,000 persons fluctuated around 215, then increased substantially to 245 in 1991–92.

By international standards, Australia's rate of admission to acute care hospitals is high, but its comparatively short average length of stay, 4.8 days for 1991–92, is the lowest among the OECD countries.

The sustained reductions in length of hospital stay are reflected in falls in the number of bed-days used by patients in acute hospitals. Between 1982–83 and 1991–92, the number of bed-days per 1,000 population fell by 2.5 per cent per year, from 1,490 to 1,218.

Same-day surgery. In recent years, the increasing use of same-day treatments has accelerated the decline in length of stay. The proportion of same-day patients in public acute hospitals has increased from 20 per cent in 1987–88 to 28 per cent in 1991–92. In 1991–92, 43 per cent of admissions to private hospitals were same-day patients.

Private hospitals

In 1992 the ABS conducted its first nationwide survey of all private hospitals. Information on facilities, patients, staffing and finances was collected from 319 private acute and psychiatric hospitals and 72 free standing day hospital facilities. Some of the findings were as follows:

- The number of beds available for in-patient overnight accommodation averaged 20,745 during the year in the acute and psychiatric hospitals included in the survey.
- There were 1,280,600 in-patient separations from private hospitals, of which 90.4 per cent were from acute and psychiatric hospitals and 9.6 per cent from free standing day hospital facilities.
- Occupied bed days for acute and private psychiatric hospitals totalled 4.9 million.
- The number of full-time equivalent staff engaged at all private hospitals was 31,257 of whom 59.5 per cent were nursing staff.
- Total operating expenditure for private acute and psychiatric hospitals during 1991–92 amounted to $1,955 million of which 60.8 per cent was expended on salaries and wages (including on-costs). Revenue received during the year was $2,177 million, nearly all (95.3%) of which was received as payments from or in respect of patients.

Health work force

At the Census on 6 August 1991, 272,560 persons reported they were employed in a health occupation; 188,630 (69.2%) of these were nurses and 38,000 (14.2%) were medical practitioners. The overall number employed in health occupations has increased steadily since 1981 (table 8.29). However, while the rate of those employed in a health occupation per 10,000 population increased between 1981 and 1986, the 1991 rate of 161.8 represents a small decrease on the 1986 figure.

8.29 PERSONS EMPLOYED IN HEALTH OCCUPATIONS

Health occupation	*30 June 1981(a)*	*1986*	*6 August 1991*
		— number —	
Medical practitioners	28,010	32,790	38,800
Dental practitioners	5,490	6,310	6,720
Other health practitioners(b)	27,020	32,640	38,200
Nurses	159,190	182,240	188,630
Total health occupations(c)	*219,810*	*253,970*	*272,560*
Total employed persons	6,292,630	6,513,520	7,109,340
Total persons	14,476,330	15,602,160	16,850,330
		— rate per 10,000 population —	
Medical practitioners	19.3	21.0	23.2
Dental practitioners	3.8	4.0	4.0
Other health practitioners(b)	18.7	20.9	22.7
Nurses	110.0	116.8	111.9
Total health occupations	*151.8*	*162.8*	*161.8*
Total employed persons	4,346.0	4,174.7	4,219.1

(a) 1981 figures have been adjusted to reflect the distribution of a sample of 1986 occupation data. (b) Includes pharmacists, occupational therapists, optometrists, physiotherapists, speech pathologists, chiropractors and osteopaths, podiatrists, radiographers and other health diagnosis and treatment practitioners. (c) Each cell has been rounded to the nearest ten, and therefore components may not add to totals.

Source: Characteristics of Persons Employed in Health Occupation, Australia, Census of Population and Housing, 6 August 1991 (4346.0).

Over half (51.2%) the persons employed in health occupations worked in the private sector. The majority of medical practitioners (66.3%), dental practitioners (85.4%) and other health professionals (67.9%) worked in the private sector, while the majority of nurses (55.0%) worked in the government sector (table 8.30).

Of all persons employed in health occupations 58.2 per cent worked in hospitals or nursing homes. Some 28.8 per cent of medical practitioners worked in hospitals or nursing homes, 27.6 per cent of general practitioners and 31.2 per cent of specialists.

8.30 PERSONS EMPLOYED IN HEALTH OCCUPATIONS, BY INDUSTRY SECTOR, AUGUST 1991 (per cent)

	Government sector					
Health occupation	*Australian*	*State and local*	*Total*	*Private sector*	*Not stated*	*'000(a)*
Medical practitioners	2.9	30.1	33.0	66.3	0.7	38,800
Dental practitioners	2.1	12.1	14.1	85.4	0.4	6,720
Other health practitioners(b)	2.8	28.6	31.4	67.9	0.7	38,200
Nurses	2.4	52.5	55.0	43.5	1.6	188,630
Total	**2.5**	**45.0**	**47.5**	**51.2**	**1.3**	**272,560**

(a) Each cell has been rounded to the nearest ten, and therefore components may not add to totals. (b) Includes pharmacists, occupational therapists, optometrists, physiotherapists, speech pathologists, chiropractors and osteopaths, podiatrists, radiographers and other health diagnosis and treatment practitioners.

Source: Characteristics of Persons Employed in Health Occupations, Australia, Census of Population and Housing, 6 August 1991 (4346.0).

Of persons employed in health occupations, 77.5 per cent were female. This is largely because of the high proportion of female nurses. However, the proportion of females varied for different occupations, from 17.1 per cent of dental practitioners and 19.5 per cent of chiropractors and osteopaths to over 90 per cent of nurses, occupational therapists and speech pathologists (table 8.31).

Almost one-third (33.0%) of persons employed in health occupations were aged 25 to 34 years. This age group accounted for the highest proportion of people in most of the health occupations. Occupations with the highest proportion of persons in the older age groups, that is, 45 years and over, were specialist medical practitioners (44.3%), dental practitioners (36.2%) and pharmacists (44.2%). Dental nurses had a particularly young age profile, with 54.1 per cent in the 15 to 24 age group.

8.31 PERSONS EMPLOYED IN HEALTH OCCUPATIONS, BY AGE AND SEX, AUGUST 1991 (per cent)

	Age group (years)							*Persons(a)*	
Occupation	*15–24*	*25–34*	*35–44*	*45–54*	*>54*	*Males*	*Females*	*%*	*'000*
Health diagnosis and treatment practitioners									
General medical	3.8	36.5	28.4	15.7	15.7	69.7	30.3	100.0	25,450
Specialist medical	2.3	19.0	34.2	25.2	19.1	74.6	25.4	100.0	13,350
Total	*3.3*	*30.5*	*30.4*	*19.0*	*16.9*	*71.4*	*28.6*	*100.0*	*38,800*
Dental	3.9	29.6	30.5	18.2	18.0	82.9	17.1	100.0	6,720
Pharmacists	10.1	23.4	22.2	25.4	18.8	56.9	43.1	100.0	10,880
Occupational therapists	16.1	41.3	25.4	13.4	3.8	6.3	93.7	100.0	3,660
Optometrists	12.6	44.5	23.6	8.2	10.4	70.3	29.1	100.0	1,820
Physiotherapists	10.9	41.4	26.1	15.0	6.7	19.8	80.2	100.0	7,130
Speech pathologists	19.4	46.9	23.4	8.0	2.3	2.9	97.1	100.0	1,750
Chiropractors and osteopaths	4.5	35.1	27.9	18.2	13.6	80.5	19.5	100.0	1,540
Podiatrists	16.7	36.8	14.9	12.3	20.2	34.2	65.8	100.0	1,140
Radiographers	15.1	38.0	30.5	12.2	4.0	34.3	65.6	100.0	4,760
Other health	8.5	28.2	32.3	20.8	10.5	24.4	75.6	100.0	5,540
Total	*7.2*	*32.0*	*28.3*	*18.3*	*14.2*	*56.2*	*43.8*	*100.0*	*83,930*
Nurses									
Registered	10.0	33.6	32.3	18.0	6.2	7.7	92.3	100.0	139,370
Enrolled	21.4	34.6	27.6	12.8	3.6	8.0	92.0	100.0	39,670
Dental	54.1	26.9	12.9	4.6	1.5	1.1	98.9	100.0	9,590
Total	*14.6*	*33.5*	*30.3*	*16.2*	*5.4*	*7.4*	*92.6*	*100.0*	*188,630*
Total	**12.4**	**33.0**	**29.7**	**16.9**	**8.1**	**22.5**	**77.5**	**100.0**	**272,560**

(a) Each cell has been rounded to the nearest ten, and therefore components may not add to totals.
Source: Characteristics of Persons Employed in Health Occupations, Australia, Census of Population and Housing, 6 August 1991 (4346.0).

HEALTH PROGRAMS

National Health Advancement Program

NHAP replaces the National Health Promotion and the National Better Health Programs following completion of their terms of agreement and subsequent evaluation.

The NHAP aims to improve the health of all Australians, with specific emphasis on reducing the health status inequalities of the lower socio-economic groups, through the commitment of $22.1 million in four target areas — a national health promotion infrastructure strategy; a national strategy to protect the health of all Australians from environmental impacts on their health and well-being; implementation of the national food and nutrition policy to improve accessibility to affordable nutritious food, and programs for disadvantaged groups; and further development, refinement and application of the new set of national health goals and targets, including planning and development of a coordinated national injury control strategy.

Women's health

National Women's Health Program. This program, which commenced in 1989–90, aims to improve the health and well-being of all women in Australia with a focus on those most at risk, and to encourage the health system to be more responsive to the health needs of women. A new four year phase of the Program with funding of $30 million was announced in the 1993 Budget. The Program is cost shared with the States and Territories on a dollar for dollar basis. The Program provides funding for improvements in general health services for women and for the establishment of primary health care services specifically for women.

Cancer screening programs. In 1990, the Commonwealth Government committed $64 million for the first three years of the National Program for the Early Detection of Breast Cancer which is being implemented over five years. The goal of the Program is to reduce mortality and morbidity from breast cancer which is a major cause of death amongst women.

A national network of dedicated and accredited breast cancer screening and assessment services is being established within each participating State or Territory to provide screening to women over 40 years of age.

Following a start-up phase in which the Commonwealth provided $11.4 million to establish or expand screening services, the Program is being cost shared equally between the Commonwealth Government and State/Territory Governments.

In April 1992, all health ministers endorsed an Organised Approach to Preventing Cervical Cancer, which promotes:

- regular biennial screening for all women in the age range 18 to 70 years;
- more reliable and accessible services for taking, interpreting and reporting Pap tests;
- improved management of screen-detected abnormalities; and
- monitoring and evaluation.

The Approach seeks to reduce mortality from cervical cancer from the current rate of 350 per year. Cervical cancer is largely preventable if detected and appropriately managed in its pre-cancerous stages.

Of the $23 million allocated to this program over four years by the Commonwealth, $17 million has been directed to the States/Territories for development of cervical cytology registries, education programs and supplementary field services to meet the needs of special groups. States/Territories are contributing a further $9 million. The balance of the Commonwealth's contribution has gone towards a comprehensive communication strategy directed towards service providers and women, including media campaigns, review and implementation of strategies to improve quality assurance in cervical cytology and management of women with screen-detected abnormalities.

Alternative Birthing Services Program. In recognition of increased community desire for greater choice in birthing services, the Commonwealth introduced a $6.4 million four year incentive package in 1989–90 to assist States and Territories to provide a range of alternative birthing services. A further $8.9 million over four years was allocated in the 1993 Budget.

Profile of women's health

The past three decades has seen an increased focus on women's health. This emerged from the historical concern with issues related to reproductive health, including family planning and maternal and child health, and broadened to include the much wider range of issues which affect women's health.

A National Women's Health Policy was launched by the Australian Government in 1989. One of its principles is that women's health policy must be based on accurate data. In response to this, the ABS released a publication entitled *Women's Health, Australia.* Subjects covered include health status, health actions, reproductive health, causes of death, life expectancy, violence against women, lifestyle (risk factors), preventative health, health of particular groups, medical work force, private health insurance and resources allocated to women's health.

Major findings of the report included the following:

- In 1989–90, females were more likely than males to report that they had experienced one or more recent conditions in the two weeks prior to being interviewed in the National Health Survey (75.4% compared with 66.2%).
- Women were less likely to smoke than males (24.7% compared with 32.1%) and the women who did smoke, on average, smoked fewer cigarettes per day and cigarettes of a lower tar content than men.
- Over 90 per cent of women aged 15 to 24 years were immunised against rubella in 1989–90.
- In 1989–90, women in older age groups, who are at a higher risk of developing cervical cancer, were less likely to have had a Pap smear within the last year than women in younger age groups.
- Almost one in four females (23.2%) consulted a doctor in the two weeks prior to being interviewed in the National Health Survey, compared with one in six males (16.8%).
- Women are waiting until they are older to have children and are having fewer children than in previous years.
- The majority of women who are victims of assault, sexual assault and rape do not report these crimes to the police.
- In the decade 1981–91, the percentage of graduating doctors who were female increased from 34 per cent to 42 per cent.

Married females with dependent children were 2.5 times more likely to have private health insurance than females who were single mothers with dependent children (54.3% compared with 21.5%).

Aboriginal health

Under the National Aboriginal Health Strategy (NAHS) the Government will provide up to $232 million over five years to dramatically lift unacceptable health and infrastructure standards in Aboriginal communities.

The funds will be used to:

- address urgent needs in Aboriginal and Torres Strait Islander communities such as housing, water, sewerage, electricity, communications and roads;
- establish new, and enable upgrading of existing, Aboriginal community-controlled health services; and
- establish an Office of Aboriginal Health within the Aboriginal and Torres Strait Islander Commission (ATSIC) to oversee and coordinate implementation of the National Aboriginal Health Strategy.

The majority of the program funds available under the NAHS are dependent on the States and Territories making substantial contributions and are the subject of continuing negotiations between the Aboriginal and Torres Strait Islander Commission, the Department of Health, Housing and Local Government and Community Services and the State/Territory Governments.

Health-related subjects are being covered in a National Survey of Aboriginal and Torres Strait Islander people to be conducted by the ABS from April to June 1994, in order to improve the information base for developments in this area. Results from the Survey will be available from the end of 1994.

Programs for the aged and people with disabilities

The Home and Community Care Program (HACC), which commenced in 1985, is cost shared between the Commonwealth Government and State/Territory Governments. The objective of the Program is to provide a range of services to enhance the quality of life of frail aged and younger people with disabilities and to assist them to live as independently as possible in the community. Services are also provided to the carers of these people.

It is recognised that particular groups within the target population have special needs in gaining access to services including Aboriginal and Torres Strait Islander people, people from a non-English-speaking background, people with dementia, financially disadvantaged people and people living in rural and remote locations.

HACC services include home help or personal care, home maintenance and modification, community nursing, delivered meals, paramedical services, transport and respite care.

An organisation eligible for HACC funding is non-profit and incorporated, or complies with similar requirements in its State/Territory. Such organisations include State/Territory Governments, local governments and community organisations.

Approximately 2,107 organisations provide care services to the HACC target population throughout Australia. An estimated 215,000 HACC consumers receive HACC services each month provided through more than 3,500 outlets. An estimated 117,000 carers benefit directly or indirectly from the provision of services.

The Commonwealth Respite for Carers (CRC) Program. The objective of the Program is to extend respite services funded under other programs such as HACC, Disabilities and those funded by State Governments. The CRC Program aims to assist carers to maintain their caring role by increasing and extending the reach of respite care services and encouraging the development of more flexible services designed to respond to individual carer needs.

Community Aged Care Packages (CACP) were introduced to provide a community alternative for frail older people whose dependency would qualify them for personal care in a hostel. The CACPs are funded under the *Aged or Disabled Personal Care Act 1954*.

A CACP provider is responsible for providing (or organising) a set of community services for a frail older person with complex care needs who prefers to remain at home rather than enter residential care. The package is planned and coordinated by the CACP provider, who provides or purchases the services found necessary in a comprehensive assessment.

Australian Hearing Services (AHS) is a statutory authority within the portfolio of Human Services and Health. Its role is to assist people with a hearing impairment and to reduce the incidence of hearing problems within the community. AHS fits the large majority of all hearing aids in Australia.

AHS provides hearing services to eligible people, who include holders of Pensioner Concession cards, Commonwealth Seniors Health cards (from July 1994), those under 21 years of age, eligible veterans, Commonwealth rehabilitation clients and certain compensation claimants. Services are delivered through a national network of 52 full-time Hearing Centres, some 70 visiting centres in rural and remote areas, and over 80 approved private hearing aid businesses across Australia.

In 1992–93, AHS provided services to over 145,000 adults and children and fitted in excess of 86,000 hearing aids.

AHS staff also conduct noise and audiological research, evaluate new devices and techniques, advise on measures to prevent hearing loss and report on environmental and occupational noise problems.

Homeless youth

The Innovative Health Services for Homeless Youth Program was established in 1989 as part of the $100 million strategy, 'Towards

Social Justice for Young Australians'. The Program develops and implements innovative primary health care services for homeless youth and a further $8.8 million over the period 1993–94 to 1996–97 was allocated in the 1993 Budget ($17.6 million when cost shared with States and Territories). Emphasis is being placed on community involvement in service delivery. The ultimate objective of the Program is to encourage a more positive attitude among homeless young people towards their personal health care.

Mental health

The emphasis has shifted from institutions for care of people with mental illness to mental health services provided in the general health sector, such as psychiatric units in general hospitals, and a range of community-based services across the health, housing and community service sectors.

Commonwealth funding of $135 million over six years was approved in the 1992 Budget to assist in implementing the National Mental Health Policy to accelerate the process of reform in the mental health sector. Of this, approximately $107 million is available directly to the States and Territories, about $22 million will be allocated to innovative projects of national significance, and $5 million will be used to support a mental health research network.

The main objectives of the reform process include: expanding community-based mental health services; improving consumer rights; reforming mental health legislation; restructuring the mental health work force; and promoting mental health and community awareness of mental health problems and mental disorders.

Diet and nutrition

The Food and Nutrition Program aims to implement projects which address the strategies of the Food and Nutrition Policy. The goal of the Policy is 'to improve health and reduce the burden of diet-related early death, illness and disability among Australians'.

Key issues are social justice, the quality and sustainability of the food supply, and intersector involvement including governments, industry and the community. It aims at improving the knowledge and skills for Australians to choose a healthy diet, incorporating food and nutrition into the food system, improving the diet of people with special needs and establishing ongoing monitoring and surveillance.

Projects are being undertaken to develop nutrition curriculum material for all primary and secondary schools, supported by professional development for teachers; develop point-of-sale material to assist consumers to make healthy food choices in the retail environment; improve the nutritional quality of hotel meals; demonstrate the feasibility of reducing the level of fat from meat in the food supply; develop a video to assist older people to consume a healthy diet; local government to integrate food and nutrition issues into local planning and to improve the access and availability of nutritious food; develop resources to assist Aboriginal and Torres Strait Islander communities to address food and nutrition concerns, and to develop a national monitoring and surveillance strategy.

The need for national information about diet and nutrition has been recognised in many forums. This need is being addressed through the National Nutrition Survey, which is a joint project between the ABS and the Department of Human Services and Health, in association with other health agencies. The survey results will contribute to the development and monitoring of health goals and targets for nutrition and diet-related disease, as well as assist with the development of food policy and regulations associated with food safety and composition.

Drugs

The National Drug Strategy is a major national effort to minimise the harmful effects of drug use on Australian society and has been in operation since 1985.

The broad range of strategies implemented under the National Drug Strategy (formerly the National Campaign Against Drug Abuse) has resulted in a number of significant achievements, particularly in relation to tobacco and alcohol where between 1985 and 1991, the death rates per 100,000 population attributable to tobacco and alcohol each declined by 12 per cent.

Dental health

The 1993–94 Federal Budget included funding for the creation of a Commonwealth Dental Health Program. The aims of the Program are to reduce barriers, including economic, geographical and attitudinal barriers, to dental care for eligible persons; to ensure equitable access of eligible persons to appropriate dental services; to improve the availability of effective and efficient dental interventions with an emphasis on prevention and early management of dental problems; and to achieve high standards of program management, service delivery, monitoring and evaluation, and accountability.

The amount to be provided over the four years 1993–94 to 1996–97 will total $278 million. Additional funds are provided for administration. Total funds are paid to the States in the form of grants. Allocation of Commonwealth funds between States is linked to the numbers of Health Card holders and, from 1 July 1994, Seniors Health Card Holders in each State. These two groups represent a combined population of about 4.3 million persons.

Organ and tissue donation

Australia operates under an 'opting in' system for organ and tissue donation. In addition to the efforts of non-government organisations to increase the rate of donation, the Commonwealth and the States share the cost of the Australian Bone Marrow Donor Registry for recruiting and matching unrelated bone marrow donors, and the Australian Co-ordinating Committee on Organ Registries and Donation, an expert government committee established to develop and implement strategies to overcome the low donation rates in Australia — currently about 13 donations per million of population.

The Australian Coordinating Committee on Organ Registries and Donation was established in 1989 by the Australian Health Ministers Advisory Council. It has facilitated public and professional research surveys to identify reasons for the low donor rate in Australia. From the results of these surveys, strategies to increase the organ donor rate have been developed.

It aims to lift the Australian rate of organ donation to between 14 and 15 donors per million population by December 1996 through concerted public and professional education and information programs.

Family planning

Commonwealth funding is provided to approved non-government organisations to assist them to provide clinical and non-clinical services associated with family planning. Eligible activities may include medical practitioner and nursing services; training of health professionals in family planning techniques; counselling services for clients; preparation and dissemination of information and publicity; workshops; and research. The Commonwealth allocation for family planning in 1993–94 was $14 million.

HEALTH CARE FINANCING

Health expenditure by governments

Health expenditure by Australian Governments in 1992–93 was $34.3 billion or $1,954 per person. Health expenditure per person increased at an average annual rate of 2.4 per cent in real terms between 1984–85 and 1992–93. Health expenditure as a proportion of gross domestic product (GDP) was estimated to be 8.5 per cent in 1992–93.

The average growth rate in real health expenditure for the period after the introduction of Medicare from 1984–85 to 1992–93 was 3.9 per cent. The growth rate in the last four years of 2.9 per cent was lower than during the first four years of the period when it averaged 5.0 per cent (table 8.32).

Medicare financing

Details of the health financing arrangements under the Medicare program introduced by the Commonwealth Government in February 1984 are available in *Year Book Australia 1984*.

The Medicare levy was increased from 1 per cent to 1.25 per cent of taxable income on 1 December 1986 and increased to 1.4 per cent on 1 July 1993.

From 1 July 1993 no levy was payable by single people earning less than $12,662 per annum or by sole parents and married couples with combined incomes of less that $21,320 per annum with a further $2,100 per annum allowed for each dependent child.

8.32 TOTAL HEALTH EXPENDITURE BY GOVERNMENTS (CURRENT AND CONSTANT 1989–90 PRICES) AND RATE OF GROWTH

	Amount ($m)		*Rate of growth (%)*	
Year	*Current prices*	*Constant 1989–90 prices(a)*	*Current prices*	*Constant 1989–90 prices(a)*
1982–83	13,239	20,673		
1983–84	14,958	21,989	13.0	6.4
1984–85	16,546	22,862	10.6	4.0
1985–86	18,586	24,180	12.3	5.8
1986–87	21,115	25,341	13.6	4.8
1987–88	23,328	26,294	10.5	3.8
1988–89	26,154	27,748	12.1	5.5
1989–90	28,814	28,814	10.2	3.8
1990–91	31,132	29,358	8.0	1.9
1991–92(b)	32,758	30,020	5.2	2.3
1992–93(b)	34,338	31,068	4.8	3.5

(a) Health expenditure 1982–83 to 1992–93 deflated to constant prices using specific health deflators. (b) Based on preliminary AIHW and ABS estimates.

Source: Australian Institute of Health and Welfare, Health Expenditure Data Base.

Commonwealth government funding of hospitals

In 1992–93, hospital funding grants by the Commonwealth Government, totalling $3,930 million to the States and Territories, provided $3,839 million for hospital and related services; $45 million for incentives in the areas of post-acute and palliative care and day surgery procedures; and $46 million towards hospital care for AIDS patients. Additionally, $37 million was provided for hospital enhancement and provision of Magnetic Resonance Imaging services as well as $7.7 million for National Diagnostic Related Groups (Casemix) projects.

Household expenditure on medical care and health

The 1988–89 Household Expenditure Survey provides estimates of expenditure on medical care and health by households across Australia. Expenditure is net of any refunds and rebates received from Medicare, private health insurance companies, and employers.

Table 8.33 shows household expenditure on medical care and health expenses for 10 household types which represent simplified life cycle stages. (The 10 types together represented about 70% of all households in Australia in 1988–89.)

As can be seen, household expenditure on medical care and health expenses varies according to the life cycle stage of a household. These changes are associated with changes in household size, the amount of income earned and the age of household members. For the first group, which consists of single persons under 35 years, for whom household size and income is relatively low, expenditure is the lowest ($9.30 per week). As the cycle progresses and household size and income peak at the stage when the household consists of a married couple with dependent and non-dependent children, health expenditure also peaks ($33.83 per week). By the time a household comprises of one person only, aged 65 and over, expenditure has decreased to $11.70 per week.

8.33 HOUSEHOLD EXPENDITURE ON MEDICAL CARE AND HEALTH EXPENSES FOR SELECTED HOUSEHOLD TYPES, 1988–89

	Single person only, under 35	Married couple, husband and wife only, reference person under 35	Married with dependent children only: Eldest child under 5	Married with dependent children only: Eldest child 5 to 14	Married with dependent children only: Eldest child 15 to 20	Married couple with: Dependent and non-dependent children only	Married couple with: Non-dependent children only	Married couple, husband and wife only, reference person 55 to 64	Married couple, husband and wife only, reference person 65 and over	Single person only, 65 and over
Average weekly household income ($)	439.80	854.34	647.85	764.35	874.53	1,100.06	1,004.75	533.79	356.93	171.72
Average number of persons in household	1.00	2.00	3.47	4.34	4.32	4.74	3.36	2.00	2.00	1.00
	— Average weekly household expenditure ($)(a)(b) —									
Accident and health insurance										
Hospital, medical and dental insurance	3.14	8.77	10.41	10.87	13.14	14.09	14.72	11.47	7.85	3.14
Ambulance insurance (separate insurance)	0.12	0.19	0.18	0.23	0.17	0.25	0.32	0.28	0.21	0.14
Sickness and personal accident insurance*	0.87	1.30	0.87	1.06	0.93	0.98	1.01	0.58	0.06	0.04
Total	*4.13*	*10.26*	*11.46*	*12.15*	*14.24*	*15.32*	*16.06*	*12.33*	*8.12*	*3.33*
Practitioners fees										
General practitioner doctor's fees*	0.44	0.80	1.42	1.13	1.26	1.33	0.86	0.84	0.49	0.08
Specialist doctor's fees*	0.53	1.96	1.77	1.68	1.92	1.89	1.85	1.21	1.35	0.55
Dental charges*	0.80	2.23	2.42	4.56	5.39	4.67	4.01	2.25	1.40	0.77
Optician's fees (including spectacles)*	0.25	0.68	0.60	0.77	1.71	2.55	1.99	1.96	1.73	0.66
Practitioner's fees, n.e.c.*	0.40	0.73	0.86	0.87	1.06	0.97	1.06	0.49	0.48	0.58
Total	*2.42*	*6.39*	*7.07*	*9.02*	*11.34*	*11.40*	*9.76*	*6.76*	*5.45*	*2.65*
Medicines, pharmaceutical products, therapeutic appliances and equipment	1.70	3.12	5.76	4.64	5.93	6.22	5.85	5.04	4.45	4.15
Other health charges**	n.p.	0.59	0.76	0.52	1.40	0.90	0.74	0.40	0.59	1.57
Total medical care and health expenses	**9.30**	**20.36**	**25.04**	**26.34**	**32.91**	**33.83**	**32.41**	**24.53**	**18.62**	**11.70**

(a) The average obtained when the total estimated expenditure for a particular expenditure item is divided by the estimated number of households within the scope of the survey in the relevant category of household type. (b) Net of refunds and rebates.

* At least one of the estimates in this row has a relative standard error greater than 25 per cent. ** All of the estimates in this row have a relative standard error greater than 25 per cent.

Source: 1988–89 Household Expenditure Survey: Household Characteristics, Australia (6531.0), unpublished ABS data.

Pharmaceutical Benefits Scheme

The Scheme was established under the provisions of the *National Health Act 1953*. It provides to the Australian community a large range of drugs and medicinal preparations prescribed by medical and dental practitioners. The medicines can be dispensed by an approved pharmacist upon presentation of a prescription.

Depending on the circumstances, the patient may pay as little as $2.60 and need pay no more than $16.00 for any prescription listed on the Pharmaceutical Benefits Schedule.

The safety net limit applies according to the patient's circumstances, but for most families it is $400 each calendar year. (This figure is adjusted for inflation at the beginning of each calendar year.) Once the patient or his/her immediate family has spent $400 on PBS medicines in a year, they need only pay $2.60 for additional PBS items for the rest of the calendar year.

If the patient holds one of the special concession cards listed earlier, the safety net limit is $135.20 per calendar year (similarly adjusted for inflation). When the patient has spent $135.20 on PBS medicines for themselves and/or his/her dependants they can get further PBS medicines free for the rest of the year. The provisions under the Scheme for pensioner and other concession card holders are described in the chapter, Social Security and Welfare.

In 1992–93 the total cost of the Scheme, including patient contribution of prescriptions processed for payment, was $1,777 million. This figure does not include the cost of drugs supplied through special arrangements, such as the Royal Flying Doctor Services, methadone maintenance programs and hormone treatment programs.

Health insurance coverage

There has been a steady decline in the proportion of the population covered by private health insurance from 53.1 per cent in March 1986 to 47.8 per cent in 1992 (table 8.34).

8.34 NUMBER OF PERSONS WITH PRIVATE HEALTH INSURANCE

	March 1986	*June 1988*	*June 1990*	*June 1992*
		— '000 —		
With private health insurance	8,208.1	8,663.8	8,916.7	8,241.4
Without private health insurance	7,170.0	7,891.3	8,220.4	8,995.3
Total(a)	**15,457.2**	**16,573.3**	**17,160.2**	**17,259.0**
		— per cent —		
With private health insurance	53.1	52.3	52.0	47.8
Without private health insurance	46.4	47.6	47.9	52.1
Total(a)	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes persons for whom details were unknown.
Source: Health Insurance Survey, Australia (4335.0).

Results of the June 1992 Health Insurance Survey show that 44.1 per cent of contributor units were covered by private health insurance. 31.2 per cent had both hospital and ancillary cover, a further 8.5 per cent had hospital cover only and 3.6 per cent had ancillary cover only. However, health insurance coverage and what was covered fluctuated across the different contributor units, ages and income (table 8.35).

Units composed of contributor, partner and dependent children were the most likely contributor unit type to be covered by private health insurance (55.7%), while less than one in four (23.3%) single parent units (contributor and dependent children) were covered.

Units with middle aged contributors were more likely to be covered than those with contributors of other ages. Of units where the contributor was aged 45 to 64 years, 54.9 per cent were covered, compared with 32.9 per cent of those with contributors aged under 24 years and 37.5 per cent of those with contributors more than 74 years of age.

Contributor units in the lowest income group (gross weekly income less than $160) were the least likely to be covered by private health insurance (22.1%). The higher the income of the contributor unit the more likely it was to be covered. Of those contributor units with a gross weekly income of over $800, 72.6 per cent were covered by private health insurance.

8.35 HEALTH INSURANCE COVERAGE OF CONTRIBUTOR UNITS, JUNE 1992(a)(b)
(per cent)

	With private health insurance					*Without private health insurance*		
	Hospital and ancillary	*Hospital only*	*Ancillary only*	*Type not known*	*Total*		*Total*	*'000*
Composition of contributor unit								
Contributor only	25.7	7.8	3.2	1.2	37.9	62.1	100.0	4,305.3
Contributor & dependent children	14.9	3.3	4.2	0.9	23.3	76.7	100.0	465.7
Contributor and partner only(c)	37.1	11.5	2.6	0.4	51.6	48.4	100.0	1,776.4
Contributor, partner & dependent children(c)	41.7	8.4	5.3	0.3	55.7	44.3	100.0	2,007.5
Age of contributor (years)								
15–24	23.5	4.6	3.6	1.2	32.9	67.1	100.0	1,577.7
25–44	32.3	6.9	4.9	0.7	44.8	55.3	100.0	3,383.3
45–64	40.6	10.2	3.4	0.7	54.9	45.1	100.0	2,159.5
65–74	24.5	14.0	1.3	0.5	40.3	59.7	100.0	873.0
>74	20.9	14.5	0.8	1.2	37.4	62.5	100.0	561.2
Gross weekly income ($)								
Less than 160(d)	13.1	6.0	1.8	1.1	22.0	77.9	100.0	1,316.8
160–239	15.5	7.9	2.2	0.6	26.2	73.9	100.0	835.9
240–399	19.3	8.4	3.1	0.6	31.4	68.6	100.0	1,843.1
400–599	33.3	8.6	4.6	0.6	47.1	52.9	100.0	1,640.2
600–799	42.7	8.6	5.6	0.8	57.7	42.4	100.0	898.6
800 or more	57.2	10.1	4.7	0.7	72.7	27.4	100.0	1,611.6
Not known	39.2	11.4	2.2	3.1	55.9	44.1	100.0	408.5
Total	**31.2**	**8.5**	**3.6**	**0.8**	**44.1**	**55.9**	**100.0**	
('000)	**2,670.2**	**727.6**	**309.7**	**69.3**	**3,776.8**	**4,777.9**		**8,554.7**

(a) The term 'contributor unit' applies to families and the individual members or groups of families as defined by their private health insurance arrangements. (b) For couples, the male partner has been designated as the contributor. (c) Includes de facto relationships. (d) Includes units for which a source of income was not reported.

Source: Health Insurance Survey, Australia (4335.0), unpublished ABS data.

HEALTH-RELATED ORGANISATIONS

International

World Health Organization. The WHO is a specialised agency of the United Nations having as its objective the attainment by all peoples of the highest level of health. Australia is assigned to the Western Pacific Region, the headquarters of which is at Manila, and is represented annually at both the World Health Assembly in Geneva and the Regional Committee Meeting in Manila. Australia's contribution to WHO for 1994 was $8,593,791.

International Agency for Research on Cancer. The IARC was established in 1965 within the framework of the WHO. The headquarters of the agency are located in Lyons, France. The objectives and functions of the agency are to provide for planning, promoting and developing research in all phases of the causation, treatment and prevention of cancer. Australia's contribution to the IARC for 1993 was $1,209,323.

Australian Government

Australian Health Ministers' Conference and the Australian Health Ministers' Advisory Council. The Australian Health Ministers' Conference (AHMC) and its advisory body, the Australian Health Ministers' Advisory Council (AHMAC) provide a mechanism for the Commonwealth Government, State and Territory Governments to discuss matters of mutual interest concerning health policy, services and programs. The AHMC comprises the Commonwealth, State, Territory and New Zealand Health Ministers. Neither the Conference nor the Council has statutory powers, and decisions are reached on the basis of consensus. Their constitution rests on the formal agreement by the Commonwealth Government, and State and Territory Governments of the membership and functions.

In April 1993, Australia's Health Ministers announced the development of a National Health Policy, a major joint initiative of States/Territories and the Commonwealth.

The framework for development of the National Health Policy has been the implementation of national health goals and targets. Four focus areas were selected for development of strategic action plans — cardiovascular disease, mental health, injury and cancers.

Department of Human Services and Health. The Department is primarily a specialist body concerned with the planning and development of a range of health and welfare policies, including the national health insurance system, Medicare.

The Department is responsible for:

- the promotion of good health and reduction of illness through regulatory, promotional and funding programs;
- the provision of care and services appropriate to their needs for aged people and people with disabilities;
- ensuring that all Australians have access to necessary health services at reasonable cost through financial arrangements with the States and Territories, the direct provision of some health services and through appropriate health insurance;
- the provision of housing assistance including crisis and supported housing;
- assisting local governments to improve the well being of local communities; and
- improving the quality of life and the choices available for families and children at home, at work and in the general community.

Australian Institute of Health and Welfare. The Australian Institute of Health and Welfare (AIHW), is a statutory authority within the Commonwealth Human Services and Health portfolio. The Institute's mission is to inform community discussion and to support public policy-making on health and welfare issues by coordinating, developing, analysing and disseminating national statistics on the health of Australians and their health and welfare services, and by undertaking and supporting related research and analysis.

As part of its national role, the AIHW also provides support to the States and Territories in the health and welfare areas, primarily through the Australian Health Ministers' Advisory Council, the Standing Committee of Social Welfare Administrators and State and Territory housing authorities.

The Institute's major divisions are located in Canberra and its National Injury Surveillance Unit is located in Adelaide. The Institute also supports three external units: the AIHW National Perinatal Statistics Unit, located in Sydney; the AIHW Dental Statistics and Research Unit, located in Adelaide; and the AIHW National Reference Centre for Classification in Health, located in Brisbane.

National Health and Medical Research Council. The NHRMC advises the Commonwealth Government and State Governments on matters of public health administration and the development of appropriate standards and guidelines. It also advises the Commonwealth Government and State Governments on matters concerning the health of the community. The objective of the

NHMRC is to advise the Australian community on the achievement and maintenance of the highest practicable standards of individual and public health and to foster research in the interests of improving those standards. The NHMRC funds medical and public health research in Australia and supports many of the medical advances made by Australians.

The Council has nominees of State and Territory health authorities, professional and scientific colleges and associations, unions, universities, business, consumer groups, welfare organisations, the Commonwealth administration, including the Aboriginal and Torres Strait Islander Commission, and conservation groups.

Private Health Insurance Administration Council is a statutory authority that was established in June 1989. The main powers and functions of the Council, which are set out in section 82G of the National Health Act, are as follow:

- to monitor the financial performance of health funds to ensure that the statutory reserve requirements are being met;
- to administer the reinsurance account arrangements;
- to collect and disseminate financial and statistical data, including tabling of an annual report to Parliament on the operations of health funds;
- to establish uniform reporting standards for funds;
- to impose levies to cover the operating costs of the Council and any unpaid claims of a collapsed fund; and
- to receive applications for the review of acute care certificates and application fees, and administer the funding arrangements for the operation of the Acute Care Advisory Committees.

PHIAC disseminates statistics through an annual report and through quarterly reports that are made available to health funds, the Federal Government and State Governments and other users with an interest in health insurance. The statistics are compiled from registered health benefits organisations' quarterly returns and provide data on membership and coverage, bed days, and benefit paid.

As at 30 June 1993, 39.4 per cent of the Australian population held private health insurance hospital cover. This is the lowest level recorded under the current arrangements that began with the introduction of Medicare in 1984. The trend of declining coverage has been evident for several years.

Australian Quarantine and Inspection Service. The Australian Quarantine and Inspection Service (AQIS) carries significant health-related responsibilities in export inspection, quarantine administration and imported food.

Export inspection activities are derived from the *Export Control Act 1982*, which is the principal legislation for export activities, and subordinate legislation comprising regulations enabled under this Act and Ministerial Orders made under these regulations.

Inspection covers meat, fish, dairy products, processed foods and vegetables, dried fruit, fresh fruit and vegetables, grains, horticultural and plant products, live animals, and some animal products. The aims of the inspectorate are to assist the export of Australian agricultural, forestry and fishery products by providing information, services and facilities that enable exporters to comply with the animal and plant health requirements of importing countries. It also aims to provide effective inspection services for food and other products under AQIS control to ensure they are safe and wholesome, are informatively described, meet international requirements and facilitate trade.

In 1992–93 AQIS provided inspection for over $3.3 billion worth of export meat to over eighty destinations. Inspection services are also provided by AQIS on behalf of State Governments in New South Wales, Victoria, South Australia, the Northern Territory and the Australian Capital Territory for meat produced for domestic consumption.

A range of non-prescribed goods are also inspected and certified on an ad hoc basis where overseas governments require this as a condition of entry of Australian goods.

AQIS quarantine activities derive from the *Quarantine Act 1908* and the *Biological Control Act 1984*. Programs are designed to address the risk of introduction of diseases and pests while enabling the importation of cleared agricultural products. Animal and plant health requirements are negotiated with exporting countries involving the latest technology for assurance of quarantine safety.

Quarantine activities are contracted to State Departments of Agriculture on the Commonwealth's behalf, and include both monitoring and surveillance elements. Monitoring covers incoming passengers, live animals, cargo and mail as well as incoming ships and aircraft. AQIS provided quarantine supervision for $49 billion worth of imports, which involved 644,000 containers, 200 million postal articles and 5.3 million passengers and crew from 26,000 international flights. Imports of biological materials for research, diagnosis and industry are also controlled.

The Australian Nature Conservation Agency coordinates and administers with AQIS the introduction and release of biological control agents aimed at combating existing pest and disease problems in Australia under the Biological Control Act.

Quarantine responsibilities include the administration of animal quarantine stations at Sydney, Melbourne, Adelaide and Perth and a high security quarantine station on the Cocos (Keeling) Islands, and the supervision of a range of plant quarantine stations and private facilities for both animal and plant quarantine.

Consignments of high and medium risk imported foods are also subject to food inspection under the provisions of the *Imported Foods Act of 1993*. In 1992–93 AQIS sampled over 3,700 consignments of risk-categorised foods with 230 failing to meet Australian food safety standards giving an overall failure rate of over six per cent. The major problems with imported food have been microbiological problems in cooked prawns and other crustaceans, molluscs, high aflatoxin levels in peanuts and heavy metals in fish. Of particular concern has been the incidence of failure in some canned foods, notably canned mushrooms. Where an overseas government's inspections system can be shown to provide equivalent safety assurances to Australia's food inspection system, food accompanied by that agency's certification is allowed entry without additional routine testing on arrival. Three such agreements were finalised in 1992–93 making a total of six currently operating.

AQIS has significant international involvement in the development of international food safety standards and related aspects of hygiene and manufacturing practice.

The National Food Authority. The National Food Authority is a statutory authority established by the *National Food Authority Act 1991*. Its primary function is to develop, vary and review standards for food available in Australia.

The objectives of the Authority in relation to food standards are:

- to protect public health and safety;
- to provide consumers with information;
- to promote trade and commerce; and
- to promote the alignment of Australian food standards with international food standards.

The Authority coordinates on a national basis food recalls, the surveillance and monitoring of the food supply and food safety education programs. It also develops assessment policies for the inspection of imported food, conducts research and surveys and develops codes of practice for the food industry.

The National Occupational Health and Safety Commission. The National Occupational Health and Safety Commission (Worksafe Australia) is a tripartite body comprising representatives of the peak employee and employer bodies — the Australian Council of Trade Unions and the Australian Chambers of Commerce and Industry — as well as the Commonwealth Government, State and Territory Governments. The mission of the National Commission is to lead national efforts to provide healthy and safe working environments, and to reduce the incidence and severity of occupational injury and disease.

Worksafe Australia has primary Commonwealth responsibility for occupational health and safety statistics.

A report relating to workers' compensation cases reported in 1991–92 involving five days or more off work, based on information supplied by a substantial proportion of Commonwealth, State and Territory agencies which administer worker's compensation systems, contained the following main findings:

- Of all the cases included on the database, 76 per cent involved males and 24 per cent females.
- The incidence rate for males for all industries was 32 cases per 1,000 wage and salary earner; for females, 13 per 1,000 wage and salary earners; and for persons, 24 per 1,000 wage and salary earners.
- The frequency rate for males for all industries was 19 cases per million hours worked; for females, 10 per million hours worked; and for persons, 16 per million hours worked.
- Around one in forty workers sustained a work related injury or disease in 1991–92 which required at least one week off work.
- The average duration was nearly eight weeks per injury or disease case.
- In 1992–93 the total estimated cost of workers' compensation claims for all of Australia was $4.8 billion. This direct cost alone represented 1.2 per cent of non-farm GDP, and 2.4 per cent of non-farm wages, salaries and supplements.

Therapeutic Goods Administration. The Therapeutic Goods Administration (TGA) is an organisation within the Department of Human Services and Health. Its role is to undertake activities with the goal of ensuring that therapeutic goods available in Australia are safe, effective and of high quality. Therapeutic goods include prescription drugs, non-prescription medicines, traditional remedies and all types of medical equipment (therapeutic devices).

TGA monitors the quality of therapeutic goods available in Australia by sampling products for testing and investigating problems and deficiencies. The various laboratories analyse therapeutic goods for acceptable quality and carry out developmental research associated with new or improved testing methods and development of standards.

In 1992–93 tests were performed on 1,013 selected products for human use to check compliance with official standards. A total of 217 of these products failed to comply. Investigations were also conducted on reported drug (124) and device (961) problems. These investigations resulted in the recall of 4 drug products and 24 device products.

Australian Radiation Laboratory. The Laboratory is concerned with the development of national policy relating to radiation health and:

- formulates policy by developing codes of practice and by undertaking other regulatory, compliance, surveillance and advisory responsibilities at the national level with respect to public and occupational health aspects of radiation;
- maintains national standards of radiation exposure and radioactivity;
- provides advice in relation to the quality and use of radio-pharmaceutical substances; and
- in support of the above activities, undertakes research and development in the fields of ionising and non-ionising radiations which have implications for public and occupational health.

Cancer registries. Cancer is a major cause of morbidity and mortality. Each year in Australia about 55,000 new cases of cancer are diagnosed and 27,500 people die from cancer. This equates to an average risk of 1 in 3 men and 1 in 4 women being directly affected by cancer in their lifetime.

Cancer is a notifiable disease in most States and Territories and is the only major disease category for which an almost complete coverage of incidence data is available. It is also the only major cause of death in Australia that is continuing to increase. If this situation is to be changed, good information on the occurrence of different types of cancer, on characteristics of patients, and on survival and mortality is essential to provide a sound basis for epidemiological studies and the initiation of prevention and treatment programs.

The only effective method of obtaining cancer incidence data is through universal registration of cancer cases. Cancer incidence data is available only from cancer registries which operate in each State and Territory except the Australian Capital Territory, where this is undertaken, at present, by the New South Wales registry. These registries are supported by a mix of State and Territory government and anti-cancer council funding.

The National Cancer Statistics Clearing House operated jointly by the Australian Institute of Health and Welfare and the Australasian Association of Cancer Registries compiles data produced by individual State and Territory registries on an ongoing basis and produces national statistics on the incidence of cancer.

Communicable Diseases Network — Australia. The Communicable Diseases Network — Australia was established in 1990 to enhance the national capability in communicable disease control. Surveillance of communicable diseases is conducted using data derived from four major sources: notifiable diseases surveillance carried out by States and Territories; the Communicable Diseases Intelligence laboratory reporting schemes; reports from sentinel general practices (Australian Sentinel Practice Research Network of the RACGP); and from specialised schemes such as the Central Malaria Register.

Australian non-government

National Heart Foundation of Australia. The Foundation is a voluntary organisation, supported almost entirely by public donations, established with the objective of reducing the toll of heart disease in Australia. It does this by programs sponsoring research in cardiovascular disease, community and professional education directed to prevention, treatment and rehabilitation of heart disease and community service programs including rehabilitation of heart patients, risk assessment clinics and surveys, and documentation of various aspects of heart disease and treatment of heart disease in Australia.

The Foundation's income in 1992 was $25.9 million of which $16.4 million was from public donations and bequests. Since the inception of the Foundation, research has been a major function. With increasing opportunities for prevention and control of heart disease, the Foundation's education and community service activities are increasing significantly. In 1992 the expenditure on research, education and community service totalled $18.3 million.

The Australian Red Cross runs the Blood Transfusion Service in Australia, based on donations of voluntary non-remunerated donors. The service is funded by the Commonwealth Government and State Governments (98%) and Red Cross (2%) approximately. Cost of providing the service in 1992–93 was $86,320,187.

Plasma products are manufactured by Commonwealth Serum Laboratories from plasma from Red Cross blood donors, and distributed by Red Cross.

BIBLIOGRAPHY

ABS Publications

Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)

Apparent Consumption of Selected Foodstuffs, Australia, Preliminary (4315.0)

Australian Demographic Statistics (3101.0)

Births, Australia (3301.0)

Causes of Death, Australia (3303.0)

Characteristics of In-Patients of Health Institutions, Australia, Census of Population and Housing (4347.0)

Characteristics of Persons Employed in Health Occupations, Australia, Census of Population and Housing (4346.0)

Deaths, Australia (3302.0)

Disability, Ageing and Carers: Preliminary Results (4430.0)

Disability and Handicap, Australia (4120.0)

BIBLIOGRAPHY — *continued*

Disabled and Aged Persons, Australia, Preliminary Results (4118.0)

Health Insurance Survey, Australia (4335.0)

Inventory of Australian Health Data Collections (4320.0)

National Health Survey: Accidents, 1989–90 (4384.0)

National Health Survey: Alcohol Consumption, 1989–90 (4381.0)

National Health Survey: Asthma and Other Respiratory Conditions, 1989–90 (4373.0)

National Health Survey: Cardiovascular and Related Conditions, 1989–90 (4372.0)

National Health Survey: Children's Immunisation, 1989–90 (4379.0)

National Health Survey: Consequences of Illness, 1989–90 (4367.0)

National Health Survey: Consultations with Health Professionals, 1989–90 (4376.0)

National Health Survey: Diabetes, 1989–90 (4371.0)

National Health Survey: Exercise, 1989–90 (4383.0)

National Health Survey: Health Related Actions, 1989–90 (4375.0)

National Health Survey: Health Risk Factors, 1989–90 (4380.0)

National Health Survey: Health Status Indicators, 1989–90 (4370.0)

National Health Survey: Lifestyle and Health, 1989–90 (4366.0)

National Health Survey: Musculoskeletal Conditions, 1989–90 (4374.0)

National Health Survey: Screening for Breast and Cervical Cancer, 1989–90 (4378.0)

National Health Survey: Smoking, 1989–90 (4382.0)

National Health Survey: Summary of Results, 1989–90 (4364.0)

National Health Survey: Use of Medications, 1989–90 (4377.0)

National Health Survey: Users' Guide, 1989–90 (4363.0)

Perinatal Deaths, Australia (3304.0)

Private Hospitals, Australia (4390.0)

Road Traffic Accidents Involving Fatalities, Australia (9401.0)

Survey of Infant Sleeping Positions, Australia (4386.0)

Women's Health, 1989–90 (4365.0)

Other Publications

ADAMS, T., Report of the Evaluation of the National HIV/AIDS Strategy: Report to the Minister for Health, Housing and Community Services and the Intergovernmental Committee on AIDS, National Evaluation Steering Committee, Canberra, 1992

ALI, R., MILLER, M., CORMACK, S., Eds. Future directions for alcohol and other drug treatment in Australia. AGPS. Canberra, 1992

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. Annual Report. AGPS. Canberra

BIBLIOGRAPHY — *continued*

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. Australia — Communicable Diseases Intelligence. AGPS, Canberra

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. The Australian Health Scheme: an overview. Canberra, 1992

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES, HIV/AIDS Research Register, Canberra, 1993

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. The National AIDS Campaign 1986 to 1992, Canberra, 1993

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. National Health Strategy Unit. The Australian Health Jigsaw: integration of health care delivery. Melbourne, 1991

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. National Health Strategy Unit. Michael Reed and Shane Solomon. Improving Australia's rural health and aged care services. Melbourne, 1992

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. Statistics on Drug Abuse in Australia, 1992, Canberra

AUSTRALIA. DEPT OF HEALTH, HOUSING AND COMMUNITY SERVICES. Towards Health for All and Health Promotion: Evaluation of the National Better Health Program, Canberra, 1993

AUSTRALIA. DEPT OF HEALTH, HOUSING, LOCAL GOVERNMENT AND COMMUNITY SERVICES. Australian Ageing Research Directory, 4th Edition, Canberra, 1993

AUSTRALIAN HEALTH MINISTERS. National Mental Health Policy. AGPS. Canberra, 1992

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE. Annual Report, AGPS, Canberra

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE. Australia's Health 1992. The third biennial report of the Australian Institute of Health and Welfare, AGPS, Canberra

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE. Health Expenditure Bulletin No 9

COOK, M., SOLON, R., COOPER-STANBURY, M., and SARDANA, B., 1994 Hospital Utilisation and Costs Study, 1991–92 Volume 2, AIHW, Canberra

COOPER-STANBURY, M., and SOLON, R., 1994. Hospital Utilisation and Costs Study, 1991–92 Volume 1, AIHW, Canberra

DEAN, M., National Women's Health Program: Evaluation and Future Directions, Canberra, 1993

D'ESPAIGNET, E., VAN OMMEREN, M., TAYLOR, F., BRISCOE, N. and PENTONY, P. Trends in Australian Mortality 1921–1988, Mortality series No. 1, 1991

DRUG OFFENSIVE (the), National Drug Strategic Plan 1993–97, National Drug Strategy Committee for the Ministerial Council on Drug Strategy, Canberra, 1993

EDWARD-BERT, P., CALDER, I., MAYNARD, E., National Review of Public Exposure to Lead in Australia, South Australian Health Commission, Adelaide, 1993

ENGLISH, B., AND THOMSON, N., A bibliography of drug use and related problems among Australian Aborigines and Torres Strait Islanders. AGPS. Canberra, 1992

GILLETT, S., and SOLON, R., 1992. Hospital Utilisation and Costs Study, 1989–90 Volume 1, AIHW, Canberra

BIBLIOGRAPHY — *continued*

GLOVER, J., AND WOOLLACOTT, T., A social health atlas of Australia. South Australian Health Commission. Adelaide, 1992

HIRSCH, N., and HAILEY, D., 1992. Minimal Access Surgery, AIHW, Canberra

McCLELLAND, A., Spending on health: the distribution of direct payments for health and medical services. Australia. Dept of Health, Housing and Community Services. National Health Strategy Unit. Melbourne, 1991

MATHERS, C., and HARVEY, R., 1988. Hospital Utilisation and Costs Study, Volume 1: Commentary, AIH, Canberra

NATIONAL CENTRE FOR EPIDEMIOLOGY AND POPULATION HEALTH. Improving Australia's health: the role of primary health care: summary of the final report of the review of the role of primary health care in health promotion in Australia. Australian National University. Canberra, 1992

NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH. Australian HIV Surveillance Report, Vol. 9 No. 4, October 1993

NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL (AUSTRALIA). Health needs of homeless youth: a summary of the key health issues for those developing policies or providing services for homeless young people. AGPS. Canberra, 1992

National priorities for drug and alcohol research prepared for the Department of Health, Housing and Community Services for use in association with the National Campaign Against Drug Abuse. AGPS. Canberra, 1992

NUTBEAM, D., WISE, M., BAUMAN, A., HARRIS, E., LEEDER, S., Goals and Targets for Australia's Health in the Year 2000 and Beyond. Report prepared for the Commonwealth Department of Health, Housing and Community Services, Department of Public Health, University of Sydney, 1993

OMMEREN, M. V., and MERTON, C., Inventory of Australian health data collections which contain information on ethnicity. AGPS. Canberra, 1992

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, 1993. OECD Health Systems Facts and Trends 1960–91, OECD, Paris

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Nine

Education

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COMMONWEALTH AND STATE GOVERNMENT RESPONSIBILITIES IN EDUCATION

The Governments of the six Australian States and the two Territories have the major responsibility for education including the administration and substantial funding of primary, secondary and technical and further education. The Commonwealth also plays a significant role in education policy, programs and funding. The total government outlay of expenditure on education in 1992–93 was $21,465 million (*see* later section), which represented 5.3 per cent of Gross Domestic Product.

The State Governments administer their own systems of primary, secondary and technical and further education through government departments and agencies responsible to State Ministers. Detailed information on the education systems of the States may be found in the respective State *Year Books*.

The Commonwealth Government has direct responsibility for education in external Territories (Norfolk Island, Christmas Island and the Cocos (Keeling) Islands) under the Minister for the Environment, Sport and Territories. The Commonwealth Government also has special responsibilities for Aborigines and for migrants, as well as the power to provide assistance for students. Moreover, the Commonwealth Government is responsible for international relations in education. The education responsibilities entail grants to schools; student assistance; overseas students; awards and exchanges; tertiary education; language policy; educational research and statistics; publications; Aboriginal education; multicultural education; Asian and women's studies; and education and the arts.

The Australian Constitution empowers the Commonwealth Government to make grants to the States and to place conditions upon such grants. The Commonwealth Government is principally responsible for the funding of higher education institutions, and provides supplementary funding for schools, and technical and further education. Apart from its significant financial role the Commonwealth is involved in promoting national consistency and coherence in the provision of education across Australia. Further information on Commonwealth government activities is contained later in this chapter.

PRESCHOOL EDUCATION

All States and Territories have a policy of making preschool education available universally for children in the years prior to school entry. A majority of the States and Territories have made considerable progress towards this goal. Most preschools are conducted on a sessional basis (that is, sessions of two to three hours for two to five days per week). Preschool programs generally favour the free play approach with emphasis on children's social and emotional development through creative activities. Parents often contribute by assisting at some sessions or by the purchase of play materials and educational resources. Attendance fees are not usually charged in those States where preschools are government-run, but in others fees may be payable to private or voluntary organisations.

PRIMARY AND SECONDARY EDUCATION

School attendance is compulsory throughout Australia between the ages of 6 and 15 years (16 years in Tasmania). In 1993 the number of full-time students attending school totalled 3,098,375, comprising 2,228,056 (72%) in government schools and 870,319 (28%) in non-government schools.

Each State or Territory has its own specific requirements. The majority of children commence primary school at about five years of age. Primary schooling generally begins with a preparatory or kindergarten year, followed by twelve grades to complete a full secondary course of study. While the final two years of schooling generally fall outside the compulsory stage of education, in 1993 87.4 per cent of students remained at school until Year 11 and 77 per cent remained until Year 12.

School organisation and operation

Primary schooling provides a general elementary program lasting for seven or eight years until Years 6 or 7. Students enter secondary schools at Year 7 in some State systems and at Year 8 in others. Secondary education is generally comprehensive and coeducational. Most students attend schools reasonably near to their homes. Usually primary and secondary schools are separate institutions, but in some country areas there are area or central schools which provide both levels of schooling. Non-government schools follow a similar pattern, but a significant though declining proportion are single sex institutions. In Tasmania and the Australian Capital Territory, attendance for the final two years of government schooling is at separate secondary colleges.

Generally, schools in Australia have a considerable degree of autonomy. Most State departments have established regional administrations which are responsible for matters such as planning school buildings and deploying staff while a central curriculum unit provides general guidelines on course planning. In general, individual schools determine teaching and learning approaches within the guidelines and offer options within resources available and the attitudes and interests of students. Some systems encourage school-based curriculum development and, in the case of Queensland and the Australian Capital Territory, school-based assessment in place of external examinations. In Victoria a combination of school-based assessment and external exams culminate in the Victorian Certificate of Education. While schools usually have a parents' association, there has been encouragement of greater community participation in general decision making at school level in some systems through parent representation on school councils and boards.

Specialist services and programs provided in schools include educational or vocational counselling by a permanent or visiting teacher; English as a Second Language program by specialist teachers, especially in schools with significant numbers of children from non-English speaking backgrounds (*see* further information in the chapter, Culture and Leisure); special programs designed to assist Aboriginal school children (including the widespread use of Aboriginal teachers' aides and bilingual education programs in communities where the children's first language is an Aboriginal language); a variety of programs for gifted and talented children; and remedial assistance for children with learning difficulties. The English as a Second Language and the School Language Program are outlined in the chapter, Culture and Leisure.

In primary education the main emphasis is on the development of basic language and literacy skills, simple arithmetic, moral and social education, health training and some creative activities.

In the upper primary years there is development of the skills learned in the earlier years. English, mathematics, social studies, science, music, art and craft, physical education and health are studied. There are also optional subjects such as religious instruction and, in some schools, foreign and community languages and instrumental music.

Students in Australian primary schools usually have only one teacher for all subjects, and are promoted each year on the basis of completing the previous year, rather than on achievement. In schools where open plan learning styles have been adopted, the method of team teaching (more than one teacher to a class) and multi-age grouping of students is often practised.

In secondary education, in some systems, the first one or two years of secondary school consist of a general program which is followed by all students, although there may be some electives. In later years a basic core of subjects is retained with students being able to select additional optional subjects. In other systems, students select options from the beginning of secondary school.

The core subjects in all systems are English, mathematics, science and, usually, a humanities or social science subject. Optional subjects may include, for example, a foreign language, a further humanities or social science subject, commerce, art, crafts, music, home economics, a manual arts subject, agriculture, physical education or health education. Some schools offer optional courses in subjects such as consumer education, conversational foreign languages, word processing, secretarial studies, road safety, drama and leisure-time activities.

In senior secondary years, a wider range of options is available in the larger schools and there is an increasing trend towards encouraging individual schools to develop courses suited to the needs and interests of their students, subject to accreditation and moderation procedures.

Students in Australian secondary schools generally have different teachers for each separate subject area, though, like primary schools, variations may occur where open planned or more flexible methods have been adopted. Promotion is, again, generally chronological, but students may be grouped according to ability after an initial period in unstreamed classes.

Examinations and assessment at each level are carried out by individual schools except Year 12 in the systems which have retained external examinations at Year 12 level. Students attaining the minimum school leaving age may leave school and seek employment, or enrol in a vocationally oriented course in a TAFE institution or a private business college. For many TAFE courses, completion of Year 10 of secondary school is a minimum entry requirement. For those continuing to the end of secondary school (Year 12), opportunities for further study are available in TAFE institutions, higher education institutions and other post-school institutions.

Students' eligibility for entry to higher education institutions is assessed during, or at the end of, the final two years of secondary schooling. Five States and the Northern Territory use different combinations of school assessment and public examinations. In Queensland and the Australian Capital Territory eligibility to enter higher education is determined from moderated and standardised school assessments. Several education systems are currently reviewing their senior secondary school assessment procedures.

Number of schools, students and teaching staff

Of the 9,865 schools operating in Australia in 1993, 7,366 (74.7%) were government schools operated by the State Directors-General of Education (or equivalent) and 2,499 (25.3%) were non-government schools.

In July 1993 the number of full-time students attending primary and secondary schools totalled 3,098,375, comprising 2,228,056 (71.9%) in government schools and 870,319 (28.1%) in non-government schools.

The number of full-time students attending government schools in 1993 decreased by 6,027 (0.3%) from the 2,234,083 attending in 1992. The number of full-time students attending non-government schools increased by 0.6 per cent (5,436) from the 864,883 attending in 1992.

9.1 SCHOOLS, STUDENTS AND TEACHING STAFF: BY CATEGORY OF SCHOOL (AND NON-GOVERNMENT AFFILIATION), JULY 1993

	Government schools	*Non-government schools*				*All schools*
		Anglican	*Catholic*	*Other*	*Total(a)*	
Number of schools	7,366	115	1,696	688	2,499	9,865
Number of students						
Males	1,141,627	44,542	301,888	92,573	439,003	1,580,630
Females	1,086,429	39,174	297,399	94,743	431,316	1,517,745
Persons	**2,228,056**	**83,716**	**599,287**	**187,316**	**870,319**	**3,098,375**
FTE of teaching staff(b)						
Males	55,595	2,908	11,716	5,460	20,084	75,679
Females	91,042	3,583	23,384	8,224	35,190	126,232
Persons	**146,637**	**6,491**	**35,100**	**13,684**	**55,274**	**201,911**

(a) Includes special schools administered by government authorities other than the State Ministry of Education in Victoria. (b) Full-time teaching staff plus full-time equivalent of part-time teaching staff.

Source: Schools, Australia (4221.0).

9.2 STUDENTS BY CATEGORY OF SCHOOL AND SEX

	1988	*1989*	*1990*	*1991*	*1992*	*1993*
			GOVERNMENT SCHOOLS			
Males	1,128,011	1,123,993	1,123,008	1,137,101	1,145,848	1,141,627
Females	1,069,692	1,070,362	1,070,339	1,080,125	1,088,235	1,086,429
Persons	**2,197,703**	**2,194,355**	**2,193,347**	**2,217,226**	**2,234,083**	**2,228,056**
			NON-GOVERNMENT SCHOOLS			
Males	413,253	420,188	425,504	431,414	435,871	439,003
Females	411,373	416,844	422,806	426,497	429,012	431,316
Persons	**824,626**	**837,032**	**848,310**	**857,911**	**864,883**	**870,319**
			ALL SCHOOLS			
Males	1,541,264	1,544,181	1,548,512	1,568,515	1,581,719	1,580,630
Females	1,481,065	1,487,206	1,493,145	1,506,622	1,517,247	1,517,745
Persons	**3,022,329**	**3,031,387**	**3,041,657**	**3,075,137**	**3,098,966**	**3,098,375**

Source: Schools, Australia (4221.0).

9.3 NUMBER OF STUDENTS(a): BY CATEGORY OF SCHOOL, SEX AND LEVEL/YEAR OF EDUCATION, JULY 1993

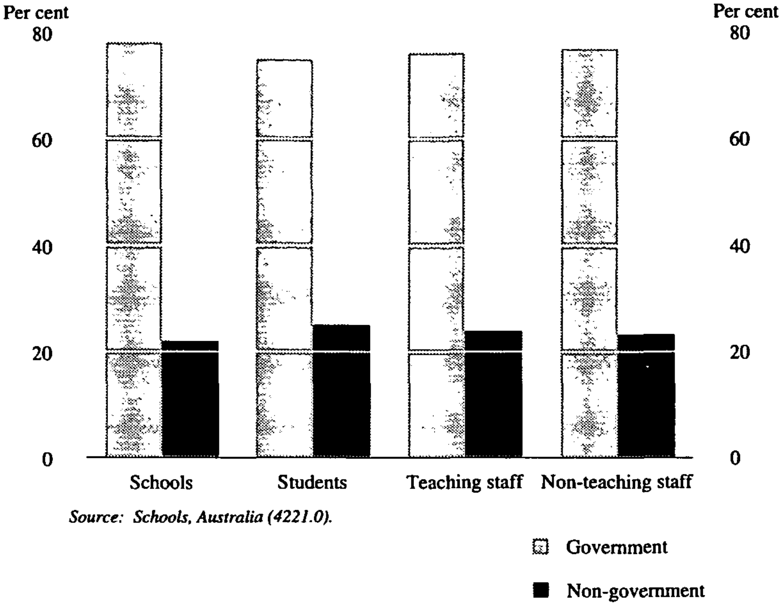
		Non-government schools				*All schools*		
Level/year of education	*Government schools*	*Anglican*	*Catholic*	*Other*	*Total*	*Males*	*Females*	*Persons*
Primary								
Pre-Year 1(b)	134,973	2,152	36,825	8,319	47,296	93,391	88,878	182,269
Year 1	191,806	2,815	48,383	11,454	62,652	130,978	123,480	254,458
Year 2	192,425	2,899	48,030	11,358	62,287	130,605	124,107	254,712
Year 3	191,225	3,312	48,765	11,491	63,568	129,958	124,835	254,793
Year 4	189,549	3,619	48,616	11,592	63,827	129,715	123,661	253,376
Year 5	189,299	4,609	49,329	12,337	66,275	131,038	124,536	255,574
Year 6	185,157	5,064	48,568	12,406	66,038	128,499	122,696	251,195
Year 7 *(Qld,SA,WA,NT)*	70,979	2,130	14,407	5,003	21,540	47,651	44,868	92,519
Ungraded	14,012	16	648	2,494	3,158	10,546	6,624	17,170
Total primary	*1,359,425*	*26,616*	*343,571*	*86,454*	*456,641*	*932,381*	*883,685*	*1,816,066*
Secondary								
Year 7 *(NSW,Vic.,Tas.,ACT)*	103,319	5,955	33,280	10,892	50,127	78,587	74,859	153,446
Year 8	163,264	10,056	48,757	18,183	76,996	123,283	116,977	240,260
Year 9	163,014	10,232	47,557	18,047	75,836	121,969	116,881	238,850
Year 10	159,506	10,386	46,645	18,173	75,204	119,562	115,148	234,710
Year 11	141,573	10,565	40,976	17,558	69,099	104,393	106,279	210,672
Year 12	122,800	9,881	37,741	16,494	64,116	90,039	96,877	186,916
Ungraded	15,155	25	760	1,515	2,300	10,416	7,039	17,455
Total secondary	*868,631*	*57,100*	*255,716*	*100,862*	*413,678*	*648,249*	*634,060*	*1,282,309*
Total	**2,228,056**	**83,716**	**599,287**	**187,316**	**870,319**	**1,580,630**	**1,517,745**	**3,098,375**

(a) As from 1990 students attending special schools have not been identified separately and have been allocated to either primary or secondary level of education. (b) Pre-year 1 comprises kindergarten in New South Wales and Australian Capital Territory; preparatory in Victoria and Tasmania; reception in South Australia; and transition in the Northern Territory.

Source: Schools, Australia (4221.0).

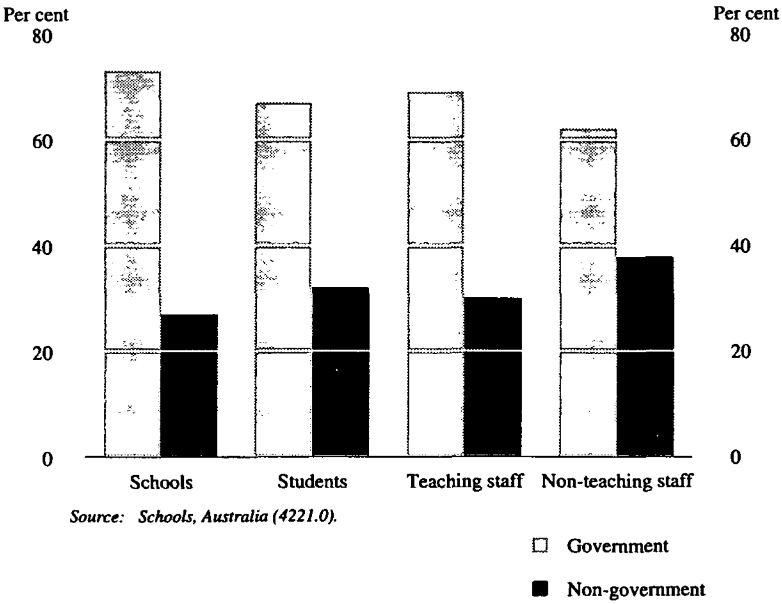
9.4 PERCENTAGE OF STUDENTS AND SCHOOL STAFF (FTE(a)) BY CATEGORY OF SCHOOL, JULY 1993

PRIMARY SCHOOLS



Source: Schools, Australia (4221.0).

SECONDARY SCHOOLS



Source: Schools, Australia (4221.0).

(a) Full-time teaching staff plus full-time equivalent of part-time teaching staff.

NOTE: Combined Primary/Secondary and Special schools are not included in the above graphs; however, the associated students and staff are included.

Other schooling arrangements

Children may be exempted from the requirement of compulsory attendance if they live too far from a school or suffer a physical disability. These children usually receive correspondence tuition. Special schools are available in larger centres for socially, physically and mentally handicapped children in cases where they are not catered for in special or regular classes in ordinary schools.

In addition to correspondence tuition there are provisions for children in isolated areas. Schools of the Air operate in New South Wales, South Australia, Queensland, Western Australia and the Northern Territory.

Children of some Aboriginal groups in remote areas of the Northern Territory who have moved away from larger centres onto small decentralised communities called outstations or homeland centres, receive schooling from Aboriginal teaching assistants supported by visiting teachers from established schools.

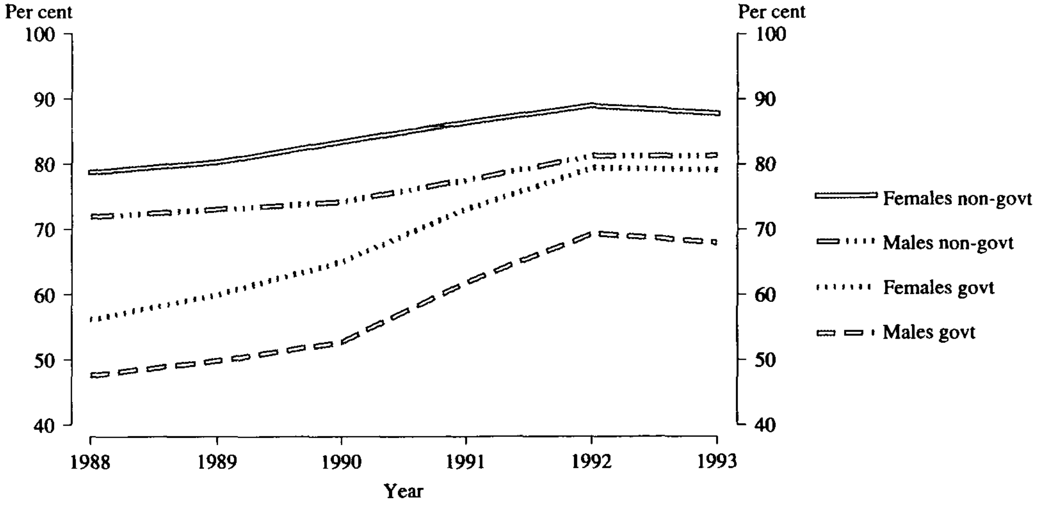
Special education is provided by State Governments and non-government authorities in specialist schools, in special classes or units in regular schools or by withdrawal from regular classes for periods of intensive assistance by special staff. In all States and particularly in New South Wales, Queensland and Victoria, parents have formed voluntary organisations to establish additional schools catering for their children's special needs. The Commonwealth Government provides funds to State and non-government authorities and community groups to assist in the provision of services and upgrading of special education facilities.

Boarding facilities are available at some non-government schools mainly in the larger towns and cities. A small number of government schools, in particular those catering for groups such as Aborigines, have residential hostels close by.

Apparent retention rates

Apparent retention rates are an important measure of performance of education systems and related government policies.

9.5 APPARENT RETENTION RATES OF SCHOOL STUDENTS TO YEAR 12 BY CATEGORY OF SCHOOL AND SEX



Source: Schools, Australia (4221.0).

The apparent retention rate is the percentage of students of a given cohort group who continued to a particular level/year of education. In graph 9.5, apparent retention rates have been calculated for students who continued to Year 12 from their respective cohort group at the commencement of their secondary schooling.

The apparent retention rate of secondary school students to Year 12 fell from 77.1 per cent in 1992 to 76.6 per cent in 1993. As in previous years, the retention rates for female students (81%) was higher than the corresponding rate for males (72%). The rate varied between States and Territories, ranging from 48 per cent in the Northern Territory to 94 per cent in the Australian Capital Territory. The apparent retention rates decreased between 1992 and 1993 in all States and Territories except New South Wales, Western Australia and Tasmania.

Care should be exercised in the interpretation of apparent retention rates since a range of factors affecting their calculation have not been taken into account. At the Australia level these include students repeating a year of education, migration and other changes to the school population.

Comparisons between government and non-government schools must be made with caution because of the net transfer of students from government to non-government schools which tends to inflate the non-government school retention rates and reduce the government school rates. International comparisons are another area where structural differences must be taken into account.

Funding of schools

Major responsibility for funding government schools lies with State Governments which provide about 90 per cent of schools' running costs. The Commonwealth contribution represents about 10 per cent. The Commonwealth is the major source of public funding for non-government schools, providing about 65 per cent, while the States provide about 35 per cent.

Non-government schools operate under conditions determined by government authorities, usually registration boards, in each State and Territory. These conditions require that minimum education standards are met and that the schools have satisfactory premises. The majority of non-government schools are Catholic and there is a Catholic Education Commission in each State and at the national level. Most other non-government schools are under the auspices of, or run by, other religious denominations.

Primary and secondary education is free in government schools in all States and Territories. Fees for the hire of text books and other school equipment, however, may be charged, particularly in secondary schools. Most State Governments provide financial assistance to parents under specified conditions for educational expenses. Assistance includes various types of scholarships, bursaries, transport and boarding allowances, many of which are intended to assist low-income families. The Commonwealth Government also provides a number of schemes of assistance to facilitate access to education. An estimated 236,938 secondary students aged 16 and over from low income families received assistance in 1993 under AUSTUDY. During 1993 12,916 children were given assistance under the Assistance for Isolated Children (AIC) Scheme, and 25,543 Aboriginal children were given assistance under ABSTUDY (Schooling).

A summary of student assistance schemes and their expenditure is contained in the Government Assistance to Students section of this chapter.

TERTIARY EDUCATION

Tertiary education is provided in universities and Technical and Further Education (TAFE) institutions. There are 36 universities which receive Commonwealth funding according to an academic profile agreed between them and the Government.

A few institutions of higher education outside the unified national system receive Commonwealth funding for teaching courses on a contract basis.

Apart from the Australian National University, the University of Canberra and the Australian Maritime College (not a member of the unified national system), which are established under Commonwealth legislation, Australian universities operate under State legislation. They are autonomous bodies responsible for their own governance and make their own decisions on, for example, matters of allocation of their funding, staffing and academic courses.

Two private universities have been established under State legislation — Bond University and the University of Notre Dame, Australia.

Vocational education and training

Most vocational education and training in Australia is provided in government administered colleges, generally referred to as Colleges of Technical and Further Education (TAFEs) or, to a lesser extent, Institutes of Technology. Vocational education and training is also provided in some higher education institutions, schools, agricultural colleges and adult education authorities and by private providers of education, such as business colleges.

The TAFE institutions offer a wide range of vocational and non-vocational training programs, ranging from recreation and leisure, through basic employment and educational preparation to trades, para-professional and professional levels. Training programs are also classified across 12 fields of study on the basis of major discipline or subject matter orientation, which are broadly consistent with the fields of study covered by higher education institutions.

Primary responsibility for administration of the TAFE system lies with the State Governments. In 1992, recurrent funding of the TAFE system was slightly in excess of $2.5 billion, of which the States provided 71 per cent, the Commonwealth 17 per cent and the remaining 12 per cent came from fees and other sources. Capital funding was $337 million, of which the Commonwealth provided 65 per cent, the States 33 per cent and 1 per cent was from other sources.

The Commonwealth Government and State Governments are strongly committed to provision of quality vocational education and training in Australia, and agreed in 1992 to establish a national vocational education and training system. Under this new system, a Ministerial Council, chaired by the Commonwealth Minister, determines national policy and priorities, strategic directions, funding arrangements and planning processes for vocational education and training, on the advice of the Australian National Training Authority (ANTA), which formally came in to operation on 1 January 1994.

Under the new national system, State training agencies manage the delivery of vocational education and training in a manner consistent with the national strategic plan. These agencies are accountable to their State Ministers for operational matters, and to the Ministerial Council on matters of national policy.

As part of the agreement to establish ANTA, the Commonwealth is providing an additional $1.1 billion growth funding for vocational education and training over the four years from 1993 to 1996, while the States are committed to maintaining their effort over the same period.

9.6 TECHNICAL AND FURTHER EDUCATION: STUDENTS (STREAMS 2100–4500) BY AGE GROUP, SEX AND TYPE OF ATTENDANCE, 1992

			Males			*Females*			*Persons*
Age group (years)	*Full-time*	*Part-time*	*Total*	*Full-time*	*Part-time*	*Total*	*Full-time*	*Part-time*	*Total*
Under 16	728	6,242	6,970	561	6,683	7,244	1,289	12,925	14,214
16	3,293	14,666	17,959	2,382	13,920	16,302	5,675	28,586	34,261
17	5,562	21,530	27,092	4,654	15,176	19,830	10,216	36,706	46,922
18	11,349	32,617	43,966	11,811	19,363	31,174	23,160	51,980	75,140
19	8,938	33,992	42,930	8,665	18,329	26,994	17,603	52,321	69,924
20	5,781	30,165	35,946	5,229	16,376	21,605	11,010	46,541	57,551
21	3,692	23,813	27,505	3,455	14,960	18,415	7,147	38,773	45,920
22	2,640	17,701	20,341	2,492	12,833	15,325	5,132	30,534	35,666
23	2,100	15,475	17,575	1,885	11,766	13,651	3,985	27,241	31,226
24	1,611	14,049	15,660	1,533	10,713	12,246	3,144	24,762	27,906
25–29	5,767	64,653	70,420	5,721	48,178	53,899	11,488	112,831	124,319
30–39	6,886	107,117	114,003	8,295	90,156	98,451	15,181	197,273	212,454
40–49	2,636	59,185	61,821	4,142	60,129	64,271	6,778	119,314	126,092
50–59	736	20,560	21,296	883	18,995	19,878	1,619	39,555	41,174
60–64	101	3,653	3,754	92	3,815	3,907	193	7,468	7,661
>64	55	2,435	2,490	54	3,294	3,348	109	5,729	5,838
Not stated	762	31,997	32,759	561	33,203	33,764	1,323	65,200	66,523
Bulk enrolments(a)	. .	2,301	2,301	. .	3,935	3,935	. .	19,756	19,756
Total	**62,637**	**502,151**	**564,788**	**62,415**	**401,824**	**464,239**	**125,052**	**917,495**	**1,042,547**

(a) The total bulk enrolments exceeds the sum of the sexes because sex was not stated for 13,520 students.
Source: Department of Employment, Education and Training.

9.7 TECHNICAL AND FURTHER EDUCATION: DUTY HOURS ('000) OF TEACHING STAFF AND FULL-TIME TEACHING STAFF NUMBERS BY TYPE OF APPOINTMENT, 1992

Type of appointment	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Full-time									
Teaching hours	3,272.9	2,902.2	1,599.5	876.9	972.9	264.8	166.9	184.5	10,240.6
Non-teaching hours	4,098.5	3,722.9	1,838.1	1,609.1	159.8	316.7	261.3	388.8	12,395.2
Total duty hours	*7,371.4*	*6,625.1*	*3,437.5*	*2,486.0*	*1,132.7*	*581.6*	*428.2*	*573.3*	*22,635.7*
Number of staff	6,043	4,629	2,716	2,011	1,637	496	315	455	18,302
Part-time									
Teaching hours	2,853.1	1,781.5	692.4	466.7	503.1	212.6	88.5	138.1	6,736.0
Non-teaching hours	211.6	215.5	32.5	7.7	118.5	26.1	8.0	—	619.8
Total duty hours	*3,064.7*	*1,997.0*	*724.9*	*474.4*	*621.6*	*238.7*	*96.4*	*138.1*	*7,355.9*
All teaching staff									
Teaching hours	6,126.0	4,683.7	2,291.9	1,343.6	1,476.0	477.5	255.3	322.6	16,976.6
Non-teaching hours	4,310.1	3,938.3	1,870.5	1,616.8	278.4	342.8	269.2	388.8	13,015.0
Total duty hours	**10,436.1**	**8,622.1**	**4,162.4**	**2,960.4**	**1,754.4**	**820.3**	**524.6**	**711.4**	**29,991.6**

(a) Actual teaching hours performed as part of the normal duties of full-time teachers over the teaching year.
Source: Department of Employment, Education and Training 'Selected TAFE Statistics, 1992'.

9.8 TECHNICAL AND FURTHER EDUCATION: ALL STUDENTS BY STREAM AND FIELD OF STUDY, 1992

Stream		*01*	*02*	*03*	*04*	*05*	*06*	*07*	*08*	*09*	*10*	*11*	*12*	*Net(a)*
1000	Recreation, leisure	11,027	15,670	166,882	36,339	753	8,827	104,161	1,699	16,577	634	31,892	308,703	701,396
2100	Basic employment skills	14,561	1,694	12,851	15,491	3,698	3,729	6,519	329	2,477	—	6,254	117,862	182,074
2200	Educational preparation	290	270	5,485	1,713	78	1,010	2,132	5	1,520	—	346	79,003	91,058
3100	Operatives: initial	14,006	13,906	18,972	74,853	2,099	27,324	17,774	426	22,792	585	35,922	10,877	230,828
3211	Recognised trades: part exempt	55	1,999	42	63	—	1,938	—	—	—	—	1,116	8,513	13,617
3212	Recognised trades: complete	5,463	26,565	560	—	—	60,614	446	—	—	—	17,714	579	111,597
3221	Other skills: part exempt	2,967	1,070	1,308	26,575	541	7,240	3,761	—	156	27	4,369	12,356	59,582
3222	Other skills: complete	11,275	1,010	11,988	35,270	92	14,184	4,163	865	1,892	325	11,689	1,919	93,656
3300	Trade technician/supervisory	6,326	8,788	7,874	46,367	2	21,480	4,658	116	6,668	194	13,442	551	115,725
3400	Para-professional technician	504	1,757	1,674	9,590	—	2,669	699	199	5,421	—	57	—	22,211
3500	Para-professional higher technician	2,187	6,325	9,805	53,385	2,362	20,168	8,443	3,342	6,699	165	4,449	3	115,902
3600	Professional	—	292	3,093	649	—	72	213	—	18	—	795	—	5,131
4100	Operatives: post initial	3,837	1,371	2,389	4,512	319	2,853	718	10	510	—	1,206	8,038	25,647
4200	Trades/other skills: post initial	5,922	8,676	4,382	21,079	4,886	24,769	3,070	778	3,358	—	13,024	1,034	89,481
4300	Trade technician/supervisory: post initial	1,401	212	92	1,102	294	5,019	178	—	1,500	—	319	—	10,102
4400	Para-professional technician: post initial	28	20	139	138	23	162	18	—	123	—	3	—	654
4500	Para-professional higher technician: post initial	—	82	277	314	170	2,022	382	—	190	—	554	40	3,990
Total net(a) streams 2100–4500		*65,726*	*70,790*	*77,633*	*272,573*	*14,412*	*179,321*	*51,335*	*5,990*	*52,095*	*1,280*	*105,476*	*229,277*	*1,042,547*
Total net(a) all streams		**76,753**	**86,460**	**244,515**	**308,912**	**15,165**	**188,148**	**155,496**	**7,689**	**68,672**	**1,914**	**137,368**	**537,980**	**1,743,943**

01 Land & Marine Resources, Animal Husbandry; 02 Architecture, Building; 03 Art, Humanities and Social Sciences; 04 Business Administration, Economics; 05 Education; 06 Engineering, Surveying; 07 Health, Community Services; 08 Law, Legal Studies; 09 Science; 10 Veterinary Science, Animal Care; 11 Services, Hospitality, Transportation; 12 TAFE Multi-field Education.

(a) Net totals are less than the sums of the individual items because some students enrol in more than one stream (field of study) in the same study (stream), but only counted once in the total.

Source: Department of Employment, Education and Training 'Selected TAFE Statistics, 1992'.

Higher education

Higher education institutions offer a great variety of courses embracing such areas as agriculture, architecture, arts, business, dentistry, economics, education, engineering, health, law, medicine, music, science and veterinary science. Fields of study with the largest numbers of total students in 1992 were Arts (22.4%), Business and Administration (20.9%) and Science (14.4%). These fields also had the largest numbers of completing students. Students commencing courses will have completed a full secondary education, or will have demonstrated that they have a high probability of successfully completing a course. There is keen demand for higher education places at most institutions.

Higher education institutions are funded by the Commonwealth under the *Higher Education Funding Act 1988*. In 1993 expenditure on higher education totalled approximately $4,400 million. Students are required to contribute to the cost of their education through the Higher Education Contribution Scheme (HECS). Under the Scheme students can pay their contribution up-front or defer payment for collection through the taxation system. In 1993 the annual course contribution, which is indexed annually, was $2,328.

The basic undergraduate course at most institutions is a bachelor degree course of three or four years duration. At some institutions, courses may also be offered at the diploma or associate diploma level. Most institutions also offer postgraduate level study. One to two years of full-time postgraduate study is required for a masters degree and three to five years for a doctoral degree. Postgraduate diplomas are offered in some disciplines. In 1992, over 73 per cent of higher education students were enrolled in bachelor courses with a further 18 per cent enrolled in postgraduate courses.

All institutions provide full-time and part-time courses. In addition some institutions offer education courses which associate full-time study with periods of employment. Distance education courses are also offered through eight Distance Education Centres and a number of specialist providers which operate in conjunction with a Centre.

In 1992, 61 per cent of students were enrolled in full-time study, 28 per cent in part-time study and 11 per cent in external studies.

The system of tuition in higher education institutions is normally by means of lectures, tutorials, seminars and supervised practical work. Normally, assessment of a student's progress is made by examination and/or completion of prescribed course work or of individual research.

Many institutions have halls of residence on the campus which accommodate some of the students currently enrolled, usually those from remote or country areas. Student organisations on campus provide a wide range of sporting and social facilities for students.

9.9 HIGHER EDUCATION: ALL STUDENTS BY LEVEL OF COURSE AND FIELD OF STUDY, 1992

Level of course	*Agri-culture, animal husbandry*	*Archi-tecture, building*	*Arts, humanities and social sciences*	*Business admin-istration, economics*	*Education*	*Engineer-ing and surveying*	*Health*	*Law, legal studies*	*Science*	*Veterinary science*	*Non-award courses*	*Total*
Higher doctorate	—	—	14	—	94	3	145	2	13	1	—	272
Ph.D	529	157	3,302	731	1,079	1,562	1,783	153	4,160	167	—	13,623
Master's by research	426	263	3,037	634	1,344	1,423	880	210	2,102	72	—	10,391
Master's by course work	168	676	5,016	9,157	5,974	1,967	2,710	1,279	2,272	56	—	29,275
Postgraduate qualification/preliminary	24	101	692	665	1,183	98	435	32	576	4	—	3,810
Graduate (post) diploma — new area	361	370	4,245	5,684	8,011	1,085	1,935	685	3,401	6	—	25,783
Graduate (post) diploma — extension area	73	398	1,819	2,350	4,497	743	1,951	841	1,395	9	—	14,076
Graduate certificate	3	—	275	770	739	92	122	57	119	—	—	2,177
Bachelor's postgraduate	—	304	661	—	2,646	28	5	404	—	—	—	4,048
Bachelor's honours	74	79	4,079	845	299	744	287	243	2,596	29	—	9,275
Bachelor's pass	5,039	9,311	97,021	93,848	43,244	33,563	46,806	13,354	60,522	1,338	—	404,046
Diploma	189	—	736	84	7,018	50	9,065	—	299	—	—	17,441
Associate diploma	3,543	235	3,367	2,287	1,484	2,138	982	502	2,857	—	—	17,395
Other award courses	—	—	15	33	1	58	5	239	25	—	—	376
Enabling courses	62	—	761	16	478	45	70	—	353	—	—	1,785
Non-award courses	—	—	—	—	—	—	—	—	—	—	5,592	5,592
Total courses	**10,491**	**11,894**	**125,040**	**117,104**	**78,091**	**43,599**	**67,181**	**18,001**	**80,690**	**1,682**	**5,592**	**559,365**

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1992'.

9.10 HIGHER EDUCATION: COURSES COMPLETED BY ALL STUDENTS, LEVEL OF COURSE AND FIELD OF STUDY, 1992

Level of course	*Agri-culture, animal husbandry*	*Archi-tecture, building*	*Arts, humanities and social sciences*	*Business admin-istration, economics*	*Education*	*Engineer-ing and surveying*	*Health*	*Law, legal studies*	*Science*	*Veterinary sciences*	*Total*
Higher doctorate	4	—	1	—	—	1	36	—	6	3	51
Ph.D.	83	11	300	41	98	184	197	11	568	29	1,522
Masters by research	86	16	266	45	133	189	106	26	260	12	1,139
Masters by course work	70	219	1,359	2,467	1,362	510	556	256	465	21	7,285
Postgraduate qualification/ preliminary	1	24	144	185	448	17	84	8	94	—	1,005
Graduate (post) diploma — new area	118	74	1,733	1,814	4,781	279	728	193	906	6	10,632
Graduate (post) diploma — extension area	47	135	805	906	1,978	176	734	996	475	5	6,257
Graduate certificate	—	134	194	1	1,005	1	2	3	7	—	1,347
Bachelor's postgraduate	74	81	2,133	590	93	340	217	160	2,075	78	5,841
Bachelor's honours	858	1,700	17,478	17,167	10,873	3,928	9,983	1,942	9,829	248	74,006
Bachelor's pass	12	13	115	446	532	40	64	55	52	—	1,329
Diploma	52	—	204	7	3,027	20	3,213	—	107	—	6,630
Associate diploma	605	54	695	467	327	366	253	68	450	—	3,285
Other award course	—	—	7	—	—	—	—	247	—	—	254
Total persons	**2,010**	**2,461**	**25,434**	**24,136**	**24,657**	**6,051**	**16,173**	**3,965**	**15,294**	**402**	**120,583**

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1993'.

9.11 HIGHER EDUCATION: COMMENCING STUDENTS BY LEVEL OF COURSE AND FIELD OF STUDY, 1992

Level of course	*Agri-culture, animal husbandry*	*Archi-tecture, building*	*Arts, humanities and social sciences*	*Business admin-istration, economics*	*Education*	*Engin-eering and surveying*	*Health*	*Law, legal studies*	*Science*	*Veterinary science*	*Non-award courses*	*Total*
Higher doctorate	—	—	10	—	64	3	47	2	5	1	—	132
Ph.D	158	73	1,066	291	358	566	571	58	1,284	53	—	4,478
Master's by research	165	129	1,299	335	622	746	390	79	916	40	—	4,721
Master's by course work	98	326	2,679	4,338	2,775	1,039	1,354	577	1,209	28	—	14,423
Postgraduate qualification/preliminary	20	56	469	377	732	80	231	16	385	2	—	2,368
Graduate (post) diploma — new area	249	188	2,484	3,299	5,499	604	1,141	419	1,827	6	—	15,716
Graduate (post) diploma — extension area	54	197	1,041	1,272	2,576	394	1,202	802	864	9	—	8,411
Graduate certificate	3	—	234	690	676	79	99	57	104	—	—	1,942
Bachelor's postgraduate	—	64	255	—	1,270	14	5	174	—	—	—	1,782
Bachelor's honours	19	3	487	137	131	24	97	18	360	16	—	1,292
Bachelor's pass	1,716	2,874	33,575	29,630	15,869	10,291	18,906	3,720	21,803	333	—	138,717
Diploma	72	—	272	21	1,548	1	420	—	161	—	—	2,495
Associate diploma	1,562	90	1,435	863	726	762	362	286	1,270	—	—	7,356
Other award courses	—	—	11	33	1	34	5	239	21	—	—	344
Enabling courses	62	—	714	15	386	23	70	—	310	—	—	1,580
Non-award courses	—	—	—	—	—	—	—	—	—	—	4,842	4,842
Total courses	**4,178**	**4,000**	**46,031**	**41,301**	**33,233**	**14,660**	**24,900**	**6,447**	**30,519**	**488**	**4,842**	**210,599**

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1992'.

9.12 HIGHER EDUCATION: ALL STUDENTS(a) BY SEX AND LEVEL OF COURSE

	Higher doctorate	*Ph.D*	*Masters research*	*Masters course-work*	*Post-graduate qualify-ing*	*Post-graduate diploma*	*Post-graduate certi-ficate*	*Post-graduate bachelor*	*Bachelor honours*	*Bachelor pass*	*Total under-graduate bachelor*	*Diploma*	*Associate diploma*	*Other*	*Total*
Males															
1987	176	5,618	3,990	8,224	909	15,671	39	894	2,263	134,624	136,887	8,945	12,420	2,611	196,384
1988	148	5,816	4,110	8,979	920	16,279	37	807	2,496	141,937	144,433	9,181	12,248	2,816	205,774
1989	119	5,485	3,861	9,564	2,053	14,111	267	1,226	2,676	150,450	153,126	8,341	11,199	1,933	211,285
1990	155	6,065	4,222	11,532	1,998	15,527	219	1,220	3,044	163,365	166,409	8,045	11,713	2,315	229,420
1991	140	7,012	4,781	14,096	1,694	17,710	664	1,227	3,807	177,803	181,610	7,329	10,484	2,929	249,676
1992	168	8,500	5,998	16,322	1,561	18,157	1,088	1,185	4,481	185,696	190,177	3,745	9,873	3,779	260,553
Females															
1987	24	2,493	2,266	5,177	684	15,981	26	1,541	2,493	124,797	127,290	29,606	9,231	3,031	197,350
1988	33	2,747	2,435	5,957	723	17,476	38	1,523	2,699	136,329	139,028	32,191	8,922	4,003	215,076
1989	38	2,783	2,465	6,417	2,596	16,061	231	2,718	2,760	149,820	152,580	33,057	8,954	1,891	229,791
1990	50	3,233	2,810	8,250	2,524	18,304	221	2,432	3,193	170,996	174,189	32,140	8,729	2,773	255,655
1991	37	3,948	3,362	10,889	2,305	21,329	737	2,972	3,949	195,031	198,980	29,173	7,976	3,154	284,862
1992	104	5,123	4,393	12,953	2,249	21,702	1,089	2,863	4,794	218,350	223,144	13,696	7,522	3,974	298,812
Persons															
1987	200	8,111	6,256	13,401	1,593	31,652	65	2,435	4,756	259,421	264,177	38,551	21,651	5,642	393,734
1988	181	8,563	6,545	14,936	1,643	33,755	75	2,330	5,195	278,266	283,461	41,372	21,170	6,819	420,850
1989	157	8,268	6,326	15,981	4,649	30,172	498	3,944	5,436	300,270	305,706	41,398	20,153	3,824	441,076
1990	205	9,298	7,032	19,782	4,522	33,831	440	3,652	6,237	334,361	340,598	40,185	20,442	5,088	485,075
1991	177	10,960	8,143	24,985	3,999	39,039	1,401	4,199	7,756	372,834	380,590	36,502	18,460	6,083	534,538
1992	272	13,623	10,391	29,275	3,810	39,859	2,177	4,048	9,275	404,046	413,321	17,441	17,395	7,753	559,365

(a) Includes State-funded basic nursing students who would previously have been trained in hospitals.

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1992'.

The proportion of higher education students who are female has risen from around 49 per cent in 1986 to over 53 per cent in 1992 as the following table shows. This table also illustrates that higher education students are predominantly in the younger age groups (61% are 24 years of age or under).

9.13 HIGHER EDUCATION: ALL STUDENTS BY AGE GROUP AND SEX

	1987	*1988*	*1989*	*1990*	*1991*	*1992*
19 and under						
Males	56,099	61,068	66,531	71,254	74,820	71,186
Females	65,741	72,985	81,892	90,589	96,617	93,427
Persons	*121,840*	*134,053*	*148,423*	*161,843*	*171,437*	*164,613*
20–24						
Males	60,759	62,896	65,482	71,902	80,304	87,542
Females	52,558	56,899	61,182	69,273	79,967	89,877
Persons	*113,317*	*119,795*	*126,664*	*141,175*	*160,271*	*177,419*
25–29						
Males	29,251	29,327	28,630	30,153	32,334	34,152
Females	23,088	24,768	25,321	27,447	30,693	32,557
Persons	*52,339*	*54,095*	*53,951*	*57,600*	*63,027*	*66,709*
30 and over						
Males	50,022	52,333	50,642	56,111	62,218	67,673
Females	55,733	60,249	61,396	68,346	77,585	82,951
Persons	*105,755*	*112,582*	*112,038*	*124,457*	*139,803*	*150,624*
Age not stated						
Males	253	150	—	—	—	—
Females	230	175	—	—	—	—
Persons	*483*	*325*	—	—	—	—
Total						
Males	**196,384**	**205,774**	**211,285**	**229,420**	**249,676**	**260,553**
Females	**197,350**	**215,076**	**229,791**	**255,655**	**284,862**	**298,812**
Persons	**393,734**	**420,850**	**441,076**	**485,075**	**534,538**	**559,365**

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1992'.

9.14 HIGHER EDUCATION: ALL STUDENTS, BY TYPE OF ENROLMENT AND SEX

	1987	*1988*	*1989*	*1990*	*1991*	*1992*
Internal						
Full-time						
Males	114,739	122,433	129,437	140,247	153,210	158,175
Females	119,415	130,980	142,664	159,264	175,197	181,029
Persons	*234,154*	*253,413*	*272,101*	*299,511*	*328,407*	*339,204*
Part-time						
Males	59,475	60,606	59,668	65,279	71,652	75,867
Females	54,374	58,647	60,898	67,573	77,557	83,449
Persons	*113,849*	*119,253*	*120,566*	*132,852*	*149,209*	*159,316*
External						
Males	22,170	22,735	22,180	23,894	24,814	26,511
Females	23,561	25,449	26,229	28,818	32,108	34,334
Persons	*45,731*	*48,184*	*48,409*	*52,712*	*56,922*	*60,845*
Total						
Males	**196,384**	**205,774**	**211,285**	**229,420**	**249,676**	**260,553**
Females	**197,350**	**215,076**	**229,791**	**255,655**	**284,862**	**298,812**
Persons	**393,734**	**420,850**	**441,076**	**485,075**	**534,538**	**559,365**

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1992'.

9.15 HIGHER EDUCATION: COURSE COMPLETIONS, BY LEVEL OF COURSE AND SEX

	1986	*1987*	*1988*	*1989*	*1990*	*1991*
Higher degree						
Research						
Males	1,276	1,257	1,455	1,458	1,465	1,706
Females	516	476	634	651	723	852
Persons	*1,792*	*1,733*	*2,089*	*2,109*	*2,188*	*2,558*
Course work						
Males	1,940	1,622	1,944	1,969	2,499	3,271
Females	968	900	1,042	1,207	1,538	2,190
Persons	*2,908*	*2,522*	*2,986*	*3,176*	*4,037*	*5,461*
Other						
Post-graduate degree						
Males	5,719	5,982	6,707	6,648	6,517	7,854
Females	6,637	7,135	8,980	9,380	9,289	11,272
Persons	*12,356*	*13,117*	*15,687*	*16,028*	*15,806*	*19,126*
Bachelor degree						
Males	24,347	24,372	24,895	25,554	27,029	30,015
Females	22,886	24,845	26,317	28,539	31,153	37,355
Persons	*47,233*	*49,217*	*51,212*	*54,093*	*58,182*	*67,370*
Other non-degree						
Males	4,879	4,300	4,705	4,711	4,114	3,809
Females	8,613	9,368	10,180	10,365	10,072	9,237
Persons	*13,492*	*13,668*	*14,885*	*15,076*	*14,186*	*13,046*
Total						
Males	**38,161**	**37,533**	**39,706**	**40,340**	**41,624**	**46,655**
Females	**39,620**	**42,724**	**47,153**	**50,142**	**52,775**	**60,906**
Persons	**77,781**	**80,257**	**86,859**	**90,482**	**94,399**	**107,561**

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1992'.

EDUCATION CHARACTERISTICS OF THE POPULATION

Participation in education

A large proportion of persons in the age group 15 to 24 participate in education well beyond the compulsory school age of 15 (16 in Tasmania). Table 9.16 shows that, in September 1993, 68 per cent of 17 year olds were still at school while a further 9 per cent had moved on to tertiary education. Overall the education participation rate of 15 to 24 year olds in September 1993 was 49 per cent.

9.16 EDUCATION PARTICIPATION RATES OF PERSONS AGED 15 TO 24: WHETHER ATTENDING AN EDUCATIONAL INSTITUTION, TYPE OF INSTITUTION ATTENDING, AGE, SEPTEMBER 1993 (per cent)

Type of institution	Age (years) 15	16	17	18	19	20	21	22	23	24	Total
Attending	96.5	88.3	76.7	59.8	51.7	41.5	32.4	25.2	18.5	17.6	49.1
School	95.9	84.7	67.8	22.4	3.4	*1.3	*0.4	*0.2	*0.3	*0.2	25.5
Tertiary(a)	*0.6	3.6	8.9	37.5	48.3	40.2	32.0	25.0	18.2	17.4	23.6
Higher education	*—	*0.1	2.1	18.1	24.5	24.4	19.5	16.4	10.3	10.6	12.9
TAFE	*0.5	3.5	5.7	17.0	20.9	13.4	10.9	6.7	5.3	4.7	8.9
Not attending	3.5	11.7	23.3	40.2	48.3	58.5	67.6	74.8	81.5	82.4	50.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes persons who were attending 'Other educational' institutions.
Source: Participation in Education, Australia (6272.0).

9.17 PERSONS AGED 15 TO 64 WHO ATTENDED A TERTIARY INSTITUTION IN 1992: TYPE OF ATTENDANCE AND LABOUR FORCE STATUS, MAY 1993

Type of attendance in 1992	Employed Full-time	Employed Part-time	Employed Total	Unemployed	Labour force	Not in labour force	Total	Unemployment rate
	'000							(%)
Full-time								
Attending	33.1	129.5	162.6	27.6	190.2	175.5	365.7	14.5
Full-time	18.8	117.6	136.4	20.2	156.6	170.9	327.5	12.9
Part-time	14.3	11.9	26.2	7.4	33.6	4.6	38.1	22.0
Total	*33.1*	*129.5*	*162.6*	*27.6*	*190.2*	*175.5*	*365.7*	*14.5*
Not attending	80.5	30.9	111.4	31.5	142.9	17.3	160.2	22.1
Total	*113.6*	*160.4*	*273.9*	*59.1*	*333.1*	*192.7*	*525.8*	*17.8*
Part-time								
Attending	298.5	50.6	349.1	17.2	366.4	35.8	402.2	4.7
Full-time	5.8	6.9	12.7	*2.1	14.9	10.2	25.1	*14.4
Part-time	292.7	43.8	336.4	15.1	351.5	25.4	377.0	4.3
Total	*298.5*	*50.6*	*349.1*	*17.2*	*366.4*	*35.6*	*402.0*	*4.7*
Not attending	251.2	41.3	292.4	28.8	321.3	22.9	344.2	9.0
Total	*549.7*	*91.9*	*641.6*	*46.1*	*687.6*	*58.7*	*746.3*	*6.7*
Total								
Attending	331.6	180.1	511.7	44.9	556.6	211.3	767.8	8.1
Full-time	24.6	124.5	149.1	22.4	171.5	181.1	352.6	13.0
Part-time	307.0	55.6	362.6	22.5	385.1	30.0	415.1	5.8
Total	*331.6*	*180.1*	*511.7*	*44.9*	*556.6*	*211.1*	*767.7*	*8.1*
Not attending	331.6	72.2	403.8	60.4	464.2	40.1	504.3	13.0
Total	**663.2**	**252.2**	**915.5**	**105.2**	**1,020.7**	**251.4**	**1,272.1**	**10.3**

Source: Transition from Education to Work, Australia (6227.0).

Education attendance and the labour force

An ABS survey in May 1993 revealed that an estimated 2,190,000 persons aged 15 to 64 years had attended an educational institution in the previous year. At the time of the survey only 71 per cent (1,552,400) were still attending. Among this group were 70,300 persons who had changed from full-time to part-time study and 35,300 of these were employed full time.

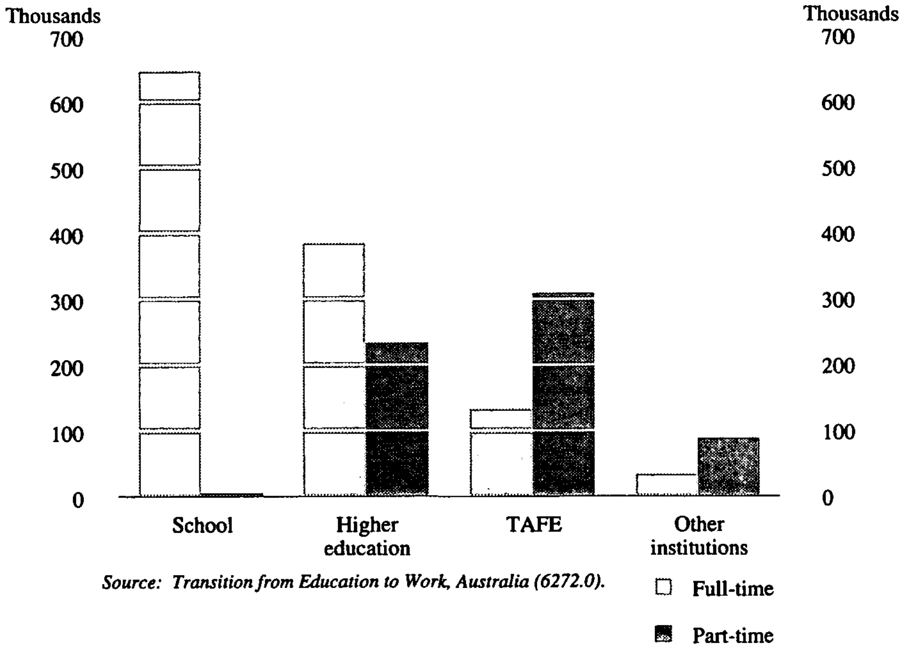
Of the 637,600 persons who had ceased education since the previous year, 476,100 were employed, 105,200 were unemployed and the remaining 56,000 were not in the labour force.

A large number of persons were involved in both study and work. The 1,552,400 persons continuing at an educational institution in May 1993 included 723,600 (47%) employed (355,200 of these in full-time employment) and 102,800 who were looking for work. There were also 26,100 persons who reported combining full-time study and full-time employment.

Graph 9.18 gives an indication of the spread of full-time and part-time study across the various types of education.

Part-time education in schools is confined to less than one per cent of students, whereas its vocational education counterpart, Technical and Further Education, shows 70 per cent of students studying part time. At higher education institutions 38 per cent of students were studying part time.

9.18 PERSONS AGED 15 TO 64 ATTENDING AN EDUCATIONAL INSTITUTION IN MAY 1993



Source: Transition from Education to Work, Australia (6272.0).

Educational attainment

In May 1993, 4,576,300 (39%) persons aged 15 to 64 had completed a recognised post-school qualification. A further 6,501,800 (55%) of the population had no recognised post-school qualifications. Of these, 732,300 (11%) were attending a tertiary institution in May 1993. Those persons still at school numbered 638,100 (5%).

Of those with post-school qualifications, the most commonly reported qualification was skilled vocational (for example, trade qualifications etc.) with 1,592,700. Bachelor degrees were reported by 831,100 persons, associate diplomas by 617,900 and 432,800 reported undergraduate diplomas. The smallest category was those with a higher degree, reported by 142,100 persons.

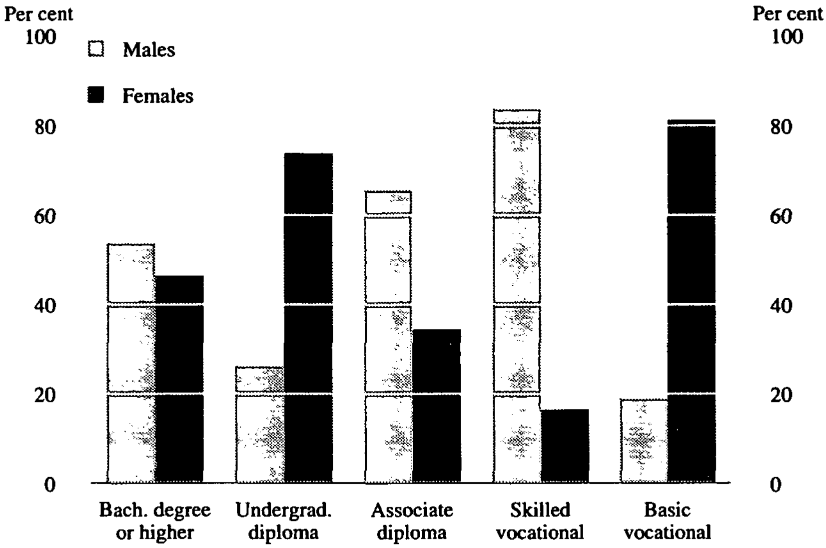
9.19 PERSONS AGED 15 TO 64: AGE AND EDUCATIONAL ATTAINMENT, MAY 1993 ('000)

						Age group (years)
Educational attainment	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*Total*
With post-school qualifications(a)	567.5	1,324.0	1,302.5	899.9	482.4	4,576.3
Higher degree	*1.9	30.1	58.4	39.9	11.8	142.1
Post-graduate diploma	9.4	53.4	88.1	45.2	17.1	213.3
Bachelor degree	110.2	285.3	244.8	139.5	51.3	831.1
Undergraduate diploma	30.8	103.2	156.5	96.0	46.4	432.8
Associate diploma	65.5	169.2	178.2	136.3	68.8	617.9
Skilled vocational	190.0	453.5	397.1	323.1	229.0	1,592.7
Basic vocational	159.7	229.4	179.3	120.0	58.0	746.4
Without post-school qualifications(b)	1,523.2	1,483.6	1,365.7	1,159.8	969.5	6,501.8
Completed highest level of school	805.4	492.6	379.0	264.2	191.0	2,132.3
Attending tertiary in May 1993	459.2	61.7	22.7	6.8	*1.8	552.2
Not attending tertiary in May 1993	346.2	430.9	356.3	257.4	189.3	1,580.1
Did not complete highest level of school	717.3	991.0	986.7	895.6	778.4	4,369.0
Attending tertiary in May 1993	108.4	37.1	23.2	10.3	*1.3	180.1
Not attending tertiary in May 1993	608.9	953.9	963.5	885.3	777.2	4,188.8
Still at school	638.1	*—	*—	*—	*—	638.1
Total	**2,728.8**	**2,807.6**	**2,668.2**	**2,059.7**	**1,451.9**	**11,716.2**

(a) The Australian Bureau of Statistics Classification of Qualifications (ABSCQ) has been used in this survey for the first time. (b) Includes persons who never attended school.

Source: Transition from Education to Work, Australia (6227.0).

9.20 DISTRIBUTION OF POST-SCHOOL QUALIFICATIONS, MAY 1993



Source: Transition from Education to Work, Australia (6227.0).

SOURCES OF STUDENT INCOME

In 1991 a survey of students, aged 15 to 64 and not employed full time, revealed that the average weekly income for all students was $119.80. Average weekly income varied little between males and females but rose steeply on an age basis — from $32.90 a week for 15 and 16 year olds to $245.00 a week for students aged 25 years or more.

Students living with parents or a guardian reported an average income of $83.40 a week compared with $189.40 a week for those living away from home, and $255.50 for students living with dependants or a spouse.

Students whose principal source of income was wages, salary and investments had an average weekly income of $198.00. This compared to $107.10 for students relying on government or other benefits and $43.50 for those receiving income from family or friends.

Secondary school students reported their average weekly income as $42.40 and tertiary students $185.60.

9.21 AVERAGE WEEKLY TOTAL INCOME OF STUDENTS: SELECTED STUDENT CHARACTERISTICS BY PRINCIPAL SOURCE OF FINANCE, 1991
($)

	Principal source of finance			
Student characteristics	*Government and other benefits*	*Wages, salaries and investments*	*Family and other*	*All students*
Sex				
Male	99.70	217.00	41.20	120.20
Female	114.40	181.00	46.20	119.40
Age group (years)				
15–16	60.00	55.90	11.40	32.90
17–18	70.90	128.50	26.50	74.60
19–20	98.50	208.90	99.30	153.50
21–24	143.70	230.50	108.70	168.20
>24	176.90	340.80	109.90	245.00
Living arrangements				
Living with parent(s) or guardian	80.00	148.80	23.30	83.40
Living with spouse and/or children	188.50	346.30	113.00	255.50
Living away from home	144.20	273.80	165.40	189.40
Student type				
Secondary	65.70	65.40	14.70	42.40
Tertiary				
Full time	98.40	110.80	35.30	77.50
Part time	157.30	340.10	157.30	261.10
Apprentice(a)	*147.70	287.00	*1.00	276.10
Total	*140.10*	*256.30*	*97.10*	*185.60*
Higher education				
Full time	136.20	164.60	90.90	132.60
Part time	*148.40	379.00	*258.30	304.00
Total	*137.80*	*228.50*	*108.10*	*164.90*
Technical and further education				
Full time	120.40	*153.20	*56.40	115.90
Part time	166.30	337.60	*116.30	259.60
Total	*139.90*	*293.20*	*64.50*	*199.40*
Other	172.90	189.60	29.10	136.30
All students	**107.10**	**198.00**	**43.50**	**119.80**

(a) Apprentices have been shown as a separate category and included in the Tertiary Total estimates, but excluded from all other student type estimates.
Source: Student Finances, Australia (6550.0).

ADULT EDUCATION

Adult education is the most decentralised of the education sectors. Many courses provide a valuable starting point for encouraging people to go on to award courses at formal educational institutions. Other courses fulfil the cultural, recreational and social needs of community members without leading to formal qualifications. The range of course providers is widespread; from commercial and private industry, church and cultural groups to professional and semi-professional bodies, from the YMCA and similar institutions, higher educational institutions (including tertiary bodies), Technical and Further Education Institutions, primary and secondary schools, workers' educational associations, personal tuition, and State and Commonwealth departments to public libraries, museums and galleries.

Since the 1980s there has been a significant growth in non-government community-based adult education run on a voluntary or semi-voluntary basis. These courses originate from the requirements, demands and initiatives of local communities and are offered by learning centres, community care centres, community schools, education centres (particularly in country areas), voluntary teaching networks, literacy groups, women's education programs, teachers' centres, ethnic networks, discussion centres and a variety of neighbourhood centres. Courses range from general interest, recreational and leisure activities, personal development, social awareness and craft through to vocational, remedial and basic education. Community-based adult education is open to all, and non-formal characteristics demonstrate the capacity of the community to develop alternatives to institutionalised education.

The higher education sector plays an integral part in adult education through programs of continuing education in professional development, preparatory skills, and general education. These courses are offered by institutions in response to industry and government initiatives and are at a level consistent with the general teaching of the institutions. The TAFE sector is the largest provider of adult recreational and leisure courses.

GOVERNMENT ASSISTANCE TO STUDENTS

The Commonwealth Government spent almost $1,618 million on student assistance in 1993.

9.22 STUDENT ASSISTANCE SCHEMES 1993

Scheme	*Number of students*	*Assistance ($'000)*
AUSTUDY Tertiary	232,221	890,018
AUSTUDY Secondary	236,938	593,154
ABSTUDY (Schooling)	25,543	43,377
ABSTUDY (Tertiary)	16,766	67,305
Assistance for Isolated Children	12,916	24,076

Source: Department of Employment, Education and Training.

AUSTUDY

AUSTUDY is the Commonwealth Government's means-tested and non-competitive scheme of financial assistance to secondary and tertiary students aged 16 and above. The scheme is a major element in the Government's drive to increase participation in full-time education in the upper secondary and tertiary levels.

Maximum allowance rates for married students with dependent children and for single students aged 16 to 20 are aligned with the corresponding rates for unemployed people and all rates are indexed annually. The types of allowances available are:

- standard rate (generally for those living at home);
- away from home rate;
- independent rate;
- a pensioner Education Supplement ($30 per week) for certain Department of Social Security pensioners; and
- dependent spouse and fares allowances for eligible students.

AUSTUDY also has special provisions for young people unable to live at home because of exceptional or intolerable circumstances. These provisions allow young people to be classified as independent, thus free from the application of the parental means test in assessing their eligibility for AUSTUDY.

The number of students assisted under AUSTUDY has increased substantially since the introduction of the scheme in 1987, from about 225,000 students in that first year to around 469,000 in 1993.

Significant improvements to AUSTUDY from 1994 provide more generous and flexible support to help alleviate difficulties faced by many students by:

- recognising a group of articulated short courses as a combined long course so that AUSTUDY and ABSTUDY assistance continues to be paid during vacations;
- making students on training agreements eligible to receive AUSTUDY and ABSTUDY, subject to the personal income test;

- simplifying eligibility rules to allow access to AUSTUDY for students with previous incomplete higher degree studies and those who have completed non-higher degrees more than 10 years ago;
- streamlining assessment procedures for students entering the AUSTUDY/ABSTUDY/AIC system where families have a Health Care Card; and
- from 20 March 1994, enabling people on employment assistance schemes who would previously have been required to transfer to AUSTUDY/ABSTUDY now to be able to undertake courses of six months or less and remain on employment assistance schemes, where they have CES approval.

ABSTUDY

ABSTUDY represents a major component of the Government's commitment under the National Aboriginal and Torres Strait Islander Education Policy to encourage Australian Aborigines and Torres Strait Islanders to take full advantage of educational opportunities, to promote equality of education, to be involved in decision-making and to improve educational outcomes.

The scheme provides financial assistance for Australian Aboriginals and Torres Strait Islanders who undertake approved secondary or tertiary education courses. Assistance is also available to primary students aged 14 or over. Some ABSTUDY allowances are paid whatever the family income. Others are subject to income testing.

ABSTUDY pays an education supplement to school students under the age of 16 who live at home. Other allowances include living allowance, dependent spouse allowance, school fees allowance, the pensioner education supplement and incidental allowance. Full-time, correspondence and tertiary part-time students may be eligible for assistance.

In some circumstances ABSTUDY also provides fares allowance to help with student's travel costs and other assistance such as meeting the cost of field trips associated with students' study. Special allowances are available for students undertaking Masters or Doctorate degrees.

In 1993, ABSTUDY assisted approximately 42,300 students.

AUSTUDY/ABSTUDY supplement

The AUSTUDY/ABSTUDY supplement gives eligible tertiary students the chance to 'trade-in' all or part of their grant in return for a supplement loan of double the amount traded in. The maximum amount of grant a student can trade-in is $3,000, resulting in a $6,000 loan. The supplement is entirely optional and is provided at no real rate of interest. Repayments do not commence until after five years, after which recovery is made through the taxation system when taxable income reaches average weekly earnings.

An AUSTUDY/ABSTUDY supplement loan of up to $2,000 is also available to dependent students whose family income exceeds the allowable threshold for AUSTUDY and ABSTUDY but is under $50,000.

In 1993, the scheme's first year of operation, 45,138 tertiary students were paid an AUSTUDY/ABSTUDY supplement loan.

Assistance for isolated children

The Assistance for Isolated Children Scheme (AIC) assists the families of primary and secondary students who, because of geographic isolation, a disability or other reason (for example, family itinerancy), do not have reasonable daily access to appropriate government schooling.

In certain limited circumstances, students may be granted AIC to bypass a local government school providing tuition in their grade or year. Examples of such circumstances are the need for remedial tuition or the need for diagnostic testing.

Assistance is available for isolated children who board away from home, study by correspondence, or live in a second home so that they can attend school daily.

AIC provides the following allowances which are free from income or assets testing:

- Boarding Allowance ($2,500 per year);
- Second Home Allowance ($2,500 per year); and
- Correspondence Allowance ($10 per week for primary students; $20 per week for secondary students).

These allowances are available to eligible students under 19 years of age.

As well, the annual boarding allowance can be increased up to $3,048 for primary students and $3,384 for secondary students up to the age of 16 years, depending on the family's income and assets.

Families can also continue to receive Department of Social Security Family Payments for eligible students. This option is not available under AUSTUDY.

In 1993, AIC assisted 12,916 students.

ADMINISTRATION OF EDUCATION AT THE NATIONAL LEVEL

The Commonwealth Department of Employment, Education and Training is responsible for education matters at the national level, to which a number of bodies contribute.

The National Board of Employment, Education and Training (NBEET), established under the *Employment, Education and Training Act 1988*, is the mechanism for providing coordinated and independent advice to the Government on employment, education, training and research in the context of the Government's broad social, economic and resource policies.

The Board provides for input from providers of education and training, and from business, industry and union organisations, as well as interested bodies in the community. It is assisted by five Councils:

- The *Australian Language and Literacy Council* advises the Minister on priorities, strategies and targets for the development and implementation of all aspects of the language and literacy policy.
- The *Australian Research Council* makes recommendations to the Minister on the distribution of resources allocated to its research funding schemes, and provides advice to the Board on national research priorities and coordination of research policy.
- The *Employment and Skills Formation Council* advises on technical and further education, employment and skills formation policies, programs and services, and the promotion of effective training through business and industry.
- The *Higher Education Council* advises on the general development of higher education in Australia and in priorities and arrangements for the funding of higher education institutions.
- The *Schools Council* advises on the Commonwealth's policies and programs relating to schools, including the general development of primary and secondary education.

In addition to the NBEET arrangements, the Commonwealth Government has established advisory arrangements in a number of specific areas including women, Aborigines, and in language policy and multicultural education.

A number of bodies at the national level have an important coordinating, planning or funding role:

- In December 1993 a new Commonwealth/State Council, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) was established. The Council replaced the former Ministerial Council on Vocational Education, Employment and Training, the Australian Education Council and Youth Ministers Council. It has responsibility for pre-primary, primary, secondary and higher education, vocational education and training, employment and linkages between employment/labour market programs and education and training, adult and community education and youth policy and programs. The functions of MCEETYA include coordination of strategic policy at the national level, negotiation and development of national agreements on shared objectives and interests as well as the sharing of information and collaborative use of resources.
- The *Australian Council for Educational Research (ACER)* is an independent national research organisation. The Council is funded by annual grants from the Commonwealth Government, and each of the State and Territory Governments, as well as from its own activities. The Council is involved in its own and contract research in cooperation with education systems and plays a central role in the areas of educational measurement and evaluation as well as research into learning and teaching and in the social context of education.

- The *National Centre for Vocational Education Research* (NCVER) was established in 1980 as a company limited by guarantee. Its core grant (representing about 40% of income) is obtained from the Commonwealth Government (providing one-half of the core grant) and the States and Territories (on a per capita basis). The NCVER conducts research; funds research; houses the national clearinghouse and International Labour Organisation (ILO) regional database; is responsible for national statistics on vocational education and training; and publishes research reports and journals.
- The *Register of Australian Tertiary Education* (RATE) was set up in January 1990 by the Australian Education Council. RATE constitutes a single national register of authorities (including institutions) empowered by State/Territory Governments or the Commonwealth Government to accredit tertiary education award courses.
- *The National Training Board* (NTB) was established as a company, limited by guarantee, in 1990 with representation being drawn from industry, unions, the Commonwealth Government, and the State and Territory Governments, to facilitate the development and approval of national competency standards for industry. The role of the Board is to endorse the core skill standards proposed by industry, provide advice and assistance to industry and identify areas where national competency standards may be required. The States and Territories adopt the approved competency standard as the benchmarks for accreditation of training, delivery of training, the registration of providers and the recognition and certification of individuals. Its aim is to ensure that the training system is consistent across the nation and provides for the formal recognition of industry and enterprise-based training.

There are also a number of non-government organisations which have coordinating roles in their specific segments of education and training at the national level. These include the National Catholic Education Commission, the National Council of Independent Schools Associations, the Australian Vice-Chancellors' Committee, the Australian Conference of Directors of TAFE and the Australian High School Principals' Association.

NEW DEVELOPMENTS IN EDUCATION

Participation in post-compulsory education

Following the (Finn) report of the committee of enquiry into post-compulsory education, the establishment of a new national education and training system was announced in July 1992.

The Finn Committee's report titled *Young People's Participation in Post-compulsory Education and Training* also led to the establishment of the Mayer Committee. This committee is expected to undertake further exploratory work on the definition of 'key competencies', which are the minimum basic skills an individual would need to acquire in preparation for employment.

Key competencies and specific industry and occupational competencies recognised as meeting National Training Board standards will form the basis of course content for the new Australian Vocational Certificate (AVC) training system. The changeover to the new system is planned to commence in 1995 with the AVC training system being developed up to that time by way of pilot projects involving the State and Territory Governments and industry. The AVC training system will provide young people with a range of training and education pathways between school and work with each pathway encompassing general education, training to industry standards and structured work experience.

EXPENDITURE ON EDUCATION

This section provides information on the extent and composition of both government and private expenditure on education in recent years. Estimates of government and private expenditure have been compiled in accordance with national accounting concepts. An explanation of these concepts is contained in *Australian National Accounts: Concepts, Sources and Methods* (5216.0), *Classification Manual for Government Finance Statistics, Australia* (1217.0), and also in *Expenditure on Education, Australia* (5510.0) from which figures included in this section have also been taken.

The emphasis given in this section to the outlays of the public sector reflects not only the relative importance of that sector in the provision of educational services but also the lack of detailed information relating to expenditure on educational activities in the private sector. However, the information provided shows the order of magnitude of private sector spending, and also the aggregate supply of education services and facilities.

Table 9.23 presents the total outlays on education by the government and private sectors and their components, and the percentages of Gross Domestic Product (GDP) which they represent, for 1992–93 and preceding years.

The total final expenditure on education (comprising the final consumption and gross fixed capital expenditures of the public and private sectors made directly into the education system) increased by 6.1 per cent from $20,210 million in 1991–92 to $21,436 million in 1992–93. It rose to 5.3 per cent of GDP in 1992–93, after a low of 4.8 per cent in the years 1988–89 and 1989–90 (*see* also graph 9.24).

9.23 GOVERNMENT AND PRIVATE EXPENDITURE ON EDUCATION

Description	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
				— $ million —		
Government						
General government final consumption expenditure	10,764	11,543	12,201	13,117	14,043	14,742
Gross fixed capital expenditure	1,011	1,072	1,301	1,361	1,207	1,419
Increase in stocks	2	2	3	−3	−4	4
Government final expenditure (1)	*11,777*	*12,617*	*13,506*	*14,476*	*15,247*	*16,166*
Personal benefit payments (2)	1,217	1,372	1,516	1,749	2,030	2,189
Grants and advances to persons and non-profit institutions(a)	1,611	1,775	1,995	2,141	2,389	2,417
Advances to persons for Higher Education Contribution Scheme	—	226	435	479	577	600
Other (3)	−14	−24	−7	34	121	93
Total government outlay on education	*14,592*	*15,965*	*17,445*	*18,879*	*20,364*	*21,465*
Private						
Private final consumption expenditure	2,703	3,253	3,941	4,304	4,614	4,914
Gross fixed capital expenditure	312	409	347	427	349	356
Private final expenditure (4)	*3,015*	*3,662*	*4,288*	*4,731*	*4,963*	*5,270*
Total final expenditure on education (1)+(4)	*14,792*	*16,279*	*17,794*	*19,207*	*20,210*	*21,436*
Total outlays on education (1)+(2)+(3)+(4)	**15,996**	**17,627**	**19,302**	**20,990**	**22,361**	**23,718**
Gross Domestic Product(b)	298,994	340,642	370,929	381,120	389,247	405,860

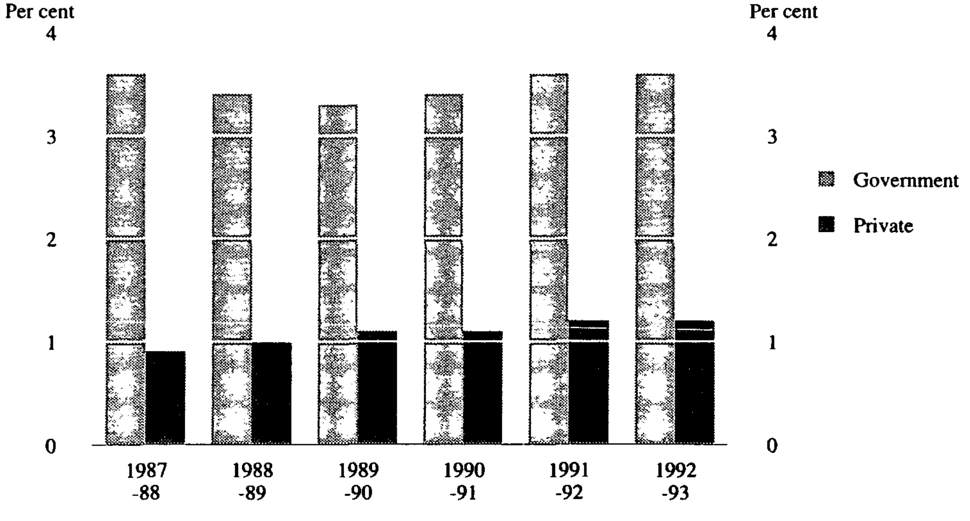
For footnotes *see* end of table.

9.23 GOVERNMENT AND PRIVATE EXPENDITURE ON EDUCATION — *continued*

Description	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
		— per cent of Gross Domestic Product —				
Total government outlays	4.9	4.7	4.7	5.0	5.2	5.3
Total final expenditure on education	4.9	4.8	4.8	5.0	5.2	5.3
of which						
General government final consumption expenditure	3.6	3.4	3.3	3.4	3.6	3.6
Private final consumption expenditure	0.9	1.0	1.1	1.1	1.2	1.2
Government gross fixed capital expenditure	0.3	0.3	0.4	0.4	0.3	0.3
Private gross fixed capital expenditure	0.1	0.1	0.1	0.1	0.1	0.1
Total outlays on education	5.3	5.2	5.2	5.5	5.7	5.8

(a) Excludes Commonwealth advances for Higher Education Contribution Scheme purposes. (b) The figures for Gross Domestic Product are obtained from *Australian National Accounts: National Income and Expenditure, December 1993 (5206.0).*
Source: Expenditure on Education, Australia (5510.0).

9.24 FINAL EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GDP



Source: Expenditure on Education, Australia (5510.0).

In addition to the final expenditure made directly on education by both sectors, the government also makes indirect expenditure relating to education, in the form of personal benefit payments, grants and advances to persons and institutions, and net advances to students under the Higher Education Contribution Scheme. (This applies to students who do not make up-front HECS payments. The net figure reflects an imputed advance made to the student less any repayments of the advance made by the student at a later date). These together with total final expenditure, make up the total outlays on education. Table 9.23 shows that total outlays rose 6.1 per cent from $22,361 million to $23,718 million between 1991–92 and 1992–93, and increased as a percentage of GDP from 5.7 to 5.8 per cent.

Table 9.25 and graph 9.26 show the components of government outlays on education in 1992–93.

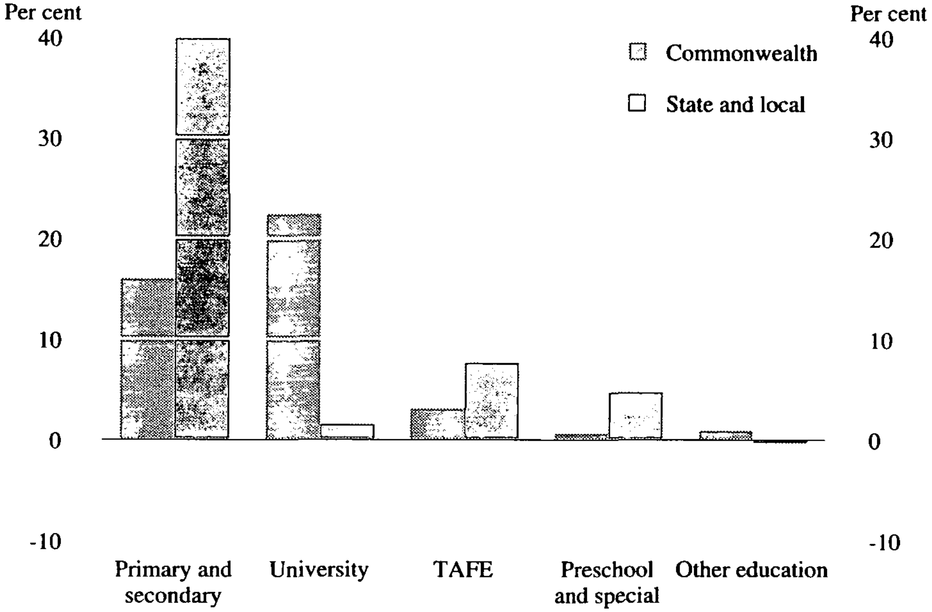
9.25 GOVERNMENT OUTLAYS ON EDUCATION, BY ECONOMIC TRANSACTION AND GOVERNMENT PURPOSE, 1992–93
($ million)

Purpose	*General government final consumption expenditure*	*Personal benefit payments*	*Expenditure on new fixed assets*	*Expenditure on second-hand fixed assets (net)*	*Other (a)*	*Intergovernmental grants (b)*	*Own source outlays (c)*
Primary & secondary education	8,334	675	576	– 19	2,417	—	11,982
Commonwealth	—	612	—	—	18	2,798	3,428
State & local	8,334	63	576	– 19	2,405	– 2,798	8,561
Tertiary education	5,034	983	785	13	663	—	7,478
Commonwealth	255	975	66	– 2	608	3,588	5,490
State & local	4,778	8	719	15	56	– 3,588	1,989
University education	3,229	869	420	14	613	—	5,144
Commonwealth	255	866	66	– 2	608	3,028	4,820
State & local	2,974	3	354	16	6	– 3,028	325
Technical & further education	1,802	107	339	– 1	50	—	2,299
Commonwealth	—	103	—	—	1	560	664
State & local	1,802	5	339	– 1	51	– 560	1,636
Tertiary education n.e.c.	3	7	26	—	—	—	35
Commonwealth	—	7	—	—	—	—	7
State & local	3	—	26	—	—	—	28
Preschool & other special education	990	6	68	—	108	—	1,171
Commonwealth	89	5	1	—	—	50	146
State & local	901	1	67	—	107	– 50	1,026
Transportation of students	166	525	—	—	3	—	694
Commonwealth	—	—	—	—	—	—	—
State & local	166	525	—	—	3	—	694
Education n.e.c.	219	—	5	– 8	– 75	—	140
Commonwealth	158	—	—	—	34	3	195
State & local	61	—	5	– 8	– 109	– 3	– 55
Total	**14,742**	**2,189**	**1,434**	**– 15**	**3,115**	**—**	**21,465**
Commonwealth	**502**	**1,593**	**67**	**– 2**	**660**	**6,439**	**9,259**
State & local	**14,240**	**597**	**1,367**	**– 12**	**2,462**	**– 6,439**	**12,215**

(a) Mainly current grants to non-government schools and subsidies for teacher housing. (b) Specific purpose grants from the Commonwealth Government to State/Territory Governments. The amounts concerned are shown as a deduction from outlays in the rows for State/Territory and local governments. (c) Outlays on education less specific purpose grants received from other levels of government. In the case of the Commonwealth Government this simply represents their total outlays but in the case of State/Territory and local governments it represents outlays financed from their own resources and non-specific Commonwealth grants. NOTE: Totals for *other* and *own source outlays* do not agree with the sum of Commonwealth and State/Territory and local *other* and *own source outlays* because of consolidation of transfers between these levels of government.

Source: Expenditure on Education, Australia (5510.0).

9.26 EDUCATION OUTLAYS BY PURPOSE, 1992–93
(percentage of total government outlays on education)



Source: Expenditure on Education, Australia (5510.0).

BIBLIOGRAPHY

ABS Publications

Education and Training in Australia (4224.0)

Expenditure on Education, Australia (5510.0)

Government Finance Statistics, Australia (5512.0)

Government Financial Estimates, Australia (5501.0)

Labour Force Status and Educational Attainment, Australia (6235.0)

Participation in Education, Australia (6272.0)

Schools, Australia (4221.0)

Student Finances, Australia (6550.0)

Transition From Education to Work, Australia (6227.0)

BIBLIOGRAPHY — *continued*

Other Publications

Publications produced by the Department of Employment, Education and Training are:

The Australian Research Council Awards

Census of Non-government Schools

DEET Programs: Impact on TAFE

Department of Employment, Education and Training Annual Report

Education at a Glance

Education Participation Rates

Higher Education Funding for the 1991–93 Triennium

Higher Education Series

Retention and Participation in Australian Schools

Schooling in Australia: Statistical Profile

Selected Higher Education Statistics

Selected TAFE Statistics

TAFE 1990: Commonwealth Programs and Priorities

The annual reports of the respective State education departments also provide detailed statistical information.

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Ten

Law and Order

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THE LAW IN AUSTRALIA

Nature and composition

The laws of a country represent the common body of rules, whether proceeding from legislation, executive action, court judgments or custom, that a State or community recognises as binding on its citizens or members, and which are enforceable by judicial means. In Australia, the law consists basically of:

- Acts passed by the Commonwealth Parliament acting within the scope of its powers under the Australian Constitution, together with the regulations, rules and orders made under such Acts;
- Acts and Ordinances passed in respect of the Australian Capital Territory and the Northern Territory, together with the regulations, rules and orders made under such Acts and Ordinances;
- Acts passed by State Parliaments and the Legislative Assemblies of the Northern Territory and the Australian Capital Territory, together with the regulations, rules and orders made under such Acts;
- so much of the common or statute law of England that still applies to Australia and remains unrevoked by Australian domestic legislation; and
- the common law, consisting of judicial decisions.

These various laws relate to a number of subject matters, including constitutional law, criminal law, civil law, family law and industrial law.

Commonwealth and State responsibilities

Under the Australian Constitution, the Commonwealth of Australia is empowered to make laws in relation to certain matters specified in the Constitution, for example, in relation to trade and commerce, taxation, defence and external affairs. In relation to some of these matters, the powers of the Commonwealth are concurrent with those of the Australian States and Territories in that they may be exercised by either the Commonwealth, the States or the Territories. In relation to some other specified topics the Commonwealth's power is absolute, and, in all areas of federal jurisdiction, Commonwealth laws are binding on the Australian States and Territories.

The Australian States and Territories have independent legislative power in relation to all matters that are not otherwise specifically invested in the Commonwealth of Australia, and it is the statute law and the common law of the States and Territories that primarily govern the day-to-day lives of most Australians.

Administration and expenditure

Administration of the law in Australia is undertaken by the responsible government concerned. Criminal law is administered principally through the Commonwealth, State and Territorial police forces, the National Crime Authority, and State and Territorial corrective or penal services. There is no independent federal corrective service, and the relevant State or Territorial agencies provide corrective services for federal offenders.

In 1991–92, almost $4.8 billion (or approximately $278 per person) was expended by the Commonwealth, State, Territorial and local governments on law and order.

10.1 GOVERNMENT CURRENT AND CAPITAL EXPENDITURE: LAW AND ORDER
($ million)

	1989–90	*1990–91*	*1991–92*
Police services(a)	2,355	2,554	2,684
Law courts and legal services(b)	1,113	1,141	1,257
Prisons and corrective services(c)	766	881	900
Total	**4,234**	**4,576**	**4,841**

(a) Includes outlays on police colleges, police training and police laboratories. (b) Includes outlays on legal representation and advice on behalf of the government and others, costs of crown prosecutions, trusteeship. Excludes outlays associated with industrial law and tribunals and appeal boards that can be classified to specific purpose categories. (c) Excludes residential child care institutions that are not places of secure detention.

Source: Unpublished ABS data available under the title Government Financial Statistics (5512.0).

Law reform

Commonwealth, State and Territory laws are altered and reformed principally by the relevant legislature. For Commonwealth laws and for the laws of the Territories (except the Australian Capital Territory, the Northern

Territory and Norfolk Island) the relevant legislature is the Commonwealth Parliament. Each State has its own State Parliament and the Australian Capital Territory, the Northern Territory and Norfolk Island each has their own House of Assembly. Each jurisdiction has established advisory bodies to advise governments and parliaments on reform of the law. Some of these bodies have a general law reform function; others are specialist bodies, restricted to particular areas of the law. General law reform commissions have been established as statutory authorities for the Commonwealth (the Australian Law Reform Commission) and all of the States except Victoria and South Australia. Specialist law reform agencies at the Commonwealth level include the Companies and Securities Advisory Committee (undertaking work in the area of corporate law) and the Copyright Law Review Committee (undertaking work in the area of intellectual property law).

The Australian Law Reform Commission

The Australian Law Reform Commission (ALRC) is the Commonwealth Government's general law reform advisory body. It commenced operation in 1975 under the *Law Reform Commission Act 1973*. Its principal objectives are:

- to influence reform of Commonwealth and Territory laws so that they accord with modern conditions;
- to promote increased opportunities for uniformity of law within Australia; and
- to reduce the duplication of law reform effort within Australia.

The Commission's primary task as a law reform agency is the development of legal policy advice on areas of Commonwealth responsibility referred to it by the Attorney-General. In some instances this means conducting joint projects with other law reform agencies.

The Commission encourages the community to contribute to its work and actively seeks input from the public and from interested groups by consulting widely throughout its references.

The Commission makes its recommendations in reports to the federal Attorney-General, which are tabled in the Federal Parliament.

Since June 1991, reports completed by the Commission have included:

- Censorship procedure, 1991 (ALRC 55);
- Multiculturalism and the law, 1992 (ALRC 57);
- Choice of law, 1992 (ALRC 58);
- Collective investments: superannuation, 1992 (ALRC 59);
- Customs and excise, 1992 (ALRC 60);
- Administrative penalties in customs and excise, 1992 (ALRC 61);
- Children's evidence, 1992 (ALRC 63); and
- Personal property securities, 1992 (ALRC 64).

See earlier Year Books for previous reports.

FEDERAL COURTS

The judicial power of the Commonwealth of Australia is vested in the High Court of Australia, in the federal courts created by the Commonwealth Parliament and in the State courts invested by Parliament with federal jurisdiction. The nature and extent of the judicial power of the Commonwealth is prescribed by Chapter III of the Australian Constitution.

High Court of Australia

The Australian Constitution provides that the judicial power of the Commonwealth of Australia should be 'vested in a Federal Supreme Court, to be called the High Court of Australia'. The Constitution requires that there shall be a Chief Justice and not less than two other Justices of the High Court. Currently there are six other Justices.

The Australian Constitution vests two types of jurisdiction in the High Court: original, under sections 75 and 76; and appellate, under section 73.

Original jurisdiction is conferred by section 38 of the *Judiciary Act 1903* in respect of:

- matters arising directly under any treaty;
- suits between States, or between persons suing or being sued on behalf of different States, or between a State and a person suing or being sued on behalf of another State;
- suits by the Commonwealth of Australia, or any person suing on behalf of the Commonwealth, against a State, or any person suing or being sued on behalf of a State;

- suits by a State, or any person suing on behalf of a State, against the Commonwealth of Australia or any person being sued on behalf of the Commonwealth; and
- matters in which a writ of mandamus or prohibition is sought against an officer of the Commonwealth of Australia or of a federal court. (However, the High Court shares some of its jurisdiction under this section with the Federal Court of Australia.)

The High Court is empowered to remit to another court any matters under section 38 of the Judiciary Act. In addition, the High Court is the Commonwealth Court of Disputed Returns.

The appellate jurisdiction of the High Court of Australia derives from the Judiciary Act, together with the *Federal Court of Australia Act 1976* and the *Family Law Act 1975*, and permits the High Court to grant leave to appeal from decisions of:

- State Supreme Courts;
- State courts exercising federal jurisdiction;
- the Federal Court of Australia; and
- the Family Court of Australia.

In considering whether to grant an application for leave to appeal from a judgment, the High Court may have regard to any matters that it considers relevant, but it is required to have regard to whether the application before it:

- involves a question of law that is of public importance, or upon which there are differences of opinion within, or among, different courts; or
- should be considered by the High Court in the interests of the administration of justice.

The High Court is the final court of appeal in Australia.

Federal Court of Australia

The Federal Court of Australia was created by the *Federal Court of Australia Act 1976.*

The Federal Court consists of an Industrial Division and a General Division. Matters arising under the *Industrial Relations Act 1988* are dealt with in the Industrial Division and all other matters are dealt with in the General Division. The Court sits as required in each Australian State, in the Australian Capital Territory and the Northern Territory.

The Federal Court has such original jurisdiction as is invested in it by laws made by the Commonwealth Parliament. Except in cases where a hearing had actually commenced before 1 February 1977, the jurisdictions formerly exercised by, respectively, the Federal Court of Bankruptcy and the Australian Industrial Court have been transferred to the Federal Court.

The Federal Court has been invested with original jurisdiction, concurrent with that of the High Court of Australia, in relation to matters in which a writ of mandamus or prohibition or an injunction is sought against an officer of the Commonwealth of Australia.

The Federal Court has appellate jurisdiction in relation to the decisions of single judges of the Court, decisions of the respective Supreme Courts of the Australian Territories (but not the Northern Territory), and certain decisions of State Supreme Courts when exercising federal jurisdiction.

Industrial Relations Court of Australia

The *Industrial Relations Reform Act 1993* repealed Part III of the *Industrial Relations Act 1988*, which gave jurisdiction to the Federal Court. All pending matters in the Federal Court arising under the *Industrial Relations Act 1988*, except those that are part heard, will be transferred to the Industrial Relations Court of Australia. Thereafter, the Federal Court will not deal with matters arising under that Act. The *Industrial Relations Reform Act 1993* also affects the Court's jurisdiction in matters under sections 45D and 45E of the *Trade Practices Act 1974.* Upon proclamation of the *Industrial Relations Reform Act 1993* section 45E is repealed, section 45D is amended and the Industrial Relations Court of Australia and not the Federal Court will have jurisdiction to hear cases dealing with boycott conduct as defined in Division 7 of Part VI of the *Industrial Relations Act 1988.* All pending matters in the Federal Court arising under sections 45D and 45E, except those that are part heard, will be transferred to the Industrial Relations Court of Australia upon the proclamation. The Federal Court will continue to have jurisdiction in relation to the new section 45D — dealing with conduct (not industrial) with anti-competitive purposes.

Family law and Family Court of Australia

The *Family Law Act 1975*, which commenced operation on 5 January 1976, introduced a new law dealing with the dissolution and nullity of marriage, custody and welfare of the children, maintenance and the settlement of property between the parties to a marriage in Australia. The Act also created the Family Court of Australia as a specialist court dealing only with matrimonial and associated proceedings.

The Act provides that there is only one ground for divorce — that of irretrievable breakdown of a marriage — which ground is established if the husband and wife have been separated and have lived apart from each other for 12 months and there is no reasonable likelihood of their reconciliation. Statistics on divorce are contained in the chapter, Demography.

The provisions of the Family Law Act dealing with the maintenance, custody and welfare of children of a marriage have, since 1 April 1988, applied to all children (including ex-nuptial children) in New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory, the Northern Territory, and Norfolk Island. In Western Australia, the Family Law Act does not apply to ex-nuptial children, who are subject to State laws.

Proceedings under the Family Law Act are dealt with by the Family Court of Australia and by certain other courts in the Australian States and Territories. Except in certain areas of Western Australia, Magistrates Courts and Courts of Petty Sessions have jurisdiction in all proceedings under the Act except for:

- proceedings for dissolution or nullity of marriage (the courts in which an undefended application for dissolution may be instituted or heard have been limited by regulation); and
- defended proceedings for custody or concerning property worth more than $1,000, unless the parties agree to the matter being heard by a Magistrates Court or Court of Petty Sessions.

A State Family Court has been established in Western Australia to deal with family law matters in that State. That Court applies the provisions of the Family Law Act in dealing with matters related to dissolution and nullity of marriages, the custody and welfare of children of marriages, and maintenance and property settlements.

In relation to the guardianship and custody of children, the Family Law Act provides that both parents are guardians, and have, subject to a court order to the contrary, the joint custody of their children under 18 years of age. However, a parent or another interested person can apply to the Court for sole custody of a child at any time.

The Court has power to settle disputes about the parties' family assets, including the power to order a transfer of legal interests in matrimonial property. When dealing with these disputes, the court considers the interest each party has in the property, the financial and non-financial contributions made by each party during the marriage, and the matters the Court is required to consider in dealing with maintenance applications.

The Family Law Act also established two statutory bodies that assist and advise the Commonwealth Attorney-General on family law matters. They are the Family Law Council, an advisory body that is based in Canberra, and the Australian Institute of Family Studies, a research body that is based in Melbourne.

The Judges of the Family Court of Australia are chosen because of their suitability to deal with matters of family law by reason of their training, experience and personality. Staff who are attached to the Court include trained counsellors and legally qualified Registrars and Deputy Registrars.

Proceedings under the Family Law Act in the Family Court are heard in open court, although persons may be excluded from the Court by court order. Some proceedings may be heard in chambers. No publicity that identifies the person or persons involved in any proceedings under the Act is permitted unless otherwise directed by the Court. The publication of law court lists and law reports, or other publications of a technical character directed to the legal or medical professions, is, however, exempted from this prohibition.

In 1992 there were 45,665 divorces granted, a 0.1 per cent increase over 1991. Of these, 24,174 (54.9%) involved children. The total number of children involved was 45,704.

Child Support Agency

The Child Support Agency was established on 1 June 1988 within the Australian Taxation Office, to collect and, where necessary, enforce the payment of maintenance under the Child Support Scheme. The scheme was implemented to ensure that, irrespective of their personal relationship, parents accepted prime responsibility for the support of their children.

Prior to 1 October 1989, the role of the Agency was to collect maintenance awarded by the courts and, through the Department of Social Security, forward payments to the parent with custody of the children. Since 1 October 1989, the Agency has become responsible for assessment of the amount of child support to be paid. The amount is derived from a formula which takes into account the incomes of both parents and the number of relevant dependent children each parent has in their care.

STATE AND TERRITORY COURTS

Australian State and Territory courts have original jurisdiction in all matters brought under State or Territory statute laws, and in matters arising under federal laws, where such matters have not been specifically reserved to courts of federal jurisdiction. Most criminal matters, whether arising under Commonwealth, State or Territory law, are dealt with by State or Territory courts.

Each State and Territory court system is organised and operates independently. However, within each system, which comprises both courts and general jurisdiction and certain specialist courts and tribunals, the courts are organised hierarchically according to the nature of the several matters with which they may deal.

Appeals

The various State County and District Courts and State and Territory Supreme Courts have jurisdiction to hear appeals against the decisions of lower courts and some specialist tribunals in their respective jurisdictions. The procedures concerning the right of appeal are laid down by statute in each State and Territory and appeals may be lodged against matters such as the correctness of the verdict or the severity of the sentence imposed.

Special courts and tribunals

Each Australian State and Territory administers particular areas of the law through specialist courts or tribunals, such as Small Claims Courts and Licensing Courts. These courts or tribunals deal primarily with civil matters or matters of an administrative nature.

Courts of Marine Inquiry

Matters that come within the jurisdiction of Courts of Marine Inquiry are contained in the *Commonwealth Navigation Act 1912*. The principal areas of these Courts' jurisdiction are to make inquiries into casualties, including missing ships and events entailing loss of life on or from ships. Courts of Marine Inquiry are convened by the request of the Minister for Transport and Communications.

ADMINISTRATIVE REVIEW ACTIVITIES

Administrative Appeals Tribunal

The Administrative Appeals Tribunal was established by the *Administrative Appeals Tribunal Act 1975*. Its President is a judge of the Federal Court of Australia. The Tribunal is an independent body the function of which is to review the decisions made by Commonwealth Ministers and authorities. The tribunal may review only those decisions over which it has been given a specific jurisdiction by a Commonwealth Act. There are now more than 230 such Acts, including the *Social Security Act 1991*, the *Migration Act 1958*, the *Customs Act 1901*, the *Freedom of Information Act 1982*, the *Veterans' Entitlements Act 1986* and the *Civil Aviation Act 1988*. The tribunal may substitute its preferred decision for that originally reached by the decision maker.

The Administrative Review Council was also established by the *Administrative Appeals Tribunal Act 1975*. The principal functions of the Administrative Review Council are to make recommendations to the Commonwealth Attorney-General on rights of review of administrative decisions and on the procedures of administrative tribunals.

Administrative Decisions (Judicial Review) Act 1977

The *Administrative Decisions (Judicial Review) Act 1977* provides for judicial review by the Federal Court of Australia of administrative action taken under Commonwealth legislation. An order of review may be sought by a person aggrieved by a decision. The Court is empowered to review the lawfulness of a decision, the conduct leading up to the making of a decision, or circumstances where there has been failure to make a decision. The grounds on which review may be sought and the powers of the Court are set out in the Act. In many cases, a person who is entitled to seek judicial review in respect of an administrative decision may separately seek a statement of reasons for the decision from the decision maker.

Commonwealth and Defence Force Ombudsman

The Office of the Commonwealth Ombudsman was established by the *Ombudsman Act 1976* to investigate complaints about the administrative actions of Commonwealth government departments and prescribed authorities.

The Ombudsman has special powers to investigate complaints against the Australian Federal Police and actions of agencies relating to freedom of information, and to inspect record-keeping procedures for telephone interceptions under the *Complaints (Australian Federal Police) Act 1981*, the *Freedom of Information Act 1982*, and the *Telecommunications (Interception) Act 1979*, respectively.

The Ombudsman was designated the Defence Force Ombudsman in 1983 by amendment to the Ombudsman Act, with power to investigate matters relating to service in the Australian Defence Force by serving and former members.

The Commonwealth Ombudsman has extensive powers to require the production of documents and information. On completion of an investigation, consideration is given to whether the action in question was illegal, unjust, oppressive, improperly discriminatory, or wrong. The Ombudsman can also assess and report on the reasonableness of any law, rule or policy under which the action was taken.

10.2 COMMONWEALTH OMBUDSMAN COMPLAINTS RECEIVED

Type of complaint	*1990 –91*	*1991 –92*	*1992 –93*
	no.	no.	no.
Commonwealth Ombudsman (includes Freedom of Information)			
Written complaints	3,134	4,338	4,149
Per 100,000 of population	18.3	24.9	24.5
Oral complaints	9,086	11,664	10,318
Per 100,000 of population	52.9	67.0	61.0
Defence Force Ombudsman			
Written	298	305	308
Oral	663	513	405
Australian Federal Police	675	693	583

Source: Commonwealth Ombudsman.

If necessary, the Commonwealth Ombudsman can recommend to the agency concerned that it take appropriate remedial action. If the agency fails to comply with such a recommendation, the Ombudsman can report to the Prime Minister and to the Commonwealth Parliament.

The Ombudsman is also the Ombudsman for the Australian Capital Territory, a separate position created by the *A.C.T. Ombudsman Act 1989*.

10.3 COMMONWEALTH AND DEFENCE FORCE OMBUDSMAN JURISDICTIONS COMPLAINTS FINALISED

Method of finalisation	*1990 –91*	*1991 –92*	*1992 –93*
	no.	no.	no.
Written complaints			
Outside Ombudsman's jurisdiction	554	625	671
Discretion exercised	702	938	871
Withdrawn or lapsed	188	168	181
Substantially in favour of complainant	718	892	900
Partly in favour of complainant	444	578	659
Not substantiated	920	997	1,028
Total	**3,526**	**4,198**	**4,310**

... continued

10.3 COMMONWEALTH AND DEFENCE FORCE OMBUDSMAN JURISDICTIONS COMPLAINTS FINALISED — *continued*

Method of finalisation	*1990 –91*	*1991 –92*	*1992 –93*
	no.	no.	no.
Oral complaints			
Discretion exercised	3,266	3,652	3,635
Written complaint advised, withdrawn, etc.	1,775	2,544	2,067
Substantially in favour of complainant	1,600	1,854	1,699
Partly in favour of complainant	1,411	1,822	1,879
Not substantiated	1,697	1,792	1,443
Total	**9,749**	**11,664**	**10,723**

Source: Commonwealth Ombudsman.

The Human Rights and Equal Opportunity Commission

The Human Rights and Equal Opportunity Commission was established on 10 December 1986. It performs functions under the *Human Rights and Equal Opportunity Commission Act 1986, Racial Discrimination Act 1975, Sex Discrimination Act 1984* and the *Disability Discrimination Act 1992.* A Commissioner is appointed under each of those Acts. In 1992, the Human Rights and Equal Opportunity Commission Act was amended to provide for an Aboriginal and Torres Strait Islander Social Justice Commissioner. The Privacy Commissioner, who performs functions under the *Privacy Act 1988,* is a member of the Commission and the Commission provides staff and administrative support to the Commissioner.

The Commission's functions include receipt and conciliation of complaints, the conduct of inquiries, and research and education programs to promote human rights.

The Commission is also responsible for monitoring and ensuring compliance with international instruments relating to civil and political rights, the rights of children, the rights of people with disabilities, the rights of intellectually disadvantaged persons, the elimination of all forms of racial discrimination, the elimination of all forms of discrimination against women and the achievement of equal opportunity in employment.

Freedom of Information Act

The *Freedom of Information Act 1982* has two objectives:

- to make available to the public information about the rules, practices and operations of Australian government departments and authorities ('agencies'); and
- to create a general right of access to documents in the possession of Commonwealth Ministers and agencies.

The Act establishes the 'legally enforceable right' of persons to obtain access to documents. The Act also sets out the responsibilities of Commonwealth agencies in dealing with requests.

The legally enforceable right of access may be subject to exemptions and exceptions, in relation to, for example, disclosure of:

- documents affecting national security, defence, international relations or relations with States;
- Cabinet and Executive Council documents;
- internal working documents;
- documents that affect enforcement of the law and protection of public safety;
- documents exempt by reason of secrecy provisions listed in Schedule 3 of the Act;
- documents affecting personal privacy;
- documents concerning business affairs or confidential material; and
- documents made available for purchase or open access upon payment of a fee.

Agencies exempt (either wholly or in relation to certain of their competitive commercial activities) include intelligence agencies, and those agencies engaged in commercial activities in competition with the private sector. These agencies are listed in Parts 1 and 2 of Schedule 2 to the Act.

The Act contains extensive provisions for review of decisions made under the Act, including review by the Administrative Appeals Tribunal and the Commonwealth Ombudsman.

OTHER COMMONWEALTH BODIES

Commonwealth Royal Commissions

Australian Governments have, from time to time, established Royal Commissions to inquire into, and report on, matters of public concern.

A Royal Commission is established by the Governor-General, on the advice of the Australian Government, issuing a commission to a person or persons to inquire into and report on specified matters. At the end of its inquiry, a Royal Commission presents its report to the Governor-General for consideration by the Government. These reports are usually also tabled in the Commonwealth Parliament.

The power to issue Letters Patent to inquire is a prerogative of the Crown. The *Royal Commissions Act 1902* confers powers on a Royal Commission to compel the attendance of persons, the giving of evidence, and the production of papers. It also creates a number of offences (for example, failure to attend a Royal Commission when summoned, or failure to produce papers) and gives some protection to Commissioners and witnesses against legal liability. The constitutional foundation of the Royal Commissions Act is section 51(xxxix) of the Australian Constitution, which provides that the Commonwealth Parliament may make laws with respect to 'matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth'.

Royal Commissions conducted between 1 July 1984 to 1 January 1994 were:

- The Royal Commission into British Nuclear Tests in Australia;
- The Royal Commission of Inquiry into Alleged Telephone Interceptions;
- The Royal Commission of Inquiry into the Chamberlain Convictions;
- The Royal Commission into Grain Storage, Handling and Transport; and
- The Royal Commission into Deaths in Custody of Aboriginals and Torres Strait Islanders.

National Crime Authority

The National Crime Authority (NCA) was established by the Commonwealth Government in July 1984 as provided by the *National Crime Authority Act 1984*. Similar legislation was passed in each State, the Northern Territory and subsequently the Australian Capital Territory, to underpin the work of the NCA in those jurisdictions, making the NCA the only law enforcement agency in Australia whose investigations are not limited by jurisdictional or territorial boundaries.

The decision to establish the NCA was taken in response to the findings of several Royal Commissions conducted in the late 1970s and early 1980s, which revealed the extent of organised criminal activity in Australia. The NCA's mission is to counteract organised criminal activity and reduce its impact on the Australian community, working in cooperation and partnership with other agencies. The term 'organised crime' is not in fact used in the *National Crime Authority Act 1984*, which instead describes such activity in terms of 'relevant criminal activity' and 'relevant offence'.

In conducting investigations, the NCA is required to assemble admissible evidence relating to offences against the laws of the Commonwealth, States or Territories to enable the prosecution of offenders and to provide that evidence to the appropriate Attorney-General or relevant law enforcement agency, such as the Director of Public Prosecutions.

Information may be passed to prosecution authorities to enable such agencies to pursue civil remedies or other action to confiscate the proceeds of criminal activity.

The NCA may also make recommendations to relevant ministers for law or administrative reform.

Apart from the normal powers of a law enforcement agency, the NCA may use special powers when it has been given a reference by a member of the Inter-Governmental Committee of Commonwealth, State and Territory Ministers. These powers include the power to issue summonses and conduct in camera hearings at which witnesses are required to give evidence or produce documents, and the power to seek the delivery to the NCA of the passport of a person who has been summonsed to appear at a hearing, but who is suspected of seeking to leave Australia.

The work of the NCA is monitored by the Inter-Governmental Committee and by the Federal Parliamentary Joint Committee on the NCA. The Act provides for the review by the Federal Court of certain decisions, and other decisions are subject to review pursuant to the *Administrative Decisions (Judicial Review) Act 1977.*

Statistics on the operations and results of NCA activities, such as numbers of investigations, persons charged, convictions obtained, and consequential taxation and proceeds of crime reclaimed are contained in its Annual Report.

At 30 June 1993, the NCA had a staff of 424 persons, including 97 police officers.

Consumer affairs

The Commonwealth involvement in consumer affairs derives substantially from the *Trade Practices Act 1974.* The Commonwealth Attorney-General has responsibility for Part V (Consumer Protection) of the Act that deals with unfair practices, provides private law rights against sellers, manufacturers and importers, and provides for product safety (including provision for the banning and/or recall of goods considered to be unsafe) and information standards.

The Federal Bureau of Consumer Affairs, located in the Attorney-General's Department:

- provides advice to the Minister for Consumer Affairs and Government agencies on consumer policy and consumer law matters;
- administers, enforces and educates consumers and business about the mandatory consumer product safety and consumer product information provisions of the Trade Practices Act;
- educates consumers about their rights and responsibilities;
- encourages consumer representation on government and private sector decision making bodies, and assists the development of industry dispute resolution schemes;
- works to provide consumers, and in particular, disadvantaged consumers with access to information, education and effective dispute resolution; and
- advises the Government on the effectiveness of Part IVA (unconscionable conduct), Part V (consumer protection) and Part VA (product liability) provisions of the Trade Practices Act.

The Australian Consumers' Council (ACC) advises the Federal Minister for Consumer Affairs on strategies for more effective consumer protection and also monitors consumer opinion. The ACC replaced the National Consumer Affairs Advisory Council on 1 February 1993. Its main objective is to provide the Minister for Consumer Affairs with advice so that the Government may enhance the power of consumers in the marketplace. The Council has eleven members and each was appointed by the Minister for Consumer Affairs for a two year period.

The Trade Practices Commission is an independent statutory authority which has the responsibility for enforcing those anti-competitive provisions of the Trade Practices Act that prohibit price fixing, resale price maintenance and other practices that prevent the operation of a free market.

The Commission also enforces the unconscionable conduct and fair trading consumer protection provisions of the Trade Practices Act which prohibit misleading and deceptive conduct, false representations about goods, bait advertising, pyramid selling and other unfair practices and sales methods. It also researches and inquires into consumer matters, assists development of industry codes of conduct and educates business about the requirements of the Trade Practices Act.

Coordination of consumer affairs activities is undertaken by the Ministerial Council of Consumer Affairs and through meetings of the Standing Committee of Officers of Consumer Affairs. There is also a Commonwealth/State Consumer Products Advisory Committee to provide a coordinated approach to product safety and information matters. The Commonwealth Government also promotes consumer awareness through financial support to two peak consumer organisations, the Australian Federation of Consumer Organisations and the Australian Financial Counselling and Credit Reform Association.

Australian Security Intelligence Organisation (ASIO)

The Australian Security Intelligence Organisation was established in 1949 as Australia's security organisation. Its functions are set out in the *Australian Security Intelligence Organisation Act 1979* (the ASIO Act). Its main role is to:

- forewarn Ministers and appropriate agencies and authorities, of activities likely to place the security of Australian people, property or interests at risk; and
- provide Ministers and appropriate agencies and authorities with sound advice on how risks might be managed and harm avoided, countered or reduced.

The ASIO Act defines activities which could cause security harm to Australia as espionage, sabotage, politically motivated violence, promotion of communal violence, attacks on the defence system, and other acts of foreign interference.

ASIO carries out its functions largely by collecting information or 'intelligence' and analysing it to produce assessments of current and likely future situations. Intelligence is collected in the course of investigating people or groups whose activities are discernibly relevant to security. Intelligence may be obtained overtly or covertly, according to circumstance. Where authorised by warrant signed by the Attorney-General, ASIO may use special powers such as telephone interception to conduct intrusive investigations.

ASIO is only an advisory body, and has no powers to enforce measures for security. It cannot limit the rights of people to engage in lawful advocacy, protest or dissent, which in themselves are not actions that endanger security. It must stay free of any political or sectional bias. Its intelligence and advice is transmitted to government and to executive agencies of government as a basis for decision making and action if required to maintain the security of Australia.

ASIO has an additional role in contributing to foreign intelligence collection in Australia, and also contributes to Australia's counter-terrorism response capability.

ASIO's chief executive, the Director-General of Security, is responsible to the Attorney-General.

LEGAL AID

The objective of the Commonwealth's legal aid scheme is to maximise access to justice by all members of the community.

Legal aid policy and service development, evaluation and coordination is largely undertaken at the Commonwealth level by the Office of Legal Aid and Family Services and delivered throughout the country by independent Legal Aid Commissions, Aboriginal Legal Services and other community-based legal centres and services.

The Commonwealth provides over half of the funding for legal aid, with the rest made up by State Government, Law Society trust account funds and contributions from clients. Legal aid services and advice are provided directly by staff lawyers or by way of subsidies to the private legal profession. Assistance is directed to those persons who are most in need by way of merit and means tests.

In addition to the provision of services in family, criminal, civil and administrative law matters by the agencies described above, the Commonwealth Attorney-General's Department also provides assistance for special interest and test cases, Royal Commission hearings, War Crimes cases, veterans' matters, internal disputes in federal trade unions and actions under international conventions (for example, relating to child abduction, overseas maintenance and civil and political rights).

THE POLICE

The principal duties of the police are the prevention and detection of crime, the protection of life and property, and the enforcement of law to maintain peace and good order. They may perform a variety of additional duties in the service of the State, including the regulation of street traffic, acting as clerks of petty sessions, Crown land bailiffs, foresters, mining wardens and inspectors under the Fisheries and other relevant Acts. With the exception of the Australian Federal Police, police forces in Australia are under the control of the respective State and Northern Territory Governments, but their members perform certain functions on behalf of the Australian Government, such as the registration of aliens, and, in conjunction with the Australian Federal Police and other Commonwealth officers, they enforce various Commonwealth Acts and Regulations.

Australian Federal Police (AFP)

The AFP is a Commonwealth Statutory Authority brought into existence by the *Australian Federal Police Act 1979.* The AFP has its headquarters in Canberra. Its Criminal Investigations Program is conducted through six Regional Commands, its Headquarters Investigations Department and its numerous Liaison Officers in many overseas countries. In the Australian Capital Territory, the AFP provides a full range of general community policing services, including traffic control, special operations, search and rescue services and conventional crime investigations.

Under Ministerial direction issued under section 13(2) of the *Australian Federal Police Act 1979* the AFP's priorities are to:

- provide the best in prevention, detection and investigation of criminal offences against the laws of the Commonwealth, with emphasis on:
  (i) providing effective strategic intelligence on criminal matters;
  (ii) attacking the financial base of criminal activity; and
  (iii) assisting in the maintenance of the integrity of financial institutions and their trading activities;
- provide a quality community policing service for the Australian Capital Territory;
- enhance the AFP's capability to support its diverse international obligations; and
- provide leadership in the Australian law enforcement effort.

The Australian Federal Police is responsible for the prevention, detection and investigation of criminal offences such as drug offences, money laundering, organised crime, identifying the proceeds of crime, and fraud against Commonwealth revenue and expenditure, for example, social security fraud and taxation fraud.

The *Proceeds of Crime Act 1987* came into force on 5 June 1987 and provides for the confiscation of assets derived from criminal conduct including drug trafficking. Similar provisions in the *Customs Act 1901* (which were enacted in 1979) provide for forfeiture and the imposition of pecuniary penalties in narcotic related matters.

All States with the exception of Tasmania have enacted confiscation legislation. In the case of Tasmania, the *Poisons Act 1971* contains provision for the forfeiture of assets which have been acquired from narcotic-related activities.

The Cash Transaction Reports Act enacted in 1988 requires mandatory reporting to the Cash Transaction Reports Agency by cash dealers of cash transactions of $10,000 or more ($5,000 in the case of an international transaction), suspect transactions, and verification of the identity of anyone opening accounts with cash dealers.

Size of police forces

The number of sworn police officers is shown in table 10.4. The figures have been supplied by the respective police agencies, and are not directly comparable (for example, the figures do not differentiate between full-time and part-time officers). Further detail on the operations of each force may be found in the respective police annual reports to their Ministers.

10.4 POLICE FORCES

At 30 June	*AFP(a)*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*
1991	r2,543	13,203	9,726	5,895	3,535	3,994	993	693
1992	r2,453	12,593	9,877	6,271	3,673	r4,112	1,018	669
1993	2,394	12,971	9,954	6,377	3,782	4,211	1,025	694

(a) Excludes protective services units.
Source: Various police authorities.

CRIME STATISTICS

Two recently introduced sets of statistics provide a national picture of crime in Australia. One set relates to a selected range of offences that became known to and recorded by police. The other comprises statistics on crimes reported to the police as well as unreported crimes, obtained from a survey of households. Both sets of statistics complement each other. Some of the main features of these statistics are given below.

Crimes recorded by police

From the crime statistics based on offences recorded by police, the most frequent crime in 1993 was that of unlawful entry with intent with more than 380,000 offences, representing a rate of 2,161 per 100,000 population. Motor vehicle theft was the next most common type of offence, with 112,508 stolen motor vehicles, a rate of 637 per 100,000 population. Among the violent crimes on which national statistics are available, the most common type of crime in 1993 was robbery, with 12,765 reports, a rate of 72 per 100,000 population. There were 12,390 sexual assault victims, which represents a rate of 70 per 100,000 population, and 290 murder victims representing a rate of 1.6 per 100,000 population (table 10.5).

Most violent offences against the person (for example, murder, attempted murder, sexual assault) occurred in private dwellings (55.9% of murders; 42.6% of attempted murders; 58.8% of sexual assaults), followed by occurrences in streets/footpaths (11.0% of murders; 23.7% of attempted murders; 7.3% of sexual assaults). The majority of robberies were carried out in streets/footpaths (36.4% of robberies), followed by retail establishments (23.7% of robberies). Armed robberies differed from unarmed robberies in that the majority of robberies involving a weapon were carried out against retail establishments (40% of armed robberies), whilst unarmed robberies tended to occur in streets/footpaths (48.6% of unarmed robberies). The most common types of premises involved in unlawful entries with intent were private dwellings (51.8%), followed by retail establishments (14.9%). Motor vehicle thefts were most common in streets/footpaths (30.3% of thefts), followed by residential locations (16.9% of thefts). However, a significant proportion of motor vehicle thefts were not classified to a specific location.

10.5 CRIMES RECORDED BY POLICE, BY CATEGORY OF OFFENCE, 1993

Offence category	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
				NUMBER					
Homicide	209	154	211	106	77	11	29	5	802
Murder	117	52	40	32	29	6	12	2	290
Attempted murder	82	65	133	52	14	3	7	3	359
Manslaughter	6	4	10	5	10	—	4	—	39
Driving causing death	4	33	28	17	24	2	6	—	114
Sexual assault	3,797	3,142	2,218	1,573	1,263	126	195	76	12,390
Kidnapping/abduction	313	68	121	75	33	13	3	17	643
Robbery	6,002	1,904	1,916	1,703	973	106	47	114	12,765
Armed robbery	2,313	990	929	490	475	45	14	52	5,308
Unarmed robbery	3,689	914	987	1,213	498	61	33	62	7,457
Blackmail/extortion	8	57	40	27	5	—	—	3	140
Unlawful entry with intent	110,448	80,463	75,021	41,579	52,766	11,943	3,687	5,710	381,617
Motor vehicle theft	39,066	27,578	15,625	10,292	16,208	1,328	751	1,660	112,50

... continued

10.5 CRIMES RECORDED BY POLICE, BY CATEGORY OF OFFENCE, 1993 — *continued*

Offence category	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
				RATE PER 100,000 POPULATION					
Homicide	3.48	3.45	6.78	7.25	4.59	2.33	17.23	1.67	4.54
Murder	1.95	1.17	1.29	2.19	1.73	1.27	7.13	0.67	1.64
Attempted murder	1.36	1.46	4.27	3.56	0.83	0.64	4.16	1.00	2.03
Manslaughter	0.10	0.09	0.32	0.34	0.60	—	2.38	—	0.22
Driving causing death	0.07	0.74	0.90	1.16	1.43	0.42	3.57	—	0.65
Sexual assault	63.19	70.42	71.26	107.61	75.29	26.71	115.86	25.43	70.15
Kidnapping/abduction	5.21	1.52	3.89	5.13	1.97	2.76	1.78	5.69	3.64
Robbery	99.89	42.67	61.56	116.51	58.00	22.47	27.93	38.14	72.28
Armed robbery	38.49	22.19	29.85	33.52	28.31	9.54	8.32	17.40	30.05
Unarmed robbery	61.40	20.48	31.71	82.99	29.69	12.93	19.61	20.74	42.22
Blackmail/extortion	0.13	1.28	1.29	1.85	0.30	—	—	1.00	0.79
Unlawful entry with intent	1,838.17	1,803.25	2,410.24	2,844.56	3,145.33	2,531.91	2,190.73	1,910.34	2,160.73
Motor vehicle theft	650.17	618.05	501.99	704.11	966.14	281.53	446.23	555.37	637.02

Source: National Crime Statistics, 1993 (4510.0).

Crime victims

Based on the results of a household survey of persons aged 15 years and over, 489,200 people had been the victims of crime during the 12 months ending April 1993. The survey covered only those types of crime which can be measured by household surveys. Information was collected on these crimes whether or not they had been reported to police, together with socio-economic information on the victims. The results of this survey are not compatible with, but complement the above national crime statistics compiled from police records.

In the 12 months to April 1993, an estimated 6.8 per cent of households in Australia were victims of at least one break and enter or attempted break and enter offence. An estimated 1.2 per cent of persons in Australia aged 15 years and over were victims of at least one robbery; 2.5 per cent of persons in Australia aged 15 years and over were victims of at least one assault; and 0.6 per cent of females aged 18 years and over were victims of at least one sexual assault (table 10.6).

10.6 VICTIMS OF CRIME(a) IN THE LAST 12 MONTHS TO APRIL 1993

Type of offence	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Households									
Break and enter	79.1	51.7	57.1	28.1	45.6	6.8	3.4	5.2	277.0
Attempted break and enter	55.3	41.8	34.8	21.3	30.0	3.5	2.4	5.1	194.2
Break and enter or attempted break and enter(b)	*120.4*	*86.1*	*82.2*	*45.4*	*67.2*	*9.6*	*4.8*	*9.3*	*425.0*
Motor vehicle theft	42.2	27.0	14.2	9.5	13.7	1.7	(e)0.3	(e)0.9	109.6
Total household victims(b)	**159.2**	**110.8**	**93.4**	**53.8**	**78.4**	**11.3**	**5.1**	**10.1**	**522.0**
Persons									
Robbery	59.3	34.7	27.4	14.8	15.8	2.9	1.6	3.7	160.1
Assault	114.8	76.3	66.3	27.9	27.9	9.8	3.3	7.9	334.2
Sexual assault(c)	17.7	7.6	5.5	4.2	(e)2.0	(e)0.9	(e)0.1	(e)0.9	38.9
Total personal victims(b)	**173.2**	**108.8**	**92.1**	**42.7**	**43.9**	**12.8**	**4.7**	**11.0**	**489.2**

For footnotes *see* end of table.

10.6 VICTIMS OF CRIME(a) IN THE LAST 12 MONTHS TO APRIL 1993 — *continued*

Type of offence	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
	VICTIMISATION RATE								
				— per cent(d) —					
Households									
Break and enter	3.7	3.3	5.2	5.0	7.5	4.0	7.4	5.0	4.4
Attempted break and enter	2.6	2.6	3.2	3.8	4.9	2.0	5.4	4.9	3.1
Break and enter or attempted break and enter(b)	*5.7*	*5.4*	*7.5*	*8.1*	*11.0*	*5.6*	*10.6*	*8.9*	*6.8*
Motor vehicle theft	2.0	1.7	1.3	1.7	2.2	1.0	(e)0.7	(e)0.8	1.7
Total household victims(b)	**7.5**	**7.0**	**8.6**	**9.7**	**12.8**	**6.6**	**11.3**	**9.7**	**8.3**
Persons									
Robbery	1.3	1.0	1.2	1.3	1.3	0.8	1.7	1.7	1.2
Assault	2.6	2.2	2.9	2.5	2.2	2.8	3.6	3.5	2.5
Sexual assault(c)	0.8	0.5	0.5	0.8	(e)0.3	(e)0.5	(e)0.2	(e)0.9	0.6
Total personal victims(b)	**3.9**	**3.2**	**4.0**	**3.8**	**3.5**	**3.7**	**5.2**	**4.9**	**3.7**

(a) Refers to households or persons who were victims of any of the types of offence specified. (b) Because an individual household or person could be a victim of both types of offence, figures given for individual offence types do not sum to the figures in this row. (c) Sexual assault questions were asked only of females aged 18 years and over. (d) Of households/persons. (e) Estimate is subject to a relative standard error of between 25 per cent and 50 per cent.

Source: Crime and Safety, Australia, April 1993 (4509.0).

The previous national crime statistics survey conducted by the ABS was in 1983. However, care must be exercised in the comparison of the results of the 1983 and 1993 surveys because of significant methodological and definitional differences. Nevertheless table 10.7 provides a general comparison of certain types of offence during the two periods.

10.7 VICTIMS OF CRIME(a) IN THE LAST 12 MONTHS: TYPE OF OFFENCE, 1983 AND 1993

			Victimisation rate	
Type of offence	*1983*	*1993*	*1983*	*1993*
	—'000—		— per cent(b) —	
Households				
Break and enter/attempted break and enter(c)	315.4	425.0	6.1	6.8
Motor vehicle theft(d)	. .	109.6	. .	1.7
Persons				
Robbery	65.3	160.1	0.6	1.2
Assault	390.9	334.2	3.4	2.5
Sexual assault(e)	26.7	38.9	0.5	0.6

(a) Refers to households or persons who were victims of any of the types of offence specified. (b) Of households/persons. (c) Not asked separately in 1983 survey. (d) Reported as a personal crime in 1983 survey. (e) Sexual assault questions were asked only of females aged 18 years and over.

Source: Crime and Safety, Australia (4509.0).

Drug offences

Australia ratified the Single Convention on Narcotic Drugs 1961 in December 1967, and the Protocol Amending the Single Convention on Narcotic Drugs on 22 December 1972. Australia is also a signatory to the Convention on Psychotropic Substances 1971. There is cooperation between the Commonwealth Government, State and Territory Governments, the various police forces, and other agencies in order to combat the perceived serious and growing threat to good order which is posed by the traffic in and abuse of drugs of dependence. The Australian Customs Service has responsibility for the enforcement of laws controlling the illicit importing and exporting of drugs, but each police force has a drug squad or squads, staffed by selected officers with special training and ability to understand the complexities of drug abuse and drug trafficking. Drug laws incorporate the controls and penalties for offences as required by international drug conventions.

10.8 SELECTED DRUG SEIZURES BY COMMONWEALTH AGENCIES(a)

Type of drug	*1991–92*	*1992–93*
Cannabis	r1,818	2,291
Cannabis resin	r797	450
Amphetamines	r76	117
Heroin	r256	187
Cocaine	r78	81
Opium	r12	15
LSD	r45	46
Other	r54	52
Total	**r3,136**	**3,239**

(a) Includes Australian Customs Service and Australian Federal Police, but excludes seizures involving the National Crime Authority.
Source: Australian Federal Police.

Further information on the widespread problems arising from drug abuse in Australia, and how these problems are being approached, may be found in the Australian Drug Intelligence Assessment Report, by the Australian Bureau of Criminal Intelligence.

CORRECTIVE SERVICES

The term 'correction' (or its derivatives) as used here refers to the objectives of the criminal justice system regarding detention and supervision of offenders.

The principal objectives of sentencing are to deter potential offenders, to express society's disapproval, to reduce the opportunity for further crime, to rehabilitate the offender, and to compensate the victim(s).

These objectives are reflected to varying degrees in the different forms of correctional options which are available to the courts in each State and Territory. These options fall broadly into three main categories:

- those that do not involve supervision or detention of the offender, such as fines, bonds and unsupervised recognisances;
- those involving supervision in the community, usually for a specified period, or until some educational or community reparative target is achieved, such as probation or community service orders; and
- those involving detention, either in prisons or other institutions, or at home subject to a home detention order.

In recent years it has become common for courts to impose sentences combining several different components, in order to ensure that the punishment is appropriate to the crime and the circumstances of the offender.

All States and the Northern Territory operate prisons and other correctional services. Separate provisions exist in each State and Territory for dealing with juvenile offenders. Convicted adult prisoners from the Australian Capital Territory serve their sentences in New South Wales prisons, but local provision is made for the short-term custody of remand prisoners, and for probation and parole services. The Commonwealth Government does not operate any prisons or other correctional services, and federal offenders (that is, persons convicted of offences under Commonwealth laws) fall within the jurisdiction of State agencies for correctional purposes.

Prisoners' offences and sentences

The Australian Institute of Criminology conducts an annual prison census on the night of 30 June of all persons, convicted or not convicted, who were held in custody in gazetted Australian prisons for adult offenders. This includes those prisoners temporarily absent from prison (for example, prisoners in hospitals, or away on work release schemes).

10.9 NUMBER OF PRISONERS BY MOST SERIOUS OFFENCE/CHARGE(a) BY AGE(b), 30 JUNE 1992

	Age group (years)								
Offence/charge(a)	*<20(b)*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*>49*	*Total*
Homicide	52	265	296	294	218	142	103	146	1,516
Assault	97	463	358	259	151	87	43	37	1,495
Sex offences	34	238	284	278	274	207	133	220	1,668
Other offences against the person	10	58	49	40	22	11	11	4	205
Robbery	112	579	451	332	185	97	41	28	1,825
Extortion	1	11	11	3	6	—	4	1	37
Break and enter	283	856	599	369	147	55	22	18	2,349
Fraud and misappropriation	8	67	96	96	69	69	57	87	549
Receiving	23	75	74	57	33	35	13	9	319
Other theft	196	478	287	185	89	47	22	24	1,328
Property damage	23	63	44	31	14	14	7	7	203
Environmental	—	3	2	—	—	—	—	—	5
Government security	—	—	—	—	1	—	—	4	5
Justice procedures	74	342	214	161	73	37	25	23	949
Unlawful possession of weapon	2	14	9	8	10	4	2	3	52
Other offences against good order	13	55	33	27	12	11	5	11	167
Possession, use of drugs	9	33	56	55	36	16	8	6	219
Deal/traffic drugs	5	98	194	266	232	166	93	72	1,126
Manufacture/grow drugs	—	25	33	40	26	20	13	16	173
Driving offences	11	101	113	112	74	52	33	23	519
Licence, registration	10	52	63	39	20	15	10	7	216
Other traffic offences	22	86	74	46	24	6	9	3	270
Other offences	9	29	42	68	64	41	29	45	327
Offences in custody	—	—	1	—	—	—	—	—	1
Unknown	10	5	5	8	4	2	1	1	36
Total persons	**1,004**	**3,996**	**3,388**	**2,774**	**1,784**	**1,134**	**684**	**795**	**15,559**

(a) The most serious offence/charge is that offence for which a prisoner received the longest sentence, or that charge which carries the longest statutory maximum penalty. (b) The age at which a convicted person would normally become liable to imprisonment in an adult prison varies from State to State, being seventeen years in Victoria, Queensland, Tasmania and the Northern Territory, and eighteen in other jurisdictions, although younger persons convicted of a particularly serious offence may be sent to an adult prison. Inmates of juvenile corrective institutions are not included in this census.

NOTE: The total number of prisoners shown in this table is greater than the total prisoners shown in the following tables. Data in this table include 1,854 remandees not convicted, awaiting sentence or deportation.

Source: Australian Institute of Criminology.

10.10 NUMBER OF SENTENCED PRISONERS BY TYPE OF SENTENCE IMPOSED(a), 30 JUNE 1992(b)

Type of sentence	*Number of prisoners*
Life	652
Governor's pleasure	70
Administrative(b)	5
Indefinite(c)	7,673
Fixed term	3,730
Fine default only	313
Periodic detention	1,257
Unknown	5
Total	**13,705**

(a) Type of sentence is determined by the cumulative effect of all sentences imposed. (b) Includes unsentenced prisoners subject to deportation orders. (c) Refers to cases where both a minimum and a maximum term are set and the actual sentence to be served lies somewhere between the two limits.

NOTE: This table excludes all remandees.

Source: Australian Institute of Criminology.

10.11 NUMBER OF SENTENCED PRISONERS BY MOST SERIOUS OFFENCE(a) AND AGGREGATE SENTENCE(b), 30 JUNE 1992

		Duration of aggregate sentence						
Offence	*Periodic detention*	*Under 3 months*	*3 months and under 2 years*	*2 and under 5 years*	*5 and under 10 years*	*10 years and over(c)*	*Not known*	*Total*
Homicide	27	—	32	83	200	291	663	1,296
Assault	154	53	569	292	144	58	12	1,282
Sex offences	86	5	130	453	590	267	27	1,558
Other offences against the person	3	3	40	40	44	16	2	148
Robbery	43	2	136	504	607	273	6	1,571
Extortion	2	—	7	9	11	1	—	30
Break and enter	113	30	922	759	228	28	2	2,082
Fraud and misappropriation	109	12	198	131	37	9	—	496
Receiving	45	17	134	55	17	1	—	269
Other theft	127	60	696	265	46	11	—	1,205
Property damage	21	11	49	53	26	6	—	166
Environmental offences	2	—	1	1	—	—	—	4
Government security	1	—	—	1	1	2	—	5
Justice procedures	63	131	446	158	50	15	9	872
Possession of weapon	5	1	17	9	4	—	—	36
Other offences against good order	4	37	57	28	12	3	2	143
Possession/use drugs	13	32	45	32	30	5	—	157
Deal/traffic drugs	127	10	210	289	219	115	4	974
Manufacture/grow drugs	33	4	40	51	19	5	—	152
Driving offences	131	90	266	11	2	1	—	501
Licence, registration	—	37	151	15	5	—	—	208
Other traffic offences	139	37	87	2	—	—	—	265
Other offences(d)	9	17	50	45	93	51	1	266
Offences in custody	—	—	—	—	1	—	—	1
Unknown	—	8	10	—	—	—	—	18
Total persons	**1,257**	**597**	**4,293**	**3,286**	**2,386**	**1,158**	**728**	**13,705**

(a) Most serious offence is that for which a prisoner received the longest sentence. (b) The longest period that a person may be detained under sentence in the current episode. (c) Includes sentences of life and detention at the Governor's pleasure. (d) Includes other offences and unknown offences.

NOTE: This table excludes all remandees.

Source: Australian Institute of Criminology.

CRIMINOLOGICAL RESEARCH

Australian Institute of Criminology

The Australian Institute of Criminology was established as a statutory authority under the *Criminology Research Act 1971* and the *Criminology Research Amendment Act 1986*.

The functions of the Institute, as defined in the Criminology Research Acts, include:

- the conduct of criminological research (that is, research in connection with the causes, prevention and correction of criminal behaviour and related matters), and the communication of the results of such research to the Commonwealth and States;
- the provision of advice on needs and programs relating to criminological research, and advice and assistance in relation to any research funded through the criminology research council;
- the conduct of seminars and courses of training and instruction for persons engaged in criminological research or work related to the prevention or correction of criminal behaviour;
- the collection and dissemination of statistics relevant to crime and criminal justice;
- the provision of advice in relation to the compilation of statistics in relation to crime; and
- the publishing of material resulting from, or relating to, its activities.

Deaths in custody. The Institute has a program of monitoring the deaths in custody that occur throughout Australia. It publishes six monthly reports on trends in the deaths of people in the custody of the police, prison and juvenile justice/juvenile welfare authorities, doing so as part of the Commonwealth's response to the recommendations of the Royal Commission into Aboriginal Deaths in Custody. During the 12 months to 30 June 1993, 72 custodial deaths were reported to have occurred in Australia, 30 in police custody and 42 in prison custody. Six of the deceased were Aboriginal people and 66 non-Aboriginal.

Crime and Violence Prevention Unit. The Unit seeks to assist the community and government in Australia to reduce and prevent crime and violence through the provision of practical assistance and the dissemination of information. The Unit provides information aimed at changing cultural attitudes which encourage violence and assists with the development of strategies for improving community safety within physical and social environments. The Unit includes the National Clearing House on Violence Against Women and administers the Australian Violence Prevention Award.

National Homicide Monitoring Program. The Institute's Program describes and analyses the characteristics of all Australian homicide incidents, and the victims and offenders involved with them, on an annual ongoing basis. From 1994 it will also include information concerning New Zealand homicides. The aim of the program is to provide reliable data on the nature of homicide and to detect patterns and trends over time.

On behalf of the National Child Protection Council, the Institute hosts a Clearing House of information whose function is to collect and disseminate material on all aspects of child abuse prevention.

BANKRUPTCY AND COPYRIGHT

Bankruptcy

Bankruptcy is a statutory regime for the release of debtors from the payment of their debts and the repayment of creditors out of the proceeds of realisation of the debtor's property.

The *Bankruptcy Act 1966* deals with matters relating to the insolvency of individuals and partnerships only. Both business and non-business bankruptcies relating to individuals/sole proprietors and partnerships are covered by the Bankruptcy Act. Company insolvencies are under the jurisdiction of the Australian Securities Commission.

The term 'insolvency' covers not only bankruptcies and orders for the administration in bankruptcy of the estates of deceased persons, but also persons who have entered into an assignment, arrangement or composition under Part X of the Bankruptcy Act. Part X of the Act involves a debtor placing before their creditors a 'Deed of Assignment', 'Deed of Arrangement' or a 'Composition' if the debtor is unable to meet their debts.

Under a Deed of Assignment, all the debtor's divisible assets are put up in full settlement of their debts. Creditors would receive less than 100 cents in the dollar.

Under a Deed of Arrangement, the debtor agrees to pay off debts over a period of time. This arrangement can be used, for example, where a debtor's business continues to trade. Creditors could, eventually, obtain 100 cents in the dollar.

A Composition is a combination of the Deed of Arrangement and the Deed of Assignment.

If creditors fail to accept an option under Part X, then the creditors or the debtor can petition for bankruptcy.

The Attorney-General's Department has the responsibility for the administration of the Act. The Minister for Justice and Consumer Affairs oversights the administration of the Insolvency and Trustee Service, Australia, a division of the Attorney-General's Department.

The administration is carried out through the Registrars in Bankruptcy (who are part of the Federal Court of Australia), the Inspector-General in Bankruptcy and the Official Receivers (who comprise the Insolvency and Trustee Service, Australia), and public accountants who are registered under the provisions of the Act as trustees in bankruptcy and who are primarily under the control and supervision of the Courts exercising jurisdiction in bankruptcy.

Bankruptcies increased in the late 1980s peaking in 1991-92 (16,780). In 1992-93, (14,852) bankruptcies were down 12 per cent on 1991-92, but were still 14 per cent higher than in 1990-91 (13,091) and 74 per cent higher than in 1989-90 (8,552). Forecasts for 1993-94 were for a continued gradual reduction in the number of bankruptcies (table 10.12).

In 1992-93, economic conditions (36%) were by far the main cause of business bankruptcies, followed by personal reasons (19%) and lack of business ability (14%) (table 10.13). For non-business bankruptcies, 32 per cent were attributed to unemployment.

This is the first time unemployment has replaced excessive use of credit (25%) as the most frequent cause of bankruptcy.

Comprehensive statistics on bankruptcy, and a more detailed account of the bankruptcy administration, are included in the Annual Report on the operation of the *Bankruptcy Act 1966*.

Summary statistics on insolvencies are contained in table 10.15.

Copyright

Copyright in Australia is administered by the Commonwealth Attorney-General's Department and is regulated by the *Commonwealth Copyright Act 1968*. The Act does not contain any provisions requiring or enabling the completion of formalities (such as publication, registration or the payment of fees) in order to obtain copyright protection in Australia. Protection is granted automatically from the moment of making a work or other subject matter.

10.12 BANKRUPTCIES AND ORDERS FOR ADMINISTRATION(a)

Year	*Number administered(b)*	*Assets ($m)*	*Liabilities ($m)*
1988-89	7,435	88.1	571.7
1989-90	8,552	145.4	643.5
1990-91	13,091	318.4	792.8
1991-92	16,780	n.a.	n.a.
1992-93	14,852	n.a.	n.a.

(a) Orders for administration of deceased persons estates. (b) These figures do not necessarily equal the sum of the totals in tables 10.13 and 10.14, mainly because proceedings involving two or more partners are treated as one administration whereas in tables 10.13 and 10.14 details are counted for each of the partners.

Source: Commonwealth Attorney-General's Department — Insolvency and Trustee Service, Australia.

10.13 CAUSES OF BUSINESS BANKRUPTCY(a)

Cause	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Lack of sufficient capital(b)	491	562	534	533	558
Lack of business ability(c)	489	721	963	1,025	680
Failure to keep proper books	26	12	34	27	44
Economic conditions(d)	240	524	1,233	1,730	1,709
Seasonal conditions(e)	30	52	57	60	56
Excessive interest(f)	95	172	267	295	254
Inability to collect debts(g)	76	107	120	145	116
Excessive drawings(h)	129	78	102	118	140
Gambling	15	18	26	16	27
Personal reasons(i)	121	267	279	244	284
Other	465	435	588	1,194	928
Total	**2,177**	**2,948**	**4,203**	**5,387**	**4,796**

(a) The sum of business and non-business bankruptcies shown in the tables on the major causes of bankruptcy do not necessarily add to the totals shown in the table 10.12. This is chiefly because proceedings involving two or more partners are treated as one administration. However, in tables 10.13 and 10.14 details are published for each of the partners. The total is also affected by the lack of returns from registered trustees. (b) Lack of sufficient initial working capital. (c) Lack of business ability, acumen, training or experience resulting in such matters as under quoting, mistakes in estimating, lack of supervision and failure to assess potential of business or to detect misrepresentations. (d) Economic conditions affecting industry, including competition and price cutting, credit restrictions, fall in prices, increases in charges and other overhead expenses, high cost of repairs and maintenance of equipment and changes in the character of business location (for example, by-pass roads). (e) Seasonal conditions including floods and drought. (f) Excessive interest payments on hire purchase and loan monies and capital losses on repayments. (g) Inability to collect debts due to disputes, faulty work or bad debts. (h) Excessive drawings including failure to provide for taxation, either personal or wage tax deductions. (i) Personal reasons including ill health of self or spouse, domestic discord and other personal reasons.

Source: Commonwealth Attorney-General's Department — Insolvency and Trustee Service, Australia.

10.14 CAUSES OF NON-BUSINESS BANKRUPTCY(a)

Cause	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Excessive use of credit(b)	2,560	2,098	3,203	3,845	2,445
Liabilities on guarantees	273	279	551	721	761
Unemployment	699	1,225	2,269	3,145	3,236
Gambling(c)	63	133	90	86	79
Ill health(d)	259	409	426	498	337
Adverse litigation	205	218	238	347	442
Domestic discord	245	362	623	418	547
Other	935	822	1,488	2,433	2,134
Total	**5,239**	**5,546**	**8,888**	**11,493**	**9,981**

(a) The sum of business and non-business bankruptcies shown in the tables on the major causes of bankruptcy do not necessarily add to the totals shown in the table 10.12. This is chiefly because proceedings involving two or more partners are treated as one administration. However, in tables 10.13 and 10.14 details are published for each of the partners. The total is also affected by the lack of returns from registered trustees. (b) Excessive use of credit facilities including pressure selling, losses on repossessions and high interest rates. (c) Gambling, speculation and extravagance in living. (d) Absence of health insurance or extensive ill health.

Source: Commonwealth Attorney-General's Department —Insolvency and Trustee Service, Australia.

10.15 INSOLVENCIES(a)

Year	Deeds of assignment Number	Deeds of assignment Assets ($m)	Deeds of assignment Liabilities ($m)	Deeds of arrangement Number	Deeds of arrangement Assets ($m)	Deeds of arrangement Liabilities ($m)
1988–89	228	11.6	40.7	263	5.4	30.0
1989–90	197	8.3	28.1	156	2.3	5.4
1990–91	185	7.9	54.6	279	8.7	60.1
1991–92	170	7.9	16.9	343	5.8	115.5
1992–93	125	6.4	64.3	301	15.1	319.9
Year	Compositions Number	Compositions Assets ($m)	Compositions Liabilities ($m)	Total Number	Total Assets ($m)	Total Liabilities ($m)
1988–89	304	3.0	43.9	795	20.0	114.6
1989–90	208	1.9	34.0	561	12.5	67.5
1990–91	341	2.9	57.0	805	19.5	171.8
1991–92	440	2.8	99.1	953	16.4	231.5
1992–93	366	2.3	179.2	792	23.8	563.4

(a) Under Part X of the Bankruptcy Act.
Source: Commonwealth Attorney-General's Department — Insolvency and Trustee Service, Australia.

BIBLIOGRAPHY

ABS Publications

Crime and Safety Survey, Australia, April 1993 (4059.0)

Information Paper: National Crime Statistics (4511.0)

National Crime Statistics, January to December 1993 (4510.0)

Other Publications

COMMONWEALTH ATTORNEY-GENERAL'S DEPARTMENT. Insolvency and Trustee Service, Australia

Australian Constitutional Law

ATTORNEY-GENERAL'S DEPARTMENT. The Australian Constitution Annotated. AGPS, Canberra, 1980

HOWARD, PROF. COLIN. Australia's Constitution. Penguin, Melbourne, 1978

LANE, PROF. P.H. An Introduction to Australian Constitutional Law. The Law Company Limited, Sydney, 1967

— An Introduction to the Australian Constitution. 2nd ed., The Law Book Company Limited, Sydney, 1977

SAWER, PROF. GEOFFREY. The Australian Constitution. AGPS, Canberra, 1975

BIBLIOGRAPHY — *continued*

Law and the Australian Legal System

BAALMAN, JOHN. Outline of Law in Australia. 4th ed. by Flick, Geoffrey A. The Law Book Company Limited, Sydney, 1979

BATES, NICHOLAS. Introduction to Legal Studies. 3rd ed., Butterworths, Melbourne, 1980

GIFFORD, D.J. and GIFFORD, KENNETH H. Our Legal System. The Law Book Company Limited, Sydney, 1981

MARSH, S.B., PREDL, I.P. and WARD, P.A. Outlines of Law - Australian Edition. McGraw-Hill Book Company, Sydney, 1972

MILTE, K. Police in Australia: Development, Functions and Procedures. Butterworths, Sydney, 1977

ROSS, STAN and WEINBURG, MARK (eds). Law for the People: A Citizen's Guide to the Law in Australia and New Zealand. Penguin Books, Melbourne, 1976

SAWER, PROF. GEOFFREY. The Australian and the Law. Penguin Books, Melbourne 1976

TWYFORD, JOHN. The Layman and the Law in Australia. 2nd ed., Doubleday, Sydney, 1980

Crime Reports

ATTORNEY-GENERAL'S DEPARTMENT. Annual Report on the Bankruptcy Act

AUSTRALIAN FEDERAL POLICE. Annual Report, Illicit Drugs in Australia

AUSTRALIAN INSTITUTE OF CRIMINOLOGY. Annual Report, and other publications listed in the 1991 and earlier Year Books

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Eleven

Culture and Leisure

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Cultural and leisure activities are essential to a shared sense of quality of life, and take many forms. At a national level these forms range across cultural heritage, creative and performing arts, literature, film and video, libraries, radio and television, sports and recreation, language and religious practice, adult education, active attachment to custom and place, and activities around the conservation and enjoyment of the natural environment.

This chapter reviews a range of cultural and leisure activity supported by the Commonwealth and its agencies, and by national non-government organisations.

CULTURAL AND NATURAL HERITAGE

Australia's heritage is drawn from its cultural and natural environments.

The cultural environment includes Aboriginal sites of all types and historic places of significance such as old towns and residential and commercial buildings, shipwrecks, streetscapes.

The natural environment ranges from sites and objects of scientific, archaeological and social importance to outstanding geological features and landscapes. Extensive areas of coastline, forest, wetlands and desert are included in national parks, nature reserves and wilderness areas, as are smaller sites, some of which are important habitats to our native flora and fauna enabling the preservation of rare and endangered species.

The functions of identifying, surveying, classifying, conserving and protecting Australia's national heritage are shared between all levels of government and statutory authorities, with assistance from academic and professional bodies, individuals and community conservation organisations such as the National Trusts in each State.

Governments support the delineation and conservation of heritage material through the provision of funding for public collections and the administration of grants in support of heritage-related activity. Statutory authorities have also been charged with providing policy advice and undertaking or sponsoring research. The Commonwealth Government works in partnership with State and Territory Governments and also undertakes heritage activities on its own account where the implications of these actions go beyond State or local boundaries. Examples of this include the nomination of sites for World Heritage listing, the protection of Aboriginal heritage and advice about proposals which might affect the National Estate.

National Estate

Australia's National Estate comprises those natural, Aboriginal, Torres Strait Islander and historic places which Australians want to keep for present and future generations.

In the Australian Heritage Commission Act the National Estate is defined as:

> '... those places, being components of the natural environment of Australia or the cultural environment of Australia that have aesthetic, historic, scientific or social significance or other special value for future generations, as well as for the present community.'

Both publicly and privately-owned places form part of the National Estate. It encompasses places which are important to local communities, as well as those which are of regional or State significance, and others which have national, and sometimes international significance. The National Estate therefore includes broad stretches of coastline, desert or forest, and national parks, as well as isolated geological monuments and small areas which might provide habitats for endangered plant or animal species. It can cover whole villages and suburbs, streetscapes, single mansions, cattlemen's huts, railway yards and other reminders of Australia's industrial heritage. It includes places of Aboriginal significance such as rock engravings, galleries of rock art, fish traps, carved trees and reminders of a post-European existence such as mission stations.

Australian Heritage Commission

The Australian Heritage Commission was established under the *Australian Heritage Commission Act 1975*, and is the Commonwealth Government's adviser on the National Estate. One of the Commission's main tasks is compiling and maintaining the Register of the National Estate. The Register is an inventory of places which make up

Australia's natural, historic and Aboriginal and Torres Strait Islander heritage. At 30 June 1993 there were over 10,000 places throughout Australia on the Register.

Listing in the Register alerts planners, decision makers, researchers and the community at large to the heritage value of places. Under section 30 of the Australian Heritage Commission Act, the Commonwealth Government is obliged not to take any action which might adversely affect a place in the Register and to seek 'feasible and prudent' alternatives. If no such alternative action exists, all reasonable measures must be taken to minimise any damaging effects. The Commonwealth is also obliged to inform the Commission of any action it might take which could significantly affect a place in the Register and to give the Commission a reasonable opportunity to consider and comment on it. Listing does not impose any direct legal constraints on the way private, State or local government owners manage places in the Register.

The following table summarises the 8,271 historic places across States and Territories listed on the Register of the National Estate at June 1993, 2,425 of these being residential houses.

11.1 HISTORIC ENVIRONMENT PLACES IN THE REGISTER OF THE NATIONAL ESTATE AT 30 JUNE 1993

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT(a)*	*Ext. Terr.*	*Total*
Number listed(b)	2,662	2,118	581	722	834	1,130	97	112	15	8,271
Types of place										
Residential houses	652	850	123	141	181	446	11	20	1	2,425
Commercial buildings (shops, offices, etc.)	225	139	59	56	115	79	2	2	2	679
Hotels, motels, inns	137	78	30	26	53	75	2	5	—	406
Banks and financial institutions	61	61	20	18	14	9	—	—	—	183
Government functions										
Government buildings (parliaments, customs, town halls, etc.)	34	25	13	18	21	14	1	3	1	130
Courthouses, police stations, prisons	199	81	19	47	36	23	8	1	—	414
Libraries, hospitals, civic structures, etc.	103	61	18	21	19	11	6	4	—	243
Military barracks, bases, fortifications	45	23	11	5	12	15	12	3	—	126
Scientific research facilities	3	3	—	—	—	—	—	1	—	7
Places of recreation (theatres, halls, race courses, etc.)	66	84	24	21	38	28	—	5	—	266
Transport and communications										
Rail, road and air transport places	52	35	13	18	15	8	8	—	—	149
Harbour facilities, ports, piers, docks, etc.	9	7	2	3	2	2	1	—	—	26
Lighthouses	24	10	3	16	6	16	2	1	—	78
Post offices, telegraph stations, etc.	67	31	14	14	22	15	5	—	—	168
Bridges	85	62	32	38	6	18	1	1	—	243
Shipwrecks	2	3	—	6	43	1	1	—	—	56

For footnotes *see* end of table.

11.1 HISTORIC ENVIRONMENT PLACES IN THE REGISTER OF THE NATIONAL ESTATE AT 30 JUNE 1993 — *continued*

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT(a)*	*Ext. Terr.*	*Total*
Primary industry (agricultural, pastoral, processing, etc.)	161	194	31	54	65	143	7	18	2	675
Towns, precincts, conservation areas	209	48	15	34	31	27	4	8	2	378
Industrial sites and buildings	27	26	6	20	10	11	1	3	—	104
Mines and mineral processing works	10	11	21	15	4	2	2	—	—	65
Churches and other places of religion	205	156	75	84	59	111	4	10	1	705
Schools and places of education	134	69	15	30	37	32	1	7	—	325
Monuments and memorials	23	8	14	7	9	2	—	5	—	68
Cemeteries and graves	20	6	5	4	15	13	6	4	—	73
Parks and gardens	74	34	11	16	17	13	4	11	—	180
Historic and miscellaneous places	28	13	6	10	8	12	8	—	6	91
Historic landscapes	7	—	1	—	—	—	—	—	—	8

(a) Australian Capital Territory figures include Jervis Bay. (b) Includes both registered places and places on the interim list.
Source: Australian Heritage Commission.

The following table summarises the 1,779 natural places listed in the Register of the National Estate at June 1993. National parks (531), Other reserves (598) and Landscapes (418) were the three largest categories of natural places protected under the National Estate Register.

11.2 NUMBER OF NATURAL PLACES LISTED IN THE REGISTER OF THE NATIONAL ESTATE BY STATE/TERRITORY AND CATEGORY AT 30 JUNE 1993

Category	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT(a)*	*Ext. Terr.*	*Total*
Number listed (b)	408	192	259	360	227	230	60	27	16	1,779
Category (number of places)										
National parks	70	41	164	152	45	44	12	2	1	531
Other reserves	168	87	47	68	130	70	16	5	7	598
Wilderness areas	23	13	18	23	6	19	3	2	—	107
Marine regions	8	7	17	20	14	20	2	—	3	91
Geological monuments	71	12	25	66	19	33	5	9	2	242
Wetlands	55	21	48	68	49	31	9	—	—	281
Arid regions	6	1	5	39	42	—	10	—	—	103
Alpine regions	1	31	—	—	—	18	—	1	—	51
Endangered species habitat	65	27	23	68	28	56	14	5	3	289
Landscapes	180	44	46	50	36	53	3	3	3	418
Miscellaneous	16	9	5	15	9	2	15	7	—	78

(a) Australian Capital Territory figures include Jervis Bay Territory. (b) Includes both places in the Register and on the Interim List. Note that the sum of columns in this table do not total number of sites in each State as individual sites may be represented in more than one category.
Source: Australian Heritage Commission, Annual Report, 1992–93.

Table 11.3 provides a summary of the types of Aboriginal places listed on the Register of the National Estate. The table reflects the national estate significance of the Aboriginal places on the register. Most of these places encompass a number of Aboriginal sites. There are many thousands of sites covering a wide range of site types on the Register. At present there are no Torres Strait Islander places on the Register of the National Estate.

Current Heritage Commission priorities are designed to redress this situation.

In 1993, 814 Aboriginal places were listed on the National Estate Register. The two major place types protected under the National Estate, namely Aboriginal art sites (196) and Aboriginal site complexes (105) accounted for a total of 37 per cent of all places listed on the Register.

11.3 ABORIGINAL AND TORRES STRAIT ISLANDER PLACES IN THE REGISTER OF THE NATIONAL ESTATE AS AT JUNE 1993

Types of place	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT(a)*	*Total*
Occupation site	16	8	6	18	9	26	3	2	88
Shell midden	13	15	15	5	—	18	—	—	66
Fish/eel trap	3	3	4	6	1	—	1	—	18
Hunting hides/traps	—	—	—	3	—	—	—	—	3
Grinding grooves	7	8	2	—	—	—	—	2	19
Quarries	3	7	7	10	3	5	—	1	36
Wells	1	3	3	4	—	—	—	—	11
Modified trees (scarred and carved)	23	8	9	2	2	—	—	1	45
Art sites	65	16	26	41	25	6	15	2	196
Stone arrangements	9	4	25	8	3	3	—	1	53
Ceremonial sites	5	3	10	—	—	—	—	—	18
Sites of spiritual or mythological significance	21	—	9	10	8	—	33	1	82
Burials/cemeteries/graves	10	12	2	1	1	2	1	—	29
Historic/contact sites	15	9	2	6	6	1	5	—	44
Site complexes	18	4	15	18	15	12	23	—	105
Organic resource area	—	—	—	—	—	1	—	—	1
Total of Aboriginal places listed(b)	**209**	**100**	**135**	**132**	**73**	**74**	**81**	**10**	**814**

(a) Australian Capital Territory figures include Jervis Bay Territory. (b) Includes registered places and places on the interim list.
Source: Australian Heritage Commission.

National Trusts

The Australian Council of National Trusts is the national coordinating body for one of Australia's largest conservation organisations, the National Trust, comprising eight member State and Territory National Trusts.

As a community organisation, independent of government and sectional interests, the mission of the National Trust movement is to ensure the conservation of Australia's heritage through leadership, involvement and education.

The National Trust movement in Australia has the largest heritage register of places in the country. Totalling more than 22,000 places, the National Trust register has formed the basis for all other registers of protected areas in Australia today.

Through lobbying, practical and educational activities, the National Trust is involved in conserving lands and buildings of aesthetic, historic, scientific, social and other special values. The Trusts' aim is to influence governments and other bodies, local, national and international, to act to conserve such values and to promote public appreciation, knowledge and enjoyment of such places.

State and Territory National Trusts own or manage a wide variety of properties from historic buildings and nature reserves to gardens and historic transport.

In 1992–93, the National Trust movement issued over 44,200 family, individual and concessional memberships, equalling approximately 75,000 and has members Australia wide.

Usage of national parks

In the 12 months prior to May 1992, 63 per cent of Australians over 18 years old had visited a heritage area, national or State park, according to a household-based survey conducted by the Australian Bureau of Statistics in May 1992.

There was some variation in the percentages between States and Territories. Victoria had the lowest proportion, with 61 per cent of its population having visited a park or heritage area. In contrast, people from the Northern Territory (75%) and Western Australia (68%) were the most likely to have been to a park. Households composed of a couple with dependent child(ren) were the most frequent visitors to a heritage area or park in the previous 12 months, at 72 per cent.

11.4 VISITED HERITAGE AREA, NATIONAL OR STATE PARK IN THE LAST 12 MONTHS BY STATES AND TERRITORIES, MAY 1992

Visited	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
				'000					
Yes	2,670.8	1,958.0	1,298.7	697.0	808.7	216.3	70.0	129.4	7,848.9
No	1,542.7	1,233.6	792.1	375.1	374.0	111.6	23.7	72.1	4,524.8
Don't know	30.2	38.6	12.1	3.5	6.2	1.3	**	4.5	96.4
Total	**4,243.8**	**3,230.1**	**2,102.9**	**1,075.6**	**1,188.9**	**329.1**	**93.6**	**206.0**	**12,470.1**
				PER CENT					
Yes	62.9	60.6	61.8	64.8	68.0	65.7	74.7	62.8	62.9
No	36.4	38.2	37.7	34.9	31.5	33.9	25.3	35.0	36.3
Don't know	0.7	1.2	0.6	0.3	0.5	0.4	**	2.2	0.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Environmental Issues — Peoples' Views and Practices (4602.0).

Aboriginal cultural heritage

Aborigines have lived in Australia for at least 40,000 years. Before European settlement Aborigines left no written records, so deduction from archaeological and anthropological evidence is the principal process in amending and advancing new theories about their history. An article on the history and culture of Aboriginal Australia appeared in the 1994 Year Book.

While the past 200 years has seen the erosion of much of the traditional fabric of Aboriginal lifestyle, in many communities the arts remain an integral part of social and religious life. The arts have also acquired the new emphasis of reinforcing Aboriginal identity and asserting traditional values in the face of an encroaching wider community. For many Aboriginal artists and craftspeople, the arts also provide an important and culturally relevant means of income.

Aboriginal heritage protection. The Aboriginal and Torres Strait Islander Commission (ATSIC) has responsibility for the administration of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*. The Act preserves and protects places, areas and objects of particular significance to Aboriginal and Torres Strait Islanders. The legislation complements existing State and Territory laws and is intended to be used only as a last resort where those laws are considered not to provide effective protection of significant areas and objects from injury or desecration, or where there is an unwillingness to invoke those laws.

Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS). The Institute's functions are to undertake and promote Aboriginal and Torres Strait Islander studies in areas such as the arts, education, languages, health, history, archaeology, sociology, anthropology, and contemporary social issues.

The Institute is central to Aboriginal studies research and supports research through the provision of grants and the employment of research staff, including visiting research fellows. The Institute publishes some of the works resulting from this research as well as books on all aspects of Aboriginal studies along with microfiche, musical recordings on disc and cassette, film, videos, journals, an annual report and an annual bibliography of material accessioned into the library.

The AIATSIS library is the largest library resource centre for information about the traditional and contemporary cultures and life styles of Aboriginal and Torres Strait Islander people. Tapes, pictures and photographs which are unique records of Aboriginal and Torres Strait Islander culture are preserved in environmentally-controlled vaults.

Languages — Aboriginal and Torres Strait Islander people. The 1991 Population Census recorded that many Aboriginal and Torres Strait Islander people spoke a language other than English at home. This was especially so in remote and rural areas. In total, one in five (over 43,000) people indicated that they spoke an indigenous language at home. This proportion was highest in the Northern Territory where 79 per cent of the indigenous population aged 5 years and over indicated that they spoke an indigenous language. This was followed by South Australia and Western Australia with about one-quarter of the Aboriginal and Torres Strait Islander population speaking an indigenous language at home. In the more urbanised States of New South Wales, Victoria and Tasmania, however, very few Aboriginal and Torres Strait Islander people (less than 2%) indicated that they spoke an indigenous language at home.

11.5 ABORIGINALS AND TORRES STRAIT ISLANDERS AGED 5 YEARS AND OVER: INDIGENOUS LANGUAGES AND PROFICIENCY IN ENGLISH, 1991 CENSUS

	Persons speaking an indigenous language		*Proficiency in English*					
	no.	*%*	*Very well*	*Well*	*Not well*	*Not at all*	*Not stated*	*Total*
New South Wales	573	1.0	440	61	33	7	32	573
Victoria	158	1.2	129	16	9	—	4	158
Queensland	6,004	10.3	2,057	2,534	1,027	197	189	6,004
South Australia	3,143	23.5	838	835	1,047	363	60	3,143
Western Australia	7,823	23.2	2,910	3,171	1,350	252	140	7,823
Tasmania	17	0.2	12	2	3	—	—	17
Northern Territory	25,753	79.0	4,998	10,531	7,293	2,627	304	25,753
Australian Capital Territory	28	1.9	28	—	—	—	—	28
Australia	**43,499**	**19.9**	**11,412**	**17,150**	**10,762**	**3,446**	**729**	**43,499**

Source: Australia's Aboriginal and Torres Strait Islander Population — 1991 Census (2740.0).

Government support for Aboriginal and Torres Strait Islander cultural activity. The Australia Council's annual support budget for the Aboriginal and Torres Strait Islander arts was just over $4 million in 1991–92 and was $4.3 million in 1992–93. Support in this area is administered by the Council's Aboriginal Arts Committee and specialist Aboriginal and Torres Strait Islander artform advisory committees.

The development of Aboriginal and Torres Strait Islander arts and culture is also assisted by the Aboriginal and Torres Strait Islander Commission (ATSIC). Under the National Art and Craft Industry Strategy, some $3.8 million was provided in 1992–93 to develop appropriate infrastructures and support for artists and craft workers. Core funding was provided to 24 community-based arts centres to assist arts and crafts projects. Assistance in management, promotion and marketing was also provided.

Protection of movable cultural heritage

The *Protection of Movable Cultural Heritage Act 1986* provides safeguards for the retention of those objects of the greatest heritage significance by requiring export permits for particular categories of objects of cultural significance which owners wish to send or take out of the country.

As a general rule, objects of Australian Aboriginal and Torres Strait Islander heritage comprising bark and log coffins, human remains, rock art, and carved trees are not allowed to be sent or taken out of the country.

Objects that may be exported (temporarily or permanently) at the discretion of the Minister for the Environment, Sport and Territories include:

- archaeological and ethnographic objects;
- some Aboriginal heritage objects;
- objects of geological, scientific or technological interest;
- military objects;
- pieces of decorative art, fine arts, books, film and sound recordings;
- numismatic and philatelic objects; and
- objects of social history.

MUSEUMS AND ART MUSEUMS

Museums are defined by the International Council of Museums as 'institutions, generally housed in one or more buildings, primarily engaged in the collection, acquisition, conservation and exhibition of the material evidence of people, their culture and environment, for the purpose of education and enjoyment by the general public and/or specialists'. Museums include art museums and historical theme parks such as Sovereign Hill, but exclude commercial art galleries as they are regarded, for statistical purposes, as being retail outlets.

National Museum of Australia

The National Museum of Australia is developing as a museum for all Australians. It operates from two venues in Canberra and through national outreach programs. It is anticipated that a permanent home for the Museum will be built by 1997.

The Museum's collection reflects its three integrated themes: Aboriginal and Torres Strait Islander Culture; Australian Society and History; and People's Interaction with the Environment. There are approximately 170,000 objects in the collection ranging from a series of historic Hills hoists to an extensive Aboriginal art collection.

The Yarramundi Visitor Centre on the shores of Lake Burley Griffin in Canberra attracted 23,545 visitors during 1992–93.

The Museum's second venue in Canberra, Old Parliament House, opened to the public in December 1992. The Museum mounts exhibitions and conducts guided tours of key heritage areas of the building. In just under 12 months since it reopened, 100,000 people had visited Old Parliament House.

Australian National Maritime Museum

The Australian National Maritime Museum, at Darling Harbour, Sydney, was established by the Commonwealth Government to be Australia's prime cultural resource for increasing and communicating knowledge, appreciation and enjoyment of Australia's past and continuing involvement with its waterways and the sea.

In 1992–93, the Museum's first full financial year since it opened its doors in November 1991, attendances totalled 262,590.

Four galleries house the permanent exhibitions, including the largest, the ANZ Tall Gallery, and the USA Gallery which is funded by a $US5 million Bicentennial gift from the USA.

The Museum presents its exhibitions on six themes:

- Discovery — the finding of Australia;
- Passengers — the long sea voyage;
- Commerce — the working sea;
- Navy — protecting Australia;
- Leisure — sun, surf and sails; and
- Australia-USA — linked by the sea.

In front of its building the Museum has two 90-metre long finger wharves to moor a fleet of 15 vessels which include historic vessels that were New Zealand and Norway's Bicentennial gifts to Australia. A list of these can be found in the 1992 Year Book.

Australian War Memorial

The Australian War Memorial commemorates the sacrifice of Australian servicemen and women who died as a result of wars or warlike operations, from the Sudan campaigns to Viet Nam. The War Memorial will also be acquiring material relating to Australian involvement in peacekeeping operations. Its mission is to assist Australians to remember, interpret and understand the Australian experience of war and its enduring impact on Australian society. The Memorial building opened in Canberra in 1941.

The commemorative area includes the glass-mosaic Hall of Memory, cloisters containing bronze panels of the Roll of Honour bearing 102,000 names, and the courtyard in which there is a Pool of Reflection and the Eternal Flame. The national Anzac Day and Remembrance Day services attended by the Governor-General are held at the Stone of Remembrance in front of the building. Other wreath-laying ceremonies are also conducted at the Commemoration Stone in the courtyard. The Tomb of the Unknown Australian Soldier, in the Hall of Memory, was added on November 11, 1993.

The Memorial also fulfils its commemorative role by being a significant museum, art gallery, and centre of research into Australian military history.

The Research Centre preserves and makes available records of Australia's participation in armed conflicts and the effects these have had on Australian society. It houses the Printed and Written Records Collection and the Photograph, Film and Sound Collections. These collections include over 80,000 volumes of books and periodicals, leaflets, postcards, personal diaries and letters, official documents, newspapers, and newspaper cuttings, a large collection of maps, over 800,000 photographs (200,000 of which are on an image database), some 600 kilometres of cinefilm and over 500 hours of sound recordings. The period covered by the collections includes the 19th Century, World War I, World War II, the Korean War, the Malaysian Conflict, the Viet Nam War and Australian Peace Keeping Operations. The Research Centre is open to the public for reference and research.

The Memorial's vast and varied collections include over 50,000 war relics ranging from aircraft to commemorative badges, 25,000 works of art including oils, watercolours, drawings, sculptures and posters, as well as extensive valuable official and personal documents and audio-visual records. The Memorial houses 50 Victoria Crosses, the largest such collection in the world. The War Memorial attracts approximately one million visitors each year.

Other collections

For information about other institutions such as the National Gallery of Australia and Science and Technology Centres refer to *Year Book Australia 1994.*

Attendances

An estimated 3.6 million people aged 18 years and over attended a museum at least once in the year ended June 1991.

11.6 ATTENDANCE AT MUSEUMS, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	1,215.2	2,620
Victoria	849.1	1,830
Queensland	559.7	1,210
South Australia	374.3	920
Western Australia	376.9	910
Tasmania	117.3	320
Northern Territory	41.6	130
Australian Capital Territory	98.8	310
Australia	**3,632.9**	**8,250**

Source: ABS Survey of Attendance at Selected Cultural Venues, Australia, June 1991.

2.9 million people attended an art museum at least once over the same period.

11.7 ATTENDANCE AT ART MUSEUMS, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	891.2	2,830
Victoria	756.3	2,760
Queensland	482.5	1,470
South Australia	249.0	810
Western Australia	304.1	1,030
Tasmania	89.1	330
Northern Territory	31.9	140
Australian Capital Territory	82.7	340
Australia	**2,886.8**	**9,710**

Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

An annual survey of museums, art museums and public galleries in Australia and New Zealand by the Australia Council revealed an increase of 4 per cent in attendances at museums and an increase of 13 per cent in attendances at art museums between 1990–91 and 1991–92.

BOTANIC GARDENS

Australian National Botanic Gardens

The Australian National Botanic Gardens occupy a 90 hectare site on the lower slopes of Black Mountain in Canberra. Over 40 hectares of this site are developed at this stage. The Gardens' mission is to grow, study and promote Australia's flora.

Officially opened in 1970, they comprise the largest living collection of Australian native plants with over 6,000 species in cultivation. The associated herbarium houses over 272,000 specimens.

An annex of approximately 80 hectares was established at Jervis Bay in 1951 to cultivate frost tender plants under more favourable conditions than those prevailing in Canberra, and to establish a collection of native plants representative of the flora of the Jervis Bay region.

There are about 400,000 visits to the Gardens in Canberra each year and about 55,000 visits to the annex at Jervis Bay.

Horticultural, botanical and biological research is an important aspect of the Garden's activities and special emphasis is placed on the study and cultivation of endangered species. The Garden's collection of over 10,000 photographs of Australian native plants is made available to publishers and researchers and the Australian Network for Plant Conservation and the Australian Cultivar Registration Authority are based at the Gardens.

The Australian Biological Resources Study which publishes the *Flora of Australia* and the *Fauna of Australia* is located within the Gardens.

Botanical gardens usage

An ABS survey of botanical gardens usage around Australia in November 1993 indicated that 41.0 per cent of persons aged 18 years and over had visited at least one botanical garden in the 12 months prior to the survey. The highest participation rate for females was in the 25 to 34 year age group at 54.1 per cent and the highest participation rate for males was 45.6 per cent for the 35 to 44 year age group. Females in the 35 to 44 year age group also rated highly at 50.7 per cent.

11.8 PERSONS AGED 18 AND OVER: WHETHER VISITED AT LEAST ONE BOTANICAL GARDEN IN THE LAST 12 MONTHS BY AGE AND SEX, NOVEMBER 1993
(per cent)

	Age group (years)								
Visited at least one botanical garden	*18–24*	*25–34*	*35–44*	*45–54*	*55–59*	*60–64*	*>64*	*Total*	*No. of persons ('000)*
				MALES					
Yes	34.1	37.5	45.6	42.4	39.7	30.5	26.3	37.8	2,348
No	65.9	62.5	54.4	57.6	60.3	69.5	73.7	62.2	3,864
				FEMALES					
Yes	43.1	54.1	50.7	37.6	49.1	26.8	33.3	44.1	2,824
No	59.9	45.9	49.3	62.4	50.9	73.2	66.7	55.9	3,584
				PERSONS					
Yes	38.6	45.9	48.2	40.1	44.3	28.6	30.2	41.0	5,172
No	61.4	54.1	51.8	59.9	55.7	71.4	69.8	59.0	7,448
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**12,620**

Source: Population Survey Monitor, Australia, November 1993 (4103.0).

LIBRARIES AND ARCHIVES

A concentration of library functions appropriate to the national reference, curatorial and bibliographic services, and the national archival service for the Commonwealth administration, are provided by the National Library of Australia and the Australian Archives, respectively.

National Library of Australia

The National Library, the six State and two Territory library services are responsible for the acquisition and conservation of copies of all significant publications originating in Australia. They also provide advice and support, interlibrary loans and other extension services to other libraries; and research, information, and reference facilities and services to the public.

A detailed description of the National Library and its holdings, the National Bibliographic Control System, the National Bibliographic Database, the Australian Bibliographic Network, the National Libraries Online Information and Interlibrary Lending Services, and the international and national coordination roles of the National Library can be found in *Year Book Australia 1991.*

Details of National Library holdings are shown below.

11.9 NATIONAL LIBRARY HOLDINGS

	1991	*1992*	*1993*
Collection volumes(a) (million)	4.625	4.709	4.796
Serial titles	200,503	214,396	211,526
Paintings, drawings and prints	40,490	40,837	40,957
Photographs	513,649	524,896	531,234
Manuscripts (in shelf metres)	8,560	8,884	8,991
Music scores	153,817	159,461	166,132
Maps	408,375	420,131	458,186
Films and video cassettes	23,966	24,789	23,027
Aerial photographs	563,843	728,903	728,902
Oral history and folklore collection tape recordings	57,625	63,486	(b)45,050

(a) Includes microform equivalents. (b) Reduction in tape recordings held is a result of transferring current affairs tapes to the Commonwealth Parliamentary Library.
Source: National Library of Australia.

Other Commonwealth libraries

Other Commonwealth libraries are located in government organisations including the Patent Office, Commonwealth Scientific and Industrial Research Organisation, the Australian Heritage Commission, the Commonwealth Parliament, the Australian Bureau of Statistics and the Antarctic Division. For more detailed information on these libraries *see Year Book Australia 1991.*

Public Lending Right Scheme

The Public Lending Right Scheme, established by the Commonwealth Government in 1974, compensates eligible creators and publishers for loss of royalties on sales of books when copies of their books are available for loan in public lending libraries. Eligible books must be created by Australian citizens and/or residents and meet certain eligibility criteria. The *Public Lending Right Act 1985*, placing the Scheme on a statutory basis, began operation on 1 July 1987.

In 1992–93 the Government provided $4.1 million for payments and administration. The Scheme's 1992–93 payments to eligible claimants totalled $3.8 million. Payments to creators and publishers are based on annual sample surveys of bookstocks of public lending libraries throughout Australia.

The number of new claims registered for the 1992–93 program was 4,274. The total number of claims received by the Public Lending Right unit since the Scheme's inception in 1974 was 63,602 as at 30 June 1993.

Eligible creators (maximum of 5 per book) may include authors, editors, illustrators, translators or compilers. Eligible publishers are publishers whose business consists wholly or substantially of the publication of books and who regularly publish in Australia. Self-publishing creators are also eligible publishers, as are non-profit organisations that publish to further their aims and objectives. Beneficiary claims for deceased creator's Public Lending Right may be made by surviving claimants, including spouse, children, and in some cases, companions.

As part of the operation of the Public Lending Right Scheme, surveys of public library book stocks are conducted. Results of surveys for 1987–93 are shown below.

11.10 PUBLIC LIBRARY BOOKSTOCK (million)

Year	*Bookstock*
1987	26.2
1988	26.8
1989	27.4
1990	27.9
1991	28.4
1992	29.1
1993	29.1

Source: The Public Lending Right Scheme, Australian Cultural Development Office.

Use of libraries

In the 12 months to June 1991, 37 per cent of the population aged 18 years and over (4.4 million people) had used a library at least once. There was a significant difference in the use of libraries by women (43%) compared with men (30%).

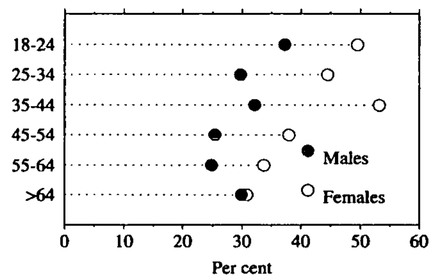
For all age categories, females had a higher participation rate than males. Participation rates ranged from 53.4 per cent for females aged 35 to 44 years to 25.0 per cent for males aged 55 to 64 years. People with Bachelor or higher degrees had a higher participation rate (62.8%) than people with no qualifications (30.2%).

11.11 ATTENDANCE AT LIBRARIES, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	1,409.1	22,990
Victoria	1,142.5	19,170
Queensland	713.0	11,340
South Australia	423.2	7,240
Western Australia	496.8	7,830
Tasmania	129.9	2,050
Northern Territory	37.7	710
Australian Capital Territory	90.2	1,490
Australia	**4,442.5**	**72,820**

Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

11.12 PARTICIPATION RATES, LIBRARIES, BY AGE GROUP AND SEX, 1990–91



Source: Attendance at Selected Cultural Venues, Australia, June 1991 (4114.0).

Archives and records

Archives are institutions whose primary function is the permanent preservation of unique records selected because of their administrative, financial, legal or other information value, and which are generally no longer required for the conduct of current activities by government agencies, non-government organisations or private individuals. While much archival work is an adjunct to other activity, there is a growing number of archival bodies, funded by governments and private sources, employing specialist staff to serve the legal, administrative and research needs of individuals and organisations.

Some State and Territory archives have been established as separate authorities (New South Wales, Victoria, South Australia, Tasmania and the Northern Territory). Others still operate broadly under State library control.

In addition, archives have been established by some churches, business corporations, universities and city councils. The Australian War Memorial collects private material concerning Australians at war and is also custodian of certain official Commonwealth records relating to war or warlike operations. The National Film and Sound Archive collects cultural material relevant to the film and sound media. Other corporate and private records continue to be collected by some State archives offices, libraries and universities.

Many of the bodies in the archives or records field are members of the Australian Council of Archives which provides a means of promoting cooperation on issues of common concern.

Australian Archives

Australian Archives is the organisation established by the *Archives Act 1983*, responsible for the broad management of the range of Commonwealth records. The Archives administers the legislative framework for Commonwealth records management (including arrangements for the disposal of records), identifies and documents records, provides appropriate custody and preservation arrangements (including archival storage) and makes records available under the law. Records covered by the Act occur in all formats, from files and index cards through architectural models and photographs, films and video tapes to optical disks, computer databases, tapes and disks.

Australian Archives' charter covers both records in the organisation's custody and material that is still in use by Commonwealth agencies. The majority of records with which the Archives is concerned were created by the Commonwealth administration, encompassing public service departments, statutory authorities, military units, committees, royal commissions and other bodies. The Archives also has responsibilities in relation to the records of Parliament and the courts. While most Commonwealth records date from 1901, significant quantities of nineteenth century records are also in the Archives' custody.

The organisation's services are primarily delivered through eight regional offices located in Canberra, each State capital and Darwin. A subregional office is also maintained in Townsville. The number of inquiries and visits to the Archives search rooms has continued to increase each year. There were 27,079 inquiries from members of the public and 3,315 inquiries from Commonwealth agencies, representing a seven per cent increase on inquiries in 1991–92. Visits to search rooms increased from 13,891 in 1991–92 to 15,327 in 1992–93.

11.13 AUSTRALIAN ARCHIVES: USAGE OF INFORMATION SERVICES

	1990–91	*1991–92*	*1992–93*
Use by Commonwealth agencies			
Reference enquiries received	2,248	2,548	3,315
Visits to search rooms	587	1,031	1,737
Requests received by lending service	161,456	160,674	159,951
Record items handled			
Record items issued/returned in search rooms	3,874	6,512	9,917
Record items issued by lending service	134,320	134,493	138,129
Record items returned to lending service	110,959	113,616	116,822
Total record items handled	*249,153*	*254,621*	*264,868*
Use by the public			
Reference enquiries received	20,183	25,799	27,079
Search tickets issued	2,360	3,215	3,294
Visits to search rooms	8,931	12,860	13,590
Record items handled			
Record items made available in search rooms	31,255	40,755	50,961
Use by Commonwealth agencies and the public			
Reference enquiries received	22,431	28,347	30,394
Visits to search rooms	9,518	13,891	15,327
Record items handled	280,408	295,376	315,829

Source: Australian Archives, Annual Report, 1992–93.

MUSIC AND PERFORMING ARTS

Overview of music and performing arts

The ABS Survey of Music and Performing Arts in Australia in 1991 identified 459 organisations engaged in presenting music and performing arts (excluding those involved in popular music, for example, rock, jazz, etc.) in 1991. Of these organisations, 197 presented mainly theatre performances, 172 were classified as symphony orchestras, chamber or choral groups, 41 presented opera and music theatre and 49 presented mainly dance performances. The survey also collected data about 13 major musicals performed in 1991.

Survey results indicated that 8.5 million patrons paid $182.7 million to attend 34,113 performances given by music and performing arts organisations. Organisations involved in theatre presented the most performances (24,613) and had the most people attending (3.5 million), while the 13 major musical productions attracted 2.1 million patrons to only 2,084 performances. 21,445 performances (63% of all performances) were given by organisations which received some form of government subsidy. These performances were attended by 4.9 million patrons (58% of all attendances). 12,668 performances were given by organisations which did not receive any financial assistance from government and 3.6 million patrons attended these performances.

11.14 NUMBER OF PERFORMANCES AND ATTENDANCES, BY TYPE OF MUSIC AND PERFORMING ARTS ORGANISATION, BY GOVERNMENT SUBSIDISED AND OTHER ORGANISATIONS(a)(b), 1991

	Government subsidised organisations		*Other organisations*		*Total all organisations*	
Type of music and performing arts organisation	*Number of performances*	*Number of paid attendances*	*Number of performances*	*Number of paid attendances*	*Number of performances*	*Number of paid attendances*
	no.	'000	no.	'000	no.	'000
Theatre organisations	16,122	2,440	8,491	1,013	24,613	3,453
Opera and music theatre organisations(c)	567	538	2,458	2,173	3,025	2,711
Symphony orchestra, chamber and choral groups	2,483	1,150	253	71	2,736	1,220
Dance organisations	2,273	760	1,466	348	3,739	1,108
Total	**21,445**	**4,888**	**12,668**	**3,604**	**34,113**	**8,492**

(a) Excludes organisations mainly involved in popular music (for example, rock, jazz etc.). (b) Includes performances and attendances overseas by Australian-based organisations. (c) Includes performances of/attendances at major musicals.

Source: Music and Performing Arts, Australia, 1991 (4116.0).

11.15 MUSIC AND PERFORMING ARTS: NUMBER OF PERFORMANCES AND ATTENDANCES(a)(b), 1991

Location where performance given	*Total all organisations* — *Number of performances*	*Total all organisations* — *Number of paid attendances*
	no.	'000
New South Wales	11,067	2,849
Victoria	9,853	2,619
Queensland	4,387	1,094
South Australia	2,537	635
Western Australia	2,742	585
Tasmania	1,026	142
Northern Territory	176	26
Australian Capital Territory	1,895	221
Overseas(c)	430	321
Total	**34,113**	**8,492**

(a) Excludes organisations mainly involved in popular music (for example, rock, jazz etc.). (b) Includes performances of/attendances at major musicals. (c) Performances and attendances overseas by Australian-based organisations.

Source: Music and Performing Arts, Australia, 1991 (4116.0).

In 1991, music and performing arts organisations received $297.2 million in revenue. Of this, $182.7 million was obtained through the box office and subscription sales, whilst $81.4 million came from government grants. A further $13.8 million was received in sponsorship and donations. The biggest income generators were 13 major musicals which generated $91.3 million. A summary of revenue and expenditure for these music and performing arts organisations is outlined in the following table.

11.16 REVENUE AND EXPENDITURE, ALL TYPES OF MUSIC AND PERFORMING ARTS ORGANISATIONS(a), 1991
($'000)

Revenue item	*Theatre (other than opera & music theatre)*	*Opera & music theatre* — *Major musicals*	*Opera & music theatre* — *Other*	*Symphony orchestra, chamber &, choral group*	*Dance*	*Total all activities*
REVENUE						
Box office, subscriptions, sales etc.	36,810	86,531	25,799	18,255	15,349	182,744
Sponsorship and donations	2,619	1,338	5,324	1,830	2,733	13,844
Government grants	21,980	. .	13,328	34,872	11,186	81,366
Other income	6,502	3,478	4,298	2,533	2,482	19,292
Total revenue	**67,911**	**91,346**	**48,748**	**57,490**	**31,751**	**297,246**
EXPENDITURE						
Overseas artists fees	506	707	1,937	2,319	90	5,560
Contract fees, wages and salaries paid to Australian artists and all other staff	33,672	19,216	20,638	38,303	13,074	124,901
Travel expenses and allowances paid to Australian staff	2,197	2,582	2,508	1,524	1,477	10,287
Marketing and promotion expenses	6,573	7,661	5,099	3,347	3,680	26,359
Hire of venues	5,174	11,116	6,680	2,264	2,400	27,634
Production costs	7,843	10,528	4,387	2,017	4,773	29,549
Other expenses	11,946	16,647	8,870	7,738	6,199	51,400
Total expenses	**67,910**	**68,457**	**50,119**	**57,512**	**31,694**	**275,691**

(a) Excludes data from organisations mainly involved in popular music (for example, rock, jazz, etc.).

Source: Music and Performing Arts, Australia, 1991 (4116.0).

1,957 persons (1,023 males, 934 females) were employed as full-time permanent employees by Australia-based music and performing arts organisations. 1,026 (52%) of full-time employees were employed as performing artists, followed by 467 (24%) other personnel; 295 (15%) technical personnel; and 169 (9%) other artistic/support staff. A similar distribution occurred with permanent part-time staff of whom an additional 434 persons (188 males, 246 females) were employed in 1991 by music and performing arts organisations. A further 1,305 persons (765 males, 540 females), were employed by major musicals during 1991.

The Australian Ballet

The Australian Ballet was established in 1961 as the nation's classical ballet company. The company now performs in Australian capital cities every year and regularly tours overseas. The Australian Ballet has an international reputation as one of the top ballet companies in the world. It is based at The Australian Ballet Centre, South Melbourne, in the Arts City precinct.

11.17 THE AUSTRALIAN BALLET: PERFORMANCE AND EMPLOYMENT

	1987	*1988*	*1989*	*1990*	*1991*	*1992*
	PERFORMANCES					
Theatres in Australia						
New South Wales	81	80	87	84	82	80
Victoria	70	58	60	61	64	60
Queensland	—	10	—	10	12	—
South Australia	12	—	12	7	10	10
Western Australia	—	—	7	—	—	9
Australian Capital Territory	—	6	6	—	6	—
Other venues in Australia						
Myer Music Bowl, Melbourne	—	1	1	1	—	—
ABC TV–FM simulcasts	—	1	2	1	—	—
Performances overseas	20	37	14	22	—	27
Total performances	**183**	**192**	**188**	**187**	**175**	**186**
	EMPLOYMENT					
Dancers	54	60	60	60	60	64
Staff						
Artistic	6	6	8	7	8	8
Music	4	5	4	5	4	4
Production & theatre	32	30	29	27	29	30
Marketing & publicity	9	10	15	11	11	13
Administration & finance	19	21	20	21	20	21
Total employment	**124**	**132**	**136**	**131**	**132**	**140**

Source: The Australian Ballet.

The Australian Opera

The Australian Opera is the largest performing arts organisation in Australia, employing more than 200 permanent staff including 30 principal artists and a chorus of 50. In addition it employs more than 500 casuals each year, including celebrated international singers.

11.18 THE AUSTRALIAN OPERA: PERFORMANCES, ATTENDANCES AND SOURCES OF INCOME

	1990	*1991*	*1992*
Salaries and wages paid ($ million)	13.7	18.4	20.8
Performances	236	218	211
Attendances	307,656	292,506	285,376
Box office, donations and other income ($ million)	20.4	21.3	22.7
Government grants ($ million)	7.8	8.1	8.1

Source: The Australian Opera, Annual Reports, 1991 and 1992.

Musica Viva

Musica Viva is Australia's national chamber music entrepreneur. A non-profit company founded in 1945 with headquarters in Sydney, Musica Viva has a Board drawn from all over Australia, a State committee structure and branch offices in all capital cities.

Musica Viva derives income from ticket sales, mainly through subscriptions from corporate sponsorship and individual donations as well as receiving subsidies from the Performing Arts Board of the Australia Council and several State Governments. In 1993 its annual income was just under $5.4 million, $3.4 million of which came from its operations. Total expenditure was just over $5.4 million.

As well as its international subscription series in Brisbane, Newcastle, Sydney, Canberra, Melbourne, Hobart, Adelaide and Perth, Musica Viva also conducts an extensive country touring program. In addition, Musica Viva operates an extensive Schools' Performance program in New South Wales, Victoria, Tasmania and Western Australia. It commissions new music from Australian composers and manages tours by Australian artists overseas, often in association with the Department of Foreign Affairs and Trade.

11.19 MUSICA VIVA AUDIENCES

	1991	*1992*	*1993*
	no.	no.	no.
New South Wales			
Regional touring	16,969	16,441	11,106
Education	205,357	188,550	198,300
Subscriptions and special events	39,016	26,802	35,785
Victoria			
Regional touring	4,228	1,634	1,638
Education	—	—	8,250
Subscriptions and special events	27,926	27,667	30,053
Queensland			
Regional touring	3,529	207	1,601
Subscriptions and special events	9,366	5,784	8,223
South Australia			
Regional touring	284	—	—
Subscriptions and special events	10,368	8,246	8,755
Western Australia			
Regional touring	—	1,659	462
Education	13,537	12,750	26,100
Subscriptions and special events	11,509	8,913	11,131
Tasmania			
Regional touring	799	640	865
Education	—	5,400	5,550
Subscriptions and special events	2,381	2,744	3,305
Australian Capital Territory			
Subscriptions and special events	11,326	8,815	11,421

... continued

11.19 MUSICA VIVA AUDIENCES — *continued*

	1991	*1992*	*1993*
	no.	no.	no.
Australia			
Regional touring	25,809	20,581	15,672
Education	218,894	206,700	238,200
Subscriptions and special events	111,892	88,971	108,673
Overseas			
International touring program	87,200	93,850	27,300

Source: Musica Viva, Annual Report, 1992 and 1993.

Attendances at performances

Attendance at music performances is a significant aspect of the cultural life of Australians. Tables 11.20 and 11.22 show that in the 12 months to June 1991, 3.5 million people aged 18 years and over, attended at least one popular music concert, and 986,000 attended at least one classical music concert.

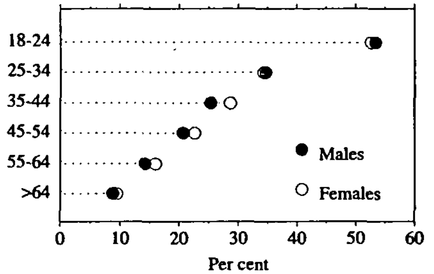
The total participation rate at popular music concerts was 28.6 per cent. There was a large difference in participation rates across all ages. The highest was for 18 to 24 year olds (53.6% of all people aged 18 to 24) and the lowest was 9.7 per cent for people aged 65 years and over. There was little difference in attendance levels between males and females for all age groups.

11.20 ATTENDANCE AT POPULAR MUSIC CONCERTS, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	1,166.2	4,860
Victoria	869.7	3,370
Queensland	604.5	2,100
South Australia	279.6	1,060
Western Australia	331.9	1,440
Tasmania	99.1	380
Northern Territory	31.6	130
Australian Capital Territory	73.9	270
Australia	**3,456.4**	**13,610**

Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

11.21 PARTICIPATION RATES, POPULAR MUSIC CONCERTS, BY AGE GROUP AND SEX, 1990–91



Source: Attendance at Selected Cultural Venues, Australia, June 1991 (4114.0).

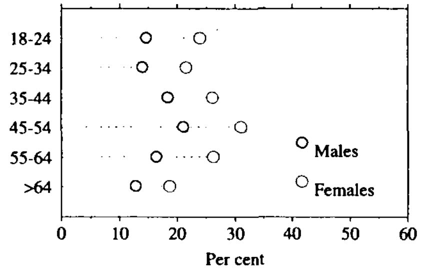
The total participation rate for classical music concerts was 8.2 per cent, of which females predominated. The largest user groups were the 35 to 44 and 45 to 54 age groups (both 10.2%).

11.22 ATTENDANCE AT CLASSICAL MUSIC CONCERTS, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	342.3	1,100
Victoria	243.8	750
Queensland	142.4	430
South Australia	86.2	230
Western Australia	97.7	330
Tasmania	32.2	120
Northern Territory	7.7	30
Australian Capital Territory	33.6	120
Australia	**985.9**	**3,110**

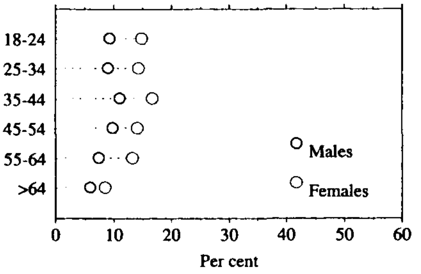
Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

11.23 PARTICIPATION RATES, CLASSICAL MUSIC CONCERTS, BY AGE GROUP AND SEX, 1990–91



Source: Attendance at Selected Cultural Venues, Australia, June 1991 (4114.0).

11.25 PARTICIPATION RATES, DANCE PERFORMANCES, BY AGE GROUP AND SEX, 1990–91



Source: Attendance at Selected Cultural Venues, Australia, June 1991 (4114.0).

In the 12 months to June 1991, 1.3 million people aged 18 years and over attended at least one dance performance; 2.2 million attended at least one performance of theatre; and 2.4 million attended at least one performance of musical theatre (includes opera).

The total participation rate for dance performance was 11.2 per cent. The largest group attending this venue were people aged 35 to 44 years. An estimated 346,400 people in this age group attended which represents a participation rate of 13.6 per cent. Participation rates were greater for females than males (13.5% and 8.7%, respectively). These sex differences in attendance levels were consistent for all age groups.

11.24 ATTENDANCE AT DANCE PERFORMANCES, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	443.7	1,200
Victoria	349.3	930
Queensland	227.9	580
South Australia	108.0	250
Western Australia	131.7	300
Tasmania	30.4	70
Northern Territory	15.8	40
Australian Capital Territory	42.6	90
Australia	**1,349.4**	**3,460**

Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

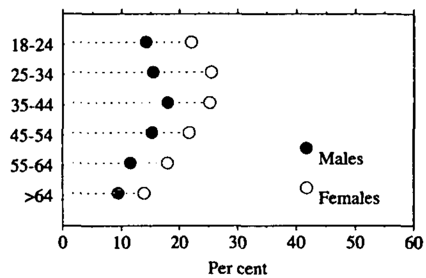
Theatre performances include performances before a live audience of a play or drama, a play reading, a poetry reading, a puppet show or children's theatre. While the highest participation rate was for people aged 35 to 44 years (21.2%), the highest attendance level was for those aged 25 to 34 (545,800 persons). The total participation rate for theatre performances was 17.8 per cent. Female participation rates were higher than males, 21.3 per cent and 14.2 per cent, respectively.

11.26 ATTENDANCE AT THEATRE, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	710.1	2,040
Victoria	548.9	1,530
Queensland	353.0	880
South Australia	186.6	470
Western Australia	225.3	550
Tasmania	54.4	130
Northern Territory	18.4	50
Australian Capital Territory	54.6	140
Australia	**2,151.3**	**5,790**

Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

11.27 PARTICIPATION RATES, THEATRE, BY AGE GROUP AND SEX, 1990–91



Source: Attendance at Selected Cultural Venues, Australia, June 1991 (4114.0).

The total participation rate for musical theatre performance was 20.1 per cent. The greatest number of people attending this venue were aged 35 to 44 years (560,400 persons). The highest participation rate was 25.6 per cent for people aged 45 to 54 years, in particular females (30.8%). Age specific participation rates ranged between 5.9 and 10.0 percentage points higher for females than males.

11.28 ATTENDANCE AT MUSICAL THEATRE, 1990–91 ('000)

State/Territory	*Attendees*	*Total visits*
New South Wales	817.4	1,920
Victoria	671.8	1,470
Queensland	417.9	910
South Australia	230.0	460
Western Australia	190.8	340
Tasmania	46.0	80
Northern Territory	11.8	30
Australian Capital Territory	41.7	70
Australia	**2,427.4**	**5,280**

Source: ABS Survey of Attendance at Selected Cultural Venues, June 1991.

FILM AND VIDEO

The total value of audio-visual production increased from $1.179 billion in 1990–91 to $1.235 billion in 1991–92 but declined to $1.209 billion in 1992–93.

11.29 VALUE OF AUDIO-VISUAL PRODUCTION BY CATEGORY ($ million)

Category	*1990–91*	*1991–92*	*1992–93*
Feature films	133	135	91
TV drama	168	174	175
TV stations	460	507	536
Commercials	220	203	185
Corporate video	170	170	198
Documentaries	25	43	20
Music video	4	4	5
Total	**1,179**	**1,236**	**1,209**

Source: Australian Film Commission/Entertainment Business Review.

Commercial and national television stations produce a large volume of programming, including news and current affairs, information and 'talk' programs, sports coverage and some arts, light entertainment and children's programming. According to the Australian Film Commission's annual National Survey of Film, Television and Video Production, the value of television station production grew steadily from $460 million in 1990–91 to $535.9 million in 1992–93.

Commonwealth funding

The Commonwealth Government provides indirect and direct support to the Australian film and television production industry.

Taxation Incentives for Films Scheme is embodied in division 10BA of the *Income Tax Assessment Act 1936* and was established in October 1980 to encourage private investment in Australian films. The scheme allows taxation concessions for private investors in qualifying Australian films which have been issued with a certificate to that effect by the Commonwealth Minister for Communication and the Arts.

Qualifying Australian films are feature films (including animated) and films of a like nature for television (telemovies); documentaries; and mini-series of television drama. They must be produced principally for public exhibition in cinemas or on television, be wholly or substantially made in Australia and have a significant Australian content.

The following films are not eligible:

- an advertising program or commercial;
- a discussion, quiz, panel, or variety program or a program of a similar nature;
- a film of a public event;
- a film forming part of a drama program series that is, or is intended to be of a continuing nature; or
- a training film.

Direct Commonwealth funding. The following funds were allocated to film-related organisations in 1992–93:

- Australian Film Finance Corporation — $61,900,000;
- Australian Film Commission — $17,119,000. In addition, $3,175,000 was expected from self-generated funds, giving a level of activity of $20,294,000;
- Australian Film, Television and Radio School — $10,677,000. In addition, $1,532,000 in self-generated income, together with sponsorship funds, provided a total activity level of $12,209,000; and
- Australian Children's Television Foundation — $1,239,000.

Australian Film Finance Corporation Pty Ltd

The Government established the Australian Film Finance Corporation (FFC) as an incorporated company in 1988. The Corporation invests in feature films, documentaries and television dramas, including mini-series and telemovies. Special attention is given to children's television. In addition to investments, the Corporation provides production assistance and print and advertising loans aimed at facilitating the theatrical release of feature films.

From the commencement of its operations until 30 June 1993, the FFC received 502 applications for funding of which 291 were approved by its Board and 263 were ultimately contracted. These productions consisted of 59 feature films, 58 television dramas and children's series, 128 documentaries and 18 co-productions.

At 30 June 1993, the FFC had invested in 263 projects and committed $347.39 million to productions triggering an Australian film production slate worth $672.52 million (including investment from the private sector and other government funding bodies). The FFC's commitment to production in 1992–93 was $68.12 million for 66 projects, to generate almost $112.57 million worth of production. In addition, the FFC has committed $49.77 million in print and advertising loans, enhancement loans, licence fees and distribution advances since incorporation in July 1988.

11.30 AUSTRALIAN FILM FINANCE CORPORATION: VALUE OF SUPPORTED PRODUCTIONS

	1991–92			1992–93		
Project type	*Number contracted*	*Budget ($m)*	*FFC's commitment ($m)*	*Number contracted*	*Budget ($m)*	*FFC's commitment ($m)*
Features	16	58.25	34.76	(a)14	41.55	26.61
Mini-series/television drama (adult)	4	27.75	12.91	4	23.71	11.31
Mini-series/television drama (children's)	8	32.44	20.21	6	26.59	16.63
Telemovies	—	—	—	4	8.87	5.00
Documentaries	27	12.12	7.76	38	11.85	8.57
Total	**55**	**130.54**	**75.64**	**66**	**112.57**	**68.12**

(a) Includes two co-productions.
Source: Australian Film Finance Corporation Pty Ltd, Annual Reports, 1991–92 and 1992–93.

Australian Film Commission

The Australian Film Commission, a statutory authority, is the primary development agency for film and television in Australia. Its objectives are to foster a stable and diverse Australian film and television production industry of quality, encourage the production and distribution of Australian programs and promote the commercial potential, cultural diversity and benefits of Australian programs both domestically and internationally. Over half the organisation's budget is invested in the production of innovative film and television projects.

11.31 AUSTRALIAN FILM INDUSTRY: NUMBER AND VALUE OF AUSTRALIAN TITLES(a)

	1988–89		1989–90		1990–91		1991–92		1992–93	
Type of film	*No.*	*$m*	*No.*	*$m*	*No.*	*$m*	*No.*	*$m*	*No.*	*$m*
Features	25	84.5	40	210.5	26	133.0	34	135.4	24	91.4
Mini-series	12	60.3	8	42.4	9	44.7	2	11.6	5	31.2
Children's mini-series	4	6.7	7	17.3	6	20.0	4	14.1	9	47.8
Telemovies	11	13.5	10	23.2	3	2.0	5	6.4	10	26.4
Series/serials	11	105.5	13	86.1	16	101.0	26	69.3	14	69.3
Total	**63**	**270.5**	**78**	**379.5**	**60**	**300.7**	**71**	**236.8**	**62**	**266.1**

(a) Includes co-productions, foreign titles shot in Australia and Australian titles shot overseas.
Source: Australian Film Commission/Entertainment Business Review.

Australian Children's Television Foundation

The aim of the Australian Children's Television Foundation is to improve the quality and quantity of children's programs on Australian television. It has actively pursued this objective by investing in script development and program production and by undertaking related educational and informational activities. The Foundation receives assistance from the Commonwealth Government, and all State and Territory Governments. In 1992–93, $1.2 million was provided by the Commonwealth with $643,330 from the other participating governments on a pro rata basis.

11.32 GOVERNMENT CONTRIBUTIONS TO THE AUSTRALIAN CHILDREN'S TELEVISION FOUNDATION
($)

Government contributor	*1990–91*	*1991–92*	*1992–93*
Commonwealth	1,163,000	1,201,000	1,239,000
State	711,652	733,455	643,330
Total	**1,874,652**	**1,934,455**	**1,882,330**

Source: Australian Children's Television Foundation, Annual Report, 1992–93.

Film and videotape censorship

The Film Censorship Board is a full-time statutory body located in Sydney as part of the Office of Film and Literature Classification. A regional censorship office is located in Melbourne.

Under the Customs (Cinematograph Films) Regulations, the Board examines imported films and videotapes to determine whether or not to register them for public exhibition. It also examines film advertising. The Regulations direct the Board not to pass films or advertising matter which in its opinion are:

- blasphemous, indecent or obscene;
- likely to be injurious to morality, or to encourage or incite crime; and/or
- undesirable in the public interest.

The Board's State functions, in relation to cinema films, including classification, are performed by virtue of formal agreements with the various States/Territories. Decisions on matters arising under the Regulations and on classification under State or Territory legislation may be appealed to the Film and Literature Board of Review. The Censorship Board also classifies sale-hire videotapes pursuant to State or Territory legislation. These decisions may likewise be appealed to the Film and Literature Board of Review.

In 1992–93, 479 feature films were examined. Of the 479 features, 61 were classified for General Exhibition (G), 99 Parental Guidance (PG), 261 For Mature Audiences (M), 2 were classified Mature Accompanied (MA) and 49 for Restricted Exhibition (R). Another 347 films were registered subject to special conditions. Seven feature films were refused registration. There were eight appeals, of which five were dismissed. Permission to import for use at approved events including film festivals, was granted to 637 films.

11.33 CINEMA FEATURES BY CLASSIFICATION, THE FILM CENSORSHIP BOARD

Classification	*1990–91*	*1991–92*	*1992–93*
G	107	76	61
PG	142	163	99
M	304	293	261
MA	—	—	2
R	63	53	49
Refused	2	10	7
Special conditions	220	403	347
Total	**838**	**998**	**826**

Source: Office of Film and Literature Classification and Film and Literature Board of Review — Reports on Activities, 1992–93.

The principal countries of origin of films were the United States of America (252), Hong Kong (90), Australia (35), the United Kingdom (21), France (23) and India (11).

The Board also examines videotapes for sale or hire. In the videotape area there is an 'X' classification which applies to videotapes containing non-violent explicit sexual material. However, the 'X' classification only applies in the Australian Capital Territory and Northern Territory. 'X' rated films are not permitted to be sold or rented elsewhere in Australia. Details of the videotapes classified by the Board over the last three years are set out in the table 11.34.

The principal countries of origin of videotapes were the United States of America (2140), the United Kingdom (665), Australia (392) and Germany (251).

11.34 VIDEOTAPES FOR SALE/HIRE BY CLASSIFICATION, THE FILM CENSORSHIP BOARD

Classification	*1990–91*	*1991–92*	*1992–93*
G	1,410	1,472	1,394
PG	561	490	461
M	715	632	613
MA	—	—	12
R	234	282	273
X	616	678	934
Refused	68	118	164
Total	**3,604**	**3,672**	**3,851**

Source: Office of Film and Literature Classification and Film and Literature Board of Review — Reports on Activities, 1992–93.

RADIO AND TELEVISION

Australian Broadcasting Authority

The Australian Broadcasting Authority (ABA) is an independent federal statutory authority responsible for the regulation of the broadcasting industry. The ABA was created by the *Broadcasting Services Act 1992* and took over the licensing, programming and ownership and control functions previously performed by the Australian Broadcasting Tribunal, as well as the function of planning the broadcasting spectrum.

In contrast to the previous legislation, the *Broadcasting Act 1942*, the Act sets out explicit policy objectives and defines the role of the regulatory authority. The objectives reflect many of the concerns of the previous Act, such as the desirability of program diversity, limits on concentration of ownership and foreign control of our mass media and the need for media to help foster an Australian cultural identity, report news fairly and respect community standards.

Commercial television broadcasting services licences are subject to five year terms, compulsory standards on Australian content and children's television and a condition that the licensee be 'a suitable person', as defined in the Act. Ownership and control limitations also apply. Under these conditions, no person may be in a position to control more than one television licence in a market or control licences with a combined audience reach of more than 75 per cent of the Australian population. Foreign control of television licences is also restricted. Commercial licences may be transferred at will, subject only to notification requirements under the ownership and control rules. Commercial radio broadcasting licences are subject to less restrictive ownership provisions.

Program content on commercial and community television and radio is covered by self-regulatory codes of practice, although the ABA can impose standards if it decides the codes are not working.

Community radio and television are not subject to ownership limitations and subscription radio broadcasting services and all categories of narrowcasting services are also not subject to ownership limits or suitability requirements.

The Act ushers in subscription television broadcasting and empowers the ABA to allocate licences subject to a suitability test and Trade Practices Commission vetting. There is special provision for three licences using the Optus satellite. Licences A and B will permit the operation of four services each. A third licence will allow the ABC to operate two channels. There is a prohibition on additional satellite licences, other than licences A, B and C, before 1 July 1997.

TRAINING — ARTS AND CULTURE

Professional training in the arts in Australia covers a broad range of resources. Training is available through formal courses in TAFE's, universities and private institutions. There are also a number of on-the-job training programs available in the arts and many organisations offer in-house training programs for their staff. The last decade has seen the development of multi-disciplinary tertiary arts training institutions in some States.

Arts Training Australia

Arts Training Australia is the national peak advisory body on vocational education and training for the arts, media, entertainment and heritage industries. It is one of a number of Industry Training Advisory Bodies supported by industry and government. Arts Training's primary purpose is to promote and enhance the quality and effectiveness of vocational training and education by providing a forum through which industry can express its vocational education and training needs. Arts

Training's industry coverage encompasses the design, film, television and radio, music, performing arts, visual arts and crafts, museums, libraries, community arts and writing and publishing industries.

Arts Training Australia coordinates a network of eight State and Territory Arts Training Advisory Bodies. The Arts Training Network is industry based, comprising employers and trade unions, professional organisations, government, and education and training providers.

The Arts Training Network conducts a range of research projects across the arts and cultural industries. These include training needs analyses, curriculum development projects, industry overview research, industry mapping projects and analyses of industry statistical data. Arts Training Australia also has a major role in policy development and the provision of advice on education and training in the arts and cultural industries to the government and other authorities.

Arts Training Australia is also recognised as the Competency Standards Body to identify and develop national industry competency standards for the arts, media, entertainment and heritage industries.

Australian Film, Television and Radio School

The Australian Film, Television and Radio School is the national training centre for the film and broadcasting industries. The School offers full-time training in film and video directing, producing, screenwriting, cinematography, editing, sound and production design, and in commercial radio production. It provides advanced education and training for industry professionals across the country through short and part-time courses. Postgraduate media courses and a selection of overseas training in the Asian–Pacific region are also carried out. The School maintains an extensive library of print and non-print material related to film, television and radio. It also has an extensive publishing program and supplies educational video resource material.

11.35 AUSTRALIAN FILM, TELEVISION AND RADIO SCHOOL GRADUATES, 1993

Type of course	*Number of graduates*
Part-time and short courses (102 different courses)	2,332
Graduate Diploma in Media	5
Graduates of TAIMA/AFTRS Associate Diploma of Arts (Video Production Techniques)	7
Full-time course graduates	
Bachelor of Arts (Film and Television)	14
Certificate — Extension Course	33
Technical Trainee	1
SBS Trainee	4
Total	**2,396**

Source: Australian Film, Television and Radio School, Annual Report, 1992–93.

National Institute of Dramatic Art

NIDA is Australia's national training school for young people who wish to enter the profession of theatre, film or television as actors, directors, designers, stage managers, theatre crafts technicians, production managers or teachers of voice and movement. The Institute's courses are designed to meet the needs of the arts entertainment industry by assisting students to develop the craft skills, cultural background and personal discipline required for successful careers in their chosen field. The Institute employs a staff of 30 full- and part-time teachers and in 1993 had 135 students.

11.36 NATIONAL INSTITUTE OF DRAMATIC ART, COURSES AND STUDENTS

	1992			1993		
Course	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Acting	34	28	62	36	25	61
Technical production	11	22	33	11	22	33
Design	10	12	22	11	9	20
Directors	4	2	6	4	1	5
Theatre crafts	2	8	10	3	7	10
Production management	1	—	1	1	—	1
Voice studies	—	2	2	2	1	3
Movement studies	—	2	2	—	2	2
Total	**62**	**76**	**138**	**68**	**67**	**135**

Source: National Institute of Dramatic Art, Annual Report, 1992.

The NIDA Open Program was established in 1990 to provide access to the expertise and facilities at NIDA through short courses for those interested in developing skills in the performing arts. Courses are offered for young people, school groups, teachers, overseas students, corporate professionals, and members of the community throughout Australia. In 1993, approximately 5,500 people participated in Open Program courses.

The Australian Ballet School

The aim of the Australian Ballet School is to provide full-time training to the highest standard for young Australian dancers seeking a career in the classical dance profession. Approximately 90 per cent of the Australian Ballet are graduates of the school which employs the Vaganova Syllabus of Classical Ballet as the backbone of its training and teaching. Through its three year course, the Australian Ballet School is essentially a 'finishing school' for highly trained students. Graduate year students of the school gain professional experience through the Dancers Company which was formed in 1980.

The work of the Australian Ballet School is supported and recognised by the Federal Government through the Department of Communications and the Arts. The balance of funding is sought from corporate sponsorship, private donors, community support, School Friends and the Australian Ballet Society. The Royal Academy of Dancing's prestigious International Digital Genee Awards held in January 1994 in London were dominated for the third year in a row by dancers from the Australian Ballet School winning Gold, Silver and Bronze medals. A total of six medals were awarded to dancers, all of whom have either been trained by, or accepted into the Australian Ballet School. March 2, 1994 was the official 30th birthday of the School and there had been approximately 1,000 enrolments to that date.

11.37 AUSTRALIAN BALLET SCHOOL STUDENTS, 1994

Year	*Males*	*Females*	*Persons*
Third	12	18	30
Second	11	17	28
First	17	17	34
Total	**40**	**52**	**92**

Source: Australian Ballet School, Newsletter, March 1994.

EMPLOYMENT AND PARTICIPATION IN CULTURE/LEISURE ACTIVITIES

Employment in cultural occupations

From the 1991 Census of Population and Housing, the number of people working in a cultural occupation as their main job was 119,513. The number of persons whose main job was in a cultural occupation group increased by 12 per cent — 6.6 per cent increase in the male figures compared with a 24.1 per cent increase in the figure for females. Authors and related professionals was the occupation group where the largest increase was recorded (49.5%). Two occupation groups recorded falls over the period. Architects and landscape architects recorded a fall of 4 per cent despite a

26.9 per cent increase in the number of females being recorded in the occupation group; the number of persons recorded in the Performing arts support workers occupation group fell by 9.8 per cent (males fell by 9.8% and females by 3.5%).

11.38 NUMBER OF PERSONS IN SELECTED CULTURAL OCCUPATIONS, 1986 AND 1991 POPULATION CENSUSES

ASCO code	Occupation group	1986 Males	1986 Females	1986 Total	1991 Males	1991 Females	1991 Total
2201	Architects & landscape architects	8,456	968	9,424	7,786	1,228	9,014
2801	Painters, sculptors and related professionals	1,262	854	2,116	1,528	1,379	2,907
2803	Photographers	4,164	1,052	5,216	3,937	1,308	5,245
2805	Designers & illustrators	6,923	6,483	13,406	9,194	8,099	17,293
2807	Journalists	6,166	3,740	9,906	5,974	4,343	10,317
2809	Authors & related professionals	970	936	1,906	1,395	1,454	2,849
2811	Film, television and stage directors	2,444	823	3,267	2,782	1,018	3,800
2813	Dancers & choreographers	216	463	679	270	553	823
2815	Musicians, composers and related professionals	4,648	1,492	6,140	5,169	1,820	6,989
2817	Actors & related professionals	1,295	830	2,125	1,312	939	2,251
2819	Announcers	1,616	404	2,020	1,739	430	2,169
3903	Performing arts support workers	4,898	1,486	6,384	4,325	1,434	5,759
4925	Craftworkers	1,839	1,853	3,692	2,454	2,347	4,801
Total		**44,897**	**21,384**	**66,281**	**47,865**	**26,352**	**74,217**

Source: Australian Bureau of Statistics, Census of Population and Housing, 1986 and 1991.

Involvement in culture/leisure activities

In March 1993 an ABS survey was conducted throughout Australia to obtain information about the involvement of persons 15 years of age and over in selected culture and leisure activities during the previous 12 months. Work in selected culture and leisure activities was defined to include both paid and unpaid involvement but excluded involvement solely for the respondent's own use or that of their family.

During the 12 months ended March 1993, 1.6 million people or 11.8 per cent of the Australian population aged 15 years or more were involved in selected culture and leisure activities. Of those persons, 34.7 per cent received some payment.

11.39 PERSONS INVOLVED IN PAID AND UNPAID CULTURE AND LEISURE ACTIVITIES IN THE TWELVE MONTHS TO MARCH 1993

State of usual residence	*Paid involvement only ('000)*	*Unpaid involvement only ('000)*	*Paid and unpaid involvement ('000)*	*Total persons involved ('000)*	*Persons with no involvement ('000)*	*Total persons ('000)*	*Participation rate (%)*
			MALES				
NSW	38.5	130.5	35.5	204.5	2,081.9	2,286.4	8.9
Vic.	37.9	109.0	33.6	180.5	1,533.1	1,713.6	10.5
Qld	28.6	77.8	26.2	132.6	1,043.3	1,175.9	11.3
SA	11.2	42.1	14.1	67.4	502.9	570.3	11.8
WA	9.2	43.8	15.2	68.2	583.4	651.5	10.5
Tas.	4.2	11.2	4.4	19.7	155.1	174.8	11.3
NT	1.4	4.2	1.5	7.0	51.2	58.3	12.1
ACT	6.3	13.4	5.2	24.9	87.7	112.6	22.1
Aust.	**137.2**	**431.9**	**135.7**	**704.8**	**6,038.6**	**6,743.4**	**10.5**
			FEMALES				
NSW	40.9	184.3	38.7	263.8	2,068.4	2,332.2	11.3
Vic.	37.7	153.1	38.3	229.1	1,529.8	1,758.9	13.0
Qld	25.5	117.3	26.0	168.8	1,013.4	1,182.2	14.3
SA	11.0	59.0	12.6	82.6	500.1	582.7	14.2
WA	13.0	59.2	16.2	88.4	559.7	648.1	13.6
Tas.	3.2	16.9	4.4	24.5	154.9	179.4	13.7
NT	2.2	5.1	2.5	9.8	45.4	55.2	17.8
ACT	6.0	18.6	4.1	28.8	86.7	115.4	24.9
Aust.	**139.5**	**613.6**	**142.8**	**895.9**	**5,958.3**	**6,854.2**	**13.1**
			PERSONS				
NSW	79.3	314.7	74.2	468.3	4,150.3	4,618.6	10.1
Vic.	75.6	262.1	71.9	409.6	3,062.9	3,472.4	11.8
Qld	54.1	195.1	52.2	301.4	2,056.8	2,358.2	12.8
SA	22.2	101.1	26.7	150.0	1,003.0	1,153.0	13.0
WA	22.1	103.0	31.4	156.6	1,143.1	1,299.6	12.0
Tas.	7.4	28.0	8.8	44.3	310.0	354.3	12.5
NT	3.6	9.4	4.0	16.9	96.6	113.5	14.9
ACT	12.3	32.0	9.3	53.7	174.3	228.0	23.5
Aust.	**276.7**	**1,045.5**	**278.5**	**1,600.7**	**11,996.9**	**13,597.6**	**11.8**

Source: Work In Selected Culture/Leisure Activities, Australia, March 1993 (6281.0).

Participation rates rose from 11 per cent for the 15 to 24 years age group peaking at 17 per cent for the 35 to 44 years age group. Participation rates for females were higher than those for males for all age groups. Overall, 13.1 per cent of females had some involvement while only 10.5 per cent of males were involved. Persons living in the Australian Capital Territory had a participation rate of 23.5 per cent (53,700 persons), significantly higher than any other State or Territory.

Many persons were involved in more than one type of activity. There were over 2.6 million involvements in selected culture and leisure activities with the most popular activities being the teaching of cultural activities, writing/publishing, music, performing arts and organising fetes/festivals. Most of these involvements were of a short-term and part-time nature, involving 13 weeks or less duration and less than 10 hours a week.

Time spent on cultural activities

Table 11.40 shows the average time spent per day by persons on selected cultural activities.

11.40 AVERAGE TIME SPENT ON SELECTED MAIN CULTURAL ACTIVITIES, 1992

Activity	*Average time spent per day in minutes*
Religious activities, ritual ceremonies	5.6
Seeing a movie	1.1
Visiting a library	0.4
Attending a concert	0.6
Watching a theatrical production	0.7
Attending an art gallery	0.1
Attending a museum	0.1
Attending zoos and animal parks	0.3
Attending a sports event	2.2
Sport (organised)	7.9
Going for a walk, walking for exercise	3.9
Playing, informal sport	2.4
Fishing, bushwalking, other outdoor activity	8.6
Card, paper, board, pinball and parlour games	3.1
Computer games, computing as a leisure activity	1.4
Games of chance, gambling	1.4
Arts	0.3
Crafts (excluding clothes making)	5.3
Performing music, drama, dancing etc.	1.2
Reading books (other than studying)	6.7
Reading magazines	1.2
Watching a movie	0.3
Watching and listening to television	103.0
Watching videos	4.4
Listening to radio	3.7
Listening to records, tapes, CDs	0.7

Source: Time Use Survey, Australia, 1992 (4153.0) unpublished data.

HOUSEHOLD EXPENDITURE ON CULTURAL AND RECREATIONAL ACTIVITIES

Table 11.41 shows a comparison between 1984 and 1988–89 of the annual average household expenditure on selected items of culture and recreation.

11.41 TOTAL ANNUAL HOUSEHOLD EXPENDITURE ON SELECTED CULTURAL AND RECREATIONAL GOODS AND SERVICES
($ million)

Expenditure item	*1984*	*1988–89*
Admission to		
Live theatre	178.2	259.3
Cinema	138.9	200.1
National park and zoo	15.7	22.5
Art gallery and museum	7.9	14.1
Total	*340.7*	*496.0*
Paintings, carvings and sculptures	55.0	62.0

... continued

11.41 TOTAL ANNUAL HOUSEHOLD EXPENDITURE ON SELECTED CULTURAL AND RECREATIONAL GOODS AND SERVICES — *continued*
($ million)

Expenditure item	*1984*	*1988–89*
Music		
Musical instruments and accessories	125.8	138.1
Radio, stereo and hi-fi equipment	293.5	470.7
Records and CDs	115.3	174.8
Audio-cassettes and tapes	97.0	166.3
Total	*631.6*	*949.9*
Cultural education		
Cultural and other non-sporting lessons	123.2	205.8
Cultural and other educational institution fees	10.5	39.5
Total	*133.7*	*245.3*
TV., radio, video, computing, etc.		
Televisions	385.2	558.1
Television aerials	13.1	50.7
Television hire	44.5	36.6
TV. games	15.7	11.3
Video cassette recorders and equipment	573.9	513.0
Video cassette tape hire	172.9	327.0
Video cassette recorder hire	36.7	31.0
Pre-recorded video cassette tape purchase	10.5	39.5
Blank video cassettes	65.5	67.6
Home computer equipment	157.2	521.4
Misc. electronic components (e.g.. TV cable, radio ear plugs)	28.8	28.2
Audio-visual equipment repairs	68.1	132.5
Audio-visual equipment repair insurance	10.5	14.1
Total	*1,582.6*	*2,331.0*
Literature		
Books	440.2	705.5
Newspapers	435.0	577.0
Magazines and comics	204.4	339.4
Other printed material	10.5	18.8
Total	*1,090.1*	*1,640.7*
Photography		
Photographic equipment	102.2	81.7
Photographic film and chemicals (incl. developing)	225.4	281.9
Studio and other professional photography	55.0	101.5
Total	*382.6*	*465.1*
Gambling		
Lottery tickets	76.0	84.6
Lotto type games and Instant Lotto (scratch cards)	513.6	560.9
TAB, on course betting	*	50.7
Poker machines and ticket machines	68.1	81.7
Other gambling	149.3	239.6
Total	*807.0*	*1,017.5*

... continued

11.41 TOTAL ANNUAL HOUSEHOLD EXPENDITURE ON SELECTED CULTURAL AND RECREATIONAL GOODS AND SERVICES — *continued*
($ million)

Expenditure item	*1984*	*1988–89*
Sport and recreation		
Cultural and other (excl. sports) clubs and associations	104.8	166.3
Sporting club subscriptions	133.6	211.4
Spectator admission fees to sport	94.3	138.1
Health and fitness studio charges	44.5	155.0
Squash court hire charges	41.9	19.7
Ten pin bowling charges	39.3	76.1
Green fees (golf, bowls, croquet, etc.)	68.1	67.6
Sports lessons	57.6	143.7
Sports equipment hire	7.9	14.1
Purchase of boats	83.9	39.5
Boat parts and accessories	36.7	84.6
Camping equipment	60.3	101.5
Hire of other recreational equipment	18.3	25.4
Amusement arcade machines	15.7	16.9
Toys	269.9	417.2
Total	*1,076.8*	*1,677.1*
Total	*6,100.1*	*8,884.6*
Total commodity/service expenditure	**94,816.0**	**141,694.2**

Note: Estimates replaced by an * indicate a standard error for that estimate of more than 50 per cent.
Source: ABS Household Expenditure Survey, 1984 and 1988–89 (6535.0).

GOVERNMENT SUPPORT FOR THE ARTS AND CULTURE

Australia Council

The Australia Council is the Commonwealth Government's arts funding and advisory body. Established as a statutory authority in 1975, its responsibilities are detailed in the *Australia Council Act 1975*. Broadly speaking, the Council's brief is to formulate and carry out policies to foster a strong artistic life throughout the nation by promoting excellence in and development of the arts. It also actively encourages involvement in the arts by all Australians and nurtures a culturally diverse national identity.

The Australia Council for the Arts conducts regular surveys of public attitudes to the arts. Its 1992 survey found that 30 per cent of people believe that everyone, that is, society as a whole, benefits from the arts and 88 per cent believe that arts activities help to bring people together in local communities. Survey results also showed that 91 per cent believe that the success of Australian painters, singers, writers and actors gives people a sense of pride in Australian achievement, and 82 per cent agree that arts activities help enrich the quality of our lives.

Two important principles guide the work of the Australia Council. It operates at arms length from government which ensures that decision making on specific grants is made independently of the political process. It also operates under the principle of peer review by which decisions on policy, priorities and grant selections are made by professional peers of the applicants.

In 1992–93, the Council received 5,846 applications and made 2,004 grants of which 531 were to individuals and 1,473 to organisations. The Council has devolved policy and funding decisions to five Boards — Aboriginal and Torres Strait Islander Arts, Community Cultural Development, Literature, Performing Arts and Visual Arts/Crafts. Their roles are to implement policy, devise support programs, monitor grants and advise the Council on broader issues of arts policies and needs. Each Board is supported by a staff unit. A brief description of their functions is contained in *Year Book Australia 1992*.

11.42 ALLOCATION OF AUSTRALIA COUNCIL FUNDS
($'000)

	1990–91	1991–92	1992–93
Arts support grants			
Aboriginal and Torres Strait Islander arts	3,325	4,071	4,344
Community cultural development	5,174	5,370	5,659
Literature	4,518	4,361	4,596
Performing arts	28,075	28,222	24,428
Visual arts/craft	6,636	7,210	7,319
Council programs & special projects	2,071	1,936	2,744
Australian artists creative fellowships	783	1,117	1,769
Community environment art & design	—	—	688
Total	*50,582*	*52,287*	*51,547*
Administration	8,742	8,674	8,031
Total operating expenses	**59,324**	**60,961**	**59,578**
Parliamentary appropriation	58,128	60,142	57,014

Source: Australia Council, Annual Reports, 1991–92 and 1992–93.

Cultural Ministers' Council

See Year Book Australia 1994.

Taxation incentives for the arts

The Taxation Incentives for the Arts Scheme came into operation on 1 January 1978 under section 78 of the *Income Tax Assessment Act 1936*. The scheme encourages the donation of gifts in kind to public art galleries, museums and libraries by allowing donors a taxation deduction.

Artbank

Artbank is a unit of the Department of Communication and the Arts. Artbank seeks to widen the appreciation of contemporary Australian art by making it available for display in Australia and in official posts overseas and encourages contemporary Australian artists by acquiring their works.

The period 1991–92 was Artbank's third and final year of transition to self-sufficiency through the operation of a trust account. In each of the three years, a direct Commonwealth appropriation ($275,000 in 1991–92) was made to the trust account to enable Artbank to buy new works in order to have sufficient stock on which to operate.

Since 1 July 1989, all revenue received from the rental program and the sale of artworks has been retained by Artbank to cover direct and indirect costs. From 1 July 1992, Artbank operated on a self-funding basis without government subvention.

In keeping with its objective, the Artbank Board approved the purchase of 393 new works for $445,582.95 and on 30 June 1992 the Artbank collection contained 6,941 works, including paintings, sculpture, photographs, prints, glass and ceramics. Revenue on the rental of artworks in 1991–92 was $916,961 and revenue from sales $130,727. There were 4,189 works on hire being 68.3 per cent of the collection by value in 1991–92.

GOVERNMENT FUNDING FOR CULTURE AND RECREATION

Culture

The Commonwealth Government formulates policy guidelines for the support of the arts generally and allocates funds annually to the national cultural institutions under its jurisdiction.

The arts in Australia receive considerable financial support from the Commonwealth Government in the form of direct grants and through the provision of taxation benefits. This support is complemented by State, Territory and local governments.

The total outlays of the three levels of government for cultural facilities and services for 1991–92 was $965 million and for broadcasting and film production was $762 million. Table 11.43 below shows total government outlays on culture from 1988–89 to 1991–92.

Recreation

The Commonwealth Department of the Environment, Sport and Territories (DEST) has a general responsibility in the national sphere for recreation, fitness and sport through the Office of Recreation and Sport.

All State Governments have also established agencies with special responsibilities for recreation and sport. Local governments also complement the Commonwealth Government and the State Governments in the provision of recreation facilities to the community as do non-government sponsors, organisers and entrepreneurs.

The total outlays of the three levels of government for recreational facilities and services in 1991–92 was $1,843 million. The table below also shows total government outlays on recreation from 1988–89 to 1991–92.

11.43 TOTAL OUTLAYS ON CULTURE AND RECREATION BY GOVERNMENTS
($ million)

Purpose	*1988–89*	*1989–90*	*1990–91*	*1991–92*
Recreational facilities and services	1,653	1,792	1,700	1,843
Cultural facilities and services	895	901	921	965
Broadcasting and film production	663	745	806	762
Other recreation and culture	12	79	232	230
Total	**3,223**	**3,516**	**3,659**	**3,799**

Source: Government Finance Statistics, Australia, 1990–91 and 1991–92 (5512.0).

SPORT AND RECREATION

Involvement in sport

In March 1993, a survey was conducted throughout Australia by the ABS of persons 15 years of age and over, to obtain information about their involvement in sport during the previous 12 months. Involvement in sport was defined to include both paid and unpaid participation in playing and non-playing capacities. Spectator involvement in sport was excluded.

The survey found that almost a third of the Australian population (4.5 million people) aged 15 years or more were involved in sport. Of these, just over 540,000 people were involved in solely non-playing capacities.

Overall, males had a participation rate 12.5 per cent higher than that of females. Most of this difference was attributable to players. When it came to persons who only had non-playing involvement, there was no significant difference in the participation rates of males and females.

Survey results also revealed that the highest participation rate for persons playing sport occurred for 15 to 24 year-olds (47.6%). For non-players, the 35 to 44 years age group had the highest participation rate (16.9%). Their most common activities were as administrators or committee members.

11.44 PERSONS WITH PAID AND UNPAID INVOLVEMENT IN SPORT, BY AGE AND SEX MARCH 1993

	Some paid involvement		*No paid involvement*		*All involvement*	
Characteristics	*Total*	*Participation rate*	*Total*	*Participation rate*	*Total*	*Participation rate*
	'000	%	'000	%	'000	%
Males	129.5	1.9	2,530.7	37.5	2,660.2	39.4
Females	83.8	1.2	1,760.9	25.7	1,844.7	26.9
Age group (years)						
15–24	69.2	2.5	1,271.0	46.7	1,340.2	49.2
25–34	60.2	2.1	1,036.5	36.8	1,096.7	39.0
35–44	43.2	1.6	892.3	33.4	935.5	35.1
45–54	28.4	1.4	500.2	24.4	528.6	25.7
55–64	9.5	0.7	285.0	19.5	294.5	20.2
>64	*2.8	*0.1	306.6	16.3	309.4	16.5
Total	**213.3**	**1.6**	**4,291.6**	**31.6**	**4,504.9**	**33.1**

Source: Involvement in Sport, Australia, March 1993 (6285.0).

Only 213,300 persons received some payment for their involvement, less than five per cent. Coaching, instructing or teaching of sport was the activity for which most persons were paid (97,800 people), while about 57,000 were paid for active sports participation.

11.45 PAID AND UNPAID INVOLVEMENTS IN SPORT, MARCH 1993

Type of involvement	*Paid involvements*	*Unpaid involvements*	*Total involvements*	*Participation rate*
	'000	'000	'000	%
Playing involvements	57.0	3,906.5	3,963.6	29.1
Non-playing involvements				
Coach/instructor/teacher	97.8	433.7	531.5	3.9
Referee/umpire	63.1	362.8	425.8	3.1
Administrator/committee member	26.0	604.9	630.9	4.6
Other involvement	15.4	378.9	394.3	2.9
Total non-playing involvements	*202.3*	*1,780.3*	*1,982.5*	. .
Total involvements	**259.3**	**5,686.8**	**5,946.1**	. .

Source: Involvement in Sport, Australia, March 1993 (6285.0).

Sport and recreation participation

The sporting activities of Australians include a range of organised and social sport, recreational and leisure activities undertaken both at home and away from home. The results of an ABS household survey, the Population Survey Monitor, on the sporting and recreation activities of Australians in August and November 1993, indicated that more males (26.1% in August and 24.5% in November) than females (12.8% in August and 15.3% in November) aged 18 years and over participated in organised sport during the survey reference weeks.

The highest participation for both sexes was in the 18 to 24 age group. The August survey also revealed that 49.1 per cent of females aged 18 and over walked for pleasure or exercise and that 82.3 per cent of persons aged 12 to 19 (attending secondary school full time) participated in a sporting or physical activity during school hours. The November survey revealed that 56.5 per cent of females aged 18 and over spent time gardening in the reference week and 67.6 per cent of males and 47 per cent of females aged 18 and over watched sport on TV during the reference week.

11.46 PERSONS AGED 18 YEARS AND OVER: PARTICIPATION IN SELECTED SPORTING, RECREATIONAL AND LEISURE ACTIVITIES BY SEX, AUGUST AND NOVEMBER 1993
(per cent)

	August 1993			*November 1993*		
Selected activities	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Exercising at gym/fitness centre	8.7	7.6	8.1	9.1	9.2	9.1
Cycling for pleasure or exercise	6.5	4.5	5.5	9.4	7.1	8.2
Swimming for pleasure or exercise	5.3	3.5	4.4	13.9	12.8	13.4
Jogging for pleasure or exercise	9.7	3.5	6.5	8.9	3.8	6.3
Walking for pleasure or exercise	33.2	49.1	41.3	40.7	56.4	48.6
Bushwalking or hiking	2.0	2.5	2.3	4.1	3.0	3.5
Fishing	6.5	1.4	3.9	7.3	2.6	4.9
Gardening	51.8	50.7	51.2	55.7	56.5	56.1

Note: Participation is based on sporting, leisure and recreational activities undertaken in the week prior to survey week.
Source: Population Survey Monitor, Australia, August and November 1993 (4103.0).

Sport and Recreation Ministers' Council

See Year Book Australia 1994.

Australian Sports Commission

The Australian Sports Commission, established under the *Australian Sports Commission Act, 1989*, is the sole authority for planning and coordinating Federal government sports funding. Incorporating the Australian Institute of Sport (AIS), the Commission conducts elite sports programs and also provides leadership and long-term direction for community sports. In support of these efforts, the Commonwealth Government provided $65.7 million in 1992–93 for the Australian Sports Commission's programs and administration. The Commission allocated funds in this year across the following programs: elite athletes, sports development, sports participation, sports science, sports medicine and research facilities, the National Sport Information Centre and corporate services.

Elite sports programs. The scholarship sports program involves 20 sports — baseball, basketball, canoeing, cricket, cycling, diving, golf, gymnastics, hockey, netball, rowing, rugby union, soccer, softball, squash, swimming, tennis, track and field, volleyball and water polo. While many programs are at the AIS headquarters in Canberra, units have been established in Perth (hockey, women's volleyball), Brisbane (diving, squash), Adelaide (track cycling, cricket), Gold Coast (canoeing), Sydney (men's volleyball) and Melbourne (golf). Baseball, rugby union, softball (women), tennis, track and field, and water polo (women) are decentralised programs, that is, their athletes are not all located in one centre but in various places across Australia.

In June 1993 there were 464 scholarship holders in the scholarship sports program (table 11.47). In addition to the scholarship sports program, the AIS also administers the National Sports Program which offers the use of AIS facilities, resources and expertise. The majority of sports utilise the program for national selection trials and squad and team trainings, development programs and coaches' seminars. The knowledge and expertise of the sports science and medicine department in particular is in heavy demand, along with specialised advice from AIS coaches. In 1992–93, 240 camps were conducted by 63 national sporting organisations involving more than 5,000 athletes and officials.

11.47 NUMBERS OF AIS SCHOLARSHIPS BY SPORT

Sport	*1990*	*1991*	*1992*	*1993*
Athletes with disabilities	—	—	—	17
Basketball	25	25	26	24
Canoeing – sprint	16	15	12	14
Canoeing – slalom	—	15	8	—
Cricket	33	14	14	14
Cycling – track	10	17	17	15
Cycling – road	—	18	18	18
Diving	10	24	28	25
Golf	—	—	10	12
Gymnastics	21	31	39	32
Hockey	29	64	68	44
Netball	19	24	21	15
Rowing	37	39	31	30
Rugby union	63	64	40	39
Soccer	19	22	21	19
Squash	19	16	25	16
Swimming	26	30	23	31
Tennis	18	12	13	21
Track and field	23	31	34	29
Volleyball	15	18	15	30
Water polo	25	27	19	19
Total	**408**	**506**	**482**	**464**

Source: Australian Sports Commission, Annual Report, 1992–93.

Assistance to national sporting organisations. The Australian Sports Commission provides financial support to national sporting organisations through its Sports Assistance Scheme. Funding is allocated on the basis of each sport's four-year development plan and is provided in the areas of sports management, coaching, athlete support and development, international competition, officiating, participation, hosting international events and sport sciences. Only one organisation per sport is eligible for financial assistance from the Commission with over one hundred national sporting organisations receiving funding during 1993.

Australian Coaching Council. The Australian Coaching Council is the Commission's program responsible for coaching development in all sports throughout Australia. The Council's activities include the education and accreditation of coaches through the National Coaching Accreditation Scheme. As at December 1993 over 127,000 coaches had been accredited under the scheme. A High Performance Coaching Course has been developed to further upgrade coaching at the elite level and 60 coaches are currently participating in the program.

Sports participation programs. The Commission has established AUSSIE SPORT, a national junior sport initiative committed to the development of young people through sport. A range of programs, resources and services are available to assist teachers, coaches, parents and others provide quality junior sport for young Australians. The Volunteer Involvement Program has been established by the Commission to maintain the focus on the participation base of sport, especially the volunteers and sporting clubs. The club planning and local government projects also focus on participation at the local level. Other participation programs include the Mature Aged Sport Program and the Aboriginal Young Persons Sport and Recreation Development Program.

Centre for Sports Science and Sports Medicine. The Centre provides a range of services from five departments: Medicine and Sports Nutrition, Physiotherapy and Massage, Biomechanics, Sport Psychology and Physiology and Applied Nutrition. The primary responsibility of the Centre is the provision of services to elite athletes and coaches to enhance athletic performance.

National Sport Information Centre. The Sports Commission's National Information Centre is Australia's premier information resource centre for sport and its related disciplines. Its services include manual and computerised reference services, current awareness publications, print and video loans, translations, information packages, and access to research dissertations on sport. These services are available to athletes, coaches, officials, students, libraries and outside enquirers.

Aboriginal recreation and sport

Since 1990-91, the Aboriginal and Torres Strait Islander Commission (ATSIC) has moved towards a clearer understanding of the sporting and recreation needs and objectives for all groups within the Aboriginal and Torres Strait Islander community, including women, youth, the elderly and the handicapped.

The Recreation and Sport Sub-program seeks to create opportunities for Aboriginal and Torres Strait Islander individuals, teams and communities to participate in sporting activities at all levels — both in the general community and within discrete Aboriginal communities. Specifically, the objectives of the sub-program are:

- to improve access to appropriate recreational and sporting facilities and equipment;
- to increase participation in recreation and sport programs and activities appropriate to community needs and wishes; and
- to provide assistance to above average and potentially outstanding sports persons to develop and demonstrate their sporting skills.

The Sport and Recreation component continued to be divided into two distinct sub-components: regional sport and recreation projects, and the national sport and recreation sub-component. The total funding for 1992–93 was $3,835,292. Of this amount, $2.2 million was allocated in the regions to support community-based activities and initiatives; and $543,574 was spent on national and multi-regional projects.

As part of the Commonwealth Government's response to the recommendations of the Royal Commission into Aboriginal Deaths in Custody, on 24 June 1992 the Prime Minister announced an additional $9 million funding over five years, commencing in 1992–93, to introduce an Aboriginal and Torres Strait Islander Young People's Sport and Recreation Development Program. In 1992-93, $955,000 was spent on this new program.

The Australian Sports Drug Agency

The Australian Sports Drug Agency was established in 1989 with funding provided through the Australian Sports Commission and is now a separate statutory authority. The objects, functions and powers of the Agency are set out in the *Australian Sports Drug Agency Act 1990*. The mission of the Agency is to reduce the harm associated with drugs use in sport in order to enhance the well-being of individuals and the value of sport to society. The Agency is responsible for educating the sporting and general community on the dangers of performance-enhancing drugs and conducting independent sampling and testing of sports participants at all levels.

11.48 DRUG TESTING OF SPORTS PARTICIPANTS, SUMMARY OF DEFAULTS

	1990–91	*1991–91*	*1992–93*
Number of tests undertaken	2,656	2,480	2,877
Number of sports tested	51	56	55
Defaults(a)			
Refused	13	7	22
Positive to OIC drug	58	33	32
Positive for prohibited drug	28	15	6
Positive for restricted drug	8	3	4
Inadvertent use of medicines	22	15	22
Total number of defaults	**71**	**40**	**54**

(a) Default refers to a positive test result or a refusal to take the test.
Source: The Australian Sports Drug Agency, Annual Reports, 1990–91 and 1991–92 with previously unpublished data.

SOCIO-CULTURAL ACTIVITIES

Often people engage in activities for reasons other than prestige or economic reward which reveal something of themselves and their beliefs. These activities make up the cultural dimension of social practice which is best described as those activities which people undertake in their own time, unconstrained by immediate material need, social obligation or gain. Typically, these are self-motivated activities which contribute to personal or social identity, and which give meaning and focus to the values people hold. They anchor institutional forms of culture within society, and provide a bridge to mutual understanding across culturally diverse groups.

Language, religious practice, and traditions, are all examples of cultural activity embedded in community life. They can be seen as mechanisms for cultural maintenance, or as adaptations by individuals and by groups to social change.

Multiculturalism

Today, Australia's population enjoys a greater diversity of origin than ever before. The 1991 Census revealed that 22.3 per cent of Australians stated that they had been born overseas, a higher proportion than that recorded by any census since the turn of the century. Not only were migrants more prevalent, but the range of countries from which they came was considerably greater, and many of Australia's more traditional European migrant groups became less predominant. Migrants born in the United Kingdom and Ireland, although comprising one-third of all overseas born people, formed only 6.9 per cent of the total population, the lowest recorded by a census for 25 years. Alternatively, migrants born in Asian countries such as China, Hong Kong, Malaysia, the Philippines and Viet Nam increased from 1.4 per cent in 1986 to 2.3 per cent of the total population in 1991.

See the chapter, Demography and the Special Article, *Ethnic and Multicultural Diversity* for further details on Australia's multiculturalism.

Australia's non-discriminatory immigration policy has resulted in a diverse society in which people of different ethnic and racial origins live together sharing a commitment to the language, laws, institutions and interests of Australia.

The Government's policies on multiculturalism are founded on three principles:

- cultural identity — the right of all Australians, within carefully defined limits such as the rule of law and parliamentary democracy, to express and share their individual cultural heritage, including their language and religion;
- social justice — the right of all Australians to equality of treatment and opportunity, and the removal of barriers of race, ethnicity, culture, religion, language, gender or place of birth; and
- economic efficiency — the need to maintain, develop and utilise effectively the skills and talents of all Australians, regardless of background. The Government's policies on multiculturalism are set out in the National Agenda for a Multicultural Australia, launched by the Prime Minister on 26 July 1989.

For a description of the Office of Multicultural Affairs *see Year Book Australia 1991.*

Bilingual Consultants Network is coordinated by the Office of Multicultural Affairs and includes both an Information Centre and a Social and Market Research Centre. Both centres were established to assist private and public sector organisations in developing policy options and specific strategies for issues relating to Australia's multicultural communities.

The Information Centre disseminates general marketing, social and economic information. The Social and Market Research Centre is an Australia-wide network of more than 600 trained bilingual consultants representing over 50 language groups and many trade and professional skills. The Centre specialises in community-based consultation and is able to assist organisations in collecting basic research information and in developing and evaluating community-based programs.

Languages

English is the national language. At the same time, Australia's cultural vitality is also a product of other languages spoken in the community. These include the indigenous languages of the Aboriginal and Torres Strait Islander citizens, as well as European and Asian languages.

In the 1991 Population Census, people were asked whether they spoke a language other than English at home. Among those who stated that they did, 408,200 spoke Italian (13.8% overseas born, 24% Australian born), and a further 274,200 spoke Greek (8.7% overseas born, 17.5% Australian born). These were the two most prevalent responses, with other responses each representing less than 10 per cent. Altogether over 2.4 million people, most of whom were born overseas, spoke a non-English language at home.

11.49 PERSONS(a) WHO SPOKE A LANGUAGE OTHER THAN ENGLISH AT HOME LANGUAGE BY SEX AND BIRTHPLACE, 1991 CENSUS

Language spoken at home	*Overseas born* Males	Females	Persons	Persons	*Australian born* Males	Females	Persons	Persons
	'000	'000	'000	%	'000	'000	'000	%
Italian	123.5	116.6	240.1	13.8	83.2	84.9	168.1	24.0
Greek	76.4	75.0	151.4	8.7	62.3	60.5	122.8	17.5
Chinese(b)	114.2	114.3	228.5	13.1	10.9	9.5	20.4	2.9
German	45.5	47.4	92.9	5.3	10.4	10.9	21.4	3.1
Arabic/Lebanese	50.5	46.0	96.5	5.5	25.2	24.4	49.6	7.1
Spanish	35.8	37.3	73.1	4.2	6.5	6.4	12.8	1.8
Serbian/Croatian	31.1	29.2	60.2	3.5	14.2	13.7	27.9	4.0
Other Yugoslavia	14.4	13.7	28.1	1.6	4.7	4.7	9.3	1.3
Polish	26.0	29.0	55.0	3.2	4.8	4.9	9.6	1.4
Dutch	19.5	22.2	41.7	2.4	2.6	3.1	5.7	0.8
Vietnamese	49.4	43.8	93.2	5.3	4.1	4.0	8.1	1.2
Maltese	18.8	18.3	37.1	2.1	7.5	7.2	14.8	2.1
French	17.6	18.5	36.1	2.1	4.3	5.0	9.4	1.3
Macedonian	20.9	19.8	40.7	2.3	10.4	10.1	20.5	2.9
Aboriginal language	0.1	0.1	0.2	—	20.2	20.5	40.7	5.8
Turkish	14.7	13.7	28.3	1.6	4.8	4.7	9.6	1.4
Hungarian	11.7	12.5	24.2	1.4	2.3	2.4	4.7	0.7
Russian	8.6	10.8	19.4	1.1	2.1	2.1	4.2	0.6
Other	175.9	191.3	367.2	21.1	27.0	25.1	52.1	7.4
Total(c)	**869.8**	**873.9**	**1,743.7**	**100.0**	**350.9**	**349.8**	**700.7**	**100.0**

(a) Excludes children aged under 5 years and persons who did not state their birthplace. (b) Includes 'Chinese as stated', 'Cantonese', 'Mandarin', 'Chinese languages NEI'. (c) Includes language not stated responses.
Source: Census 1991.

Within this group, proficiency in English varied according to age and birthplace. Almost 91 per cent of 5 to 24 year olds spoke English well or very well, compared with 60 per cent of those aged 65 years and over. The influence of birthplace was evident in the consistently higher level of proficiency in English among those born in Australia, 95 per cent of this group spoke English well or very well, compared with 81 per cent overall.

11.50 PERSONS WHO SPOKE A LANGUAGE OTHER THAN ENGLISH AT HOME
PROFICIENCY IN ENGLISH BY BIRTHPLACE AND AGE, AUGUST 1991
(per cent)

	Age group (years)				
Proficiency in English	*5–24*	*25–44*	*45–64*	*>64*	*Total*
Total population					
speaks English					
Well/very well	90.6	82.9	72.5	59.9	80.6
Not well	8.1	15.3	23.5	27.0	16.1
Not at all	1.3	1.7	4.0	13.1	3.3
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Total ('000)	742,205	835,234	557,854	235,129	2,370,422
Total(a) ('000)	748,157	841,466	561,665	237,517	2,388,805
Australian born					
speaks English					
Well/very well	95.2	95.9	89.1	85.4	94.9
Not well	4.0	3.2	8.5	10.0	4.1
Not at all	0.8	0.8	2.4	4.7	1.0
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Total ('000)	416,852	174,020	29,817	11,587	632,276
Total(a) ('000)	420,435	176,122	30,498	11,991	639,046

(a) Includes proficiency in English not stated but excludes not stated to both language and proficiency.
Source: Census 1991.

Australian Language and Literacy Policy. The goals of the Australian Language and Literacy Policy encompass proficiency in spoken and written English for all Australians, the learning of languages other than English, the maintenance, and, where appropriate, recording of Aboriginal and Torres Strait Islander languages and the provision of language services. It also addresses the needs of children and adults, of those in work, of those unemployed or not in the labour force, and of Australians from different ethnic backgrounds.

The Federal Government proposes to spend more than $360 million in 1994–95 alone to implement the policies and strategies designed to achieve the goals of the policy.

English as a Second Language in Schools (ESL). Under the National Equity Program for Schools the Commonwealth provides funds to assist with the provision of ESL in Australian schools.

The ESL component aims to improve the educational participation and outcomes for ESL students by:

- developing their English language competence; and
- facilitating their participation in mainstream education activities.

The school ESL component comprises two sub-components: New Arrivals and General Support. In 1993, the New Arrivals sub-component provided $2,722 per student ($2,617 in 1992) for up to 12 months of intensive English tuition for eligible students newly arrived in Australia. In 1993, the General Support sub-component provided $63.4 million ($49.4 million in 1992) to assist schools to provide additional English tuition to, and adapt existing teaching practices for ESL students (including those born in Australia) who have reached a sufficient level of competence to participate in mainstream classes.

The provisions of the New Arrivals sub-component were extended in 1990 to cover students enrolling in the first formal year of primary school who had arrived in Australia up to eighteen months previously (as compared with the six months which applied in earlier years). This change was introduced to take account of the limited exposure to English of many preschool age children arriving in Australia.

School Language Program. The Commonwealth also provides funding for languages in Australian schools under the School Language Program which comprises two elements: the Priority Languages Incentive Element (PLIE) and the Community Languages Element.

The objective of the PLIE is to provide financial incentives towards increasing the numbers of students studying priority languages other than English at year 12 level. Each year, State Ministers with responsibility for Education declare eight priority languages for their State from the following list of 14: Aboriginal languages; Arabic; Chinese (Mandarin); French; German; Indonesian; Italian; Japanese; Korean; Modern Greek; Russian; Spanish; Thai and Vietnamese.

In 1993, a grant of $315 was paid under this element in respect of each eligible student, up to a ceiling of 25 per cent of all year 12 students enrolled in each school, school system, approved aggregation of independent schools or government educational institution. An eligible student is one who in the program year 1992, recorded an achievement in an accredited Year 12 level course in a declared priority language in the relevant State. The per capita rate for 1994 will be $327. In 1993, the Commonwealth provided a total of $5.7 million to government schools or government educational institutions, non-government systems or non-systemic schools or recognised aggregations of non-systemic schools within the States and Territories.

In February 1994, the Council of Australian Governments (the Prime Minister, State Premiers and Territory Chief Ministers) endorsed a report entitled *Asian Languages and Australia's Economic Future* and agreed to a plan under which it is expected that all primary school children will be studying a language other than English by 1998 and all Year 10 students will study a second language — 60 per cent of them an Asian language — by 2006. The cost of the plan (half to be met by the Commonwealth Government and half by the State and Territory Governments) is estimated to cost $11.3 million in 1994 and rise to $208 million (in 1994 dollars) in 2006.

The Community Languages Element (CLE) replaced the Ethnic Schools Program in 1992. The objectives of this element are to maintain relevant languages and cultures among students of non-English speaking background (including Aboriginal and Torres Strait Islander students) and to increase the awareness and understanding for all students of the different community languages and cultures within Australian society. The CLE recognises the resources provided by Australia's multicultural society and encourages the further study of languages and cultures. Under this Element, assistance is provided through States and school system authorities to operate classes in the languages and cultures of ethnic communities for the benefit of both non-English speaking background and other students. In 1993, $10.2 million was provided for this purpose.

Religion

In every national census taken in Australia, a voluntary question on religious affiliation has been asked. Since 1933, the voluntary nature of the religion question has been specifically stated. In 1971, the instruction 'if no religion, write none' was introduced. The following table provides a summary of the major religious affiliations at each census since 1911. At the 1991 Census, 74 per cent of the population stated a Christian religion compared with 95.9 per cent in 1911.

11.51 MAJOR RELIGIOUS AFFILIATIONS, CENSUS YEARS

Census year	Anglican	Catholic	Other Christian	Total Christian	Non-Christian	No religion	Religion not stated	Other(a)	Total
								%	'000
1911	38.4	22.4	35.1	95.9	0.8	0.4	(b)2.7	0.2	4,455.0
1921	43.7	21.7	31.6	96.9	0.7	0.5	(b)1.7	0.2	5,435.7
1933	38.7	19.6	28.1	86.4	0.4	0.2	12.8	0.1	6,629.8
1947	39.0	20.9	28.1	88.0	0.5	0.3	10.9	0.2	7,579.4
1954	37.9	22.9	28.5	89.4	0.6	0.3	9.5	0.2	8,986.5
1961	34.9	24.9	28.4	88.3	0.7	0.4	10.5	0.2	10,508.2
1966	33.5	26.2	28.5	88.2	0.7	0.8	10.0	0.3	11,599.5
1971	31.0	27.0	28.2	86.2	0.8	6.7	6.0	0.2	12,755.6
1976	27.7	25.7	25.2	78.6	1.0	8.3	11.8	0.4	13,548.4
1981	26.1	26.0	24.3	76.4	1.4	10.8	10.9	0.5	14,576.3
1986	23.9	26.0	23.0	73.0	2.0	12.7	11.9	0.4	15,602.2
1991	23.8	27.3	22.9	74.0	2.6	12.9	10.2	0.3	16,850.3

(a) Comprises non-theistic affiliation and religion inadequately described. (b) Includes 'object to state'.
Source: Census 86 — Religion in Australia (2510.0) and Census 1991.

Australia's population grew by 15.6 per cent in the decade to 1991. For the same period, many religions grew at a rate greater than the national population.

Of the Christian groups, the Pentecostal and Baptist faiths experienced the greatest increase in support. Only the Churches of Christ and the Salvation Army demonstrated declining or static adherence. Buddhism and Islam showed the most significant increase in allegiance within the non-Christian religion group.

Catholics have recently replaced Anglicans as the largest religious group in Australia. A small part of this growth can be attributed to recent overseas migration. According to the 1991 Census, over 320,000 Catholics had arrived in Australia since 1981. The majority originated from Europe and the USSR (34%) and South East Asia (28%).

Non-Christian religions, while comprising only 2.6 per cent of the population, have grown from 1.4 per cent in 1981. The number claiming such allegiances have increased by 247,500 (125.3%). Part of this growth is attributable to recent immigration. For example, 23,560 Muslims (16% of all Australian adherents) migrated from the Middle East and North Africa, 69,593 Buddhists (49.8%) from South East Asia and 14,215 Hindus (32.6%) from southern Asia, during the 1981–91 period.

During the period 1981–91, the majority of migrants without a religious affiliation came from the United Kingdom and Ireland (35,237), Hong Kong (25,854) and Viet Nam (20,740).

The following table shows the breakdown of religious groupings by the number and percentage of affiliates within each at the 1981 and 1991 Censuses.

11.52 GROWTH IN RELIGIOUS AFFILIATION, 1981 AND 1991 CENSUSES

	1981		*1991*		
Religion	*('000)*	*(%)*	*('000)*	*(%)*	*Growth (%)*
Christian					
Anglican	3,810.5	26.1	4,018.8	23.8	5.7
Baptist	190.3	1.3	279.8	1.7	47.0
Catholic	3,786.5	26.0	4,606.0	27.3	21.7
Churches of Christ	89.4	0.6	78.3	0.5	– 12.5
Jehovah's Witnesses	51.8	0.4	74.8	0.4	44.4
Lutheran	199.8	1.4	250.9	1.5	25.6
Orthodox	421.3	2.9	474.8	2.8	12.7
Pentecostal	72.1	0.5	150.6	0.9	108.8
Presbyterian & Reformed	637.8	4.4	732.0	4.3	14.8
Salvation Army	71.6	0.5	72.4	0.4	1.1
Uniting Church	1,203.4	8.2	1,387.7	8.2	15.3
Other	598.8	4.1	339.6	2.0	– 43.3
Non-Christian					
Buddhist	35.1	0.2	139.8	0.8	298.3
Islam	76.8	0.5	147.5	0.9	92.1
Judaism	62.1	0.4	74.3	0.4	19.5
Other	23.6	0.2	83.6	0.5	254.4
No religion	1,576.7	10.8	2,176.6	12.9	38.0
Not stated					
Inadequately described	1,668.8	11.4	1,762.2	10.5	5.6
Total	**14,576.3**	**100.0**	**16,850.3**	**100.0**	**15.6**

Source: Census 1991.

BIBLIOGRAPHY

ABS Publications and Data Sources

1984 Household Expenditure Survey, Australia: Detailed Expenditure Items (6535.0)

1988-89 Household Expenditure Survey, Australia: Detailed Expenditure Items (6535.0)

Attendance at Selected Cultural Venues, Australia, June 1991 (4114.0)

Australia's Aboriginal and Torres Strait Islander Population — 1991 Census (2740.0)

Census 86 — Religion in Australia (2510.0)

Census of Population and Housing, 1986 and 1991 (unpublished data)

Environmental Issues — Peoples' Views and Practices (4602.0)

Government Finance Statistics, Australia, 1990–91 and 1991–92 (5512.0)

Involvement in Sport, Australia, March 1993 (6285.0)

Music and Performing Arts, Australia, 1991 (4116.0)

Population Survey Monitor, Australia, August and November 1993 (4103.0)

Time Use Survey, Australia, 1992 (4153.0) unpublished data

Work in Selected Culture/Leisure Activities, Australia, March 1993 (6281.0)

Other Publications

ANNUAL REPORT OF THE PUBLIC LENDING RIGHT COMMITTEE, 1992–93

AUSTRALIA COUNCIL. Annual Reports, 1991–92 and 1992–93

AUSTRALIAN ARCHIVES. Annual Report, 1992–93

AUSTRALIAN BALLET SCHOOL. Newsletter, March 1994

AUSTRALIAN CHILDREN'S TELEVISION FOUNDATION. Annual Report, 1992–93

AUSTRALIAN FILM COMMISSION. Annual Report, 1992–93

AUSTRALIAN FILM COMMISSION/ENTERTAINMENT BUSINESS REVIEW, National Survey of Film, Television and Video Production (1992–93)

AUSTRALIAN FILM FINANCE CORPORATION PTY LTD. Annual Reports, 1991–92 and 1992–93

AUSTRALIAN FILM, TELEVISION AND RADIO SCHOOL. Annual Report, 1992–93

AUSTRALIAN HERITAGE COMMISSION. Annual Report, 1992–93

AUSTRALIAN NATIONAL MARITIME MUSEUM. Annual Report, 1992–93

THE AUSTRALIAN OPERA. Annual Reports, 1991 and 1992

AUSTRALIAN SPORTS COMMISSION. Annual Report, 1992–93

AUSTRALIAN SPORTS DRUG AGENCY. Annual Reports, 1990–91 and 1991–92

BERNDT, R.M. and BERNDT, C.H. with STANTON, J., Aboriginal Art: a visual perspective, Methuen, 1982

BIBLIOGRAPHY — *continued*

BERNDT, R.M. and PHILLIPS, E.S. (ed.), The Australian Aboriginal Heritage, ASEA/Ure Smith, Sydney, 1973

McDONNELL, J.S. Public Attitudes to the Arts: 1992, Australia Council, Redfern, NSW, 1993

MUSICA VIVA. Annual Reports, 1992 and 1993

NATIONAL INSTITUTE OF DRAMATIC ART. Annual Report, 1992

OFFICE OF FILM AND LITERATURE CLASSIFICATION AND FILM AND LITERATURE BOARD OF REVIEW. Reports on Activities, 1992–93

ROBERTS, G. "Speaking in Other Tongues", The Bulletin, April 19, 1994

SPRING, J. Museums 1992: Art Museums, Museums and Public Galleries in Australia and New Zealand., Research Paper No. 9, June 1993, Australia Council, Redfern, NSW, 1993

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twelve

Overview of Australian Industry

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This is a new chapter of the *Year Book* which presents a statistical overview of business and industry and provides a context for other chapters which deal with individual industries. It presents key summary statistics of the structure and financial performance of industries and their contributions to overall measures of production, employment and investment. An important new source of data for this overview is the ABS' Economic Activity Survey (EAS), which is conducted annually and covers businesses in all divisions of industry. The other main sources for the industry-wide statistics in this chapter are the Australian national accounts and the labour force survey.

The statistics on individual industries contained in other chapters are not necessarily comparable with the overview statistics because of differences between industry-specific statistical collections and the industry-wide statistical series, in such aspects as frequency and scope of statistical collections, and the methodology.

Industry structure: numbers and sizes of business units

For many purposes the term 'business' is taken to mean a legal entity such as a registered company, partnership, sole proprietor, government enterprises or any other legally recognised organisation which provides goods or services. However, the business units about which the ABS collects and publishes information, have been defined to reflect, as far as possible, the way businesses are structured and the units for which accounts are kept. This has led to the adoption of the 'management unit' for the collection of much of the financial performance data.

Throughout this chapter the term business will refer to the management unit. This is defined as the highest level accounting unit in a business for which accounts are maintained, provided that the unit does not include too wide a range of activities. For the majority of businesses, the management unit coincides with the legal entity (that is, company, partnership, trust, sole operator, etc.). In the case of large diverse businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business' for which separate accounts are kept. Further discussion about the units adopted for statistical purposes is contained in publications listed in the chapter bibliography.

The table below provides an overview of the structure of Australian private sector business in 1991–92 in terms of the number of management units in various industry divisions, by broad size categories. The number of persons employed is also shown in order to provide a measure of the relative importance of industries in that year. The statistics are drawn from a survey of employing businesses together with estimates of self-employed persons from the labour force survey. The statistics differ from the more broadly defined employment series provided in table 12.8, based entirely on the labour force survey, for reasons referred to in the text at that table.

12.1 NUMBER OF PRIVATE SECTOR NON-AGRICULTURAL BUSINESSES AND PERSONS EMPLOYED, BY INDUSTRY, 1991-92 ('000)

	Small businesses		*Medium and large businesses*		*All businesses*	
Industry division	*Number*	*Employment*	*Number*	*Employment*	*Number*	*Employment*
Mining	2.1	8.1	0.2	65.4	2.3	73.5
Manufacturing	67.2	449.3	1.6	511.0	68.8	960.3
Construction	145.6	333.9	2.3	275.2	147.9	420.8
Wholesale trade	50.6	207.0	3.7	221.6	54.3	428.6
Retail trade	149.0	539.7	4.5	482.0	153.5	1,021.7
Transport and storage	51.3	127.8	1.7	95.8	53.0	223.6
Finance, property and business services	127.4	377.9	4.6	387.3	132.0	765.2
Community services	72.1	219.7	4.3	374.6	76.4	594.3
Recreational, personal and other services	89.8	305.4	4.3	254.0	94.1	559.4
Total(a)	**757.1**	**2,571.4**	**26.7**	**2,536.4**	**783.8**	**5,053.8**

(a) Includes Electricity, gas and water, and Communication.
Source: Small Business in Australia (1321.0).

Comparable statistics are not available for the Agriculture, forestry, fishing and hunting industries, estimated to number about 116,000 businesses which employ about 324,000 persons. Within this category the number of businesses in the Agricultural industry in 1991-92 was estimated to be 110,000 and about 93 per cent of these were small businesses (defined as having an estimated value of agricultural operations between $20,000 and $400,000) employing 235,000 people including seasonal workers.

For the purpose of these and later statistics, *large business* includes individual businesses or groups of related businesses which employ over 500 persons or have an income of more than $250 million or have assets worth more than $1,000 million. An enterprise group is defined in accordance with Australian companies legislation, as comprising all businesses under common ownership and control. Individual management units (or 'divisions') within such groups may be below the cut-offs referred to above, but are included on the basis of the employment/income/assets of the group as a whole.

Small businesses are those management units which are not part of large business groups as defined above and employ:

- less than 20 persons for non-manufacturing industries; or
- less than 100 persons for manufacturing industries.

Tables 12.2, 12.3 and 12.4 provide a further view of the structure of Australia's non-agricultural industries in terms of the varying contributions made by small, medium and large businesses to some key measures of economic activity, namely sales, profit and production. In this case, the statistics relate only to employing businesses, but these account for a high proportion of activity in any case. The figures include both private and public trading businesses but exclude operations of the non-trading general government sector.

12.2 SALES OF GOODS AND SERVICES OF NON-AGRICULTURAL BUSINESSES, BY SIZE AND INDUSTRY, 1991-92

	Small businesses		Medium businesses		Large businesses		All employing businesses
Industry	*$m*	*%*	*$m*	*%*	*$m*	*%*	*$m*
Mining	n.p.	n.p.	n.p.	n.p.	23,006	74	31,121
Manufacturing	37,901	23	25,967	16	99,413	61	163,281
Electricity, gas and water	n.p.	n.p.	n.p.	n.p.	20,749	86	24,042
Construction	16,755	46	10,562	29	9,192	25	36,509
Wholesale trade	39,055	26	59,237	39	52,253	35	150,545
Retail trade	51,947	39	40,337	31	39,556	30	131,840
Transport and storage	7,999	24	6,816	20	18,438	55	33,253
Communication	n.p.	n.p.	n.p.	n.p.	14,438	98	14,735
Finance and insurance	4,111	25	4,014	25	8,026	50	16,151
Property and business services	16,752	41	15,992	39	8,218	20	40,961
Community services	9,476	49	6,591	34	3,321	17	19,388
Recreation, personal and other services	13,626	42	12,537	38	6,435	20	32,598
All non-agricultural industries	**202,096**	**29**	**189,285**	**27**	**303,045**	**44**	**694,426**

Source: Business Operations and Industry Performance (8140.0).

12.3 OPERATING PROFIT BEFORE TAX OF NON-AGRICULTURAL BUSINESSES, BY SIZE AND INDUSTRY, 1991-92

	Small businesses		Medium businesses		Large businesses		All employing businesses
Industry	*$m*	*%*	*$m*	*%*	*$m*	*%*	*$m*
Mining	n.p.	n.p.	n.p.	n.p.	3,512	67	5,268
Manufacturing	1,863	22	1,198	14	5,356	64	8,417
Electricity, gas and water	n.p.	n.p.	n.p.	n.p.	1,527	93	1,640
Construction	*–30	. .	*647	32	1,375	69	*1,992
Wholesale trade	*1,026	20	*795	16	3,211	64	*5,032
Retail trade	*22	1	*552	37	920	62	1,494
Transport and storage	*211	60	547	156	–407	. .	*351
Communication	n.p.	n.p.	n.p.	n.p.	2,185	. .	2,171
Finance and insurance	*781	5	*1,207	8	13,397	87	15,385
Property and business services	1,858	54	*438	13	1,128	33	3,424
Community services	1,697	68	558	22	252	10	2,507
Recreation, personal and other services	*1,052	51	*509	25	515	25	2,077
All non-agricultural industries	**9,521**	**19**	**7,268**	**15**	**32,970**	**66**	**49,758**

Source: Business Operations and Industry Performance (8140.0).

12.4 INDUSTRY GROSS PRODUCT OF NON-AGRICULTURAL BUSINESSES, BY SIZE AND INDUSTRY, 1991-92

	Small businesses		*Medium businesses*		*Large businesses*		*All employing businesses*
Industry	*$m*	*%*	*$m*	*%*	*$m*	*%*	*$m*
Mining	n.p.	n.p.	n.p.	n.p.	12,373	75	16,418
Manufacturing	12,278	25	7,984	17	27,964	58	48,226
Electricity, gas and water	n.p.	n.p.	n.p.	n.p.	12,236	91	13,492
Construction	*4,284	41	2,883	27	3,321	32	10,488
Wholesale trade	6,098	31	6,123	31	7,708	39	19,929
Retail trade	8,251	44	4,365	23	6,139	33	18,755
Transport and storage	2,379	17	2,738	19	9,295	64	14,412
Communication	n.p.	n.p.	n.p.	n.p.	12,193	100	12,241
Finance and insurance	1,248	. .	*340	. .	-5,149	. .	-3,560
Property and business services	9,298	53	*4,971	29	3,160	18	*17,429
Community services	5,519	47	4,422	38	1,806	15	11,746
Recreation, personal and other services	5,115	41	4,630	37	2,755	22	12,501
All non-agricultural industries	**56,661**	**29**	**41,615**	**22**	**93,802**	**49**	**192,078**

Source: Business Operations and Industry Performance (8140.0).

Industry concentration

An indication of the degree of competition within each industry is provided by industry concentration statistics. These statistics show the proportions of sales of goods and services that are concentrated among the 20 largest business groups operating in each industry. The 'largest 20' are further subdivided into the first (largest) four business groups, second four groups, and so on as in the following table. Percentage share is shown for groups of four businesses separately and cumulatively.

12.5 INDUSTRY CONCENTRATION STATISTICS, 1991–92

Industry		*Ranking by sales of goods and services* First four groups	Second four groups	Third four groups	Fourth four groups	Fifth four groups	All businesses
Mining							
Sales of goods and services	$m	12,300	3,469	2,250	1,743	1,437	31,121
Percentage of all businesses	%	39.5	11.1	7.2	5.6	4.6	100.0
Cumulative percentage	%	39.5	50.7	57.9	63.5	68.1	100.0
Manufacturing							
Sales of goods and services	$m	15,406	10,248	7,846	6,337	5,309	163,281
Percentage of all businesses	%	9.4	6.3	4.8	3.9	3.3	100.0
Cumulative percentage	%	9.4	15.7	20.5	24.4	27.6	100.0
Electricity, gas and water							
Sales of goods and services	$m	9,279	4,377	3,433	1,530	916	24,042
Percentage of all businesses	%	38.6	18.2	14.3	6.4	3.8	100.0
Cumulative percentage	%	38.6	56.8	71.1	77.4	81.3	100.0
Construction							
Sales of goods and services	$m	3,259	2,015	1,308	848	611	36,509
Percentage of all businesses	%	8.9	5.5	3.6	2.3	1.7	100.0
Cumulative percentage	%	8.9	14.4	18.0	20.4	22.0	100.0
Wholesale trade							
Sales of goods and services	$m	15,530	8,384	5,208	3,831	3,017	150,545
Percentage of all businesses	%	10.3	5.6	3.5	2.5	2.0	100.0
Cumulative percentage	%	10.3	15.9	19.3	21.9	23.9	100.0
Retail trade							
Sales of goods and services	$m	28,323	3,761	2,380	1,658	1,187	131,840
Percentage of all businesses	%	21.5	2.9	1.8	1.3	0.9	100.0
Cumulative percentage	%	21.5	24.3	26.1	27.4	28.3	100.0
Transport and storage							
Sales of goods and services	$m	8,510	4,212	1,996	1,211	680	33,253
Percentage of all businesses	%	25.6	12.7	6.0	3.6	2.0	100.0
Cumulative percentage	%	25.6	38.3	44.3	47.9	49.9	100.0
Communication							
Sales of goods and services	$m	14,438	n.p.	n.p.	n.p.	n.p.	14,735
Percentage of all businesses	%	98.0	n.p.	n.p.	n.p.	n.p.	100.0
Cumulative percentage	%	98.0	n.p.	n.p.	n.p.	n.p.	100.0
Finance and insurance							
Sales of goods and services	$m	4,146	1,609	740	600	429	16,151
Percentage of all businesses	%	25.7	10.0	4.6	3.7	2.7	100.0
Cumulative percentage	%	25.7	35.6	40.2	43.9	46.6	100.0
Property and business services							
Sales of goods and services	$m	1,464	1,161	902	644	541	40,961
Percentage of all businesses	%	3.6	2.8	2.2	1.6	1.3	100.0
Cumulative percentage	%	3.6	6.4	8.6	10.2	11.5	100.0
Community services							
Sales of goods and services	$m	795	495	371	295	246	19,388
Percentage of all businesses	%	4.1	2.6	1.9	1.5	1.3	100.0
Cumulative percentage	%	4.1	6.7	8.6	10.1	11.4	100.0
Recreation, personal and other services							
Sales of goods and services	$m	1,946	1,041	932	739	481	32,598
Percentage of all businesses	%	6.0	3.2	2.9	2.3	1.5	100.0
Cumulative percentage	%	6.0	9.2	12.0	14.3	15.8	100.0
All industry divisions except Agriculture and public administration							
Sales of goods and services	$m	51,221	18,928	15,842	13,076	11,711	694,426
Percentage of all businesses	%	7.4	2.7	2.3	1.9	1.7	100.0
Cumulative percentage	%	7.4	10.1	12.4	14.3	16.0	100.0

Source: ABS Economic Activity Survey (unpublished data).

Table 12.5 shows that in 1991–92 7.4 per cent of total sales of goods and services of all the industries listed were controlled by the top four business groups. The top 20 business groups accounted for 16 per cent of sales.

The highest degree of concentration was in the Communication industry, with 98 per cent of sales concentrated in the top four business groups. The next most highly concentrated industries were Mining and Electricity, gas and water where the top four business groups accounted for 39.5 per cent and 38.6 per cent of sales, respectively. The top 20 business groups in these two industries accounted for 68.1 and 81.3 per cent, respectively.

Industries with low concentration of sales among their top businesses include Property and business services, Community services and Recreation, personal and other services.

Industry contribution to gross domestic product

One measure of the changing importance of an industry within the economy is its contribution to gross domestic product as presented in the National Accounts. This is shown in percentage terms in table 12.6 below. Table 12.7 shows the gross product of each industry in value terms for a series of years. While the proportions in table 12.6 are best calculated using data valued in current prices, trends in value aggregates, as in table 12.7, are best assessed in constant price terms, presently at average 1989–90 prices.

12.6 PERCENTAGE CONTRIBUTIONS TO GROSS DOMESTIC PRODUCT, BY INDUSTRY (CURRENT PRICES)

	1964–65	*1974–75*	*1984–85*	*1990–91*	*1991–92*	*1992–93*
Agriculture, forestry, fishing and hunting	11.1	5.8	4.5	3.3	3.1	3.2
Mining	1.6	3.7	6.7	4.9	4.2	4.3
Manufacturing	25.8	21.3	17.7	14.9	14.4	14.7
Electricity, gas and water	3.1	2.8	3.5	3.3	3.5	3.5
Construction	8.4	8.8	7.7	7.5	7.1	7.0
Wholesale and retail trade	18.4	17.8	16.3	17.4	17.5	17.4
Transport and storage	} 7.3	} 7.1	4.9	4.7	4.9	4.9
Communication			2.1	2.4	2.6	2.6
Finance, property and business services	7.1	8.7	10.1	13.1	13.4	13.6
Public administration and defence	3.3	5.0	4.1	3.8	4.0	4.0
Community services	6.4	10.2	11.6	11.9	12.5	12.6
Recreation, personal and other services	3.3	4.1	4.0	4.6	4.8	4.8
Ownership of dwellings	5.0	6.1	8.3	9.8	10.0	9.9
Import duties	1.3	1.3	1.4	0.9	0.8	0.8
Less imputed bank service charge	–2.1	–2.5	–2.7	–2.5	–2.9	–3.3
All industries GDP	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

12.7 GROSS DOMESTIC PRODUCT AT AVERAGE 1989-90 PRICES, BY INDUSTRY
($ million)

	1974-75	*1984-85*	*1990-91*	*1991-92*	*1992-93*
Agriculture, forestry, fishing and hunting	10,864	14,271	16,095	15,333	16,065
Mining	9,410	12,488	16,995	17,323	17,507
Manufacturing	45,062	50,589	56,112	55,133	56,864
Electricity, gas and water	6,138	9,736	12,161	12,347	12,509
Construction	20,176	24,549	27,439	24,544	25,444
Wholesale and retail trade	45,972	55,339	62,620	63,627	64,593
Transport and storage	9,441	14,132	17,757	17,738	18,469
Communication	3,130	5,424	8,730	9,348	10,126
Finance, property and business services	23,913	32,869	45,846	44,035	45,146
Public administration and defence	8,704	11,231	13,813	14,697	15,055
Community services	20,269	32,483	42,488	44,381	45,886
Recreation, personal and other services	11,379	13,647	16,177	16,158	16,583
Ownership of dwellings	19,463	29,343	35,784	36,700	37,814
Import duties	1,873	2,977	3,708	3,749	3,997
Less imputed bank service charge	6,251	7,355	7,970	7,898	8,215
Balancing item	-745	—	—	—	—
All industries GDP	**228,789**	**301,723**	**367,755**	**367,215**	**377,843**

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

These tables indicate a marked change in emphasis from goods-producing industries to service-providing industries within the expanding economy.

In 1964-65, apart from Wholesale and retail trade, the two most important industries were Manufacturing (25.8%) and Agriculture, forestry, fishing and hunting (11.1%). By 1992-93, the proportional contribution of both had declined significantly (the former to 14.7% and the latter to 3.2%).

The two industries whose share of overall economic activity increased most over the period from 1964-65 to 1991-92 were Finance, property and business services (from 7.1% to 13.6%) and Community services (from 6.4% to 12.6%). The share of Mining also increased markedly, but from a relatively low base of 1.6 per cent in 1964-65. However, Mining's share of activity has declined since the mid-1980s, when it was as high as 6.7 per cent of GDP, to 4.3 per cent in 1992-93.

Industry contribution to employment

The following table shows the number of persons employed in the public and private sectors classified by industry as reported in the Labour Force Survey.

The private sector component is generally higher than the counts based on surveys of employing businesses shown in table 12.1. Additionally, table 12.8 includes the Agricultural industries and Public administration and defence, together with the public sector component of other industries such as the following for which December 1992 estimates are: Electricity, gas and water (94,900); Transport and storage (112,800); Communication (112,700); and Finance, property and business services (102,900).

12.8 EMPLOYED PERSONS BY INDUSTRY, ANNUAL AVERAGE(a)
('000)

	1984–85	1989–90	1990–91	1991–92	1992–93
Agriculture, forestry, fishing and hunting	402.7	425.7	433.8	409.0	405.9
Mining	93.6	104.4	96.0	91.2	88.7
Manufacturing	1,150.0	1,220.8	1,167.4	1,111.6	1,115.2
Electricity, gas and water	139.4	109.2	104.2	107.6	98.9
Construction	456.7	600.1	571.3	518.2	535.8
Wholesale and retail trade	1,302.5	1,640.7	1,620.9	1,596.5	1,608.9
Transport and storage	359.4	397.3	399.6	389.7	372.7
Communication	140.1	140.0	141.9	132.0	115.5
Finance, property and business services	629.3	896.5	897.3	884.8	870.5
Public administration and defence	322.9	345.2	362.6	353.2	369.9
Community services	1,143.6	1,367.9	1,408.4	1,452.7	1,460.2
Recreation, personal and other services	433.9	583.2	584.9	624.0	622.4
Total	**6,574.1**	**7,831.0**	**7,788.3**	**7,670.5**	**7,664.4**

(a) Averages calculated on quarterly estimates.
Source: The Labour Force, Australia (6203.0).

In general the goods-producing industries such as Agriculture, Mining and Manufacturing have experienced declining employment, whereas employment in the service-producing industries such as Community services and Recreation industries has been increasing. Total employment peaked during 1989–90 and has declined since.

The Wholesale and retail industries have for some years been the largest employing industries. Between 1989–90 and 1992–93, the only industries which recorded growth were Community services (92,300), Recreation, personal and other services (39,200) and Public administration and defence (24,700).

Labour productivity

Changes in the number of persons employed tend to reflect the level of economic activity of the industry. A developing or buoyant industry will generally show an increase in the number of employed persons over time. However, structural reform or increased use of technology within an industry may well result in changes in employment relative to output.

A general indication of such effects is provided in the following table showing constant price estimates of gross product per hour worked.

12.9 INDEXES OF GROSS PRODUCT AT AVERAGE 1989–90 PRICES PER HOUR WORKED, BY INDUSTRY(a)
(Reference base year 1989–90 = 100.0)

	1974–75	1984–85	1989–90	1990–91	1991–92	1992–93
Agriculture, forestry, fishing and hunting	69.1	97.9	100.0	105.8	107.2	112.7
Mining	80.0	93.2	100.0	112.4	121.9	127.2
Manufacturing	64.8	89.8	100.0	103.7	107.3	109.7
Electricity, gas and water	51.1	66.6	100.0	108.3	107.6	119.5
Construction	84.8	111.1	100.0	101.3	102.1	99.3
Wholesale and retail trade	90.9	102.8	100.0	97.1	100.6	101.2
Transport and storage	63.9	91.8	100.0	101.5	103.2	111.5
Communication	35.5	68.4	100.0	103.8	119.6	145.5
Recreation, personal and other services	112.8	110.1	100.0	99.5	94.1	98.0

(a) Estimates of gross product per hour worked are not presented for three industries: Finance, property and business services; Public administration and defence; and Community services because the estimates of gross product at average 1989–90 prices are derived using a methodology which either assumes no change in labour productivity or, in the case of Public administration and defence, and Community services only partially reflects change in labour productivity.
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

Business operations and performance

Table 12.10 presents measures of business operations (in terms of income, expenditure and balance sheet information) by industry. The statistics relate only to employing businesses. The table also shows a selection of industry performance ratios suitable for comparing performance across industries. All the data items listed are defined in *Business Operations and Industry Performance, Australia* (catalogue no. 8140.0).

Table 12.10 shows the relative importance (based on financial measures) of various industries. The Finance and insurance industry accounted for nearly 30 per cent of the operating profits and 34 per cent of the net worth of all industries included.

However, the relative performance of industries, like the relative performance of businesses, is best analysed by reference to performance ratios. Various ratios commonly used in financial analysis are included in the table. These show, for example, that in 1991–92:

- industries which converted the highest proportion of their sales into profit (as represented by the operating profit margin) were Mining and Communication;
- the industry which had the highest return on assets and return on net worth was Construction;
- the industry which had the highest debt to assets and debt to equity ratios was Retail trade;
- industries which had the highest ability to service their debt charges from profits (as represented by the interest coverage ratio) were Mining and Community services; and
- the industry with the highest operating profits and labour costs per person employed was Mining.

12.10 FINANCIAL TRANSACTIONS AND BALANCES, AND INDUSTRY PERFORMANCE RATIOS BY INDUSTRY, 1991–92

Item	*Unit*	*Agriculture, forestry, fishing & hunting*	*Mining*	*Manu-fact-uring*	*Electri-city, gas & water*	*Cons-truct-ion*	*Whole-sale trade*	*Retail trade*
		INCOME STATEMENT						
Sales of goods and services	$m	20,058	31,121	163,281	24,042	36,509	150,545	131,840
Less								
Cost of sales	$m	12,846	15,046	116,659	12,370	27,051	131,754	114,125
Trading profit	**$m**	**7,212**	**16,075**	**46,622**	**11,672**	**9,458**	**18,791**	**17,715**
Plus								
Interest income	$m	348	434	1,046	474	279	1,032	951
Other operating income	$m	817	338	2,434	805	1,019	1,941	2,034
Less								
Labour costs	$m	2,476	4,551	30,567	4,062	7,213	11,577	14,537
Depreciation	$m	n.a.	3,198	4,663	2,654	591	1,362	1,304
Other operating expenses	$m	1,629	2,495	2,450	335	315	892	643
Earnings before interest & tax	**$m**	**4,272**	**6,603**	**12,422**	**5,900**	***2,637**	**7,933**	**4,216**
Less								
Interest expenses	$m	1,966	1,335	4,005	4,260	645	2,902	2,722
Operating profit before tax	**$m**	**2,306**	**5,268**	**8,417**	**1,640**	***1,992**	**5,032**	**1,494**
		BALANCE SHEET						
Assets								
Current	$m	17,350	13,015	57,889	6,496	10,573	52,012	22,475
Non-current	$m	94,056	47,480	84,527	77,060	8,965	*33,947	23,059
Total	*$m*	*111,405*	*60,495*	*142,416*	*83,556*	*19,538*	*85,959*	*45,534*
Liabilities								
Current	$m	3,380	12,276	49,469	9,543	9,138	40,873	26,042
Non-current	$m	13,349	18,849	32,171	33,800	5,513	16,575	10,021
Total	*$m*	*16,729*	*31,124*	*81,640*	*43,343*	*14,651*	*57,448*	*36,063*
Net worth	**$m**	**94,676**	**29,370**	**60,776**	**40,213**	**4,887**	***28,511**	**9,471**
		INDUSTRY PERFORMANCE RATIOS						
Operating profit margin	%	11.5	16.9	5.2	6.8	5.5	3.3	1.1
Return on assets	%	2.1	8.7	5.9	2.0	10.2	5.9	3.3
Return on net worth	%	2.4	17.9	13.8	4.1	40.8	17.6	15.8
Debt to assets	%	15.0	51.4	57.3	51.9	75.0	66.8	79.2
Debt to equity	%	17.7	106.0	134.3	107.8	299.8	201.5	380.8
Current ratio(a)	no.	n.a.	1.1	1.2	0.7	1.2	1.3	0.9
Interest coverage	no.	2.2	4.9	3.1	1.4	4.1	2.7	1.5
Operating profit per person employed	$'000	7.1	60.6	9.0	16.7	8.1	13.3	1.7
Labour costs per person employed	$'000	7.6	52.3	32.8	41.4	29.3	30.5	16.8

For footnotes *see* end of table.

12.10 FINANCIAL TRANSACTIONS AND BALANCES, AND INDUSTRY PERFORMANCE RATIOS BY INDUSTRY, AUSTRALIA, 1991-92 — *continued*

Item	*Unit*	*Transport and storage*	*Communication*	*Finance and insurance*	*Property and business services*	*Community services*	*Recreation, personal & other services*	*All selected industries*
				INCOME STATEMENT				
Sales of goods and services	$m	33,253	14,735	16,151	40,961	19,388	32,598	714,482
Less								
Cost of sales	$m	21,730	4,528	22,271	26,475	11,416	20,846	537,118
Trading profit	**$m**	**11,523**	**10,207**	**– 6,120**	**14,486**	**7,973**	**11,752**	**177,366**
Plus								
Interest income	$m	340	210	56,882	4,750	622	326	67,694
Other operating income	$m	2,867	93	19,326	7,186	8,182	1,053	48,096
Less								
Labour costs	$m	10,505	4,862	10,852	13,328	12,568	8,031	135,128
Depreciation	$m	1,823	2,180	1,459	1,151	795	1,089	23,579
Other operating expenses	$m	306	40	5,067	566	266	373	14,067
Earnings before interest & tax	**$m**	***2,096**	**3,428**	**52,710**	***11,377**	**3,148**	**3,638**	**120,382**
Less								
Interest expenses	$m	1,745	1,257	37,326	7,953	641	1,562	68,318
Operating profit before tax	**$m**	***351**	**2,171**	**15,385**	***3,424**	**2,507**	**2,077**	**52,064**
				BALANCE SHEET				
Assets								
Current	$m	9,158	4,825	n.a.	47,765	7,686	8,707	708,027
Non-current	$m	35,081	21,230	n.a.	103,331	23,294	29,788	927,227
Total	*$m*	*44,239*	*26,055*	*795,486*	*151,096*	*30,979*	*38,495*	*1,635,254*
Liabilities								
Current	$m	11,393	5,497	n.a.	47,122	6,563	9,837	648,648
Non-current	$m	22,396	9,870	n.a.	44,360	5,390	14,638	405,576
Total	*$m*	*33,789*	*15,367*	*596,160*	*91,482*	*11,953*	*24,475*	*1,054,224*
Net worth	**$m**	**10,450**	**10,688**	**199,327**	**59,613**	**19,027**	**14,021**	**581,029**
				INDUSTRY PERFORMANCE RATIOS				
Operating profit margin	%	1.1	14.7	. .	8.4	12.9	6.4	7.3
Return on assets	%	0.8	8.3	1.9	2.3	8.1	5.4	3.2
Return on net worth	%	3.4	20.3	7.7	5.7	13.2	14.8	9.0
Debt to assets	%	76.4	59.0	74.9	60.5	38.6	63.6	64.5
Debt to equity	%	323.3	143.8	299.1	153.5	62.8	174.6	181.4
Current ratio(a)	no.	0.8	0.9	n.a.	1.0	1.2	0.9	1.1
Interest coverage	no.	1.2	2.7	1.4	1.4	4.9	2.3	1.8
Operating profit per person employed	$'000	1.2	18.1	48.4	7.0	4.4	4.0	9.9
Labour costs per person employed	$'000	35.3	40.5	34.1	27.2	22.3	15.5	25.8

(a) Current assets/current liabilities.

Source: Business Operations and Industry Performance (8140.0).

Industry contribution to capital expenditure

The following table shows estimates of the level of private expenditure on capital assets (structures and equipment) by industry, providing a general indication of trends in productive capacity.

12.11 PRIVATE GROSS FIXED CAPITAL EXPENDITURE AT AVERAGE 1989–90 PRICES BY INDUSTRY
($ million)

	1974–75	*1984–85*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Agriculture, forestry, fishing and hunting	3,007	4,079	3,117	1,819	2,065	2,216
Mining	2,310	3,238	4,577	4,928	4,675	5,186
Manufacturing	5,134	5,778	9,246	7,641	6,932	6,748
Electricity, gas and water	98	159	177	70	58	686
Construction	924	2,005	1,852	1,294	1,176	1,339
Wholesale and retail trade	2,915	4,713	5,898	6,320	5,447	5,080
Transport and storage and Communication	1,499	2,591	3,145	3,132	2,490	2,627
Finance, property and business services	3,536	6,146	11,606	8,686	6,292	5,646
Community services	564	961	1,324	1,188	1,140	1,274
Recreation, personal and other services	1,008	2,232	3,015	2,934	2,537	2,293
Ownership of dwellings	11,591	16,632	18,545	16,516	16,257	18,425
Total (excluding real estate transfer expenses)	*32,586*	*48,534*	*62,502*	*54,528*	*49,069*	*51,520*
Real estate transfer expenses	3,837	5,591	5,299	5,461	6,014	6,051
Total	**36,423**	**54,125**	**67,801**	**59,989**	**55,083**	**57,571**

Source: Australian National Accounts: Capital Stock (5221.0).

BIBLIOGRAPHY

ABS Publications

Australian National Accounts: Capital Stock (5221.0)

Australian National Accounts: National Income, Expenditure and Product (5204.0)

Business Operations and Industry Performance (8140.0)

The Labour Force, Australia (6203.0)

Profiles of Australian Business (1322.0)

Small Business in Australia (1321.0)

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Thirteen

Tourism

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Tourism encompasses all short-term travel away from the normal place of work and residence, including that undertaken for business and pleasure. It includes both domestic and international travel and involves the consumption of a wide range of goods and services provided by, for example, transport and tour operators, accommodation establishments, theme parks and attractions, entertainment and arts venues, museums and historical sites, restaurants, travel agents and souvenir retailers.

It also draws on services provided by the Commonwealth Government, the State and Territory Governments and local government organisations without direct charge to tourists, such as the construction and maintenance of roads, airports, harbours, railways and national parks, tourism promotion, immigration and customs services, information services and the provision of a large number of recreational facilities.

Economic importance

Just as tourism is a dominant force in the global economy, it is one of Australia's largest and most dynamic sectors of commerce too. In recent years, tourism has experienced unprecedented growth and made a substantial contribution to national economic development. It has matured into a prominent, sophisticated activity with the potential to play a significant role in securing Australia's future prosperity.

It is estimated by the Bureau of Tourism Research that tourism directly and indirectly contributed 5.5 per cent to Gross Domestic Product in 1991–92 and accounted for some 458,000 jobs (6.0% of total employment). During the 1980s and into the 1990s, tourism has created over 100,000 new jobs.

In 1991–92 total expenditure derived from tourism was around $26.2 billion, of which $18.4 billion was attributed to domestic tourism. Foreign exchange earnings from international tourism to Australia were estimated to be about $7.7 billion. This represents an increase of 8.5 per cent over the previous year, and amounted to 11 per cent of Australia's total current account credits. This increase resulted from growth in both the volume of visitors and daily expenditure per head.

While growth in tourism flows to Australia in the mid to late 1980s was almost twice the international rate, Australia's share of world tourism is still small, accounting for only around 0.5 per cent of total international visitor arrivals in all countries. Because Australia is a long haul destination for most international travellers this share is never likely to be large; however, there is still considerable potential for growth in the future.

The domestic travel market was relatively stagnant from 1984–85 to 1988–89, but 1989–90 saw a 4.6 per cent increase to 223.8 million in the number of domestic tourism visitor nights compared with the previous year. Thereafter it experienced an overall downward trend to 210.4 million domestic tourism visitor nights in 1992–93.

The number of international visitors to Australia increased at a rate of 25 per cent per annum from 1984 to 1988. However, 1989 saw a 7.5 per cent decrease in arrivals to 2.1 million partly because of the 'rain shadow' effect of Expo 88 and the Bicentennial and the adverse impact of the disruption to domestic airline services in late 1989. Arrivals recovered by 6.5 per cent to 2.2 million in 1990 and thereafter increased to new record levels of 2.4 million in 1991, 2.6 million in 1992 and 3.0 million in 1993, with annual growth rates of 7.0, 9.8 and 15.1 per cent, respectively (table 13.1). Visitors from Asia have contributed increasingly to this upward trend.

International travel

Statistics about travellers to and from Australia are classified in the first instance by the actual or intended length of stay in Australia or abroad as reported on passenger cards collected from incoming and outgoing passengers under the *Migration Act 1958*; this classification distinguishes between long-term and short-term movement.

Statistics of short-term arrivals and departures are given below. (Statistics of permanent and long-term movement are shown in the chapter, Demography.)

Short-term movement is defined as comprising visitor arrivals and Australian resident departures where the intended stay in Australia or abroad is for a period of less than 12 months, together with departures of visitors and returns of Australian residents who have stayed in Australia or abroad for less than 12 months.

Short-term movement excludes persons who arrive in and depart from Australia on the same ship's voyage or on the same flight (variously called 'direct transit' or 'through' passengers), or who change flights without leaving the airport's transit area; passengers on pleasure cruises commencing and finishing in Australia; and all crew. However, it includes persons who pass through the customs barrier and declare the purpose of their visit to Australia to be 'in transit'. Short-term visitors are more numerous than long-term visitors and have come to be regarded as 'tourists' by many users of the statistics.

13.1 SUMMARY OF SHORT-TERM TRAVELLERS

	Overseas visitors		*Australian residents*	
	Arriving in Australia	*Departing from Australia*	*Departing from Australia*	*Returning to Australia*
Census years				
1981	936,700	900,400	1,217,300	1,181,400
1986	1,429,400	1,363,800	1,539,600	1,513,200
1991	2,370,400	2,350,800	2,099,400	2,009,700
Year				
1988	2,249,300	2,174,100	1,697,600	1,637,900
1989	2,080,300	2,020,400	1,989,800	1,912,700
1990	2,214,900	2,162,700	2,169,900	2,109,300
1991	2,370,400	2,350,800	2,099,400	2,009,700
1992	2,603,300	2,533,500	2,276,300	2,166,300
1993 p	2,996,300	2,930,300	2,267,200	2,213,700

Source: Overseas Arrivals and Departures, Australia (3404.0).

In addition to the basic classification of travellers shown above, certain other characteristics are collected. These are: sex, age, marital status, country of citizenship, country of birth, intended or actual length of stay, purpose of journey, mode of transport, country of residence or country where most time was or will be spent, country of embarkation or disembarkation, State of residence or State where most time was or will be spent, and State or country of embarkation or disembarkation.

The categories shown in the previous table are cross-classified by various characteristics listed above and the resulting statistics are shown in considerable detail in ABS monthly, quarterly and annual publications. Certain unpublished information is available on request. Selected traveller statistics are shown in the following tables.

As shown in table 13.2, short-term travel is subject to marked seasonal variation, December being the peak month for the arrival of overseas visitors and the departure of Australian residents.

13.2 SHORT-TERM TRAVELLERS: ARRIVALS AND DEPARTURES OF OVERSEAS VISITORS AND AUSTRALIAN RESIDENTS, BY MONTH OF ARRIVAL OR DEPARTURE, 1993

	Overseas visitors		*Australian residents*	
Month	*Arriving*	*Departing*	*Departing*	*Returning*
January	242,800	300,800	147,600	273,800
February	245,500	230,000	140,800	161,800
March	257,900	256,100	171,900	143,100
April	226,300	241,700	189,900	165,800
May	213,400	236,100	185,100	154,100
June	204,600	200,300	218,400	159,900
July	244,600	203,900	207,100	227,800
August	239,900	258,500	178,800	182,500
September	224,000	212,300	228,800	200,500
October	267,200	242,700	176,900	252,400
November p	284,800	279,200	170,500	163,200
December p	345,300	268,700	251,400	128,600
Total p(a)	**2,996,300**	**2,930,300**	**2,267,200**	**2,213,700**

(a) Differences between the sums of components and totals are due to rounding.
Source: Overseas Arrivals and Departures, Australia (3401.0).

In 1993, the majority of Australian residents departing for short-term visits abroad intended to stay for under one month, with 54 per cent intending to stay for under three weeks (table 13.3). The majority of short-term visitors to Australia intended to stay under three weeks, with 60 per cent intending to stay under two weeks (table 13.4).

Statistics for Australian residents refer to their total time away from Australia; for overseas visitors they refer only to the Australian portions of their trips.

In the case of both Australian residents departing and overseas visitors arriving, the most common reason for their visit was 'holiday', followed by 'visiting relatives' and 'business' as the second and third most common reasons. Table 13.6 provides statistics on short-term travellers classified by country.

13.3 SHORT-TERM TRAVELLERS: DEPARTURES OF AUSTRALIAN RESIDENTS, BY STATED PURPOSE OF JOURNEY AND INTENDED LENGTH OF STAY, 1993p

	Main purpose of journey						
Intended length of stay	*Visiting relatives*	*Holiday, accompanying business traveller(a)*	*Convention*	*Business*	*Employment*	*Other and not stated*	*Total(b)*
Under 1 week	27,700	94,500	10,000	102,100	3,200	16,000	253,600
1 week & under 2 weeks	54,400	354,200	22,000	105,600	2,800	21,100	560,100
2 weeks & under 3 weeks	70,800	240,100	11,900	59,600	3,700	15,000	401,000
3 weeks & under 1 month	60,800	112,300	5,500	25,400	4,200	8,500	216,700
1 month & under 2 months	149,400	193,100	5,200	38,300	5,200	18,200	409,400
2 months & under 3 months	65,800	70,200	1,400	14,800	4,200	6,900	163,400
3 months & under 6 months	55,300	53,800	300	14,100	6,800	11,000	141,200
6 months & under 12 months	29,700	43,000	100	11,500	19,600	18,000	121,800
Total(b)	**513,800**	**1,161,200**	**56,300**	**371,500**	**49,800**	**114,600**	**2,267,200**

(a) Includes student vacation. (b) Differences between the sums of components and totals are due to rounding.
Source: Overseas Arrivals and Departures, Australia (3404.0).

13.4 SHORT-TERM TRAVELLERS: ARRIVALS OF OVERSEAS VISITORS, BY STATED PURPOSE OF JOURNEY AND INTENDED LENGTH OF STAY, 1993p

	Main purpose of journey							
Intended length of stay	*In transit*	*Visiting relatives*	*Holiday, accompanying business traveller*	*Convention*	*Business*	*Employment*	*Other & not stated*	*Total(a)*
Under 1 week	94,400	48,700	602,300	12,300	117,100	3,600	23,900	902,400
1 week & under 2 weeks	—	84,500	687,000	23,500	81,100	4,300	24,100	904,500
2 weeks & under 3 weeks	—	93,800	228,700	9,700	31,800	1,000	11,500	376,500
3 weeks & under 1 month	—	70,900	112,300	2,000	8,200	600	6,100	200,100
1 month & under 2 months	—	130,100	150,500	1,800	14,400	1,500	10,500	308,800
2 months & under 3 months	—	41,700	38,300	400	5,200	1,000	7,100	93,700
3 months & under 6 months	—	39,700	40,000	200	4,100	2,400	13,500	100,000
6 months & under 12 months	—	21,700	34,200	100	4,300	9,700	40,500	110,500
Total(a)	**94,400**	**531,200**	**1,893,100**	**50,100**	**266,100**	**24,100**	**137,400**	**2,996,300**

(a) Differences between the sums of components and totals are due to rounding.
Source: Overseas Arrivals and Departures, Australia (3404.0).

International visitors generally spend most time in New South Wales, with Queensland and Victoria being the next most visited States, although there is some variation in this overall pattern according to their country of residence.

13.5 INTERNATIONAL VISITORS: NIGHTS SPENT IN EACH STATE, 1992 (per cent)

	Country of residence								
State/Territory	*USA*	*Japan*	*Other Asia*	*Canada*	*New Zealand*	*UK and Ireland*	*Other Europe*	*Other countries*	*Total*
New South Wales	35	33	35	30	35	31	27	42	33
Victoria	21	6	28	17	12	17	17	23	19
Queensland	25	50	11	32	30	24	27	21	25
South Australia	5	2	3	6	4	7	7	2	5
Western Australia	6	6	17	9	10	15	10	5	12
Tasmania	1	—	1	1	1	2	2	1	1
Northern Territory	4	2	1	3	6	3	7	1	3
Australian Capital Territory	4	1	4	2	2	2	3	5	3
Australia	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Bureau of Tourism Research, International Visitor Survey, 1992.

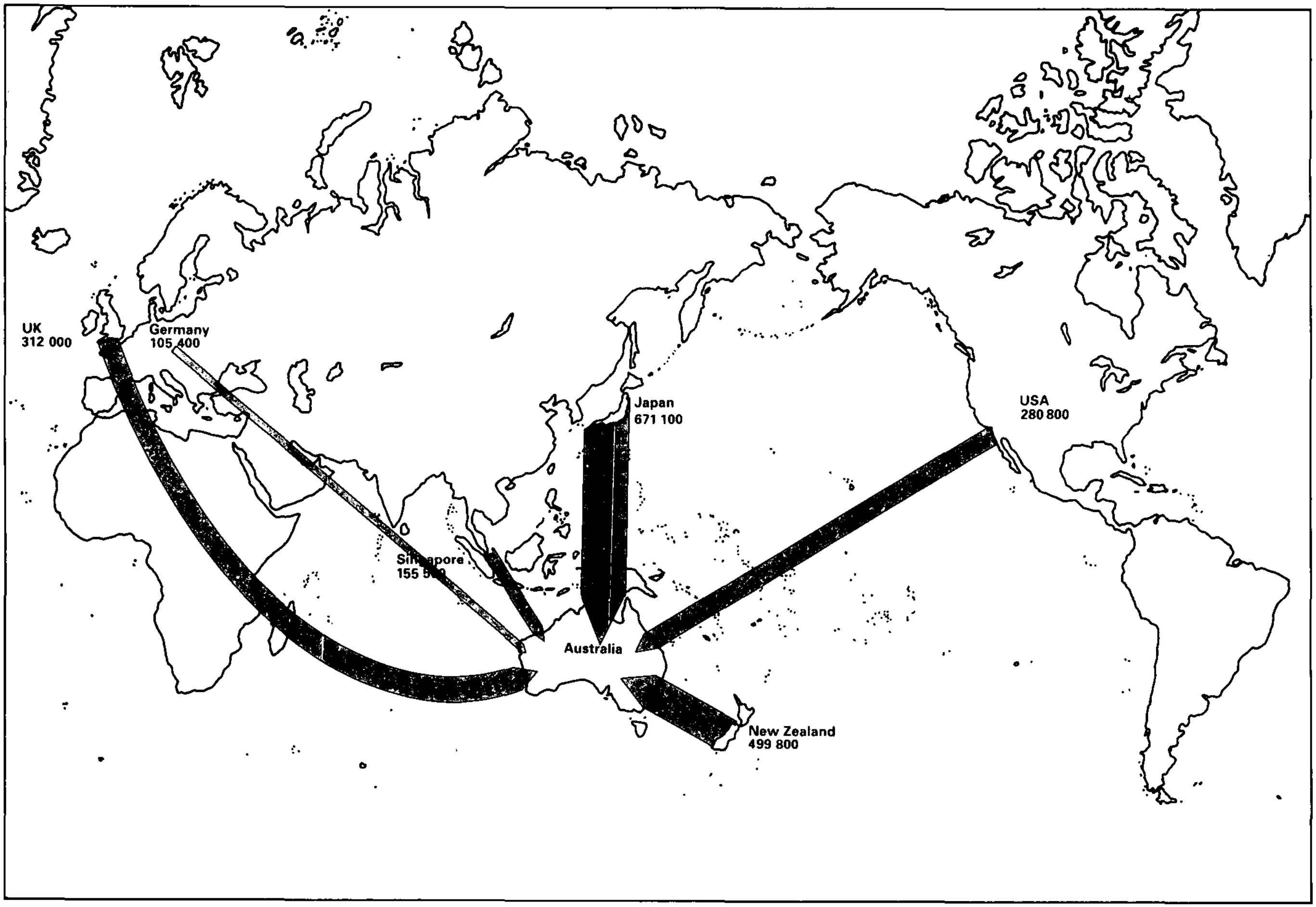
13.6 SHORT-TERM TRAVELLERS: ARRIVALS OF OVERSEAS VISITORS AND DEPARTURES OF AUSTRALIAN RESIDENTS, BY COUNTRY OF RESIDENCE/INTENDED STAY AND INTENDED LENGTH OF STAY, 1993p

	Arrivals of overseas visitors intended length of stay					*Departures of Australian residents intended length of stay*			
Country of residence (visitors) and country of intended stay (residents)	*Under 1 week*	*1 week & under 1 month*	*1 month & under 3 months*	*3 months & under 12 months*	*Total*	*Under 1 month*	*1 month & under 3 months*	*3 months & under 12 months*	*Total*
Oceania and Antarctica									
Fiji	5,300	5,800	3,900	2,400	17,300	69,700	5,800	2,500	78,000
New Caledonia	6,100	10,000	1,800	600	18,500	15,500	500	200	16,300
New Zealand	172,400	280,000	33,100	14,300	499,800	314,600	27,100	8,700	350,400
Papua New Guinea	16,200	15,800	5,400	3,000	40,400	24,600	5,900	4,900	35,400
Other	6,800	6,400	4,200	2,800	20,200	55,800	5,700	2,400	63,900
Total	*206,800*	*317,900*	*48,400*	*23,100*	*596,100*	*480,300*	*44,900*	*18,700*	*543,900*
Europe, the former USSR & former Yugoslav Republics	300	400	1,100	1,500	3,400	900	4,400	2,600	7,900
France	7,900	12,900	7,500	2,500	30,700	10,300	13,200	4,000	27,500
Germany	14,600	37,900	42,700	10,200	105,400	12,800	15,100	6,400	34,300
Greece	1,000	1,200	2,500	2,100	6,800	4,500	12,100	12,800	29,500
Ireland	800	3,300	4,500	2,300	10,900	2,600	7,300	1,500	11,400
Italy	3,600	14,500	9,800	3,800	31,700	9,100	20,800	12,400	42,300
Netherlands	2,400	9,200	11,900	4,000	27,500	4,300	6,700	2,900	13,800
Switzerland	3,000	9,700	11,900	5,900	30,600	3,100	4,000	1,600	8,800
United Kingdom	30,300	130,800	108,500	42,500	312,000	62,500	128,100	49,400	240,000
Other	9,800	32,400	22,300	14,200	78,700	14,900	31,500	17,900	64,400
Total	*73,700*	*252,300*	*222,700*	*89,000*	*637,600*	*125,000*	*243,400*	*111,500*	*479,900*
South East Asia									
Indonesia	22,800	35,900	6,800	6,400	71,900	176,700	17,500	6,800	201,000
Malaysia	24,800	40,200	8,200	7,000	80,200	55,500	20,000	7,900	83,400
Philippines	5,200	6,500	2,800	3,500	17,900	24,200	13,700	3,600	41,500
Singapore	47,800	92,200	9,300	6,200	155,500	78,300	12,500	6,200	96,900
Thailand	25,400	15,100	2,900	3,200	46,700	59,100	8,400	4,200	71,700
Other	1,400	3,800	1,500	2,500	9,100	11,900	17,400	5,700	34,900
Total	*127,400*	*193,700*	*31,400*	*28,800*	*381,200*	*405,500*	*89,500*	*34,400*	*529,500*
North-east Asia									
Hong Kong	17,700	57,500	9,000	7,500	91,700	85,200	26,400	19,100	130,700
Japan	318,200	328,500	10,400	14,000	671,100	31,800	6,500	7,500	45,800
Other	78,600	93,700	9,100	12,700	194,000	40,100	19,300	7,800	67,300
Total	*414,500*	*479,700*	*28,400*	*34,200*	*956,800*	*157,200*	*52,200*	*34,300*	*243,700*
Southern Asia									
India	1,400	4,000	2,300	1,900	9,700	7,700	10,400	4,700	22,800
Other	700	2,100	1,600	1,700	6,100	6,200	7,600	2,800	16,600
Total	*2,100*	*6,100*	*3,900*	*3,700*	*15,800*	*13,900*	*18,000*	*7,500*	*39,400*
The Americas									
Canada	5,700	24,100	14,200	6,400	50,500	13,200	13,400	4,700	31,300
USA(a)	58,700	176,100	32,100	13,800	280,800	203,300	72,700	23,100	299,200
Other	2,500	6,100	2,500	2,200	13,300	5,300	7,000	4,500	16,800
Total	*67,000*	*206,300*	*48,900*	*22,400*	*344,500*	*221,800*	*93,100*	*32,300*	*347,200*
Africa (excl. North Africa)									
South Africa	3,600	12,400	8,800	2,500	27,300	5,400	5,300	2,300	13,000
Other	1,800	3,400	2,900	1,200	9,300	7,200	6,200	2,500	15,900
Total	*5,400*	*15,900*	*11,700*	*3,600*	*36,600*	*12,600*	*11,500*	*4,800*	*29,000*
Middle East & North Africa	2,700	7,000	6,300	5,100	21,000	10,200	18,300	18,400	46,900
Total(b)	**902,400**	**1,481,000**	**402,400**	**210,500**	**2,996,300**	**1,431,400**	**572,800**	**263,000**	**2,267,200**

(a) Includes America undefined. (b) Includes other and not stated.

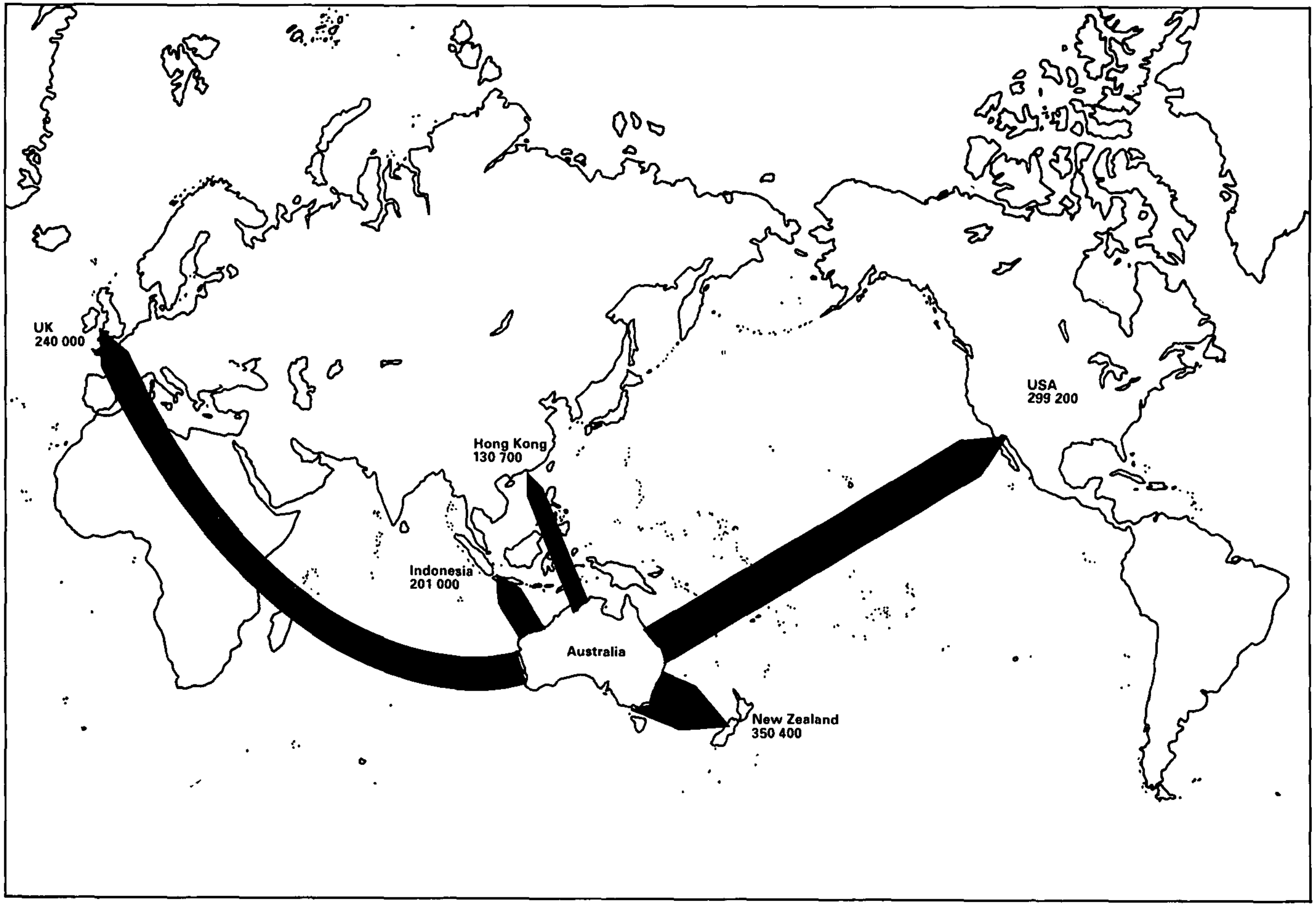
Source: Overseas Arrivals and Departures (3404.0) and unpublished ABS series.

13.7 OVERSEAS VISITORS TO AUSTRALIA(a), 1993p



(a) Length of stay in Australia — under 1 week to less than 12 months.
Source: Overseas Arrivals and Departures, Australia (3404.0) and unpublished ABS series.

13.8 AUSTRALIAN TRAVELLERS OVERSEAS(a), 1993p



(a) Length of stay overseas — under 1 month to less than 12 months.
Source: Overseas Arrivals and Departures, Australia (3404.0) and unpublished ABS series.

International visitor expenditure

Estimates of 1992 expenditure in Australia by country of residence are shown in the following table. Japanese tourists had the highest average expenditure per day at $143 in 1992 but had the shortest average length of stay at nine days, whereas visitors from the United Kingdom and Ireland had the lowest expenditure per day at $47 but had the longest average length of stay of 47 days. The average length of stay of all international visitors was 25 days while the average daily expenditure in Australia was $69.

13.9 INTERNATIONAL VISITORS(a): EXPENDITURE IN AUSTRALIA BY COUNTRY OF RESIDENCE, 1992

	Country of residence								
	USA	*Japan*	*Other Asia*	*Canada*	*New Zealand*	*UK and Ireland*	*Other Europe*	*Other countries*	*Total*
Average total expenditure ($)(b)	1,901	1,241	2,315	2,056	1,100	2,174	2,463	1,697	1,760
Average stay (days)	25	9	32	38	17	47	41	28	25
Average expenditure per day ($)(b)	76	143	73	54	63	47	61	61	69
Total nights in Australia (million)	6.2	5.6	13.6	1.9	7.4	13.0	10.5	3.7	61.8

(a) Visitors aged 15 years and over. (b) Excludes expenditure on international airfares and inclusive package expenditure purchased outside Australia.

Source: Bureau of Tourism Research, International Visitor Survey, 1992.

Domestic travel

In 1992–93 the main purposes of domestic trips were pleasure or holiday (39%), visiting friends or relatives (29%), and business (16%). The main mode of transport used was private vehicle (78%). The mean length of a trip by domestic tourists was 4.4 nights in 1992–93 (table 13.10)

Table 13.11 shows that the main destination of domestic travellers was New South Wales, followed by Queensland. The main purpose of travel was for pleasure and holidays, with visiting friends and relatives the next most frequent purpose.

13.10 SUMMARY OF PERSON TRIPS AND NIGHTS AWAY(a), 1992–93

State/Territory of origin	*Estimated population(a) as at 30 June 1993*	*Person trips*	*Average trips per person*	*Total nights away*	*Nights away per person trip*
	'000	'000		'000	
New South Wales	4,718.8	14,825	3.1	64,855	4.4
Victoria	3,519.7	10,456	3.0	44,690	4.3
Queensland	2,417.5	10,281	4.3	43,336	4.2
South Australia	1,161.9	4,097	3.5	19,418	4.7
Western Australia	1,295.4	5,175	4.0	24,353	4.7
Tasmania	364.2	1,685	4.6	6,407	3.8
Northern Territory	121.3	356	2.9	2,296	6.4
Australian Capital Territory	231.5	1,003	4.3	5,049	5.0
Total(b)	**13,830.3**	**47,878**	**3.5**	**210,404**	**4.4**

(a) For persons aged 15 years and over. (b) Total includes 'not stated'.

Source: Bureau of Tourism Research, Domestic Tourism Monitor, 1992–93.

13.11 NUMBER OF NIGHTS SPENT IN STATE OF MAIN DESTINATION BY MAIN PURPOSE OF TRIP, 1992–93 ('000 nights)

	Main purpose of trip				
State/Territory of main destination	*All business*	*Pleasure/ holiday*	*Visiting friends/ relatives*	*Other*	*Total(a)*
New South Wales	7,811	29,553	19,331	7,856	64,551
Victoria	4,087	16,555	10,211	4,583	35,435
Queensland	6,820	27,687	13,091	6,401	53,999
South Australia	2,316	7,871	3,522	2,371	16,081
Western Australia	5,258	10,474	5,091	3,440	24,264
Tasmania	672	3,861	1,720	1,042	7,296
Northern Territory	904	2,280	492	972	4,646
Australian Capital Territory	1,007	1,130	1,207	786	4,131
Total(a)	**28,874**	**99,411**	**54,666**	**27,454**	**210,404**

(a) Differences between the sums of components and totals are due to rounding.
Source: Bureau of Tourism Research, Domestic Tourism Monitor, 1992–93.

In 1992–93, the most frequently used accommodation by domestic travellers was the home of friends or relatives (44% of visitor nights), followed by hotels or motels with facilities (18%) and caravan parks or camping grounds (14%). The following table classifies the types of accommodation used for all visitor nights by the main purpose of the trip.

13.12 NUMBER OF VISITOR NIGHTS, BY ACCOMMODATION USED BY MAIN PURPOSE OF TRIP, 1992–93 ('000 visitor nights)

	Main purpose of trip				
All accommodation used	*All business*	*Pleasure/ holiday*	*Visiting friends/ relatives*	*Other*	*Total(a)*
Hotel/motel with facilities	10,776	19,537	2,836	4,358	37,509
Hotel/motel without facilities	1,074	1,850	257	346	3,528
Friends'/relatives' house	5,646	28,360	46,251	12,118	92,375
Caravan/tent/cabin/camping	1,748	22,114	1,821	2,917	28,600
Rented house/flat	1,592	10,222	1,027	1,073	13,914
Own holiday home/flat	724	5,911	519	1,155	8,311
Guest house/private hotel	659	1,792	212	599	3,263
Farm	565	895	869	492	2,822
Boat/cabin cruiser	28	398	7	27	461
Hostel	450	741	46	511	1,748
Other/not stated	5,610	7,592	820	3,855	17,874
Total(a)	**28,874**	**99,411**	**54,666**	**27,454**	**210,404**

(a) Differences between the sums of components and totals are due to rounding.
Source: Bureau of Tourism Research, Domestic Tourism Monitor, 1992–93.

13.13 TOURIST ACCOMMODATION(a)

		Quarter ended			
		March 1993	*June 1993*	*September 1993*	*December 1993*
LICENSED HOTELS WITH FACILITIES(b)					
Establishments	number	1,183	1,196	1,185	1,138
Guest rooms	number	65,114	66,305	66,348	66,517
Bed spaces	number	171,024	174,671	174,935	175,476
Room occupancy rates	per cent	55.4	52.3	56.1	61.0
Bed occupancy rates	per cent	35.4	32.6	35.4	39.0
Gross takings from accommodation	$'000	326,653	315,612	344,815	391,787
MOTELS, etc.(b)					
Establishments	number	3,709	3,750	3,739	3,694
Guest rooms	number	101,081	100,701	100,670	100,226
Bed spaces	number	304,537	304,225	304,200	302,890
Room occupancy rates	per cent	50.6	49.8	53.4	51.9
Bed occupancy rates	per cent	31.5	29.7	32.3	31.5
Gross takings from accommodation	$'000	305,827	296,315	327,348	317,754
TOTAL HOTELS AND MOTELS etc.(b)					
Establishments	number	4,892	4,946	4,924	4,832
Guest rooms	number	166,195	167,006	167,018	166,743
Bed spaces	number	475,561	478,896	479,135	478,366
Room occupancy rates	per cent	52.5	50.5	54.5	55.5
Bed occupancy rates	per cent	32.9	30.7	33.5	34.2
Gross takings from accommodation	$'000	632,480	611,927	672,163	709,542
CARAVAN PARKS(c)					
Establishments	number	2,681	2,681	2,695	2,704
Powered sites	number	202,478	202,753	203,905	204,059
Unpowered sites	number	69,722	69,375	69,198	69,270
Cabins, flats etc.	number	14,260	14,545	14,763	14,971
Total capacity	*number*	*286,460*	*286,673*	*287,866*	*288,300*
Site occupancy rates(d)	per cent	44.7	42.1	43.2	42.4
Gross takings from accommodation	$'000	110,967	96,971	104,374	108,504
HOLIDAY FLATS, UNITS AND HOUSES(b)					
Flats, units etc.					
One bedroom	number	7,773	7,665	7,733	7,986
Multiple bedroom	number	26,548	26,110	26,726	27,500
Total flats, units etc.	*number*	*34,321*	*33,775*	*34,459*	*35,486*
Bed spaces	number	148,464	146,251	148,721	154,103
Unit occupancy rates	per cent	54.8	44.3	55.3	51.1
Gross takings from accommodation	$'000	105,561	75,462	99,577	102,697
VISITOR HOSTELS(e)					
Establishments	number	404	397	410	414
Bed spaces	number	24,943	24,680	24,681	24,960
Bed occupancy rates	per cent	44.8	39.3	43.9	43.2
Gross takings from accommodation	$'000	11,497	10,479	11,511	11,694

(a) A tourist accommodation establishment is defined as an establishment which predominantly provides short-term accommodation (that is, for periods of less than two months) available to the general public. (b) For definitions *see Tourist Accommodation, Australia* (8635.0). (c) Includes long-term caravan parks. For definitions *see Tourist Accommodation, Australia* (8635.0). (d) From September quarter 1992, caravan park sites etc. permanently reserved but only casually occupied by their tenants have been recorded continuously as site nights occupied irrespective of whether the tenants of individual sites were in residence on any particular night. Occupancy measures from September quarter 1992 are therefore not comparable with those from previous quarters. (e) 'Backpacker' accommodation.

Source: Tourist Accommodation, Australia (8635.0).

Tourist accommodation

The preceding section contains statistics on accommodation of all types used by domestic travellers. This section relates to commercial *tourist accommodation* used by domestic and international travellers.

New South Wales is the State with the most commercial tourist accommodation available. At December 1993, 34 per cent (56,901 guest rooms) of Australia's tourist accommodation capacity in hotels, motels and guest houses with facilities was in New South Wales, with 45 per cent (25,503 guest rooms) of the State's capacity concentrated in the Sydney Statistical Division. Queensland had 24 per cent (40,125 guest rooms), and Victoria had 18 per cent (30,265 guest rooms) of Australia's accommodation capacity.

In the three months to 31 December 1993, 36 per cent of room nights occupied in Australia were taken in four and five star graded accommodation. This figure demonstrates the continuation of an increasing market share for higher rated accommodation, evident since 1986 (then 23%).

During 1993, the supply of hotel, motel and guest house accommodation in Australia grew more slowly than demand. The number of guest rooms available increased by less than 0.1 per cent in the year to 31 December 1993, while room nights occupied increased by 7.6 per cent over the same period. The comparative rates for 1992 were 2.9 per cent for rooms available and 4.3 per cent for room nights occupied.

Table 13.13 provides further details of tourist accommodation.

Inbound tourism

During 1993, an ABS Survey of Inbound Tourism Operators collected data on the Australian ground content (for example, coach transfers, accommodation, meals, cruises, etc.) of Australian tours sold overseas.

In 1992–93 passengers from Japan accounted for 47.1 per cent of a total of 1.2 million passengers involved and 53.5 per cent of the total value of gross invoices of $958 million (that is, all amounts received for ground content received in Australia). In fact, passengers from Asia (including Japan) represented 78.2 per cent of total passengers and accounted for 76.1 per cent of the total value of gross invoices.

North America accounted for 6.7 per cent of passengers and 8.8 per cent of the total value of gross invoices, Europe (including the United Kingdom and Ireland) for 8.8 per cent of passengers and 9.8 per cent of gross invoices, and New Zealand and the South Pacific for 5.8 per cent of passengers and 4.7 per cent of the total value of gross invoices.

The survey also showed that inbound tour operators employed 2,170 persons full time and 520 persons part time in Australia. In addition, they employed 230 persons full time overseas.

Overseas tourism marketing expenditure

An ABS Survey of Overseas Tourism Marketing Expenditure for 1992–93 revealed that 27.5 per cent of the total expenditure of $190 million was directed towards the Japanese market, 26.7 per cent towards the United Kingdom and Europe, 23.7 per cent towards the United States of America and Canada, and 13.9 per cent towards Asia (excluding Japan).

Of this overseas tourism marketing expenditure, the majority (77.5%) was by independent operators, while 10.8 per cent was in cooperation with the Australian Tourism Commission and 11.6 per cent was in cooperation with other organisations.

Of the total overseas tourism marketing expenditure, 16.9 per cent was by accommodation operators, 15.7 per cent by inbound tour operators, 10.1 per cent by State tourism authorities, and 4.8 per cent by coach operators.

Australian Tourist Commission

The Commission (ATC) is a statutory authority under the *Australian Tourist Commission Act 1987*. Its role is to increase the number of visitors to Australia, to maximise for Australia the benefits from overseas visitors and to ensure that Australia is protected from adverse environmental and social impacts of international tourism.

The Commission engages in a wide variety of marketing activities including consumer and trade advertising, in both print and television media, direct mail, market research, industry seminars and familiarisation visits for journalists and photographers. These activities are carried out in cooperation with State and Territory tourism authorities as well as the Australian and overseas travel industries. Advertising designed to promote Australia as a friendly, exciting and safe tourist destination provides a marketing umbrella for the States, Territories and industry, and is placed in various tourist markets at times selected to achieve maximum awareness of Australia as a tourist destination.

Current marketing initiatives include the introduction of a special 'theme years' campaign. It began in 1993 with the theme 'Discover the Year of Sport', continuing with: 1994, 'Discovering the Great Australian Outdoors'; 1995, 'Celebrate Australian Art and Culture'; 1996, 'Experience the Festivals of Oz'; and ending in 1997 with 'Enjoy Good Living Down Under'.

Overseas offices of the ATC are located in London, Frankfurt, Los Angeles, New York, Singapore, Tokyo, Osaka, Hong Kong and Auckland.

BIBLIOGRAPHY

ABS Publications

Domestic Travel and Tourism Survey, Australia (9216.0)

Overseas Arrivals and Departures, Australia (3404.0) — annual

Overseas Arrivals and Departures, Australia (3401.0) — monthly

Selected Accommodation Establishments, Australia (8636.0)

Tourist Accommodation, Australia (8635.0)

Other Publications

BUREAU OF TOURISM RESEARCH. Domestic Tourism Monitor, 1992–93

BUREAU OF TOURISM RESEARCH. International Visitor Survey, 1992

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Fourteen

Environment

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This chapter of the Yearbook presents information about Australia's environment. This is a huge topic and there are many initiatives worthy of presentation. With the passage of time, more and more data is becoming available. However, not all information is updated on an annual basis, so rather than repeat it, references are provided here to information in previous Yearbooks.

- Biodiversity and introduced species — *see* Yearbook No. 76 and *Australia's Environment: Issues and Facts* (4140.0), chapter 2.
- Water resources — *see* Yearbook No. 76, chapter 18.
- Environmental law — *see* Yearbook No. 76 for details on various legislation in the Commonwealth and State jurisdiction that relate to the environment.
- World Heritage Areas — details of Australian properties on the World Heritage List are provided in Yearbook No. 76.
- Management of wastes, particularly on local council activities, landfill sites and waste minimisation, *see* Yearbook No. 76, and *Australia's Environment: Issues and Facts* (4140.0).

ENVIRONMENTAL INDICATORS

Environmental indicators are increasingly seen as a necessary tool for helping to set the course towards a sustainable future. The OECD has been undertaking work on indicators as part of its program on environmental economics that would integrate environment and economic decision-making. Indicators need to be viewed in a dynamic context, so the set of indicators can change to reflect the changing nature of policy and the seriousness of different environmental problems.

The following data reflect economic and population changes of environmental significance. The data have been prepared by the OECD and show a comparison of Australia with some selected countries.

14.1 OECD ENVIRONMENTAL DATA

Indicator		*Australia*	*Canada*	*USA*	*Netherlands*	*Sweden*	*UK*	*Total OECD*	*Total world*
Carbon dioxide (CO_2) emissions from energy use (million tonnes)									
	1980	221	439	4,913	184	75	601	10,150	18,792
	1990	272	437	5,038	183	56	598	10,361	21,562
	1992	288	457	5,188	190	57	610	10,657	n.a.
Greenhouse gas emissions	1990								
Methane ('000 t)		5,000	3,700	37,000	833	457	4,371	70,400	274,900
CFCs ('000 t)		8	14	130	9	2	n.a.	400	600
CO_2 (million t)		287	461	5,067	200	60	n.a.	10,803	22,300
Estimation of renewable fresh water resources (internal resources), long-term annual average (billion cubic metres)		343	2,740	2,460	11	167	71	n.a.	n.a.
Total water abstraction (million m^3)	1980	n.a.	37,864	525,000	14,794	4,106	13,912	927,000	n.a.
	1990	n.a.	46,878	468,000	n.a.	2,932	14,237	900,800	n.a.
Population served by waste water treatment plants (%)	1980	n.a.	64	70	73	82	82	52	n.a.
	1990	n.a.	70	n.a.	93	95	87	63	n.a.
Major protected areas	1990								
('000 km^2)		457	701	983	4	18	46	2,482	6,515
(% of land area)		5.9	7.0	10.5	9.5	3.9	18.9	7.7	4.9

... continued

14.1 OECD ENVIRONMENTAL DATA — *continued*

Indicator		*Australia*	*Canada*	*USA*	*Nether-lands*	*Sweden*	*UK*	*Total OECD*	*Total world*
Wooded area									
('000 km^2)	1980	1,059	4,364	2,968	3.3	279	21	10,113	41,003
	1990	1,060	4,533	2,946	3.3	280	24	10,281	40,276
(% of land area)	1990	13.8	49.2	32.1	9.9	68.1	10.0	33.2	30.8
Waste generated									
Municipal waste									
('000 tonnes)	1990	n.a.	16,000	177,500	7,430	3,200	20,000	408,000	n.a.
Production of hazardous waste									
('000 t)	1990	n.a.	6,080	180,000	1,040	500	2,540	n.a.	n.a.
Total energy supply per unit of GDP									
(index 1985 = 100)	1980	108	108	109	106	99	107	107	n.a.
	1991	107	97	97	97	95	94	94	n.a.
Tonnes of oil equivalent (TOE)/'000 $US	1985	0.38	0.52	0.44	0.36	0.44	0.31	0.35	n.a.
Total energy supply per capita									
(index 1985 = 100)	1981	101	100	103	102	90	96	99	n.a.
	1991	112	102	103	109	100	106	106	n.a.
TOE/capita	1985	4.68	7.67	7.41	4.25	5.70	3.59	4.50	n.a.
Road vehicle stocks									
Motor vehicles in use									
(millions)	1981	7.6	13.4	158.3	4.9	3.1	17.5	341.4	427.2
	1991	10.0	16.8	192.3	6.2	4.0	23.4	449.5	608.0
Public R&D expenditure for environment protection									
($US million)	1985	24.9	45.9	258.0	52.4	20.7	99.6	n.a.	n.a.
	1991	50.7	41.3	361.2	69.0	48.9	112.5	n.a.	n.a.
(% of total R&D)	1991	3.5	1.6	0.7	4.1	3.1	1.7	n.a.	n.a.
National population									
(million)	1981	14.9	24.4	230.1	14.3	8.3	56.4	786.7	4,513.5
	1991	17.3	27.0	252.7	15.1	8.6	57.6	844.8	n.a.
Population density									
(persons/km^2)	1981	1.9	2.4	24.6	381.7	18.5	230.2	24.5	33.7
	1991	2.2	2.7	27.0	403.7	19.2	235.4	26.4	n.a.
GDP @ 1985 prices and purchasing power parities									
(index 1985 = 100)	1981	88.5	89.9	90.4	94.5	91.4	89.4	90.7	n.a.
	1991	114.8	112.7	111.9	117.4	108.8	114.3	117.3	n.a.

Source: OECD, Environmental Data Compendium, 1993.

NATIONAL ACTIVITIES

Australian and New Zealand Environment and Conservation Council (ANZECC)

ANZECC was formed, in 1991, by combining the Australian and New Zealand Environment Council (ANZEC) and the Council of Nature Conservation Ministers (CONCOM).

Some of the 1993 activities of ANZECC included:

- National Lead Abatement Education Campaign, to inform Australians about the need to reduce the amount of lead entering the environment, with the key aim being to reduce the consumption of leaded petrol. A price differential between leaded and unleaded petrol was introduced in February 1994.

- National Pollutant Inventory (NPI) — ANZECC endorsed State and Territory participation in the development of the NPI, being undertaken by the Commonwealth Environment Protection Agency (CEPA).
- National Reserve System — ANZECC agreed to the finalisation of a technical paper about scientific data and analytical methods relevant to the establishment of a National Reserve System, which recognises the importance of a representative system of protected areas.
- National Recycling Targets — there was agreement on the need for a more strategic, proactive and coordinated role in waste minimisation and recycling issues, with work to be established to identify instances where standards are inhibiting the development of and uses for recycled materials.

Commonwealth Environment Protection Agency (CEPA)

CEPA is an agency of the Commonwealth Department of the Environment, Sport and Territories. It will interact with the National Environment Protection Authority (NEPA), when it is established under the terms of the Intergovernmental Agreement on the Environment (*see* Yearbook 1994), and with ANZECC to provide a uniform, coordinated approach to protecting Australia's environment.

The current projects of CEPA are:

- Environmental Impact Assessment.
- National Pollutant Inventory which will assemble information on pollutants entering the Australian environment as emissions to air, land and water, and waste disposal to land.
- Environment technologies, involving the running of programs to assist the industry's development, develop export markets and setting up a database on the capabilities of the Australian industry.
- Dumping wastes at sea — administration of laws to control waste dumping at sea.
- Contaminated sites — issues such as technical guidelines for the assessment and management of sites.
- Water quality.
- Air pollution, through work on national lead abatement strategy, development of national guidelines for industrial emissions and ambient air quality goals.
- Safe management of biotechnology.
- Ozone protection, through the coordination of national ozone protection activities and input to international activities under the Montreal Protocol.
- Waste minimisation.
- Chemicals management through assessment of the environmental hazards of agricultural, veterinary and industrial chemicals.
- Management of hazardous waste by administering Commonwealth hazardous waste legislation which implements the Basel Convention, an agreement to reduce generation of hazardous waste and to ensure it is disposed of in an environmentally safe manner as close to the source as possible.
- Cleaner production in industry, which involves programs with industry designed to demonstrate the economic and environmental benefits of product and process redesign from an environmental perspective.

Protection of freshwater resources

This section focuses on some of the programs which include in their aims protection of the quality and supply of freshwater resources. This matter features in the UNCED Agenda 21 program.

The National Landcare Program (NLP).

The Decade of Landcare Program has been developed to provide an integrated policy and program package to resource users and managers. It provides an overall collaborative framework within which all participants — governments, the farming sector, industry, the conservation movement, land and water managers and the community — are encouraged to make their contribution to sustainable management of all resources. Within the plans, the contribution of women to the process of improved resource management has been emphasised.

The NLP has three components — the Community Landcare Component bringing together community-based natural resource management policies and programs; the Federal/State/Territory governments' component, which draws together in partnership agreements the objectives, strategies and evaluation arrangements for joint action on natural resource management issues; and a national initiative component, which covers activities of national significance, undertaken by the Government, for example, research and development.

Major elements funded under the NLP include integrated catchment management, salinity mitigation, land resource management, water assessment and planning, vegetation protection and re-establishment, flood plain management, the country towns water management program, community landcare, property management planning and biological diversity conservation. Australian Government funding, in conjunction with financial assistance from other sources such as State Governments and the community, will be provided to priority natural resource management projects through partnership agreements.

In 1993–94 funding of $105.2 million was allocated under the NLP. Of this amount, $10.2 million was allocated for catchment management to improve water quality through improved land, water and related vegetation management. A further $1.6 million will improve sewage treatment at selected sites to reduce phosphorous loads in the Darling Catchment.

The National Water Quality Management Strategy. In association with the States and Territories, the Federal Government is developing the National Water Quality Management Strategy which covers fresh and marine waters, reclaimed water and rural water management. The objective of the Strategy is to achieve sustainable use of the nation's water resources by protecting and enhancing their quality while maintaining economic and social development. The Strategy provides a nationally consistent approach through the National Water Quality Management Guidelines which have a shared national objective but provide the flexibility to respond to local and regional circumstances.

The Strategy also encompasses the development of guidelines for urban stormwater and sewerage systems addressing in particular the following issues: effluent management, acceptance of trade (industrial) wastes, the reuse of reclaimed water and sludge management.

Other programs contributing to improved water quality are:

- the National Waterwatch Program which aims to improve community awareness of water quality issues through supporting and facilitating the development of community-based water quality monitoring programs; and
- the National Wetlands Management Program which seeks to promote the wise use of wetlands and has, as one of its goals, the production of a wetlands management manual for both technical and community use.

The Australian Guidelines for Drinking Water Quality are intended to provide the community and the water supply industry with guidance on a nationally consistent approach to what constitutes good quality drinking water. They are concerned with the safety of water, from a health point of view and with its aesthetic quality. They are intended for drinking water (except bottled or packaged water) irrespective of its source (municipal supplies, rain water tanks, bores, point-of-use treatment devices, etc.) or where it is used (homes, restaurants, camping areas, ships, etc).

The Guidelines for the use of reclaimed water address the need to use an important resource efficiently and to conserve it through reuse.

Monitoring river health. The Federal Government has established programs on monitoring and reporting on the state of Australia's rivers and has begun investigations into the environmental flow requirements of its waterways. They include the community-based Waterwatch Program and the River Murray Corridors of Green community-based program which aims to develop a network of vegetation corridors along the Murray River.

The 1992 Monitoring River Health initiative incorporates two components — environmental flows (allocated $2.5 million over four financial years) and scientific water quality monitoring (allocated $7.5 million over four financial years). The Federal Government provided $10.1 million in 1993–94 under the National Landcare Program for catchment management to improve water quality through improved land, water and related vegetation management.

The National Drought Policy is based on sustainable development, risk management, productivity growth and structural adjustment in the farm sector. It seeks to encourage the sectors of rural Australia to adopt a self-reliant approach to managing for climatic variability.

Knowledge of the natural variability of climate and its impact on water resources is essential to the sustainable management of our freshwater resources. The Bureau of Meteorology is the national hydro-meteorological authority charged with observation and scientific study of the atmospheric and land phases of the hydrological cycle. An integrated assessment of resources, essential to the management of the resource, involves the measurement and analysis of rainfall, evaporation, stream flow and underground water. The Bureau operates national networks for the measurement of climatic data and provides a national focus for the coordination, monitoring, evaluation and review of hydro-meteorological and hydrological data collection.

Research activities. The Federal Government funds research and development (R&D) to increase the sustainable use of Australia's land and water resources.

Some agencies fund R&D aimed directly at achieving sustainable use of Australia's land and water resources. Of particular interest is the Land and Water Resources Research and Development Corporation (LWRRDC). Its objective includes the funding of R&D to increase the sustainable use of land and water. The LWRRDC has identified river research as a high priority in its strategic plan for 1992–97. Two major issues to be addressed are an understanding of in-stream and flood plain processes, including the flow requirements of rivers, and the development of indicators of river health.

Other agencies fund R&D which either directly or indirectly helps to achieve sustainable use, most notably the Co-operative Research Centres (CRC) Program and the Industry Research and Development Board (IRDC). Under the CRC program, research, industry and educational institutions collaborate to develop proposals for the establishment of specific CRCs. There is now a number of CRCs undertaking research into specific aspects of land and water use in Australia.

Two recently established CRCs, one for freshwater ecology and the other for tropical rainforest ecology and management, intend to establish programs that will add to scientific knowledge on the nation's rivers. The CRC for Catchment Hydrology has established programs on river research.

Through the Industry Innovation Program, the Industry Research and Development Board funds a range of companies and research organisations undertaking R&D on sustainable use of Australia's land and water resources. Examples include the development of new technologies to treat waste water and sewage and new techniques to treat contaminated sediments and soils.

VISITS TO NATIONAL PARKS

Table 14.2, showing how many persons visited a heritage area, national or State park in the 12 months to May 1992, gives some indication of the numbers of people who experience Australia's flora and fauna. Some 63 per cent of Australians over 18 years old made at least one visit.

14.2 PERSONS WHO VISITED HERITAGE AREA, NATIONAL OR STATE PARK IN THE 12 MONTHS ENDED MAY 1992

Visited	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Yes	2,670.8	1,958.0	1,298.7	697.0	808.7	216.3	70.0	129.4	7,848.9
No	1,542.7	1,233.6	792.1	375.1	374.0	111.6	23.7	72.1	4,524.8
Don't know	30.2	38.6	12.1	3.5	6.2	1.3	**	4.5	96.4
Total persons(a)	**4,243.8**	**3,230.1**	**2,102.9**	**1,075.6**	**1,188.9**	**329.1**	**93.6**	**206.0**	**12,470.1**
					— per cent —				
Yes	62.9	60.6	61.8	64.8	68.0	65.7	74.7	62.8	62.9
No	36.4	38.2	37.7	34.9	31.5	33.9	25.3	35.0	36.3
Don't know	0.7	1.2	0.6	0.3	0.5	0.4	**	2.2	0.8

(a) Aged 18 years or more.
Source: Environmental Issues: People's Views and Practices (4602.0).

About 36 per cent of the population that was included in the May 1992 household survey on environmental issues did not visit a heritage area, national or State park. Table 14.3 provides some of the reasons given.

14.3 REASON FOR PERSONS NOT VISITING HERITAGE AREAS OR PARKS IN THE 12 MONTHS ENDED MAY 1992

Reason not visited	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
No time	370.5	314.4	187.7	87.4	103.9	29.5	10.6	25.0	1,129.0
Cost	57.8	44.8	41.5	24.5	14.6	3.3	**	4.1	190.6
Access/distance	106.6	93.1	61.5	26.0	33.1	10.3	3.0	4.1	337.7
Unable to	125.1	95.6	64.8	24.5	27.4	9.7	0.6	2.9	350.5
Not interested	59.6	40.5	37.5	11.6	16.2	4.1	0.3	1.8	171.7
Don't know	4.6	10.3	2.3	4.2	3.3	0.1	**	**	24.8
Other	41.7	36.5	35.4	11.7	10.4	3.7	0.3	1.7	141.5
No reason	776.8	598.5	361.4	185.2	165.1	50.9	8.8	32.4	2,178.9
Total persons(a)	**1,542.7**	**1,233.6**	**792.1**	**375.1**	**374.0**	**111.6**	**23.7**	**72.1**	**4,524.8**
					— per cent —				
No time	24.0	25.5	23.7	23.3	27.8	26.4	44.8	34.7	25.0
Cost	3.7	3.6	5.2	6.5	3.9	3.0	**	5.7	4.2
Access/distance	6.9	7.5	7.8	6.9	8.9	9.2	12.9	5.7	7.5
Unable to	8.1	7.8	8.2	6.5	7.3	8.7	2.4	4.0	7.7
Not interested	3.9	3.3	4.7	3.1	4.3	3.7	1.4	2.5	3.8
Don't know	0.3	0.8	0.3	1.1	0.9	0.1	**	**	0.5
Other	2.7	3.0	4.5	3.1	2.8	3.3	1.4	2.3	3.1
No reason	50.4	48.5	45.6	49.4	44.1	45.6	37.1	45.0	48.2

(a) Aged 18 years or more.
Source: Environmental Issues: People's Views and Practices (4602.0).

14.4 CONCERN ABOUT ENVIRONMENTAL PROBLEMS, MAY 1992

Concern about environmental problems	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Yes	3,125.5	2,428.2	1,556.9	828.7	903.6	232.7	74.6	172.0	9,322.2
No	1,021.7	717.3	505.1	230.3	258.9	92.8	16.5	29.7	2,872.3
Don't know	96.6	84.7	40.9	16.6	26.4	3.6	2.5	4.2	275.6
Total persons(a)	**4,243.8**	**3,230.1**	**2,102.9**	**1,075.6**	**1,188.9**	**329.1**	**93.6**	**206.0**	**12,470.1**
					— per cent —				
Yes	73.6	75.2	74.0	77.0	76.0	70.7	79.6	83.5	74.8
No	24.1	22.2	24.0	21.4	21.8	28.2	17.7	14.4	23.0
Don't know	2.3	2.6	1.9	1.5	2.2	1.1	2.7	2.1	2.2

(a) Aged 18 years or more.
Source: Environmental Issues: People's Views and Practices (4602.0).

CONCERN ABOUT THE ENVIRONMENT

Concern about environmental quality is another measure of the perception of the quality of life. Tables 14.4 to 14.6 shows the extent and nature of the concerns of Australians about the environment in 1992. The problems registering the highest level of concern were air pollution, destruction of ecosystems and ocean pollution.

14.5 SPECIFIC ENVIRONMENTAL PROBLEMS CONCERNING PERSONS(a), MAY 1992

Environmental problem	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Destruction of trees/ecosystems	1,365.6	1,000.4	779.3	338.0	370.5	118.1	33.3	83.4	4,088.4
Extinction of species	820.5	664.3	448.0	184.4	157.2	65.7	27.5	40.9	2,408.5
Air pollution	1,794.1	1,401.3	775.1	385.5	412.6	111.8	38.7	90.7	5,009.8
Ocean pollution	1,459.0	942.0	766.3	316.5	330.6	114.1	39.0	60.6	4,028.1
Freshwater pollution	1,268.9	987.8	656.4	313.1	303.9	99.5	27.7	65.4	3,722.8
Other pollution	646.9	397.5	318.2	146.6	145.3	55.1	14.9	28.1	1,752.7
Garbage disposal	1,045.2	738.2	457.2	231.4	229.1	80.8	29.3	45.4	2,856.4
Toxic chemical waste	912.6	743.7	450.0	199.1	209.5	72.3	29.2	37.6	2,654.0
Ozone layer	1,168.9	1,028.1	551.5	312.9	305.1	92.6	36.0	70.7	3,565.8
Greenhouse effect	727.2	663.2	318.7	165.8	153.2	63.1	19.5	39.2	2,150.0
Land degradation	566.7	597.6	343.7	148.2	139.1	54.3	21.9	31.8	1,903.5
Sand mining	206.8	170.5	108.1	28.8	27.8	18.4	4.2	2.9	567.7
Use of uranium	356.2	319.0	173.7	82.7	69.9	34.7	11.0	8.0	1,055.4
Nuclear tests/weapons	617.4	577.3	305.0	127.1	106.2	52.2	21.0	17.1	1,823.4
Overpopulation	551.7	408.6	315.8	96.6	108.6	46.0	17.6	25.9	1,570.8
Resource conservation	632.6	541.4	325.1	142.8	127.1	54.5	18.2	31.2	1,872.9
Use of pesticides	545.2	518.7	327.0	114.2	99.4	55.8	25.9	16.6	1,702.8
Other	223.3	166.4	137.2	80.8	70.4	18.5	9.8	10.7	717.2
No concerns	1,118.3	802.0	546.1	246.9	285.3	96.4	19.1	34.0	3,148.0
Total persons	**4,243.8**	**3,230.1**	**2,102.9**	**1,075.6**	**1,188.9**	**329.1**	**93.6**	**206.0**	**12,470.1**
					— per cent —				
Destruction of trees/ecosystems	32.2	31.0	37.1	31.4	31.2	35.9	35.5	40.5	32.8
Extinction of species	19.3	20.6	21.3	17.1	13.2	20.0	29.4	19.8	19.3
Air pollution	42.3	43.4	36.9	35.8	34.7	34.0	41.4	44.0	40.2
Ocean pollution	34.4	29.2	36.4	29.4	27.8	34.7	41.7	29.4	32.3
Freshwater pollution	29.9	30.6	31.2	29.1	25.6	30.2	29.6	31.8	29.9
Other pollution	15.2	12.3	15.1	13.6	12.2	16.7	15.9	13.6	14.1
Garbage disposal	24.6	22.9	21.7	21.5	19.3	24.5	31.3	22.0	22.9
Toxic chemical waste	21.5	23.0	21.4	18.5	17.6	22.0	31.2	18.3	21.3
Ozone layer	27.5	31.8	26.2	29.1	25.7	28.1	38.5	34.3	28.6
Greenhouse effect	17.1	20.5	15.2	15.4	12.9	19.2	20.8	19.0	17.2
Land degradation	13.4	18.5	16.3	13.8	11.7	16.5	23.4	15.5	15.3
Sand mining	4.9	5.3	5.1	2.7	2.3	5.6	4.5	1.4	4.6
Use of uranium	8.4	9.9	8.3	7.7	5.9	10.5	11.8	3.9	8.5
Nuclear tests/weapons	14.5	17.9	14.5	11.8	8.9	15.9	22.5	8.3	14.6
Overpopulation	13.0	12.7	15.0	9.0	9.1	14.0	18.8	12.6	12.6
Resource conservation	14.9	16.8	15.5	13.3	10.7	16.6	19.4	15.2	15.0
Use of pesticides	12.8	16.1	15.6	10.6	8.4	17.0	27.6	8.1	13.7
Other	5.3	5.2	6.5	7.5	5.9	5.6	10.5	5.2	5.8
No concerns	26.4	24.8	26.0	23.0	24.0	29.3	20.4	16.5	25.2

(a) Aged 18 years or more. Totals do not equal the sum of environmental problems in each column because people may report more than one problem.

Source: Environmental Issues: People's Views and Practices (4602.0).

14.6 ENVIRONMENTAL CONCERN REGISTERED IN LAST 12 MONTHS, MAY 1992

Environmental concern registered last 12 months	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Yes	432.7	293.3	199.1	96.3	145.3	36.7	10.6	21.1	1,235.0
No	2,685.4	2,121.9	1,350.4	730.9	754.9	195.7	63.8	149.7	8,052.6
Don't know	7.4	13.0	7.3	1.5	3.4	0.4	0.2	1.2	34.5
No concerns	1,118.3	802.0	546.1	246.9	285.3	96.4	19.1	34.0	3,148.0
Total persons(a)	**4,243.8**	**3,230.1**	**2,102.9**	**1,075.6**	**1,188.9**	**329.1**	**93.6**	**206.0**	**12,470.1**
					— per cent —				
Yes	10.2	9.1	9.5	9.0	12.2	11.1	11.3	10.2	9.9
No	63.3	65.7	64.2	68.0	63.5	59.4	68.1	72.7	64.6
Don't know	0.2	0.4	0.3	0.1	0.3	0.1	0.3	0.6	0.3
No concerns	26.4	24.8	26.0	23.0	24.0	29.3	20.4	16.5	25.2

(a) Aged 18 years or more.
Source: Environmental Issues: People's Views and Practices (4602.0).

People's views on the issue of the priority between environmental protection and economic growth, provide an indicator of the public's attitude to the environment generally. Table 14.7 shows that in May 1992, a majority of people (70%) rated them as being of equal importance. As the questions were necessarily cast in somewhat simplified terms, the responses can only be regarded as indicative of general attitudes rather than of fully formulated views.

14.7 ATTITUDE TO ENVIRONMENTAL PROTECTION AND ECONOMIC GROWTH, MAY 1992

Priority	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Environment protection is more important than economic growth	825.5	564.2	383.4	224.9	229.3	44.2	18.2	50.3	2,339.9
Environment protection and economic growth are equally important	2,921.0	2,251.8	1,493.6	758.8	872.2	252.9	67.3	144.1	8,761.7
Environment protection is less important than economic growth	284.9	246.4	143.9	49.3	58.3	21.5	5.5	7.4	817.1
Cannot decide/no opinion	212.4	167.8	82.0	42.6	29.1	10.6	2.7	4.2	551.4
Total persons(a)	**4,243.8**	**3,230.1**	**2,102.9**	**1,075.6**	**1,188.9**	**329.1**	**93.6**	**206.0**	**12,470.1**

For footnotes *see* end of table.

14.7 ATTITUDE TO ENVIRONMENTAL PROTECTION AND ECONOMIC GROWTH MAY 1992 — *continued*

Priority	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— per cent —				
Environment protection is more important than economic growth	19.5	17.5	18.2	20.9	19.3	13.4	19.4	24.4	18.8
Environmental protection and economic growth are equally important	68.8	69.7	71.0	70.5	73.4	76.8	71.9	70.0	70.3
Environment protection is less important than economic growth	6.7	7.6	6.8	4.6	4.9	6.5	5.9	3.6	6.6
Cannot decide/no opinion	5.0	5.2	3.9	4.0	2.4	3.2	2.8	2.0	4.4

(a) Aged 18 years or more.
Source: Environmental Issues: People's Views and Practices (4602.0).

RECYCLING BY HOUSEHOLDS

Recycling is one of the main ways of reducing the adverse effects of the disposal of solid waste. In 1989, 61 per cent of councils were involved in recycling schemes. This is achieved through kerb-side collection schemes and drop-off facilities.

Individual households play an important role in recycling. An ABS survey in May 1992 found that old clothes and rags were the items most commonly recycled, with three per cent of households having recycled all the surveyed items.

14.8 ITEMS RECYCLED BY HOUSEHOLDS(a), MAY 1992

Item recycled	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Paper	1,053.2	933.6	448.2	363.7	566.5	179.1	16.9	96.0	3,657.3
Glass	935.5	982.6	527.0	466.9	542.0	214.2	9.0	83.3	3,760.7
Cans	721.5	758.0	406.4	428.9	512.5	123.5	11.3	42.6	3,004.8
Plastic	621.6	673.8	423.1	280.3	331.6	141.5	8.8	49.9	2,530.7
Motor oil	144.3	128.4	115.7	66.3	92.9	49.8	4.9	24.0	626.4
Kitchen or food waste	555.9	554.8	413.0	336.9	347.8	223.6	20.4	63.5	2,515.9
Garden waste	775.4	721.1	610.5	401.6	414.8	246.3	29.7	78.6	3,278.0
Old clothing or rags	1,071.9	930.7	773.6	524.0	629.6	287.5	31.9	113.8	4,363.0
No recycling by the household	317.6	142.6	235.8	141.1	116.4	90.6	19.5	18.9	1,082.4
Total households	**1,832.9**	**1,391.8**	**1,243.4**	**844.3**	**928.8**	**466.2**	**62.3**	**151.8**	**6,921.4**

For footnotes *see* end of table.

14.8 ITEMS RECYCLED BY HOUSEHOLDS(a), MAY 1992 — *continued*

Item recycled	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— per cent —				
Paper	57.5	67.1	36.0	43.1	61.0	38.4	27.1	63.3	52.8
Glass	51.0	70.6	42.4	55.3	58.4	46.0	14.5	54.9	54.3
Cans	39.4	54.5	32.7	50.8	55.2	26.5	18.2	28.1	43.4
Plastic	33.9	48.4	34.0	33.2	35.7	30.4	14.2	32.9	36.6
Motor oil	7.9	9.2	9.3	7.9	10.0	10.7	7.9	15.8	9.0
Kitchen or food waste	30.3	39.9	33.2	39.9	37.4	48.0	32.7	41.9	36.3
Garden waste	42.3	51.8	49.1	47.6	44.7	52.8	47.7	51.8	47.4
Old clothing or rags	58.5	66.9	62.2	62.1	67.8	61.7	51.2	75.0	63.0
No recycling by the household	17.3	10.2	19.0	16.7	12.5	19.4	31.3	12.5	15.6

(a) Totals do not equal the sum of items in each column because more than one item may be recycled.
Source: Environmental Issues: People's Views and Practices (4602.0).

The principal recycling method was use of central collection points, with household collection being the next most frequently used method.

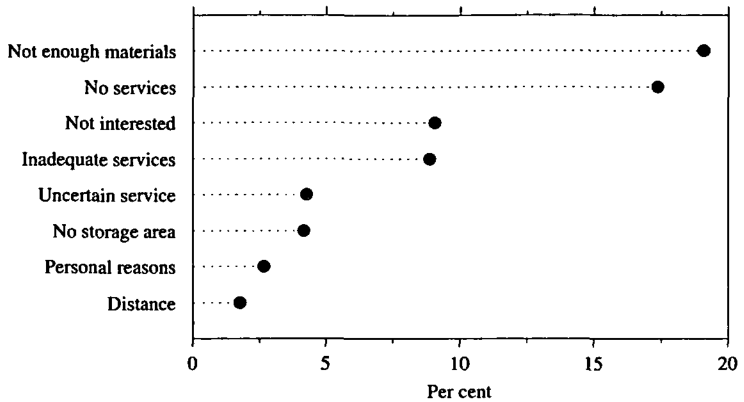
14.9 RECYCLING METHODS USED BY HOUSEHOLDS(a), MAY 1992

Recycling method	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— '000 —				
Central collection point	916.1	666.8	642.9	546.5	556.1	236.2	23.1	108.6	3,696.4
Collection from house	958.7	991.4	370.3	279.7	456.4	82.7	7.7	55.9	3,202.8
Special areas at dump	134.4	133.3	133.6	59.7	84.8	102.8	4.4	55.2	708.3
Compost or mulch	720.1	681.1	590.5	385.9	392.1	250.1	27.6	76.9	3,124.3
Reuse within household	636.7	608.2	559.5	382.2	448.6	228.6	23.3	71.1	2,958.1
Other	46.9	28.4	40.8	24.5	41.3	10.9	2.0	6.2	201.0
No recycling by the household	317.6	142.6	235.8	141.1	116.4	90.6	19.5	18.9	1,082.4
Total households	**1,832.9**	**1,391.8**	**1,243.4**	**844.3**	**928.8**	**466.2**	**62.3**	**151.8**	**6,921.4**
					— per cent —				
Central collection point	50.0	47.9	51.7	64.7	59.9	50.7	37.2	71.6	53.4
Collection from house	52.3	71.2	29.8	33.1	49.1	17.7	12.4	36.8	46.3
Special areas at dump	7.3	9.6	10.7	7.1	9.1	22.1	7.0	36.4	10.2
Compost or mulch	39.3	48.9	47.5	45.7	42.2	53.7	44.3	50.7	45.1
Reuse within household	34.7	43.7	45.0	45.3	48.3	49.0	37.4	46.8	42.7
Other	2.6	2.0	3.3	2.9	4.4	2.3	3.1	4.1	2.9
No recycling by the household	17.3	10.2	19.0	16.7	12.5	19.4	31.3	12.5	15.6

(a) Totals do not equal the sum of methods in each column because more than one method may be used.
Source: Environmental Issues: People's Views and Practices (4602.0).

About 16 per cent of households did not recycle any of the surveyed items. The main reasons given were that they did not have sufficient recyclable materials or that there were no services or facilities available.

14.10 REASONS HOUSEHOLDS DO NOT RECYCLE, MAY 1992



Source: Environmental Issues: People's Views and Practices (4602.0).

The Commonwealth has adopted volume targets for specific materials as part of the National Kerbside Recycling Strategy. The targets, to be achieved by 1995, are:

Paper packaging	71% of input used to produce paper packaging from secondary fibre
Newsprint	40%
Glass	45%
Aluminium cans	65%
Steel cans	25% by 1996 (40% by 2000)
Plastic containers	25%
Paperboard containers for liquids	20%

Source: National Waste Minimisation and Recycling Strategy, CEPA, 1992.

Clean up Australia

On Clean Up Australia Day, 6 March 1994, half a million Australians collected an estimated 20,000 tonnes of rubbish from roadsides, rivers, parklands, beaches and waterways around the country. The items they collected and removed ranged from paper litter to several thousand car bodies.

It all started from an idea by Ian Kiernan, 1994 Australian of the Year, to make a better environment by encouraging people everywhere to clean up their local area. The idea came to him while he was sailing single-handed around the world in 1986 and was confronted by seas polluted by the cast-offs of modern life — nappies, plastic bottles and bags, cans, garbage and refuse of every description.

On his return to Australia he organised Clean Up Sydney Harbour in 1989, when 40,000 volunteers removed 5,000 tonnes of waste from the harbour and its foreshores. Its success led to an expansion of the campaign to a Clean Up Australia Day across the country in each year since 1990.

The half a million people who turned out in 1994 covered over 8,000 sites across 698 cities and towns, where Clean Up Australia committees now operate.

The campaign has spread beyond Australia. In 1993, an estimated 30 million people in 80 countries took part in the first Clean Up the World, the second of which is planned for September 1994.

Ian Kiernan is now chairman of Clean Up the World as well as Chairman of Clean Up Australia. Within five years many nations have been moved to take part in an event which gives everyone the opportunity to take responsibility for their environment and bring about environmental change.

COSTS OF ENVIRONMENT PROTECTION

Businesses, governments and households spend some of their resources on protection of the environment. For 1990–91 and 1991–92 the ABS collected some information about expenditure by businesses in the mining and manufacturing sectors on pollution abatement and control. The expenditures included are for activities aimed at the prevention, reduction and elimination of pollution arising from production processes. Table 14.11 provides a summary of some of the information obtained.

14.11 EXPENDITURE BY SOME MINING AND MANUFACTURING INDUSTRIES ON ENVIRONMENT PROTECTION

		Metallic minerals, coal, oil and gas		*Selected manufacturing industries*	
Item	*Unit*	*1990–91*	*1991–92*	*1990–91(a)*	*1991–92*
Capital expenditure					
Change-in-production processes	$m	74.0	7.5	n.a.	n.a.
End-of-line-techniques	$m	96.0	50.3	n.a.	n.a.
Total	*$m*	*170.0*	*57.9*	*248.0*	*505.5*
Current expenditure					
Waste management	$m	68.9	n.a.	n.a.	n.a.
Other operational and maintenance costs	$m	23.0	n.a.	n.a.	n.a.
Total	*$m*	*91.8*	*86.6*	*232.5*	*523.6*
Total expenditure	**$m**	**261.8**	**144.5**	**480.5**	**1,029.1**

For footnotes *see* end of table.

14.11 EXPENDITURE BY SOME MINING AND MANUFACTURING INDUSTRIES ON ENVIRONMENT PROTECTION — *continued*

		Metallic minerals, coal, oil and gas		*Selected manufacturing industries*	
Item	*Unit*	*1990–91*	*1991–92*	*1990–91(a)*	*1991–92*
Expenditure on environment protection compared to total expenditure					
Capital expenditure on environment	$m	170.0	57.9	248.0	505.5
Total capital expenditure	$m	4,018.0	3,452.2	n.a.	n.a.
Percentage spent on environment	%	4.2	1.7	n.a.	n.a.
Current expenditure on environment	$m	91.8	86.6	232.5	523.6
Total current expenditure	$m	8,906.6	9,206.0	n.a.	n.a.
Percentage spent on environment	%	1.0	0.9	n.a.	n.a.
Cost of environmental licences	$m	5.2	n.a.	n.a.	n.a.
Number of establishments operating under licences	no.	162	n.a.	623	n.a.
Research expenses	$m	5.3	n.a.	n.a.	n.a.

(a) The industry scope was limited in this year, therefore comparisons with 1991–92 are not possible.
Source: Manufacturing Industry, Australia (8221.0), Mining Industry, Australia (8402.0) and Cost of Environment Protection, Australia - Selected Industries, 1990–91 (4603.0).

INTERNATIONAL COOPERATION

UN Conference on Environment and Development, Rio de Janeiro, 1992

The largest conference to date on environment and development was held in Rio de Janeiro, Brazil from 1–12 June 1992. The United Nations Conference on Environment and Development (UNCED) brought together 178 governments, thousands of delegates and members of non-government organisations and journalists.

Four documents were agreed by many governments at the sessions in Brazil. These were the Rio Declaration, Agenda 21 and two conventions, one on climate change and one on biodiversity. A Declaration of Forest Principles was also agreed upon. Although not strictly binding under international law, Agenda 21 is an action plan to implement the principles found in the Rio Declaration. It is a substantial document containing about 40 chapters on a wide range of issues, including:

- protection of the atmosphere by combating climate change, depletion of the ozone layer and transboundary air pollution;
- protection of the quality and supply of freshwater resources;
- protection of the oceans and coastal areas;
- protection and management of land resources by combating deforestation, desertification and drought;
- conservation of biological diversity;
- environmentally sound management of biotechnology;
- environmentally sound management of wastes, particularly hazardous wastes and toxic chemicals, as well as prevention of illegal international traffic in toxic and dangerous products and wastes;
- improvement of the living and working environment of the poor in urban slums and rural areas; and
- protection of human health conditions and improvement of the quality of life.

Subsequent to the UNCED, the United Nations has created the Commission on Sustainable Development to progress various international discussions. Member countries have a responsibility to report annually on aspects of their implementation of Agenda 21. Australia presented its first report in December 1993, addressing issues such as transfer of environmentally sound technologies, protecting and promoting human health, promoting sustainable human settlement, and toxic chemicals and hazardous wastes.

International treaties and conventions

Some of the international treaties and conventions relating to the environment to which Australia is a party are:

General environmental

- Antarctic Treaty (signed by Australia 23 June 1961);
- Convention for the Protection of the World Cultural and Natural Heritage (17 December 1975); and
- Convention on the Conservation of Nature in the South Pacific (28 March 1990).

Coastal/marine resources

- International Convention for the Regulation of Whaling (10 November 1948);
- UN Convention on the Law of the Sea (10 December 1982); and
- Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific (24 November 1989).

Toxic and hazardous wastes

- South Pacific Nuclear Free Zone Treaty (11 December 1986);
- Convention on Early Notification of a Nuclear Accident (23 October 1987);
- Treaty Banning Nuclear Weapons Testing in the Atmosphere, in Outer Space and Under Water (12 November 1963);
- International Convention for the Prevention of Pollution from Ships (14 January 1988);
- International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention) (20 September 1985); and
- Basel Convention on the Transborder Movement of Hazardous Waste (early 1992).

Biological diversity

- Convention on Wetlands of International Importance (12 December 1975);
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (27 October 1976);
- International Plant Protection Convention (27 August 1952); and
- Convention on Biological Diversity (18 June 1993).

Air quality

- Vienna Convention for the Protection of the Ozone Layer (17 August 1989); and
- Montreal Protocol on Substances that Deplete the Ozone Layer (22 September 1990).

BIBLIOGRAPHY

ABS Publications

Australia's Environment: Issues and Facts (4140.0)

Community Participation in Energy Conservation, Victoria (4120.2)

Cost of Environment Protection, Australia – Selected Industries, 1990–91 (4603.0)

Environmental Issues: People's Views and Practices (4602.0)

Manufacturing Industry, Australia (8221.0)

Mining Industry, Australia (8402.0)

Other Publications

Draft Australia's National Report to the United Nations Commission on Sustainable Development, December 1993

OECD. Environmental Data Compendium 1993

OECD. Environmental Indicators, 1991

National Strategy for Ecologically Sustainable Development, December 1992

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Fifteen

Agriculture

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The major source of the statistics in this chapter is the Agricultural Census conducted by the ABS at 31 March each year.

The ABS excludes from the Census those establishments which make only a small contribution to overall agricultural activity. From 1986–87 to 1990–91, the Census included establishments with agricultural activity which had an estimated value of agricultural operations of $20,000 or more. Prior to this (1982–83 to 1985–86) the cut-off value was $2,500. The cut-off was raised to $22,500 for the 1991–92 Census.

While this alteration has resulted in some changes in the counts of numbers of establishments engaged in agricultural activities, the effect on the statistics of production of major commodities is small. Statistics of minor commodities normally associated with small-scale operations may be affected to a greater extent.

Unless indicated otherwise, Australian totals include data for all States and both Territories.

Details of the method used in the calculation of the estimated value of agricultural operations (EVAO) are contained in the publication *Characteristics of Australian Farms* (7102.0).

Financial statistics are collected in the Agricultural Finance Survey, conducted annually since 1986–87. The size inclusions referred to above for the Agricultural Census apply also to the Agricultural Finance Survey.

CHARACTERISTICS OF AUSTRALIAN FARMS

The gross product of agriculture, forestry, fishing and hunting in 1992–93 was $12,869 million, 3.2 per cent of GDP. Agriculture constituted the major proportion of this total, as indicated by the fact that 386,400 of the 405,900 people employed in the above group of industries were employed in agriculture and services to agriculture. As at August 1993, five per cent of employed persons were employed in Agriculture and Services to Agriculture.

Table 15.1 provides information on the number, and type of agricultural establishments at 31 March 1993.

It should be noted that prior to 1991–92, establishments within the agricultural sector were classified in accordance with the 1983 edition of the *Australian Standard Industrial Classification (ASIC)* (1201.0). Since ASIC has now been replaced by the new *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (1292.0), 1992–93 census units have been classified on an ANZSIC basis. Care should be taken when making comparisons between years where different classifications have been used.

15.1 ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY, 31 MARCH 1993

ANZSIC code	*Industry of establishment*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
0111	Plant nurseries	613	296	456	81	162	34	11	4	1,657
0112	Cut flower & flower seed growing	213	146	138	88	116	46	4	—	751
0113	Vegetable growing	644	1,043	1,258	553	546	580	11	3	4,638
0114	Grape growing	541	1,594	50	1,155	186	23	3	—	3,552
0115	Apple & pear growing	222	470	123	144	197	160	—	1	1,317
0116	Stone fruit growing	352	201	90	348	150	12	—	—	1,153
0117	Kiwi fruit growing	18	11	1	—	5	—	—	—	35
0119	Fruit growing n.e.c.	1,646	362	1,638	656	343	20	38	—	4,703
0121	Grain growing	2,060	2,502	1,397	2,911	2,311	19	5	—	11,205
0122	Grain-sheep/beef cattle farming	6,843	2,738	1,682	3,314	4,008	82	2	—	18,669
0123	Sheep-beef cattle farming	3,584	2,872	1,117	987	633	418	—	28	9,639
0124	Sheep farming	7,216	4,399	872	1,523	2,025	516	—	25	16,576
0125	Beef cattle farming	5,615	5,066	7,673	538	1,175	578	203	15	20,863
0130	Dairy cattle farming	1,965	7,672	1,840	849	514	767	—	1	13,608
0141	Poultry farming (meat)	331	137	88	70	51	13	—	—	690
0142	Poultry farming (eggs)	170	131	138	54	90	16	6	2	607
0151	Pig farming	442	239	463	224	132	51	1	—	1,552
0152	Horse farming	494	294	282	87	101	32	1	1	1,292
0153	Deer farming	125	116	45	42	39	11	—	—	378
0159	Livestock farming n.e.c.	237	181	131	156	70	21	2	—	798
0161	Sugar cane growing	461	—	4,455	—	—	—	—	—	4,916
0162	Cotton growing	445	—	371	—	—	—	—	—	816
0169	Crop & plant growing n.e.c.	219	370	465	85	57	42	3	—	1,241
	Total (ANZSIC code 01)	*34,456*	*30,840*	*24,773*	*13,865*	*12,911*	*3,441*	*290*	*80*	*120,656*
02	Services to agriculture; hunting & trapping	25	25	21	14	6	3	—	—	94
03	Forestry & logging	4	1	7	—	1	9	—	—	22
04	Commercial fishing	1	—	1	1	2	3	—	—	8
	Total (ANZSIC Division A)	*34,486*	*30,866*	*24,802*	*13,880*	*12,920*	*3,456*	*290*	*80*	*120,780*
B	Mining	3	1	1	—	1	1	—	—	7
C	Manufacturing	39	34	10	31	24	4	2	1	145
D	Electricity, gas & water supply	—	1	—	—	—	—	—	—	1
E	Construction	20	35	13	13	1	6	—	—	88
F	Wholesale trade	33	20	3	6	5	7	—	—	74
G	Retail trade	13	10	10	5	1	8	—	—	47
H	Accommodation, cafes & restaurants	6	4	3	2	1	—	—	—	16
I	Transport & storage	27	42	13	23	6	14	—	—	125
J	Communication services	1	—	—	—	—	—	—	—	1
K	Finance & insurance	1	—	—	—	—	—	—	—	1
L	Property & business services	30	4	31	15	18	5	—	1	104
M	Government administration & defence	9	1	—	—	—	—	—	—	10
N	Education	19	1	8	1	14	2	—	—	45
O	Health & community services	1	—	8	1	—	—	—	—	10
P	Cultural & recreational services	6	10	1	1	—	2	—	—	20
Q	Personal & other services	5	1	9	—	6	1	—	—	22
	Unclassified	586	221	219	99	131	12	6	—	1,274
Total all industries		**35,285**	**31,251**	**25,131**	**14,077**	**13,128**	**3,518**	**298**	**82**	**122,770**

Source: Characteristics of Australian Farms (7102.0).

EMPLOYMENT IN AGRICULTURE

15.2 EMPLOYED PERSONS(a) IN AGRICULTURE AND SERVICES TO AGRICULTURE ('000)

August	*Married males*	*All males*	*Married females*	*All females*	*Persons*
1988	193.2	284.0	97.5	118.7	402.7
1989	187.5	269.4	94.2	112.2	381.6
1990	195.5	282.5	100.3	118.0	400.5
1991	181.8	265.4	97.0	115.9	381.2
1992	173.3	257.6	91.8	113.3	370.9
1993	187.4	267.2	97.7	115.5	382.7

(a) The estimates of employed persons include persons who worked without pay for at least one hour per week in a family business or on a farm (that is, unpaid family helpers).

Source: The Labour Force, Australia (6203.0).

GROSS VALUE OF AGRICULTURAL COMMODITIES PRODUCED

The gross value of agricultural commodities produced is the value placed on recorded production at the wholesale prices realised in the market place.

15.3 GROSS VALUE OF AGRICULTURAL COMMODITIES PRODUCED ($ million)

Commodity	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Crops						
Barley for grain	454.9	558.1	708.8	568.3	680.9	792.7
Oats for grain	191.0	232.6	178.0	147.3	178.3	205.5
Wheat for grain	2,002.8	2,950.3	2,775.1	1,988.1	2,097.2	2,669.6
Other cereal grains	392.5	411.0	360.7	304.9	473.3	340.1
Sugar cane cut for crushing	608.9	744.2	874.0	748.0	602.7	797.7
Fruit and nuts	832.1	951.6	1,022.1	1,059.6	1,304.1	1,380.3
Grapes	345.6	427.3	392.2	362.0	433.0	377.6
Vegetables	928.4	1,165.3	1,328.2	1,284.9	1,242.4	1,226.6
All other crops(a)	1,882.4	2,202.9	2,237.2	2,611.5	2,853.8	2,804.4
Total crops	*7,638.6*	*9,643.3*	*9,876.3*	*9,074.6*	*9,865.7*	*10,594.5*
Livestock slaughterings and other disposals(b)						
Cattle and calves(c)	3,047.9	3,189.6	3,860.5	3,869.4	3,801.9	3,839.2
Sheep and lambs	803.9	738.3	585.4	364.2	460.6	663.0
Pigs	(d)536.1	(e)629.3	(e)656.0	(e)691.0	(e)658.6	(e)649.5
Poultry	(d)671.2	(e)730.3	(e)777.9	(e)788.3	(e)778.0	(e)833.5
Total livestock slaughterings and other disposals	*(d)(f)5,074.3*	*(g)5,300.8*	*(g)5,893.3*	*(g)5,721.0*	*(g)5,738.1*	*(g)6,023.5*

For footnotes *see* end of table.

15.3 GROSS VALUE OF AGRICULTURAL COMMODITIES PRODUCED — *continued*
($ million)

Commodity	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Livestock products						
Wool	5,517.3	5,906.0	5,718.1	4,180.9	2,979.5	2,568.5
Milk	1,390.9	1,635.1	1,749.0	1,824.8	1,960.0	2,314.4
Eggs	304.4	321.4	311.8	321.1	278.1	289.4
Total livestock products(h)	*(i)7,247.0*	*(j)7,910.8*	*(j)7,806.7*	*(j)6,354.3*	*(j)5,244.0*	*(j)5,205.3*
Total value of agricultural commodities produced	**(k)19,962.5**	**(l)22,862.5**	**(l)23,585.1**	**(l)21,158.5**	**(l)20,861.3**	**(l)21,836.4**

(a) Includes pastures and grasses. Excludes crops for green feed or silage. (b) Includes net exports of livestock. (c) Includes dairy cattle slaughtered. (d) Excludes Northern Territory pigs and poultry. (e) Excludes Tasmania and Northern Territory pigs and poultry. (f) Includes goat slaughterings, exports and buffalo slaughterings. (g) Includes goat slaughterings, exports, buffalo slaughterings and Tasmanian pigs and poultry. (h) Includes honey and beeswax. (i) Includes cashmere, cashgora, mohair, liquid goat milk, honey and beeswax. Excludes Northern Territory and Australian Capital Territory milk and eggs. (j) Excludes Northern Territory milk and eggs. (k) Includes Northern Territory pigs, poultry, milk and eggs and Australian Capital Territory milk and eggs. (l) Includes Northern Territory pigs, poultry, milk and eggs.

Source: Value of Agricultural Commodities Produced, Australia (7503.0).

The following table shows the index of the gross value of commodities produced at constant prices, that is, it is a measure of change in value after the direct effects of price changes have been eliminated.

15.4 INDEX OF VALUES AT CONSTANT PRICES OF AGRICULTURAL COMMODITIES PRODUCED(a)
(Reference base year 1989–90 = 1,000)

Commodity	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Crops						
Barley for grain	859	818	1,000	1,016	1,120	1,335
Oats for grain	1,096	1,138	1,000	933	1,030	1,181
Wheat for grain	859	989	1,000	1,056	729	1,019
Other cereal grains	1,274	1,082	1,000	859	1,379	857
Sugar cane(b)	932	987	1,000	940	831	1,089
Fruit and nuts	1,026	1,001	1,000	959	1,003	1,171
Grapes	999	1,100	1,000	1,027	1,185	983
Vegetables	974	995	1,000	1,042	1,050	1,042
All other crops(c)	1,009	1,013	1,000	1,050	1,245	1,244
Total crops	*956*	*994*	*1,000*	*1,019*	*1,000*	*1,114*
Livestock slaughterings and other disposals						
Cattle and calves(d)	939	890	1,000	1,049	1,068	1,089
Sheep and lambs	1,016	965	1,000	908	932	945
Pigs	936	972	1,000	984	1,059	1,035
Poultry	943	957	1,000	1,011	1,076	1,099
Total livestock slaughterings(e)	*947*	*915*	*1,000*	*1,028*	*1,055*	*1,070*
Livestock products						
Wool	835	869	1,000	969	804	782
Milk	982	1,005	1,000	1,022	1,075	1,171
Eggs	1,052	1,011	1,000	1,018	913	956
Total livestock products(f)	*878*	*906*	*1,000*	*982*	*869*	*876*
Total agricultural commodities produced	**928**	**945**	**1,000**	**1,008**	**970**	**1,024**

(a) Indexes of values at constant prices (weighted by average unit values of the year 1989–90). (b) Sugar cane cut for crushing and planting. (c) Includes pasture and grasses. Excludes crops for green feed or silage. (d) Includes dairy cattle slaughtered. (e) Component series based on carcass weight. Includes goat slaughterings. (f) Includes honey, beeswax and goat products.

Source: Value of Agricultural Commodities Produced, Australia (7503.0).

GATT: Implications of the Uruguay round for agriculture

After seven years of international trade negotiations, the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) was finalised in Geneva on the 15 December 1993. The outcome is a complex set of new understandings and agreements which will govern global trade in the future.

This article provides a summary of the expected impacts on Australian agriculture.

The GATT, a set of rules and disciplines in international trade, aims to provide collective protection for all countries, and in particular small and medium sized countries. The establishment of the World Trade Organisation (WTO) will provide a dispute settlement process and ensure that these countries are sufficiently protected against unilateral action by the major economic powers.

New international agreements have been agreed upon to cover a wide range of areas. This incorporates the rapidly expanding trade areas of services, such as banking and telecommunications, and intellectual property like patents and copyrights. Also, agreement was reached on a large tariff cutting package (33% on average), particularly in the industrial sector. Furthermore, for the first time, agriculture and textiles are to be fully integrated under GATT.

The treaty is scheduled to come into effect during 1995, with many of its key provisions to be phased in over six years. The effects of GATT will not be felt right away. Nevertheless, the OECD estimates that the outcomes on agricultural and industrial products alone will provide a boost to the global economy of $A418 billion by 2002. Also, the GATT secretariat estimated that world merchandise trade would be about $A1,120 billion higher by 2005 than if trade continued at pre-Uruguay round levels. This will all depend on the exact way in which individual countries implement the agreement.

The Australian economy

For the Australian economy, the Uruguay Round of agreements provides major trading opportunities. Being a middle-ranking trading country and wanting an effective multilateral trading system, Australia placed much importance on participation in and successful conclusion of the Uruguay Round. The Industry Commission has estimated that the long-term effects of the round will eventually be an annual increase in Australia's exports of over $A5 billion and an increase in Australia's GDP of around $A3.7 billion per year. Overall, all sectors of the Australian economy stand to benefit, especially agriculture.

GATT's impact on agriculture

In the agricultural package, tariff equivalents of border measures, domestic subsidies and export subsidies are to be reduced. Minimum access levels have also been set where imports have previously been small. This should result in better access for agricultural exports. The market outlook should improve as a result of significant reductions in the export industry subsidy and domestic support policies which have distorted international markets for agricultural exports in recent decades. Finally, the trading environment will be significantly freer and fairer but still remain extremely competitive.

Competitive support

Domestic support measures which distort trade will be cut by 20 per cent for agriculture as a whole. This aims to decrease policy induced over-production which distorts world agricultural markets. However, a range of assistance measures that will have a minimal effect on trade will not be subject to reduction. Such measures include disaster relief, research, disease control and infrastructure.

Export subsidies

Countries are required to reduce the value of direct export subsidies to 36 per cent below the 1986–90 base period with a reduction in the quantity of subsidised exports by 21 per cent. These cuts in export subsidies, which are to occur over six years, will relieve a major source of downward pressure on international prices.

Border protection

The market access provisions include an average cut in all agricultural tariffs of 36 per cent from their 1986–88 base level, over the six year implementation period, with the minimum cut being 15 per cent. Importantly, all existing non-tariff barriers, such as quantitative restrictions, will be converted to tariff equivalents. All tariffs are to be bound which means they cannot be raised without appealing to GATT or without compensation being paid to exporting countries. In a developing country's situation the corresponding cuts are 24 per cent and 10 per cent respectively, with an implementation period of 10 years. For the least developed countries no tariff cut is required. Under the Agricultural Agreement, Australia must meet the three commitments. Australia has already met the required reductions of domestic support with relatively low levels already existing. The main area where export subsidy commitments are required is for dairy products, with reductions occurring over the implementation period. Regarding market access, the 1988 and 1991 tariff cuts meet the necessary reductions on agricultural tariffs for nearly all products. Quotas on imports of cheese and unmanufactured tobacco are to be replaced by tariff-based arrangements. For all but a few products, no further tariff cuts are required beyond those previously announced.

The new Agricultural Agreement resulting from the Uruguay Round has significant implications for Australian and world agricultural commodities. The estimated impacts of the Round on world prices are shown in table 1. Most of these figures are relatively modest, except for dairy products. With the implementation of the agreement taking place over six years, the full effects will not be realised until well into the next decade.

As indicated in table 2, Australian agriculture should benefit from the Uruguay Round with the gains estimated to be modest over the long term. The benefits to Australian agriculture from the world price increases will be improved further by greater domestic production in response to the higher prices.

TABLE 1. INCREASES IN WORLD PRICES RESULTING FROM THE IMPLEMENTATION OF THE URUGUAY ROUND AGREEMENT (per cent)

Beef (foot and mouth disease free)	6
Beef (foot and mouth disease affected)	1
Pork	7
Sheep meat	3
Poultry meat	2
Butter	4
Cheese	20
Milk powders	16
Wheat	8
Corn	6
Other coarse grains	5
Rice	8
Soybeans	1
Other oilseeds	6
Cotton	2
Sugar	1

Source: Andrews, N., Roberts, I. and Hester, S.

TABLE 2. INCREASES IN ANNUAL VALUE OF AUSTRALIAN PRODUCTION AND EXPORTS(a)

	Increase in volume (%)	*Increase in value ($m)*
Production		
Beef	3	340
Sheep meat	(b)	10
Dairy products	1	320
Wheat	5	340
Coarse grains	1	70
Rice	3	15
Sugar	(b)	5
Total		**1,110**
Exports		
Beef	7	330
Sheep meat	(b)	(b)
Dairy products	10	210
Wheat	7	320
Coarse grains	3	50
Rice	5	30
Sugar	(b)	10
Total		**950**

(a) The changes in the value of the Australian production and exports were estimated by applying the percentage change in world prices as a result of the Uruguay Round and the percentage change in the volume of production and exports as estimated from the model to the actual average value of Australian production and exports over the period 1988–89 to 1992–93. (b) Less than 0.5 per cent in absolute value.

Source: Andrews, N., Roberts, I. and Hester, S.

Meat

Access was the critical issue for beef within the Uruguay Round. For the Australian economy there are two principal outcomes. The first is an undertaking given by the European Union (EU) to continue to observe the Andriessen Assurance. This means the EU has maintained its agreement to refrain from exporting subsidised beef to key Asian and Pacific markets, which are of major importance to Australian beef exporters. The second main outcome is that there will no longer be a meat Import Law in the United States (US) for beef. This will be replaced by a tariff quota which is set significantly above recent access levels. Furthermore, increased access to beef markets in Korea and Japan will benefit the beef trade. The overall outlook for beef is positive and provides greater opportunity for Australia in accessing export markets.

Grain

Grain growers will benefit from the agreement, with improvements in world economic growth and expanded trade. Considerable reductions will occur in EU export subsidy programs for wheat. Also, the market distorting effects of the US Export Enhancement Program (EEP) will be reduced, so the US will export less subsidised wheat in terms of volume and value. The key outcome in the grain area is the permanent opening up of the Korean and Japanese rice markets. Also, there will be improved access for wheat and barley to Japan and Korea. However, the extent to which Australia will benefit will depend on how the US and EU might change their support arrangements within the framework of the agreement.

Dairy

The key result for the dairy industry will be the reduction in export subsidies. Both the US and EU will be cutting sales of subsidised skim milk powder while the EU will also cut subsidised cheese. There will be access into the US, EU and Asian markets with quotas being increased and tariffs being reduced. This will allow for a more predictable environment for Australia to trade in. However, while this appears good for Australia, there needs to be restructuring of the industry's market support system. Under present arrangements, Australian exports are classified as subsidies under the terms of the agreement and the volume of subsidised exports will have to be reduced for Australia to comply with the limits on volumes of subsidised exports.

Sugar

The main benefit for Australian sugar will be increased demand arising from greater access opportunities for processed products. There will also be some benefit from tariff reduction in Japan and Korea and reductions in EU export subsidies.

Wool

The Uruguay Round of GATT will significantly benefit Australian wool growers. There will be greater access to wool importing countries such as the US, India and China due to reductions in barriers and the phase-out of the Multi-Fibre Agreement. The Australian wool industry will also benefit from the liberalisation of trade in textiles and clothing, although this is not part of the Agricultural Agreement. Indirectly, improved grain and beef prices could cause farmers to produce more of these products and less wool, and decreased wool production should lead to increased wool prices.

Review

The Uruguay Round has delivered a fundamental change to world trade, particularly to agriculture. There is considerable opportunity for Australia and the rest of the world for the benefits to be realised. However, these benefits will not occur overnight as the implementation will be staged over six years. The outcome will not be fully realised until well into the next decade. The actual impact of the Round will depend on the exact way in which individual countries implement the agreement. It will be important for Australian rural industries to think forward as trade will be fairer and freer, but very competitive.

Bibliography

Andrews, N., Roberts, I. and Hester, S. *The Uruguay Round outcome: implications for agricultural and resource commodities Outlook 94 — World Commodity Markets and Trade,* Australian Bureau of Agricultural and Resource Economics

Thomson, G., *GATT: Impact of the final Uruguay Round Agreement for Australian agriculture and resource based industries Outlook 94 — World Commodity Markets and Trade,* Australian Bureau of Agricultural and Resource Economics

FINANCIAL STATISTICS OF FARM BUSINESSES

Estimates of selected financial aggregates of farm businesses are shown in the following tables. The estimates have been derived from the Agricultural Finance Survey (AFS).

15.5 ESTIMATES OF SELECTED FINANCIAL AGGREGATES OF FARM BUSINESSES(a)
($ million)

	1988–89	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Sales from crops	6,991.2	7,795.2	7,196.7	7,718.3	8,572.8
Sales from livestock	5,399.3	5,519.1	4,864.5	4,905.3	5,430.9
Sales from livestock products	6,715.7	7,157.9	5,853.6	4,753.6	4,768.2
Turnover	20,272.3	21,823.5	19,190.6	18,576.0	20,043.2
Purchases and selected expenses	10,672.6	11,447.8	10,892.5	10,726.3	11,381.5
Value added(b)	11,690.3	10,237.4	7,347.7	8,039.5	9,085.0
Adjusted value added(b)	10,500.3	8,924.4	6,023.1	6,729.1	7,740.9
Gross operating surplus(b)	8,643.3	6,897.0	4,133.6	4,876.5	5,828.0
Interest paid	1,681.1	2,227.5	2,066.0	1,820.4	1,497.7
Cash operating surplus(c)	5,227.3	5,330.6	3,412.8	3,095.0	4,080.7
Total net capital expenditure	1,849.1	1,906.3	1,216.6	1,420.8	1,659.6
Gross indebtedness	12,948.0	14,518.0	14,140.6	14,819.2	15,377.8

(a) Statistics for 1991–92 are not strictly comparable with previous periods. For 1988–89, 1989–90 and 1990–91, the population for the Agricultural Finance Survey consisted of all farm businesses classified to an industry class within subdivision 01 Agriculture of the Australian Standard Industrial Classification and with an estimated value of agricultural operations of $20,000 or more. This was increased to $22,500 in 1991–92. (b) Includes an estimate for the value of the increase in livestock. (c) Excludes an estimate for the value of the increase in livestock.

Source: Agricultural Industries, Financial Statistics, Australia (7507.0).

15.6 ESTIMATES OF SELECTED FINANCIAL AGGREGATES OF FARM BUSINESSES, 1992–93
($ million)

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.(a)*
Sales from crops	2,199.5	1,412.8	2,090.5	971.4	1,557.7	193.8	8,572.8
Sales from livestock	1,379.4	918.5	1,678.3	395.9	462.8	125.1	5,430.9
Sales from livestock products	1,246.7	1,721.9	471.4	403.6	690.8	172.8	4,768.2
Turnover	5,156.6	4,296.7	4,595.3	1,910.7	2,875.8	525.8	20,043.2
Purchases and selected expenses	3,033.8	2,294.3	2,598.2	1,054.5	1,710.5	304.7	11,381.5
Value added(b)	2,248.8	2,247.9	1,942.1	962.7	1,188.9	201.8	9,085.0
Adjusted value added(b)	1,862.0	1,966.8	1,661.6	822.6	1,006.4	168.6	7,740.9
Gross operating surplus(b)	1,305.3	1,593.1	1,237.5	643.8	801.2	103.0	5,828.0
Interest paid	422.8	316.1	340.8	147.3	190.8	45.5	1,497.7
Cash operating surplus(c)	811.3	1,045.4	987.1	425.8	618.5	77.1	4,080.7
Total net capital expenditure	383.8	364.3	358.2	177.2	279.3	41.6	1,659.6
Gross indebtedness	4,355.1	2,769.5	3,606.9	1,486.0	2,192.5	472.2	15,377.8

(a) Includes Northern Territory and estimates for multi-State enterprises. (b) Includes an estimate for the value of the increase in livestock. (c) Excludes an estimate for the value of the increase in livestock.
Source: Agricultural Industries, Financial Statistics, Australia (7507.0).

Using turnover as a guide to the size of farm business activity, in 1992-93 farm businesses with an annual turnover of $300,000 and over (13.3% of total farm businesses) accounted for almost half of farm business turnover.

15.7 FARM BUSINESSES BY SIZE OF TURNOVER

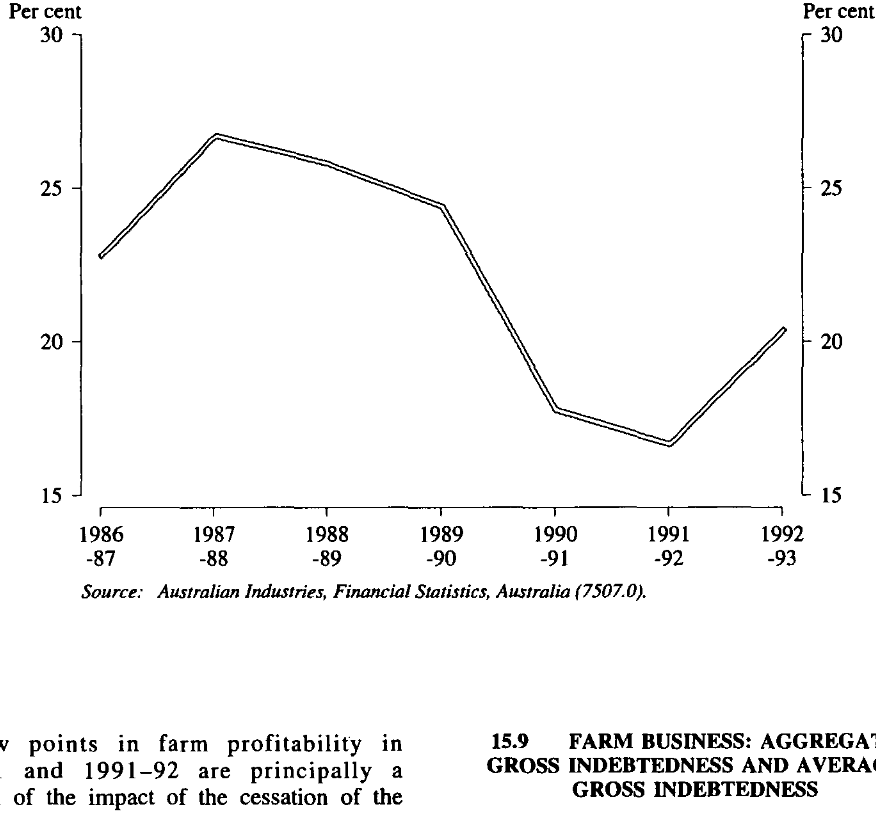
	Number of farm businesses ('000)			*Total turnover ($m)*		
Size of turnover	*1990–91*	*1991–92*	*1992–93*	*1990–91*	*1991–92*	*1992–93*
Less than $50,000	26.6	26.3	23.7	818.4	758.7	761.9
$50,000 to $99,999	26.5	29.7	25.5	2,111.8	2,095.9	1,915.6
$100,000 to $149,999	19.6	18.5	18.3	2,520.6	2,267.3	2,281.1
$150,000 to $199,999	11.1	11.2	10.5	1,975.1	1,965.6	1,823.7
$200,000 to $249,999	7.3	6.8	8.0	1,679.2	1,536.0	1,787.6
$250,000 to $299,999	3.8	5.1	4.8	1,095.1	1,417.8	1,297.6
$300,000 and over	13.3	12.0	15.2	8,990.3	8,534.8	10,175.8
Total	**108.3**	**109.6**	**106.1**	**19,190.6**	**18,576.0**	**20,043.2**

Source: Agricultural Industries, Financial Statistics, Australia (7507.0).

In 1992–93, farm businesses making less than $50,000 in turnover were, in aggregate, in a cash operating loss situation. Average cash operating loss per farm business for these farm businesses in 1992–93 was under $1,000. The previous year farm businesses with turnover less than $50,000 had experienced an average cash operating loss of $3,100. Farm businesses making $300,000 or more in turnover had an average cash operating surplus of $149,500 in 1992–93 compared with an average of $123,000 in 1991–92.

In 1992–93, farm business profit margin, the ratio of cash operating surplus to turnover, was 21.3 per cent. This represented an improvement from 1991–92 when the farm business profit margin fell to only 16.7 per cent. Profit margins over recent years are illustrated in the following graph.

15.8 PROFIT MARGINS: AUSTRALIAN FARM BUSINESSES



Source: Australian Industries, Financial Statistics, Australia (7507.0).

The low points in farm profitability in 1990–91 and 1991–92 are principally a reflection of the impact of the cessation of the wool floor price support scheme.

Gross indebtedness

Aggregate farm gross indebtedness has increased from an estimated $11,482.9 million at the end of 1986–87 to an estimated $15,377.8 million at the end of 1992–93. Average gross indebtedness per farm business at the end of 1992–93 was $145,000. At the end of 1986–87, 89,965 farm businesses were actually in debt with average indebtedness of $127,637. At the end of 1992–93, the number of farm businesses in debt had decreased to 79,638 whereas the average indebtedness of these businesses had increased to $193,096.

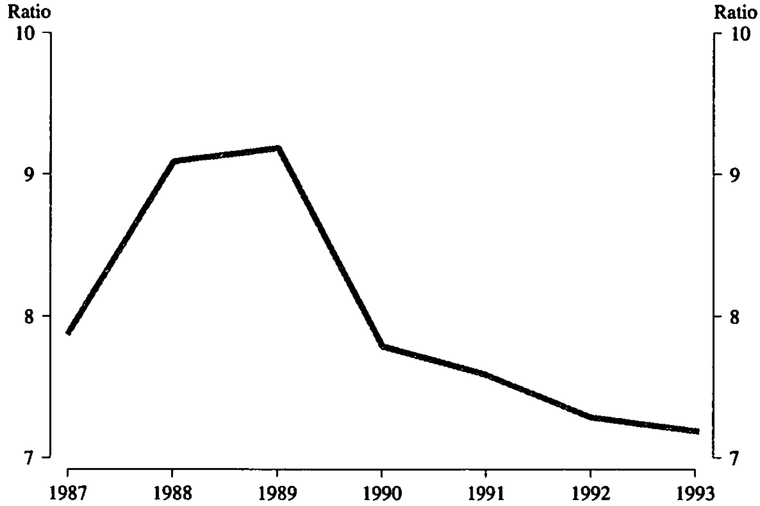
15.9 FARM BUSINESS: AGGREGATE GROSS INDEBTEDNESS AND AVERAGE GROSS INDEBTEDNESS

30 June	*Aggregate gross indebtedness ($m)*	*Average gross indebtedness per farm business ($)*
1987	11,482.9	96,700
1988	11,425.6	99,900
1989	12,948.0	114,400
1990	14,518.0	126,400
1991	14,140.6	130,600
1992	14,819.2	135,200
1993	15,377.8	145,000

Source: Australian Industries, Financial Statistics, Australia (7507.0).

At the end of 1992–93, the estimated debt to asset ratio was 7.3, that is, for every dollar of debt there was 7.30 dollars of asset value.

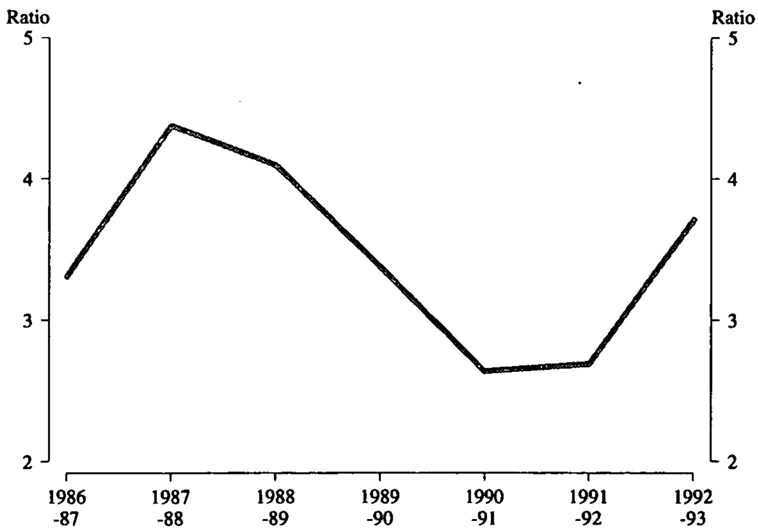
15.10 DEBT TO ASSET RATIO: AUSTRALIAN FARM BUSINESSES, 30 JUNE



Source: Australian Industries, Financial Statistics, Australia (7507.0).

The interest coverage ratio (the number of times farm businesses can pay the interest bill out of cash operating surplus before deducting interest paid) is an indicator of farm business economic health. In 1992–93, the interest coverage ratio was 3.8. This represented a considerable improvement from 1991–92, when the ratio had been 2.7.

15.11 AUSTRALIAN FARM BUSINESSES: INTEREST COVERAGE RATIO



Source: Australian Industries, Financial Statistics, Australia (7507.0).

Profile of the rural population

Demographic characteristics

Growth in the rural population in Australia from the mid-1970s to the early 1990s resulted in a reversal of the long-term trend of a declining rural population (that is, all persons living in small towns or settlements with a population of less than 1,000). Although the growth was only modest (average of 1.9% per year), it saw the rural population grow to just over 2.5 million in 1991. This represented 15 per cent of the total population, a proportion which is low compared to most other countries. Since World War II, this number has been influenced by a number of factors, beginning with the implementation of soldier resettlement schemes following the War, natural population growth rate and a mid-1970s trend, which included commuters settling on the outer fringes of major cities and city people, particularly retirees, moving to coastal localities.

Three in four rural Australians live in New South Wales, Victoria or Queensland, due to these States' large regions amenable to agricultural development. In comparison to the urban population, rural people are highly represented in the Northern Territory (32%), Tasmania (27%), and Queensland (21%). The Northern Territory has experienced the greatest growth in rural population, increasing by 29 per cent between 1986 and 1991, while Queesland's rural community increased 14 per cent.

Historically, men have outnumbered women by substantial proportions in rural areas. However, since a ratio of 121 men for every 100 women recorded at the 1954 Census, the proportion has steadily declined to a ratio in 1991 of 109 men per 100 women. During this same period there were improvements in the standard of living in rural areas, changes in the role of women in the labour force and decreasing reliance on labour as a result of increased mechanisation.

On average, the male population in rural areas was slightly older than the male population in urban areas with a median age of 32 years compared to 31 for urban areas. The median age of rural women was 32 years, slightly younger than women in urban areas whose median age was 33 years. There were high proportions of children (aged 0 to 16) and 'middle aged' adults (aged 30 to 55), indicators of a relatively high proportion of 'traditional' families in rural areas. There were also marked differences in the number of younger adults in rural and urban areas. People in their late teens and early twenties (the ages typically associated with leaving school and entering the work force or tertiary education) were under represented in rural areas. This was more evident in the number of rural women, with the ratio of males being substantially higher in the age group 15 to 24 than for any other age group.

Married people represented 63 per cent of the rural adult population compared to 55 per cent of the urban adult population, while the percentage of divorced, separated and widowed people, especially women, was lower in rural areas.

There were 265,000 Aboriginal and Torres Strait Islander people counted in the 1991 Census, with 86,000 (32%) living in rural areas.

Education, employment and income

In 1991, 42 per cent of persons in rural areas, aged 15 and over, had left school before they were 16 (including those who did not go to school). This compares to only 36 per cent of persons, living in urban areas, in the same category. In rural areas, women (aged 15 and over) were more likely than men to have stayed at school until they were at least 17 years of age, while the reverse was true in urban areas. Overall, 4.7 per cent of persons in rural areas, 15 and over, were still at school compared to 4.9 per cent of people, 15 and over, in urban areas.

Tertiary students who lived in rural areas accounted for only 11 per cent of students at TAFE colleges and seven per cent of students undertaking courses at colleges of advanced education or universities. This is a reflection of the small number of tertiary institutions, particularly universities in or readily accessible from rural areas. The proportion of men in rural areas with post-school qualifications (27%) was less than that of men in urban areas (32%). In comparison, there was little difference between women in rural and urban areas with similar proportions having post-school qualifications.

In 1991, there were 1.2 million people in the labour force in rural areas, representing 15 per cent of Australia's total labour force. The Agriculture, forestry, fishing and hunting industry employed 24 per cent of employed persons in the rural area, while Community Services (predominantly health and education) employed 15 per cent and the Wholesale/Retail sector, 14 per cent. The labour force participation rate of men in rural areas was 75 per cent compared to 53 per cent for women. Between 1981 and 1991, the rural labour force participation rate fell by five percentage points for men and increased three percentage points for women. While urban men's labour force participation rate fell by five percentage points, urban women's participation rate increased by nearly six percentage points.

The median annual income range of persons aged 15 years or more in rural and urban areas was the same at $12,001-$16,000. However, the median annual income of rural families ($25,001-$30,000) was lower than that of urban families ($35,001-$40,000). Overall, employed people in rural areas were more likely to have been working in the private sector, to have been self-employed, to have worked longer hours and to have worked at home, than employed urban people.

The cost of housing was lower in rural areas with the median weekly rent being in the range of $48-$77 compared to the urban median range of $108-$137. The median monthly housing loan repayment for rural households was in the range $476-$550 compared to the urban median repayment range of $551-$625.

LAND USED FOR AGRICULTURE

The total area of agricultural establishments in 1992–93 constituted 59.7 per cent of the Australian land area, the remainder being urban areas, State forests, mining leases and national parks etc., with an overwhelming proportion of unoccupied land (mainly desert) (table 15.12). The balance data in that table include large areas of arid or rugged land held under grazing licences but not always used for grazing, and also variable amounts of fallow land.

The area cropped represents 3.8 per cent of the area of agricultural establishments.

15.12 LAND UTILISATION IN AUSTRALIA
(million hectares)

	Area of			Total	
Year	*Crops(a)*	*Sown pastures and grasses*	*Balance(b)*	*Area of establishments*	*Percentage of Australian land area (768,284,000 hectares)*
1987–88	18.4	28.6	425.0	472.0	61.4
1988–89	17.5	30.2	419.2	466.9	60.8
1989–90	17.0	30.9	416.4	464.3	60.4
1990–91	17.4	28.3	417.1	462.8	60.2
1991–92	16.4	30.8	418.8	466.0	60.7
1992–93	17.3	29.0	413.8	460.1	59.9

(a) Excludes pastures and grasses harvested for hay and seed which have been included in 'sown pastures and grasses'. (b) Used for grazing, lying idle, fallow, etc.
Source: Summary of Crops, Australia (7330.0).

15.13 AREA OF ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY
(million hectares)

At 31 March	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*Aust. (incl. ACT)*
1988	61.5	13.1	152.5	60.0	113.5	1.9	69.6	472.0
1989	61.6	13.1	151.3	58.0	112.6	1.9	68.3	466.9
1990	62.0	13.1	152.3	57.5	110.9	1.9	66.6	464.3
1991	60.7	12.7	150.8	57.0	110.9	1.9	68.8	462.8
1992	60.4	12.4	150.0	56.9	115.7	1.8	68.7	466.0
1993	59.4	12.3	149.5	56.6	110.6	1.8	69.9	460.1

Source: Summary of Crops, Australia (7330.0).

CROPS

The following tables show the area of crops in the States and Territories of Australia since 1870–71, and a summary of the area, production and gross value of the principal crops in Australia in recent years.

15.14 AREA OF CROPS(a)
('000 hectares)

Year	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
1870–71	156	280	21	235	22	64	—	—	868
1880–81	245	627	46	846	26	57	—	—	1,846
1890–91	345	822	91	847	28	64	—		2,197
1900–01	990	1,260	185	959	81	91	—	—	3,567
1910–11	1,370	1,599	270	1,112	346	116	—	—	4,813
1920–21	1,807	1,817	316	1,308	730	120	—	1	6,099
1930–31	2,756	2,718	463	2,196	1,939	108	1	2	10,184
1940–41	2,580	1,808	702	1,722	1,630	103	—	2	8,546
1949–50	2,295	1,881	832	1,518	1,780	114	—	4	8,424
1954–55	2,183	1,904	1,049	1,711	2,069	122	—	2	9,040
1959–60	2,888	1,949	1,184	1,780	2,628	130	1	3	10,564
1964–65	4,182	2,621	1,605	2,414	3,037	163	2	4	14,028
1969–70	4,999	2,212	2,208	2,290	3,912	98	6	2	15,728
1971–72	4,186	1,925	2,017	2,278	3,751	67	7	1	14,231
1972–73	4,329	1,943	1,963	2,122	3,814	80	12	1	14,265
1973–74	4,628	1,981	1,786	2,451	4,133	74	6	1	15,060
1974–75	4,089	1,772	1,898	2,257	3,754	67	7	1	13,845
1975–76	4,285	1,851	2,010	2,116	4,208	60	8	1	14,539
1976–77	4,520	1,943	2,026	2,036	4,417	65	2	1	15,010
1977–78	4,984	2,163	2,107	2,564	4,910	70	1	1	16,800
1978–79	5,020	2,209	2,307	2,827	4,993	80	2	1	17,438
1979–80	5,243	2,243	2,334	2,771	5,281	79	2	1	17,954
1980–81	5,208	2,180	2,481	2,772	5,547	84	1	1	18,273
1981–82	5,744	2,184	2,765	2,865	5,963	90	2	1	19,613
1982–83	5,200	2,234	2,648	2,856	6,380	98	3	1	19,420
1983–84	6,566	2,655	2,998	3,108	6,526	101	5	1	21,961
1984–85	5,789	2,569	3,047	2,902	6,723	99	6	1	21,136
1985–86	5,990	2,528	3,231	3,039	5,970	88	7	1	20,853
1986–87	5,325	2,317	3,036	3,066	5,930	78	12	—	19,764
1987–88	4,908	2,159	2,870	2,990	5,334	84	13	1	18,359
1988–89	4,560	1,990	2,842	2,961	5,082	82	11	1	17,527
1989–90	4,077	1,989	2,580	3,042	5,174	83	9	—	16,953

For footnotes *see* end of table.

15.14 AREA OF CROPS(a) — *continued*
('000 hectares)

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1990–91	4,073	2,063	2,872	2,933	5,359	75	6	—	17,382
1991–92	3,846	2,039	2,302	2,920	5,216	76	5	—	16,404
1992–93	3,906	2,258	2,316	3,073	5,668	73	4	1	17,297

(a) The classification of crops was revised in 1971–72 and adjustments made to statistics back to 1967–68. After 1966–67 lucerne for green feed, hay and seed, and pasture cut for hay and harvested for seed or green feed are excluded.

NOTE: From 1970–71 to 1980–81 figures related to area 'used for' crops, that is, an area used for more than one purpose during the year was counted only once. From 1981–82, an area double cropped has been counted separately each time used.

Source: Summary of Crops, Australia (7330.0).

15.15 SELECTED CROPS: AREA, PRODUCTION AND GROSS VALUE

	1990–91			1991–92			1992–93		
	Area ('000 ha)	Production ('000 tonnes)	Gross value ($m)	Area ('000 ha)	Production ('000 tonnes)	Gross value ($m)	Area ('000 ha)	Production ('000 tonnes)	Gross value ($m)
Cereals for grain									
Barley	2,556	4,108	568	2,744	4,530	681	2,947	5,397	792.7
Grain sorghum	378	751	99	569	1,447	201	427	548	85.6
Maize	49	194	32	52	269	46	45	199	40.5
Oats	1,044	1,530	147	1,160	1,690	178	1,149	1,937	205.5
Rice	89	740	138	114	957	183	106	858	163.7
Wheat	9,218	15,066	1,988	7,183	10,557	2,097	8,275	14,739	2,669.6
Legumes for grain	1,388	1,363	286	1,762	1,899	395	1,797	2,041	441.6
Crops for hay									
Oats	252	(a)829	89	327	(a)1,155	n.a.	247	981	96.4
Wheat	19	52	4	30	64	n.a.	21	60	5.9
Crops for green feed, silage									
Barley	n.a.								
Forage sorghum	154								
Oats	329	n.a.	n.a.	r759	n.a.	n.a.	712	n.a.	n.a.
Wheat	n.a.								
Sugar cane cut for crushing	325	24,370	748	329	20,640	603	328	27,958	797.7
Tobacco	5	13	78	5	11	71	4	11	70.0
Cotton	279	1,129	898	312	1,278	879	287	1,000	706.0
Peanuts (in shell)	18	27	30	21	39	41	23	32	32.8
Soybean	40	62	22	30	63	22	30	49	18.1
Canola	73	98	n.a.	151	170	n.a.	107	178	56.6
Sunflower	166	152	42	79	84	28	60	50	16.1
Fruit (excl. grapes)	113	n.a.	1,060	117	n.a.	1,259	123	n.a.	1,380.3
Fruit									
Orchard	95	n.a.	733	99	n.a.	n.a.			
Oranges	n.a.	(b)453	165	n.a.	(b)470	203	n.a.	616	212.1
Apples	n.a.	289	183	n.a.	316	269	n.a.	328	263.4
Pears	n.a.	160	84	n.a.	180	122	n.a.	168	98.5
Peaches	n.a.	58	44	n.a.	62	49	n.a.	63	49.7
Bananas	10	165	235	10	177	270	11	289	299.8
Pineapples	6	126	37	6	133	39	6	142	41.8
Grapes	60	851	362	61	986	433	63	792	377.6
Vegetables	121	n.a.	1,284	117	n.a.	1,242	118	2,189	1,226.6
Potatoes	(c)40	(c)1,372	(c)377	(c)40	(c)1,150	(c)339	39	1,129	314.4
Total all crops (excl. pastures and grasses)	**17,382**	**n.a.**	**8,492**	**16,404**	**n.a.**	**9,267**	**17,297**	**n.a.**	**9,998.6**

(a) Includes all cereals not collected separately. (b) Excludes Queensland. (c) Includes potatoes for seed.

Source: Summary of Crops, Australia (7330.0); Value of Agricultural Commodities Produced, Australia (7503.0); Value of Selected Agricultural Commodities Produced, Australia (7502.0); and Viticulture, Australia (7310.0).

The characteristics of the main crops are outlined below.

Cereal grains

In Australia, cereals are conveniently divided into autumn–winter–spring growing ('winter' cereals) and spring–summer–autumn growing ('summer' cereals). Winter cereals such as wheat, oats, barley and rye are usually grown in rotation with some form of pasture such as grass, subterranean clover, medics or lucerne. In recent years, alternative winter crops such as canola, field peas and lupins have been introduced to cereal rotation in areas where they had not previously been grown. Rice, maize and sorghum are summer cereals with the latter being grown in association with winter cereals in some areas. In northern Queensland and Western Australia there are two rice growing seasons.

Wheat is Australia's most important crop. It is produced in all States but primarily on the mainland in a narrow crescent known as the wheat-belt. Inland of the Great Dividing Range, the wheat-belt stretches in a curve from central Queensland through New South Wales, Victoria and southern South Australia. In Western Australia, the wheat-belt continues around the south-west of the State and some way north up the western side of the continent.

Following a very low level of production in 1991–92, wheat production in 1992–93 increased by almost 40 per cent to 14.7 million tonnes. Excellent seasonal conditions in most wheat growing regions resulted in very high yields compared with 1991–92.

15.16 WHEAT: AREA, PRODUCTION AND RECEIVALS

	Area(a)		*Production(a)*		*Australian Wheat Board*
Season	*For grain ('000 ha)*	*All purposes ('000 ha)*	*Grain ('000 tonnes)*	*Gross value ($m)*	*receivals ('000 tonnes)*
1987–88	9,005	9,141	12,287	2,015.7	10,740
1988–89	8,827	8,932	13,935	2,975.9	12,954
1989–90	9,004	9,093	14,214	2,792.0	13,057
1990–91	9,218	(b)9,237	15,066	1,988.1	13,047
1991–92	7,183	(b)7,213	10,557	2,097.2	6,769
1992–93	8,275	(b)8,296	14,739	2,669.6	12,173

(a) Area and production data relate to the year ending 31 March. (b) Excludes wheat for hay for all States, except New South Wales.
Source: Summary of Crops, Australia (7330.0); Value of Agricultural Commodities Produced, Australia (7503.0); and Value of Selected Agricultural Commodities Produced, Australia (7502.0).

15.17 WHEAT FOR GRAIN: AREA AND PRODUCTION

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
			AREA ('000 hectares)				
1987–88	2,464	1,026	646	1,556	3,312	1	9,005
1988–89	2,309	931	768	1,520	3,297	1	8,827
1989–90	2,123	952	894	1,557	3,476	1	9,004
1990–91	2,166	911	1,060	1,448	3,632	1	9,218
1991–92	1,499	664	492	1,297	3,230	1	7,183
1992–93	1,694	821	669	1,419	3,669	1	8,275
			PRODUCTION ('000 tonnes)				
1987–88	3,997	1,882	718	1,803	3,882	4	12,287
1988–89	4,105	1,691	1,550	1,361	5,225	2	13,935
1989–90	3,423	1,961	1,420	2,607	4,800	3	14,214
1990–91	4,128	1,493	1,973	2,021	5,449	2	15,066
1991–92	2,183	1,150	344	2,141	4,736	3	10,557
1992–93	3,583	2,015	735	2,421	5,979	5	14,739

Source: Summary of Crops, Australia (7330.0).

Oats are traditionally a cereal of moist temperate regions. However, improved varieties and management practices have enabled oats to be grown over a wide range of soil and climatic conditions. They have a high feed value and produce a greater bulk of growth than other winter cereals; they need less cultivation and respond well to superphosphate and nitrogen. Oats have two main uses: as a grain crop, or as a fodder crop, (following sowing or fallow or rough sowing into stubble or clover pastures). Fodder crops can either be grazed and then harvested for grain after removal of livestock or else mown and baled or cut for chaff.

Oats production in 1992–93 increased by 14.6 per cent despite a 0.9 per cent fall in plantings, reflecting the excellent seasonal conditions which prevailed during the season.

15.18 OATS FOR GRAIN: AREA AND PRODUCTION

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
AREA ('000 hectares)							
1987–88	526	216	19	132	373	10	1,275
1988–89	548	189	18	156	389	10	1,309
1989–90	365	189	15	172	340	8	1,089
1990–91	374	177	24	135	324	9	1,044
1991–92	457	183	15	129	367	9	1,160
1992–93	448	223	15	123	332	9	1,149
PRODUCTION ('000 tonnes)							
1987–88	707	325	14	135	502	16	1,698
1988–89	780	276	15	131	618	18	1,838
1989–90	504	330	14	250	529	13	1,640
1990–91	538	301	27	148	497	19	1,530
1991–92	579	300	5	172	614	19	1,690
1992–93	761	404	10	165	578	19	1,937

Source: Summary of Crops, Australia (7330.0).

Barley. This cereal contains two main groups of varieties, 2-row and 6-row. The former is generally, but not exclusively, preferred for malting purposes. Barley is grown principally as a grain crop although in some areas it is used as a fodder crop for grazing, with grain being subsequently harvested if conditions are suitable. It is often grown as a rotation crop with wheat, oats and pasture. When sown for fodder, sowing may take place either early or late in the season, as it has a short growing period. It may therefore provide grazing or fodder supplies when other sources are not available. Barley grain may be crushed to meal for stock or sold for malting.

Barley continues to grow in importance as a cereal crop. Production in 1992–93 of 5.4 million tonnes is 58 per cent higher than the 1987–88 level and plantings have increased steadily in recent years.

15.19 BARLEY FOR GRAIN: AREA AND PRODUCTION

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
AREA ('000 hectares)							
1987–88	465	366	169	876	461	8	2,346
1988–89	413	350	200	837	383	8	2,190
1989–90	413	389	179	900	421	8	2,310
1990–91	463	463	177	945	498	10	2,556
1991–92	517	534	128	999	554	11	2,744
1992–93	560	551	189	1,023	611	12	2,947

... continued

15.19 BARLEY FOR GRAIN: AREA AND PRODUCTION — *continued*

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
			PRODUCTION ('000 tonnes)				
1987–88	744	529	244	1,261	617	22	3,417
1988–89	712	545	374	1,036	552	22	3,242
1989–90	656	696	321	1,724	628	19	4,044
1990–91	822	651	361	1,506	742	26	4,108
1991–92	749	898	70	1,882	900	32	4,530
1992–93	1,044	1,116	285	1,855	1,061	35	5,397

Source: Summary of Crops, Australia (7330.0).

Grain sorghum. The sorghums are summer growing crops which are used in three ways: grain sorghum for grain; sweet or fodder sorghum, sudan grass and, more recently, columbus grass for silage, green feed and grazing; and broom millet for brooms and brushware.

Grain sorghum has been grown extensively only in the last two decades. Rapid increases in production have resulted in a substantial increase in exports over this period. The grain is used primarily as stockfeed and is an important source for supplementing other coarse grains for this purpose.

Grain sorghum production decreased significantly in 1992–93. Production in Queensland, the dominant State, decreased by almost 70 per cent as a result of drought conditions which prevailed during the year. Overall, production declined by 62 per cent.

15.20 GRAIN SORGHUM FOR GRAIN: AREA AND PRODUCTION

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.(a)*
			AREA ('000 hectares)				
1987–88	175	—	565	—	—	—	745
1988–89	152	—	468	—	—	—	625
1989–90	138	—	238	—	—	—	380
1990–91	84	—	291	(b)	1	(b)	378
1991–92	147	—	420	(b)	—	(b)	569
1992–93	118	—	308	—	—	—	427
			PRODUCTION ('000 tonnes)				
1987–88	412	1	1,213	—	—	—	1,633
1988–89	301	1	934	—	1	—	1,244
1989–90	359	1	578	—	1	—	946
1990–91	187	1	558	(b)	2	(b)	751
1991–92	398	—	1,045	(b)	—	(b)	1,447
1992–93	229	—	315	—	2	—	548

(a) Includes the Northern Territory. (b) Not collected.
Source: Summary of Crops, Australia (7330.0).

Maize. Like sorghum, maize is a summer cereal demanding specific soil and climatic conditions. Maize for grain is almost entirely confined to the south-east regions and the Atherton Tablelands of Queensland; and the north coast, northern slopes and tablelands and the Murrumbidgee Irrigation Area in New South Wales. Small amounts are grown in all States, except South Australia, for green feed and silage, particularly in association with the dairy industry.

Maize production in 1992-93 suffered as a result of drought conditions in Queensland. A 47 per cent fall in that State from 21 per cent less plantings saw production for Australia fall to 199 thousand tonnes, 26 per cent less than in 1991-92.

15.21 MAIZE FOR GRAIN: AREA AND PRODUCTION

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
			AREA ('000 hectares)				
1987–88	15	1	37	—	1	—	56
1988–89	14	—	36	—	1	—	52
1989–90	17	—	34	—	1	—	52
1990–91	18	—	29	(a)	1	(a)	49
1991–92	17	—	34	(a)	1	(a)	52
1992–93	16	—	27	—	2	(a)	45
			PRODUCTION ('000 tonnes)				
1987–88	72	6	124	—	5	—	208
1988–89	78	1	132	—	4	—	217
1989–90	98	1	115	—	5	—	219
1990–91	91	2	95	(a)	5	(a)	194
1991–92	119	3	141	(a)	5	(a)	269
1992–93	108	3	75	—	13	(a)	199

(a) Not collected.
Source: Summary of Crops, Australia (7330.0).

Rice. In Australia, rice was first grown commercially in 1924–25 in the Murrumbidgee Irrigation Area, one of three irrigation areas in southern New South Wales where rice is now produced. About 96 per cent of Australia's rice is grown in New South Wales. The remainder is grown in the Burdekin River basin at Mareeba in northern Queensland and in the Adelaide River District in the Northern Territory.

15.22 RICE FOR GRAIN: AREA AND PRODUCTION

Season	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
			AREA ('000 hectares)				
1987–88	102	—	4	—	—	—	106
1988–89	94	—	3	—	—	—	97
1989–90	100	—	5	—	—	—	105
1990–91	85	(a)	4	(a)	(a)	(a)	89
1991–92	109	(a)	4	(a)	(a)	(a)	114
1992–93	105	(a)	2	(a)	(a)	(a)	106
			PRODUCTION ('000 tonnes)				
1987–88	721	—	19	—	—	—	740
1988–89	730	—	18	—	—	—	748
1989–90	816	—	30	—	—	—	846
1990–91	719	(a)	21	(a)	(a)	(a)	740
1991–92	929	(a)	28	(a)	(a)	(a)	957
1992–93	846	(a)	12	(a)	(a)	(a)	858

(a) Not collected.
Source: Summary of Crops, Australia (7330.0).

Vegetables

The area sown to vegetables reached a peak of over 200,000 hectares in 1945. It remained static at around 109,000 hectares from the mid-1970s to the mid-1980s, increased until the end of the decade but has levelled out in recent years. Yields from most vegetable crops have continued to increase due to variety breeding for increased yields, greater use of irrigation and better control of disease and insect pests.

In 1992–93, the two largest vegetable crops, potatoes and tomatoes, decreased in terms of both area planted and quantity produced. Other significant vegetable crops to fall in 1992–93 included onions which fell by 23.9 per cent and peas which fell by 4.7 per cent.

15.23 SELECTED VEGETABLES FOR HUMAN CONSUMPTION: AREA UNDER PRODUCTION

Year	*French and runner beans*	*Cabbages*	*Carrots*	*Cauliflowers*	*Onions*	*Green peas*	*Potatoes*	*Tomatoes*	*Other*	*Total vegetables*
				AREA ('000 hectares)						
1987–88	6.0	2.8	4.6	3.4	5.0	11.2	39.8	8.9	35.0	116.7
1988–89	6.9	2.2	4.8	3.5	5.3	11.9	37.6	9.1	37.7	119.0
1989–90	7.3	2.3	4.8	3.7	5.1	13.3	40.6	9.6	39.1	125.8
1990–91	6.4	2.3	4.3	3.8	5.7	10.8	39.8	10.1	37.5	120.7
1991–92	6.8	2.3	4.7	3.6	5.4	8.9	39.8	9.0	37.0	117.5
1992–93	6.7	2.1	4.9	4.0	4.4	9.2	(a)38.8	8.6	39.0	117.7

(a) Excludes potatoes for seed.
Source: Summary of Crops, Australia (7330.0).

15.24 PRODUCTION OF SELECTED VEGETABLES FOR HUMAN CONSUMPTION

						Green peas			
	French and runner beans	*Cabbages*	*Carrots*	*Cauliflowers*	*Onions*	*Processing (shelled weight)*	*Sold in pod (pod weight)*	*Potatoes*	*Tomatoes*
				PRODUCTION ('000 tonnes)					
1987–88	32.7	80.1	144.0	112.2	181.7	43.0	1.2	1,081.5	282.6
1988–89	35.5	87.8	148.7	79.6	196.3	46.0	1.1	1,048.0	318.6
1989–90	38.4	77.8	154.9	88.6	192.5	49.8	1.0	1,178.0	322.1
1990–91	29.9	76.8	152.1	90.3	222.3	40.9	1.0	1,136.2	364.1
1991–92	32.5	78.6	158.3	78.3	220.5	37.2	(a)0.9	1,150.1	330.5
1992–93	32.0	69.5	168.9	80.2	167.9	35.5	0.8	1,129.2	290.8

(a) Excludes potatoes for seed.
Source: Summary of Crops, Australia (7330.0).

Fruit

A wide variety of fruit is grown in Australia ranging from pineapples, mangoes and papaws in the tropics to pome, stone and berry fruits in the temperate regions.

The most important fruit crops in Australia are apples, oranges, bananas and grapes. However, some other fruit types have experienced considerable growth in recent years. These include mangoes, kiwi fruit and strawberries. The most significant crop in terms of gross value of production is bananas, marginally ahead of apples. The value of the banana crop has increased by 152.4 per cent since 1987–88.

15.25 SELECTED FRUIT STATISTICS

	Orchard fruit number of trees ('000)				Tropical and other fruits area (ha)			
Year	*Apples*	*Oranges*	*Pears(a)*	*Peaches*	*Bananas*	*Pineapples*	*Other fruit*	*Total area of fruit (ha)*
1987–88	6,555	6,873	1,779	1,867	9,195	6,269	2,024	166,100
1988–89	6,810	7,122	2,028	2,004	9,319	6,660	1,239	119,756
1989–90	7,023	7,187	2,201	2,035	9,092	6,461	1,427	121,785
1990–91	6,919	7,357	2,205	2,104	9,578	5,927	1,941	113,225
1991–92	7,206	7,536	2,183	2,123	9,913	5,745	2,531	116,702
1992–93	7,321	7,797	2,120	2,214	10,518	5,854	2,850	123,066

PRODUCTION ('000 tonnes)									
	Apples	*Apricots*	*Bananas*	*Cherries*	*Oranges*	*Peaches*	*Pears(a)*	*Pineapples*	*Plums and prunes*
1987–88	300.0	28.0	160.1	5.0	479.0	66.0	162.0	146.5	18.0
1988–89	323.0	27.9	195.8	4.0	399.2	51.9	142.1	154.4	19.9
1989–90	319.4	29.7	180.3	4.7	487.2	58.0	164.2	141.6	19.9
1990–91	288.7	25.2	165.1	5.4	453.3	57.9	159.6	126.0	19.6
1991–92	316.1	31.8	176.9	4.8	469.9	61.7	180.1	133.3	21.6
1992–93	327.8	29.5	213.9	5.0	616.5	62.6	168.4	142.4	25.0
GROSS VALUE OF PRODUCTION ($ million)									
1987–88	183.1	30.4	118.8	14.2	143.9	44.9	77.0	34.0	21.8
1988–89	235.6	27.8	134.8	14.0	177.0	42.4	63.9	43.2	26.7
1989–90	211.6	28.0	181.3	17.4	175.9	50.9	79.3	40.7	24.3
1990–91	182.6	23.6	235.2	19.7	164.6	44.0	83.6	37.3	26.3
1991–92	269.4	33.5	270.0	20.2	202.8	49.0	121.6	39.0	29.9
1992–93	263.4	30.6	299.8	19.2	212.1	49.7	98.5	41.8	37.5

(a) Includes Nashi.
Source: Summary of Crops, Australia (7330.0); Value of Agricultural Commodities Produced, Australia (7503.0); and Value of Selected Agricultural Commodities Produced, Australia (7502.0).

Grapes

Grapes are a temperate crop which require warm to hot summer conditions for ripening and predominantly winter rainfall. Freedom from late spring frosts is essential. They are grown for wine-making, drying and, to a lesser extent, for table use. Some of the better known wine producing areas are the Barossa, Clare, Riverland, Southern Districts and Coonawarra (South Australia); north-eastern Victoria and Great Western (Victoria); Hunter and Riverina (New South Wales); Sunraysia (New South Wales and Victoria); Swan Valley and Margaret River (Western Australia).

15.26 VITICULTURAL STATISTICS: AREA, PRODUCTION AND VALUE

	Area		Production: grapes used for(a)		Total(b)	
Year	*Bearing ('000 ha)*	*Total ('000 ha)*	*Winemaking ('000 tonnes fresh weight)*	*Drying ('000 tonnes fresh weight)*	*Quantity ('000 tonnes fresh weight)*	*Gross value ($m)*
1987–88	54	57	460	293	799	345.6
1988–89	54	57	563	248	859	427.3
1989–90	54	59	530	249	824	392.2
1990–91	54	60	487	317	851	362.0
1991–92	56	61	565	373	987	r433.0
1992–93	59	63	546	197	794	377.6

(a) Excludes Northern Territory and Australian Capital Territory. (b) Includes grapes used for table and other purposes.
Source: Summary of Crops, Australia (7330.0); Value of Agricultural Commodities Produced, Australia (7503.0); and Value of Selected Agricultural Commodities Produced, Australia, Preliminary (7502.0).

15.27 VITICULTURE: AREA AND PRODUCTION, BY VARIETY, 1993 SEASON(a)

	Area of vines at harvest			*Production of grapes used for*			
Variety	*Bearing*	*Not yet bearing*	*All vines*	*Wine-making*	*Drying*	*Other*	*Total*
	— hectares —			— tonnes (fresh weight) —			
Red grapes							
Cabernet Sauvignon	5,163	726	5,890	37,990	—	—	37,990
Currant (incl. Carina)	1,203	108	1,310	167	12,355	—	12,522
Grenache	1,911	21	1,932	19,222	—	—	19,222
Mataro	617	15	632	8,516	—	—	8,516
Pinot Noir	1,185	137	1,321	10,011	—	—	10,011
Shiraz	5,500	640	6,140	56,430	—	—	56,430
Other red grapes	786	158	944	5,330	141	4,341	9,813
Total red grapes	*19,818*	*2,155*	*21,974*	*157,213*	*12,674*	*15,582*	*185,469*
White grapes							
Chardonnay	4,984	1,123	6,107	55,311	—	—	55,311
Doradillo	644	1	645	13,125	—	—	13,125
Muscat Gordo Blanco	3,360	45	3,404	67,909	4,415	261	72,585
Palomino & Pedro Ximenes	780	1	782	10,830	—	—	10,830
Rhine Riesling	3,546	73	3,620	34,847	—	—	34,847
Semillon	2,904	162	3,066	39,759	—	—	39,759
Sultana	15,505	421	15,926	76,010	177,860	25,824	279,695
Waltham Cross	686	7	692	2,437	2,102	2,045	6,583
Other white grapes	561	121	682	5,249	15	1,904	7,169
Total white grapes	*38,652*	*2,185*	*40,837*	*388,610*	*184,417*	*34,244*	*607,271*
Total grapes	**58,470**	**4,341**	**62,811**	**545,823**	**197,091**	**49,825**	**792,740**

(a) Excludes Northern Territory and the Australian Capital Territory where varietal data is not collected.
Source: Viticulture, Australia (7310.0).

Selected other crops

Oilseeds. The oilseeds industry is a relatively young industry by Australian agricultural standards. The specialist oilseed crops grown in Australia are sunflower, soybeans, canola, safflower and linseed. Sunflower and soybeans are summer grown while the others are winter crops. In Australia, oilseeds are crushed for their oil, which is used for both edible and industrial purposes and protein meals for livestock feeds.

Oilseed crops are grown in all States but the largest producing regions are the grain growing areas of the eastern States.

15.28 OILSEEDS: AREA AND PRODUCTION

Season	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
			AREA ('000 hectares)				
1987–88	109	50	175	10	4	—	348
1988–89	103	46	189	8	3	—	349
1989–90	84	39	69	7	1	—	200
1990–91	134	23	135	7	2	—	302
1991–92	155	47	71	15	17	—	305
1992–93	119	37	50	14	12	—	232
			PRODUCTION ('000 tonnes)				
1987–88	116	48	201	12	4	—	381
1988–89	138	46	195	11	3	—	394
1989–90	119	38	84	7	2	—	251
1990–91	169	21	124	9	2	—	325
1991–92	191	44	78	19	16	—	348
1992–93	198	41	36	16	12	—	304

Source: Summary of Crops, Australia (7330.0).

Cotton is grown primarily for its fibre (lint). When the cotton is matured, seed cotton is taken to a gin where it is separated (ginned) into lint, seed and thrash. Lint is used for yarn while seed is further processed at an oil mill. There the short fibres (linters) remaining on the seed after ginning are removed. They are too short to make into cloth but are used for wadding, upholstery and paper. The seeds are then separated into kernels and hulls. Hulls are used for stock feed and as fertiliser, while kernels are crushed to extract oil. The remaining cake is ground into meal which is protein roughage used as stock feed.

Seed cotton production declined by 21.8 per cent in 1992–93, the first fall in production since 1982–83. Despite an accompanying fall in the gross value, cotton remains a significant crop, representing about seven per cent of the total value of all crops.

15.29 COTTON: AREA, PRODUCTION AND EXPORTS

	Seed cotton(a)					Raw cotton export	
Year	Area ('000 ha)	Quantity ('000 tonnes)	Gross value ($m)	Cotton-seed(b) ('000 tonnes)	Lint(b) ('000 tonnes)	Quantity ('000 tonnes)	Value f.o.b. ($m)
1987–88	245	762	421.6	435	281	176	353.0
1988–89	194	769	536.9	449	286	286	461.0
1989–90	240	792	639.5	493	305	291	539.0
1990–91	279	1,129	898.0	686	433	319	689.4
1991–92	312	1,278	878.6	724	502	458	944.2
1992–93	287	1,000	706.0	p528	p373	395	752.3

(a) Before ginning. (b) Estimated by the Australian Bureau of Agricultural and Resource Economics.
Source: Summary of Crops, Australia (7330.0) and Value of Agricultural Commodities Produced, Australia (7503.0).

Sugar cane is grown commercially in Australia along the east coast over a distance of some 2,100 kilometres in a number of discontinuous areas from Maclean in northern New South Wales to Mossman in Queensland. The geographical spread contributes to the overall reliability of the sugar cane crop and to Australia's record as a reliable sugar supplier.

Approximately 94 per cent of production occurs in Queensland, with some 75 per cent of the crop grown north of the Tropic of Capricorn in areas where rainfall is reliable and the warm, moist and sunny conditions are ideal for the growing of sugar cane. Farm sizes generally range between 20 and 70 hectares.

Following falls in each of the previous three years, sugar cane production rose in 1992–93 by 35.5 per cent to 28 million tonnes. Improved seasonal conditions saw the Queensland crop increase by 36.8 per cent despite a slight fall in the area planted.

15.30 SUGAR CANE: AREA, PRODUCTION AND YIELD

	New South Wales					Queensland				
	Sugar cane cut for crushing			Raw sugar(a)		Sugar cane cut for crushing			Raw sugar(a)	
Year	Area harvested ('000 ha)	Production (tonnes)	Yield ('000 t/ha)	Quantity (tonnes)	Yield ('000 t/ha)	Area harvested ('000 ha)	Production (tonnes)	Yield ('000 t/ha)	Quantity (tonnes)	Yield ('000 t/ha)
1987–88	16	1,632	60.4	195	7.2	291	23,200	64.4	3,483	9.7
1988–89	15	1,560	104.0	196	13.1	302	25,586	85.9	3,483	11.5
1989–90	15	1,388	92.5	179	11.9	307	25,552	83.2	3,618	11.8
1990–91	14	1,137	81.2	r161	r11.5	311	23,232	74.7	r3,354	r10.8
1991–92	15	1,416	94.4	r180	r12.0	314	19,225	61.2	r2,931	r9.3
1992–93	16	1,667	104.2	240	15.0	312	26,292	84.3	4,016	12.9

(a) In terms of 94 net titre.
Source: Summary of Crops, Australia (7330.0).

Fodder crops. Considerable areas of Australia are devoted to fodder crops which are utilised either for grazing (as green feed), or harvested and conserved as hay, ensilage, etc.

This development of fodder conservation as a means of supplementing pasture and natural sources of stockfeed is the result of the seasonal and comparatively unreliable nature of rainfall in Australian agricultural areas.

15.31 FODDER CROPS: AREA AND PRODUCTION

	Hay(a)			Green feed or silage(b)	
		Production			
Year	Area ('000 ha)	Quantity ('000 tonnes)	Gross value ($m)	Area ('000 ha)	Silage made ('000 tonnes)
1987–88	344	1,003	85.8	1,313	878
1988–89	323	1,080	106.8	1,152	825
1989–90	297	964	104.0	r1,053	723
1990–91	(c)336	(c)1,068	(c)112.3	(d)787	(d)574
1991–92	(c)450	(c)r1,480	(c)r159.0	(d)759	(d)687
1992–93	(c)324	(c)1,220	(c)116.9	(d)712	(d)883

(a) Principally oaten and wheaten hay. (b) Principally from oats, barley, wheat and forage sorghum. (c) Excludes wheat for hay for all States, except New South Wales. (d) Excludes oats for New South Wales, Victoria, Tasmania and the Northern Territory.
Source: Summary of Crops, Australia (7330.0).

15.32 FARM STOCKS OF CEREAL GRAINS, HAY AND SILAGE
('000 tonnes)

	Cereal grains				
At 31 March	*Barley*	*Oats*	*Wheat*	*Hay*	*Silage*
1988	693	1,366	962	4,972	757
1989	702	1,550	1,028	5,550	975
1990	655	1,610	954	5,687	991
1991	697	1,420	1,213	5,332	1,018
1992	868	1,378	1,035	5,394	1,014
1993	825	1,582	1,110	5,714	1,292

Source: Summary of Crops, Australia (7330.0).

LIVESTOCK

The numbers of each of the principal kinds of livestock in Australia at ten-yearly intervals from 1861 to 1971, and yearly from 1981, are given in the following table.

15.33 LIVESTOCK
('000)

Year	*Cattle*	*Sheep*	*Pigs*	*Year*	*Cattle*	*Sheep*	*Pigs*
1861	3,958	20,135	351	1981	25,168	134,407	2,430
1871	4,276	41,594	543	1982	24,553	137,976	2,373
1881	7,527	62,184	816	1983	22,478	133,237	2,490
1891	10,300	97,881	891	1984	22,161	139,242	2,527
1901	8,640	70,603	950	1985	22,784	149,747	2,512
1911	11,745	98,066	1,026	1986	21,820	146,776	2,512
1921	13,500	81,796	674	1987	21,915	149,157	2,611
1931	11,721	110,568	1,072	1988	21,851	152,443	2,706
1941	13,256	122,694	1,797	1989	22,434	161,603	2,671
1951	15,229	115,596	1,134	1990	23,191	170,297	2,648
1961	17,332	152,579	1,615	1991	(a)23,662	163,238	2,531
1971	24,373	177,792	2,590	1992	(a)23,880	148,203	r2,570
				1993	(a)24,062	138,102	2,646

(a) Excluding house cows and heifers.
Source: Livestock and Livestock Products, Australia (7221.0).

Cattle

Cattle-raising is carried out in all States, the main object in certain districts being the production of stock suitable for slaughtering purposes and in others the raising of dairy herds. While dairy cattle are restricted mainly to southern and to coastal districts, beef cattle are more concentrated in Queensland and New South Wales. Cattle numbers in Australia increased slowly during the 1960s and 1970s, despite seasonal changes and heavy slaughterings, to a peak of 33.4 million in 1976. Beef cattle production is often combined with cropping, dairying and sheep. In the northern half of Australia, cattle properties and herd sizes are very large, pastures are generally unimproved, fodder crops are rare and beef is usually the only product. The industry is more intensive in the south because of the more favourable environment including more improved pasture.

Drought conditions in the early 1980s led to a decline in the beef herd until 1984. For the next five years, the size of the herd remained relatively static. Since 1989, cattle numbers have increased each year, despite drought conditions which have prevailed in many parts of Queensland and in north-western New South Wales.

15.34 CATTLE BY AGE, SEX AND PURPOSE
('000)

						31 March
Classification	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*
Milk cattle						
Bulls used or intended for service	36	36	33	31	31	31
Cows, heifers and heifer calves	2,506	2,476	2,461	2,399	2,401	2,472
House cows and heifers	38	34	28	(a)	(a)	(a)
Total	*2,581*	*2,546*	*2,523*	*2,430*	*2,432*	*2,504*
Meat cattle						
Bulls used or intended for service	528	551	582	538	521	526
Cows and heifers (1 year and over)	9,818	10,120	10,577	10,687	10,748	11,171
Calves under 1 year	4,716	4,816	5,107	5,208	5,128	5,064
Other cattle (1 year and over)	4,207	4,402	4,401	4,799	5,050	4,795
Total	*19,270*	*19,888*	*20,668*	*21,232*	*21,447*	*21,555*
Total all cattle	**21,851**	**22,434**	**23,191**	**23,662**	**23,880**	**24,062**

(a) Not collected.
Source: Livestock and Livestock Products, Australia (7221.0).

15.35 CATTLE
('000)

31 March	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*Aust.(a)*
1988	4,962	3,474	8,825	947	1,705	542	1,385	21,851
1989	5,329	3,509	8,994	943	1,702	560	1,388	22,434
1990	5,506	3,646	9,489	969	1,673	569	1,327	23,191
1991	5,653	3,631	9,856	990	1,584	584	1,353	(b)23,662
1992	5,697	3,574	10,005	1,016	1,649	593	1,334	(b)23,880
1993	5,783	3,689	9,873	1,104	1,648	605	1,347	(b)24,062

(a) Includes the Australian Capital Territory. (b) Excluding house cows and heifers.
Source: Livestock and Livestock Products, Australia (7221.0).

Sheep

With the exception of a short period in the early 1860s, when the flocks in Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep raising. Western Australia is presently the second largest sheep raising State, with Victoria ranking third in numbers of sheep.

Sheep numbers reached a peak of 180 million in Australia in 1970. Following subsequent falls, by March 1990, flock numbers had risen to 170 million. However, poor market prospects for wool since 1990 have had a marked impact on the flock size and numbers declined to 138 million in 1993.

15.36 SHEEP AND LAMBS
(millions)

31 March	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.*
1988	54.9	27.0	14.4	17.4	34.0	4.7	152.4
1989	59.1	28.1	14.9	17.4	37.1	4.9	161.6
1990	62.1	29.3	16.7	18.4	38.4	5.3	170.3
1991	59.8	27.5	17.4	17.2	36.5	4.8	163.2
1992	53.6	24.8	15.3	16.1	34.1	4.3	148.2
1993	48.1	23.6	13.4	15.7	33.0	4.3	138.1

Source: Livestock and Livestock Products, Australia (7221.0) and Selected Agricultural Commodities, Australia, Preliminary (7112.0).

15.37 SHEEP AND LAMBS
(millions)

						31 March
	1988	*1989*	*1990*	*1991*	*1992*	*1993*
Sheep (1 year and over)						
Rams	1.7	1.8	1.8	1.7	1.6	1.4
Breeding ewes	71.6	74.8	74.8	67.0	65.5	61.4
Other ewes	4.3	4.7	6.0	9.7	7.9	6.6
Wethers	39.1	43.7	47.7	48.7	45.5	40.3
Lambs and hoggets (under 1 year)	35.7	36.6	40.1	36.1	27.8	28.4
Total sheep & lambs	**152.4**	**161.6**	**170.3**	**163.2**	**148.2**	**138.1**

Source: Livestock and Livestock Products, Australia (7221.0).

Pigs

15.38 PIGS
('000)

31 March	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*Aust.(a)*
1988	853	437	617	441	307	48	2,706
1989	855	423	611	450	285	45	2,671
1990	865	428	600	437	272	42	2,648
1991	821	403	596	400	271	38	2,531
1992	r799	431	560	420	318	40	r2,570
1993	818	425	617	435	305	44	2,646

(a) Includes the Northern Territory and the Australian Capital Territory.
Source: Livestock and Livestock Products, Australia (7221.0).

Poultry

15.39 POULTRY
('000)

31 March	Chickens: Hens and pullets for egg production	Chickens: Meat strain chickens (broilers)	Chickens: Total chickens(a)	Other poultry: Ducks	Other poultry: Turkeys	Other poultry: Other poultry	Total all poultry
1988	13,463	47,988	64,201	663	1,585	365	66,813
1989	13,193	39,709	56,149	263	1,125	420	57,957
1990	13,084	43,906	59,956	276	1,240	449	61,920
1991	12,590	39,883	55,116	364	1,446	455	57,382
1992(b)	10,994	44,750	60,071	n.p.	n.p.	(c)2,293	62,364
1993(b)	12,844	51,664	68,936	n.p.	n.p.	(c)1,896	70,832

(a) Includes breeding stock. (b) Excludes Tasmania. (c) Includes ducks and turkeys.
Source: Livestock and Livestock Products, Australia (7221.0).

MEAT PRODUCTION AND SLAUGHTERINGS

Tables 15.40 and 15.41 contain details of slaughterings and meat production from abattoirs, commercial poultry and other slaughtering establishments and include estimates of animals slaughtered on farms and by country butchers. The data relate only to slaughterings for human consumption and do not include animals condemned or those killed for boiling down.

15.40 PRODUCTION OF MEAT(a)
('000 tonnes)

Year	Carcass weight: Beef	Carcass weight: Veal	Carcass weight: Mutton	Carcass weight: Lamb	Carcass weight: Pig meat	Carcass weight: Total meat	Dressed weight(b)(c): Total all chickens	Dressed weight(b)(c): Poultry(d)
1987–88	1,549	39	293	293	297	2,471	(e)362	401
1988–89	1,459	32	254	290	308	2,343	(e)368	407
1989–90	1,642	35	333	295	317	2,622	(e)380	425
1990–91	1,723	36	381	287	312	2,741	(e)388	430
1991–92	1,753	38	392	275	336	2,794	416	457
1992–93	1,787	39	370	273	328	2,798	435	474

(a) Excludes offal. (b) Excludes the Northern Territory and the Australian Capital Territory. (c) Dressed weight of whole birds, pieces and giblets. (d) Includes other fowls, turkeys, ducks and drakes. (e) Excludes Tasmania.
Source: Livestock Products, Australia (7215.0).

15.41 NUMBERS OF LIVESTOCK AND POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION
(million head)

Year	Cattle	Calves	Sheep	Lambs	Pigs	Chickens (b)	Other fowls(a) and turkeys	Ducks and drakes
1987–88	6.9	1.2	14.9	17.2	4.9	(c)273.6	11.1	2.3
1988–89	6.3	1.0	12.4	16.5	5.0	(c)274.1	10.6	2.2
1989–90	6.9	1.0	16.1	16.8	4.9	(c)285.5	10.8	2.2
1990–91	7.3	1.0	18.2	16.4	4.9	(c)283.7	9.9	2.3
1991–92	7.6	1.1	18.8	15.8	5.1	(c)293.5	8.7	2.2
1992–93	7.4	1.0	17.5	15.4	5.0	304.1	8.4	2.3

(a) Comprises hens, roosters, etc. (b) Comprises broilers, fryers and roasters. (c) Excludes Tasmania.
Source: Livestock Products, Australia (7215.0) and Agricultural Statistics, Australian Bureau of Statistics.

15.42 GROSS VALUE OF LIVESTOCK SLAUGHTERINGS AND OTHER DISPOSALS(a)
($ million)

Year	Cattle and calves	Sheep and lambs	Pigs	Poultry	Total
1987–88	3,047.9	803.9	536.1	671.2	(b)5,074.3
1988–89	3,189.6	738.3	629.3	730.3	(b)5,300.8
1989–90	3,860.5	585.4	656.0	777.9	(b)5,893.3
1990–91	3,869.4	364.2	691.0	788.3	(b)5,721.0
1991–92	3,801.9	460.6	658.6	778.0	(b)5,738.1
1992–93	3,839.2	663.0	649.5	833.5	(b)6,023.5

(a) Includes adjustment for net exports of live animals. (b) Includes goats and buffalo.
Source: Value of Agricultural Commodities Produced, Australia (7503.0) and Value of Selected Agricultural Commodities Produced, Australia, Preliminary (7502.0).

15.43 EXPORTS OF FRESH, CHILLED OR FROZEN MEAT(a)
('000 tonnes)

	Beef(b)(c)		Veal(b)		Mutton(b)		Lamb		
	Bone-in	Bone-out	Bone-in	Bone-out	Bone-in	Bone-out	Bone-in	Bone-out	Pork
1987–88	7.6	310.2	0.4	2.7	31.5	34.0	26.3	1.3	3.0
1988–89	47.4	493.7	1.0	5.3	32.6	53.7	34.9	2.7	6.6
1989–90	83.1	579.8	1.1	4.6	63.3	55.0	36.4	3.6	6.2
1990–91	83.8	662.0	1.0	5.1	91.0	64.9	41.4	3.4	5.4
1991–92	100.0	691.5	1.5	5.7	103.7	75.0	39.4	4.6	5.0
1992–93	80.9	739.5	2.1	5.3	80.2	77.4	46.7	5.5	7.0

(a) Excludes offal. (b) Factors can be applied to beef, veal, mutton and lamb bone-out figures to derive bone-in carcass weight which, when added to bone-in figures, shows total exports in carcass weight. The factor for beef and veal is 1.5 and that for mutton and lamb 2.0 (Source: Australian Meat and Livestock Corporation). (c) Includes buffalo meat.
Source: Agricultural Statistics, Australian Bureau of Statistics.

Production of sheep meats in Australia is closely associated with the wool industry. Sheep grazing often occurs on mixed farms in conjunction with beef and/or grain enterprises and in some areas producers specialise in lamb production. The supply of sheep meat depends greatly on seasonal conditions, decisions to build up or reduce flock numbers, expectations of wool prices, live sheep exports and the pattern of domestic consumption of meat. Production in 1992–93 decreased by 3.5 per cent to 643,377 tonnes.

In 1992–93, exports of beef to Japan increased to 258,924 tonnes from the 196,059 tonnes of the previous year. Liberalisation of the Japanese market occurred in 1991. This involved removal of import quotas in exchange for a percentage of customs value. Exports of beef to Canada increased to 91,661 tonnes whereas exports to both the USA and the Republic of Korea decreased to 305,911 tonnes and 74,293 tonnes, respectively.

Significant changes have taken place in the pig producing industry in recent years. Capital investment and corporate takeovers have seen the emergence of a few large companies producing 30 per cent of all pigs sold in Australia. These moves, on top of the trend to more intensive and efficient production techniques, have seen pigmeat production rise steadily since 1982 to reach 325,894 tonnes in 1992–93. In addition, there has been an increase in the slaughter weights of pigs reflecting the demands of the fresh pork trade.

WOOL

Wool production

Wool as shorn from the sheep ('greasy wool') contains an appreciable amount of grease, dirt, vegetable matter and other extraneous material. The exact quantities of these impurities in the fleece vary between differing climatic and pastoral conditions, with seasonal fluctuations and with the breed and condition of the sheep. It is, however, the clean wool fibre that is ultimately consumed by the textile industry and the term 'clean yield' is used to express the net wool fibre content present in greasy wool. Clean yields for Australia have gradually trended upwards; in 1990–91 and 1991–92 the clean yield of the Australian clip was 65.6 per cent and in 1992–93, 66.0 per cent.

The gross value of wool produced in 1992–93 was 54.7 per cent lower than in 1988–89, the peak year in the wool boom of the 1980s.

15.44 SHEARING, WOOL PRODUCTION AND VALUE

		Wool production				
				Total wool		
Year	*Sheep and lambs shorn (million)*	*Average fleece weight (kg)*	*Shorn wool ('000 tonnes)*	*Other wool(a) ('000 tonnes)*	*Quantity ('000 tonnes)*	*Gross value (b) ($m)*
1987–88	186.3	4.53	843.0	73.4	916.4	5,517
1988–89	196.4	4.58	898.9	60.1	959.0	5,906
1989–90	215.1	4.79	1,030.9	71.1	1,102.0	5,718
1990–91	212.9	4.65	989.2	76.9	1,066.1	4,181
1991–92	181.2	4.42	801.2	73.7	875.0	2,979
1992–93	179.0	4.55	815.1	54.3	869.4	2,568.5

(a) Comprises dead and fellmongered wool, and wool exported on skins. (b) Gross value is based, for shorn wool, upon the average price realised for greasy wool sold at auction and, for skin wools, on prices recorded by fellmongers and skin exporters.
Source: Shearing and Wool Production Forecast, Australia (7211.0); Value of Agricultural Commodities Produced, Australia (7503.0); and Value of Selected Agricultural Commodities Produced, Australia, Preliminary (7502.0).

Wool receivals

The total amounts of taxable wool received by selling brokers and dealers in recent years are shown in the following table. It excludes wool received by brokers on which tax had already been paid by other dealers (private buyers) or brokers.

15.45 TAXABLE WOOL RECEIVALS

Year	Receivals: Brokers (NCWSB)	Dealers(a)	Brokers and dealers	Dealers as per cent of total receivals
	— '000 tonnes —			%
1987–88	707.3	135.1	842.4	16.0
1988–89	755.1	136.5	891.5	15.3
1989–90	911.8	138.0	1,049.8	13.1
1990–91	916.3	96.4	1,012.7	9.5
1991–92	734.2	102.3	836.6	12.2
1992–93p	703.2	140.8	844.1	16.8

(a) Includes brokers who are not members of the National Council of Wool Selling Brokers of Australia (NCWSB).
Source: Livestock Products, Australia (7215.0).

Wool marketing arrangements

The auction system reverted to a 'free marketing' system during the 1990–91 season. The Reserve Price Scheme that had operated since 1974 was suspended in February 1991. It had become unworkable due to the massive accumulation of wool in the stockpile and the substantial debt which had been incurred. The stockpile of bales at 22 April 1994 was 3,733,408.

On 1 December 1993, the Australian Wool Corporation and the Australian Wool Research and Development Corporation were replaced by the Australian Wool Research and Promotion Organisation (AWRAP). The role of AWRAP is to improve the performance of the Australian wool industry by funding research and development and generic promotion of wool internationally. It does not participate in the trading of wool or have any involvement in the stock holding or disposal arrangements. It is funded by Australian wool growers who contribute four per cent of their wool sale proceeds to fund promotion and research activities. The growers' contribution is matched by the Australian Government.

From 1 February 1994, the Australian Wool Exchange (AWEX) took over the responsibility for the wool auction system. AWEX is not a statutory body and cannot compulsorily collect levies and is run on a commercial basis.

Sales of wool from the stockpile are controlled by Wool International, the statutory authority in charge of the stockpile. Wool is sold from the stockpile by either private treaty on either a current or deferred delivery basis or by auction. From 1 July 1994, Wool International must dispose of 28,000 bales per month and from 1 January 1995, 180,000 bales per quarter.

DAIRYING

Dairying is a major Australian rural industry, ranking fourth behind the wheat, wool and beef industries in terms of value of production. The gross value of dairy production at farm gate prices in 1992–93 was $2,314 million or approximately 11 per cent of the gross value of rural production. The gross value of this industry at an ex-factory level is approximately $4,200 million per annum. The industry is also one of Australia's leading rural industries in terms of the proportion of down stream employment and processing it generates. Employment at manufacturing, processing and farm establishments is estimated to be in the vicinity of 50,000 people.

Production

Australian milk production in 1992–93 was 7,327 million litres, an increase of 8.9 per cent compared with the previous year. This largely reflected productivity gains through a combination of farm and herd management techniques. Average production per dairy cow of 4,318 litres in 1992–93 was around a third higher than the levels of the early 1980s.

Domestic market

Average annual per capita milk consumption has stabilised at around 100 litres since the mid-1980s. However, there have been substantial changes in the types of fresh milk consumed, with fat reduced and modified milks taking an increasing share of overall market milk sales.

After growing strongly throughout the late 1980s, domestic sales of cheese have stabilised in recent years at slightly above 150,000 tonnes. This is approximately nine kilograms per capita on an annual basis. This reflects the fact that recent increases in sales of cheddar varieties (particularly lower fat varieties) have been offset by a decline in sales of round eye cheese (such as Swiss, Gouda and Edam).

15.46 MILK CATTLE ('000)

		Cows and heifers used or intended for production of milk or cream for sale		
31 March	*Bulls used or intended for service*	*Cows (in milk and dry)*	*Heifers*	*House cows and heifers(a)*
1989	36	1,663	813	34
1990	33	1,653	808	28
1991	31	1,637	762	(b)
1992	31	1,652	749	(b)
1993	31	1,697	776	(b)

(a) One year and over, kept for the establishment's own milk supply. (b) Not collected.
Source: Livestock and Livestock Products, Australia (7221.0) and Selected Agricultural Commodities, Australia, Preliminary (7112.0).

15.47 PRODUCTION, UTILISATION AND GROSS VALUE OF WHOLE MILK

		Whole milk intake by factories		
Year	*Market milk sales by factories*	*Milk used in the manufacture of dairy products*	*Total intake*	*Gross value*
		— million litres —		$m
1987–88	1,667	4,462	6,129	1,390.9
1988–89	1,695	4,594	6,289	1,635.1
1989–90	1,705	4,558	6,263	1,749.0
1990–91	1,736	4,667	6,403	1,824.8
1991–92	1,765	4,965	6,731	1,960.0
1992–93	1,777	5,550	7,327	2,314.4

Source: Australian Dairy Corporation.

BEEKEEPING

The beekeeping industry consists of approximately 300–400 full-time apiarists, who produce approximately 70 per cent of the Australian honey production, and a large number of part-time apiarists who produce the rest. Some of these apiarists move as far afield as from Victoria to Queensland in an endeavour to obtain a continuous supply of nectar for honey from suitable flora. While honey production remains the predominant sector of the industry, production of breeding stock and provision of pollination services is significant.

15.48 BEEKEEPING

Year	Number of apiarists	Honey produced: Number of beehives: Productive(a) ('000)	Total ('000)	Quantity ('000 tonnes)	Average production per productive hive (kg)	Gross value ($'000)	Beeswax produced: Quantity (tonnes)	Gross value ($'000)(b)
1987–88	770	285	366	23.0	80.8	32,523	428	1,940
1988–89	836	307	405	22.6	73.8	29,586	530	1,967
1989–90	819	298	405	21.2	71.2	26,113	412	1,546
1990–91	726	290	384	20.6	r71.0	26,078	381	1,389
1991–92	651	264	366	18.9	r71.8	25,008	390	1,455
1992–93	686	278	362	22.6	81.1	31,499	422	1,560

(a) Beehives from which honey was taken. (b) Includes pollen.
Source: Agricultural Census, Australian Bureau of Statistics.

APPARENT CONSUMPTION OF FOODSTUFFS

Estimates of the consumption of foodstuffs in Australia are compiled by deducting exports from the sum of production and imports and allowing for recorded movement in stocks of the respective commodities. The term 'consumption' is used in a specialised sense. The estimates derived are broadly the quantities available for consumption at a particular level of distribution, that is, ex-market, ex-store or ex-factory depending on the method of marketing and/or processing. Because consumption of foodstuffs is measured, in general, at 'producer' level no allowance is made for wastage before they are consumed. The effect of ignoring wastage is ultimately to overstate consumption to some extent.

The estimates of consumption per capita have been obtained by using the mean resident population for the period.

Table 15.49 shows the changes in trends in the consumption of various foodstuffs over the past fifty years.

15.49 APPARENT PER CAPITA CONSUMPTION OF FOODSTUFFS
(kg — unless otherwise indicated)

Commodity	Average 3 years ended: 1938–39	1948–49	1958–59	1968–69	1978–79	1988–89	Latest year 1992–93p
Meat and meat products							
Meat (carcass equivalent weight)							
Beef	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	35.4
Veal	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.7
Beef and veal	*63.6*	*49.5*	*56.2*	*40.0*	*64.8*	*40.1*	*37.1*
Lamb	6.8	11.4	13.3	20.5	14.4	14.9	12.5
Mutton	27.2	20.5	23.1	18.8	3.6	7.3	8.5
Pigmeat(a)	3.9	3.2	4.6	6.7	13.3	17.5	18.9
Total	*101.5*	*84.6*	*97.2*	*85.9*	*96.1*	*79.8*	*77.1*
Offal and meat, n.e.i.	3.8	4.0	5.2	5.1	5.9	3.1	2.5
Total meat and meat products (carcass equivalent weight)	**118.5**	**103.0**	**112.4**	**98.8**	**102.0**	**83.0**	**79.6**

For footnotes *see* end of table.

15.49 APPARENT PER CAPITA CONSUMPTION OF FOODSTUFFS — *continued*
(kg — unless otherwise indicated)

						Average 3 years ended	Latest year
Commodity	*1938–39*	*1948–49*	*1958–59*	*1968–69*	*1978–79*	*1988–89*	*1992–93p*
Canned meat (canned weight)	1.0	1.2	1.9	2.2	1.6	n.a.	n.a.
Bacon and ham (cured carcass weight)	4.6	5.3	3.2	3.6	6.0	6.9	7.1
Poultry							
Poultry (dressed weight)	n.a.	n.a.	n.a.	8.3	17.1	24.3	26.5
Milk and milk products							
Market milk (fluid whole litres)	106.4	138.7	128.7	128.2	100.5	101.8	101.2
Cheese (natural equivalent weight)	2.0	2.5	2.6	3.5	5.3	8.3	9.0
Oils and fats							
Butter	14.9	11.2	12.3	9.8	5.1	3.2	2.6
Margarine							
Table margarine	0.4	0.4	n.a.	1.5	5.4	6.8	6.2
Other margarine	1.8	2.4	2.2	3.4	3.1	2.2	1.8
Total margarine	*2.2*	*2.8*	*n.a.*	*4.9*	*8.5*	*9.0*	*8.0*
Beverages							
Tea	3.1	2.9	2.7	2.3	1.7	1.2	1.0
Coffee(b)	0.3	0.5	0.6	1.2	1.6	2.0	2.2
Aerated & carbonated waters (litres)	n.a.	n.a.	n.a.	47.3	67.4	79.9	97.2
Beer (litres)	53.2	76.8	99.7	113.5	133.2	111.7	95.6
Wine (litres)	2.7	5.9	5.0	8.2	14.7	20.2	18.2
Spirits (litres alcohol)	0.5	0.8	0.7	0.9	1.2	1.2	1.2

(a) Includes pigmeat for bacon and ham. (b) Coffee and coffee products in terms of roasted coffee.
Source: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0).

AGRICULTURAL IMPROVEMENTS

Irrigation

Irrigation is one of the factors by which agriculture is developed. The variability in stream flow and annual rainfall means that successful irrigation of crops and pastures is dependent on storage. Ground water supplies are used in areas where the quantity is adequate and the quality is suitable. The area of land irrigated (approximately 2.1 million hectares in 1992–93) forms 11.4 per cent of the total area under crops.

15.50 AREA OF CROPS AND PASTURES IRRIGATED
('000 hectares)

	Australia										*1993*
	1991	*1992*	*1993*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*
Pastures	1,133	1,081	1,184	517	502	54	62	16	31	—	—
Cereals	260	275	311	229	24	47	7	1	3	—	—
Vegetables for human consumption	93	93	89	14	18	28	9	7	13	—	—
All fruits	123	120	125	26	30	23	36	6	3	1	—
All other crops	266	356	245	143	8	81	3	3	6	—	—
Sugar cane	138	146	154	(a)	(a)	154	(a)	(a)	(a)	(a)	(a)
Total	**2,012**	**2,069**	**2,107**	**930**	**581**	**387**	**117**	**33**	**55**	**3**	**—**

(a) Not classified.
Source: Summary of Crops, Australia (7330.0).

Fertilisers

Most Australians soils are deficient in phosphorous. Because of this and the significant but less widespread deficiency of sulphur in many soils, phosphatic fertilisers, particularly single superphosphate, account for the bulk of fertiliser usage. Over half of superphosphate is used on pastures in areas with moderate to good rainfall. Large quantities are also used on cereal crops. Nitrogen deficiency is also general in Australian soils and the use of nitrogenous fertilisers is increasing. Potassium deficiency, however, is confined mainly to soils in the higher rainfall areas which are intensively cropped or used for irrigated pastures.

15.51 ARTIFICIAL FERTILISERS: AREA AND USAGE

Year	*Area fertilised ('000 ha)*	*Super-phosphate used ('000 tonnes)*	*Nitrogenous fertilisers used ('000 tonnes)*	*Other fertilisers used ('000 tonnes)*
1987–88	26,651	2,454	431	953
1988–89	27,871	2,523	438	971
1989–90	27,360	2,378	483	1,010
1990–91	23,627	(a)	(a)	(b)3,239
1991–92	19,517	(a)	(a)	(b)2,678
1992–93	19,702	(a)	(a)	(b)2,761

(a) Not collected. (b) Includes all fertiliser categories.

Source: Summary of Crops, Australia (7330.0).

BIBLIOGRAPHY

ABS Publications

Agricultural Industries, Financial Statistics, Australia (7507.0)

Agricultural Industries, Financial Statistics, Australia, Preliminary (7506.0)

Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)

Apparent Consumption of Selected Foodstuffs, Australia, Preliminary (4315.0)

Characteristics of Australian Farms (7102.0)

Foreign Trade, Australia: Merchandise Exports and Imports (5410.0)

The Labour Force, Australia (6203.0)

Livestock and Livestock Products, Australia (7221.0)

Livestock Products, Australia (7215.0)

Principal Agricultural Commodities, Australia, Preliminary, Agricultural Production and Farmers' Intentions for (next) Season (7111.0)

Shearing and Wool Production Forecast, Australia (7211.0)

Shearing and Wool Production Forecast, Australia, Preliminary (7210.0)

Summary of Crops, Australia (7330.0)

Value of Agricultural Commodities Produced, Australia (7503.0)

Value of Principal Agricultural Commodities Produced, Australia, Preliminary (7501.0)

Viticulture, Australia (7310.0)

Other Publications

INTERNATIONAL WHEAT COUNCIL. Grain Marketing Report, December 1992

LEWIS, HOLT AND ENGLISH. Composition of Foods, Australia, AGPS, Canberra, 1992

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Sixteen

Forestry and Fishing

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FORESTRY

Forests are an important renewable natural resource providing a wide range of indispensable products and benefits to the community.

The cover of forest vegetation protects the soil from water and wind erosion, reduces flooding and siltation of water storages and maintains the quality of water. Forests provide habitat for a variety of native animals and plants.

Native and plantation forests contribute substantially to Australia's economy, especially to employment in rural areas. Forests also represent valuable ecosystems providing a gene pool of great diversity for scientific investigation; a source of honey, oils, gums, resins and medicines; and a resource base for education, tourism and recreation and other purposes. Forests cannot necessarily provide for all uses at the same time, yet careful management will ensure that the forests provide multiple benefits in the long term for the Australian community.

Existing forest estate

Native forest is defined in this report as land dominated by trees with an existing or potential mature height of twenty metres or more, as well as native stands of cypress pine in commercial use regardless of height. Based on this definition, the total area of native forest is estimated at 41 million hectares as at 30 June 1992 (about 5% of Australia's land area). (The National Forest Policy Statement defines a forest as an area dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding five metres, and with existing or potential projective cover of overstory strata about equal to or greater than 30%. The National Forest Inventory is presently revising the estimate of the total area of native forest according to the definition in the National Forest Policy Statement.)

16.1 NATIVE FOREST AREAS, BY FOREST TYPE AND OWNERSHIP, AT 30 JUNE 1992
('000 hectares)

Item	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Total*
CLASSIFIED BY FOREST TYPE GROUP									
Rainforest	265	16	1,237	—	6	605	203	—	2,332
Eucalypt productivity(a)									
Class I	1,163	544	205	—	182	452	—	—	2,546
Class II	3,661	4,323	1,290	—	2,516	1,868	—	—	13,658
Class III	7,937	538	3,300	—	—	—	—	51	11,826
Tropical eucalypt and paperbark	—	—	4,078	—	—	—	2,450	—	6,528
Cypress pine	1,696	7	1,686	—	—	—	778	—	4,167
Total	**14,722**	**5,428**	**11,796**	—	**2,704**	**2,925**	**3,431**	**51**	**41,057**
CLASSIFIED BY OWNERSHIP									
Public ownership	9,530	4,768	10,304	—	2,212	2,066	850	51	29,781
Category 1(b)	3,255	3,127	3,071	—	1,788	1,146	—	—	12,387
Category 2(c)	3,705	—	6,412	—	53	295	511	—	10,976
Category 3(d)	2,570	1,641	(e)821	—	371	625	339	51	6,418
Private ownership	5,192	660	1,492	—	492	859	2,581	—	11,276
Total	**14,722**	**5,428**	**11,796**	—	**2,704**	**2,925**	**3,431**	**51**	**41,057**

(a) Eucalypt forests are grouped into productivity classes in descending order of productivity. No specific indexes of productivity have been developed for these classes and there can be some overlap, especially between States, in the relative productivity levels used to assign particular forest types to productivity classes. (b) Forest land managed for multiple use including wood production. (c) Crown land either vacant or occupied under lease on which wood harvesting is carried out under government control but is not reserved and managed for that purpose. (d) Land on which wood production is excluded (National Parks etc.). (e) Includes 101,500 hectares in World Heritage Area previously included in Category 1.

Source: State and Territory forest services.

Of the 41 million hectares, 29.8 million hectares (73%) are publicly owned and 11.3 million hectares (27%) are private land. Of the publicly owned forests, 6.4 million hectares (16%) are in National Parks or in World Heritage areas, 12.4 million hectares (30%) are managed by State forest authorities for various uses, including wood production and 11 million hectares (27%) are vacant or leasehold Crown land. A small but increasing area is covered by plantations. Australia has around 1.1 million hectares of plantations — 956,000 hectares of mostly radiata pine and 117,000 hectares of hardwood. Plantations are expanding at approximately 30,000 hectares a year.

Plantations. The Commonwealth Government has supported the expansion of Australia's plantation resource base for many years. For instance, the National Afforestation Program (NAP) was established in 1987–88 as a three year grants program to stimulate an expansion in the commercial hardwood timber resource and to assist in land rehabilitation through broadacre commercial plantations (including farm forestry).

Table 16.2 shows total plantation areas in Australia classified by species.

16.2 PLANTATION AREAS CLASSIFIED BY SPECIES, 31 MARCH 1992
(hectares)

Species group	*NSW(a)*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT(b)*	*ACT*	*Aust.*
Coniferous									
Pinus radiata	248,762	213,475	3,360	98,722	58,770	76,693	—	13,332	713,114
Pinus elliottii	5,216	8	75,092	—		270—	—	—	80,586
Pinus pinaster	711	1,321	—	2,779	27,820	—	—	—	32,631
Pinus caribaea	113	3	54,403	—	—	—	2,386	—	56,905
Araucaria species	1,666	—	45,278	—	—	—	—	—	46,944
Other	9,745	2,017	10,496	364	670	334	1,801	444	25,871
Total	*266,213*	*216,825*	*188,629*	*101,865*	*87,530*	*77,027*	*4,187*	*13,776*	*956,051*
Broadleaved									
Eucalyptus species	27,250	20,374	1,489	1,204	23,830	38,196	—	—	112,343
Populus species	1,351	151	—	—	—	—	—	—	1,502
Other	1	126	220	—	—	2,700	—	—	3,047
Total	*28,602*	*20,651*	*1,709*	*1,204*	*23,830*	*40,896*	—	—	*116,892*
Total	**294,815**	**237,476**	**190,332**	**103,069**	**111,370**	**117,923**	**4,187**	**13,776**	**1,072,948**

(a) Eucalypt plantation areas previously classified as native forest in table 16.1 are now recorded separately in table 16.2. (b) Since 31 March 1986, plantations on Aboriginal land have been transferred to private ownership and publicly owned plantations are no longer managed for wood production.

Sources: National Forest Inventory, and State and Territory forest agencies.

Wood and wood products

Australia's wood and wood products industries are important components of Australia's primary industry and manufacturing sectors. They are particularly important in providing economic development and employment in many regions of rural Australia. The industry includes the hardwood and softwood sawmilling, plywood and panels, woodchip export and the pulp and paper sectors. Over 60,000 people are directly employed in growing and harvesting of wood and the manufacture and processing of wood and paper products. The wood and wood products industries contribute about one per cent to gross domestic product.

In 1989–90, value added for wood and wood products industry was $2.9 billion, representing 4.2 per cent of value added by the total manufacturing sector. In 1992–93, exports of forest products totalled $777 million, of which 54 per cent were woodchips and 25 per cent paper and paperboard products. In the same year, imports were $2,437 million, of which 45 per cent was paper and 21 per cent sawnwood. This indicates that the trade deficit in forest products is $1,660 million. Australia produces 70 per cent of its sawn timber needs, of which native forests provide approximately 40 per cent, with the balance coming from softwood plantations. Imported sawn timber is mostly Douglas Fir from North America, and Radiata Pine from New Zealand.

The hardwood and softwood sawmilling sectors comprise mills of various sizes which process timber into sawn timber and other products such as veneers, mouldings and floorings. The hardwood mills are generally small scale and scattered. The softwood mills are generally larger and more highly integrated with other wood processing facilities. Australia's production of sawn timber increased by 4.8 per cent in 1992–93 to 3,081,000 cubic metres, of which 47 per cent was hardwood and 53 per cent was softwood.

Other value added timber products include plywood, wood-based panels and reconstituted wood products. Australian wood-based panels include particle board, medium density fibreboard and hardboard made from softwood or hardwood pulp logs, sawmill residues or thinnings. Australia has 18 panelboard mills, 10 producing particle board, 4 producing medium density fibreboard, 3 producing hardboard and 1 producing softboard.

Australia has 22 pulp and paper mills, which utilise roundwood thinnings, low quality logs, harvesting residues and sawmill waste and recycled paper and paperboard to produce a broad range of pulp and paper products. Around a third of domestically consumed paper is imported. The four major types of paper products produced domestically are packaging and industrial papers, newsprint, printing and writing papers, and tissue paper. Each requires different inputs and technologies.

The woodchip export industry uses timber which is unsuitable for sawmilling and not required by the Australian pulp, paper and reconstituted board industries. Before the advent of the woodchip export industry, much of this material was left in the forest after logging. Considerable quantities of sawmill waste material, which would otherwise be burnt, are also chipped for local pulpwood-using industries and for export. Until recently, at least 95 per cent of woodchips exported from Australia have been eucalypt but increasing quantities of softwood woodchips are now becoming available from pine plantations.

16.3 SUMMARY OF OPERATIONS OF WOOD PROCESSING ESTABLISHMENTS, 1991–92

Industry description	*Establishments at 30 June*	*Employment at 30 June(a)*	*Wages and salaries(b)*	*Turnover*
	no.	'000	$m	$m
Log sawmilling	583	9.8	232.0	1,010.4
Veneers and manufactured boards of wood	85	4.4	142.2	766.2
Hardwood wood chips	19	0.6	24.9	341.1

(a) Includes working proprietors. (b) Excludes the drawings of working proprietors.
Source: Manufacturing Industry, Australia (8221.0).

16.4 PRODUCTION OF WOOD AND SELECTED WOOD PRODUCTS(a)

Item	*Quantity*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Sawn Australian grown timber(b)	'000 cu m	3,172	2,774	2,921	3,081
Woodchips (green weight)					
Hardwood (broad leaved)	'000 tonnes	5,169	5,042	4,870	5,078
Softwood	'000 tonnes	718	960	1,307	1,242
Particle board(c)	'000 cu m	768	625	643	660
Wood pulp					
Mechanical	'000 cu m	430,665	459,078	459,832	436,026
Other	'000 cu m	599,711	562,760	559,687	560,467
Paper and paperboard					
Newsprint	tonnes	383,657	394,990	403,728	433,476
Tissue and sanitary papers	tonnes	163,072	133,800	n.p.	n.p.
Graphic	tonnes	n.p.	n.p.	231,541	} 1,392,661
Other paper and paperboard	tonnes	766,690	963,574	n.p.	

(a) Excludes production of small single establishment enterprises with fewer than four persons employed and establishments engaged in non-manufacturing activities but which may carry on, in a minor way, some manufacturing. (b) Source: Australian Bureau of Agricultural and Resource Economics. (c) Particle boards and similar boards of wood or other ligneous material. Excludes laminated.
Source: Manufacturing Production, Australia: Building Materials and Fittings (8361.0) and Manufacturing Production, Australia: Wood and Wood Products (8369.0).

Government administration

Land management is primarily the responsibility of State and Territory Governments. Each State has a forest authority responsible for the management and control of publicly-owned forests, in accordance with the Forestry Acts and Regulations of the State or Territory concerned.

The Department of Primary Industries and Energy (DPIE) and the Department of the Environment, Sport and Territories (DEST) are the two key agencies which have responsibilities relating to forest management at the national level. Close liaison is maintained between the two agencies on relevant issues. DPIE's main responsibilities are the development of a national approach to forest management; providing advice to the Commonwealth Minister responsible for forest matters; administration of export licensing responsibilities in relation to unprocessed timber; liaison with State, national and international organisations concerned with forestry; provision of a Secretariat for the Ministerial Council on Forestry, Fisheries and Aquaculture (MCFFA); and management of policy and program initiatives.

DEST has responsibilities for environmental matters relating to forests. DEST provides policy advice to its Minister and the Government on conservation and environmental matters pertaining to Australia's forests, including biological diversity and climate change. The Australian Heritage Commission, the Australian Nature Conservation Agency and the Commonwealth Environment Protection Agency within DEST have assessment, management and monitoring roles in respect of the national estate, endangered species and environmental impacts in Australia's forests.

DPIE and DEST, in close cooperation with the States, Territories and Ministerial Councils, were extensively involved in the development of the National Forest Policy Statement, the National Forest Inventory.

The MCFFA consists of Commonwealth, State, Territory, and New Zealand Ministers responsible for forests. It is the successor of the Australian Forestry Council formed in 1964, and works to provide leadership and facilitate cooperation at the national level. Initiatives fostered by the MCFFA are aimed at promoting the enhanced management of the nation's forest resourccs in the general interest of the community. Most recently it has been involved in the development and implementation of initiatives under the National Forest Policy Statement in cooperation with the Australian and New Zealand Environment and Conservation Council.

Commonwealth government initiatives

The National Forest Policy Statement

was signed by the Commonwealth Government and all mainland State and Territory

Governments, at the Council of Australian Governments' meeting in Perth in December 1992. The Statement was developed jointly by the Commonwealth, States and Territories through the Australian Forestry Council (now the Ministerial Council on Forestry, Fisheries and Aquaculture) and the Australian and New Zealand Environment and Conservation Council in consultation with other relevant government agencies, the Australian Local Government Association, unions, industry, conservation organisations and the general community. The Statement is the joint response of the Commonwealth Government, State and Territory Governments to three major reports on forest issues — those of the Ecologically Sustainable Development Working Group on Forest Use, the National Plantations Advisory Committee, and the Resource Assessment Commission's Forest and Timber Inquiry.

The Statement provides a policy framework for the future management of Australia's public and private forests and outlines a vision for the ecologically sustainable management of Australia's forests comprising broad national goals in the following eleven areas:

- *Conservation* — to maintain an extensive and permanent native forest estate in Australia and to manage that estate in an ecologically sustainable manner so as to conserve the full suite of values that forests can provide for current and future generations. These values include biological diversity, and heritage, Aboriginal and other cultural values.
- *Wood production and industry development* — to develop internationally competitive and ecologically sustainable wood production and wood products industries. Efficient industries based on maximising value-adding opportunities and efficient use of wood resources will provide the basis for expansion in wood products manufacturing, which in turn will provide national and regional economic benefits.
- *Integrated and coordinated decision making and management* — to reduce fragmentation and duplication in the land use decision-making process between the States and the Commonwealth and to improve interaction between forest management agencies in order to achieve agreed and durable land use decisions.
- *Private native forests* — to ensure that private native forests are maintained and managed in an ecologically sustainable manner, as part of the permanent native forest estate, as a resource in their own right, and to compliment the commercial and nature conservation values of public native forests.
- *Plantations* — to expand Australia's commercial plantations of softwoods and hardwoods so as to provide an additional, economically viable, reliable and high-quality wood resource for industry; and to increase plantings to rehabilitate cleared agricultural land, to improve water quality, and to meet other environmental, economic and aesthetic objectives.
- *Water supply and catchment management* — to ensure the availability of reliable, high-quality water supplies from forested land and to protect catchment values.
- *Tourism and other economic and social opportunities* — to manage Australia's forests in an ecologically sustainable manner for a range of uses, including tourism, recreation and production of non-wood products.
- *Employment, work force education and training* — to expand employment opportunities and the skills base of people working in forest management and forest-based industries.
- *Public awareness, education and involvement* — to foster community understanding of, and support for, ecologically sustainable forest management in Australia and to provide opportunities for effective public participation in decision making.
- *Research and development* — to increase Australia's national forest research and development effort and to ensure that it is well coordinated, efficiently undertaken and effectively applied.
- *International responsibilities* — to promote nature conservation and sustainable use of forests outside Australia and to ensure that Australia fulfils its obligations under relevant international agreements.

The Commonwealth has established two plantations initiatives under the Statement, the Farm Forestry Program (FFP) and the North Queensland Community Rainforest Reforestation Program (CRRP).

Commonwealth funding of $3.7 million has been allocated to FFP projects and $4.2 million to the CRRP over the years 1992–93 to 1995–96. The CRRP funding is being matched by the Queensland Government while grantee contributions are substantial in the case of the FFP projects.

An objective of both the FFP and the CRRP is to promote commercial wood production on cleared agricultural land so as to provide an additional, reliable, high-quality wood resource for sustainable regional industries, as well as diversify farm incomes. The programs aim to encourage the integration of farm forestry with agricultural activities and promote appropriate linkages between tree growers and wood processing industries. Other objectives of the programs are to address problems of land degradation and provide for improved water quality, and in the case of the CRRP, to train a work force and landowners to support the long-term practice of rainforest plantation establishment and management.

The One Billion Trees (OBT) Program was initiated by the Commonwealth Government in 1989 to encourage community participation and involvement in vegetation establishment and retention projects.

It is the Commonwealth Government's principal vegetation management program with the primary aim of having a billion more trees established around Australia by the year 2000.

The Commonwealth, through the Australian Nature Conservation Agency, provided $4.3 million for 1993–94 to Greening Australia, a non-profit community-based organisation to continue the OBT Program. State and Territory Greening Australia staff provide technical information, advice and practical support to help individuals and groups to develop community-based landcare and conservation activities.

Greening Australia conducts school-based and community education projects to develop a knowledge and understanding of the processes of vegetation decline, land degradation and remedial vegetation management.

The Australia-wide network of Greening Australia staff and volunteers conduct trials and demonstrations on how to establish and sustain vegetation, how to develop seed banks and collect seed from local species, conduct species trials, and coordinate major revegetation projects.

To provide a further incentive for community groups to become involved in the OBT Program, the Commonwealth provided $905,600 for 1993–94 for cooperative projects involving revegetation for land and nature conservation. Projects that may attract assistance include wildlife habitats and corridors, shelterbelts and livestock havens, species trials, seed collection, preservation of remnant vegetation, beautification and amenity planting, and land degradation control and prevention. Emphasis is placed on community involvement and self-help, and on maximising the extent of community benefit. The Program is closely linked to the Save the Bush Program with a number of projects attracting funding from both programs.

National forest inventory. In many of the debates over forest management, the information base on forest attributes, such as timber, fauna and flora, has been found to be incomplete. Accordingly, a National Forest Inventory will be completed by 1995. A comprehensive information base, it will lead to more informed discussion and decision making about the future of Australia's forests by identifying and describing forest communities and their current conservation status, and information to enable the planning of efficient sustainable forest utilisation.

Tropical forests. Over half of the world's known plant and animal species are found in rainforests. Rainforests are the traditional home of many tribal peoples and also play an important role in contributing to global climatic stability. However, destruction of tropical forests in developing countries is occurring because of activities largely associated with population pressures and poverty.

Australia has only a relatively small area of tropical forest (an estimated 1.4 million hectares out of a total forested area of 41 million hectares), confined to northern and eastern Queensland, the Northern Territory and Western Australia. Much of this forest is already under various forms of protection. For example, the Queensland Wet Tropics World Heritage Area covers almost 890,000 hectares, including most of the tropical forest in North Queensland.

As a developed country with considerable experience and expertise in sustainable forest management, Australia can make a positive contribution to the improvement of forest management practices in developing countries, by providing education, training and technical expertise.

In June 1992 the Commonwealth Government announced its policy on international trade in tropical timber. A key aspect of the policy is a commitment to the year 2000 target set by the International Tropical Timber Organisation (ITTO), by which date all tropical timber products entering international trade should be derived from sustainably managed forests. Other aspects of the policy include support for the conservation of biodiversity, reforestation through agroforestry and plantations, and the provision of technical and scientific assistance to other countries — largely in the Asia-Pacific region — to promote better forest management practices. These policy measures complement initiatives arising from the Rio Earth Summit including the Conventions on Climate Change and Biodiversity, Agenda 21 and The Statement of Principles on Forests.

Pulp mill guidelines. The Commonwealth has established environmental guidelines for the development of new bleached eucalypt kraft pulp mills. To ensure the effective implementation of the Commonwealth guidelines and to streamline approval processes, the Commonwealth has concluded agreements with Tasmania, Western Australia and Victoria. These agreements make provision for the review of the guidelines if there have been commercially proven major new advances in pulping and bleaching technology.

A National Pulp Mills Research Program (NPMRP) exists to ensure that the Commonwealth guidelines remain current with international developments in pulping and bleaching technologies. The NPMRP is a cooperative venture involving the Commonwealth Government and State Governments, community interest groups, industry and the CSIRO. The Program has as its principal objectives: expansion of basic knowledge in pulping of eucalypt woods and bleaching of the pulps; improving the currently available technology; and developing more relevant and superior biological monitoring systems for the receiving waters.

The Commonwealth has commenced a review of the guidelines in the light of recent international pulp and paper research and developments in the wood pulping industry. It is envisaged that the review will be completed by December 1994.

Research

A Forest and Wood Products Research and Development Corporation has been established as a key initiative under the National Forest Policy Statement to assist the forest industries to improve their international competitiveness and to realise their growth potential. Its charter is to identify priorities and to commission, administer and subsequently evaluate research into a broad range of issues relating to wood production, extraction, processing, economics and marketing. The Corporation will be jointly funded by the industry and the Commonwealth.

Commonwealth Scientific and Industrial Research Organisation (CSIRO). Forestry research is conducted primarily within the Division of Forestry and the Division of Forest Products. The emphasis is on strategic research concerned with commercial production and processing of wood from native eucalypt forests and plantations of eucalypts and softwoods.

The Division of Forestry has its headquarters in Canberra with other laboratories in Hobart, Mount Gambier and Perth. The Cooperative Research Centre for Temperate Hardwood Forestry is co-located with the Division on the campus of the University of Tasmania. The Division of Forest Products is based at Clayton, Melbourne. The Cooperative Research Centre for Hardwood Fibre and Paper Science operates from the CSIRO-Monash University site at Clayton.

Research is conducted in programs closely aligned to major forest resources and industry sectors: Softwood Plantations, Hardwood Plantations, Regrowth Forest Management, Australian Tree Resources, Fibres and Chemicals, and Wood Science and Technology. Prominent disciplines are tree physiology, nutrition, genetics, chemistry and engineering. CSIRO scientists have contributed to guidelines for new bleached kraft eucalypt pulp mills.

Australia's trade deficit in forest products is $1.7 billion per year; reducing this deficit is a major target of governments, industry and research organisations. Sustained high production has long been a major goal of forestry research, and thus plantations and better native eucalypt forests are a focus of attention. Forests of both types will remain important sources of wood for national production of pulp and paper as well as sawn timber.

FISHING

Fisheries resources

Australia's fisheries stocks are extremely diverse but, by world standards, its marine ecosystem is relatively unproductive. The Australian Fishing Zone covers an area 16 per cent larger than the Australian land mass and is the third largest fishing zone in the world. However, Australia's fish production is insignificant by world standards. This reflects low productivity of the oceans rather than under-exploitation of the resource.

Over 3,000 species of marine and freshwater fish and at least an equal number of crustacean and mollusc species occur in and around Australia. Despite this, less than 100 of these are commercially exploited. Australia's major commercially exploited species are prawns, rock lobster, abalone, tuna, other fin fish, scallops, oysters and pearls. Australian fishing operators concentrate their efforts on estuarine, coastal, pelagic (surface) species and demersal (bottom living) species that occur on the continental shelf.

In 1991–92, Australians consumed 3.4 kilograms of edible weight fresh and frozen fish per person, sourced from Australian waters, and 1.9 kilograms of imported fish. The consumption per person of crustaceans and molluscs (such as prawns, lobsters, crabs and oysters) was 1.2 kilograms. A further 3.1 kilograms per head was consumed in the form of prepared seafood products.

The level of fishing effort exerted by the fishing fleet has increased rapidly over the last decade to the point where almost all the major known fish, crustacean and mollusc resources are fully exploited. Some major fisheries such as southern bluefin tuna, gemfish and shark have suffered serious biological depletion.

Australia has enjoyed a relatively long history of success in the farming of the Sydney rock oyster. Pearl culture operations and ornamental fish farming are well established. The production of juveniles of several species of fin fish, molluscs and crustaceans has been undertaken for some years, initially for restocking wild populations and subsequently for grow-out operations. As in many other developed countries, there has been a surge of interest and investment in many types of aquatic farms over the last decade. Notable successes are the salmon industry in Tasmania and commercial cultivation of the Pacific oyster, blue mussel and rainbow trout.

Aquaculture, or 'fish farming', is an alternative to harvesting the naturally occurring fish stocks and has considerable potential as a means of ensuring sustainability of harvesting yields. Aquaculture industries are established in all States, with species involved ranging from pearl oysters, to freshwater trout, to crocodiles. Aquaculture has experienced rapid growth during the past four years with the value of production rising from $188 million in 1989–90 to $259 million in 1992–93.

Developmental work is active in a number of areas such as barramundi, freshwater crayfish (yabbies and marron), prawns, mussels and algae and research is continuing into the hatchery rearing of species such as abalone, scallops, giant clams, flat and pearl oysters. Over half of the established aquaculture output by value goes to markets other than for direct consumption. However, the newer emerging industries are producing mainly food. A strategy for the development of Australian aquaculture is being formulated by a Working Group of Commonwealth and State fisheries agencies.

Production, processing and exports and imports of fisheries products

Value of fisheries production. Table 16.5 shows the gross value of the Australian commercial fishing industry. As the value of materials used in the course of production is not available, it is not possible to show net values. Gross value of production is the value placed on recorded production at the wholesale price realised in the principal markets. In general, the principal markets are the metropolitan markets in each State, although, in cases where commodities are consumed locally or where they become raw material for a secondary industry, these points are treated as the principal markets.

The gross value of fisheries production in 1992–93 is estimated to have been $1,374 million, a five per cent rise on the production of the previous year. The types of seafood which have increased substantially in value include abalone, tuna and prawns. The main factor behind the increase in the value of tuna was the increase in the proportion of tuna caught by long-lining for the high value Japanese sashimi market.

16.5 GROSS VALUE OF FISHERIES PRODUCTION
($ million)

Period	*Value*	*Period*	*Value*
1975–76	146	1984–85	522
1976–77	206	1985–86	635
1977–78	233	1986–87	702
1978–79	279	1987–88	828
1979–80	326	1988–89	1,022
1980–81	330	1989–90	1,092
1981–82	344	1990–91	1,223
1982–83	423	1991–92	1,307
1983–84	449	1992–93	1,374

Source: Australian Bureau of Agricultural and Resource Economics and the Australian Fisheries Service.

16.6 GROSS VALUE OF SELECTED MAJOR SPECIES
($ million)

	1990–91	*1991–92*	*1992–93p*
Prawns	263	252	259
Rock lobster	287	362	328
Tuna	66	75	106
Other fin fish	270	281	294
Abalone	92	97	125
Scallops	42	80	58
Oysters	43	44	45
Pearls	129	79	121
Other(a)	31	37	38
Total	**1,223**	**1,307**	**1,374**

(a) Other aquaculture not elsewhere included.
Source: Australian Bureau of Agricultural and Resource Economics.

16.7 AUSTRALIAN FISHERIES PRODUCTION(a) BY CATEGORY
(tonnes)

	1990–91	*1991–92*	*1992–93p*
Fish			
Tuna	11,666	13,088	12,762
Other	145,435	126,202	117,464
Total	*157,102*	*139,289*	*130,226*
Crustaceans			
Prawns	29,118	24,700	23,615
Rock lobster	14,717	18,356	17,934
Other	3,741	4,337	4,282
Total	*47,576*	*47,393*	*45,832*
Molluscs			
Abalone	5,154	5,079	4,927
Scallops	14,540	28,826	24,366
Oysters	9,267	9,072	9,039
Other	3,611	4,240	3,950
Total	*32,572*	*47,217*	*42,282*
Total quantity	**237,250**	**233,899**	**218,340**

(a) Includes estimated value of aquaculture production but excludes inland commercial fisheries.
Source: Australian Bureau of Agricultural and Resource Economics.

16.8 AUSTRALIAN FISHERIES PRODUCTION BY FISHERY AND CATEGORY
(tonnes)

	1990–91	*1991–92*	*1992–93p*
Northern prawn			
Prawn			
Tiger	3,364	4,142	2,837
Banana	6,987	2,508	4,166
Endeavour	727	1,054	794
King	109	78	47
Total	*11,187*	*7,781*	*7,844*
Torres Strait			
Prawn			
Tiger	674	764	816
Endeavour	933	989	1,008
King	57	58	50
Other	9	6	4
Total	*1,673*	*1,816*	*1,879*
Tropical rock lobster	171	147	175
Spanish mackerel	106	100	110
Total	*1,950*	*2,063*	*2,164*
Other fisheries(a)	486	292	329
South east			
Orange roughy	33,111	19,082	12,351
Morwong	1,053	833	920
Tiger flathead	2,120	2,202	1,555
Gemfish	1,120	375	739
Blue grenadier	3,347	3,061	3,174
Ocean perch	156	179	270
School whiting	1,840	988	898
Ling	720	615	776
Redfish	1,007	1,516	879
Mirror dory	297	237	236
Tasmanian trevalley	1,043	1,254	1,264
Other	6,522	7,390	8,143
Total	*52,337*	*37,732*	*31,205*

For footnotes *see* end of table.

16.8 AUSTRALIAN FISHERIES PRODUCTION BY FISHERY AND CATEGORY— *continued*
(tonnes)

	1990–91	*1991–92*	*1992–93p*
Great Australian Bight			
Orange roughy	959	627	458
King flathead	365	621	508
Gemfish	172	274	132
Bight redfish	40	131	44
Jackass morwong	53	81	68
King dory	12	63	27
Blue grenadier	32	50	45
Spiky oreo	23	46	21
Ling	28	33	17
Squid	27	32	5
Other	433	178	173
Total	*2,144*	*2,136*	*1,499*
Southern shark			
School and gummy	2,361	2,134	2,003
Other shark	368	613	583
Total	*2,729*	*2,747*	*2,586*
East coast tuna			
Yellowfin	569	628	626
Southern bluefin	8	—	—
Albacore	86	177	174
Bigeye	14	26	26
Billfish	36	62	60
Skipjack	—	208	212
Other fish	283	143	149
Total	*997*	*1,244*	*1,246*
East coast purse seine			
Yellowfin	40	—	—
Skipjack	6,000	6,633	6,630
Total	*6,040*	*6,633*	*6,630*
Southern bluefin tuna			
Domestic	3,059	2,142	1,741
Joint venture	941	2,073	2,450
Other	344	800	650
Total	*4,343*	*5,015*	*4,841*
Total production	**82,213**	**65,643**	**58,344**

(a) Includes North West Slope and Kimberley Coast prawn fisheries.
Source: Australian Bureau of Agricultural and Resource Economics.

Processing of fish, crustaceans and molluscs. There is very little value added processing of fish products in Australia. Processing establishments vary in size, scope of operations and sophistication of technologies employed. The majority of establishments undertake only the most basic cleaning, filleting, packing and freezing processes, but others have the capacity for significant product transformation.

Fish, crustaceans and molluscs intended for export are processed in establishments registered under the Export (Fish) Regulations. Edible fish for local consumption is mainly dispatched fresh-chilled to markets.

Exports and imports. Exports of fisheries products comes under Commonwealth jurisdiction, while domestic market activity comes under that of the corresponding State or Territory.

A significant proportion of Australian fisheries production is exported. In 1992–93 the value of exports was $951 million which amounted to approximately 69 per cent of the total value of Australian production. The Australian fisheries export industry depends on a limited range of products sold on a few major markets and in 1992–93 exports to Japan and Taiwan accounted for about 60 per cent of the value of all exports. In 1992–93 the most valuable exports included rock lobster ($384 million), abalone ($168 million) and prawns ($155 million).

16.9 DESTINATION OF AUSTRALIAN FISHERIES EXPORTS

	1990–91		*1991–92*		*1992–93*	
Country	*$m*	*%*	*$m*	*%*	*$m*	*%*
Japan	356	49.4	347	41.9	406	42.7
USA	129	18.0	161	19.4	139	14.6
Taiwan	73	10.1	141	16.9	160	16.8
Hong Kong	71	9.9	91	10.9	143	15.0
Spain	35	4.9	21	2.5	12	1.3
Singapore	18	2.4	21	2.5	27	2.8
France	3	0.5	10	1.1	22	2.3
Thailand	8	1.2	6	0.7	5	0.5
Saudi Arabia	1	0.1	6	0.7	2	0.2
Malaysia	1	0.2	5	0.6	7	0.7
Other	24	3.4	22	2.7	28	2.9
Total	**720**	**100.0**	**832**	**100.0**	**951**	**100.0**

Source: ABS Foreign Trade statistics.

In the same period, Australia imported $500 million of seafood, 21 per cent of which came from Thailand and 18 per cent from New Zealand. The most valuable categories of seafood imported included prawns from Thailand ($48 million), canned fish from Canada and Thailand ($33 million each) and frozen fish fillets from New Zealand ($28 million).

16.10 SOURCE OF AUSTRALIAN FISHERIES IMPORTS

	1990–91		*1991–92*		*1992–93*	
Country	*$m*	*%*	*$m*	*%*	*$m*	*%*
Thailand	83	18.6	92	19.4	107	21.4
New Zealand	70	15.6	82	17.3	90	18.0
Canada	35	7.8	36	7.6	36	7.2
Malaysia	39	8.8	32	6.8	35	7.0
USA	22	4.8	25	5.3	28	5.6
Japan	25	5.6	22	4.6	17	3.4
Chile	16	3.5	16	3.3	13	2.6
Vietnam	13	2.8	15	3.2	19	3.8
Korea, Republic of	12	2.7	14	2.9	14	2.8
Indonesia	15	3.4	13	2.8	9	1.8
Other	118	26.4	127	26.7	132	26.4
Total	**447**	**100.0**	**475**	**100.0**	**500**	**100.0**

Source: ABS Foreign Trade statistics.

Fisheries legislation and territorial arrangements

The Commonwealth Parliament has enacted a number of laws dealing with fisheries in Australian waters beyond territorial limits, and has fishing agreements and arrangements with a number of other countries.

The fisheries laws of the States and the Northern Territory apply to all kinds of fishing within the territorial sea and inland waters. These laws require the licensing of persons and boats in the commercial fisheries and provide a range of other regulatory powers.

In July 1992 Australia ratified the Convention on Prevention of Fishing with Long Driftnets in the South Pacific Region.

The Australian Fishing Zone and foreign fishing. Establishment of a 200 nautical mile Australian Fishing Zone (AFZ) in 1979 covering a total of 8.9 million square kilometres, brought portions of oceanic tuna stocks, and demersal and pelagic fish stocks previously exploited by foreign fishing vessels, under Australian control.

Australia has an international obligation under the Law of the Sea Convention, to allow foreign nations access to resources within the AFZ that are surplus to domestic fisheries requirements and where such access does not conflict with Australian management and development objectives.

Licensed vessels are currently permitted to operate in Australian waters either under bilateral agreements or joint venture arrangements with foreign governments or fishing companies/organisations. As at December 1993, up to 250 licences are available under the Bilateral access agreement.

Following the introduction of controls on the length of gillnets which can be used, foreign pelagic gillnet operations have ceased. Japan is permitted, under agreement, to long-line, principally for tuna, off certain areas of Australia. Negotiations between Australia, New Zealand and Japan have resulted in an agreed total quota for southern bluefin tuna for 1993–94.

In February 1990 the Governments of Australia and the Soviet Union signed a fisheries cooperation agreement which provides a framework for fishing to take place under subsidiary agreements. The agreement also established principles under which port access by Soviet trawlers for repairs, revictualling, refuelling and landing of catch might be authorised.

Whales are a protected species in the Australian Fishing Zone.

Fisheries Act 1952. This Act applies to commercial fishing for swimming species by Australians in waters extending from 3 to 200 nautical miles seaward of the territorial sea baseline of Australia and external territories excluding the territorial sea of another country, and by foreign boats in the 200 nautical mile AFZ. The AFZ extends 200 nautical miles seaward of the territorial sea baseline of Australia and the external Territories but does not include waters adjacent to Australia's Antarctic Territory or waters exempted from the AFZ by proclamation under section 7A of the Act.

Australia has made maritime delimitation agreements with Indonesia, Papua New Guinea, the Solomon Islands and France. Australia has yet to make a marine delimitation with New Zealand. There are proclamations in force under section 7A of the Act for all overlappings of the AFZ with neighbours' exclusive fishing zones, whether or not Australia has made a delimitation agreement with the country concerned.

This Act requires the holding of licences and empowers the Minister to prohibit fishing activities as necessary for the conservation of resources and the management of the fisheries. The Fisheries Act authorises the publication of management plans having the force of law in relation to particular fisheries.

In recent years, most domestic fisheries have been subject to biological and economic pressure due to increased effort. In 1985 the Commonwealth Fisheries Act was amended to allow formal management of Commonwealth fisheries. Since then major elements in management policy have included:

- quotas;
- catch restrictions;
- limited entry arrangements;
- boat replacement policy;
- seasonal and periodic closures and gear restrictions;

- voluntary unit buy-back schemes;
- permanent closure of nursery grounds;
- long-term freeze on licence transfers;
- research into sustaining long-term biologically viable fisheries; and
- international management agreements.

The *Fisheries Management Act 1991* was introduced to implement new management controls. It provides a simpler and more legislative base for management. Management will concentrate on the use of individual transferable quotas (ITQ) as the preferred tool to achieve a reduction in fishing levels. A particular fishery is assigned a total allowable catch and the market for ITQs will determine the most efficient allocation of quotas and the most economically efficient use of resources. The Australian Fisheries Management Authority (AFMA) was established in February 1992 as part of the new management system.

Refer to *Year Book Australia 1990* for a detailed account of the following Acts: *Continental Shelf (Living Natural Resources) Act 1968*; *Torres Strait Fisheries Act 1984*; *Foreign Fishing Boats Levy Act 1981*; *Fisheries Agreements (Payments) Act 1981*; and *Fisheries Levy Act 1984*.

Research

The main aim of fisheries research in Australia is to provide a background of biological, technical and economic information which will provide guidance for the efficient and sustainable utilisation of fisheries resources. To this end much of the research already undertaken has been directed at formulating recommendations for management of various fisheries. Research work, including feasibility fishing projects involving foreign fishing vessels, is also carried out and is expected to lead to the development of new fisheries, the expansion of under-exploited fisheries, greater economy in operations and the use of more efficient equipment and methods.

The Fisheries Development Trust Account (established under the *Fishing Industry Act 1956*) and the Fishing Industry Research and Development Trust Fund (established under the *Fishing Industry Research and Development Act 1987*) are available to support, financially, projects for the development and management of the fisheries and fishing industry is funded by annual Commonwealth appropriation. The latter is a matching fund into which is paid each year an appropriation from Commonwealth government revenue. Total Commonwealth funds are linked to amounts collected from the fishing industry by the State Fisheries Authorities and paid into appropriate State research accounts for the same purpose. Priority areas for research and development include resource assessments, fish diseases and toxins, post-harvest activities, economics and marketing and management of the environment.

Organisations in Australia at present engaged in research into fisheries matters are:

- CSIRO Division of Fisheries Research, which has its headquarters and main laboratory at Hobart, Tasmania, and regional laboratories in Western Australia and Queensland (fisheries science);
- CSIRO Division of Oceanography, which has its headquarters and laboratory at Hobart, Tasmania;
- CSIRO Division of Food Research, conducts research into handling, storage, processing and transportation of fish at its laboratory in Hobart, Tasmania;
- The Australian Fisheries Management Authority, Department of Primary Industries and Energy, Canberra;
- Bureau of Resource Sciences, Department of Primary Industries and Energy, Canberra;
- Australian Bureau of Agricultural and Resource Economics, Department of Primary Industries and Energy, Canberra;
- State fisheries departments (research vessels are operated by all States);
- Great Barrier Reef Marine Park Authority (GBRMPA) located in Townsville and Canberra universities; and
- Private fishing companies (surveys of fisheries resources, research into handling, processing and marketing).

RECREATIONAL FISHING

People fishing for recreation and pleasure reported an estimated catch of 23,152 tonnes of fish, 2,800 tonnes of crabs and 1,400 tonnes of yabbies/marron in the year ending April 1992. On average, every Australian household casting a line or net caught 27.1 kilograms of seafood.

The pastime of recreational fishing was most popular in New South Wales with 296,900 households reporting that a member had caught fish for home consumption, followed by 245,900 households in Queensland and 235,500 households in Victoria.

Queensland anglers had the most success by landing nearly 7,300 tonnes (23.5% of the total fish catch) of seafood, compared with just under 6,600 tonnes (21.3%) caught in New South Wales and 5,200 (16.8%) in Western Australia.

16.11 RECREATIONAL FISHING CATCH BY TYPE OF SEAFOOD, YEAR ENDED APRIL 1992
(tonnes)

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Abalone	20.8	36.4	0.2	8.1	32.3	25.1	—	3.3	126.0
Crabs	335.8	51.9	869.6	865.6	648.1	10.2	54.5	5.9	2,841.5
Fish	5,046.9	4,164.4	5,732.1	3,184.7	3,371.8	1,014.7	388.2	248.8	23,151.7
Lobster, crayfish	127.4	46.1	50.0	53.3	357.7	56.9	4.3	3.3	698.9
Mussels	9.9	20.5	2.7	15.6	48.1	21.6	3.9	1.6	123.9
Octopus	79.9	18.6	3.4	10.5	56.3	2.3	—	0.6	171.5
Oysters	132.2	4.8	129.7	11.8	29.3	16.5	2.7	3.0	330.0
Prawns	251.6	119.8	316.0	14.4	117.0	0.9	11.0	4.7	835.6
Scallops	—	149.6	19.5	17.3	3.2	7.5	0.4	0.3	197.7
Squid	96.7	148.6	53.0	330.1	142.5	32.1	2.8	5.7	811.4
Yabbies, marron	399.6	339.6	78.6	215.1	351.2	0.2	3.2	11.0	1,398.5
Other seafood	85.5	72.7	29.5	29.0	35.4	3.2	0.5	0.6	256.3
Total seafood	**6,586.3**	**5,173.1**	**7,284.3**	**4,755.5**	**5,192.9**	**1,191.1**	**471.4**	**288.6**	**30,943.2**

Source: Home Production of Selected Foodstuffs, Australia (7110.0).

BIBLIOGRAPHY

ABS Publications

There are no ABS publications devoted to forestry and fishery statistics for Australia as a whole. Forestry and fishery statistics are available in publications on broader subjects or in unpublished ABS data, which can be obtained on request.

Apparent Consumption of Foodstuff and Nutrients, Australia (4306.0)

Home Production of Selected Foodstuffs, Australia (7110.0)

Manufacturing Industry, Australia (8221.0)

Manufacturing Industry: Summary of Operations, Australia (8202.0)

Manufacturing Production, Australia: Building Materials and Fittings (8361.0)

Manufacturing Production, Australia: Wood and Wood Products (8369.0)

Other Publications

AUSTRALIAN BUREAU OF AGRICULTURAL AND RESOURCE ECONOMICS. Australian Commodities: Forecasts and Issues (various issues)

AUSTRALIAN BUREAU OF AGRICULTURAL AND RESOURCE ECONOMICS. Australian Fisheries Statistics, 1993

DEPARTMENT OF PRIMARY INDUSTRIES AND ENERGY. AUSTRALIAN FISHERIES SERVICE, Australian Fisheries

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Bushfires — an integral part of Australia's environment

(This article has been contributed by Mr N. P. Cheney, CSIRO Division of Forestry.)

Introduction

The January 1994 bushfires in New South Wales have renewed, once again, the public awareness of the susceptibility of Australia to fire. However, our history suggests that this awareness will be short-lived for the majority of the population. One of the consequences of improved bushfire control is that fewer and fewer people have a regular association with fire. This is reflected in changes in community attitudes towards fire and their own ability to live with what is a very natural and very Australian phenomenon. A better understanding of fire principles, better equipment and better communication by fire authorities will continue to reduce the average area of countryside burnt each year. However, it is because of this that the general public will be less prepared and more reliant on external services and perhaps more prone to disasters in the future.

The bushfires in New South Wales were extensive but mostly confined to the coastal strip between Batemans Bay in the south to the New South Wales/Queensland border and generally less than 100 kilometres inland from the coast. Many of the fires burnt in rugged and largely uninhabited country managed for national parks or nature reserves and did little quantifiable damage. The most damaging fire of the period was one of the smallest. The Como/Jannali fire burnt only 476 hectares, yet the fire destroyed 101 houses, which was more than half of the total house losses for all of New South Wales during the January bushfire emergency period. Our history, and the experience of countries overseas with similar fire climates, are that disasters on the urban bushland interface are likely to be more serious in the future.

Fire climate

The geographic location and the topography of Australia mean that almost all vegetation types in the country are fire prone. There are few high mountains and no truly alpine regions. Only the tropical rainforests of north Queensland can be said to be virtually fire-free. Even the normally arid interior of the country is capable of carrying extensive fires. In 1974–75, lush growth of grasses and forbs following exceptionally heavy rainfall in the previous two years provided continuous fuels through much of central Australia and in this season fires burnt over 117 million hectares or 15 per cent of the total land area of this continent.

The fire season in different regions of Australia depends primarily on latitude. In northern Australia the main fire season is winter and spring (the dry season of wet-dry tropics) and when the prevailing wind direction is from the south-east. The fire season in southern Australia is predominantly summer and autumn (*see* Figure 1). The most severe fire weather occurs in the south-eastern corner of Australia south of a line between Adelaide and Sydney. This is where high pressure systems located in the Tasman Sea can force hot, dry air from the centre of the continent and where low pressure troughs travelling across the southern ocean can form very strong pressure gradients and produce very strong, dry winds. In other parts of the country strong winds during the dry season are rare; they are generally associated with the tropical cyclones and are mostly heavily moisture laden, though, on occasions, cyclonic winds have caused havoc during the fire season in Western Australia.

The south-eastern areas of Australia and Tasmania along with the south-west corner of Western Australia also produce the tallest forests and associated heavy fuel loads. These wet forests occasionally dry out and under extreme fire weather, these heavy fuels produce the most intense and devastating bushfires. So the greatest potential for a bushfire disaster is where people have built in close proximity to the tall, wet forests of southern Australia.

FIGURE 1 BUSHFIRE SEASONS IN AUSTRALIA

MONTHS OF THE FIRE SEASON

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
	N	N	N	N	O	O	O	■	■	■	O	O
	■	O	N	N	N	N	O	O	■	■	■	■
	■	■	O	N	N	N	N	O	O	■	■	■
	■	■	■	■	O	N	N	N	O	O	■	■
	■	■	■	■	■	O	N	N	N	O	O	■

N = normal months when serious fires are likely to occur

■ = months where fire occurance is unlikely

O = occasional months when serious fires are likely to occur

Source: R.H. Luke and A.G. McArthur, Bushfires in Australia.

Bushfires in pre-European times

Historical accounts record that Aborigines burnt extensively and often. Although they had little capacity for fire suppression there seems little doubt that they had a very extensive knowledge about when and where particular areas would burn and the biological consequences of their burning. They burnt some areas early in the fire season, before fires would spread extensively, to protect them from fires later in the season. When the weather conditions were appropriate they burnt to promote the flowering and fruiting of certain edible plants. They used fire extensively for warfare, for providing access through thick vegetation, for hunting, for warmth, and for protection against snakes and insects. Their traditions, it seems, did not value areas that were left unburnt for a long time, for much of the burning was done with no specific objective in mind other than 'to clean up the country'; an attitude and practice that still remains with Aboriginal people living in inland Australia today.

While they appeared to manage fire by burning early in the dry season to create green pick and to protect special areas, Aborigines also burnt late in the season with little apparent concern for the downwind consequences of the fire. For example, fires for hunting drives were reported to be lit during hot, dry windy weather when grasses were fully cured. Fires were lit in a horseshoe shape into the wind and, although some control was exercised on the backing fire to force animals out through the opening in the horseshoe as the fire encircled them, the head fires were allowed to run with the wind.

The repeated observation of the first explorers were of open forests and woodlands with a grassy understorey and the impression of an annual conflagration during the fire season. In May 1770, Captain James Cook described the vegetation and country on Botany Bay's southern shore as '... the country which we found diversified with woods, lawns and marshes; the woods are free from underwood of every kind and the trees are such a distance from one another that the whole country might be cultivated without being obliged to cut down a single tree ...' and elsewhere '... the moors looked like our moors in England and as no trees grow upon it but everything is covered with a thin brush of plants about as high as the knees.' This description fits a vegetation which is burnt annually, or in the case of heathlands, every two to three years. These observations were repeated by other explorers that pushed further inland from the coast up until about 1850.

Annual burning is only possible in vegetation types such as the tropical and subtropical woodlands where there is a substantial proportion of grassy fuels. The temperate woodlands may or may not burn every summer depending on the distribution of summer (dry season) rainfall and the extent of perennial grasses. It is obvious that much of the tall, dry forests and heathlands of today were originally of more open character and carried a substantial sward of grassy fuels that did permit annual or biennial burning.

Historically, it also seems that the Aborigines did not favour the tall, wet forests of southern Australia and these, being naturally moist, even in summer, burnt only under extreme fire weather conditions when the forest fuels dried out and were ignited by fires from the open woodlands and dry forests. These conditions occurred every 50 to 200 years and the resulting fires were very intense and extensive, regenerating tracts of even-aged forest.

It seems likely that most of the dry forests and woodlands of Australia had a fire regime perpetuated by Aboriginal Australians that was similar in many respects to the annual burning regime in northern Australia today. Fires were lit frequently throughout the year and in the dry season when grasses were fully cured, and burnt unchecked until they ran into an area that had been burnt some time previously. Fires were not particularly intense even on days of extreme fire weather because the fuels were light.

After European settlement

As soon as the Europeans established permanent towns and farms, there was pressure to reduce the number and frequency of Aboriginal ignitions. This started a change in the fire regimes over much of the country from one of annual burning to regimes of somewhat longer frequencies. As soon as Aboriginal burning ceased, the regrowth of the vegetation was extremely rapid and within a few years the grass was 'choked by underwood' and by the regeneration of young trees. Major Mitchell describes 'the omission of the annual periodical burning by natives, of the grass and young saplings has already produced in the open forest lands nearest to Sydney, thick forests of young trees, where, formally, a man might gallop without impediment and see whole miles before him.' This regeneration of forests around Sydney was repeated in other parts of Australia and is still happening today in areas of north Queensland. The cessation of annual burning by graziers in lands newly reserved for national parks is allowing open forests and woodlands to develop into closed forests. In other areas, the open eucalypt woodlands on the rainforest fringes, which had been maintained by periodic burning, are now being invaded by rainforest species.

Despite the popular view that European settlement increased the frequency of fire in the country, it is clear from the historical evidence that as European settlement increased, fire frequency decreased. As fire frequency decreased, however, the fuels built up and when fires did occur they were more intense than fires under the Aboriginal annual burning regime.

For a period around 1850 to 1900, there was deliberate firing of the vegetation by Europeans associated with minerals prospecting. Burning was widely used to clear scrub and litter and expose the underlying rocks. Where this was carried out in dry forests carrying substantial regeneration and heavy fuel build up after the cessation of annual Aboriginal burning some years earlier, the fire intensities were dramatically increased. The prospectors did extend burning into wet forests which were not regularly frequented by Aborigines but this effect was probably relatively localised.

Burning was undertaken by graziers to clear land of rough shrub and coarse grasses and to produce green pick for cattle on rough bush leases. This burning differed from Aboriginal burning both in timing and in frequency. The frequency of graziers burning has been progressively decreasing over the past 200 years. Several observers quoted graziers firing parts of the country as often as every three to four years up until the 1920s but for most of southern Australia the frequency now is very much less than this.

Legislation and management

Legislation to specifically limit the lighting and spread of bushfires was established at different times in different States around the 1880s. The first ordinance 'to diminish the dangers from bushfires' was established in Western Australia in 1847 followed by the Bushfires Acts in South Australia and Tasmania. Organised protection from fire was not possible until much later. In the early 1900s forestry departments were established and advocated complete protection from fire caused by the miners and the graziers. Still, legislation lacked any impact until after the disastrous fires of February 1926 when sweeping changes were made in almost every State. Lighting of fires during the fire season was prohibited, forestry departments were strengthened and volunteer bushfire brigades were formed to control fires in rural areas.

From 1926 to 1970, every major change in fire management followed a major fire disaster and in this period most of the disasters resulted when graziers' fires burning during an extended spring drought continued into summer. The year of change was different in each State: 1939 and 1944 in Victoria, 1952 and 1968 in New South Wales, 1961 in Western Australia and 1967 in Tasmania. Along with the increasing tide of legislative restrictions and control, was the progressive reservation of vacant crown lands — initially for forestry and later for national parks — and progressive improvement in agricultural grazing land. Increasingly there were assets such as homesteads, stock, crops and fencing that demanded protection from wildfires and, more recently, the threat of litigation from neighbours burnt out by escaped fire has made graziers more circumspect with their burning.

Fire ecology

Eucalypts appeared in the fossil record around 80 million years ago. With them were charcoal fragments, and indication of the long association of fire with Australian flora. Although there have been substantial changes in the vegetation associated with change in climate, the fossil record shows that whenever there was a change to a drier environment with associated sclerophyll vegetation, there is also an increase in the frequency of fire. For example, in the Lake George area of New South Wales, whenever there was a shift from plants favoured by a cool temperate climate to plants which were favoured by a dry arid climate (for example, the eucalypts), there was an increase in charcoal associated with the plant pollen. There was a substantial increase in the amount of charcoal present between 200,000 and 250,000 years before present which is well before Aborigines were considered to be within the area. Since then, the presence of natural ignition from lightning and the extensive burning practices of the Aborigines have influenced the development of our forests and heathlands and resulted in a natural mosaic of plant community ages throughout Australia.

Although wildfire is detrimental to our rural production and the built environment, it should be considered to be as much a part of the natural environmental of our forests and heathland ecosystems as the sun and the rain. Some Australian plants are stimulated to flower by the presence of fire or smoke, while others have seeds which require some heat treatment before they will germinate. There is a suite of specific plants and animals which are associated with each fire regime. Annual burning favours communities of grasses and herbs, which in turn are preferred by kangaroos and larger wallabies. The tall eucalypts of the mountain forests of Victoria and Tasmania have seeds which are so small that they will not survive in the deep litter beds that accumulate beneath them. These species require an intense fire under dry conditions to remove the accumulated organic matter on the forest floor so that the tiny eucalypt seedlings can grow and regenerate the forests. If these forests do not receive a fire within their life span, (which is about 250 to 350 years), they will die out and be replaced by temperate rainforest species. In between these two extremes are other plants which have the capacity to produce abundant shoots from stems or lignotubers after fire and so can withstand frequent and repeated firing at regular intervals.

Similarly, some species of our native fauna are favoured by burning at regular intervals, others prefer intermediate intervals between fire, while yet others require long periods without fire for their optimum development. When considering fire in relation to fauna, it is important not to confuse temporary impacts on individual animals with longer term trends which often have a net beneficial effect. During any fire some animals will perish. However, in the absence of fire, changes in vegetation may cause the decline and disappearance of some species. The interdependence of plants and animals with a particular fire frequency can be quite complex. For example, the small rat kangaroo or woylie of Western Australia has a diet which consists mainly of the underground fruiting bodies of a fungus. The fruiting of the fungus is related to the amount of nitrogen in the soil which is, in turn, related to the vigour of understorey plants which are capable of fixing nitrogen. Thus, the optimum conditions for this animal requires a fire frequency which regenerates the understorey shrubs (in the absence of fire the shrubs die out) and yet provides other areas where the shrubs are intact with shelter from predators.

Introduced animals have had a huge impact on the smaller native fauna whose interaction with fire is complicated further by the grazing of native vegetation by rabbits and the predation by foxes and feral cats. It is considered by many that these influences are having a much greater impact on our fauna than the changed frequency of fire.

The nature of bushfire disasters — past and future

A natural disaster occurs when a natural phenomenon impacts on a vulnerable population. The severity and magnitude of a bushfire depend upon both the severity of the prevailing weather conditions and the amount of fuel available for combustion. Under a frequent burning regime, heavy fuel loads do not accumulate and so extreme fire intensities cannot occur even though fires may spread rapidly in grassy fuels. The most intense conflagrations will occur in those locations where there is the potential for extreme fire weather and the accumulation of heavy fuel loads. In Australia, these locations are the tall, wet forests of the temperate zones of Victoria, south-western Western Australia and southern Tasmania.

For a conflagration to be a disaster depends on the vulnerability of the population and their level of preparedness. The historic fire disasters of the past occurred when numerous fires left to burn by graziers burnt huge areas under extreme conditions. In 1939, 71 lost their lives, mostly from timber towns in the forest lands of Victoria. In 1967, on 7 February, there were 110 fires burning within a 25 mile radius of Hobart in southern Tasmania before the onset of extreme fire weather. These fires converged together over a period of seven hours and devastated the suburban fringes of Hobart and towns in the channel districts to the south of Hobart. These fires burned 264,000 hectares, 61 lives were lost and more than 1,700 homes destroyed. On 16 February 1983 (Ash Wednesday), 15 major fires in South Australia burnt out 160,000 hectares, killed 28 people and destroyed 383 homes. On the same day, eight major fires in Victoria burnt out 183,000 hectares, wiped out several towns and seaside resorts, 47 people perished and 2,186 homes were destroyed. In 1994, in New South Wales, between 21 December and 16 January, more than 800 fires burnt more than 800,000 hectares and totally destroyed 287 residential properties and other premises. Four people were killed.

However, in each of the recent fire disasters, the major losses have occurred when a single fire burnt into a residential area, either a major town or on one of the city fringes as shown in Table 1. The total area burnt by the Como/Jannali fire, which burnt entirely within the suburban development of greater Sydney, was only 476 hectares, yet this was responsible for more than half the residential house losses in the recent New South Wales fires. Similarly, in the Tasmanian disaster, very substantial losses occurred from a relatively few fires; one of the major ones being the Hobart fire which burnt only 6,660 hectares, killed 20 people and destroyed 310 homes and other buildings.

Historically, major disasters have occurred where severe fires are least frequent. In the future it is likely that the frequency of burning per se is likely to decrease and, as a consequence of this, the vulnerability of the population to fire is likely to increase. In the past, the perimeter of major cities between the urban area and the bushland was often well defined with a substantial fire break or fuel-modified area which separated the town from the rural vegetation. Residential sites were substantially cleared of bush before development and the size of normal residential blocks gave little scope for regeneration of natural bush. There is now an increasing tendency for people on the outskirts of major cities and towns to purchase larger blocks of from one to 20 hectares and build their homes without substantial clearing of the native vegetation or, where this land had previously been pastoral land, regrowth and regeneration of the native vegetation has been encouraged.

In addition to living more intimately with the fuels, the people living in these areas have little understanding of bushfires or fire behaviour. They have often urban-based employment and many expect fire protection to be provided as a service and seem reluctant to join a volunteer bushfire brigade to provide fire protection as a cooperative self-help operation. Without the experience of regular fires under mild conditions, the residents of these areas can be totally unprepared for the occasional wildfire burning under extreme fire weather conditions. Fewer precautions will be taken to clear fuels around individual houses and the concentration of house losses is likely to be greater than in the past.

The overseas experience in areas with a similar fire climate to Australia follow the same trends set out above. People are building houses on larger blocks with more wildland fuels being retained in an undisturbed state. The East Bay Hills fire of 20 October 1991 burnt through an urban/rural residential area in Oakland and Berkeley Hills, California. The total area of the fire was only 615 hectares, yet 25 people were killed, 2,777 separate family residences and more than 400 apartments were destroyed. Because of its urbanisation, the area had a relatively low frequency of fire but when severe weather conditions prevailed, the intermix of houses, forest and scrub fuels on steep slopes produced a wildfire that was impossible to contain until the weather conditions moderated. Ironically, some 20 per cent of the vegetation was Australian eucalypts.

TABLE 1 MOST SIGNIFICANT SINGLE FIRES IN URBAN/RURAL WILDFIRE DISASTERS IN AUSTRALIA AND CALIFORNIA

Year	*Date*	*Location*	*Area burnt (ha)*	*Fatalities*	*Homes destroyed*
		AUSTRALIA			
1964	14 January	Dandenong Ranges, Victoria	2,000	8	454
1967	7 February	Hobart, Tasmania	6,600	20	310
1983	16 February	Upper Beaconsfield, Victoria	9,200	21	238
1983	16 February	Macedon, Victoria	29,500	7	628
1983	16 February	Mt Osmond, South Australia	3,885	9	9,100+
1994	8 January	Como/Jannali, New South Wales	476	1	101
		CALIFORNIA, UNITED STATES OF AMERICA			
1961	n.a.	Bel-Air, Los Angeles	2,500	n.a.	484
1977	n.a.	Santa Barbara	325	n.a.	234
1990	n.a.	Santa Barbara	2,000	n.a.	641
1991	20 October	Oakland/Berkeley	615	25	2,777

Source: CSIRO Division of Forestry.

The comparatively minor losses of the Como/Jannali fire reflects different town planning where most of the housing was sharply separated from the bushland by a perimeter road or fire trail. The trend for housing intermixed with bushland fuels like the East Bay Hills area is increasing in Australia. However, where people demand residential homes on large bushland blocks, the management of fuels on these blocks to minimise the bushfire threat must become the responsibility of each and every individual. Improved building standards will help but solves only part of the problem. Unless individuals band together to maintain low fuel levels within the urban/rural residential areas, then this type of urban wildfire demonstrated within the Sydney suburbs is going to be repeated elsewhere in Australia in the future with increasing levels of property damage and disruption.

Chapter Seventeen

Mining and Energy

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Prior to the 1995 Year Book, the subjects of this chapter were covered in two separate chapters — Mining and Minerals; and Energy. Because of the interrelationships, the two subjects are now combined in this chapter.

THE MINING INDUSTRY

Mining, as defined in the 1993 edition of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (1292.0), broadly relates to the extraction of minerals occurring naturally as solids such as coal and ores; liquids such as crude petroleum; or gases such as natural gas.

The mining sector contributed $17,315 million or 4.3 per cent of Australia's Gross Domestic Product (GDP) in 1992–93.

Main features of 1992–93

Table 17.1 provides a summary of the operations of the mining industry in 1992–93. Turnover increased in the mining industry by two per cent to $28,980.9 million whilst employment in the industry dropped by five per cent to 58,047 people.

The industries most responsible for the rise in turnover were oil and gas, up $378.6 million to $8,456.1 million; and coal, up $409.0 million to $9,259.1 million. Other industries to increase turnover were copper ore, up $261.6 million to $893.3 million and bauxite, up $23.5 million to $778.1 million.

Industries that declined in turnover were: silver-lead-zinc ore, down $173.0 million to $955.7 million; other metal ores, down $144.8 million to $824.5 million; iron ore, down $80.3 million to $3,262.6 million; mineral sands, down $56.0 million to $502.5 million; and gold ore, down $9.2 million to $4,048.9 million.

Table 17.2 contains a summary of the operations of the mining industry in 1992–93, by State and Territory.

Mineral production

Australian production in the metallic minerals, coal, oil and gas sectors for 1992–93 was valued at $26,721.3 million, an increase of 2.8 per cent over the previous year (table 17.3). Metallic mineral production dominated with $10,920.3 million or 40.9 per cent of the total, while coal was 28.4 per cent of the total and oil and gas 30.7 per cent.

By value, the two largest components of metallic mineral production were gold and iron ore which accounted for $3,961.8 million and $3,025.6 million, respectively, or a combined share of 64.0 per cent.

Western Australia accounted for both the largest share of metallic mineral production with $7,390.8 million or 67.7 per cent, and the largest share of total mineral production with $10,285.9 million, 38.5 per cent of the total.

The increase in the value of mineral production in 1992–93 was due to the oil and gas industry which rose to $8,216.2 million from $7,811.8 million in 1991–92. This represented a rise of $404.4 million or 5.2 per cent.

The value of metallic minerals decreased marginally, falling 0.3 per cent while the value of coal production rose 5.1 per cent primarily due to increased prices. The total value of the coal industry (excluding Tasmania) was $7,584.8 million in 1992–93. New South Wales and Queensland are the major coal producing States with 44.2 per cent and 46.9 per cent of the market, respectively.

In 1992, Australia remained the world's largest producer of bauxite (38.1% of total world production); diamonds (36.4%); lead (16.4%); and the mineral sands concentrates of ilmenite (55.4%), rutile (43.9%) and zircon (39.2%).

17.1 MINING: SUMMARY OF OPERATIONS BY INDUSTRY
($ million)

	Coal		*Oil and gas*		*Iron ores*		*Bauxite*		*Copper ores*		*Gold ores*	
Items	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*
INCOME AND EXPENDITURE												
Turnover(a)	8,850.1	9,259.1	8,077.5	8,456.1	3,342.9	3,262.6	754.6	778.1	631.7	893.3	4,058.1	4,048.9
Plus closing stocks	753.2	758.0	205.3	220.3	357.2	333.3	42.6	44.8	108.4	151.8	541.9	577.6
Less opening stocks	756.8	775.1	164.1	221.5	306.7	363.2	45.4	42.8	92.6	103.5	562.6	550.8
Less purchases, transfers in & selected expenses	4,068.2	3,968.8	643.2	735.0	981.3	998.0	220.6	248.0	224.5	291.6	1,974.4	1,981.9
Value added	*4,778.4*	*5,273.2*	*7,475.5*	*7,720.0*	*2,412.1*	*2,234.7*	*531.2*	*532.2*	*423.0*	*650.0*	*2,063.0*	*2,093.8*
FIXED CAPITAL EXPENDITURE												
Fixed capital expenditure less disposals	502.9	884.4	1,573.0	1,621.8	287.0	408.0	26.3	65.0	93.2	87.9	446.0	477.5
EMPLOYMENT DETAILS												
Establishments at 30 June (no.)	143	148	102	101	17	18	11	11	9	13	157	152
Employment at 30 June (no.)(b)	26,990	26,687	5,046	4,987	8,392	7,001	2,153	1,917	2,351	2,512	7,665	7,586
Wages and salaries ($m)(c)	1,727.8	1,774.1	373.3	377.3	466.7	439.8	96.9	86.7	112.9	132.5	359.9	346.9

For footnotes *see* end of table.

17.1 MINING: SUMMARY OF OPERATIONS BY INDUSTRY — *continued*
($ million)

	Mineral sands		*Silver-lead-zinc ores*		*Other metal ores(d)*		*Total metal ores*		*Total coal, oil and gas and metal ores*	
	1991–92	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*
INCOME AND EXPENDITURE										
Turnover(a)	558.5	502.5	1,128.7	955.7	969.3	824.5	11,443.8	11,265.7	28,371.4	28,980.9
Plus closing stocks	161.3	127.9	198.0	157.8	212.4	187.8	1,621.7	1,580.9	2,580.3	2,559.2
Less opening stocks	166.5	136.9	204.9	207.3	196.3	205.2	1,575.1	1,609.7	2,496.0	2,606.3
Less purchases, transfers in & selected expenses	287.7	291.0	548.3	545.2	364.2	365.0	4,601.1	4,720.7	9,312.5	9,424.5
Value added	*265.5*	*202.4*	*573.5*	*361.0*	*621.2*	*442.1*	*6,889.4*	*6,516.1*	*19,143.2*	*19,509.3*
FIXED CAPITAL EXPENDITURE										
Fixed capital expenditure less disposals	72.0	23.2	188.9	92.1	108.0	208.3	1,221.4	1,362.0	3,297.3	3,868.1
EMPLOYMENT DETAILS										
Establishments at 30 June (no.)	21	19	17	17	22	14	254	244	499	493
Employment at 30 June (no.)(b)	1,833	1,862	4,386	3,480	2,532	2,015	29,312	26,373	61,348	58,047
Wages and salaries ($m)(c)	78.2	71.3	214.1	193.8	137.2	107.7	1,465.9	1,378.7	3,566.9	3,530.1

(a) Includes transfers out to other establishments of the same management unit where appropriate. (b) Includes working proprietors. (c) Excludes amounts drawn by working proprietors. (d) Includes nickel ore mining.

Source: Mining Industry, Australia (8402.0).

17.2 MINING: SUMMARY OF OPERATIONS BY STATE/TERRITORY
($ million)

	New South Wales(a)		Victoria		Queensland		South Australia	
Items	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*
INCOME AND EXPENDITURE								
Turnover(b)	4,551.0	4,662.5	3,630.6	4,073.6	6,477.5	6,751.2	1,095.1	1,093.4
Plus closing stocks	487.1	456.8	61.5	45.9	661.5	699.7	87.1	93.1
Less opening stocks	468.4	510.7	46.1	62.7	680.2	645.0	96.5	93.2
Less purchases, transfers in & selected expenses	2,162.1	2,120.2	170.9	196.4	2,828.5	2,783.7	233.5	204.9
Value added	*2,407.7*	*2,488.4*	*3,475.1*	*3,860.4*	*3,630.2*	*4,022.2*	*852.2*	*888.4*
FIXED CAPITAL EXPENDITURE								
Fixed capital expenditure less disposals	430.4	399.3	253.9	244.3	442.8	767.0	93.8	140.7
EMPLOYMENT DETAILS								
Establishments at 30 June (no.)	99	102	11	16	123	126	16	16
Employment at 30 June (no.)(c)	17,819	16,833	1,031	1,082	15,667	15,432	2,269	2,237
Wages and salaries ($m)(d)	1,128.0	1,122.0	124.5	103.7	893.3	920.0	96.5	104.5

	Western Australia		Tasmania		Northern Territory		Australia	
	1991–92	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*	*1991–92*	*1992–93*
INCOME AND EXPENDITURE								
Turnover(b)	10,707.9	10,575.9	382.6	330.4	1,526.7	1,493.9	28,371.4	28,980.9
Plus closing stocks	971.3	984.1	59.3	48.9	252.7	230.7	2,580.3	2,559.2
Less opening stocks	924.5	980.4	58.5	58.3	221.8	256.0	2,496.0	2,606.3
Less purchases, transfers in, & selected expenses	3,438.8	3,641.2	179.2	173.8	299.4	304.2	9,312.5	9,424.5
Value added	*7,315.9*	*6,938.5*	*204.1*	*147.1*	*1,258.2*	*1,164.3*	*19,143.2*	*19,509.3*
FIXED CAPITAL EXPENDITURE								
Fixed capital expenditure less disposals	1,891.6	2,209.1	31.7	29.0	153.1	78.7	3,297.3	3,868.1
EMPLOYMENT DETAILS								
Establishments at 30 June (no.)	202	189	11	9	37	35	499	493
Employment at 30 June (no.)(c)	21,088	19,543	1,716	1,526	1,758	1,394	61,348	58,047
Wages and salaries ($m)(d)	1,140.5	1,111.9	92.6	89.1	91.5	78.9	3,566.9	3,530.1

(a) Includes the Australian Capital Territory. (b) Includes transfers out to other establishments of the same management unit where appropriate. (c) Includes working proprietors. (d) Excludes amounts drawn by working proprietors.
Source: Mining Industry, Australia (8402.0).

17.3 MINERAL PRODUCTION, STATES AND AUSTRALIA, 1992–93

		Australia		*1992–93*							
Mineral	*Units*	*1990–91*	*1991–92*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*Australia*
Metallic minerals											
Bauxite	'000 tonnes	41,831	34,788	—	—	8,770	—	26,448	—	5,728	40,946
Copper concentrate	'000 tonnes	(a)1,004	(a)915	175	55	827	n.a.	75	108	14	(a)1,254
Gold bullion (dore)	kg	264,993	259,656	10,309	3,118	47,194	—	195,259	275	19,176	275,331
Iron ore	'000 tonnes	111,475	114,781	—	—	—	2,514	111,730	1,459	—	115,703
Iron oxide for											
Cement manufacture	tonnes	89,585	104,569	14,773	—	10,785	—	—	83,344	—	108,902
Coal washing	tonnes	229,452	204,285	45,670	—	21,046	—	—	155,094	—	221,810
Lead concentrate	'000 tonnes	870	858	319	—	393	—	28	162	28	930
Manganese ore	'000 tonnes	1,488	1,238	—	—	—	—	251	—	1,174	1,425
Mineral sands											
Ilmenite concentrate	'000 tonnes	1,328	1,424	7	—	157	—	1,352	—	—	1,516
Leucoxene concentrate	'000 tonnes	24	12	—	—	—	—	11	—	—	11
Monazite concentrate	'000 tonnes	7	7	—	—	—	—	6	—	—	6
Rutile concentrate	'000 tonnes	202	169	50	—	59	—	76	—	—	185
Zircon concentrate	'000 tonnes	317	342	45	—	53	—	302	—	—	400
Nickel concentrate	'000 tonnes	510	476	—	—	—	—	522	—	—	522
Nickel ore	'000 tonnes	1,133	831	—	—	259	—	—	—	—	259
Tantalite-columbite concentrate	tonnes	703	873	—	—	—	—	537	—	—	537
Tin concentrate	tonnes	10,957	10,995	19	—	79	—	209	12,080	—	12,387
Uranium concentrate (U308)	tonnes	(a)2,913	(a)2,901	—	—	—	n.a.	—	—	1,342	(a)1,342
Zinc concentrate	'000 tonnes	1,810	1,927	602	—	622	—	263	454	70	2,011
Other metallic minerals	tonnes	101,418	91,113	6,805	—	19,816	1,179	—	95,099	9	122,908
Total value of metallic minerals	**(b) $'000**	**(b) 10,909,859**	**10,957,237**	**465,379**	**89,967**	**1,702,212**	**287,130**	**7,390,763**	**(b)310,224**	**674,566**	**(b) 10,920,259**

For footnotes *see* end of table.

17.3 MINERAL PRODUCTION, STATES AND AUSTRALIA, 1992–93 — *continued*

		Australia		*1992–93*							
Mineral	*Units*	*1990–91*	*1991–92*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*Australia*
Saleable coal											
Black coal	'000 tonnes	166,505	176,570	84,211	—	85,302	2,778	5,428	251	—	177,970
Brown coal	'000 tonnes	48,884	51,452	—	48,428	—	—	—	—	—	48,428
Total value of coal	**$'000**	(c) **6,753,719**	(c) **7,216,392**	**3,351,286**	**379,419**	**3,555,055**	**54,691**	**244,312**	**n.p.**	**—**	(c) **7,584,763**
Oil and gas											
Crude oil-stabilised(d)	mega litres	29,189	31,984	—	17,804	1,180	1,662	6,533	—	3,413	30,592
Natural gas	giga litres	15,593	16,289	—	6,823	1,314	4,200	3,960	—	334	16,631
Ethane	giga litres	175	182	—	171	—	16	—	—	—	187
Liquefied petroleum gases	mega litres	3,517	3,638	—	2,741	136	852	—	—	—	3,729
Liquefied natural gases	'000 tonnes	3,577	4,250	—	—	—	—	4,922	—	—	4,922
Total value of oil and gas	**$'000**	**8,629,350**	**7,811,764**	**—**	**n.p.**	**261,988**	**n.p.**	**2,650,804**	**—**	**675,733**	**8,216,237**
Total value of metallic minerals, coal and oil and gas	**$'000**	**26,292,928**	**25,985,393**	**3,816,665**	**n.p.**	**5,519,255**	**n.p.**	**10,285,879**	(b) **310,224**	**1,350,299**	**26,721,259**

(a) Excludes South Australia. (b) Includes Tasmanian coal production. (c) Excludes Tasmania. (d) Includes condensate.

Source: Mining Production, Australia (8405.0).

Exports

Australia is the world's largest exporter of black coal, alumina, diamonds and ilmenite, rutile and zircon; the second largest exporter of iron ore, aluminium, lead and zinc; and the third largest exporter of gold.

Exports of mining products rose in value by 8.4 per cent in 1992–93 to $15,860 million or 26.1 per cent of total merchandise exports. This followed a rise of 2.6 per cent in 1991–92.

The percentage contributions of the major mineral products to total exports have remained fairly stable over the period 1990–91 to 1992–93. Black coal remains the largest single export item and the main mineral exported, with a value of $7,538 million in 1992–93, 12.4 per cent of total exports. Gold was the next most valuable mineral exported with a value of $4,315 million in 1992–93. Other major exports were iron ore ($2,895 million, 4.8% of total exports), crude oil ($1,801 million, 3.0%), zinc ores ($539 million, 0.8%) and uranium ($125 million, 0.2%).

Exports of mining products together with basic manufactures of mineral origin grew by 5.6 per cent in 1992–93 following growth of one per cent in 1991–92. However, as a proportion of total exports they declined from 41 per cent in 1991–92 to 40 per cent in 1992–93.

The major contributors to the export value increase in 1992–93 were coking coal, up $537 million (13%) to $4,542 million; refined gold, up $299 million (7%) to $4,302 million (with about 40% of the increase attributable to gold of overseas origin); crude oil, up $231 million (14%) to $1,852 million; liquefied natural gas (LNG), up $208 million (25%) to $1,051 million; steaming coal, up $158 million (6%) to $2,891 million; aluminium metal, up $151 million (10%) to $1,723 million; and copper, up $82 million (12%) to $790 million.

The only commodity which recorded a substantial decrease in export value in 1992–93 was uranium, which fell $122 million (50%) to $123 million. Commodities recording smaller falls were bauxite, down $33 million (28%) to $85 million; zircon concentrate, down $32 million (34%) to $61 million; and iron, ingot steel and ferroalloys, down $29 million (8%) to $313 million.

Imports

In 1992–93, mining sector imports were $2,551 million, a rise of 41.9 per cent on the 1991–92 total of $1,798 million.

With the inclusion of basic manufactures of mineral origin, mineral resource imports totalled $5,594 million in 1992–93. This represents a rise of $1,215 million (28%) on 1991–92. The dominant contributors to the increase were crude oil, up $922 million (40%) to $3,224 million; and refined petroleum products, up $205 million (45%) to $660 million.

Selected commodity review

Gold production (content of all minerals) in Australia during 1992–93 was 244,595 kilograms. Western Australia accounted for most production with 73.4 per cent, followed by Queensland with 14.0 per cent, Northern Territory (6.9%), New South Wales (3.2%) and Victoria (1.7%).

Gold is Australia's second biggest export earner, having overtaken wool in 1990–91. In 1992–93 it accounted for 7.1 per cent of total exports at a value of $4,315 million. The main markets were Singapore ($1,910 million), Japan ($816 million) and Hong Kong ($612 million).

The gold mining industry employed 7,586 people in 1992–93 or 13.1 per cent of total employment in the metallic minerals, coal, oil and gas industries, making it the second highest employer in the mining sector behind coal.

Australia accounts for 11.1 per cent of estimated world gold production, with South Africa being the world's biggest gold producer.

Iron ore production in 1992–93 was 115.7 million tonnes of which 93.0 per cent or 107.6 million tonnes was exported. Iron ore mining employs over 7,000 people.

Almost 97 per cent of production takes place in Western Australia's Pilbara region. Iron ore is also mined in South Australia and Tasmania.

Iron ore accounted for $2,895 million or 4.8 per cent of total exports in 1992–93. Japan is Australia's largest market, taking nearly half of its exports (49.2% in dollar terms). Other important markets are Korea (16.5%), China (14.8%), Taiwan (4.9%) and Germany (3.4%).

Bauxite and alumina. Australia is the world's largest bauxite and alumina producer and the fourth largest aluminium producer.

Bauxite mining employed 1,917 people nationally (June 1993), with mines in Western Australia south of Perth, in the Northern Territory on the Gove Peninsula and in Queensland at Weipa. Generally the bauxite ore is not sold but processed to alumina for sale or for conversion to aluminium. Alumina production reached 12.2 million tonnes in 1992–93 while refined aluminium production was 1.3 million tonnes.

In 1992–93, alumina ranked fifth by value among major commodity exports with 3.8 per cent of total exports, 9.4 million tonnes valued at $2,302 million; aluminium ranked seventh with 3.4 per cent, 1.1 million tonnes valued at $2,047 million.

Japan was the major market for aluminium taking 32.3 per cent while East and South East Asia together accounted for over 86 per cent of exports.

Mineral sands describes the group of minerals comprising ilmenite, leucoxene, rutile, monazite and zircon, which are produced from deposits on the east and west coasts of Australia. Australia was the world's largest producer of ilmenite (55.4%), rutile (43.9%) and zircon (39.2%) in 1992.

Despite overall increases in the quantity of production of mineral sands, the value of production decreased by 18.0 per cent to $412.8 million in 1992–93. For the same period, exports were valued at $236.1 million, a fall of 19.0 per cent from the 1991–92 value.

Ilmenite, leucoxene and rutile are sources of titanium metal and are used in the manufacture of paint and other pigments and as a coating on welding-rod electrodes. Zircon is the major source of zirconium which is a corrosion-resistant metal used in nuclear reactors and chemical processing equipment. Monazite contains certain rare-earth elements and thorium which is used in incandescent gas mantles and as a fuel in nuclear reactors.

Thorium is a radioactive mineral that is about three times as abundant as uranium, but occurs in fewer geological environments and in lower grade accumulation. Most of the world's resources of thorium occur in monazite, which in Australia is produced from titanium-bearing mineral sands. Australia presently supplies about 65 per cent of the world's traded monazite. Exports from Australia of thorium and thorium-containing ores require the approval of the Minister for Primary Industries and Energy under the Customs (Prohibited Exports) Regulations.

Diamonds were first extracted in 1982 in Western Australia.

Australia is now the world's largest producer of diamonds (gem and industrial) with 36.4 per cent of world production in 1992. Most of this is from the Argyle Diamond Mine in the Kimberley region of Western Australia. This mine commenced operations in December 1985 and is the world's biggest single producer of diamonds.

In 1992–93, 32.2 mega carats of diamonds (sorted and unsorted) were exported with a value of $483 million.

Uranium. Australia has about 31 per cent of the Western world's low-cost uranium reserves. Deposits occur in the Northern Territory, Western Australia, South Australia and Queensland.

Australia's reasonably assured uranium resources, at December 1992, totalled 462,000 tonnes of uranium recoverable at less than $US80 per kg U.

The Australian Government maintains its 'three mines' policy with regard to uranium mining, the mines being the Ranger and Nabarlek mines in the Northern Territory and Olympic Dam in South Australia.

The Ranger deposit was discovered in 1969, 250 kilometres east of Darwin, and mining commenced in 1981.

The Nabarlek deposits were discovered in 1970. The Nabarlek 1 deposit is completely mined out and the mine has been on care and maintenance since 1989 while negotiations proceed over the Nabarlek 2 deposits.

The Olympic Dam deposits were discovered in 1975 and mining commenced in 1988.

Production of uranium (contained in uranium oxide) for 1992–93 was 2,293 tonnes, 1,132 tonnes from Ranger and 1,161 tonnes from Olympic Dam.

Uranium oxide exports in 1992–93 were 2,289 tonnes valued at $123 million.

All Australian uranium production is exported, in the form of yellow cake, principally for use as fuel for nuclear power stations. Minor quantities are used in medical, industrial and scientific applications.

All exports of Australian uranium are subject to the most stringent safeguards which provide assurance that none of the material is diverted from peaceful uses.

The *Nuclear Non-Proliferation (Safeguards) Act 1987* gives domestic effect to Australia's international nuclear non-proliferation obligations which require domestic legislation. The legislation establishes a system of permits for the possession and transport of nuclear material (defined to cover uranium, thorium and plutonium), and other physical items such as equipment and material used in nuclear reactors. The permit and related provisions also deal with the possession and communication of sensitive information about nuclear technology, in circumstances where that information is not already a matter of public record. The legislation is administered by the Australian Safeguards Office.

Australia has no nuclear power stations.

In 1992 Australia produced 11.4 per cent of the world's production (excluding the centrally planned economies).

Coal. Black coal is currently the largest source of primary energy in Australia. By world standards, in relation to present population and consumption, Australia is fortunate in the availability of easily worked deposits of coal. The country's main black coal fields are located in New South Wales and Queensland, not far from the coast and the main centres of population.

Of Australia's identified in situ resources of black coal, currently estimated at 72 gigatonnes (Gt), about 51 Gt are considered to be economically recoverable. They are located largely in the Sydney Basin in New South Wales and the Bowen Basin in Queensland. There are other coal-bearing basins in New South Wales and Queensland, while small deposits are being worked in Western Australia, South Australia and Tasmania.

Black coal production in 1992–93 was 178 million tonnes. Two States dominated black coal production, New South Wales (84.2 million tonnes) and Queensland (85.3 million tonnes). The black coal industry was the single largest employer in the mining sector in 1992–93 employing 26,687 people.

More than half of New South Wales coal production is from underground mines whereas over 90 per cent of Queensland coal production is from open-cut mines.

Black coal produced in South Australia is used for electricity generation as is most of Western Australia's black coal, and by industry in Tasmania.

Black coal is Australia's biggest export earner accounting for 12.4 per cent of the total value of exports in 1992–93 or $7,538 million, up from $6,851 million (and down from 12.5% of total exports) in 1991–92. By far the biggest market for Australian coal was Japan which bought 63.9 million tonnes for $3,761 million, 49.9 per cent of total sales. South Korea bought 15.5 million tonnes for $917 million (12.1%) and Taiwan 8.3 million tonnes for $441 million (5.8%).

Two-thirds of black coal production consisting of steaming coal, and hard and soft coking coal is exported.

Australia also produces brown coal in Victoria where it is used for electricity generation. In 1992–93 brown coal production was 48.4 million tonnes.

Australia's measured and indicated resources of brown coal were estimated to be around 41 Gt at December 1992. The main deposits are located in Victoria's Latrobe Valley (over 39 Gt). Small deposits exist in other areas of south Gippsland, in south-eastern Victoria at Gelliondale and in the south-central region at Anglesea, Bacchus Marsh and Altona. Deposits are also known to exist at many places along the southern margin of the continent, and as far north as central Queensland. Large deposits are being tested in the Kingston area of South Australia, the Esperance area of Western

Australia and at Rosevale in the north-east of Tasmania.

Because brown coal has a relatively low specific-energy value and high water content, its utilisation depends on large-scale, low-cost mining and negligible transportation costs in its raw state. In Victoria, the brown coal industry has reached a high degree of sophistication in mining, on-site development of power generation, briquette and char manufacture.

Crude oil and condensate. Indigenous production in 1992–93 at 30,592 megalitres (ML) (529 thousand barrels per day) of crude oil and condensate was slightly lower than production in 1991–92 of 31,984 ML. In 1992–93, the Bonaparte Basin produced 3,304 ML of crude oil, nearly 11 per cent of the total indigenous oil production. Production of crude oil from the Gippsland Basin accounts for 58 per cent of total indigenous crude oil production. The North West Shelf was the major producer of condensate during 1992–93 with 58 per cent of indigenous production sourced in that region.

Export volumes of crude oil and condensate increased by 12.6 per cent to 10,098 ML in 1992–93 compared with 1991–92. The main markets were Japan, Indonesia and Singapore. Imports of crude oil and condensate increased by 27 per cent to 19,421 ML.

Liquefied petroleum gas (LPG) is a valuable co-product of oil and gas production and petroleum refining. The major constituents of LPG are propane and iso- and normal-butane, which are gaseous at normal temperatures and pressures and are easily liquefied at moderate pressures or reduced temperature. Operations involving LPG are expensive in relation to other liquid fuels because LPG has to be refrigerated or pressurised when transported and stored. LPG is an alternative transport fuel for high mileage vehicles in urban areas as well as a petrochemical feedstock and a traditional fuel.

Identified economically recoverable resources of LPG at December 1992 of 129,000 ML were concentrated in Bass Strait, the North West Shelf and the Cooper Basin.

Production of naturally occurring LPG in Australia in 1992–93 was 3,729 ML. The major contributors to this total were the Bass Strait fields (2,741 ML or 73% of total production) and the Cooper Basin (852 ML or 23% of total production). About 39 per cent of domestic LPG production is exported (1,480 ML in 1992–93), mainly to Japan. Domestic consumption of 3,532 ML in 1992–93 was met by 1,250 ML of product derived from processing industries, with supply shortfalls being met by naturally occurring product and imports.

Natural gas. During 1992–93, 23,953 million cubic metres of natural gas (including liquefied natural gas (LNG)) was produced for domestic consumption and export representing an increase of 6.2 per cent from the 1991–92 production level. A further 7,640 million cubic metres of natural gas from the export phase of the North West Shelf Project was liquefied for shipment to Japan. This export earned $1,051 million and represented 30 per cent of total Australian natural gas production.

It is estimated that exports of LNG to Japan will continue to expand, rising to a peak of seven million tonnes per year by 1995–96.

17.4 PETROLEUM PRODUCTION

Year	*Crude oil and condensate*	*LPG(a)*	*Natural gas*
	ML	ML	GL
1987–88	31,264	3,923	15,249
1988–89	28,255	3,763	15,772
1989–90	31,993	3,785	20,090
1990–91	31,955	3,547	21,109
1991–92	31,309	3,589	22,564
1992–93	30,703	3,776	23,953

(a) Naturally occurring.
Source: Department of Primary Industries and Energy.

The prospects of further discoveries of petroleum in Australia are considered to be only modest, the most prospective area being the sedimentary basins off the north-west coast. Consistent with the existing pattern of discoveries, undiscovered oil is likely to be of the light, low sulphur type and more gas fields than oil fields should be found. Assessments by the Bureau of Resource Sciences indicate that there is an average probability of finding at least another 380 gigalitres (GL) (2,400 million barrels) of crude oil in Australia. This compares with demonstrated economically recoverable resources of 258 GL (1,622 million barrels) and demonstrated sub-economically recoverable resources of 40 GL (251 million barrels) as at December 1991.

17.5 PETROLEUM RESOURCES(a), DECEMBER 1991

Basin	*Crude oil*	*Gas condensate*	*LPG*	*Sales gas*
	GL	GL	GL	TL
Demonstrated economic resources(b)				
Gippsland (Vic.)	126	22	42	222
Carnarvon (WA)	99	92	77	621
Cooper/Eromanga (SA/Qld)	11	7	11	76
Amadeus (NT) and Bonaparte (WA/NT)	20	2	1	20
Perth (WA)	1	—	—	4
Bowen/Surat (Qld)	—	—	—	—
Canning (WA)	—	—	—	—
Otway (Vic.)	—	—	—	1
Total	**258**	**124**	**131**	**944**
Demonstrated sub-economic resources(c)				
Gippsland/Bass (Vic./Tas.)	28	3	—	34
Bonaparte (WA/NT)	5	7	12	164
Carnarvon (WA)	4	4	2	378
Cooper/Eromanga (SA/Qld)	—	4	6	41
Browse (WA)	—	32	55	451
Perth (WA)	—	—	—	—
Amadeus (NT)	—	—	—	7
Bowen/Surat/Adavale (Qld)	—	—	—	3
Bass (Tas./Vic.)	2	6	8	10
Otway (SA/Vic.)	—	—	—	—
Total	**40**	**56**	**83**	**1,088**

(a) Based on the McKelvey classification which subdivides resources in terms of the economic feasibility of extraction and their certainty of occurrence. (b) Demonstrated economic resources are resources judged to be economically extractable and for which the quantity and quality are computed from specific measurements and extrapolations on geological evidence. (c) Demonstrated sub-economic resources are similar to demonstrated economic resources in terms of certainty of occurrence but are judged to be sub-economic at present.

Source: Department of Primary Industries and Energy.

Mineral processing and treatment

As few minerals can be directly used in the form in which they are mined, most minerals must undergo processing and treatment before utilisation. Table 17.6 shows the production of the main manufactured products of mineral origin during recent years.

17.6 PRODUCTION(a) OF PRINCIPAL MANUFACTURED PRODUCTS OF MINERAL ORIGIN

Commodity		1990–91	1991–92	1992–93
		METALS (b)		
Non-ferrous				
Alumina	'000 tonnes	11,402	11,824	12,221
Refined aluminium	'000 tonnes	1,236	1,234	1,301
Refined copper	'000 tonnes	237	r276	312
Lead bullion (for export)(c)	'000 tonnes	176	202	238
Refined lead	'000 tonnes	220	r219	320
Refined zinc	'000 tonnes	320	325	326
Refined tin	tonnes	321	r248	258
Ferrous				
Pig iron	'000 tonnes	5,600	6,394	6,445
Precious				
Refined gold(d)	kg	255,318	281,835	288,188
Refined silver(e)	tonnes	409	382	355
		FUELS		
Petroleum products				
Diesel-automotive oil	megalitres	10,284	10,279	10,603
Industrial fuel and marine fuel	megalitres	172	111	87
Fuel oil for burning	megalitres	2,623	r2,571	2,489
Automotive petrol	megalitres	16,454	17,192	17,730
		BUILDING MATERIALS		
Clay bricks	millions	1,765	r1,632	1,722
Portland cement	'000 tonnes	6,110	r5,731	6,225
		CHEMICALS		
Sulphuric acid	'000 tonnes	986	816	868
Superphosphate(f)	'000 tonnes	1,574	1,337	1,440

(a) Some products exclude production of single establishment manufacturing establishments employing less than four persons and production of establishments predominantly engaged in non-manufacturing activities but which may carry on in a minor way, some manufacturing. (b) Excludes secondary metal with the exception of basic iron. (c) Metallic content. (d) Newly won gold of Australian origin. (e) The unit of quantity for silver has been amended from kilograms to tonnes. (f) Double and triple superphosphate expressed in terms of single phosphate, that is, nine per cent P equivalent.

Source: Australian Bureau of Agricultural and Resource Economics (non-ferrous, precious metals and petroleum products only).

MINERAL GEOLOGY

Minerals of economic significance occur throughout Australia, their geological age ranging from Pre-Cambrian to recent. Many of the large deposits such as the base metal deposits at Broken Hill (New South Wales), Mount Isa and Hilton (Queensland), McArthur Rivers (Northern Territory), the copper-uranium-gold deposit at Olympic Dam (South Australia); gold deposits of the Kalgoorlie region and iron ore deposits of the Pilbara region, both in Western Australia and the uranium deposits of the Alligator Rivers area of the Northern Territory, are Pre-Cambrian in age. In eastern Australia major deposits such as the Elura, Cobar, Woodlawn, Hellyer and Rosebery base metal deposits, the Renison tin deposit, Kidston, Mount Leyshon and most other gold deposits, and most black coal deposits, are Palaeozoic in age. Deposits formed in Tertiary times include the brown coals of Victoria, the oil shales of eastern Queensland, the bauxites of Weipa (Queensland), Gove (Northern Territory) and the Darling Ranges in Western Australia, nickeliferous laterites at Greenvale (Queensland) and the mineral sands deposits of the Murray Basin.

Petroleum has been identified in the Australian sediments as old as Pre-Cambrian. Australia's major petroleum bearing basins are under Bass Strait (mainly Tertiary) and offshore north-western Australia (mainly Mesozoic). The main onshore basins are the Amadeus, Bowen/Surat, Cooper/Eromanga and Perth Basins.

Australia has over 20 per cent of the world's economically recoverable resources of bauxite, iron ore, mineral sands, uranium, industrial diamonds and tantalum. We have over 10 per cent of the world's economically recoverable brown coal, lead, manganese, cadmium and zinc and over five per cent of the world's economically recoverable black coal, silver, nickel, lithium and gold.

MINERAL EXPLORATION

Exploration consists of the search for new ore occurrences and undiscovered oil or gas, and/or appraisal intended to delineate or extend the limits of known deposits of minerals and oil or gas reservoirs by geological, geophysical, geochemical and other methods. This includes drilling but excludes activities of a developmental or production nature. Exploration for water is excluded.

Mineral exploration expenditure

Table 17.7 shows expenditure on private mineral exploration other than for petroleum in Australia during the last six years.

Petroleum exploration expenditure

Table 17.8 shows expenditure on private petroleum exploration in Australia during the last six years.

17.7 PRIVATE MINERAL EXPLORATION EXPENDITURE (OTHER THAN FOR PETROLEUM)
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
New South Wales	64.5	50.6	55.1	60.6	63.3	60.9
Victoria	33.9	21.7	21.0	12.7	12.6	12.2
Queensland	159.3	139.8	128.4	124.1	109.9	117.9
South Australia	18.9	16.6	13.2	15.5	19.7	21.3
Western Australia	466.3	387.2	315.4	324.8	332.8	348.1
Tasmania	10.4	13.1	11.8	9.9	7.9	7.8
Northern Territory	48.9	68.6	62.6	53.9	57.8	63.5
Australia	**802.2**	**697.6**	**607.5**	**601.7**	**604.0**	**631.8**

Source: Actual and Expected Private Mineral Exploration, Australia (8412.0).

17.8 PRIVATE PETROLEUM EXPLORATION EXPENDITURE
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Onshore	271.9	233.6	143.2	217.1	135.3	115.2
Offshore	223.2	405.7	439.4	365.4	338.8	496.7
Total	**495.1**	**639.3**	**582.6**	**582.6**	**473.9**	**611.9**

Source: Actual and Expected Private Mineral Exploration, Australia (8412.0).

ADMINISTRATIVE AND FINANCIAL ARRANGEMENTS

Mineral rights

Mineral rights in Australia are held by the State and Territory Governments and the granting of exploration and mining titles is administered by them under the respective State or Territory legislation. The Commonwealth Government holds rights to minerals on Australia's continental shelf beyond coastal waters of the States and the Northern Territory and certain prescribed substances in the Northern Territory, within the meaning of the Atomic Energy Act (principally uranium). The Commonwealth Government is also able to influence overall development and production activity in the mineral industry by virtue of its constitutional powers with respect to international trade, customs and excise, taxation and foreign investment and has also established consultative mechanisms, such as the Australian Coal Industry Council.

Mining and exploration for other than petroleum — legislation

Onshore. Each State or Territory has its own Mining Acts and Regulations governing the prospecting for and working of mineral deposits. These Acts and Regulations, although similar in principle, are different in detail.

Rights to explore for minerals are awarded by granting prospecting licences and (for larger areas) exploration licences or exploration permits. Each tenement sets out conditions such as minimum exploration expenditure each year, methods of prospecting and tenure of agreement. The tenure is usually limited. Most States and Territories make provision for Miner's Right which permits an individual to prospect or fossick for minerals on Crown Land.

Offshore. Following the enactment of the *Seas and Submerged Lands Act 1973*, the High Court confirmed that the Commonwealth has sovereignty over the territorial sea and sovereign rights over the resources of the whole of Australia's continental shelf. However, in the offshore Constitutional Settlement between the Commonwealth and the States reached in June 1979, it was agreed that responsibility for mining of the seabed of coastal waters (that is, the area on the landward side of the outer limit of the three nautical mile territorial sea) should lie with the States and the Northern Territory and should be governed by their legislation, while the Commonwealth should have responsibility for areas beyond. The *Offshore Minerals Act 1994*, which replaced the *Minerals (Submerged Lands) Act 1981*, provides for the granting and administration of exploration and mining licences in the Commonwealth sea.

Petroleum mining and exploration — legislation

Onshore. In Australia, full control of petroleum mining rights is vested with the relevant State or Territory Government. Any organisation or individual proposing to undertake petroleum exploration or development must first satisfy the relevant government that it has access to the necessary financial and technical resources to undertake the proposed operations.

Offshore. The situation is the same as that detailed above for mining exploration and development, with the Commonwealth having sovereignty but administrative responsibility divided; in the case of petroleum, under the *Petroleum (Submerged Lands) Act 1967*.

The offshore legislation provides for:

- exploration permits, providing exclusive exploration rights over a specific area;
- production licences to authorise development and commercial production from discovered fields; and
- retention leases to allow security of tenure over discoveries not currently regarded as economic to mine.

Offshore projects, except the area around the North West Shelf Gas Project, are subject to Petroleum Resource Rent Taxation (PRRT). The tax is levied at a rate of 40 per cent on net project revenues. All exploration expenditures incurred by the explorer in PRRT liable areas are allowable deductions. The North West Shelf Project is subject to an excise on crude oil production and a royalty on the net wellhead value of all petroleum production.

The Timor Gap Zone of Cooperation Treaty designates an area of the Continental Shelf between Australia and Indonesia subject to control by a Joint Administration. Revenue collected from petroleum production taxation is shared between the two nations. The Treaty has provisions to prevent double taxation.

In order to encourage offshore petroleum exploration, the Commonwealth conducts a coordinated strategy involving the regular release of exploration areas, improved collection and dissemination of exploration data to explorers and enhanced company awareness about Australia's title acquisition and taxation agreements. A major feature of the strategy is that explorers are given advance notice of future releases of exploration areas.

Mineral royalties

Mineral resources are owned by the Crown in Australia, either by the State and Territory Governments, within their borders (and up to three nautical miles offshore), or by the Commonwealth Government in offshore areas outside of the three nautical mile limit.

Accordingly, royalties are collected by State and Territory Governments for mining onshore and up to three nautical miles offshore and by the Commonwealth outside that limit.

State royalties regulations vary in regard to types of royalties, rates levied and those commodities subject to royalties.

In recent years some State Governments have negotiated special royalty arrangements with companies which are seeking mineral leases for large-scale developments. These royalty rates may vary, depending on whether production is for export or for domestic processing. Examples of this type of royalty agreement are the Argyle Project in Western Australia and the Olympic Dam mine in South Australia. Mineral royalties received by governments in recent years are shown in table 17.9.

17.9 MINERAL ROYALTY RECEIPTS BY GOVERNMENTS(a)
($'000)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
New South Wales(b)	97,166	99,387	128,966	155,006	141,819	150,380
Victoria(c)	r55,920	r60,043	r60,146	53,359	62,600	57,527
Queensland(b)	196,013	178,301	r207,954	227,566	263,406	303,194
South Australia	36,011	34,914	44,004	80,570	71,767	71,344
Western Australia(d)	r158,896	r168,479	r244,330	284,842	308,257	310,582
Tasmania	3,048	3,800	6,394	5,350	4,729	5,795
Northern Territory	10,642	9,514	24,079	28,350	28,265	14,942
Commonwealth Government	285,052	182,670	273,077	361,791	102,459	76,711
Total	**r842,748**	**r737,108**	**r988,950**	**1,196,834**	**983,302**	**990,475**

(a) Significant revisions have occurred to some figures due to the reclassification of petroleum royalty payments and payments to the States under arrangements relating to the collection of offshore petroleum royalties. (b) Includes royalties on sand and gravel from Crown lands. (c) Includes royalties on brown coal paid by State Electricity Commission. (d) Includes prepaid royalty of $50 million in respect of diamond royalty agreement.

Source: Federal, State and Territory departments responsible for mining.

Crude oil marketing and pricing arrangements

The crude oil market was deregulated on 1 January 1988. Refiners and producers are allowed to negotiate freely the quantities and prices of crude oil they buy and sell. Crude oil producers also have complete freedom to export crude oil as an alternative to selling on the domestic market, subject to government policy in times of emergency. The Commonwealth Government no longer fixes an Import Parity Price nor requires refiners to absorb quantities of Australian oil at that price, as it did prior to deregulation.

Decisions on major refinery investment associated with changes in domestic crude availability have been easier in a deregulated market and a significant program of investment in upgraded plant and equipment has already been undertaken.

The price of crude oil used for the purposes of excise tax assessment is the monthly volume weighted average of realised prices of sales of oil from the area subject to excise.

Pricing of liquefied petroleum gas (LPG)

As from 1 February 1989, the Commonwealth Government no longer sets the price of LPG on the Australian market. This decision represents an important move towards a free market in LPG and brings LPG into the same pricing arena as other major petroleum products. The Prices Surveillance Authority (PSA) has responsibility for determining the maximum wholesale price of LPG in each capital city.

Pricing and export approval system for liquefied natural gas (LNG)

The Commonwealth Government removed volume controls on LNG exports in November 1991, but a price approval and monitoring system has been maintained to ensure that community returns are safeguarded. The

Department of Primary Industries and Energy has responsibility for price monitoring and the authority to approve export prices rests with the Minister.

Secondary tax arrangements in the petroleum industry

In addition to general taxation arrangements applying to companies in Australia, petroleum production projects are subject to secondary taxes. The type and rate of secondary taxation (resource rent tax, resource rent royalty, or excise and royalties) depends on the location of the petroleum resource, the date of discovery of the petroleum reservoir and the date upon which production commenced.

A *Resource Rent Tax* (RRT) applies to petroleum projects in the majority of Australia's offshore areas beyond the States' territorial seas. Excluded are the North West Shelf production licence areas and associated exploration permits. Where RRT applies, it replaces excise and royalties which would otherwise have been levied.

A *Resource Rent Royalty* (RRR) may be applied to onshore petroleum projects by State Governments. Where RRR is applied the legislation provides for the Commonwealth to waive its crude oil excise whenever the relevant State Government negotiates an acceptable RRR agreement with the project producers and agrees to a satisfactory revenue sharing formula with the Commonwealth.

Excise applies to crude oil production from the North West Shelf projects offshore and all onshore areas (except Barrow Island where a RRR applies).

Crude oil excise is based on the annual level of crude oil sales from individual production areas and is levied as a percentage of the realised price received by producers.

Different excise scales are applicable to oil production depending upon the date of discovery of the production area and the date when the area was first developed. In the case of new offshore projects to which excise and royalty apply, and all onshore fields, the first 30 million barrels of crude oil production are exempt from excise. Production beyond this level is subject to the appropriate excise rate.

Oil discovered before 18 September 1975 ('old' oil) attracts a higher rate of excise than oil discovered on or after this date ('new' oil). An 'intermediate' scale also applies to oil produced from 'old' oil fields that were not developed as at 23 October 1984. However, in the case of all onshore fields that commenced production after 1 July 1987, production in excess of 30 million barrels is subject to 'new' oil excise.

A *Commonwealth Royalty* is also levied on offshore petroleum production from the North West Shelf Project. Proceeds are shared, generally on a 32:68 basis by the Commonwealth and Western Australia. Onshore petroleum rights are vested in the State and Northern Territory Governments and the Commonwealth does not in general receive a share of this royalty.

Incentives to encourage petroleum exploration and development

Apart from the deregulation of crude oil marketing from 1 January 1988 and the concessions to the crude oil excise regime, the Government continues its policy of encouraging petroleum exploration and development in Australia.

Australian participation guidelines for foreign investment policy in respect of new oil and gas development proposals involving total investment of over $10 million no longer apply. These projects will be allowed to proceed unless judged contrary to the national interest.

The rate of company tax has been reduced to 33 per cent and the immediate 100 per cent deductibility of exploration expenditure against company tax has been retained, as has the write-off over 10 or 20 years in equal instalments of expenditure on infrastructure such as pipelines.

The Government continues to release offshore petroleum exploration areas regularly, usually twice a year. The release made in November 1993 offered 11 areas off the coast of Western Australia, South Australia, Victoria, Tasmania, the Northern Territory and in the Territory of Ashmore and Cartier Island.

Administrative arrangements

The Commonwealth Minister for Primary Industries and Energy has portfolio responsibility for national energy policy matters, including the commercial development of hydrocarbon fuels and minerals. The Department of Primary Industries and Energy provides support for a number of advisory bodies including the Energy Research and Development Corporation, the Australian Minerals and Energy Council, the National Energy Consultative Council, the National Oil Supplies Advisory Committee, the National Petroleum Advisory Committee, the National Fuels Emergency Consultative Committee and the Australian Coal Industry Council.

The Department is also responsible for the implementation of action required from Australia's membership of the International Energy Agency and for the national system of accounting for control of nuclear materials under Australia's Agreement with the International Atomic Energy Agency.

Research and development

The Energy Research and Development Corporation (ERDC) manages investment in energy research. Over the past three years, ERDC has committed approximately $32 million to investments in innovation projects which have a total cost of approximately $115 million.

ERDC manages projects in four portfolios: gas and liquid fuels, electricity, renewable energy sources and systems, and planned energy use (manufacturing, transport and housing).

Its role is to facilitate and stimulate investment in effective energy research for Australia. It seeks to bring together the people, organisations and resources necessary to successfully research, develop and commercialise innovative change.

Its objectives are to manage projects which will benefit Australia by increasing the efficiency of energy use, the diversity of energy supply, the development of competitive Australian industries and/or reducing adverse environmental impacts, energy requirements and energy costs.

International Energy Agency (IEA)

The IEA (of which Australia is a member) carries out the International Energy Program and the Long Term Co-operation Program. These programs aim to:

- prepare member countries against risk of oil supply disruptions and share remaining supplies in the event of a severe oil shortfall;
- develop alternative energy sources and the more efficient use of energy through cooperative research and development programs; and
- promote cooperative relations with other oil-producing and oil-consuming countries.

RESEARCH

Research investigations into problems of exploration, mining, ore-dressing and metallurgy are conducted by government bodies, universities, private enterprise, or by the combined efforts of all these. A summary of the main organisations and their functions follows.

Australian Geological Survey Organisation

The Australian Geological Survey Organisation (AGSO), formerly called the Bureau of Mineral Resources, Geology and Geophysics (BMR), is Australia's premier geoscientific agency.

AGSO's primary mission is to build a national geoscientific mapping effort to encourage economically and environmentally sustainable management of Australia's minerals, energy, soil and water resources.

AGSO's role is to improve the quality, extent and accessibility of the geoscience knowledge base to underpin:

- the development of a more competitive and diversified Australian mineral and petroleum exploration industry;
- the improved management of Australia's natural resources consistent with the principles of ecologically sustainable development; and
- the development of effective strategies to mitigate natural geological hazards.

AGSO provides expert professional geoscientific advice on minerals, petroleum, ground water, coastal and marine issues and seismological and geological hazard analysis to underpin the development of management and land use strategies.

AGSO's activities include regional mapping and analysis of major mineral provinces and petroleum basins, regional environmental mapping (including land resources such as soils and ground water), airborne magnetic and radiometric surveying, onshore and offshore seismic surveying, the operation of geophysical observatories and the development of an accessible National Geoscience Information System.

Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Minerals research by the CSIRO is primarily undertaken within the Institute of Minerals, Energy and Construction (IMEC).

Research and development activities of the Institute are designed to play a major contributing role in the development of sustainable and competitive minerals, energy and construction industries in Australia and in the creation of a better living and working environment for all Australians through:

- The provision of high-quality research, development and service capabilities which support existing and emerging industries as well as providing for the next generation of technology, products and processes.
- Helping to bring about safe and ecologically sustainable development for all Australians through research and advice on environmental issues related to IMEC's client industries.
- Working closely with industry, government and other organisations to help transform research outcomes into new or improved business opportunities including, where appropriate, the championing of individual projects.

University research

The various universities in Australia carry out research into various aspects of the mineral industry such as geology, ore mineralogy and genesis, mining techniques, mineral processing, extractive metallurgy, and materials and metals technology.

Australian Mineral Industries Research Association Limited

The Association provides high-quality development and management of jointly funded research projects for the benefit of the Association's members. Membership includes all the largest Australian mineral and coal companies, smaller exploration companies and suppliers of services to the industry. It sustains an active involvement in four Co-operative Research Centres and was appointed in 1992 to manage the Australian Coal Association Research Program.

INTERNATIONAL ASSOCIATIONS

Because Australia is a large supplier of certain minerals to the rest of the world, and because the industry depends to a large extent on the maintenance of a high level of exports, international relations are of considerable importance to the industry. The Commonwealth Government takes an active role in international consultations and discussions relating to minerals. The most important international links are:

- Association of Tin Producing Countries (ATPC);
- International Lead and Zinc Study Group (ILZSG);
- UNCTAD Intergovernmental Group of Experts (IGE) on Iron Ore; and
- International Nickel Study Group (INSG).

ENERGY

Energy is fundamental to Australia's standard of living and economic performance. It has an important role to play in restructuring Australia's economy and improving its competitiveness.

The Commonwealth Government has a significant involvement in the activities of the energy sector. Its responsibilities for export policy and offshore petroleum activities have a major impact on specific development projects.

Key Australian energy policy objectives are:

- responsible development of a growing, internationally competitive energy export sector;
- promotion of efficient production, distribution and use of energy to maximise its contribution to Australia's economic performance;
- development of a flexible, dynamic energy sector capable of responding effectively to change;

- integration of economic efficiency in the production and use of energy with environmental goals through the principles of ecologically sustainable development; and
- promotion of domestic R&D aimed at efficient, ecologically sustainable energy production, diversification and use, complemented with international energy R&D cooperation.

In 1991, the Commonwealth released an energy policy discussion paper *Issues in Energy Policy: Agenda for the 1990s* which identified a number of key issues:

- developing a framework for a coordinated energy policy for all of Australia;
- developing effective mechanisms to incorporate the costs of environmental damage, risk or rehabilitation into energy costs and prices;
- improving energy efficiency as a cornerstone of sustainable energy production and use;
- reforming the electricity supply industry;
- drawing up a national strategy for the development of natural gas;
- maintaining energy supplies for Australia; and
- enhancing Australia's position as a reliable supplier of a diversified mix of clean fuels.

Progress on these issues means that Australia is now well placed to meet its key energy policy objectives.

Australia has abundant reserves of coal, gas and uranium to meet both export and domestic demands. Given currently known resources, it can continue current production rates in these energy sources for 300 years (black coal), 45 years (gas), and 145 years (uranium), respectively. Australia is one of only five Organisation for Economic Cooperation and Development (OECD) countries that are net energy exporters. Australia is:

- the world's largest exporter of coal, accounting for around one-third of the world seaborne coal trade;
- a major uranium producer and exporter; and
- currently an exporter of Liquefied Petroleum Gas (LPG) and petroleum products, and a major exporter of Liquefied Natural Gas (LNG).

Estimates of Australia's demonstrated economically recoverable resources of energy as at December 1992 were:

Black coal	51	Gt
Brown coal	41	Gt
Natural gas	888	TL
Uranium	462	kt

NOTE: Gt — gigatonnes; TL — teralitres; kt — kilotonnes.
Source: Bureau of Resource Sciences.

Information on petroleum resources is available in table 17.5.

ENERGY RESOURCES

Information relating to mineral energy resources — black coal, brown coal, petroleum, uranium and thorium — is contained in the Mining Industry section of this chapter.

Information on other forms of energy resources follows.

Solar

One of the best prospects for using many renewable energy technologies to generate electricity in the short to medium term appears to be in remote areas, where there are a total of more than 10,000 households and 300 communities which generate their own electricity. Remote area power supply systems can be based on different renewable energy technologies, depending on local resources. Photovoltaic cells are the most widely used technology, with some wind powered systems and a small number of micro-hydro systems. Batteries store electricity produced by the solar cells or wind turbines for use during periods when the sun is not shining or when there is no wind.

There are two main applications of solar energy that have the potential to make a significant contribution to grid-based electricity supply. These are photovoltaics and solar thermal technologies. One of the most promising applications of photovoltaics would appear to be on long feeder lines. It is also possible that solar power supply systems could be a cost effective source of peaking power in those electricity grids where the maximum annual load occurs in summer. A wide range of solar thermal technologies are the subject of research and development around the world. These include systems where sunlight from a large field of mirrors is focused on a central receiver, where the heat is used to produce electricity; smaller, dispersed systems, each unit of which operates as a separate collector; and solar ponds which effectively collect and store low grade heat.

Passive solar design is an economically viable means of using solar technology throughout Australia. Careful attention to building design, materials and orientation can greatly decrease heating and cooling requirements (and increase comfort) for a modest increase in construction costs over conventional buildings. Passive solar design principles have shown that solar energy can meet up to 90 per cent of normal household space heating needs.

Australia has a well established domestic solar water heater industry. Domestic solar water heaters are installed on some 300,000 or five per cent of Australian houses. In Western Australia one in four households has a solar water heater, while in the Northern Territory the figure is 37 per cent. In the 1993–94 Budget, the Commonwealth Government announced that it would provide $6 million for a program to enable solar water heaters to be provided to consumers at low initial outlay. The aim of the program is to develop, trial and demonstrate innovative means of financing solar water heaters. The program encouraged cooperative action between industry, energy utilities and financiers to provide households with solar water heaters at a low initial cost, with the balance to be recovered through payments collected through customers energy bills.

Wind

Of the renewable energy technologies to emerge in the last 10–15 years, wind farms are probably the most promising and lowest cost option for large-scale power supplies in the near term. Australia's best wind resources are located in coastal regions of southern Australia, particularly in Tasmania, South Australia and Western Australia.

At Esperance in south-west Western Australia, the State Energy Commission of Western Australia has commissioned a 2.5 megawatt wind farm which will supply some 14 per cent of the town's power supply. In Victoria, a wind turbine has been installed at Breamlea, south-west of Melbourne, which produces some 100,000 kWh per annum, and preparations are now underway at Toora to connect a 10 MW wind farm to the grid in late 1994.

Wave

Wave power plants are another potential source of electricity for Australia. Although detailed studies of Australia's best wave resources have yet to be undertaken, the best conditions appear to be in southern regions.

The commercial use of wave power throughout the world is presently confined to small-scale applications in areas which have traditionally relied upon high cost sources of electricity such as diesel generators. At this stage there appears to be considerable uncertainty about the cost of electricity produced by wave power plants.

Geothermal

Geothermal heat can be used for the production of electricity. Commercially available geothermal power plant technology relies upon heat extracted from aquifers located in regions with significant geothermal activity. Possible areas identified in Australia are the Great Artesian Basin. Hot water from bores in these areas could provide an opportunity to produce electricity for homesteads and communities. A 120 KW demonstration plant is operating in Birdsville, Queensland. In Portland, Victoria, geothermal energy is currently being used for water heating at the municipal swimming pool, and also for space heating at the hospital and police station.

Hot dry rocks technology involves pumping water into holes drilled into hot areas deep beneath the earth's surface. This water is then collected and brought to the surface where it is used to generate electricity. Significant resources exist in central Australia.

Given the scale of the engineering required, this technology is likely to be only appropriate for grid connected applications. Further exploration is needed to delineate Australia's resources, as the best resources identified to date are located in central Australia, and significant costs would be associated with transmitting electricity from this source to major metropolitan centres.

Municipal waste

Rubbish dumps or landfills contain large amounts of organic matter. As time passes some of this organic matter is converted into methane by bacterial action. This methane is known as landfill gas and can be collected using drill holes and used either to power an engine to generate electricity for sale to the electricity grid, reticulated in natural gas pipelines or used as a source of heat for applications adjacent to the landfill (for example, brick works, heated swimming pool). The use of landfill gas power plants in Australia was pioneered by Northcote City Council with a Commonwealth grant.

Major landfill gas developments have occurred in the States of Victoria, New South Wales and South Australia. The first landfill gas-fuelled power station was commissioned in Victoria in May 1992, and that State now has three such power stations operating at Berwick (5.6 MW), Corio (0.9 MW) and Broadmeadows (5.0 MW). Similar power stations are now operating in New South Wales at Lucas Heights (4.0 MW, commissioned in May 1994) and at Wingfield in South Australia (5.0 MW, commissioned in July 1994).

Biomass

Two forms of biomass most frequently used in Australia are wood and bagasse. Approximately 6.0 megatonnes of firewood are currently used annually in Australia, equivalent in energy terms to about 100 petajoules, or 2.5 per cent of total energy consumption.

Bagasse, the fibrous residue remaining after extraction of the juice from sugar cane, is the major fuel used in the sugar industry, providing about 70 petajoules, or 1.75 per cent of Australia's total energy consumption.

ELECTRICITY AND GAS SUPPLY

At 30 June 1993, the total installed public electric generating capacity in Australia was 35.6 million kilowatts. Total electricity generation in 1992–93 was 152,426 million KWh.

Of total public electrical energy produced during 1992–93 hydro-electric sources provided approximately 11 per cent, and the balance was supplied by fossil fuels with approximately 88 per cent provided by coal. The development of coal-fired power stations has been facilitated by the presence of large demonstrated economic resources of coal close to the major industrial areas in New South Wales and Victoria.

About 90 per cent of electric power in Australia is produced by power stations owned and operated by State government utilities.

Natural gas consumption in 1992–93 was forecast to be 704 petajoules, an increase of 4.1 per cent on 1991–92 and contributed 17.1 per cent of Australia's forecast energy requirements.

Natural gas exports in the form of LNG (Liquefied Natural Gas), began in 1989 and for the year 1992–93 were equal to 270 petajoules.

17.10 ELECTRICITY AND GAS ESTABLISHMENTS: SUMMARY OF OPERATIONS, 1992–93

	Electricity					Gas
Items	*NSW*	*Vic.*	*Qld*	*Other(a)*	*Aust.*	*Aust*
	INCOME AND EXPENDITURE					
Turnover(b)	7,882.8	3,579.0	3,545.1	3,278.7	18,285.7	3,142.4
Plus closing stocks	447.9	94.4	97.2	201.4	840.9	55.7
Less opening stocks	477.9	127.0	119.1	225.0	949.1	65.9
Less purchases, transfers in & selected expenses	4,200.1	1,119.4	1,788.3	1,189.2	8,297.1	1,498.2
Value added	*3,652.7*	*2,426.9*	*1,735.0*	*2,065.9*	*9,880.5*	*1,633.9*
	FIXED CAPITAL EXPENDITURE					
Fixed capital expenditure less disposals	652.2	–390.3	586.5	445.6	1,293.9	208.3
	EMPLOYMENT DETAILS					
Establishments at 30 June (no.)	28	13	10	11	62	30
Employment at 30 June (no.)(c)	19,639	13,279	8,566	11,638	53,122	8,769
Wages and salaries ($m)(d)	773.6	754.6	306.0	443.2	2,277.2	336.9

(a) South Australia, Western Australia, Tasmania, Northern Territory and the Australian Capital Territory. (b) Includes transfers out to other establishments of the same management unit where appropriate. (c) Includes working proprietors. (d) Excludes amounts drawn by working proprietors.

Source: Electricity and Gas Operations, Australia (8208.0).

The main features of the production and distribution of electricity and gas in each State and Territory are outlined below.

Snowy Mountains Hydro-Electric Scheme

The Commonwealth Government's major direct role in the electricity supply industry is its major responsibility for the Snowy Mountains Scheme. It supplies water for both electricity generation and irrigation. Located in south-eastern Australia, on its completion in 1974, the Scheme was one of the largest engineering works of its type in the world. It impounds the south-flowing waters of the Snowy River and its tributary, the Eucumbene, at high elevations and diverts them inland to the Murray and Murrumbidgee Rivers through two tunnel systems driven through the Snowy Mountains. The Scheme also involves the regulation and utilisation of the headwaters of the Murrumbidgee, Tumut, Tooma and Geehi Rivers. The diverted waters fall some 800 metres and together with regulated flows in the Geehi and Tumut River catchments, generate mainly peak load electricity for the States of New South Wales and Victoria and the Australian Capital Territory as they pass through power stations to the irrigation areas inland from the Snowy Mountains.

A special article on the Scheme appeared in *Year Book Australia 1986*.

New South Wales

Pacific Power (formerly the Electricity Commission) is responsible for the production of electricity and its bulk transmission throughout New South Wales. Twenty-five electricity supply authorities handle the retail distribution of electricity to consumers. It also supplies several large industrial customers.

Electricity for New South Wales is generated mainly in coal-fired thermal power stations, supplemented by a share of the Snowy Mountains Scheme together with smaller hydro and gas turbine power stations.

At June 1993 there were seven major power stations in the Pacific Power system and their base load capacities were as follows: Bayswater (Hunter Valley) 2,640 MW; Liddell (Hunter Valley) 2,000 MW; Munmorah (Tuggerah Lakes) 600 MW; Vales Point (Lake Macquarie) 1,320 MW; Eraring (Lake Macquarie) 2,640 MW; Wallerawang (near Lithgow) 1,000 MW; and Mount Piper (near Lithgow) 660 MW. The total nominal capacity (maximum continuous rating of the generators) of Pacific Power's system at 30 June 1993 was 11,514 MW. The maximum demand for electricity from the system during 1992–93 occurred on 20 July 1992 and was 9,792 MW. Electricity sent out from these power stations in 1992–93 was 48,473 GWh.

Interconnection of the New South Wales and Victorian power systems with that of South Australia was completed in December 1989 and commercial operations began in March 1990. Studies have begun to explore interconnection of the New South Wales and Queensland power systems.

The greater part of the hydro-electric potential of New South Wales is concentrated in the Snowy Mountains Scheme. New South Wales' share sent out over its system in 1992–93 was 3,854 GWh. Apart from this scheme, major hydro-electric stations are in operation at the Warragamba Dam (50 MW) and Hume Dam (50 MW). A pumped-storage hydro-electric system to produce 240 MW has been installed as part of the Shoalhaven Scheme in conjunction with the Water Board. In addition, there are five smaller hydro-electric installations in operation in various parts of the State.

Electricity sent out over Pacific Power's system from these hydro-electric stations in 1992–93 was 181 GWh.

Total electricity generated in New South Wales from all sources in 1992–93 was 57,794 GWh, with 51,131 GWh sent out over Pacific Power's system.

Natural gas was made available to Sydney consumers with the completion of an overland supply pipeline from the Moomba field in South Australia in 1976. Since then lateral pipelines have been completed to a number of New South Wales towns.

The total amount of gas (of all types) available for issue through mains in New South Wales in 1992–93 was 96 petajoules.

Victoria

The State Electricity Commission (SEC) is a body corporate and one of the largest public sector organisations in Australia. It is a self-supporting business and is the principal supplier of electricity throughout Victoria.

The SEC's total installed generating plant capacity (maximum continuous rating of the generators) at 30 June 1993 was 7,763 MW, including both capacity within the State and that available to it from New South Wales. In 1992–93, electricity generated by the SEC in its thermal and hydro-electric power stations, or purchased, totalled 39,091 GWh.

At June 1993, it distributed electricity directly to 1,654,700 customers and indirectly to a further 292,400 through 11 metropolitan councils.

Victoria's electricity system is based upon the State's extensive brown coal resource in the Latrobe Valley, 140 to 180 kilometres east of Melbourne in central Gippsland, one of the largest single brown coal deposits in the world — *see* earlier section on brown coal.

The major brown coal-fired generating plants in the system are the 2,000 MW Loy Yang 'A', the 1,600 MW Hazelwood and 1,450 MW Yallourn 'W' power stations, followed by Morwell (170 MW). These stations are all located in the Latrobe Valley and generate 85 per cent of the State's electricity requirement.

Other thermal stations are Jeeralang (465 MW) gas turbine station in the Latrobe Valley and Newport 'D' (500 MW) gas-fired station in Melbourne. There are hydro-electric power stations in north-eastern Victoria: Kiewa (184 MW), Eildon–Rubicon–Cairn Curran (135 MW) and Dartmouth (150 MW). In 1992–93, Victoria also took 1,927 GWh of the output of the Snowy Mountains Hydro-Electric Scheme and half of the output of the Hume hydro-electric station near Albury.

The Loy Yang 'B' station, the second part of the Loy Yang Project, has approved capacity of 1,000 MW in two units of 500 MW each.

The Gas and Fuel Corporation combines the resources of government with those of private enterprise to supply gas.

Gas is reticulated to around 1.27 million domestic, industrial and commercial customers through an underground network of transmission pipelines and mains, some 24,089 kilometres in length.

In addition to the greater Melbourne area, a reticulated supply is provided in 50 cities and towns throughout Victoria and in Albury, New South Wales.

Ninety-nine per cent of reticulated supply is Bass Strait natural gas, purchased from Esso and BHP. Six towns in western Victoria receive a reticulated supply of tempered liquefied petroleum gas.

Queensland

The main supply of electricity in Queensland is controlled by the Queensland Electricity Commission (QEC). The QEC provides electricity to major users of power and to seven Electricity Boards which in 1992–93 provided power to 1,123,671 domestic and 175,658 commercial and industrial consumers, increases of 8.9 and 3.8 per cent, respectively over the previous year.

Electricity generation in Queensland is based primarily on the State's plentiful resources of black coal. In 1992–93, Stanwell, Callide B, Tarong, Gladstone Swanbank A and Swanbank B steam plants consumed 12,278 kilotonnes of coal and 16,874 tonnes of oil. This generated 28,307.2 GWh of energy or 99 per cent of energy generated in Queensland. The hydro-electric plants at Kareeya, Barron Gorge and Wivenhoe produced 271.4 GWh of energy in 1992–93.

Planning for the future is still based on coal-fired power stations providing the bulk of Queensland's electrical energy needs, augmented as necessary by pumped-storage and conventional hydro-electric stations for peaking capacity.

Natural gas produced for sale in Queensland comes from three main areas, the Surat-Bowen Basin concentrated around Roma, the Denison Trough and south-west Queensland. Natural gas from the Surat-Bowen Basin is piped to the Wallumbilla junction of the Roma to Brisbane pipeline for compression and reticulation to domestic, commercial and industrial consumers in Roma, Dalby, Oakey, Toowoomba, Ipswich, Brisbane and the Gold Coast. A pipeline was recently constructed connecting the Surat-Bowen Basin and the Denison Trough to commercial and domestic users at Gladstone and Rockhampton. Recent developments have seen the south-west Queensland gas fields connected to the South Australian gas network.

South Australia

The Electricity Trust of South Australia (ETSA) is responsible for unification and coordination of the major portion of the State's electricity supply.

At June 1993, the Electricity Trust's installed capacity was 2,350 MW. Its major power stations are Torrens Island (1,280 MW), Port Augusta Northern Power Station (500 MW), and Port Augusta Playford 'B' (240 MW). The Trust also operates gas turbine stations at Dry Creek (156 MW), Mintaro (90 MW) and Snuggery (75 MW) and a small diesel station at Port Lincoln (9 MW).

The Electricity Trust supplies directly or indirectly more than 99 per cent of all electricity customers connected to the public supply within the State. The remainder are supplied by small diesel generating plants situated in towns in the more remote areas of the State. Total Electricity Trust customers at 30 June 1993 was 675,452.

A 500 MW capacity interconnection with the Victorian–New South Wales systems has been operational since March 1990.

SAGASCO Holdings Ltd has responsibility for oil and gas exploration, development and production, and the distribution within the State of gas and LPG. It has three subsidiaries: South Australian Gas Company Ltd (to supply gas to Adelaide and surrounding areas), SAGASCO Resources Ltd (to undertake oil and gas exploration, development and production) and SAGASCO LPG Pty Ltd.

Natural gas is reticulated throughout most of Adelaide, Angaston, Whyalla, Mount Gambier, Peterborough and Port Pirie. Liquefied petroleum gas is distributed by reticulation at Roxby Downs and Renmark and is available elsewhere as bottled gas.

Western Australia

Most of the electricity production in the State is generated by the State Energy Commission of Western Australia (SECWA), whose responsibilities include ensuring the effective and efficient use of the State's energy resources and the provision of economical and reliable supplies of electricity and gas. Significant amounts of electricity are also generated by private enterprise, particularly large-scale mining companies in the Pilbara region.

SECWA operates two power grid systems, one for the Pilbara and the other for the south-west, which supply the electricity needs of 98 per cent of the State's population.

- The South-West Interconnected System services an area from Kalbarri in the north to Bremer Bay in the south and from Perth east to Kalgoorlie. Three major thermal power stations provide the bulk of electricity for the system. They are located at Muja (1,040 MW capacity) and Bunbury (120 MW), both are coal fired and generated around 66 per cent of electricity supplied through the system during 1991–92; and at Kwinana (880 MW), fuelled by coal, heavy fuel oil and North West Shelf gas. Gas turbines are located at Pinjar (north of Wanneroo), Mungarra (south-east of Geraldton), Kwinana, Geraldton and Kalgoorlie to provide peak and emergency power. The commissioning of an additional four 36 MW and one 116 MW gas turbines during 1993, make Pinjar the third largest station in this system with 18.0 per cent of the total capacity of 2,754 MW.

- The Pilbara Interconnected System links Karratha, Dampier, Cape Lambert, Wickham, Roebourne, Port Hedland and Goldsworthy. Electricity is supplied from Cliffs Robe River Iron Associate's gas-fired station at Cape Lambert. Additional power can be drawn from the SECWA stand-by diesel generating facility at Port Hedland, from Hamersly Iron Proprietary Limited's power station at Dampier and from a SECWA gas turbine generating unit also located in Dampier.

Outside the electricity grid systems, SECWA operates another 28 smaller diesel power stations and provides support services for the Aboriginal and Torres Strait Islander Commission to help run 34 Aboriginal village power stations in remote areas of the State. At 30 June 1993, SECWA had 677,477 customer accounts for electricity throughout Western Australia.

The North West Shelf provides most of the natural gas to SECWA with a small amount of gas also being received from the onshore Woodada gas field (near Dongara). In addition to reticulating (principally) North West Shelf natural gas to customers linked to the Dampier to Bunbury pipeline, SECWA also reticulates tempered liquefied petroleum (TLP) gas to customers in Albany on the south coast, and Simulated Natural Gas (SNG) to customers in Mandurah, south of Perth. At 30 June 1993, there were 297,562 customer accounts for natural gas, 2,870 customer accounts for TLP gas and 2,599 for SNG gas. This represents an increase in customers of 7.9 per cent since June 1992.

Research continues into alternative sources of energy. Western Australia's geographical and climatic characteristics are such that it has potential to take advantage of advances in the use of solar, wind, hydro-electric and tidal or wave power.

Wind power was of some significance as an energy source in the early days of settlement and is still used extensively in agricultural and pastoral areas for pumping water for stock. In March 1987, SECWA commissioned six 60 kilowatt wind turbines at Salmon Beach, a few kilometres west of the south coastal town of Esperance, to augment the local electricity supply. A second wind farm was commissioned at Ten Mile Lagoon, Esperance during March 1994. This two MW wind farm is expected to supply 14 per cent of the power requirements of Esperance and save 1.6 million litres of fuel which would have been otherwise consumed by the diesel power station. A wind power generator is also being used to augment the electricity supply on Rottnest Island.

Consultations and feasibility studies have started for a proposed 16 MW hydro-electric scheme power station sited at the Ord River diversion dam, which could be operating by mid-1996 to supply power to Kununurra and Wyndham.

Agreement has been reached to buy electricity from Western Australia's first private power station using landfill gas. The power station at the Redhill landfill site (approximately 25 kilometres north-east of Perth) was commissioned in June 1993, and has a capacity of about two MW which is sufficient to supply electricity for 2,000 average homes.

Tasmania

Tasmania's electricity requirements are provided by the Hydro-Electric Commission. The total installed generator capacity at 30 June 1993 was 2,435 MW of which almost 90 per cent was supplied by an integrated hydro-network. An oil-fired thermal station of 240 MW is located at Bell Bay.

The Hydro-Electric Commission also purchased electricity amounting to five GWh from two privately-owned developments.

Hydro-electric power accounts for almost all reticulated energy in Tasmania. A usually reliable distribution of rainfall throughout the year and the establishment of numerous lakes within the State, has created substantial artificial storage.

The total energy generated during the 1992–93 financial year was 8,849 GWh, a small decrease from the previous year. Total sales amounted to 8,183 GWh of which 5,224 GWh was sold to the major industrial sector.

Total water storages at June 1993 were 41.8 per cent, a rise of 8.8 per cent in the 12 month period. The total energy yield from storages during 1992–93 was 100.8 per cent of the long-term average. Bell Bay thermal station was not required to contribute to the State's energy requirements for the year.

Commissioning of the Anthony Power Development, the last hydro-power development, took place on 13 May 1994. It will be known as the Tribute Power Station and will add 84 MW to the installed capacity of the system.

A $150,000 feasibility study into the introduction of wind power on King Island commenced in January 1994, and is expected to lead to the installation by 1995 of wind turbines to meet an estimated 20 per cent of the Island's energy needs.

Gas is only a minor energy source in Tasmania. Town gas is manufactured and reticulated in Launceston only. Bottled LPG is a minor domestic, commercial and motor fuel in the State.

Northern Territory

The Power and Water Authority (PAWA) is responsible for generation, transmission and distribution of electricity and the sale of natural gas in the Northern Territory.

PAWA supplies electricity to 51,800 services in four major regional centres and eight minor centres.

There are 70 remote communities with PAWA electricity supplies.

Total energy generated in the Northern Territory in 1992–93 was 1,198 GWh. Total sales comprised 806 GWh to businesses and 300 GWh to domestic consumers.

Natural gas pipelines from the Amadeus Basin in central Australia supply the Territory's four major centres — Darwin, Katherine, Tennant Creek and Alice Springs — all of which use indigenous natural gas, replacing imported heavy fuel oil and distillate as fuel for electricity generation. A combined cycle block of 100 MW comprises half of the installed capacity at Channel Island Power Station near Darwin.

A privately-built, owned and operated transmission line between Darwin and Katherine, allows reserve capacity to be shared and has reduced costs because of the higher operating efficiencies of Channel Island Power Station compared with Katherine Power Station.

A privately-owned power station of 15 MW capacity is situated at Pine Creek. It is operated by PAWA under contractual arrangements and supplies PAWA customers at and around Pine Creek.

Australian Capital Territory

Electricity is distributed within the Territory by the ACT Electricity and Water Authority (ACTEW). During 1992–93 the total bulk electricity purchased was 2,347 GWh, comprised of 1,677 GWh provided by Pacific Power, and 670 GWh reserved from the Snowy Mountains Hydro-Electric Authority. The system's maximum demand was 572 MW. ACTEW supplied 117,765 customers at June 1993.

Natural gas from the Moomba fields in South Australia is piped to Canberra via a 70 kilometre spur which branches from the main Moomba–Sydney pipeline at Dalton.

During 1992–93, AGL Canberra Ltd reticulated 4,328 terajoules of natural gas to 1,251 commercial and industrial establishments and about 39,280 homes.

BIBLIOGRAPHY

ABS Publications

Actual and Expected Private Mineral Exploration, Australia (8412.0)

Directory of Energy Related Statistics, 1992 (1107.0)

Domestic Firewood and Coal Usage, Tasmania, 1985 (8204.6)

Electricity and Gas Operations, Australia (8208.0)

Foreign Trade, Australia: Merchandise Exports (5424.0)

Foreign Trade, Australia: Merchandise Imports (5426.0)

Mining, Australia, Preliminary (8401.0)

Mining Industry, Australia (8402.0)

Mining Production, Australia (8405.0)

National Energy Survey: Annual Consumption of Reticulated Energy by Households, Australia, 1985–86 (8213.0)

National Energy Survey: Energy Consumption in Industry, Australia, 1986–87 (8217.0)

National Energy Survey: Household Appliances, Facilities and Insulation, Australia, 1985–86 (8212.0)

National Energy Survey: Household Sample File on Magnetic Tape, 1985–86 (8220.0)

National Energy Survey: Household Sample File on Magnetic Tape, 1985–86 (8215.0)

National Energy Survey: Weekly Reticulated Energy and Appliance Usage Patterns by Season, Households, Australia, 1985–86 (8218.0)

New South Wales Energy Survey, October 1984: Part 2 — Household Energy Consumption (8212.1)

New South Wales Energy Survey, October 1984: Sample File on Magnetic Tape (8215.1)

New South Wales Energy Survey: Part 1 — Household Appliances, Facilities, Insulation and Appliance Acquisition, October 1984 (8211.1)

Other Publications

Other organisations which produce statistics in this field include the Australian Bureau of Agricultural and Resource Economics, the Department of Primary Industries and Energy, the Joint Coal Board, the Australian Institute of Petroleum and the Electricity Supply Association of Australia. State government departments and instrumentalities also are important sources of energy data, particularly at the regional level, while a number of private corporations and other entities operating within the mining and energy fields also publish or make available a significant amount of information.

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book.* Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book.*

Chapter Eighteen

Manufacturing, Wholesale and Retail Industries

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MANUFACTURING

Manufacturing, as specified in Division C of the Australian Standard Industrial Classification (ASIC), broadly relates to the physical or chemical transformation of materials or components into new products whether the work is performed by power-driven machines or by hand.

Despite a significant increase in the level of manufacturing gross product over the last 20 years, the manufacturing sector's contribution to the gross product of all industry fell considerably over the period. From 21.0 per cent in 1972–73, manufacturing industry ($59,771 million) only accounted for 14.7 per cent of all industry gross product in 1992–93.

Employment in the manufacturing sector has also fallen markedly over the last 20 years. In 1972–73 more than 1.3 million persons were employed in manufacturing, 23.9 per cent of employment in all industries. In 1992–93 manufacturing employment was only 14.6 per cent of all industries.

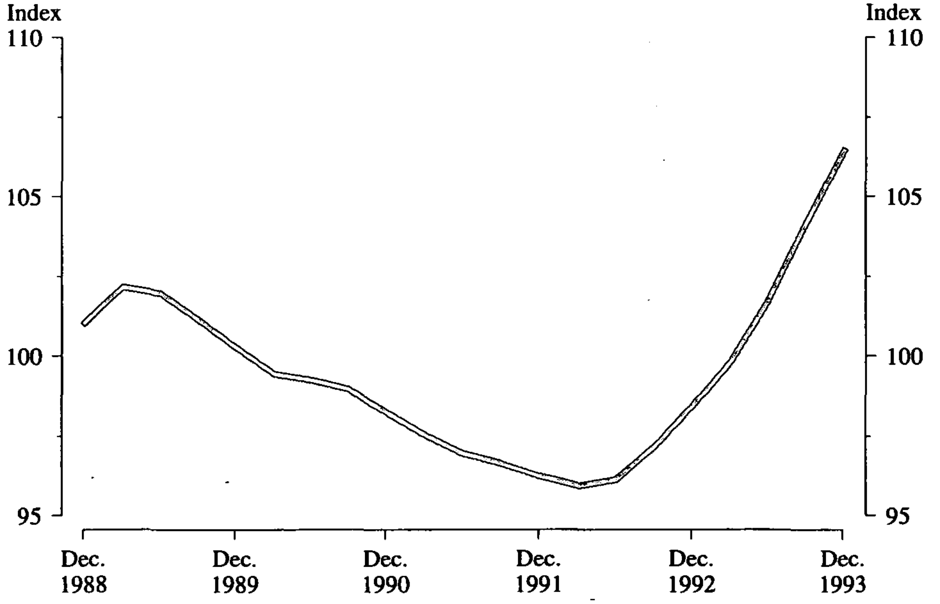
Manufacturing trends

In the December quarter 1993, the trend for the index of manufacturing production continued to grow, with a rise of 2.2 per cent following rises in the six previous quarters (graph 18.1).

Over the period 1983–84 to 1992–93 the index of manufacturing production increased by 18 per cent. After consecutive increases between 1983–84 and 1988–89, the index recorded successive falls in 1989–90, 1990–91 and 1991–92, then an increase in 1992–93 (table 18.2).

The largest increases over the period 1983–84 to 1992–93 occurred in Other machinery and equipment (up 42%) and Basic metal products (up 40%). Clothing and footwear (down 13%) and Wood, wood products and furniture (down 7%), were the only industries to record falls over the period.

18.1 INDEX OF TOTAL MANUFACTURING GROSS PRODUCT AT AVERAGE 1989–90 PRICES TREND ESTIMATE
(Reference base year 1989–90 = 100)



Source: Quarterly Indexes of Industrial Production, Australia (8125.0).

Structure of the manufacturing industry

There were 41,480 manufacturing establishments operating in Australia at 30 June 1992 at which time they employed 906,900 persons. During 1991–92, manufacturing establishments paid $27,068 million in wages and salaries and recorded $168,019 million in turnover (table 18.3).

The industries with the most persons employed at 30 June 1992 were Food, beverages and tobacco (166,000), Other machinery and equipment (114,200) and Paper, paper products, printing and publishing (100,000). Textiles (26,200) was the smallest employer, accounting for only three per cent of manufacturing employment. Food, beverages and tobacco was also the largest contributor to total manufacturing turnover, accounting for 21 per cent, followed by Chemical, petroleum and coal products (14%) and Basic metal products (12%).

18.2 INDEXES OF MANUFACTURING INDUSTRY GROSS PRODUCT AT AVERAGE 1989–90 PRICES (Reference base year 1989–90 = 100.0)

Industry subdivision	*1983 –84*	*1984 –85*	*1985 –86*	*1986 –87*	*1987 –88*	*1988 –89*	*1989 –90*	*1990 –91*	*1991 –92*	*1992 –93*
Food, beverages and tobacco	89.1	90.2	90.1	92.9	97.2	99.6	100.0	101.6	104.4	112.3
Textiles	90.5	99.7	99.0	102.8	102.1	103.9	100.0	100.9	103.7	92.1
Clothing and footwear	101.1	104.6	116.7	108.3	109.0	112.3	100.0	92.3	86.9	88.2
Wood, wood products and furniture	89.1	93.5	105.4	95.6	107.0	111.7	100.0	90.8	88.5	82.9
Paper, paper products, printing and publishing	81.1	88.3	89.7	93.1	99.4	106.3	100.0	97.1	92.8	88.1
Chemical, petroleum and coal products	87.7	89.9	87.7	92.0	99.0	100.9	100.0	104.3	104.3	104.6
Non-metallic mineral products	76.5	82.6	94.4	86.8	91.3	102.4	100.0	89.5	85.4	93.1
Basic metal products	74.7	81.5	82.1	82.7	85.8	90.0	100.0	102.6	103.9	104.4
Fabricated metal products	81.6	81.7	88.5	87.1	99.3	108.2	100.0	91.2	85.6	82.1
Transport equipment	82.7	90.2	89.4	84.3	87.6	93.0	100.0	92.4	84.5	88.2
Other machinery and equipment	82.0	86.4	86.3	93.7	98.6	106.9	100.0	100.8	99.0	116.4
Miscellaneous manufacturing	85.9	91.0	82.9	95.2	102.3	106.2	100.0	100.3	98.2	97.5
Total manufacturing	**84.2**	**88.5**	**90.1**	**91.1**	**96.5**	**101.5**	**100.0**	**98.1**	**96.4**	**99.5**

Source: Quarterly Indexes of Industrial Production, Australia (8125.0).

18.3 SUMMARY OF OPERATIONS OF THE MANUFACTURING INDUSTRY, 1991–92

Industry subdivision	*Establishments operating at 30 June (no.)*	*Employment at 30 June(a) ('000)*	*Wages and salaries (b) ($m)*	*Turnover ($m)*	*Persons employed per establishment (no.)*	*Turnover per person employed ($'000)*
Food, beverages and tobacco	4,228	166.0	4,608	35,768	39	216
Textiles	936	26.2	742	4,121	28	157
Clothing and footwear	2,574	49.8	1,128	4,847	19	97
Wood, wood products and furniture	6,590	71.7	1,686	7,638	11	107
Paper, paper products, printing and publishing	4,913	100.0	3,217	14,332	20	143
Chemical, petroleum and coal products	1,213	50.5	1,937	23,462	42	465
Non-metallic mineral products	1,757	37.6	1,224	7,319	21	195
Basic metal products	889	62.1	2,508	20,521	70	330
Fabricated metal products	6,528	88.8	2,415	11,555	14	130
Transport equipment	2,099	81.6	2,550	14,153	39	173
Other machinery and equipment	5,910	114.2	3,432	15,902	19	139
Miscellaneous manufacturing	3,843	58.2	1,620	8,402	15	144
Total manufacturing	**41,480**	**906.9**	**27,068**	**168,019**	**22**	**185**

(a) Includes working proprietors. (b) Excludes the drawings of working proprietors.
Source: Manufacturing Industry, Australia (8221.0).

Turnover

Turnover figures include sales of goods whether produced by the establishment or not; transfers out of goods to other establishments of the same enterprise; bounties and subsidies on production; plus all other operating revenue from outside the enterprise (such as commission, repair and service revenue and rent, leasing and hiring revenue), plus capital work for own use, or for rental or lease. Receipts from interest, royalties, dividends, and sales of fixed tangible assets are excluded.

New South Wales (34%) and Victoria (32%) combined comprised two-thirds of manufacturing turnover in 1991–92. New South Wales contributed about a third of the turnover in most industries, with Other machinery and equipment (43% of Australian total) and Transport equipment (16% of Australian total) being the most notable exceptions. Victoria dominated in Clothing and footwear (48%), Textiles (47%) and Transport equipment (45%) but contributed only 19 per cent of Australian turnover for Basic metal products. Although Queensland accounted for only 14 per cent of manufacturing turnover, it contributed 22 per cent of Australian turnover in the Non-metallic mineral products industry. Similarly, South Australia accounted for 28 per cent of Australian turnover for Transport equipment compared with only 9 per cent of total manufacturing turnover for Australia.

18.4 TURNOVER BY MANUFACTURING INDUSTRY, 1991-92
($ million)

Industry subdivision	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Food, beverages and tobacco	11,413	10,670	6,945	2,806	2,573	1,182	104	75	35,768
Textiles	1,271	1,950	169	436	151	140	n.p.	n.p.	4,121
Clothing and footwear	1,793	2,323	306	319	68	30	n.p.	n.p.	4,847
Wood, wood products and furniture	2,521	1,788	1,409	679	723	440	25	54	7,638
Paper, paper products, printing and publishing	5,618	4,693	1,535	930	716	696	27	119	14,332
Chemical, petroleum and coal products	8,763	7,843	2,886	1,261	2,538	n.p.	n.p.	n.p.	23,462
Non-metallic mineral products	2,521	1,679	1,582	508	767	160	48	54	7,319
Basic metal products	8,008	3,949	3,109	1,486	2,901	n.p.	n.p.	n.p.	20,521
Fabricated metal products	4,136	3,570	1,821	830	916	147	n.p.	n.p.	11,555
Transport equipment	2,196	6,374	1,091	3,918	406	150	13	7	14,153
Other machinery and equipment	6,803	5,420	1,171	1,581	785	74	16	51	15,902
Miscellaneous manufacturing	2,768	3,597	812	795	361	55	9	5	8,402
Total manufacturing	**57,809**	**53,856**	**22,837**	**15,548**	**12,903**	**3,924**	**673**	**469**	**168,019**

Source: Manufacturing Industry, Australia (8221.0).

Employment

New South Wales (34%) and Victoria (33%) dominate manufacturing in Australia, comprising two-thirds of employment in 1991–92. However, different industries dominate, in terms of employment, in different States (table 18.5).

New South Wales dominates in Basic metal products (45% of the Australian total) and Chemical, petroleum and coal products (43% of the Australian total); Victoria has a significant proportion of industry employment in Textiles (51%), Transport equipment (48%), and Clothing and footwear (47%); Queensland contributes significantly to Food, beverages and tobacco (20%) and Wood, wood products and furniture (20%) while South Australia contributes significantly to the Transport equipment work force (18%).

The quarterly Survey of Employment and Earnings is the ABS' major source of statistics on employed wage and salary earners. For further information refer to the chapter, Labour.

Manufacturing employment/turnover ratios

The average employment size of manufacturing establishments declined slightly between 1987–88 and 1991–92, with most industries displaying a similar trend. However, Basic metal products and Transport equipment both recorded significant falls in average employment size over the period (table 18.6).

Average turnover per person employed in the manufacturing sector during 1991–92 was $185,000. This represented an increase of 49 per cent over 1987–88 (in current price terms). Chemical, petroleum and coal products ($465,000) and Basic metal products ($330,000) showed the highest ratios of turnover to employment in 1991–92, while Clothing and footwear ($97,000) showed the lowest.

Chemical, petroleum and coal products showed the greatest increase in turnover per person employed between 1987–88 and 1991–92 (99%). However this movement was significantly affected by a change in accounting practices by a number of businesses involved in the petroleum refinery industry (prior to 1989–90, manufacturing turnover for these businesses only reflected the value of commission earned by the manufacturing establishments involved). Clothing and footwear (up 56%) recorded the next largest increase in the ratio of turnover to employment.

18.5 EMPLOYMENT IN MANUFACTURING AT 30 JUNE 1992
('000)

Industry subdivision	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Food, beverages and tobacco	50.4	47.8	33.1	15.4	11.7	6.1	0.6	0.7	166.0
Textiles	6.4	13.3	1.3	2.2	1.6	1.4	n.p.	n.p.	26.2
Clothing and footwear	17.2	23.4	4.2	3.4	1.1	0.4	n.p.	n.p.	49.8
Wood, wood products and furniture	22.5	17.6	14.5	6.8	6.7	2.8	0.1	0.5	71.7
Paper, paper products, printing and publishing	37.8	31.5	11.9	6.8	6.3	4.4	0.3	1.3	100.3
Chemical, petroleum and coal products	21.8	17.3	4.5	2.6	3.7	0.5	n.p.	n.p.	50.5
Non-metallic mineral products	11.8	9.7	7.3	2.9	4.6	0.9	0.1	0.2	37.6
Basic metal products	27.8	10.7	7.7	6.1	6.1	3.0	n.p.	n.p.	62.1
Fabricated metal products	31.8	25.7	14.8	6.8	7.6	1.5	0.3	0.4	88.8
Transport equipment	16.6	39.2	6.6	14.4	3.4	1.2	0.2	0.1	81.6
Other machinery and equipment	46.6	36.5	10.2	13.0	6.7	0.8	0.1	0.3	114.2
Miscellaneous manufacturing	18.4	23.4	6.3	6.5	2.9	0.6	0.1	0.1	58.2
Total manufacturing	**309.1**	**296.1**	**122.4**	**86.8**	**62.5**	**23.5**	**2.8**	**3.7**	**906.9**

Source: Manufacturing Industry, Australia (8221.0).

18.6 MANUFACTURING EMPLOYMENT/TURNOVER RATIOS

	Persons employed per establishment (no.)					*Turnover per person employed ($'000)*				
Industry subdivision	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*
Food, beverages and tobacco	38	41	41	43	39	158	173	190	205	216
Textiles	36	35	33	29	28	109	126	133	143	157
Clothing and footwear	26	26	24	22	19	62	70	80	90	97
Wood, wood products and furniture	11	13	12	11	11	82	91	99	103	107
Paper, paper products, printing and publishing	24	25	23	22	20	108	118	128	140	143
Chemical, petroleum and coal products	46	47	46	46	42	234	258	393	452	465
Non-metallic mineral products	17	22	22	23	21	146	169	187	189	195
Basic metal products	105	96	83	82	70	219	274	313	319	330
Fabricated metal products	15	17	16	15	14	95	109	121	127	130
Transport equipment	50	54	50	45	39	115	126	157	171	173
Other machinery and equipment	23	25	23	21	19	96	109	120	134	139
Miscellaneous manufacturing	16	17	16	16	15	107	120	131	141	144
Total manufacturing	**24**	**26**	**25**	**24**	**22**	**124**	**140**	**163**	**178**	**185**

Source: Manufacturing Industry, Australia (8221.0).

Labour costs

Major labour costs in the manufacturing industry fell marginally during 1991–92 following a marginal rise in the previous year. For each year in the period 1989-90 to 1991–92, earnings comprised around 88 to 89 per cent of total costs. This ratio is about the average for all industries.

18.7 MAJOR LABOUR COSTS OF MANUFACTURING INDUSTRY

				1991–92	
				Percentage distribution of labour costs by type	
Type of labour cost	*1989–90*	*1990–91*	*1991–92*	*Manufacturing*	*All industries*
	$m	$m	$m	%	%
Earnings	28,032	27,880	27,740	88.1	89.0
Other labour costs	3,596	3,769	3,732	11.9	11.0
Payroll tax	1,342	1,377	1,405	4.5	3.5
Superannuation	1,086	1,167	1,208	3.8	4.9
Workers' compensation	1,009	1,043	923	2.9	1.9
Fringe benefits tax	159	181	195	0.6	0.7
Total major labour costs	**31,628**	**31,648**	**31,472**	**100.0**	**100.0**

Source: Labour Costs, Australia (6348.0).

Average total labour costs per employee in 1991–92 of $35,038 represented an increase of 6 per cent over 1990–91 costs and was 14 per cent above 1989–90 costs. For 1991–92, the average labour costs in the manufacturing industry were significantly higher than the average of $30,995 per employee for all industries.

18.8 AVERAGE LABOUR COST PER EMPLOYEE IN MANUFACTURING INDUSTRY ($)

			1991–92	
Type of labour cost	*1989–90*	*1990–91*	*Manufacturing*	*All industries*
Earnings	27,306	28,985	30,883	27,581
Other labour costs	3,503	3,918	4,155	3,413
Payroll tax	1,307	1,432	1,565	1,086
Superannuation	1,058	1,213	1,345	1,516
Workers' compensation	983	1,085	1,028	586
Fringe benefits tax	155	188	217	225
Total major labour costs	**30,809**	**32,903**	**35,038**	**30,995**

Source: Labour Costs, Australia (6348.0).

Training expenditure

In the three month period July 1993 to September 1993, average training expenditure per employee in the manufacturing industry was $204.00, with an average of 6.5 paid training hours per employee being recorded (table 18.9). Average training expenditure of $502.00 per employee in Basic metal products was more than double the manufacturing average, with the figure for Chemical, petroleum and coal products also being relatively high. Wood, wood products and furniture recorded the lowest value for average training expenditure per employee ($106.00). The average of 16.0 paid training hours per employee recorded in Basic metal products was two and a half times the manufacturing industry average of 6.5 hours per employee.

The manufacturing industry spent more on training per employee than the average for all industries, and had a higher average of paid training hours per employee.

Comparative figures for 1990 are shown in table 18.9.

18.9 MANUFACTURING INDUSTRY: AVERAGE TRAINING EXPENDITURE AND PAID TRAINING HOURS PER EMPLOYEE, JULY TO SEPTEMBER

	Average training expenditure per employee(a)		*Average paid training hours per employee(b)*	
Industry subdivision	*1990*	*1993*	*1990*	*1993*
	$	$	no.	no.
Food, beverages and tobacco	89	169	3.5	4.7
Textiles; Clothing and footwear	95	150	4.1	4.6
Wood, wood products and furniture	77	106	4.9	6.1
Paper, paper products, printing and publishing	171	234	8.4	6.6
Chemical, petroleum and coal products	310	344	8.3	6.6
Non-metallic mineral products	104	175	4.3	4.8
Basic metal products	289	502	10.9	16.0
Fabricated metal machinery and equipment(c)	118	140	5.0	5.0
Transport equipment	276	282	16.8	11.5
Miscellaneous manufacturing	100	170	3.3	5.4
Total manufacturing	**149**	**204**	**6.7**	**6.5**
All industries	163	192	5.9	5.6

(a) Estimated training expenditure divided by estimated total number of employees. (b) The total time receiving formal training averaged over the total number of employees. (c) Includes Fabricated metal products and Other machinery and equipment.
Source: Employer Training Expenditure, Australia (6353.0).

Industrial disputes

One hundred and seventy industrial disputes occurred in the manufacturing industry during 1993. These disputes involved over 175,000 employees and resulted in a loss of more than 238,000 working days (table 18.10). The Basic metal products, Fabricated metal products, Transport equipment, and Other machinery and equipment industries combined accounted for 63 per cent of the disputes, comprising nearly 85 per cent of employees involved and 67 per cent of working days lost.

Although disputes in the manufacturing industry only represented 28 per cent of all disputes, 36 per cent of employees involved and 37 per cent of working days lost were attributable to this sector.

Table 18.10 shows the overall fall in the level of industrial disputes between 1992 and 1993.

Trade union membership

Between 1982 and 1986, a fall in the proportion of manufacturing employees with trade union membership coupled with a contraction in manufacturing industry employment resulted in a decrease in union membership of nearly 90,000 persons (14%) in this industry. The number of manufacturing employees with union membership fell a further 90,100 persons (17%) between 1986 and 1992, resulting in an overall fall of approximately 180,000 persons (28%) between 1982 and 1992. Despite this large fall in membership numbers, manufacturing industry continues to have a higher rate of union membership than the average for all industries (table 18.11).

The number of trade union members in all industries decreased between 1982 and 1992 and in percentage terms membership followed a downward trend similar to manufacturing.

Although nearly a half of permanent manufacturing employees belonged to a trade union in 1992, less than a fifth of casual employees were members. Female employees (both permanent and casual) displayed lower membership rates than males of the same employment status. The membership rate for casual manufacturing employees was higher than the all industries average (table 18.12).

18.10 MANUFACTURING INDUSTRY: INDUSTRIAL DISPUTES WHICH OCCURRED DURING 1992 AND 1993

	Total industrial disputes in progress(a)		*Employees involved (directly & indirectly)*		*Working days lost*	
Industry subdivision	*1992*	*1993*	*1992*	*1993*	*1992*	*1993*
	no.	no.	'000	'000	'000	'000
Food, beverages and tobacco	29	34	33.2	13.6	42.3	55.5
Textiles; Clothing and footwear	6	3	11.5	0.7	11.1	1.6
Wood, wood products and furniture	4	8	7.1	2.8	7.7	6.1
Paper, paper products, printing and publishing	11	6	18.2	6.9	52.2	9.3
Chemical, petroleum and coal products	15	9	10.3	1.5	14.0	4.5
Metal products, machinery and equipment(b)	108	107	122.6	149.3	121.4	160.4
Other manufacturing(c)	11	6	22.9	0.2	27.3	0.6
Total manufacturing	**171**	**170**	**225.9**	**175.4**	**276.1**	**238.1**
All industries	728	610	871.3	489.6	941.2	635.8

(a) Disputes affecting more than one industry have been counted as a separate dispute in each industry. (b) Includes Basic metal products; Fabricated metal products; Transport equipment; and Other machinery and equipment. (c) Includes Non-metallic mineral products; and Miscellaneous manufacturing.

Source: Industrial Disputes, Australia (6322.0).

18.11 EMPLOYEES WITH TRADE UNION MEMBERSHIP: MANUFACTURING AND ALL INDUSTRIES

	Manufacturing		*All industries*	
	Number ('000)	*Percentage of total employment*	*Number ('000)*	*Percentage of total employment*
March–May 1982	635.0	53.9	2,567.6	49.5
August 1986	545.4	51.2	2,593.9	45.6
August 1988	546.7	48.5	2,535.9	41.6
August 1990(a)	520.9	46.1	2,659.6	40.5
August 1992	455.3	44.4	2,508.8	39.6

(a) The August 1990 survey included persons aged 70 years and over.

Source: Trade Union Members, Australia (6325.0).

18.12 MANUFACTURING INDUSTRY: PROPORTION OF EMPLOYEES WITH TRADE UNION MEMBERSHIP BY SEX AND EMPLOYEE STATUS, AUGUST 1992 (per cent)

Employees	*Manufacturing*	*All industries*
Males		
Permanent	50.5	48.1
Casual	21.6	18.4
Total	*48.2*	*43.4*
Females		
Permanent	38.6	42.9
Casual	16.7	16.5
Total	*33.6*	*34.8*
Persons		
Permanent	47.8	46.0
Casual	19.1	17.2
Total	**44.4**	**39.6**

Source: Trade Union Members, Australia (6325.0).

Capital expenditure

New capital expenditure in the manufacturing industry rose by 3 per cent between 1991–92 and 1992–93, with Paper, paper products, printing and publishing (up 33%), Transport equipment (up 22%) and Food, beverages and tobacco (up 22%) registering increases over the period. Basic metal products (down 34%) experienced the largest fall in new capital expenditure in 1992–93. Textiles, clothing and footwear, and Paper, paper products, printing and publishing showed consecutive increases in the latest three years, while a decrease was recorded for Chemical, petroleum and coal products.

18.13 PRIVATE NEW CAPITAL EXPENDITURE IN MANUFACTURING INDUSTRY
($ million)

Industry subdivision	*1990–91*	*1991–92*	*1992–93*
Food, beverages and tobacco	1,379	1,178	1,433
Textiles; Clothing and footwear	192	195	209
Paper, paper products, printing and publishing	546	688	912
Chemical, petroleum and coal products	1,184	919	900
Basic metal products	1,321	1,643	1,084
Transport equipment	716	554	675
Fabricated metal products and Other machinery and equipment	846	667	727
Other manufacturing(a)	1,286	1,014	1,127
Total manufacturing	**7,471**	**6,858**	**7,068**

(a) Includes Wood, wood products and furniture; Non-metallic mineral products; and Miscellaneous manufacturing.
Source: Private New Capital Expenditure, Australia, Actual and Expected Expenditure (5626.0).

Stocks

In average 1989–90 price terms, the value of stocks at the end of June 1993 was one per cent higher than in June 1992, following a fall of three per cent between June 1991 and June 1992. Paper, paper products, printing and publishing (up 18%) and Clothing and footwear (up 12%) recorded stock increases between June 1991 and June 1993. Transport equipment (down 20%) and Miscellaneous manufacturing (down 11%) showed the largest percentage stock run-downs between June 1991 and June 1993.

18.14 BOOK VALUE OF STOCKS OWNED BY PRIVATE MANUFACTURING BUSINESSES AT AVERAGE 1989–90 PRICES
($ million)

			June
Industry subdivision	*1991*	*1992*	*1993*
Food, beverages and tobacco	4,227	4,031	4,285
Textiles	956	1,109	878
Clothing and footwear	741	767	829
Wood, wood products and furniture	1,113	1,147	1,012
Paper, paper products, printing and publishing	1,030	1,100	1,216
Chemical, petroleum and coal products	2,791	2,973	2,932
Non-metallic mineral products	1,014	1,015	991
Basic metal products	2,715	2,733	2,754
Fabricated metal products	1,412	1,284	1,294
Transport equipment	2,082	1,671	1,670
Other machinery and equipment	3,062	2,724	3,070
Miscellaneous manufacturing	1,206	1,132	1,072
Total manufacturing	**22,349**	**21,686**	**22,003**

Source: Stocks, Manufacturers' Sales and Expected Sales, Australia (5629.0).

Price indexes of articles produced

From 1988–89 to 1992–93, the price index of articles produced by the manufacturing industry rose by 14.3 per cent (over the same period, the Consumer Price Index rose by 17.1%). Much of these price rises occurred between 1989–90 and 1990–91 (11.2%). Since then, prices have risen much more gradually, and have been spread fairly evenly across all industry subdivisions.

18.15 PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY(a)
(Reference base year 1988–89 = 100.0)

Industry subdivision	*1990–91*	*1991–92*	*1992–93*
Food, beverages and tobacco	109.5	112.3	116.2
Textiles	103.4	102.9	101.8
Clothing and footwear	112.0	114.9	116.1
Wood, wood products and furniture	112.7	114.2	116.5
Paper, paper products, printing and publishing	111.0	117.3	119.9
Chemicals and chemical products	109.3	109.9	111.1
Petroleum products	150.1	134.3	143.9
Non-metallic mineral products	117.2	119.3	119.3
Basic metal products	106.2	99.9	100.6
Fabricated metal products	113.7	114.3	114.7
Transport equipment	109.9	112.7	116.0
Other machinery and equipment	107.0	107.0	109.3
Miscellaneous manufacturing	106.4	107.8	109.6
All manufacturing industry	**111.2**	**111.6**	**114.3**

(a) These indexes relate only to articles produced in the industry for sale or transfer outside the industry.
Source: Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0).

Company profits

Profits before income tax earned by manufacturing companies increased by 38 per cent between 1991–92 and 1992–93, following a rise of 17 per cent from 1990–91. Only Basic metal products recorded lower profits in 1992–93 than in 1990–91. Food, beverages and tobacco was the most significant contributor to manufacturing profits in 1992–93 (27%). Transport equipment recorded a net operating loss in 1990–91 but a subsequent turnaround resulted in this industry accounting for seven per cent of manufacturing profits in 1992–93.

The increase in manufacturing profit of 38 per cent between 1991–92 and 1992–93 compared favourably with the selected main industries (principally mining, manufacturing, retail, wholesale and construction) increase of 33 per cent.

18.16 MANUFACTURING COMPANIES: PROFIT BEFORE INCOME TAX BY INDUSTRY
($ million)

Industry subdivision	*1990–91*	*1991–92*	*1992–93*
Food, beverages and tobacco	1,543	1,706	2,159
Textiles; Clothing and footwear	176	268	259
Paper, paper products, printing and publishing	263	756	1,026
Chemical, petroleum and coal products	711	686	1,011
Basic metal products	705	140	513
Transport equipment	– 209	58	541
Fabricated metal products and Other machinery and equipment	603	1,016	1,024
Other manufacturing(a)	1,164	1,157	1,437
Total manufacturing	**4,956**	**5,788**	**7,970**

(a) Includes Wood, wood products and furniture; Non-metallic mineral products; and Miscellaneous manufacturing.
Source: Company Profits, Australia (5651.0).

Foreign investment

The level of foreign investment in manufacturing industry in Australia was $51,574 million at 30 June 1992. The industries with the highest levels of foreign investment were Food, beverages and tobacco ($13,688 million) and Basic metal products ($12,587 million). Between 30 June 1990 and 30 June 1992 the level of foreign investment in manufacturing industry increased by six per cent (in current price terms). Wood, wood products and furniture (up 36%) and Transport equipment (up 19%) showed the largest percentage increases. Six industry subdivisions recorded falls over the period, with Clothing and footwear (down 29%) recording the largest percentage fall.

18.17 FOREIGN INVESTMENT IN MANUFACTURING INDUSTRY(a) AT 30 JUNE
($ million)

Industry subdivision	*1990*	*1991*	*1992*
Food, beverages and tobacco	12,779	14,435	13,688
Textiles	432	365	404
Clothing and footwear	112	135	80
Wood, wood products and furniture	73	61	99
Paper, paper products, printing and publishing	4,156	3,765	4,042
Chemical, petroleum and coal products	5,374	5,332	5,612
Non-metallic mineral products	959	1,035	909
Basic metal products	10,625	11,263	12,587
Fabricated metal products	1,180	1,317	1,254
Transport equipment	2,406	2,533	2,861
Other machinery and equipment	2,632	2,726	2,543
Miscellaneous manufacturing	7,749	7,270	7,496
Total manufacturing	**48,477**	**50,238**	**51,574**

(a) The industry categories shown relate to the predominant activity of the enterprise group receiving the investment funds. This is not necessarily the industry of end use of the funds.
Source: International Investment Position, Australia (5305.0).

Principal manufacturing commodities

Table 18.18 shows the total recorded production of some selected articles manufactured in Australia.

Of the 26 selected articles produced by manufacturing establishments, six had lower levels of production in 1992–93 than in 1991–92. Twelve commodities had higher levels of production in 1992–93 than in 1989–90.

Concentration of enterprises in the manufacturing industry

Concentration statistics provide information on the extent to which a few enterprise groups predominate in individual industries. They are a useful aid in assessing the degree of competition existing among enterprise groups engaged in an industry.

In 1991–92, the most concentrated industries, in terms of the share of employment accounted for by the largest four enterprise groups, were Basic metal products (45%) and Non-metallic mineral products (41%). The industries with the lowest levels of concentration were Fabricated metal products (7%), Wood, wood products and furniture (9%) and Other machinery and equipment (9%) (table 18.19).

Manufacturing technology

The proportion of manufacturing establishments (employing 10 or more people) using advanced manufacturing technologies increased by about one-quarter to 41 per cent in the three-year period to December 1991 (tables 18.20 and 18.21). Over the same period, the proportion of manufacturing establishments using the advanced management technique, Total Quality Control/Management (TQC/TQM), increased by more than half to 24 per cent. By 1996, a further nine per cent of manufacturers intended introducing advanced manufacturing technologies and 25 per cent intended introducing TQC/TQM. As at December 1991, the most widely used advanced manufacturing technology was computer aided design and/or engineering.

18.18 QUANTITIES OF SELECTED ARTICLES PRODUCED BY MANUFACTURING ESTABLISHMENTS

Article	*Unit of quantity*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Basic iron, spiegeleisen and sponge iron	'000 tonnes	6,188	5,600	6,394	6,445
Blooms and slabs from continuous casting	'000 tonnes	5,136	4,620	5,205	6,218
Gas(a)	terajoules	591,210	536,193	553,438	567,647
Electricity	mill.kWh	151,907	153,822	156,413	159,872
Bricks, clay(b)	million	2,034	1,762	1,632	1,722
Cement, portland	'000 tonnes	7,075	6,110	5,731	6,225
Particle boards and similar boards(c)	'000 cu m	n.a.	625	643	660
Plastics in primary forms(d)	'000 tonnes	987	949	1,002	1,023
Sulphuric acid, oleum	'000 tonnes	1,464	986	816	868
Refrigerators, domestic	'000	346	363	372	393
Clothes washing machines, domestic	'000	330	326	296	308
Colour television sets(e)	'000	158	167	177	154
Electric motors	'000	2,528	2,480	2,421	2,796
Lawn mowers, rotary petrol type	'000	263	224	216	274
Motor vehicles					
Cars and station wagons	'000	386	311	269	275
Vehicles for goods and materials(f)	'000	26	18	15	15
Yarn(g)					
Cotton	tonnes	20,603	23,785	25,069	26,344
Wool	tonnes	19,758	18,809	18,551	18,167
Woven fabric(g)					
Cotton (incl. towelling)	'000 sq. m	40,452	35,766	38,907	41,410
Wool (incl. blanketing)	'000 sq. m	8,459	7,641	8,132	8,343
Man-made fibre	'000 sq. m	179,051	184,502	185,528	185,060
Textile floor coverings	'000 sq. m	43,804	41,648	41,265	41,030
Confectionery					
Chocolate base	tonnes	94,717	96,872	97,867	105,429
Other	tonnes	64,208	64,908	65,418	68,782
Beer(h)	million litres	1,939	1,915	1,862	1,805
Tobacco & cigarettes(i)	tonnes	27,318	26,833	24,538	24,001

(a) Available for issue through mains. Includes natural gas. (b) For structural purposes. (c) Not laminated. Includes board for subsequent conversion to other purposes. (d) Includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar forms. (e) Excludes combination with radio etc. (f) Includes utilities, panel vans and prime movers for semi-trailers. Excludes off-highway trucks (for example, dump wagons), materials handling trucks (for example, fork-lift trucks) and semi-trailers. (g) Includes mixtures predominantly of the fibre named. (h) Includes ale and stout. Excludes extra light beer containing less than 1.15 per cent but more than 0.5 per cent by volume of alcohol. (i) Source: Australian Tobacco Marketing Advisory Committee.

NOTE: Data in this table exclude operations by single establishment enterprises employing fewer than four persons.

Source: ABS manufacturing production publications (8357.0 to 8363.0 and 8367.0 to 8369.0).

18.19 CONCENTRATION OF ENTERPRISES IN MANUFACTURING IN TERMS OF EMPLOYMENT(a) BY INDUSTRY, 1991–92

	Enterprise groups ranked by turnover									
	Largest 4		*5–8*		*9–12*		*13–16*		*Remainder*	
Industry subdivision	*'000*	*Ratio*	*'000*	*Ratio*	*'000*	*Ratio*	*'000*	*Ratio*	*'000*	*Ratio*
Food, beverages and tobacco	19.4	0.12	16.9	0.10	10.8	0.07	10.3	0.06	108.6	0.65
Textiles	3.9	0.15	1.8	0.07	1.9	0.07	1.4	0.06	17.2	0.66
Clothing and footwear	8.1	0.16	1.7	0.03	2.6	0.05	0.8	0.02	36.6	0.73
Wood, wood products and furniture	6.6	0.09	2.2	0.03	2.1	0.03	1.2	0.02	59.5	0.83
Paper, paper products, printing and publishing	22.7	0.23	6.9	0.07	4.9	0.05	3.7	0.04	62.0	0.62
Chemical, petroleum and coal products	7.7	0.15	2.9	0.06	3.4	0.07	3.5	0.07	33.0	0.65
Non-metallic mineral products	15.2	0.41	4.7	0.12	1.6	0.04	1.8	0.05	14.2	0.38
Basic metal products	28.2	0.45	8.6	0.14	5.9	0.10	2.7	0.04	16.7	0.27
Fabricated metal products	6.4	0.07	6.1	0.07	3.0	0.03	2.3	0.03	71.0	0.80
Transport equipment	20.4	0.25	11.4	0.14	6.9	0.08	5.5	0.07	37.3	0.46
Other machinery and equipment	9.8	0.09	8.5	0.07	4.0	0.03	3.2	0.03	88.8	0.78
Miscellaneous manufacturing	8.1	0.14	4.6	0.08	1.4	0.02	1.3	0.02	42.8	0.74
Total manufacturing	**45.7**	**0.05**	**33.4**	**0.04**	**30.9**	**0.03**	**20.8**	**0.02**	**776.3**	**0.86**

(a) Employment at end of June. Includes working proprietors.

NOTE: Data in this table exclude operations by single establishment enterprises employing fewer than four persons.

Source: Manufacturing Industry, Concentration Statistics, Australia (8207.0) and Manufacturing Industry, Australia (8221.0).

18.20 PROPORTION OF MANUFACTURING ESTABLISHMENTS(a) WITH ADVANCED TECHNOLOGY (per cent)

		Proportion of manufacturing establishments having one or more technologies	
ASIC code	*Industry subdivision*	*1988*	*1991*
21	Food, beverages and tobacco	28	32
23	Textiles	34	34
24	Clothing and footwear	15	29
25	Wood, wood products and furniture	23	30
26	Paper, paper products, printing and publishing	21	27
27	Chemical, petroleum and coal products	43	44
28	Non-metallic mineral products	41	47
29	Basic metal products	50	62
31	Fabricated metal products	31	46
32	Transport equipment	47	54
33	Other machinery and equipment	56	64
34	Miscellaneous manufacturing	34	44
21–34	**Total manufacturing**	**33**	**41**

(a) Establishments with employment of 10 or more.

Source: Manufacturing Technology Statistics, Australia, 31 December 1991 (8123.0).

18.21 PROPORTION OF MANUFACTURING ESTABLISHMENTS(a) WITH ADVANCED TECHNOLOGY, BY BROAD TECHNOLOGY CATEGORY, 31 DECEMBER 1991
(per cent)

		Broad technology category				
ASIC code	*Industry subdivision*	*Design and engineering*	*Fabrication, machining and assembly*	*Automated material handling*	*Automated inspection and/or testing equipment*	*Communi-cations and control*
21	Food, beverages and tobacco	8	13	9	7	29
23	Textiles	12	15	4	7	26
24	Clothing and footwear	15	17	3	1	8
25	Wood, wood products and furniture	17	18	3	3	13
26	Paper, paper products, printing and publishing	16	8	2	2	15
27	Chemical, petroleum and coal products	19	14	8	8	43
28	Non-metallic mineral products	12	20	15	7	36
29	Basic metal products	28	45	12	8	44
31	Fabricated metal products	23	34	2	1	21
32	Transport equipment	28	44	3	7	34
33	Other machinery and equipment	44	43	3	5	34
34	Miscellaneous manufacturing	23	25	5	7	24
21–34	**Total manufacturing**	**21**	**24**	**5**	**4**	**24**

(a) Establishments with employment of 10 or more.
Source: Manufacturing Technology Statistics, Australia, 31 December 1991 (8123.0).

Research and experimental development

Research and experimental development (R&D) activity in the business context is systematic investigation or experimentation involving innovation or technical risk, the outcome of which is *new knowledge*, with or without a specific practical application or *new or improved* products, processes, materials, devices or services. R&D activity extends to modifications to existing products/processes.

Business enterprises classified to the Other machinery and equipment industry (*see* footnote (b) to table 18.22) accounted for nearly 36 per cent of all manufacturing research and development expenditure in 1990–91. Chemical, petroleum and coal products (17%) and Transport equipment (15%) were also major contributors to R&D expenditure.

Expenditure on R&D by manufacturing business enterprises increased by more than 50 per cent between 1986–87 and 1990–91. Paper, paper products, printing and publishing (up 254%) had the largest percentage increase over the period, while Textiles, Clothing and footwear (down 42%) was the only industry to experience a fall in R&D expenditure.

Between 1988–89 and 1990–91 Paper, paper products, printing and publishing (up 47%) and Basic metal products (up 43%) exhibited the largest percentage increases over the period. Falls in R&D expenditure were recorded by Wood, wood products and furniture (down 30%); Non-metallic mineral products (down 21%); Textiles, Clothing and footwear (down 18%); Transport equipment (down 4%) and Food, beverages and tobacco (down 2%).

18.22 EXPENDITURE ON RESEARCH AND EXPERIMENTAL DEVELOPMENT BY MANUFACTURING ENTERPRISES
($ million)

			1990–91			
			Type of expenditure			
Industry subdivision	*1986–87*	*1988–89*	*Capital expenditure*	*Labour costs(a)*	*Other current expenditure*	*Total*
Food, beverages and tobacco	58.8	87.4	11.9	42.5	30.9	85.3
Textiles; Clothing and footwear	12.9	9.1	1.1	3.3	3.1	7.5
Wood, wood products and furniture	6.4	10.4	0.5	4.4	2.4	7.3
Paper, paper products, printing and publishing	10.0	24.1	6.3	10.8	18.4	35.4
Chemical, petroleum and coal products	120.1	147.1	17.7	84.1	76.9	178.7
Non-metallic mineral products	15.3	22.2	2.9	7.4	7.3	17.5
Basic metal products	63.2	91.4	23.3	49.6	57.6	130.5
Fabricated metal products	23.0	26.1	7.8	15.0	9.9	32.6
Transport equipment	127.9	162.3	14.5	81.9	58.7	155.0
Photographic, professional and scientific equipment(b)	25.7	35.7	3.8	23.0	15.1	41.9
Appliances and electrical equipment(b)	174.5	236.4	25.0	155.4	94.8	275.1
Industrial machinery and equipment(b)	43.3	56.1	3.6	27.6	29.1	60.3
Miscellaneous manufacturing	21.6	27.1	3.8	16.3	12.8	32.9
Total manufacturing	**702.7**	**937.2**	**122.0**	**521.2**	**416.9**	**1,060.0**

(a) Includes wages and salaries, payroll tax, payments to contract staff on the payroll, fringe benefits tax and workers compensation, holiday pay, long service leave payments, sick pay, employer contributions to superannuation and pension schemes. (b) Photographic, professional and scientific equipment; Appliances and electrical equipment; and Industrial machinery and equipment comprise subdivision 33 (Other machinery and equipment) of ASIC.

Source: Research and Experimental Development, Business Enterprises, Australia (8104.0).

Commonwealth government authorities

Year Book Australia 1994 contained an outline of the role and responsibilities of the Industry Commission, the Bureau of Industry Economics, and the Department of Industry, Technology and Regional Development, since changed to the Department of Industry, Science and Technology.

WHOLESALE

The wholesale industry comprises businesses primarily engaged in the resale (as agents or principals) of goods to businesses or to institutional (including government) users. These businesses are wholesale merchants who take title to the goods they sell; separate sales branches (not being retail businesses) operated by manufacturing businesses; commission agents, import and export agents and purchasing agents; petroleum products distributors; and cooperatives and marketing boards engaged in marketing farm products.

Comprehensive statistics on the wholesale industry are only collected periodically. The most recent wholesale industry survey was in respect of 1991–92, following a previous survey for 1981–82. Only broad comparisons can be made between these two series.

Since 1981–82, the wholesale industry has seen a four per cent increase in the number of businesses operating, while the number of persons employed has decreased by five per cent. Turnover, at constant prices, increased by 19 per cent since 1981–82, from $105,219 million to $125,367 million.

The following results from the 1991–92 survey have been produced on the basis of the new Australian and New Zealand Standard Industrial Classification (ANZSIC).

Results from the 1991-92 Wholesale Industry Survey showed the Machinery and equipment group employing the highest number of persons at 102,677, representing 29 per cent of the total persons employed in the wholesale sector, with a turnover of $26,014 million. Computer wholesaling, which is a subset of this group, was a significant contributor to the wholesale industry with 22,619 persons employed, and a turnover figure of $7,419 million.

The Minerals, metals and chemicals group had the highest level of turnover ($36,088 million), assets ($17,504 million) and liabilities ($11,941 million). This was mainly due to the petroleum product class which had assets and liabilities of $13,166 million and $8,918 million respectively.

The following table shows a summary of key data items for the wholesale industry.

18.23 WHOLESALE INDUSTRY: SUMMARY OF OPERATIONS BY ANZSIC GROUP, 1991-92

ANZSIC group	*Description*	*Businesses*	*Persons employed*	*Wages & salaries*	*Turnover*	*Total assets*	*Total liabilities*
		no.	'000	$m	$m	$m	$m
451	Farm produce	1,820	19,565	508	11,747	9,451	6,994
452	Minerals, metals and chemicals	1,522	31,012	1,201	36,088	17,504	11,941
453	Builders supplies	3,923	44,155	1,054	9,464	5,046	3,623
461	Machinery and equipment	8,188	102,677	3,344	26,014	14,094	11,197
462	Motor vehicles	4,084	42,149	1,004	16,254	5,993	4,384
471	Food, drink and tobacco	3,484	43,466	1,025	21,436	5,034	3,854
472	Textiles, clothing and footwear	1,892	14,875	395	4,543	3,343	2,146
473	Household goods	1,252	12,977	375	4,778	2,554	1,867
479	Other wholesaling	3,802	39,524	1,046	11,628	5,906	4,076
Total wholesale industry		**29,967**	**350,401**	**9,952**	**141,951**	**69,193**	**50,082**

Source: Wholesale Industry, Australia, 1991–92 (8638.0).

The largest commodity sales expressed as a percentage of total wholesale sales were: crude oil and petroleum products (15.6%); cars and commercial vehicles (6.3%); wool, wheat and other cereal grains (4.3%); iron ore, metals and metallic ores (3.9%); and computers and related parts (3.5%).

RETAIL

The retail industry comprises businesses primarily engaged in the resale of new or used goods to final consumers for personal or household consumption, or in selected repair activities such as the repair of household equipment or motor vehicles.

The retail industry is a very important part of the Australian economy, as all Australians depend on shops to supply goods and services. In terms of sales of goods and services, the retail industry is the third largest of Australia's industries behind manufacturing and wholesale. In 1991–92 there were more than 83,000 retail businesses in Australia which generated turnover of some $114.3 billion and employed more than 831,000 people.

The retail industry is dominated by small business with 96 per cent of businesses employing less than 20 people. These small businesses also accounted for 44 per cent of the industry's turnover during 1991–92.

The largest industry group was Supermarkets and grocery stores which recorded turnover of $25.3 billion during 1991–92 or 22 per cent of total retail industry turnover. At 30 June 1992, there were about 172,500 people employed in this industry group which was 21 per cent of total retail employment.

The Motor vehicle retailing and services groups were also significant contributors to retail industry turnover. Motor vehicle retailing recorded $20.7 billion or 18 per cent of the total for the retail industry while the Motor vehicle services group generated an estimated $16.7 billion which was about 15 per cent of the total.

In terms of numbers of businesses, the Specialised food retailing group (dominated by takeaway food retailers) was the largest with about 19,800 businesses recorded, closely followed by the Motor vehicle services group with about 19,300 businesses.

In 1991–92, assets exceeded liabilities in all industry groups. Department stores had assets worth almost $7.0 billion which was the highest value estimated for any group.

18.24 RETAIL INDUSTRY: SUMMARY OF OPERATIONS BY ANZSIC CLASS, 1991–92

ANZSIC group	*Description*	*Businesses*	*Persons employed*	*Wages & salaries*	*Turnover*	*Total assets*	*Total liabilities*
		no.	'000	$m	$m	$m	$m
5110	Supermarkets and grocery stores	5,602	172,482	2,362	25,280	5,517	4,338
512	Specialised food retailing	19,795	154,741	1,577	11,536	4,961	3,729
5210	Department stores	14	93,538	1,473	9,830	6,957	5,762
522	Clothing and soft good retailing	7,742	75,685	1,133	7,839	3,708	2,605
523	Furniture, houseware and appliance retailing	6,718	51,513	1,037	9,552	3,646	2,643
524	Recreational good retailing	6,648	40,033	537	5,070	2,505	1,711
525	Other personal and household good retailing	11,811	71,666	1,047	7,550	3,826	2,378
526	Household equipment repair services	1,220	5,154	89	306	128	100
531	Motor vehicle retailing	4,730	52,432	1,255	20,648	4,075	3,765
532	Motor vehicle services	19,318	114,072	1,974	16,696	3,954	3,001
Total retail		**83,596**	**831,315**	**12,483**	**114,307**	**39,277**	**30,031**

Source: Retail Industry, Australia, 1991–92 (8622.0).

The $114.3 billion turnover recorded by retail outlets in Australia during 1991–92 can be divided into two broad categories — Retail sales of goods and Other income. Retail sales of goods ($102 billion) accounted for 89.0 per cent of the total while the remainder was made up of Other income items, the main component being service income with $7.4 billion (6% of total turnover) (table 18.25).

Sales of food and groceries was the largest of the commodity groups with over $35.0 billion, or 31.0 per cent of the total followed by sales of motor vehicles and associated goods with $26.0 billion (23% of total turnover).

Other than service income, the other major item in Other income was wholesale sales by retail businesses, almost $5 billion or four per cent of total turnover.

18.25 RETAIL INDUSTRY: COMMODITY SALES AND OTHER INCOME, 1991–92

Major commodity group	*Sales*	*Total turnover*
	$m	%
Food and groceries	34.7	30.4
Motor vehicles and associated goods	26.0	22.8
Personal and other goods	17.3	15.1
Clothing, footwear and fabrics	12.4	10.9
Household goods	10.9	9.5
Total retail sales	*101.3*	*88.6*
Other income		
Wholesale sales	4.9	4.3
Service income	7.4	6.5
Commission income	0.3	0.3
Rent, leasing and hiring income	0.4	0.3
Total other income	*13.0*	*11.4*
Total turnover	**114.3**	**100.0**

Source: Retail Industry: Commodity Sales, Australia, 1991–92 (8624.0).

BIBLIOGRAPHY

ABS Publications

Australian National Accounts: Concepts, Sources and Methods (5216.0) — Chapter 4 'Estimates at Constant Prices'

Australian National Accounts: National Income, Expenditure and Product (5206.0)

Company Profits, Australia (5651.0)

Employed Wage and Salary Earners, Australia (6248.0)

Employer Training Expenditure, Australia (6353.0)

Industrial Disputes, Australia (6322.0)

Integration of Economic Statistics: The Conceptual and Operational Framework (1113.0)

International Investment Position, Australia (5305.0)

Labour Costs, Australia (6348.0)

The Labour Force, Australia (6203.0)

The Labour Force, Australia (6204.0)

Manufacturing Industry, Australia (8221.0)

Manufacturing Industry, Concentration Statistics, Australia (8207.0)

Manufacturing Production, Australia: Principal Commodities Produced (8365.0)

BIBLIOGRAPHY — *continued*

Manufacturing Production bulletins (8357.0 to 8363.0 and 8367.0 to 8369.0)

Manufacturing Technology Statistics, Australia, 31 December 1991 (8123.0)

Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0)

Private New Capital Expenditure, Australia, Actual and Expected Expenditure (5626.0)

Quarterly Indexes of Industrial Production, Australia (8125.0)

Research and Experimental Development, Business Enterprises, Australia (8104.0)

Retail Industry, Australia, 1991–92 (8622.0)

Retail Industry: Commodity Sales, Australia, 1991–92 (8624.0)

Stocks, Manufacturers' Sales and Expected Sales, Australia (5629.0)

Trade Union Members, Australia (6325.0)

Wholesale Industry, Australia, 1991–92 (8638.0)

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Nineteen

Prices

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Prices are a key factor in the operation of an economy, and the indexes which provide summary measures of the movements in various categories of prices are used extensively to analyse and monitor price behaviour, and to adjust government payments such as pensions.

This chapter provides an outline of the major price indexes, their history, and their underlying concepts and methodology. More detailed information is contained in the source publications referred to throughout the chapter and in the bibliography.

CONSUMER PRICE INDEX

The Consumer Price Index (CPI) is a general indicator of the rate of change in prices paid by household consumers for the goods and services they buy.

The simplest way of thinking about the CPI is to imagine a basket of goods and services of the kind bought by Australian households. As prices vary, the total price of this basket will also vary. The CPI is simply a measure of the changes in the price of this basket as the prices of items in it change.

The price of the CPI basket in the base period is assigned a value of 100.0 and the prices in other periods are expressed as percentages of the price in the base period. For example, if the price of the basket had increased 35 per cent since the base year, then the index would read 135.0. Similarly, if the price had fallen by 5 per cent since the base year, the index would stand at 95.0.

For practical reasons, the CPI basket cannot include every item bought by households, but it does include all the important kinds of items. It is not necessary to include every item that people buy since many related items are subject to similar price changes. The idea is to select representative items so that the index reflects price changes for a much wider range of goods and services than is actually priced.

The total basket is divided into the following eight major commodity groups: food; clothing; housing; household equipment and operation; transportation; tobacco and alcohol; health and personal care; and recreation and education. These groups are divided in turn into 35 subgroups and the subgroups into 107 expenditure classes.

In addition to the aggregate All groups index, indexes are also compiled and published for each of the groups, subgroups and expenditure classes for each State capital city, Darwin and Canberra. 'National' indexes are constructed as the weighted average of the indexes compiled for each of the eight capital cities.

Index population

The CPI measures price changes relating to the spending pattern of a large proportion of metropolitan employee households. This group is termed 'the CPI population group'. For this purpose employee households have been defined as those households which obtain at least three-quarters of their total income from wages and salaries excluding the top 10 per cent (in terms of income) of such households. Metropolitan means the State capital cities, Darwin and Canberra.

However, the exclusion of particular subgroups of the Australian population from the CPI population group does not necessarily mean that the CPI does not provide a suitable measure of price change for all household types. For example, a study undertaken by the ABS in 1992 (and updated in 1993) showed that an experimental index constructed to reflect the expenditure patterns of age pensioner households displayed little variation from the CPI over a period of nearly eleven years, although there were some differences in index movements when shorter periods were examined.

Conceptual basis

The CPI is a quarterly measure of the change in average retail price levels. It provides a method of comparing the average price level for a quarter with the average price level of the reference base year or changes in the average price level from one quarter to any other quarter.

In measuring price changes, the CPI aims to measure only pure price changes (that is, it is concerned with isolating and measuring only that element of price change which is not brought about by any change to either the quantity or the quality of the goods or services concerned). In other words it aims to measure, each quarter, the change in the cost of purchasing an identical basket of goods and services. This involves evaluating changes in the quality of goods and services included in the index and removing the effects of such changes from the prices used to construct the index.

The CPI is also a measure of changes in the prices actually paid by consumers for the goods and services they buy. It is not concerned with nominal, recommended or list prices (unless they are the prices consumers actually pay).

Although the CPI is often loosely called the 'cost-of-living index' this is not strictly correct. A true cost-of-living index would, among other things, need to be concerned with changes in standards of living and with the substitutions that consumers make in order to maintain their standard of living in the face of changing market conditions (for instance, buying chicken rather than beef when beef prices are high).

The CPI basket includes goods and services ranging from steak to motor cars and from dental fillings to restaurant meals. The items are chosen not only because they represent the spending habits of the CPI population group but also because the items are those whose prices can be associated with identifiable and specific commodities and services. While government taxes and charges which are associated with the use of specific goods and services (such as excise duty, sales taxes, local government rates, etc.) are included, income taxes and the income-related medicare levy are excluded because they cannot be clearly associated with the purchase or use of a specific quantity of any good or service.

Items are not excluded from the CPI basket on the basis of moral or social judgements. For example, some people may regard the use of tobacco and alcohol as socially undesirable, but these commodities are included in the CPI basket because they are significant items of household expenditure and their prices can be accurately measured. However, to assist in understanding the effect that major item groups have on the CPI, the ABS publishes a range of supplementary indexes which exclude, in turn, each of the eight major commodity groups. These supplementary indexes can also be used in their own right for evaluating price changes or for indexation purposes.

Periodic reviews of the CPI

Like any other longstanding and important statistical series, the CPI is reviewed from time to time to ensure that it continues to be relevant to current conditions. Over time, household spending habits change and the range of available goods and services also changes. The CPI needs to be updated to take account of these changes.

Since its inception in its current form in 1960, CPI reviews have usually been carried out at approximately five-yearly intervals. Following each review, which involves revising the list of items and their weights, the new series are linked to the old to form continuous series. This linking is carried out in such a way that the resulting continuous series reflects only price changes and not differences in the prices of the old and new baskets.

The latest revision of the CPI was concluded in the September quarter 1992. In addition to revising weights to reflect new expenditure patterns (based on the 1988–89 ABS household expenditure survey) and re-referencing the index to the 1989–90 base period, the review also considered a number of conceptual and methodological issues, including the treatment of home ownership costs.

Weighting pattern

Between periodic reviews of the CPI, each of the 107 expenditure classes has a fixed weight (that is, the measure of its relative importance). Details of the weighting pattern for the current (12th series) CPI are shown in the following table.

19.1 CONSUMER PRICE INDEX, 12TH SERIES, WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES, WEIGHTING PATTERN AT JUNE QUARTER 1992

Groups and subgroups	*Percentage contribution to the All Groups CPI*
Food	**18.324**
Dairy products	1.463
Cereal products	2.097
Meat and seafoods	3.001
Fresh fruit and vegetables	1.417
Processed fruit and vegetables	0.829
Soft drinks, ice cream and confectionery	2.890
Meals out and take away foods	4.959
Other food	1.668
Clothing	**6.264**
Men's and boys' clothing	1.686
Women's and girls clothing	2.545
Fabrics and knitting wool	0.746
Footwear	1.063
Dry cleaning and shoe repairs	0.224
Housing	**15.900**
Rents	4.865
Home ownership	11.035
Household equipment and operation	**18.370**
Fuel and light	2.339
Furniture and floor coverings	4.344
Appliances	1.538
Household textiles	0.754
Household utensils and tools	1.212
Household supplies and services	3.970
Postal and telephone services	1.715
Consumer credit charges	2.498
Transportation	**15.967**
Private motoring	14.755
Urban transport fares	1.212
Tobacco and alcohol	**7.475**
Alcoholic drinks	5.061
Cigarettes and tobacco	2.414
Health and personal care	**6.850**
Health services	3.961
Personal care products	2.097
Hairdressing services	0.792
Recreation and education	**10.850**
Books, newspapers and magazines	1.146
Recreational goods	2.564
Holiday travel and accommodation	2.349
Recreational services	2.852
Education and child care	1.939
Total All Groups	**100.000**

Source: The Australian Consumer Price Index 12th Series Review (6450.0).

Price collection

Since the CPI is designed to measure the impact of changing prices on metropolitan employee households, information about prices is collected in the kinds of retail outlets or other places where these households normally purchase goods and services. Prices are collected from many sources, including supermarkets, department stores, footwear stores, restaurants, motor vehicle dealers and service stations, dental surgeries, hotels and clubs, schools, hairdressers, travel agents and airlines, bus operators, electricians and plumbers. Items like rail fares, electricity and gas charges, telephone charges and local government rates are collected from the authorities concerned. Information on rents is obtained from property management companies and from government housing commissions. In total, around 100,000 separate price quotations are collected each quarter.

The collection of prices in each capital city is carried out by trained ABS field staff.

The prices used in the CPI are those that any member of the public would have to pay to purchase the specified good or service. Any sales or excise taxes attached to goods are included in the CPI price. Sale prices, discount prices and 'specials' are reflected in the CPI so long as the items concerned are of normal quality (that is, not damaged or shopsoiled), and are offered for sale in reasonable quantities. To ensure that the price movements reflect the buying experience of the bulk of the metropolitan population, the brands and the varieties of the items which are priced are generally those which sell in greatest volume.

Price movements by city

The following table presents All groups index numbers for each of the eight capital cities and for the weighted average of the eight capital cities together with percentage changes.

19.2 CONSUMER PRICE INDEX: ALL GROUPS INDEX NUMBERS
(Reference base year 1989–90= 100.0)(a)

Year	*Sydney*	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Canberra*	*Darwin*	*Weighted average of eight capital cities*
				INDEX NUMBERS					
1988–89(b)	92.5	92.3	93.0	93.3	92.3	93.4	93.1	94.2	92.6
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	104.9	105.8	104.9	106.2	105.1	104.9	105.1	105.7	105.3
1991–92	106.7	108.1	107.0	108.9	105.9	107.1	107.8	108.0	107.3
1992–93	107.7	108.9	108.5	111.2	106.2	108.5	109.5	109.5	108.4
1993–94	109.2	111.1	110.6	113.4	108.5	111.7	111.4	111.5	110.4
				PERCENTAGE CHANGE FROM PREVIOUS YEAR					
1988–89(b)	8.2	6.8	7.0	7.2	7.5	6.1	6.6	4.9	7.3
1989–90	8.1	8.3	7.5	7.2	8.3	7.0	7.4	6.2	8.0
1990–91	4.9	5.8	4.9	6.2	5.1	4.9	5.1	5.7	5.3
1991–92	1.7	2.2	2.0	2.5	0.8	2.1	2.6	2.2	1.9
1992–93	0.9	0.7	1.4	2.1	0.3	1.3	1.6	1.4	1.0
1993–94	1.4	2.0	1.9	2.0	2.2	2.9	1.7	1.8	1.8

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities. (b) These series have been affected by a change in the treatment of mortgage interest charges from March quarter 1989.
Source: Consumer Price Index (6401.0).

The capital city indexes measure price movements over time in each city individually. They do not measure differences in retail price levels between cities. For example, the index for Adelaide in 1993–94 of 113.4 compared with the corresponding index for Sydney of 109.2 does not mean that prices in Adelaide are higher than those in Sydney. It simply means that, since the base period (1989–90), prices in Adelaide have increased by a greater percentage than those in Sydney (13.4% compared with 9.2%).

Price movements by broad commodity group

The following table presents, for the weighted average of the eight capital cities, index numbers for each of the eight major commodity groups and for the All groups together with percentage changes.

19.3 CONSUMER PRICE INDEX: GROUP INDEX NUMBERS WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES (Reference base year 1989–90 = 100.0)

Year	*Food*	*Clothing*	*Housing*	*Household equipment and operation*	*Transportation*	*Tobacco and alcohol*	*Health and personal care*	*Recreation and education(a)*	*All groups*
				INDEX NUMBERS					
1988–89(b)	93.4	95.1	86.9	94.8	92.5	92.4	93.3	94.2	92.6
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	103.3	104.6	103.5	105.1	106.9	108.8	109.6	105.0	105.3
1991–92	105.8	106.4	98.9	107.5	108.8	115.0	121.3	106.9	107.3
1992–93	107.4	107.5	94.6	107.3	111.3	124.4	124.0	109.1	108.4
1993–94	109.4	106.7	94.2	107.8	113.8	133.7	129.0	111.9	110.4
				PERCENTAGE CHANGE FROM PREVIOUS YEAR					
1988–89(b)	9.5	7.1	12.6	5.7	3.8	5.7	8.4	6.2	7.3
1989–90	7.1	5.2	15.1	5.5	8.1	8.2	7.2	6.2	8.0
1990–91	3.3	4.6	3.5	5.1	6.9	8.8	9.6	5.0	5.3
1991–92	2.4	1.7	-4.4	2.3	1.8	5.7	10.7	1.8	1.9
1992–93	1.5	1.0	-4.3	-0.2	2.3	8.2	2.2	2.1	1.0
1993–94	1.9	-0.7	-0.4	0.5	2.2	7.5	4.0	2.6	1.8

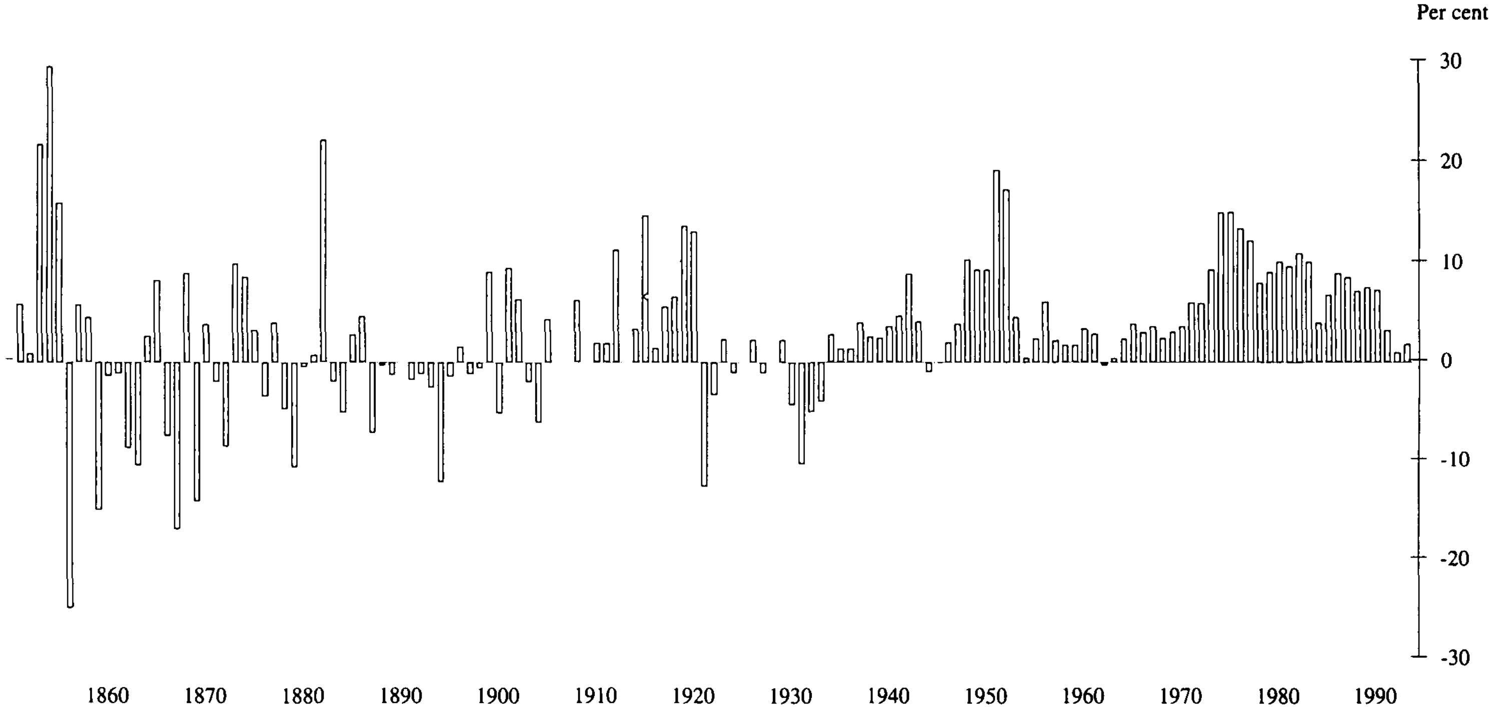
(a) Group first compiled for 1982-83. (b) Series for Housing and All groups have been affected by a change in the treatment of mortgage interest charges from March quarter 1989.
Source: Consumer Price Index (6401.0).

Long-term price series

Although the CPI has only been compiled from 1948, an approximate long-term measure of retail price change has been constructed by linking together other selected retail price index series. The index numbers are expressed on a reference base 1945 = 100, which was the end of a period of relative price stability during World War II. The successive series linked together to produce this long-term series of index numbers are:

- from 1850 to 1901, Sydney Retail Price Index;
- from 1901 to 1914, the A Series Index:
- from 1914 to 1946–47, the C Series Index;
- from 1946–47 to 1948–49, a combination of the C Series Index (excluding rent) and the housing group of the CPI; and
- from 1948–49 onwards, the CPI.

19.4 LONG-TERM SERIES: PERCENTAGE CHANGE FROM PREVIOUS YEAR



Source: Australian Bureau of Statistics.

19.5 RETAIL PRICE INDEX NUMBERS(a), LONG-TERM LINKED SERIES
(Reference base year 1945 = 100)

Year	*Index number*	*Year*	*Index number*	*Year*	*Index number*
1850	53	1898	41	1946	102
1851	56	1899	45	1947	106
1852	56	1900	43	1948	117
1853	69	1901	47	1949	128
1854	89	1902	50	1950	140
1855	103	1903	49	1951	167
1856	78	1904	46	1952	196
1857	82	1905	48	1953	205
1858	86	1906	48	1954	206
1859	73	1907	48	1955	211
1860	72	1908	51	1956	224
1861	71	1909	51	1957	229
1862	65	1910	52	1958	233
1863	58	1911	53	1959	237
1864	60	1912	59	1960	245
1865	64	1913	59	1961	252
1866	60	1914	61	1962	251
1867	50	1915	70	1963	252
1868	54	1916	71	1964	258
1869	46	1917	75	1965	268
1870	48	1918	80	1966	276
1871	47	1919	91	1967	286
1872	43	1920	103	1968	293
1873	47	1921	90	1969	302
1874	52	1922	87	1970	313
1875	53	1923	89	1971	332
1876	51	1924	88	1972	352
1877	53	1925	88	1973	385
1878	51	1926	90	1974	443
1879	45	1927	89	1975	510
1880	45	1928	89	1976	579
1881	46	1929	91	1977	650
1882	56	1930	87	1978	702
1883	55	1931	78	1979	766
1884	52	1932	74	1980	844
1885	53	1933	71	1981	926
1886	56	1934	73	1982	1,028
1887	52	1935	74	1983	1,132
1888	52	1936	75	1984	1,177
1889	51	1937	78	1985	1,257
1890	51	1938	80	1986	1,370
1891	50	1939	82	1987	1,487
1892	49	1940	85	1988	1,594
1893	48	1941	89	1989	1,714
1894	42	1942	97	1990	1,839
1895	42	1943	101	1991	1,898
1896	42	1944	100	1992	1,917
1897	42	1945	100	1993	1,952

(a) The index numbers relate to Sydney from 1850 to 1900; from 1901 to 1980 they relate to the weighted average of six State capital cities and from 1981 to the weighted average of eight capital cities.
Source: Australian Bureau of Statistics.

History of Retail Price Indexes

The Consumer Price Index (CPI) is the latest of a number of retail price indexes which have been constructed for various purposes by the Australian Bureau of Statistics.

Early retail price indexes

The first such index was compiled in 1912 and included a range of commodities gathered into four groups; groceries, dairy products, meat and rent. Separate indexes were calculated for each of five main towns (including the capital city) in each of the six States. By using price information obtained from newspapers and government reports index numbers were calculated retrospectively to 1901 for each of the 30 towns, to 1850 for Sydney and to 1870 for Hobart.

This index was compiled until 1938 and came to be known as the A Series Index. In the intervening years a number of other series were also developed. These included the B Series Index, the C Series Index and the D Series Index.

In August 1924, the Conference of Statisticians of Australia and New Zealand resolved that 'for the purposes of computing price-levels in respect of rent, it is desirable that houses of four and five rooms only be taken into account.' From the first quarter of 1925 onwards the B Series Index was compiled on this basis, being in other respects the same as the A Series Index.

Other developments in retail price indexes in the years preceding World War II were driven by the requirements of the Arbitration Court rather than by statistical considerations.

In 1907 Mr Justice Higgins had handed down the 'Harvester' ruling which set a basic wage of 42 shillings per week. In 1913, the A Series Index was adopted by the Commonwealth Arbitration Court for use in adjusting this basic wage in line with price changes. In 1920 the Royal Commission on the Basic Wage recommended the introduction of a new series which would cover a wider range of goods. This recommendation led, in 1923, to the introduction of the C Series Index which covered items gathered into the groups food, groceries, rent of four and five roomed houses, clothing, household drapery and hardware, fuel, lighting and 'other miscellaneous items'. Index numbers were calculated retrospectively to 1914 and the C Series Index eventually became the most important and widely used of the early retail price indexes. It was not until 1934, however, that the Arbitration Court adopted the C Series Index for the purpose of adjusting wages.

In May 1933 the D Series Index was created by a ruling of the Court. The D Series was essentially a hybrid of the A Series Index and the C Series Index. It was used for general wage adjustment purposes for only a short period (May 1933 to April 1934) but continued to be compiled until 1936 due to the exemption of some industries from the Court's April 1934 decision to adopt the C Series Index.

World War II and its aftermath

World War II and its aftermath powerfully affected the construction of retail price indexes in Australia. The disruptions caused by war and the rapid economic and social changes which took place in the postwar years created the need to review the regimen and weighting pattern of the C Series Index.

A new series, the Interim Retail Price Index, was introduced in 1954 and compiled retrospectively to 1952.

The Interim Retail Price Index included a greater variety of foodstuffs (such as packaged breakfast foods, soft drinks, ice cream and confectionery) and, for the first time, a range of services (hairdressing, postage, telephone services, dry cleaning and shoe repairs). The Interim Retail Price Index was restricted to the six State capitals and the weighted average of six State capitals only.

Introduction of the Consumer Price Index

As its name implies, the Interim Retail Price Index was only ever intended as a temporary measure and it was replaced in the June quarter of 1960 by the Consumer Price Index (CPI).

The 1950s was a time of rapid social and economic change. Home ownership replaced house renting as the major way in which shelter was provided, private motor vehicles partly replaced the use of public transport and a widening range of electrical appliances attained widespread use. It was realised that no single regimen and accompanying set of weights could accurately represent patterns of consumer spending during this period. It was therefore decided that the Consumer Price Index would be a chain-linked series of short-term indexes rather than a single long-term index with fixed weights like its predecessors.

The CPI was first compiled in the June quarter of 1960 and index numbers were calculated retrospectively to the September quarter of 1948. In keeping with the philosophy of using chain-linked short-term indexes, three sets of weights were used in the retrospective calculations of index numbers, one set to apply to each of the periods September 1948–June 1952, June 1952–June 1956 and June 1956–March 1960. A fresh set of weights was calculated for use from March 1960 onwards. The index was reviewed at regular intervals and new weights introduced in the December quarters of 1963, 1968 and 1973, September quarters of 1974 and 1976, March quarter of 1982, December quarter of 1986 and June quarter of 1992.

International comparisons

In analysing price movements in Australia, an important consideration is Australia's performance relative to other countries. However, due to the many differences in the structure of the housing sector in different countries and in the way that housing is treated in their CPIs, a simple comparison of All groups (or headline) CPIs is often inappropriate. To provide a better basis for international comparisons, the Fourteenth International Conference of Labour Statisticians adopted a resolution which called for countries to 'provide for dissemination at the international level of an index which excludes shelter, in addition to the all-items index.'

The following table presents indexes for selected countries on a basis consistent with the above resolution and comparable with the Australian series 'All groups excluding housing'.

19.6 CONSUMER PRICE INDEX: INTERNATIONAL COMPARISONS, ALL GROUPS EXCLUDING HOUSING, INDEX NUMBERS(a)
(Reference base year 1989–90=100)

Period	*United States of America*	*Japan*	*Germany (a)*	*Canada*	*United Kingdom*	*Hong Kong*	*Republic of Korea*	*Taiwan*	*Australia*	*New Zealand (b)*
					INDEX NUMBERS					
1988–89	95.5	97.2	97.5	95.4	94.5	90.8	93.7	97.0	93.7	93.0
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	105.5	103.4	102.7	105.6	107.7	110.8	109.1	104.0	105.6	104.0
1991–92	108.7	105.9	106.9	109.0	115.0	121.7	117.9	107.6	108.8	106.5
1992–93	112.1	106.8	110.5	110.9	118.6	130.8	123.5	111.4	111.0	108.7
1993–94	114.8	n.y.a.	113.9	112.1	n.y.a.	140.1	130.4	n.y.a.	113.5	109.4
				PERCENTAGE CHANGE SINCE PREVIOUS YEAR						
1988–89	4.7	1.1	1.9	4.0	5.0	9.7	6.4	2.8	6.6	3.9
1989–90	4.7	2.9	2.6	4.8	5.8	10.1	6.7	3.1	6.7	7.5
1990–91	5.5	3.4	2.7	5.6	7.7	10.8	9.1	4.0	5.6	4.0
1991–92	3.0	2.4	4.1	3.2	6.8	9.8	8.1	3.5	3.0	2.4
1992–93	3.1	0.8	3.4	1.7	3.1	7.5	4.7	3.5	2.0	2.1
1993–94	2.4	n.y.a.	3.1	1.1	n.y.a.	7.1	5.6	n.y.a.	2.3	0.6

(a) The statistics for Germany refer to Western Germany (Federal Republic of Germany before the unification of Germany). (b) From March quarter 1994 the statistics for New Zealand refer to 'all groups excluding housing and credit services'.
Source: Consumer Price Index (6401.0).

PRODUCER PRICE INDEXES

The first price index of this kind compiled by the ABS was the Melbourne Wholesale Price Index which was introduced in 1912 with index numbers compiled back to 1861 from prices extracted from newspapers and trade publications. Index numbers were compiled up to 1961. The index related chiefly to basic materials and foods weighted in accordance with consumption in about the year 1910.

The next index published was the Wholesale Price (Basic Materials and Foodstuffs) Index which was introduced in 1939; index numbers are available for the period 1928 to 1970. The index related to commodities in their basic or primary form and prices were obtained as near as possible to the point where they made their first effective impact on the local price structure. With few exceptions, prices were obtained from Melbourne sources.

The following table contains a linked series for these two wholesale price indexes from 1861 to 1967–68.

The present range of producer price indexes was developed and produced progressively from the 1960s. The current indexes relate to the building industry, manufacturing industry, and (not included in this chapter) the mining industry.

The following table contains the linked producer price index for manufacturing from 1968–69 onwards. Other current indexes are covered later in the chapter.

19.7 PRODUCER AND WHOLESALE PRICE INDEXES
(Reference base year 1968–69 = 100.0)

Year	*Producer Price Indexes*	*Year*	*Producer Price Indexes*
	(a)	1969–70	103.9
1861	24.2		
1871	19.3	1970–71	108.5
1881	17.6	1971–72	113.9
1891	14.9	1972–73	120.7
1901	15.3	1973–74	134.6
1911	15.7	1974–75	158.1
1921	30.0	1975–76	177.8
		1976–77	196.9
1925–26	29.7	1977–78	213.8
	(b)	1978–79	237.4
1930–31	25.4	1979–80	274.9
1935–36	23.9		
1940–41	29.3	1980–81	305.2
1945–46	36.5	1981–82	328.9
1950–51	62.7	1982–83	360.2
1955–56	85.9	1983–84	382.8
		1984–85	404.8
1960–61	92.5	1985–86	430.3
1961–62	86.4	1986–87	458.5
1962–63	87.4	1987–88	492.1
1963–64	90.0	1988–89	526.0
1964–65	91.3	1989–90	559.9
1965–66	95.4		
1966–67	98.4	1990–91	584.6
1967–68	99.7	1991–92	586.7
	(c)	1992–93	600.9
1968–69	100.0	1993–94	607.2

(a) Melbourne Wholesale Price Index (All Groups). (b) Wholesale Price (Basic Materials and Foodstuffs) Index (All Groups). (c) Price Index of Articles Produced by Manufacturing Industry.
Source: Labour Report; Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0).

A description of the main producer price indexes is given below. In addition to the figures contained in the various ABS producer and foreign trade publications, a large volume of unpublished figures is available on request. These price indexes are used by both the government and private sectors for applications such as adjusting business contracts. They are also used extensively for economic analysis.

Price Index of Materials Used in House Building

The Price Index of Materials Used in House Building measures changes in prices of selected materials used in the construction of houses in each capital city Statistical Division. It was first compiled on a reference base of 1966–67 = 100.0, using a weighting pattern derived from estimated material usage in 1968–69. Monthly index numbers on a 1966–67 = 100.0 reference base are available for the period July 1966 to September 1986.

The current indexes for the six State capital cities were introduced in October 1986 on a reference base of 1985–86 = 100.0 and were linked to the previous series. The items were selected and allocated weights on the basis of the estimated values of each material used in a sample of representative houses constructed in 1985–86. The index for Canberra was introduced in respect of February 1988 on a reference base of 1986–87 = 100.0.

19.8 PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING(a)
(Reference base year 1985–86 = 100.0)

Year	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra (b)
1988–89	126.1	128.4	125.8	123.8	120.9	128.1	120.0	121.0
1989–90	135.8	139.1	133.5	134.1	129.7	140.8	128.0	130.5
1990–91	142.1	145.7	138.1	141.9	136.2	148.7	134.2	136.4
1991–92	142.4	146.1	137.3	144.7	135.5	149.3	138.3	140.3
1992–93	145.2	148.5	141.1	147.8	137.8	150.5	140.7	143.2
1993–94	152.1	154.8	149.6	152.2	151.8	153.5	144.3	150.5

(a) The separate city indexes measure price movement within each city individually. They do not compare price levels between cities. (b) Reference base 1986–87 = 100.0.
Source: Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0).

Price Index of Materials Used in Building Other than House Building

The Price Index of Materials Used in Building Other than House Building measures changes in prices of selected materials used in the construction of buildings other than houses in metropolitan areas. The types of building directly represented in the index are:

- flats and other dwellings;
- hotels, motels and hostels;
- shops;
- factories;
- offices;
- other business premises;
- education buildings;
- health buildings; and
- other non-residential buildings.

The index was first compiled on a reference base of 1966–67 = 100.0 using a weighting pattern derived from estimated materials usage in 1966–67. Since its introduction the index has been reviewed and its weighting pattern updated on two occasions.

Rebased indexes for the six State capital cities were introduced in February 1981 on a reference base of 1979–80 = 100.0. The composition of these indexes reflected the usage of materials in the three years ending June 1977. An index for Canberra was introduced in November 1987 on a reference base of 1986–87 = 100.0.

The current indexes were introduced in October 1993 on a reference base of 1989–90 = 100.0. The composition of these indexes reflects the usage of materials in the five years ending June 1992.

19.9 PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING(a)
(Reference base year 1989–90 = 100.0)

Year	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra
1988–89	92.7	92.8	92.9	91.4	93.1	92.4	94.4	92.5
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	105.1	105.6	104.5	104.8	105.3	105.5	103.9	106.2
1991–92	105.7	107.1	103.4	107.4	105.4	105.2	107.1	108.8
1992–93	106.0	106.5	104.4	108.9	105.1	105.7	108.2	109.0
1993–94	107.5	107.0	106.7	110.1	107.9	107.1	110.1	110.2

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities.
Source: Price Index of Materials Used in Building Other than House Building, Eight Capital Cities (6407.0).

19.10 PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING INDEX NUMBERS FOR SELECTED BUILDING MATERIALS WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES (Reference base year 1989–90 = 100.0)

Year	*Structural timber*	*Clay bricks*	*Ready mixed concrete*	*Galvanised steel decking cladding and sheet products*	*Structural steel*	*Reinforcing steel bar fabric and mesh*
1988–89	94.2	90.0	92.1	90.2	93.3	91.8
1989–90	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	102.6	103.5	109.4	105.2	102.0	106.4
1991–92	100.3	105.0	106.0	106.6	100.7	105.8
1992–93	107.1	106.2	103.5	108.4	101.2	109.2
1993–94	127.1	107.8	106.7	107.5	104.3	112.7

	Aluminium windows	*Conductors (mains cable and circuitry)*	*Lamps and light fittings*	*Non-ferrous pipes*	*Builders' hardware*	*Paint*
1988–89	93.8	82.6	97.6	97.3	93.4	89.9
1989–90	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	101.8	114.3	99.9	102.0	104.9	108.5
1991–92	99.5	113.6	100.8	100.8	109.8	116.7
1992–93	99.1	109.2	101.1	104.6	112.6	118.2
1993–94	99.7	99.2	102.7	107.0	115.3	119.9

Source: Price Index of Materials Used in Building Other Than House Building, Six State Capital Cities and Canberra (6408.0).

Price Indexes of Materials Used in Manufacturing Industries

These indexes measure changes in prices of materials (including fuels) used by establishments classified to the Manufacturing Division of the Australian Standard Industrial Classification (ASIC), 1983 edition.

Separate price indexes are published for materials used in Manufacturing Industry as a whole, for 14 separate Manufacturing *sectors* (defined in terms of ASIC subdivisions or ASIC groups) and for selected groups of materials classified according to whether the material is home produced or imported.

The indexes are compiled and published on a *net sector* basis, that is, each index includes only those materials which are used in the defined sector of Australian manufacturing industry and which have been produced by establishments outside that sector.

The indexes were first compiled on a reference base of 1968–69 = 100.0, using a weighting pattern derived from estimated manufacturing usage in 1971–72. Monthly index numbers for this first series are available for the period July 1968 to November 1985.

The current indexes were introduced in December 1985 on a reference base of 1984–85 = 100.0. With a few exceptions, the items included in the indexes were allocated weights in accordance with the estimated value of manufacturing usage in 1977–78.

19.11 PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES(a)
SELECTED CATEGORIES OF MATERIALS
(Reference base year 1984–85 = 100.0)

	Imported materials				Home produced materials				
Year	*Agricultural*	*Mining*	*Manufactured*	*Total imported materials*	*Agricultural, forestry and fishing*	*Mining*	*Electricity*	*Total home produced materials*	*All materials*
1988–89	95.3	56.7	135.8	116.5	131.0	93.6	118.3	111.3	113.1
1989–90	85.5	66.1	139.5	121.1	134.0	103.5	123.6	117.9	119.0
1990–91	83.5	79.7	140.3	124.7	126.9	119.1	128.9	123.3	123.8
1991–92	85.0	70.2	141.3	123.3	128.7	108.7	133.0	119.3	120.7
1992–93	89.6	72.5	150.2	130.6	135.2	113.6	133.2	124.6	126.6
1993–94	92.7	63.1	154.4	131.7	141.9	100.4	132.8	120.9	124.6

(a) The index is on a net basis and relates in concept only to materials that enter Australian manufacturing industry from other sectors of the Australian economy or from overseas.

Source: Price Indexes of Materials Used in Manufacturing Industries, Australia (6411.0).

Price Indexes of Articles Produced by Manufacturing Industry

These indexes measure movements in the prices of articles produced by manufacturing industry. For the purpose of the index, manufacturing industry is defined to be establishments classified to the Manufacturing Division of the ASIC, 1983 edition.

The indexes are constructed on a *net sector* basis. This approach means that:

- The All Manufacturing Industry Index represents price movements of goods which are produced by establishments in the Manufacturing Division, for sale or transfer to establishments outside the Manufacturing Division, for export, or for use as capital equipment. Articles which are sold or transferred to other establishments within manufacturing industry for further processing or for use as inputs are excluded.
- The net subdivision indexes for each of the manufacturing subdivisions represent movements in prices of goods produced by establishments in the respective subdivisions, for sale or transfer to other subdivisions within manufacturing or to establishments outside the Manufacturing Division, for export, or for use as capital equipment. Sales or transfers to establishments within the subdivision are excluded.

The indexes were first published in June 1976 on a reference base of 1968–69 = 100.0, with indexes compiled retrospectively to July 1968. The composition and weighting patterns of the indexes were based on the value of production in 1971–72.

The current indexes were introduced from May 1990. The composition and weighting pattern are based on the value of production in 1986–87 and the indexes are on a reference base of 1988–89 = 100.0.

19.12 PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY(a)
(Reference base year 1988–89 = 100.0)

		Net subdivision indexes						
Year	*All Manu-facturing Industry Index*	*Food, beverages and tobacco (21)*	*Textiles (23)*	*Clothing and footwear (24)*	*Wood, wood products and furniture (25)*	*Paper, paper products and printing (26)*	*Chemicals and chemical products (275 & 276)*	*Petro-leum products (277 & 278)*
1988–89	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1989–90	106.5	106.9	103.2	107.3	107.6	104.3	104.4	118.4
1990–91	111.2	109.5	103.4	112.0	112.7	111.0	109.3	150.1
1991–92	111.6	112.3	102.9	114.9	114.2	117.3	109.9	134.3
1992–93	114.3	116.2	101.8	116.1	116.5	119.9	111.1	143.9
1993–94	115.5	120.5	102.2	117.1	122.5	122.0	110.3	127.2

	Net subdivision indexes					
	Non-metallic mineral products (28)	*Basic metal products (29)*	*Fabricated metal products (31)*	*Transport equipment (32)*	*Other machinery and equipment (33)*	*Miscellan-eous manu-facturing products (34)*
1988–89	100.0	100.0	100.0	100.0	100.0	100.0
1989–90	108.7	105.6	107.9	105.6	104.2	103.7
1990–91	117.2	106.2	113.7	109.9	107.0	106.4
1991–92	119.3	99.9	114.3	112.7	107.0	107.8
1992–93	119.3	100.6	114.7	116.0	109.3	109.6
1993–94	120.8	99.8	114.8	119.1	109.9	112.4

(a) For a full description of Division C, 'Manufacturing' and the subdivisions within the Manufacturing Division, *see Australian Standard Industrial Classification (ASIC)* (1201.0), 1983 edition.
Source: Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0).

FOREIGN TRADE PRICE INDEXES

The first index of export prices was compiled annually from 1901 to 1916–17 as a current weighted unit value index.

The method of calculation was changed in 1918 to incorporate fixed weights, applied to the average unit values of each export in successive years. This index was published for the years 1897 to 1929–30.

Two new series of monthly export price indexes were published in 1937, compiled back to 1928. One index used fixed weights and the other used changing weights. The methodology was changed and actual export prices were used instead of unit values. The indexes were compiled until 1962.

In 1962, a fixed weights index on the reference base of 1959–60 = 100.0 was introduced. A new interim series was linked to this index, still with a reference base of 1959–60 = 100.0, but from July 1969 with updated weights. The interim index was replaced in 1979 by an index on a reference base of 1974–75. In 1990, the current index was released.

The first import price index produced by the ABS covered the period from September quarter 1981 to September quarter 1991 on a reference base of 1981–82 = 100.0. This index replaced an index previously published by the Reserve Bank of Australia on a reference base of 1966–67 = 100.0. The Reserve Bank's import price index was published from 1928 until September 1982.

The latest Import Price Index series was introduced in December 1991 with monthly index numbers compiled from April 1991 onwards, on a reference base of 1989-90 = 100.0.

To give a broad indication of long-term changes, the following table draws on the available foreign trade indexes.

19.13 FOREIGN TRADE PRICE INDEXES
(Reference base year 1968–69 = 100)

Year	*Export Price Index (All Groups)*	*Import Price Index (All Groups)*	*Year*	*Export Price Index (All Groups)*	*Import Price Index (All Groups)*
1901	15	. .	1972–73	131	113
1911	17	. .	1973–74	157	131
1921–22	25	. .	1974–75	177	189
1931–32	18	22	1975–76	193	214
1936–37	29	21	1976–77	216	246
1941–42	27	35	1977–78	227	278
1946–47	53	51	1978–79	256	307
1951–52	123	92	1979–80	309	403
1956–57	115	91	1980–81	328	450
1960–61	93	95	1981–82	332	458
1961–62	94	94	1982–83	360	506
1962–63	99	94	1983–84	369	524
1963–64	112	96	1984–85	396	580
1964–65	103	97	1985–86	417	659
1965–66	105	99	1986–87	431	731
1966–67	103	100	1987–88	469	742
1967–68	98	99	1988–89	501	694
1968–69	100	100	1989–90	529	729
1969–70	101	103	1990–91	503	752
1970–71	99	108	1991–92	474	749
1971–72	102	114	1992–93	495	818
			1993–94	486	844

Source: The sources used for the Import Price Index are the Reserve Bank of Australia Bulletin up to and including 1981–82, and the ABS Import Price Index, Australia (6414.0) thereafter. The source used for the Export Price Index is the ABS Export Price Index, Australia (6405.0).

Export Price Index

The index measures changes in the prices of all exports of merchandise from Australia, including re-exports (that is, goods which are imported into Australia and exported at a later date without physical alteration). The index numbers for each month relate to prices of exports actually shipped during that month.

The current Export Price Index is a fixed weights index compiled on a reference base of 1989–90 = 100.0, with the weights based predominantly on Australian exports for 1988–89.

In general, prices are obtained from major exporters of the selected commodities included in the index.

The commodities included in the current index have been combined into broad index groups in three ways. Index numbers are produced for groupings defined in terms of the Australian Harmonized Export Commodity Classification, on an industry of origin basis defined in terms of the Australian Standard Industrial Classification and for selected sections of the Standard International Trade Classification.

19.14 EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN HARMONIZED EXPORT COMMODITY CLASSIFICATION(a)
(Reference base year 1989–90 = 100.0)

		AHECC sections				
Year	*All groups*	*Live animals, animal products*	*Vegetable products*	*Prepared foodstuffs*	*Mineral products*	*Products of chemical or allied industries*
1990–91	95.0	96.1	77.9	91.8	108.3	100.2
1991–92	89.6	97.6	83.1	87.9	103.1	89.6
1992–93	93.5	105.1	94.3	94.9	108.2	90.1
1993–94	91.8	110.3	88.6	102.3	100.9	87.5

	AHECC sections				
Year	*Wool and cotton fibres*	*Gold, diamonds and coin*	*Base metals and articles of base metals*	*Machinery and mechanical appliances*	*Motor vehicles, aircraft and vessels*
1990–91	77.8	96.6	92.6	97.8	100.0
1991–92	66.6	91.8	79.7	94.8	100.4
1992–93	60.9	99.6	81.0	98.2	105.0
1993–94	59.0	110.4	76.3	97.5	109.3

(a) Data prior to 1989–90 are not available because AHECC is not strictly comparable with the AECC formerly used.
Source: Export Price Index, Australia (6405.0).

19.15 EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION
(Reference base year 1989–90 = 100.0)

	ASIC divisions		
Year	*Agriculture*	*Mining*	*Manufacturing*
1988–89	103	83	96
1989–90	100.0	100.0	100.0
1990–91	77.2	106.5	96.9
1991–92	72.9	103.5	89.8
1992–93	74.6	108.0	94.1
1993–94	72.2	101.0	95.2

Source: Export Price Index, Australia (6405.0).

Import Price Index

The Import Price Index measures changes in prices of imports of merchandise into Australia on a free on board country of origin basis. The index numbers for each month relate to prices of imports landed in Australia during the month.

The Import Price Index was first published in May 1983 on a reference base of 1981–82 = 100.0. Quarterly index numbers are available from the September quarter 1981 to the September quarter 1991.

A review of the index was completed in December 1991. The resulting index is on a reference base of 1989–90 = 100.0 and uses a weighting pattern based on the pattern of Australian imports during 1988–89 and 1989–90. Monthly index numbers are available from April 1991.

Prices of individual shipments are obtained from major importers of the selected items.

Index items have been grouped according to four different classifications:

- the Standard International Trade Classification;
- the Combined Customs Tariff and Statistical Nomenclature;
- on an industry of origin basis defined in terms of the ASIC; and
- the United Nations Classification by Broad Economic Categories.

19.16 IMPORT PRICE INDEX: INDEX NUMBERS BASED ON THE STANDARD INTERNATIONAL TRADE CLASSIFICATION
(Reference base year 1989–90 = 100.0)

SITC section	*1991–92*	*1992–93*	*1993–94*
Food and live animals chiefly for food	98.1	104.7	106.8
Beverages and tobacco	115.7	121.8	111.5
Crude materials, inedible, except fuels	90.8	101.1	116.3
Mineral fuels, lubricants and other related materials	92.5	100.1	93.5
Animal and vegetable oils, fats and waxes	116.6	126.6	120.9
Chemicals and related products n.e.s.	100.5	106.2	103.3
Manufactured goods classified chiefly by material	103.3	109.3	112.1
Machinery and transport equipment	104.8	116.8	123.1
Miscellaneous manufactured articles	105.7	114.9	117.0
Commodities and transactions not elsewhere classified	91.4	98.7	110.4
All groups	**102.7**	**112.1**	**115.6**

Source: Import Price Index, Australia (6414.0).

19.17 IMPORT PRICE INDEX: INDUSTRY OF ORIGIN INDEX NUMBERS BASED ON THE AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION
(Reference base year 1989–90 = 100.0)

Division	*1991–92*	*1992–93*	*1993–94*
Agriculture, forestry, fishing and hunting	99.7	102.6	107.3
Mining	105.5	113.7	97.8
Manufacturing	102.6	111.7	115.5

Source: Import Price Index, Australia (6414.0).

19.18 IMPORT PRICE INDEX: INDEX NUMBERS FOR BROAD ECONOMIC CATEGORIES AND END USE CLASSES
(Reference base year 1989–90 = 100.0)

Categories/classes	*1991–92*	*1992–93*	*1993–94*
Broad economic categories			
Food and beverages	102.1	108.0	107.8
Industrial supplies n.e.s.	98.8	104.1	105.0
Fuels and lubricants	94.7	103.2	95.4
Capital goods and parts and accessories thereof	102.3	110.9	114.0
Transport equipment and parts and accessories thereof	108.5	124.6	135.9
Consumer goods n.e.s.	106.0	114.6	117.7
End use classes			
Capital goods	105.1	117.0	122.8
Intermediate goods	98.6	105.1	106.6
Consumption goods	107.0	116.9	121.1

Source: Import Price Index, Australia (6414.0).

BIBLIOGRAPHY

ABS Publications

The Australian Consumer Price Index: Concepts, Sources and Methods (6461.0)
The Australian Consumer Price Index 12th Series Review (6450.0)
Australian Harmonized Export Commodity Classification (1233.0)
Australian Standard Industrial Classification, Volume 1 — The Classification (1201.0)
Average Retail Prices of Selected Items, Eight Capital Cities (6403.0)
Consumer Price Index (6401.0)
Export Price Index, Australia (6405.0)
A Guide to the Consumer Price Index (6440.0)
House Price Indexes: Eight Capital Cities (6416.0)
Import Price Index, Australia (6414.0)
Information Paper: Review of the Price Indexes of Articles Produced by Manufacturing Industry (6418.0)
Labour Report, Nos 1–61
Price Index of Copper Materials (6410.0)
Price Index of Materials Used in Building Other Than House Building, Eight Capital Cities (6407.0)
Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0)
Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0)
Price Indexes of Materials Used in Coal Mining (6415.0)
Price Indexes of Materials Used in Manufacturing Industries, Australia (6411.0)
Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods (6419.0)

Other Publications

Monthly Bulletin of Statistics of the Statistical Office of the United Nations
Reserve Bank of Australia Bulletin

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twenty

Construction and Housing

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This chapter covers two main subjects. First, there is an account of the industry activity involved in construction, ranging from house building to large-scale construction projects such as roads, power plants and other public facilities. Second, it focuses on housing and associated characteristics. The chapter concludes with an outline of main government activities in the field of housing.

CONSTRUCTION

The construction sector engages in three broad areas of activity — residential building (houses, flats, etc.), non-residential building (offices, shops, hotels, etc.), and engineering construction (roads, bridges, water and sewerage, etc.). In this section an overview of the structure, operations and trends is presented of the construction industry as a whole, based on statistical collections undertaken about every five years, 1988–89 being the latest period for which this overall data is available. This is followed by more recent and detailed statistics on residential building, non-residential building and engineering construction activities obtained from other ongoing statistical collections. Because of the different sources and methods used for the various collections, the resulting statistics are not always comparable with each other.

The construction industry is an important sector of the Australian economy. Not only is it significant in its own right, but it has an influential effect on other sectors of the economy.

In 1992–93 the construction industry contributed $28,177 million (7%) to the gross product of all industries. It employed 536,000 people which was seven per cent of employment of all industries.

The structure of the construction industry

Construction activity is undertaken by both the private and public sector in Australia. Private sector activity is concentrated in the residential and non-residential (offices, hotels, etc.) building sectors, while the public sector plays a key role in initiating and undertaking engineering construction activity.

The ABS conducts construction industry surveys about every five years. For the most recent survey period, 1988–89, two collections were undertaken: the Construction Industry Survey of private sector construction establishments and a survey of construction activities undertaken by public sector enterprises. Selected statistics for the two sectors are presented below. Because of the different concepts used in the collection of these data, the public sector results cannot be validly aggregated with those for the private sector. More detailed statistics for 1988–89 are contained in *Year Book Australia 1994*.

Private sector construction. Australia wide, there were 98,100 private sector construction establishments operating at some time during 1988–89 (table 20.1). These establishments employed 395,000 persons, total turnover was $46,755.9 million and value added, $15,690.7 million.

The special trade construction industries, while comprising 76 per cent of the number of establishments, contributed 66 per cent to employment and 54 per cent to value added. Non-residential construction (that is, the sum of non-residential building construction and non-building construction) on the other hand, while comprising only 8 per cent of the number of establishments, contributed 21 per cent to employment and 31 per cent to value added.

20.1 PRIVATE SECTOR CONSTRUCTION ESTABLISHMENTS: SELECTED STATISTICS BY INDUSTRY CLASS, 1988–89

ASIC code	Description	Establishments operating during the year ('000)	Total employment ('000)	Total turnover (a) ($m)	Value added ($m)
4111	House construction	13.9	43.4	8,488.7	1,844.6
4112	Residential building construction n.e.c.	1.8	7.8	1,851.0	409.8
4113	Non-residential building construction	3.9	47.3	13,749.2	2,971.9
411	*Total building construction*	*19.6*	*98.4*	*24,088.9*	*5,226.2*
4121	Road and bridge construction	0.8	12.0	2,214.7	756.3
4122	Non-building construction n.e.c.	3.1	25.0	3,076.0	1,193.8
412	*Total non-building construction*	*3.9*	*37.0*	*5,290.7*	*1,950.1*
41	*Total general construction*	*23.5*	*135.4*	*29,379.6*	*7,176.3*
4231	Concreting	4.1	16.4	1,452.6	624.4
4232	Bricklaying	7.7	20.8	763.6	533.4
4233	Roof tiling	1.5	5.1	343.2	125.5
4234	Floor and wall tiling	2.9	5.9	240.6	138.6
4241	Structural steel erection	1.2	8.2	506.8	326.6
4242	Plumbing	10.6	36.2	2,451.3	1,168.2
4243	Electrical work	8.5	38.7	2,753.9	1,297.8
4244	Heating and air conditioning	1.3	13.5	1,595.9	607.8
4245	Plastering and plaster fixing	4.5	15.9	1,040.2	459.4
4246	Carpentry	12.7	30.4	1,288.6	753.5
4247	Painting	8.9	24.4	1,085.4	658.1
4248	Earthmoving and dredging	4.5	17.2	1,662.8	807.3
4249	Special trades n.e.c.	6.3	27.0	2,191.3	1,013.7
42	*Total special trade construction*	*74.5*	*259.6*	*17,376.3*	*8,514.4*
41,42	**Total construction**	**98.1**	**395.0**	**46,755.9**	**15,690.7**

(a) Includes contract construction revenue; sales of speculative construction projects; capital work done for own use, rental or lease; and other operating revenue.

Source: Construction Industry, Australia: Summary of Private Sector Operations, 1988–89 (8771.0).

Public sector construction. The Public Sector Construction Activity Survey provided details on the construction and/or repair and maintenance activities of all public sector enterprises which had expenditure of $250,000 or more. This includes hospitals and universities administered by relevant public authorities.

Australia wide, $20,567.3 million was spent by the public sector on construction and repair and maintenance activity in 1988–89 (table 20.2). Of this, $8,087.7 million (39%) represented payments to private sector contractors. State Government was responsible for the bulk of the expenditure with $12,335.1 million (60%). The Commonwealth Government outlayed $5,214.9 million (25%) and local government $3,017.3 million (15%).

Table 20.3 shows the types and scale of construction work undertaken by all levels of government in 1988–89.

20.2 PUBLIC SECTOR ENTERPRISES UNDERTAKING CONSTRUCTION: SELECTED STATISTICS, BY LEVEL OF GOVERNMENT, 1988–89

Level of government	*Number of enterprises*	*Employment ('000)*	*Work done by own employees ($m)*	*Work done by private sector contractors ($m)*	*Total expenditure ($m)*
Commonwealth	176	48.5	3,483.1	1,731.8	5,214.9
State	498	104.1	6,654.5	5,680.6	12,335.1
Local	828	51.0	2,341.9	675.4	3,017.3
Total	**1,502**	**203.6**	**12,479.6**	**8,087.8**	**20,567.3**

Source: Public Sector Construction Activity, Australia, 1988–89 (8775.0).

20.3 PUBLIC SECTOR ENTERPRISES UNDERTAKING CONSTRUCTION TOTAL EXPENDITURE BY TYPE OF WORK, 1988–89

	Commonwealth Government		*State Government*		*Local Government*		*Total*	
	$m	*%*	*$m*	*%*	*$m*	*%*	*$m*	*%*
New work, alterations, additions, improvements & renovations								
Building								
Residential	73.7	1.4	768.5	6.2	11.0	0.4	853.1	4.1
Non-residential	1,319.7	25.3	2,843.6	23.1	232.8	7.7	4,396.1	21.4
Total building	*1,393.4*	*26.7*	*3,612.1*	*29.3*	*243.8*	*8.1*	*5,249.2*	*25.5*
Engineering								
Roads, highways & subdivisions	95.5	1.8	1,298.6	10.5	834.3	27.7	2,228.4	10.8
Electricity generation, transmission & distribution	40.4	0.8	1,314.2	10.7	228.5	7.6	1,583.0	7.7
Telecommunications	1,899.7	36.4	25.5	0.2	0.2	—	1,925.4	9.4
Other engineering	130.5	2.5	1,741.1	14.1	443.8	14.7	2,315.5	11.3
Total engineering	*2,166.1*	*41.5*	*4,379.4*	*35.5*	*1,506.8*	*49.9*	*8,052.3*	*39.2*
Total new work, alterations, additions, improvements & renovations	*3,559.4*	*68.3*	*7,991.4*	*64.8*	*1,750.6*	*58.0*	*13,301.5*	*64.7*
Repair & maintenance								
Building	552.3	10.6	1,089.5	8.8	114.8	3.8	1,756.6	8.5
Roads, highways & subdivisions	33.5	0.7	621.9	5.0	780.0	25.9	1,435.4	7.0
Other repair & maintenance	1,069.5	20.5	2,627.8	21.3	371.4	12.3	4,068.7	19.8
Total repair & maintenance	*1,655.4*	*31.7*	*4,339.2*	*35.2*	*1,266.2*	*42.0*	*7,260.7*	*35.3*
Total demolition	0.1	—	4.4	—	0.6	—	5.1	—
Total construction, repair, maintenance & demolition	**5,214.9**	**100.0**	**12,335.1**	**100.0**	**3,017.3**	**100.0**	**20,567.3**	**100.0**

Source: Public Sector Construction Activity, Australia, 1988–89 (8775.0).

Trends in the construction industry

Trends over more recent years in the level of activity of the construction industry as a whole are shown below.

In the 1992–93 financial year, estimated construction activity at average 1989–90 prices (original terms) was $35,088 million. This was four per cent above the 1991–92 estimate of $33,623 million. The rise in activity was mainly attributable to residential building, which recorded a 17 per cent rise from $12,909 million in 1991–92 to $15,151 million in 1992–93. Engineering construction rose by three per cent (from $10,328 million to $10,651 million), while non-residential building fell by 11 per cent from $10,386 million in 1991–92 to $9,285 million in 1992–93.

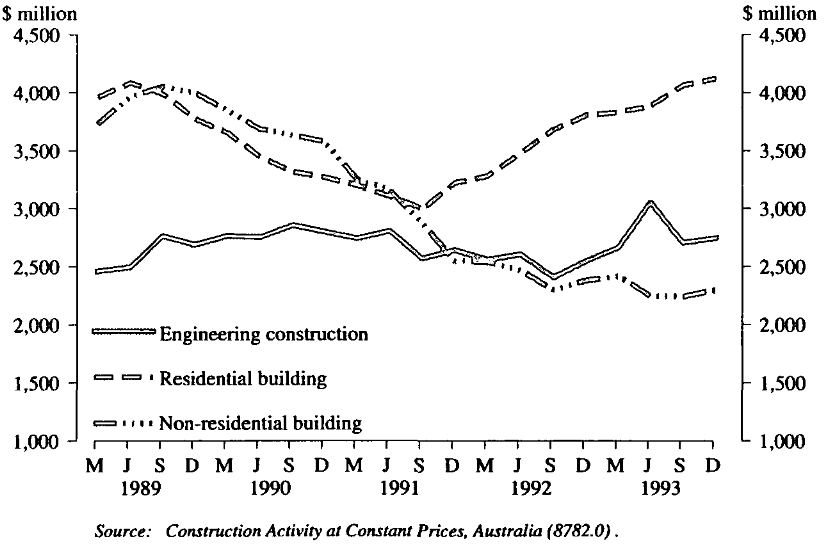
20.4 CONSTRUCTION ACTIVITY AT AVERAGE 1989–90 PRICES ($ million)

Year	*Residential building*	*Non-residential building*	*Engineering construction*	*Total construction*
1988–89	15,511	14,590	9,798	39,899
1989–90	14,802	15,548	10,928	41,279
1990–91	12,835	13,588	11,136	37,559
1991–92	12,909	10,386	10,328	33,623
1992–93	15,151	9,285	10,651	35,088

Source: Construction Activity at Constant Prices, Australia (8782.0).

The area of construction with the largest contribution to total activity in 1992–93 was residential building with 43 per cent of the total, while engineering construction and non-residential building accounted for 30 per cent and 26 per cent, respectively. By contrast, in 1991–92 residential building accounted for 38 per cent of total construction with non-residential building and engineering construction each accounting for 31 per cent of total construction.

20.5 CONSTRUCTION ACTIVITY AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



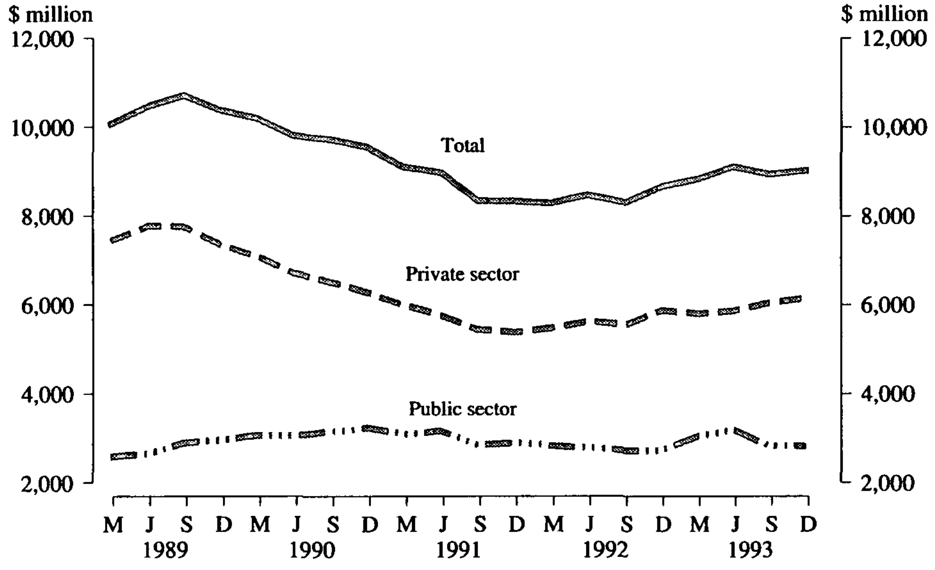
Source: Construction Activity at Constant Prices, Australia (8782.0).

Of the $35,088 million of construction expenditure in 1992–93, $23,236 million (66%) was work done for the private sector. Of this, $14,326 million (62%) was on residential building, $6,159 million (27%) on non-residential building and the remaining $2,751 million (12%) on engineering construction.

Public sector construction expenditure displayed a different pattern, with $7,900 million (67%) out of a total expenditure of $11,851 million being spent on engineering construction. Non-residential building ($3,126 million) accounted for 26 per cent of total expenditure, with the remaining $825 million (7%) being spent on residential building.

Construction activity for the public sector has remained relatively constant (graph 20.6) at around $3,000 million each quarter over the last seven years. The volatility evident in the total construction series is dominated by the trends in the private sector construction activity series.

20.6 PRIVATE AND PUBLIC CONSTRUCTION ACTIVITY AT AVERAGE 1989–90 PRICES SEASONALLY ADJUSTED



Source: Construction Activity at Constant Prices, Australia (8782.0).

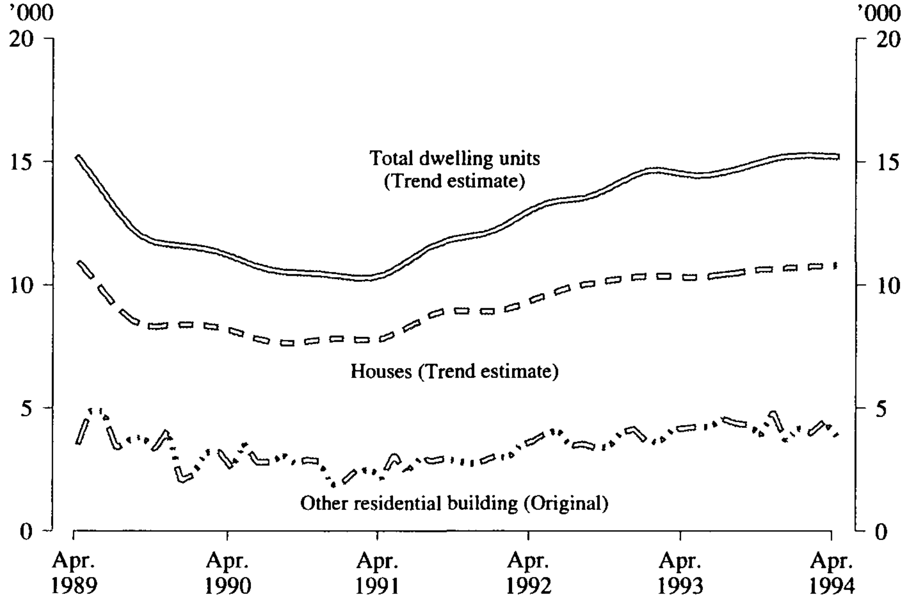
Up to this point, this chapter has provided an overview of the construction industry as a whole. The industry has three broad areas of activity — residential building, non-residential building and engineering construction. These sectors are examined in more detail below.

Residential building

Residential building involves the construction of dwelling units, which are separated into new houses and other residential building (flats, apartments, villa units, townhouses and duplexes).

As can be seen from graph 20.7, after a period of decline throughout 1989 and 1990, total dwelling unit approvals grew steadily during 1991 and 1992. Apart from a three month period of decline from February to May 1993, total dwelling unit approvals again grew steadily during 1993. The level of dwelling unit approvals in early 1994 was only 4.3 per cent below that of the last peak in the trend series in late 1988. Approvals for separate houses, which accounts for nearly 70 per cent of all dwelling units approved, followed a similar pattern.

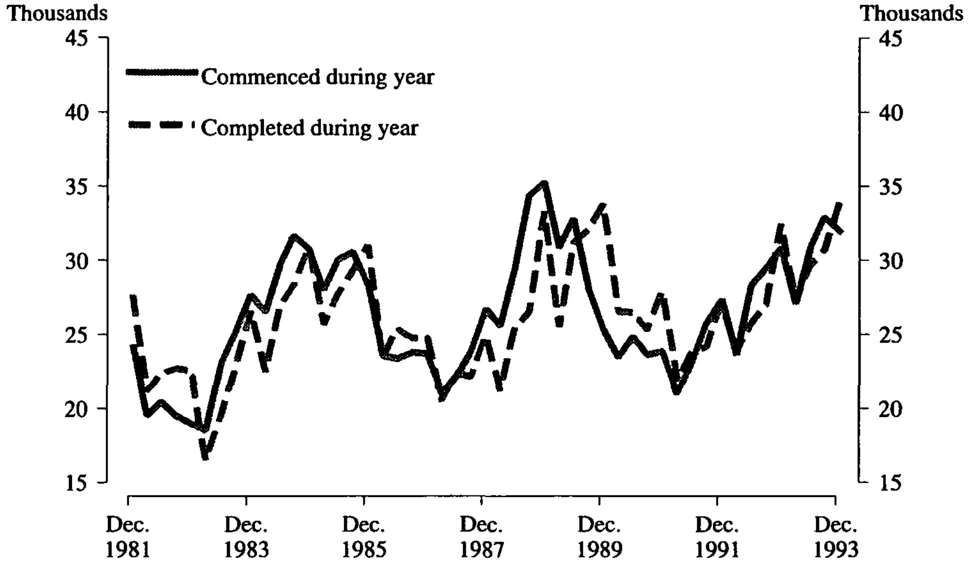
20.7 NUMBER OF DWELLING UNITS APPROVED



Source: Building Approvals, Australia (8731.0).

New houses. Graph 20.8 illustrates the approximately four year cyclical pattern of new house commencements. Lows were recorded in 1982–83, 1986–87 and 1990–91, with peaks in 1984–85 and 1988–89. In 1992–93, new house construction was in a growth phase, with a moderate increase in the number of commencements. House completions generally follow a similar pattern to commencements.

20.8 NEW HOUSE BUILDING ACTIVITY: NUMBER OF HOUSES



Source: Building Activity, Australia (8752.0).

Table 20.9 shows that the number of new houses approved in 1992–93 was 123,600, an increase of 11 per cent over the 1991–92 figure of 110,900. Private sector approvals dominated, contributing 97 per cent to the total number of new houses approved.

The estimated number of new houses commenced in 1992–93 was 117,200, an increase of more than 13 per cent over the 1991–92 estimate (104,100).

New house completions (115,300) increased by more than 15 per cent over the 1991–92 estimate of 99,900.

Other residential building. The level of activity of other residential building construction is highly variable and does not follow the regular pattern experienced in house construction. This is because of the generally larger size of other residential building construction jobs and the extent of speculative building of private flats, home units and similar other residential building projects.

Table 20.9 shows that in 1992–93, 47,000 new other residential dwelling units were approved, an increase of nearly 20 per cent over the 1991–92 figure of 39,300. Of the 47,000 new other residential dwelling units approved, 40,300 (86%) were owned by the private sector, compared with 79 per cent in the previous year. In 1992–93, public sector owned other residential building approvals (6,700) were 20 per cent lower than in 1991–92 (8,300). Of the 47,000 new other residential dwelling units approved in 1992–93, 59 per cent were semi-detached, row or terrace houses, townhouses, etc., while 41 per cent were flats, units or apartments, etc.

Nevertheless, it is apparent that there has been an increase in other residential building activity in recent years, in both real terms and as a percentage of total housing activity. The number of other residential dwelling unit approvals, expressed as a proportion of total dwelling unit approvals, has risen from 25 per cent in 1990–91, to 26 per cent in 1991–92 and 28 per cent in 1992–93.

The number of new other residential dwelling units commenced in Australia during 1992–93 was 44,400, 23 per cent higher than the 1991–92 figure of 36,200. The number of commencements increased in New South

Wales, Queensland, Western Australia, Tasmania and the Australian Capital Territory, but decreased in Victoria, South Australia and the Northern Territory.

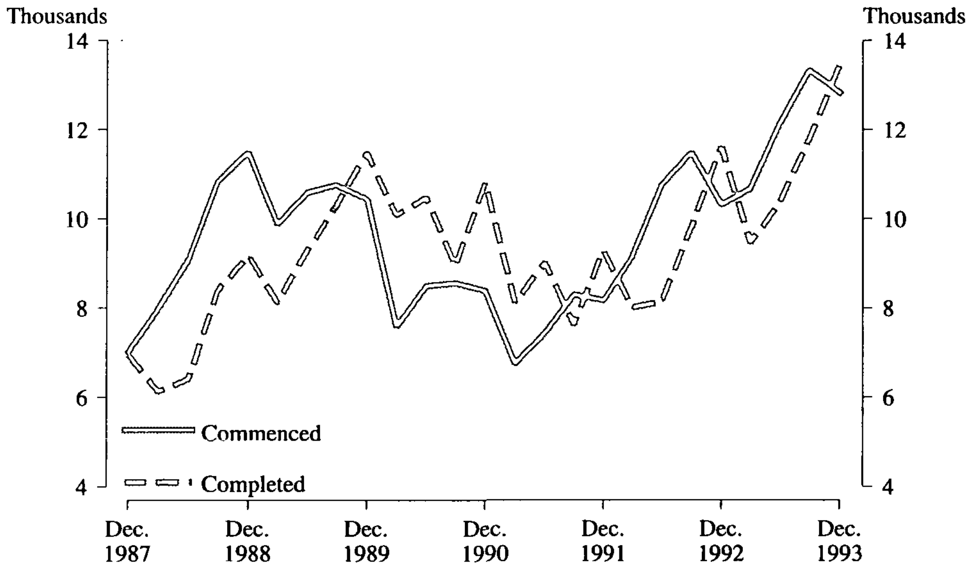
New other residential dwelling unit completions in 1992–93 totalled 41,000, a rise of 25 per cent over the 1991–92 figure of 32,800.

20.9 RESIDENTIAL BUILDING, 1992–93 ('000)

	New house	*New other residential building*
Private sector		
Approved	119.8	40.3
Commenced	113.7	37.4
Completed	112.3	32.9
Public sector		
Approved	3.7	6.7
Commenced	3.5	7.0
Completed	3.0	8.1
Total		
Approved	123.6	47.0
Commenced	117.2	44.4
Completed	115.3	41.0

Source: Building Approvals, Australia (8731.0) and Building Activity, Australia (8752.0).

20.10 OTHER RESIDENTIAL BUILDING ACTIVITY: NUMBER OF DWELLING UNITS



Source: Building Activity, Australia (8752.0).

Value of residential building. Approvals for total new residential building were valued at $14,121.4 million in 1992–93, 18 per cent above the 1991-92 figure of $12,005.9 million. New house approvals were valued at $10,605.7 million, 13 per cent above the 1991–92 figure of $9,388.5 million. New house approvals in 1992–93 represented 75 per cent of total new residential building approvals, compared with 78 per cent in

1991-92. Approvals for alterations and additions to residential building totalled $2,088.6 million in 1992-93, a six per cent rise over the 1991-92 figure ($1,973.9 million).

The value of work done on new residential buildings in 1992-93 was $13,489.1 million, making up 55 per cent of the total value of building work done. The value of work done on alterations and additions to residential building was $2,179.1 million.

20.11 VALUE OF RESIDENTIAL BUILDING, 1992-93
($ million)

Class of building	*Approved*	*Work done(a)*
New residential buildings		
New houses	10,605.7	10,369.5
New other residential buildings	3,515.6	3,119.6
Total new residential building	*14,121.4*	*13,489.1*
Alterations and additions to residential buildings(b)	2,088.6	2,179.1

(a) During period. (b) Valued at $10,000 or more.
Source: Building Approvals, Australia (8731.0) and Building Activity, Australia (8752.0).

Non-residential building

The value of non-residential building approved in Australia in 1992-93 was $7,676.5 million, a six per cent increase over the 1991-92 figure of $7,208.7 million. Rises were recorded in all categories except Hotels, which fell by $172.3 million (42%), and Offices which fell by $258.4 million (15%). In absolute terms, the largest rise was in the approval of Health buildings, which increased from $497.5 million to $853.8 million, a rise of 72 per cent. Other significant rises were in Shops, up $259.9 million to $1,145.1 million (29%), Entertainment and recreational up $107.3 million to $783.9 million (16%) and Educational which rose by $97.8 million to $1,028.1 million (11%).

20.12 VALUE OF NON-RESIDENTIAL BUILDING
($ million)

	1991-92		*1992-93*	
Class of building	*Approved*	*Work done(a)*	*Approved*	*Work done(a)*
Hotels, etc.	406.3	664.7	234.0	271.6
Shops	885.2	1,093.5	1,145.1	1,089.1
Factories	704.9	1,011.7	734.5	911.2
Offices	1,745.7	3,223.1	1,487.3	2,302.9
Other business premises	774.7	922.8	826.9	911.3
Educational	930.3	1,039.4	1,028.1	1,100.9
Religious	79.4	81.5	88.0	106.2
Health	497.5	624.6	853.8	823.3
Entertainment and recreational	676.6	602.9	783.9	568.4
Miscellaneous	508.0	657.7	494.9	622.6
Total non-residential building(b)	**7,208.7**	**9,922.1**	**7,676.5**	**8,708.0**

(a) During period. (b) Valued at $50,000 or more.
Source: Building Approvals, Australia (8731.0) and Building Activity, Australia (8752.0).

The total value of work done on non-residential building in 1992-93 was $8,708 million, a decrease of 12 per cent from the 1991-92 figure of $9,922.1 million.

This follows a 28 per cent fall from 1990–91 to 1991–92. All categories of non-residential building recorded decreases in the value of work done in 1992–93, except Educational, which rose six per cent, Religious (30%) and Health (32%). Significant falls were recorded in the categories Hotels, etc. (59%), Offices (29%) and Factories (10%).

Building activity at constant prices

Estimates of the value of building (residential and non-residential) work done at average 1989–90 prices are presented in table 20.13 below. Constant price estimates measure changes in value after the direct effects of price changes have been eliminated.

At average 1989–90 prices, the value of total building work done rose moderately in 1992–93. Following a fall of 12 per cent in 1991–92, the value of building work done increased by $1,140.9 million (5%) to $24,435.4 million in 1992–93.

The bulk of this rise occurred in new residential building, which increased from $10,968.8 million in 1991–92 to $13,089.9 million in 1992–93, a rise of 19 per cent. The value of work done on alteration and additions to residential buildings also rose, by six per cent, while work done on non-residential building declined by 11 per cent.

20.13 VALUE OF BUILDING WORK DONE AT AVERAGE 1989–90 PRICES ($ million)

	New residential building					
Year	*Houses*	*Other residential buildings*	*Total*	*Alterations and additions to residential buildings*	*Non-residential building*	*Total building*
1987–88	8,543.9	1,791.1	10,335.0	1,736.1	13,905.8	25,976.9
1988–89	10,799.3	2,716.3	13,515.6	1,995.2	14,590.0	30,100.8
1989–90	9,661.1	3,020.2	12,681.3	2,120.7	15,548.1	30,350.1
1990–91	8,212.7	2,582.1	10,794.8	2,040.0	13,587.9	26,422.7
1991–92	8,523.6	2,445.2	10,968.8	1,940.1	10,385.6	23,294.5
1992–93	9,816.7	3,273.2	13,089.9	2,060.4	9,285.1	24,435.4

Source: Building Activity, Australia (8752.0).

Engineering construction

This section contains estimates of engineering construction activity in Australia by both public and private sector organisations. These estimates, together with the preceding data on residential and non-residential building, complete the picture of construction activity in Australia.

The total value of engineering construction work done during 1992–93 was $11,525 million, a $434 million (4%) rise on the 1991–92 estimate of $11,091 million (table 20.14). This rise was entirely in work done for the public sector, which increased by $606 million (8%) to $8,528 million. Engineering construction work done for the private sector fell by $176 million to $2,997 million.

Overall, significant expenditure occurred in the categories of Roads, highways and subdivisions (34% of the total value), Telecommunications (16%), Electricity generation, transmission and distribution (13%) and Heavy industry (12%).

For the public sector, engineering construction activity centred around the categories of Roads, highways and subdivisions, which accounted for 34 per cent of total activity (up from 28% in 1991–92), Telecommunications which was 21 per cent (down from 23% in 1991–92) and Electricity generation, transmission and distribution which was 17 per cent (down from 19% in 1991–92).

For the private sector, major construction activity was undertaken in the categories of Heavy industry (41% of total expenditure, down from 48% in 1991–92) and Roads, highways and subdivisions (33%, the same as in 1991–92).

20.14 VALUE OF ENGINEERING CONSTRUCTION WORK DONE
($ million)

	1991–92			1992–93		
	For the private sector	*For the public sector*	*Total*	*For the private sector*	*For the public sector*	*Total*
Roads, highways and subdivisions	1,038.2	2,252.6	3,290.8	982.9	2,906.3	3,889.2
Bridges	12.0	245.1	257.0	3.0	221.4	224.4
Railways	33.3	443.3	476.6	12.6	517.1	529.7
Harbours	30.1	56.6	86.7	32.9	114.0	147.7
Water storage and supply	59.8	695.4	755.2	82.4	621.7	704.1
Sewerage and drainage	56.6	541.6	598.3	74.7	579.3	654.0
Electricity generation transmission and distribution	99.9	1,497.2	1,597.0	79.5	1,442.5	1,522.0
Pipelines	99.3	52.7	152.0	188.5	55.2	243.7
Recreation	183.4	155.5	338.9	220.7	147.5	368.2
Telecommunications	6.9	1,801.6	1,808.5	69.2	1,794.3	1,863.5
Heavy industry	1,517.5	156.7	1,674.2	1,232.4	104.9	1,337.3
Other	31.4	24.4	55.8	17.3	23.5	40.8
Total	**3,168.2**	**7,922.7**	**11,091.0**	**2,996.5**	**8,528.3**	**11,524.8**

Source: Engineering Construction Activity, Australia (8762.0).

Price indexes of materials used in building

Two price indexes measure the changes in prices of selected materials used in the construction of buildings — one for materials used in house building, the other for materials used in building other than house building.

Price Index of Materials Used in House Building. Table 20.15 shows the changes in prices of selected materials used in the construction of houses in each capital city statistical division.

The All groups index (weighted average of the six State capital cities) increased 2.0 per cent (2.8 index points) from 1991–92 to 1992–93. This follows a 0.2 per cent (0.3 index points) increase in the previous financial year.

Melbourne (up 2.8%), Brisbane (up 2.1%) and Canberra (up 2.1%) recorded the largest increases. All capital cities recorded increases with the smallest occurring in Perth (up 0.8%).

Price Index of Materials Used in Building Other than House Building. The All groups index (weighted average of six State capital cities) increased by 0.3 per cent (or 0.3 index points) from 1991–92 to 1992–93. This follows a 0.6 per cent (0.6 index points) increase between 1990–91 and 1991–92 (table 20.16).

The large increases in the index occurred in Brisbane (up 1.4%), Hobart (up 1.1%), and Melbourne (1.0%). Sydney (down 0.6%) and Adelaide (down 0.3%) were the only capital cities to record falls.

20.15 PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING
(Reference base year 1985–86 = 100.0)

	1990–91	*1991–92*	*1992–93*
Sydney	145.7	146.1	148.5
Melbourne	138.1	137.3	141.1
Brisbane	141.9	144.7	147.8
Adelaide	136.2	135.5	137.8
Perth	148.7	149.3	150.5
Hobart	134.2	138.3	140.7
Canberra(a)	136.4	140.3	143.2
Weighted average of six State capital cities	142.1	142.4	145.2

(a) Reference base year 1986–87 = 100.0.
Source: Price Index of Materials Used in House Buildings, Six State Capital Cities and Canberra (6408.0).

20.16 PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING ALL GROUPS
(Reference base year 1989–90 = 100.0)

	1990–91	*1991–92*	*1992–93*
Sydney	105.6	107.1	106.5
Melbourne	104.5	103.4	104.4
Brisbane	104.8	107.4	108.9
Adelaide	105.3	105.4	105.1
Perth	105.5	105.2	105.7
Hobart	103.9	107.1	108.3
Darwin	105.4	108.6	109.5
Canberra	106.2	108.7	108.9
Weighted average of six State capital cities	105.1	105.7	106.0

Source: Price Index of Materials Used in Building Other Than House Buildings, Eight Capital Cities (6407.0).

Labour costs

Average labour costs per employee in the construction industry increased by 3.9 per cent in 1991–92 to $34,546. Labour costs per employee continued to be higher than the all industries average, primarily due to higher gross wages and salaries, termination payments, superannuation and workers' compensation costs (table 20.17)

However, on a costs per hour worked basis, labour costs were actually lower in the construction industry, $17.75 per hour worked compared to $18.59 for all industries. This was mainly due to lower gross wages and salaries of $16.83, 5.1 per cent lower than for all industries. Despite lower total labour costs per hour worked, the superannuation and workers' compensation components were higher than for all industries at $1.30 and 63 cents per hour, respectively (table 20.18).

The percentage distribution of labour costs remained fairly constant with gross wages and salaries accounting for 82.5 per cent of total labour costs. Superannuation accounted for 6.4 per cent, payroll tax 2.9 per cent and workers' compensation 3.1 per cent.

20.17 AVERAGE LABOUR COSTS PER EMPLOYEE, CONSTRUCTION INDUSTRY ($)

	1990–91		*1991–92*	
	Construction	*All industries*	*Construction*	*All industries*
Earnings	29,258	26,646	30,066	27,581
Gross wages and salaries	28,203	25,520	28,508	26,305
Termination payments	569	698	1,122	798
Fringe benefits	486	428	437	478
Other labour costs	3,983	3,226	4,480	3,413
Superannuation	1,666	1,377	2,201	1,516
Payroll tax	1,076	1,029	1,010	1,086
Workers' compensation	1,012	618	1,063	586
Fringe benefits tax	229	201	206	225
Total labour costs	**33,241**	**29,872**	**34,546**	**30,995**

Source: Labour Costs, Australia (6348.0).

20.18 LABOUR COSTS PER HOUR WORKED AND COSTS AS A PERCENTAGE OF TOTAL LABOUR COSTS, CONSTRUCTION INDUSTRY, 1991–92

	Cost per hour worked ($)		*Percentage of total labour costs (%)*	
	Construction	*All industries*	*Construction*	*All industries*
Earnings	17.75	18.59	87.0	89.0
Gross wages and salaries	16.83	17.73	82.5	84.9
Termination payments	0.66	0.54	3.2	2.6
Fringe benefits	0.26	0.32	1.3	1.5
Other labour costs	2.65	2.30	13.0	11.0
Superannuation	1.30	1.02	6.4	4.9
Payroll tax	0.60	0.73	2.9	3.5
Workers' compensation	0.63	0.40	3.1	1.9
Fringe benefits tax	0.12	0.15	0.6	0.7
Total labour costs	**20.40**	**20.89**	**100.0**	**100.0**

Source: Labour Costs, Australia (6348.0).

Industrial disputes

Of the 610 industrial disputes during 1993, 27 or four per cent affected the construction industry as was noted earlier, employment in the construction industry makes up seven per cent of all employment. These 27 disputes involved (either directly or indirectly) 14,200 construction industry employees and resulted in the loss of 13,100 working days.

20.19 CONSTRUCTION INDUSTRY INDUSTRIAL DISPUTES WHICH OCCURRED DURING 1993

	Construction	*All industries*
Total industrial disputes which occurred (no.)	27	610
Employees involved (directly and indirectly) ('000)	14.2	489.6
Working days lost ('000)	13.1	635.8

Source: Industrial Disputes, Australia (6322.0).

Table 20.20 shows that, Australia wide, the construction industry recorded an average of 51 working days lost per thousand employees, 53 per cent lower than the Australian all industries average of 108 working days lost per thousand employees. Victoria was the most strike affected State with 95 working days lost per thousand construction industry employees. This figure is 86 per cent higher than the Australian average for the construction industry of 51 working days lost per thousand employees, but 44 per cent lower than the Victorian all industries average of 170 working days lost per thousand employees.

20.20 CONSTRUCTION INDUSTRY INDUSTRIAL DISPUTES WHICH OCCURRED DURING 1993 (working days lost per thousand employees)

State/Territory	*Construction*	*All industries*
New South Wales	55	89
Victoria	95	170
Queensland	10	132
South Australia	—	53
Western Australia	74	51
Tasmania	—	29
Northern Territory	—	38
Australian Capital Territory	—	76
Australia	**51**	**108**

Source: Industrial Disputes, Australia (6322.0).

Trade union membership

The proportion of construction industry employees who are trade union members has been falling steadily since 1986.

In 1986, 48 per cent of construction industry employees were trade union members. This figure fell to 47 per cent in 1988, 45 per cent in 1990 and 42 per cent in 1992.

This fall in trade union membership participation was not restricted to the construction industry. In all industries the estimated average trade union membership has also been falling steadily from 46 per cent in 1986 to 42 per cent (1988), 41 per cent (1990) and 40 per cent (1992).

As might be expected, in the construction industry, permanently employed males were most likely to belong to trade unions with 55 per cent of this category belonging to a union. Females employed in the construction industry were less likely to belong to trade unions with only 10 per cent of permanently employed and no casually employed females being trade union members (table 20.22).

20.21 CONSTRUCTION INDUSTRY EMPLOYEES WHO WERE TRADE UNION MEMBERS

	Construction	*All industries*
August 1986(a)		
No. of members ('000)	145.3	2,593.9
Proportion of employees who are in trade unions (%)	48.0	45.6
August 1988(a)		
No. of members ('000)	157.5	2,535.9
Proportion of employees who are in trade unions (%)	47.1	41.6
August 1990		
No. of members ('000)	170.7	2,659.6
Proportion of employees who are in trade unions (%)	45.4	40.5
August 1992		
No. of members ('000)	123.9	2,508.8
Proportion of employees who are in trade unions (%)	42.4	39.6
Total number of employees ('000)	292.6	6,334.8

(a) Estimates from 1986 to 1988 have been revised to exclude persons aged 70 years and over.
Source: Trade Union Members, Australia (6325.0).

20.22 CONSTRUCTION INDUSTRY EMPLOYEES WHO WERE TRADE UNION MEMBERS, AUGUST 1992
(per cent)

	Construction	*All industries*
Males		
Permanent	55.1	48.1
Casual	23.4	18.4
Total	*47.2*	*43.4*
Females		
Permanent	9.7	42.9
Casual	—	16.5
Total	*5.9*	*34.8*
Persons		
Permanent	50.7	46.0
Casual	19.4	17.2
Total	*42.4*	*39.6*

Source: Trade Union Members, Australia (6325.0).

Training expenditure

During July to September 1993 employers in the construction industry spent the equivalent of 1.8 per cent of gross wages and salaries on formally training employees. This was a decrease from the same period in 1990 when the corresponding figure was 1.9 per cent. The percentage of gross wages and salaries spent on training by employers in the construction industry in 1993 was lower than the average expenditure of all industries (2.9%). The non-building construction industry recorded a rise in expenditure, from 1.8 per cent of gross wages and salaries in 1990 to 1.9 per cent in 1993.

The two sectors, non-building and other construction, spent a similar percentage of gross wages and salaries on training, however, the amount spent per employee and the number of hours training per employee varied between the two groups. Non-building construction spent the largest amount per employee on training ($153) in the September quarter 1993. This was an increase of 9 per cent from the same period in 1990 when $140 per employee was spent. Other construction recorded a decline of 7 per cent in expenditure from the September quarter 1990 to 1993 ($140 per employee to $130 per employee).

The amount of time employees in the construction industry spent receiving training decreased by 34 per cent between 1990 and 1993 (from 9.0 hours to 5.9 hours). Other construction recorded the highest average hours of training per employee (6.5 hours). This was higher than the all industry average of 5.6 hours.

20.23 TRAINING EXPENDITURE IN THE CONSTRUCTION INDUSTRY JULY TO SEPTEMBER 1993

Industry	*Percentage of gross wages and salaries*	*Dollars per employee*	*Hours per employee*
Non-building construction	1.9	153	4.1
Other construction(a)	1.8	130	6.5
Total construction	*1.8*	*135*	*5.9*
Total all industries	**2.9**	**192**	**5.6**

(a) Comprises building and special trades construction.
Source: Employer Training Expenditure, Australia (6353.0).

HOUSING

Housing satisfies the essential human needs for shelter, security and privacy. Internationally, shelter is recognised as a basic human right. The adequacy or otherwise of housing is therefore an important component of individual well-being. Housing also has an enormous significance in the national economy, with its influence on investment levels, interest rates, building activity and employment.

This part of the chapter provides a profile of the various aspects of housing in Australia, based on information from the five-yearly Census of Population and Housing and from periodic surveys. Care should be taken when comparing statistics from different sources because of differences in the timing and conceptual bases of individual statistical collections on respective topics.

Number and type of dwellings

Number of dwellings. The number of occupied dwellings is distributed broadly according to the population of each State and Territory. However, the growth in the number of occupied dwellings in each State/Territory between 1986 and 1991 was variable. Queensland and Western Australia had the highest growth (18%), followed by the Australian Capital Territory (17%), then the Northern Territory (15%). The remainder, New South Wales, Victoria, South Australia and Tasmania grew by less than 9 per cent. The average growth for Australia over the five-year period was 11 per cent.

The number of caravans, etc. in caravan parks and occupied boats in marinas has increased in all States/Territories except Victoria where the number decreased 2.4 per cent. The Northern Territory had the highest growth rate (37%), with the growth rate in New South Wales (19%), South Australia (17%) and Queensland (16%) above the Australian average. The remainder were all below eight per cent. The average growth for Australia was 13 per cent.

20.24 NUMBER OF DWELLINGS BY STATE/TERRITORY

	30 June 1986			*6 August 1991*		
State/Territory	*Occupied*	*Caravans, etc.(a)*	*Unoccupied*	*Occupied*	*Caravans, etc.(a)*	*Unoccupied*
New South Wales	1,817,392	21,916	174,467	1,961,229	26,036	192,140
Victoria	1,351,118	9,475	143,264	1,466,150	9,243	164,754
Queensland	838,122	27,310	94,714	986,013	31,788	99,014
South Australia	474,456	3,162	48,546	511,995	3,710	53,534
Western Australia	458,762	10,749	53,851	539,024	10,907	57,643
Tasmania	149,484	658	19,470	162,320	680	21,764
Northern Territory	39,779	3,456	3,639	45,805	4,737	3,075
Australian Capital Territory	79,363	368	5,588	92,485	395	5,658
Australia(b)	**5,208,476**	**77,094**	**543,539**	**5,765,021**	**87,496**	**597,582**

(a) Occupied caravans, etc. in caravan parks were counted as occupied private dwellings in the 1976 and 1981 Censuses. (b) Excludes offshore, migratory and non-private dwellings.

Source: 1991 Census of Population and Housing, State Comparison Series (2731.0).

Type of dwellings. The separate house is the most popular type of dwelling in Australia today making up 77 per cent of all dwellings. Tasmania has the highest proportion of separate houses (85%) and the Northern Territory the lowest (61%). All other States and the Australian Capital Territory are in the range of 70 to 80 per cent.

Flats or apartments are the next most common type of dwellings. Twelve per cent of dwellings in Australia are of this design. Western Australia (7%), Tasmania (7%) and South Australia (8%) have relatively low percentages of flats or apartments. New South Wales with 17 per cent has the highest proportion of flats or apartments.

The Australian Capital Territory, South Australia and Western Australia have more semi-detached type housing than flats or apartments. Western Australia has almost twice the number of semi-detached dwellings (12%) as it has flats or apartments (7%).

A high proportion of caravans etc. in caravan parks exist in the Northern Territory. This represents nine per cent of dwellings in the Territory. The Northern Territory also has a high percentage of 'other' dwelling structures (8%) including caravans not in caravan parks, improvised homes, campers out and houses or flats attached to shops and offices.

20.25 TYPE OF DWELLINGS BY STATE/TERRITORY, 1991

Type of dwelling	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.(a)*
					— per cent —				
Separate house	72.7	79.8	78.4	77.0	77.8	84.8	60.8	79.1	76.7
Semi-detached(b)									
1 storey	4.0	6.8	2.8	11.9	10.4	5.1	5.7	7.0	5.9
2 or more storeys	3.1	1.2	1.5	1.3	1.9	1.0	2.1	3.7	2.0
Flat or apartment(c)									
1 or 2 storey	6.4	6.6	7.2	6.4	2.9	4.8	11.0	3.6	6.2
3 storeys	5.5	2.2	2.6	0.7	2.0	0.7	2.4	3.8	3.2
4 or more storeys	4.5	1.0	2.1	0.2	1.4	0.3	1.0	0.9	2.3
Attached to a house	0.6	0.4	0.3	0.3	0.2	0.7	0.3	0.8	0.4
Caravan etc. in a caravan park	1.2	0.6	2.9	0.7	1.8	0.4	8.8	0.4	1.4
Other(d)	2.0	1.6	2.2	1.6	1.7	2.2	7.8	0.7	1.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
					— '000 —				
Number of dwellings	2,179.4	1,640.1	1,116.8	569.2	607.6	184.8	53.6	98.5	6,450.1

(a) Excludes non-private dwellings, and offshore and migratory dwellings. (b) Includes row/terrace houses, townhouses, of one or more storeys. (c) Includes blocks of one or more storeys; and flats attached to houses. (d) Includes caravans, etc. not in caravan parks, improvised homes, campers out, houses or flats attached to shop, office, etc., and not stated.
Source: 1991 Census of Population and Housing, State Comparison Series (2731.0).

Standard of housing and facilities

The following information on certain physical features and facilities of dwellings provides some indication of the standard of housing in Australia.

Material of outer walls. Availability, cost, durability, appearance and climatic conditions can affect the use of certain materials for outer walls.

Brick veneer remains the most commonly used material for outer walls. Sixty-seven per cent of dwellings approved in Australia in 1992–93 were to be constructed using brick veneer. Brick veneer is the most popular material used in all States and Territories except the Northern Territory and Western Australia where double brick is more prevalent. In the Australian Capital Territory, 97 per cent of approvals were for brick veneer houses. This is 30 per cent above the national average.

The Northern Territory has a high percentage of dwellings assembled using steel, aluminium and other materials as their external wall (30%), compared with only 2.6 per cent for Australia as a whole.

In Tasmania, 16 per cent of dwellings used timber and 6 per cent used stone and concrete for their exterior. This compares to 7 per cent and 0.7 per cent, respectively, for Australia.

20.26 NEW HOUSES APPROVED, BY MATERIAL OF OUTER WALLS AS A PROPORTION OF TOTAL STATE/TERRITORY, 1992–93

Material of outer wall	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
					— per cent —				
Double brick	12.5	2.0	5.2	3.7	87.2	3.6	62.9	0.5	18.8
Brick veneer	73.6	82.6	78.6	88.9	4.3	67.6	2.2	97.4	67.2
Timber	6.9	7.6	9.8	1.8	2.9	16.1	2.2	0.1	7.0
Fibre cement	4.1	1.8	4.5	4.7	3.2	4.0	0.8	—	3.6
Stone and concrete	0.5	0.7	0.5	0.7	0.5	6.4	1.5	0.1	0.7
Steel, aluminum and other	2.4	5.3	1.5	0.2	1.8	2.3	30.4	1.8	2.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
					— number —				
Number of approvals	29,522	27,158	33,881	10,086	16,485	2,956	1,055	2,443	123,586

Source: Building Approvals Microfiche Service, Australia (8734.0).

Number of rooms. The most readily available indicator of dwelling size is the number of bedrooms.

Nearly half of all dwellings in Australia have three bedrooms (49%). Fifty-eight per cent of separate houses have three bedrooms. Two bedroom dwellings are more common in semi-detached homes and flats and apartments.

Most caravans in caravan parks (57%) and 'other' dwellings (35%) have either no bedrooms or one.

Information on the incidence of other types of rooms such as bathrooms, toilets, laundries and lounge/dining/family rooms was provided in the 1994 issue of *Year Book Australia.*

20.27 PROPORTION OF DWELLINGS BY DWELLING STRUCTURE AND NUMBER OF BEDROOMS, 1991
(per cent)

		Semi-detached(a)		*Flat/apartment*							
Number of bedrooms	*Separate house*	*1 storey*	*2 or more storeys*	*1–2 storeys*	*3 storeys*	*4 or more storeys*	*Attached to a house*	*Caravan etc. in a caravan park*	*Other (b)*	*Not stated*	*All households*
Zero – one	1.4	12.9	5.9	29.4	22.0	23.0	54.1	56.7	34.8	7.3	6.4
Two	15.2	53.9	40.8	56.3	63.7	57.0	26.2	21.8	24.9	22.7	23.1
Three	57.8	27.6	40.6	7.5	7.6	12.3	8.9	6.8	20.5	39.6	48.7
Four	19.9	1.9	6.5	0.7	0.3	0.4	3.1	1.0	5.3	12.8	15.9
Five or more	3.5	0.3	1.7	0.6	0.2	0.2	2.1	0.3	4.1	3.0	2.9
Not stated	2.2	3.3	4.4	5.4	6.2	7.1	5.6	13.3	10.5	14.7	3.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes row/terrace houses, townhouses, of one or more storeys. (b) Includes caravans not in caravan parks, houseboats etc., improvised homes, campers out, house of flat attached to a shop, office etc.
Source: Unpublished data from the 1991 Census of Population and Housing.

Provision for motor vehicles. Most dwellings (85%) had at least one motor vehicle on-site on Census night 1991. Over 75 per cent of separate houses had one or two motor vehicles at the dwelling while 10 per cent of separate houses had three motor vehicles. Most semi-detached homes, flats and apartments had either no motor vehicle or one which was also the case for caravans etc. in caravan parks.

20.28 PROPORTION OF DWELLINGS BY DWELLING STRUCTURE AND NUMBER OF MOTOR VEHICLES GARAGED, 1991
(per cent)

		Semi-detached(a)		*Flat/apartment*							
Number of motor vehicles	*Separate house*	*1 storey*	*2 or more storeys*	*1–2 storeys*	*3 storeys*	*4 or more storeys*	*Attached to a house*	*Caravan etc. in a caravan park*	*Other(b)*	*Not stated*	*All households*
None	8.1	25.6	19.9	33.4	32.7	33.0	27.9	19.5	17.9	13.1	12.6
One	38.7	50.9	48.7	47.3	48.1	46.7	47.2	60.5	45.6	36.8	41.0
Two	36.9	16.9	22.2	11.5	11.2	11.2	14.4	9.2	21.5	26.4	31.9
Three	10.1	2.4	3.7	1.4	1.1	1.1	3.2	1.0	5.4	6.7	8.3
Four or more	4.0	0.5	0.9	0.5	0.5	0.5	1.3	0.4	2.6	2.7	3.3
Not stated	2.1	3.7	4.6	5.9	6.5	7.4	6.0	9.5	7.0	14.3	3.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes row/terrace houses, townhouses, of one or more storeys. (b) Includes caravans not in caravan parks, houseboats etc., improvised homes, campers out, house of flat attached to a shop, office etc.
Source: Unpublished data from the 1991 Census of Population and Housing, 6 August.

Year Book Australia 1994 contained information on time spent travelling to work.

Household energy use and conservation.

Eighty-six per cent of households have some type of room heating. The most common type of fuel used is electricity with 43 per cent of households using this source for warmth. Mains gas (28%) closely followed by wood, coal and oil (25%) were the next most common.

Nearly all (99%) of households have some form of hot water service. Separate houses and semi-detached dwellings almost always had hot water services (99% and 100%, respectively). Flats/units had hot water services in 98 per cent of cases and 'other' dwellings only 91 per cent of the time.

Electricity is still the most popular type of fuel for all purposes (95%). Mains gas (38%) and wood, coal and oil (28%) are the next most prevalent types of fuel. Six per cent of households use solar energy in the dwelling. This is mainly for hot water services in separate houses.

20.29 PROPORTION OF HOUSEHOLDS BY TYPE OF DWELLING BY TYPE OF FUEL USED IN DWELLING BY PURPOSE OF FUEL, OCTOBER–DECEMBER 1990
(per cent)

	Type of fuel used in household					
Type of dwelling(a)	*Electricity*	*Mains gas*	*Solar*	*Wood, coal, oil*	*Other fuel(b)*	*All households*
			ROOM HEATING			
Separate house	40.2	29.3	0.1	30.2	7.9	87.5
Semi-detached(c)						
1 storey	52.6	30.5	—	9.0	3.4	85.9
2 or more storeys	55.9	20.0	—	7.6	* 3.6	79.7
Total	*53.4*	*27.8*	—	*8.6*	*3.4*	*84.3*
Flat/unit						
1–3 storeys	59.2	15.7	—	1.6	3.1	76.1
4 or more storeys	67.2	* 6.6	—	* 1.1	—	73.8
Total	*59.8*	*15.0*	—	*1.6*	*2.9*	*75.9*
Other	35.7	12.9	—	21.4	12.1	73.4
Total	**43.3**	**27.5**	**0.1**	**25.3**	**7.1**	**85.9**

For footnotes *see* end of table.

20.29 PROPORTION OF HOUSEHOLDS BY TYPE OF DWELLING BY TYPE OF FUEL USED IN DWELLING BY PURPOSE OF FUEL, OCTOBER–DECEMBER 1990 — *continued*
(per cent)

	Type of fuel used in household					
Type of dwelling(a)	*Electricity*	*Mains gas*	*Solar*	*Wood, coal, oil*	*Other fuel(b)*	*All households*
			HOT WATER SERVICE			
Separate house	64.0	27.7	6.7	3.3	3.2	98.7
Semi-detached(c)						
1 storey	59.6	37.5	2.2	* 0.5	2.1	99.7
2 or more storeys	65.0	33.8	* 1.2	—	—	98.7
Total	*61.0*	*36.5*	*1.9*	* *0.3*	*1.6*	*99.5*
Flat/unit						
1–3 storeys	68.5	27.7	1.2	—	1.4	97.6
4 or more storeys	75.5	21.3	* 1.3	—	* 0.6	97.7
Total	*69.0*	*27.2*	*1.2*	—	*1.3*	*97.7*
Other	60.7	19.6	* 2.0	* 4.0	* 8.0	91.1
Total	**64.3**	**28.2**	**5.7**	**2.8**	**2.9**	**98.5**
		SAME FUEL USED FOR ROOM HEATING AND HOT WATER SERVICE				
Separate house	31.7	20.7	—	2.2	0.7	54.9
Semi-detached(c)						
1 storey	36.9	22.8	—	* 0.2	* 0.2	59.9
2 or more storeys	40.1	15.0	—	—	—	55.1
Total	*37.7*	*20.8*	—	* *0.1*	* *0.2*	*58.6*
Flat/unit						
1–3 storeys	47.3	13.3	—	—	* 0.2	60.7
4 or more storeys	54.3	4.0	—	—	—	58.3
Total	*47.8*	*12.6*	—	—	* *0.1*	*60.5*
Other	23.7	10.0	—	* 4.0	* 1.1	38.8
Total	**33.9**	**19.7**	**—**	**1.8**	**0.6**	**55.7**
			ALL PURPOSES			
Separate house	94.8	38.4	6.8	32.8	13.8	100.0
Semi-detached(c)						
1 storey	95.8	48.0	2.2	10.0	5.7	100.0
2 or more storeys	92.8	41.3	* 1.2	9.2	* 4.1	100.0
Total	*95.0*	*46.3*	*1.9*	*9.7*	*5.3*	*100.0*
Flat/unit						
1–3 storeys	94.5	33.2	1.2	1.9	4.7	100.0
4 or more storeys	94.7	24.5	* 1.3	* 1.1	* 0.6	100.0
Total	*94.5*	*32.5*	*1.2*	*1.8*	*4.4*	*100.0*
Other	*83.9*	*24.6*	**3.1*	*24.3*	*30.8*	*100.0*
Total	*94.7*	*38.2*	*5.8*	*27.5*	*12.2*	*100.0*

(a) Rows will not add across as a household may use more than one type of fuel for each purpose. (b) Includes kerosene, bottled, L.P. or other gas, other fuels n.e.i. (c) Includes row/terrace houses and townhouses.
* Relative standard error of 30 per cent or more.
Source: Unpublished data from the ABS 1990 Survey of Income, and Housing Costs and Amenities.

Thirty-six per cent of dwellings in Australia have insulation in their roof only. Just under 41 per cent of separate houses and 32 per cent of one storey semi-detached dwellings have only roof insulation. A very small proportion of dwellings (2.4%) have insulation in the wall only, mainly occurring in separate houses. Only 13 per cent of all dwellings have insulation both in the wall and roof. Thirty per cent of households have no insulation in either the wall or roof. Flats and apartments are more likely to have no insulation than semi-detached or separate houses.

20.30 PROPORTION OF DWELLINGS BY TYPE AND LOCATION OF INSULATION OCTOBER–DECEMBER 1990
(per cent)

	Type of insulation					
Type of dwelling	*Wall*	*Roof*	*Wall and roof*	*None*	*Unknown*	*All households*
Separate house	2.8	40.5	15.2	29.3	7.9	100.0
Semi-detached(a)						
1 storey	*0.8	31.9	3.6	31.1	23.0	100.0
2 or more storeys	*2.0	18.0	*1.4	25.3	39.2	100.0
Flat/unit						
1–3 storeys	*0.5	12.8	2.0	30.7	41.1	100.0
4 or more storeys	—	*0.4	—	41.9	42.9	100.0
Other	—	21.4	10.9	38.8	19.0	100.0
Total	**2.4**	**36.2**	**12.8**	**29.6**	**13.2**	**100.0**

(a) Includes row/terrace houses, townhouses, of one or more storeys.
* Relative standard error of 30 per cent or more.
Source: Unpublished data from the ABS 1990 Survey of Income, and Housing Costs and Amenities.

INVESTORS IN RENTAL DWELLINGS

There were approximately 752,100 people who were current investors in residential rental property in Australia in July 1993. This is about six per cent of the adult population.

The Australian Capital Territory had the most rental investors per capita with 8.8 per cent of its population investing in residential rental property. This is closely followed by the Northern Territory (8.7%), Queensland (7.2%) and Western Australia (7.1%). Tasmania, New South Wales, South Australia and Victoria were all below the Australian average with 4.4, 5.1, 5.5 and 5.8 per cent, respectively of their populations investing.

20.31 RENTAL INVESTORS BY STATE/TERRITORY OF USUAL RESIDENCE, 1993

State/Territory	*Number of investors ('000)*	*Proportion of all investors (%)*	*Proportion of all persons in State/Territory (%)*
New South Wales	220.5	29.3	5.1
Victoria	187.8	25.0	5.8
Queensland	158.3	21.0	7.2
South Australia	59.4	7.9	5.5
Western Australia	85.0	11.3	7.1
Tasmania	14.6	1.9	4.4
Northern Territory	7.6	1.0	8.7
Australian Capital Territory	18.7	2.5	8.8
Australia	**752.1**	**100.0**	**6.0**

Source: Investors in Rental Dwellings, Australia, July 1993 (8711.0).

The main reason people became a landlord was to have a secure long-term investment. Most rental investors bought their rental property with a loan or mortgage. Approximately 432,800 investors took out a loan or mortgage to acquire their property, while 86,200 bought the property outright.

20.32 REASON FOR BECOMING A LANDLORD, BY HOW FIRST PROPERTY AS A LANDLORD WAS ACQUIRED, 1993

Reason for becoming a landlord	*Own home*	*Bought property with loan or mortgage*	*Bought property outright*	*Inherited property*	*All investors*	*Number of investors ('000)*
			— per cent —			
Secure long-term investment	32.7	61.9	56.5	29.9	52.1	391.7
Income from rent	22.3	10.5	23.4	23.0	15.7	118.1
Reduce taxable income by negative gearing	7.2	20.8	* 2.4	* 3.6	14.3	107.8
Plan to return to live in dwelling at later date	18.6	1.3	* 0.7	* 2.2	6.0	44.8
Possible future home	8.1	11.4	9.4	* 8.6	10.2	76.7
Potential for capital gain	9.2	10.5	7.4	* 7.9	9.7	72.8
Investing for retirement	5.7	15.4	11.0	* 7.9	11.9	89.7
Other	28.2	9.0	14.6	40.6	16.0	120.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**752.1**
			— '000 —			
Number of investors	205.2	432.8	86.2	27.8	752.1	. .

* Relative standard error of 30 per cent or more.
Source: Investors in Rental Dwellings, Australia, July 1993 (8711.0).

HOME OWNERSHIP AND RENTING

Sixty-seven per cent of the 5,853,000 occupied dwellings in Australia were either owned or being purchased by their occupiers, according to the 1991 Census of Population and Housing. The most prevalent type of tenancy was ownership (40%). Buying and renting were equal second with 27 per cent of dwellings in each of these situations. Only seven per cent of dwellings were rented from the government, with 19 per cent being leased from 'other' landlords which included private landlords and employers.

Most separate houses were owned outright (45%) or were being purchased (31%) by the residents. However, semi-detached homes, flats and apartments were more often rented from landlords other than government departments or agencies. Caravans were most commonly owned by the occupants, with only a small number being purchased.

20.33 TYPE OF DWELLING BY NATURE OF OCCUPANCY, 1991
(per cent)

	Nature of occupancy						
			Rented				
Type of dwelling	*Owned*	*Being purchased*	*Government*	*Other*	*Not stated*	*Other*	*Total*
Separate house	45.4	31.4	4.9	12.0	0.6	5.7	100.0
Semi-detached(a)							
1 storey	27.8	13.0	20.0	32.7	1.3	5.1	100.0
2 or more storeys	23.0	16.3	16.9	36.1	1.1	6.5	100.0
Flat/apartment							
1–2 storeys	13.4	6.4	13.0	58.4	2.3	6.5	100.0
3 storeys	17.8	10.5	13.0	49.4	1.8	7.5	100.0
4 or more storeys	23.3	9.3	15.2	41.5	1.8	9.0	100.0
Attached to a house	18.4	5.0	3.0	56.9	2.3	14.3	100.0
Caravan etc. in caravan parks	45.4	5.9	0.7	27.5	2.6	17.8	100.0
Caravan not in caravan park, houseboat etc.	47.0	9.8	0.8	14.8	1.8	25.9	100.0
Improvised homes, campers out	31.8	11.1	1.8	13.2	1.5	40.5	100.0
House attached to a shop	16.2	12.7	2.6	53.1	2.2	13.1	100.0
Not stated	31.0	22.7	6.5	20.1	1.3	18.5	100.0
Total	**40.4**	**26.7**	**6.9**	**18.9**	**0.9**	**6.3**	**100.0**

(a) Includes row/terrace houses, townhouses, of one or more storeys.
Source: Unpublished data from the 1991 Census of Population and Housing.

Almost 41 per cent of families who owned their own home, were couples with no children. Another 33 per cent of owners were two-parent families with dependent children. One-parent families accounted for nine per cent of owners.

A large proportion of purchasers were two-parent families with dependent children (62%). Only 10 per cent of two-parent families who were purchasing did not have dependent children.

Seventy-eight per cent of two-parent families owned or were buying their dwelling with only 18 per cent renting. This compared to 52 per cent and 44 per cent for one-parent families.

20.34 HOME OWNERSHIP AND RENTALS, BY TYPE OF FAMILY(a), 1991 ('000)

Type of families	Owners	Purchasers	Renters: Government	Renters: Other	Renters: Not stated	Other(b)	All families
One-parent families							
With dependent offspring	73.3	89.9	85.2	107.4	3.8	15.2	374.8
With no dependent offspring	94.1	29.5	19.9	21.7	1.4	7.6	174.3
Total	*167.5*	*119.4*	*105.1*	*129.1*	*5.2*	*22.8*	*549.0*
Couples without offspring	724.7	303.7	51.6	199.8	8.9	54.7	1,343.5
Two-parent families							
With dependent offspring	589.6	849.9	109.2	264.0	8.8	73.7	1,895.2
With no dependent offspring	258.0	93.3	14.7	23.3	1.6	14.8	405.8
Total	*847.6*	*943.2*	*123.9*	*287.3*	*10.4*	*88.6*	*2,300.9*
Families of other related individuals	34.6	11.6	4.7	22.8	0.9	5.0	79.6
Total	**1,774.3**	**1,377.9**	**285.2**	**639.0**	**25.5**	**171.0**	**4,273.0**

(a) Excludes families living in caravans etc. in caravan parks. (b) Comprises 'other/inadequately described' and 'not stated'.
Source: 1991 Census of Population and Housing, Basic Community Profile (2722.0).

The pattern of different types of tenure varies across States and Territories (table 20.35).

Victoria had the highest level of home ownership with 71 per cent of dwellings either being purchased or owned outright. The lowest level of home ownership of 36 per cent was recorded in the Northern Territory. Only 15 per cent of homes are owned outright in the Northern Territory.

There was a high percentage of purchasers in the Australian Capital Territory (38%) compared to the Australian average (27%). All other States had proportions between 20 and 30 per cent.

In the Northern Territory, nearly 50 per cent of dwellings were rented. Twenty-three per cent were leased from the Government. This is three times the figure for Australia and over four times the Victorian equivalent. The Australian Capital Territory also had a high percentage of renters at 33 per cent, with 13 per cent of dwellings in the Australian Capital Territory being rented from the Government.

20.35 PROPORTION OF DWELLINGS BY TYPE OF TENURE, 1991 (per cent)

Nature of occupancy	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	All households
Owners	41.6	41.5	40.7	39.9	37.0	41.8	14.6	24.9	40.4
Purchasers	24.7	29.3	23.9	27.6	29.5	27.6	21.8	38.2	26.7
Renters									
Government	6.8	4.8	5.0	12.4	7.6	9.2	23.1	13.0	6.9
Other	19.3	17.5	22.5	14.6	19.4	15.3	25.0	19.4	19.0
Not stated	0.9	0.9	1.0	0.7	0.7	0.8	1.2	0.5	0.9
Total renters	*27.1*	*23.1*	*28.5*	*27.7*	*27.8*	*25.3*	*49.2*	*32.9*	*26.7*
Other(a)	6.7	6.1	6.9	4.8	5.7	5.3	14.3	4.0	6.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes 'other/inadequately described' and 'not stated'.
Source: 1991 Census of Population and Housing, State Comparison Series (2731.0).

ACCESSIBILITY AND AFFORDABILITY OF HOUSING

The ability of people to acquire housing depends on two considerations — their ability to buy or rent housing in the first instance (housing accessibility) and their ability to subsequently maintain their housing financial commitments (housing affordability). The cost of acquiring and/or maintaining housing is a major component in the cost of living. Some measures of the cost and financing of housing are shown in the following statistics.

The unit used in the statistics on housing accessibility and affordability varies between 'household' and 'income unit', depending on the subject. For statistical purposes a household is a social unit, a group of people who live together in a single dwelling with common housekeeping arrangements. An income unit, in simple terms, is more in the nature of an economic unit, which may comprise only some members of one or more households, for example, a married couple owning, buying or maintaining the cost of a dwelling, but excluding dependent or non-dependent children living with them. However, as it is estimated that there were 5.6 million households and 6.2 million income units in 1990, these figures are close enough to allow general compatibility between the various statistics whether based on the household or income unit.

Rental tenants

In 1991, nearly half of rental dwellings in Australia were rented at below $108 per week, with 30 per cent rented under $78 per week.

Table 20.36 shows the clear relationship between annual household income and how much rent is paid per week. Sixty-six per cent of households with incomes below $8,001 paid less than $78 a week in rent for a dwelling, while 58 per cent of households with income over $100,000 paid more than $197 a week in rent. However, households in the income range of $20,001 to $30,000 were spread quite evenly over the first four rent ranges, with only a small proportion paying over $197 a week for rent.

20.36 ANNUAL HOUSEHOLD INCOME, BY WEEKLY RENT(a), 1991
(per cent)

	Weekly rent						
Annual household income	*$0–$77*	*$78–$107*	*$108–$137*	*$138–$197*	*Over $197*	*Not stated*	*Total*
$0 - $8,000	66.4	12.7	7.5	6.2	2.4	4.9	100.0
$8,001 - $12,000	59.5	18.4	10.6	6.6	1.4	3.6	100.0
$12,001 - $20,000	40.1	20.9	18.4	14.7	3.1	2.9	100.0
$20,001 - $30,000	22.2	23.9	23.5	23.0	5.3	2.1	100.0
$30,001 - $40,000	17.0	18.0	23.7	30.5	8.9	1.8	100.0
$40,001 - $60,000	14.3	13.2	20.4	36.1	14.5	1.5	100.0
$60,001 - $80,000	13.1	8.6	12.9	36.4	27.6	1.4	100.0
$80,001 - $100,000	10.5	6.1	8.5	33.0	40.5	1.4	100.0
Over $100,000	10.5	4.2	6.1	19.2	58.1	1.8	100.0
Partial income stated	24.9	15.8	18.4	25.5	12.2	3.3	100.0
No income stated(a)	27.5	13.8	14.3	17.2	8.7	18.4	100.0
Total	**30.2**	**17.2**	**17.9**	**22.4**	**9.4**	**3.0**	**100.0**

(a) Only includes rented occupied dwellings (excludes caravans etc. in caravan parks and not classifiable households).
Source: 1991 Census of Population and Housing, Basic Community Profile (2722.0).

Home buyers

Table 20.37 shows the distribution of mortgage repayments for different types of dwelling being purchased.

In 1991, the highest mortgage repayments were made on semi-detached homes with two or more storeys. Sixteen per cent of these purchasers were paying over $1,400 per month, compared with five per cent for separate houses in the same range.

The median monthly mortgage payment for those purchasing a dwelling was in the range $551 to $625, with a similar median recorded for purchasers of separate houses. Purchasers were paying a median amount of between $776 to $850 per month in mortgage repayments on 2 or more storey semi-detached dwellings.

20.37 HOUSING LOAN REPAYMENTS, BY TYPE OF DWELLING, 1991

Monthly mortgage repayments	Separate house	Semi-detached: 1 storey	Semi-detached: 2 or more storeys	Flat/apartment: 1 or 2 storeys	Flat/apartment: 3 storeys	Flat/apartment: 4 or more storeys	Flat/apartment: Attached to a house	Total
				— per cent —				
Less than $201	11.5	8.3	5.1	8.3	6.2	6.6	10.3	11.2
$201 - $300	8.4	7.5	4.7	6.9	5.5	5.5	7.3	8.3
$301 - $400	11.2	9.2	7.5	9.5	7.7	7.0	7.6	11.0
$401 - $475	8.1	7.3	5.8	8.1	7.1	6.3	6.5	8.0
$476 - $550	8.7	8.2	7.2	9.8	8.6	7.9	8.0	8.7
$551 - $625	8.5	8.5	7.2	9.8	9.2	8.5	8.6	8.5
$626 - $700	6.7	6.8	6.4	7.5	7.8	7.1	5.6	6.7
$701 - $775	4.5	5.2	4.4	5.4	5.4	4.9	4.9	4.6
$776 - $850	6.2	6.8	6.6	6.7	7.4	6.1	5.4	6.2
$851 - $925	3.8	4.3	4.4	4.2	5.0	3.8	2.9	3.8
$926 - $1,000	4.3	4.9	5.5	4.4	5.3	5.3	4.6	4.3
$1,001 - $1,200	6.1	7.5	9.0	6.3	8.7	8.8	6.4	6.2
$1,201 - $1,400	3.6	4.7	6.4	3.8	5.7	7.0	3.7	3.7
More than $1,400	5.0	7.3	16.2	5.9	7.5	11.6	8.7	5.4
Not stated	3.3	3.5	3.6	3.5	2.9	3.4	9.6	3.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
				— '000 —				
Number of dwellings	1,422.9	44.2	18.5	22.3	19.1	11.9	1.1	1,561.3

Monthly mortgage repayments	Caravan etc. in a caravan park	Caravan not in a caravan park, houseboat etc.	Improvised home, campers out	House or flat attached to a shop, office, etc.	Not stated	Total
			— per cent —			
Less than $201	24.2	14.4	8.8	4.0	9.9	11.2
$201 - $300	20.6	15.9	10.2	3.8	7.4	8.3
$301 - $400	17.4	17.6	15.2	5.0	10.3	11.0
$401 - $475	9.3	8.3	10.8	3.4	7.4	8.0
$476 - $550	7.6	7.8	9.5	4.2	7.9	8.7
$551 - $625	5.2	6.6	8.3	4.1	8.3	8.5
$626 - $700	3.5	4.7	7.6	3.8	6.5	6.7
$701 - $775	1.9	2.9	3.6	2.5	4.9	4.6
$776 - $850	2.1	3.7	4.3	4.1	6.0	6.2
$851 - $925	0.8	1.7	3.2	2.8	3.9	3.8
$926 - $1,000	1.1	2.5	3.4	3.9	4.5	4.3
$1,001 - $1,200	1.0	2.3	4.2	8.3	6.5	6.2
$1,201 - $1,400	0.6	1.6	2.2	6.0	4.2	3.7
More than $1,400	1.3	3.7	2.8	35.5	6.5	5.4
Not stated	3.4	6.4	5.8	8.6	5.8	3.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
			— '000 —			
Number of dwellings	5.2	1.6	1.0	3.9	9.7	1,561.3

Source: Unpublished data from the 1991 Census of Population and Housing.

There were approximately 941,700 people who bought a home in Australia during the three years from 1988 to 1990. First home buyers accounted for 31 per cent of these. The remainder were changeover buyers, people who have previously owned or part-owned a home. First home buyers during 1988 to 1990 accounted for nearly seven per cent of all owners and buyers in Australia.

The typical first home buyer household was a married couple. They were usually aged between 25 and 34 years, were well-qualified and were born in Australia. Generally they bought three bedroom separate houses with some form of undercover parking. The prices paid for the houses ranged fairly evenly across the market.

Some comparisons can be drawn on certain characteristics of first home buyers and changeover buyers during the period 1988 to 1990, and of the Australian population as a whole (table 20.38).

There was a slightly higher proportion of married couples among first home buyers (69%) than in the general population (63%) and an even higher proportion among changeover buyers (73%).

On the whole, first home buyers were younger than home buyers generally. Well over half of first home buyers were aged between 25 and 34 years (54%), compared with only 20 per cent for all households in Australia. Around 23 per cent of changeover buyers were aged from 25 to 34 years with the majority (31%) aged from 35 to 44 years.

First home buyers (87%) and changeover buyers (86%) were more likely to have a separate house than Australian households as a whole (81%). However, 91 per cent of all owners and buyers in Australia lived in separate houses.

First home buyers were more likely to buy a three bedroom house (62%) than changeover buyers (52%). A greater proportion of changeover buyers bought houses with more than three bedrooms (28% of changeover buyers compared to 13% of first home buyers).

Over half of first home buyers had post-secondary qualifications (55%), close to the national figure of 49 per cent. However, only 29 per cent of first home buyers did not complete secondary schooling compared to 41 per cent for households generally.

For first home buyers, 72 per cent were born in Australia which was close to the 71 per cent figure for all households. There was a greater proportion of first home buyer households born in Asia (8%) than for the general population (3%). People born in Europe including the USSR comprised 13 per cent of first home buyers, 21 per cent of all households and 23 per cent of all owners and buyers and changeover buyers.

First home buyers were more likely to buy lower value houses than changeover buyers (11% of first home buyers estimated the value of their house as less than $62,500, compared with 5% of changeover buyers). For households in general, 34 per cent valued their dwellings at less than $62,500. At the higher end of the market (houses estimated at more than $120,000) the proportion of first home buyers was around 41 per cent (compared with 42% for all households) and 63 per cent for changeover buyers.

First home buyers had higher incomes than all households, and had a higher mean weekly income ($820) than all owners and buyers ($780) and the general population ($720). Changeover buyers were estimated to have an even higher mean weekly income of $850.

20.38 SELECTED CHARACTERISTICS OF HOME BUYERS (HOUSEHOLDS), 1988 TO 1990

Selected characteristics	*Recent(a) first home buyers*	*Recent(a) changeover buyers*	*Total recent(a) buyers*	*All owners and buyers*	*All households*
			— per cent —		
Household type					
Married	68.9	73.1	71.8	70.7	62.8
Lone parent	4.8	5.8	5.5	5.8	7.6
Single person	12.1	15.1	14.1	17.1	19.8
Other	14.2	6.0	8.5	6.3	9.8
Age of reference person (years)					
15–24	14.9	* 0.5	4.9	1.3	5.7
25–34	54.3	23.3	32.9	15.8	20.4
35–44	19.8	30.6	27.3	24.3	23.0
45–54	7.6	17.4	14.4	19.3	17.1
55–64	* 2.0	13.8	10.2	16.4	14.0
>64	* 1.2	14.4	10.3	22.8	19.7
Separate houses	86.9	85.9	86.2	91.2	80.7
Number of bedrooms					
Three	62.0	52.0	55.1	55.5	51.2
More than three	12.5	27.6	23.0	22.6	18.5
Less than three	25.4	20.4	21.9	21.9	30.2
Undercover car parking	73.9	84.9	81.5	85.2	78.9
Qualifications of reference person					
Did not complete secondary	28.9	33.2	31.9	39.2	40.5
Completed secondary	15.7	9.1	11.2	9.0	10.1
Trade/other certificate or diploma	39.3	42.6	44.2	39.9	37.9
Bachelor degree or higher	15.5	14.0	11.9	11.3	10.9
Other	* 0.5	1.0	0.8	0.6	0.6
Birthplace of reference person					
Australia	72.1	68.5	69.6	70.4	70.8
Other Oceania	2.6	3.1	2.9	1.4	2.2
Europe and the USSR	12.6	22.7	19.6	22.6	20.8
Middle East and North Africa	* 1.8	1.0	1.3	1.5	1.4
South East Asia	4.3	1.1	2.1	1.4	1.7
North-east Asia	* 1.1	1.0	1.1	0.6	0.8
Southern Asia	2.8	1.2	1.7	0.8	0.8
Northern America	* 0.8	* 0.3	* 0.5	0.4	0.5
South and Central America and the Caribbean	* 1.0	* 0.1	* 0.3	0.3	0.4
Africa excluding North Africa	* 1.2	* 0.9	1.0	0.6	0.7
Dwelling purchase price					
Less than $62,500	26.5	11.8	16.3	70.1	78.6
$62,500 to $84,999	23.3	16.5	18.6	8.8	6.3
$85,000 to $119,999	26.4	28.9	28.1	9.7	7.0
$120,000 or more	23.8	42.8	37.0	11.4	8.2
Estimated value of house					
Less than $62,500	10.6	5.1	6.8	8.0	34.1
$62,500 to $84,999	17.9	7.9	11.0	10.2	7.3
$85,000 to $119,999	30.8	24.4	26.4	23.1	16.5
$120,000 or more	40.6	62.6	55.8	58.7	42.1

For footnotes *see* end of table.

20.38 SELECTED CHARACTERISTICS OF HOME BUYERS (HOUSEHOLDS), 1988 TO 1990 — *continued*

Selected characteristics	*Recent(a) first home buyers*	*Recent(a) changeover buyers*	*Recent(a) home buyers*	*All owners and buyers*	*All households*
Gross household income, 1989–90			— per cent —		
Less than $27,500	25.8	33.4	31.1	38.1	43.0
$27,500 to $42,499	25.9	22.6	23.6	22.0	22.1
$42,500 to $54,999	23.2	16.1	18.3	14.7	13.7
$55,000 or more	25.1	27.8	27.0	25.2	21.1
			— dollars —		
Mean weekly income	820	850	840	780	720
			— '000 —		
Number of households	290.2	651.5	941.7	4,402.5	6,148.2

(a) Persons who purchased a home between 1988 and 1990.
* Relative standard error of 30 per cent or more.
Source: First Home Buyers in Australia, 1988 to 1990 (4137.0).

House Price Index

The price indexes of established houses and project homes over recent years are shown in tables 20.39 and 20.40.

During 1992–93, established house prices rose steeply in Darwin, increasing by 16 per cent from 1991–92, following rises of six per cent and nine per cent in 1991–92 and 1990–91, respectively. Brisbane and Canberra also showed rises in house prices, however, these were lower than the previous year.

Melbourne has been experiencing decreases in established house prices for the last few years, with falls of 4.8 per cent in 1990–91, 0.4 per cent in 1991–92 and 1.8 per cent in 1992–93. After falls of 5.2 per cent and 0.7 per cent, Perth recorded a rise of 4.6 per cent.

All capital cities with the exception of Melbourne and Adelaide, had increases in project home prices during 1992–93. In Melbourne, a 1.4 per cent decrease was recorded, which was the same as the previous year. No change occurred in Adelaide.

The price index of materials used in house building is contained in the chapter, Prices.

20.39 ESTABLISHED HOUSE PRICE INDEX NUMBERS (Reference base year 1989–90 = 100.0)

Period	*Sydney*	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	100.5	95.2	114.3	106.2	94.8	106.3	109.3	107.3
1991–92	104.9	94.8	128.2	106.5	94.1	112.0	115.6	124.4
1992–93	105.3	93.1	134.9	110.1	98.4	116.6	133.6	134.2
PERCENTAGE CHANGE FROM PREVIOUS YEAR								
1990–91	0.5	-4.8	14.3	6.2	-5.2	6.3	9.3	7.3
1991–92	4.4	-0.4	12.2	0.3	-0.7	5.4	5.8	15.9
1992–93	0.4	-1.8	5.1	3.4	4.6	4.1	15.6	7.9

Source: House Price Indexes: Eight Capital Cities (6416.0).

20.40 PROJECT HOME PRICE INDEX NUMBERS
(Reference base year 1989–90 = 100.0)

Period	*Sydney*	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Darwin*	*Canberra*
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	102.9	103.2	104.3	104.5	91.9	106.4	105.3	110.6
1991–92	103.1	101.8	105.2	105.4	90.6	110.1	107.8	123.7
1992–93	103.6	100.4	108.8	105.4	92.8	114.1	111.4	131.8
PERCENTAGE CHANGE FROM PREVIOUS YEAR								
1990–91	2.9	3.3	4.3	4.5	– 8.1	6.4	5.3	10.6
1991–92	0.2	– 1.4	0.9	0.9	– 1.4	3.5	2.4	11.8
1992–93	0.5	– 1.4	3.4	—	2.4	3.6	3.3	6.5

Source: House Price Indexes: Eight Capital Cities (6416.0).

Housing finance

Table 20.41 presents statistics of secured housing finance commitments made by significant lenders to individuals for the construction or purchase of dwellings for owner occupation.

In 1992–93, a total of $36,778 million was committed for the purchase of 453,138 dwellings. This represents strong growth on the 1991–92 figures, an increase of 29 per cent in dollars and 19 per cent in the number of loans. Of this, 78 per cent of the money was used to purchase established dwellings, 18 per cent to finance construction of new dwellings and the remainder (4.8%) was used to purchase newly erected dwellings.

Banks continued to be the predominant lenders and in 1992–93 provided $32,986.4 million (90% of all loans) to 402,799 individuals (89% of all borrowers) in finance commitments. This represents a 48 per cent increase in lending, and a 35 per cent increase in the number of loans by banks during 1992–93.

The permanent building societies showed a marked decrease (38%) both in the number and dollar amount of loans. In 1992–93, they represented 6.4 per cent of dollars committed and 6.5 per cent of the total number of loans.

In 1992–93, the average size loan from banks was $81,900, from permanent building societies $79,100, and from all types of lenders, $81,200.

20.41 HOUSING FINANCE FOR OWNER OCCUPATION: NUMBER OF DWELLING UNITS AND VALUE OF COMMITMENTS TO INDIVIDUALS, BY TYPE OF LENDER

	Banks	*Permanent building societies*	*Other lenders(a)*	*Total*
CONSTRUCTION OF DWELLINGS				
			— number —	
1989–90	52,091	3,576	6,916	62,583
1990–91	52,256	4,979	5,890	63,125
1991–92	60,229	7,372	6,941	74,542
1992–93	80,015	4,848	5,454	90,317
			— $ million —	
1989–90	2,862.0	245.2	428.5	3,535.7
1990–91	3,043.9	372.9	404.4	3,821.2
1991–92	3,749.5	564.4	514.3	4,828.2
1992–93	5,637.8	402.9	409.4	6,450.1

For footnotes *see* end of table.

20.41 HOUSING FINANCE FOR OWNER OCCUPATION: NUMBER OF DWELLING UNITS AND VALUE OF COMMITMENTS TO INDIVIDUALS, BY TYPE OF LENDER — *continued*

	Banks	*Permanent building societies*	*Other lenders(a)*	*Total*
PURCHASE OF NEWLY ERECTED DWELLINGS				
— number —				
1989–90	8,148	1,309	4,861	14,318
1990–91	10,117	2,260	4,034	16,411
1991–92	11,925	3,481	4,360	19,766
1992–93	16,310	1,394	2,876	20,580
— $ million —				
1989–90	589.8	108.0	387.5	1,085.3
1990–91	773.2	201.5	345.5	1,320.2
1991–92	949.8	310.3	376.1	1,636.2
1992–93	1,420.4	127.5	202.4	1,750.3
PURCHASE OF ESTABLISHED DWELLINGS				
— number —				
1989–90	150,276	21,179	31,720	203,175
1990–91	155,369	29,853	28,963	214,185
1991–92	225,969	36,859	22,170	284,998
1992–93	306,474	23,347	12,420	342,241
— $ million —				
1989–90	10,607.2	1,525.7	2,205.9	14,338.8
1990–91	11,320.0	2,283.4	2,030.8	15,634.3
1991–92	17,563.0	2,922.6	1,588.4	22,073.9
1992–93	25,928.1	1,810.8	838.6	28,577.5
TOTAL				
— number —				
1989–90	210,515	26,064	43,497	280,076
1990–91	217,742	37,092	38,887	293,721
1991–92	298,123	47,712	33,471	379,306
1992–93	402,799	29,589	20,750	453,138
— $ million —				
1989–90	14,059.1	1,878.9	3,021.9	18,959.9
1990–91	15,137.2	2,857.9	2,780.7	20,775.7
1991–92	22,262.3	3,797.3	2,478.8	28,538.4
1992–93	32,986.4	2,341.3	1,450.4	36,778.0

(a) Includes cooperative housing societies.
Source: Unpublished ABS housing finance statistics.

Ongoing cost of housing

In addition to the initial cost of acquiring housing, there are the ongoing costs such as water and general rates, mortgage repayments and rent or board payments.

Table 20.42 shows mean weekly housing costs by nature of occupancy and number of bedrooms in 1990. Housing costs for owners were very low ($20 per week) since they only paid rates and repayments of any loans they might have had for alterations and additions.

Purchasers paid the highest in housing costs, at $184 per week. This mainly went towards paying off the mortgage or loan on the dwelling.

Mean weekly housing costs for all renters were $108. However, private renters ($133) usually paid over twice the amount than government renters paid ($58).

Generally, as the number of bedrooms increased housing costs also increased.

20.42 MEAN WEEKLY HOUSING COSTS, BY NUMBER OF BEDROOMS BY NATURE OF OCCUPANCY, OCTOBER–DECEMBER 1990

	Number of bedrooms							
Nature of occupancy	*None*	*One*	*Two*	*Three*	*Four*	*Five*	*Six or more*	*All households*
	— dollars per week —							
Equity holders								
Owners	16	11	15	20	26	28	36	20
Purchasers	168	189	188	174	197	259	262	184
Total equity holders	*64*	*73*	*69*	*86*	*104*	*117*	*106*	*87*
Renters								
Government	28	31	54	68	79	84	161	58
Private	87	97	132	141	161	195	76	133
Resident relative	—	—	—	—	—	—	—	—
Other	70	37	69	58	84	70	37	61
Total renters	*54*	*73*	*119*	*107*	*131*	*173*	*70*	*108*
Rent-free	—	—	—	—	—	—	—	—
Total	**57**	**69**	**87**	**89**	**105**	**119**	**91**	**90**
	— '000 —							
Number of households	31.9	321.7	1,505.1	3,149.2	976.3	133.6	30.3	6,148.2

Source: Unpublished data from the ABS 1990 Survey of Income and Housing Costs and Amenities.

Table 20.43 shows mean weekly housing costs for different types of dwellings in 1990.

The highest housing costs were for two or more storey semi-detached homes ($138 per week). Residents of separate houses had housing costs of $88 per week, the lowest cost of all types of dwelling.

One storey semi-detached homes with five bedrooms cost the occupants $250 per week compared to 'other' dwellings with no bedrooms, which cost $14 per week.

The standard three bedroom separate house cost around $88 per week for the average household. Overall, Australians paid $90 per week on costs for their dwelling.

20.43 MEAN WEEKLY HOUSING COSTS BY STRUCTURE OF DWELLING BY NUMBER OF BEDROOMS, OCTOBER–DECEMBER 1990

Structure of dwelling	*Number of bedrooms* None	*One*	*Two*	*Three*	*Four*	*Five*	*Six or more*	*All house-holds*
				— dollars per week —				
Separate house	86	66	68	88	104	118	95	88
Semi-detached(a)								
1 storey	28	79	108	86	70	250	—	97
2 or more storeys	108	101	134	143	225	79	—	138
Total	*48*	*84*	*113*	*103*	*161*	*159*	—	*108*
Flat/unit								
1–3 storeys	37	66	105	95	81	—	39	92
4 or more storeys	50	75	102	78	—	—	—	87
Total	*39*	*67*	*105*	*93*	*81*	—	*39*	*92*
Other	14	57	120	171	158	176	—	109
Total	**57**	**69**	**87**	**89**	**105**	**119**	**91**	**90**
				— '000 —				
Number of households	31.9	321.7	1,505.1	3,149.2	976.3	133.6	30.3	6,148.2

(a) Includes row/terrace houses, townhouses, of one or more storeys.
Source: Unpublished data from the ABS 1990 Survey of Income, and Housing Costs and Amenities.

GOVERNMENT INITIATIVES

The Commonwealth Government has developed an integrated set of policies for housing and urban development which are aimed at expanding the range and supply of secure, affordable and appropriate housing choices accessible to all Australians. Some of these are outlined below.

The Australian Urban Export Strategy

The Commonwealth is promoting micro-economic reform in the housing industry through such activities as the Australian Urban Export Strategy, which will help the housing and urban development industries to export knowledge and technology to neighbouring countries where the demand for housing is high.

Urban and regional development review

The urban future of Australia is also under consideration following the 1993–94 Budget announcement that funds would be provided for a comprehensive review of Australian urban and regional development. To ensure that a set of integrated policy recommendations result, the review will span six Commonwealth Government portfolios — Departments of Human Services and Health; Environment, Sport and Territories; Transport; Primary Industries and Energy; Industry, Science and Technology; and Administrative Services.

National Youth Housing Strategy

The 1993–94 Budget included the announcement of the development of a National Youth Housing Strategy to set objectives for the improvement of housing options for young people on low incomes to reduce the over-reliance on crisis accommodation.

Australian Institute of Health and Welfare

Under amendments to legislation in 1992, housing assistance was added to the Institute's responsibilities of health and welfare. Its role is to gather, enhance and disseminate national data on health and welfare services, including housing assistance, in order to support both government and community organisations in their discussions and policy making.

Commonwealth-State Housing Agreement

While most Australians are able to house themselves without government assistance, housing assistance remains important for various population groups, especially low income earners. The *Housing Assistance Act 1989* is the legislative basis for the Commonwealth's provision of financial assistance to the States and Territories for housing and related purposes. The Commonwealth-State Housing Agreement (CSHA) is incorporated in the Act and sets out the terms for the provision of housing assistance for rental housing, home purchases and other specific housing programs. The details of the assistance provided under the CSHA are set out in table 20.44. Micro-economic reforms in the housing and urban development industries aim to improve the availability of affordable and appropriate housing choices.

20.44 COMMONWEALTH PAYMENTS MADE TO THE STATES AND TERRITORIES UNDER THE CSHA DURING 1992–93 ($'000)

	NSW	*Vic.*	*Qld*	*WA*	*SA*	*Tas.*	*ACT*	*NT*	*Total*
Untied grants	(a)266,281	(a)216,675	134,514	(a)81,093	(a)79,443	24,598	15,681	11,242	829,527
Pensioner Rental Housing Program	17,654	10,882	9,644	4,153	3,762	1,179	523	432	48,229
Aboriginal Rental Housing Program	6,989	3,638	21,022	15,862	8,342	626	—	17,958	74,437
Mortgage and Rent Assistance Program	10,550	7,883	4,994	1,081	2,582	682	508	275	28,555
Crisis Accommodation Program	—	5,352	—	—	—	—	—	—	5,352
Local Government and Community Housing Program	—	3,906	—	1,013	233	—	211	91	5,454
Community Housing Program	—	—	602	2,229	—	—	189	—	3,020
Total	**301,474**	**248,336**	**170,776**	**105,431**	**94,362**	**27,085**	**17,112**	**29,998**	**994,574**

(a) These figures include funds brought forward from later year under arrangements announced in the 1992–93 Budget.
Source: Department of Human Services and Health.

Commonwealth housing assistance provided under the CSHA is complemented by financial assistance for housing through a number of other programs which include:

- Rent assistance — a tax free allowance paid by the Departments of Social Security and Veterans' Affairs to pensioners, beneficiaries and recipients of additional family payment who pay rent (other than to a public housing authority), lodging, board and lodging, or site rent or fees.
- Supported Accommodation Assistance Program — funds a range of supported accommodation and related support services to assist people who are either permanently or temporarily homeless as a result of crisis.
- Residential care for older people — provides funding to a range of organisations that provide suitable accommodation for older people. Capital grants are provided to build, buy, extend or upgrade nursing homes and hostels.
- Disabilities Services Program — provides funds to non-profit community-based organisations and State and local government authorities to provide a range of services including accommodation.
- Housing assistance programs for Aboriginal and Torres Strait Islander peoples — a range of programs administered by the Aboriginal and Torres Strait Islander Commission.
- Defence Service housing programs — which are provided by the Department of Defence.

A housing authority exists in each State and Territory which is responsible for home construction, home loans, and the provision of homes on a rental basis, as follows:

- New South Wales — Department of Housing;
- Victoria — Department of Planning and Development;
- Queensland — Department of Housing, Local Government and Planning;
- South Australia — South Australian Housing Trust;
- Western Australia — Homeswest;
- Tasmania — Department of Community and Health Services;
- Northern Territory — Department of Lands and Housing; and
- Australian Capital Territory — The ACT Housing Trust.

BIBLIOGRAPHY

ABS Publications

1990 Survey of Income & Housing Costs and Amenities: Characteristics of Dwellings — Standard Tables (4133.0.40.001)

1990 Survey of Income & Housing Costs and Amenities: Housing Occupancy and Costs (4130.0)

1990 Survey of Income & Housing Costs and Amenities: Income Units (6523.0)

1990 Survey of Income & Housing Costs and Amenities: Persons with Earned Income (6546.0)

1991 Census — Australia in Profile (2821.0)

1991 Census of Population and Housing — Basic Community Profile, Australia (2722.0)

1991 Census of Population and Housing — State Comparison Series (2731.0)

Building Approvals Microfiche Service, Australia (8734.0)

Census 86 — Cross-classified Characteristics of Persons and Dwellings, Australia (2498.0)

Directory of Housing Related Statistics (Edn2) (1118.0)

Dwelling Structure Classification (DSC) (1296.0)

First Home Buyers, Australia, 1988–1990 (4137.0)

House Price Indexes: Eight Capital Cities (6416.0)

Housing, Australia (1320.0)

Housing Characteristics and Decisions: A Comparative Study of Sydney, Melbourne, Adelaide and Canberra, 1991 (8710.0)

Housing Finance for Owner Occupation, Australia (5609.0)

Investors in Rental Dwellings, Australia, July 1993 (8711.0)

Social Indicators No. 5 (4101.0)

Women in Australia (4113.0)

BIBLIOGRAPHY — *continued*

Other Publications

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE. Australia's Welfare 1993, Services and Assistance

The annual reports of the Commonwealth and State and Territory Government Housing Authorities show further details of government activities in the field of housing.

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twenty-one

Transport and Communications

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THE TRANSPORT INDUSTRY

The transport industry consists of businesses mainly engaged in passenger and freight transport by road, rail, water and air, and associated storage facilities and services. In 1992–93 the gross product of the transport industry was $19,967 million, 4.9 per cent of the gross domestic product for all industries, and it employed 373,000 people.

Detailed statistics providing a comprehensive view across all sections of the industry have only been collected once, for 1983–84. A summary of these was contained in the 1994 and earlier editions of *Year Book Australia.* However, the latest available statistics on the road, rail, water and air sections of the transport industry, obtained from a variety of sources, are contained in this chapter.

ROAD TRANSPORT

Length of road system

Information on lengths of roads open for general traffic in Australia, at the latest dates available, classified according to certain broad surface groups as defined by the respective States and Territories are as follows.

21.1 LENGTHS OF ROADS OPEN FOR GENERAL TRAFFIC, 30 JUNE (kilometres)

Surface of roads	*NSW(a) 1990*	*Vic.(b) 1990*	*Qld 1992*	*SA 1993*	*WA(c) 1992*	*Tas.(d) 1992*	*NT(e) 1993*	*ACT 1993*
Bitumen or concrete	77,803	68,408	60,701	25,042	43,134	9,515	6,018	2,345
Gravel, crushed stone or other improved surface	64,572	48,287	50,039	—	45,955	12,968	6,780	80
Formed only	32,438	23,580	48,611	69,773	36,328	233	4,846	—
Cleared only	20,616	21,009	15,078	—	17,726	1,874	2,688	—
Total	**195,429**	**161,284**	**174,429**	**94,815**	**143,143**	**24,590**	**20,332**	**2,425**

(a) Excludes roads designated but not trafficable. Excludes Lord Howe Island and the unincorporated area of the Western Division. (b) Excludes roads coming under the responsibility of the State Electricity Commission and Forests Commission. (c) Excludes approximately 25,300 kilometres of forestry roads. (d) Forestry roads have been reclassified from cleared only to gravel. (e) Excludes roads in towns and Local Government Areas. There have been some roads transferred to Local Government Areas since 1992, 8,200 kilometres of roads on Aboriginal land, and 1,400 kilometres of park roads.

Source: Derived mainly from local government sources in each State and the Australian Capital Territory Department of Urban Services.

Registered motor vehicles

Censuses of registered motor vehicles have been conducted in respect of 31 December 1955 and 1962; 30 September 1971, 1976, 1979, 1982, 1985, 1988 and 1991, and 30 June 1993. Summary details of registered motor vehicles are also compiled as at 30 June each year from information supplied by the various motor vehicle registration authorities in the States and Territories. They cover vehicles owned by private individuals, local government authorities, State Governments, and the Commonwealth Government (excluding those belonging to the defence services).

Figures from the censuses differ from the corresponding year's figures compiled for the annual vehicles on register series. These inconsistencies result from different dates of recording and because, for some States and Territories, the annual figures include vehicles where the registration has lapsed but the details have not been removed from the register, whereas the census excludes such vehicles.

There were 10,505,900 registered motor vehicles (excluding tractors, plant and equipment, caravans and trailers) in Australia at 30 June 1993 (table 21.2). This represents an increase of 405,900 vehicles (4.0%) since 30 September 1991.

Table 21.3 shows the average age of vehicle by type of vehicle. The average age of the total motor vehicle fleet increased by 0.6 from 9.8 years in 1991 to 10.4 years in 1993. Just over three-quarters of all vehicles on register (7,899,100) are five or more years old. The average age of buses went down, in contrast to the average age of other vehicles which went up.

As shown in table 21.4, the number of motor vehicles (excluding motor cycles) steadily increased every year between 1988 and 1993 except in 1991. In contrast, the number of motor cycles decreased over the same period.

Registered motor vehicles (excluding motor cycles) per 1,000 of population has followed the same trend as the total number of motor vehicles. The figure of 575 vehicles per 1,000 of population in 1993 was the highest ever (table 21.5).

21.2 MOTOR VEHICLE CENSUS, 30 JUNE 1993 ('000)

State/Territory	*Passenger vehicles*	*Light comm-ercials*	*Trucks*			*Buses*	*Motor cycles*	*Total(a)*
			Rigid	*Artic-ulated*	*Non-freight carrying*			
New South Wales	2,561.5	405.8	102.3	13.1	9.3	11.3	69.2	3,172.4
Victoria	2,304.8	358.8	87.3	15.3	11.5	13.2	73.8	2,864.7
Queensland	1,385.8	311.9	60.9	10.0	6.0	8.9	63.6	1,847.2
South Australia	752.3	109.2	26.9	5.3	6.7	3.3	29.2	932.8
Western Australia	838.2	175.9	42.3	6.0	8.8	5.5	37.7	1,114.5
Tasmania	232.2	54.9	11.3	1.6	3.3	2.0	6.6	311.9
Northern Territory	54.7	20.5	2.5	1.0	0.2	1.4	3.9	84.2
Australian Capital Territory	150.8	17.2	3.0	0.3	0.8	1.3	4.8	178.2
Australia	**8,280.2**	**1,454.3**	**336.6**	**52.5**	**46.6**	**46.9**	**288.8**	**10,505.9**

(a) Excludes tractors, plant and equipment, caravans and trailers.
Source: Motor Vehicle Census: Australia (9309.0).

21.3 AVERAGE AGE OF VEHICLE, 30 JUNE 1993 AND 1991 (years)

Type of vehicle	*State/Territory of registration*								*1993 Aust.*	*1991 Aust.*
	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*		
Passenger vehicles	9.3	10.8	10.0	11.2	10.5	11.6	9.4	9.8	10.2	9.7
Light commercial vehicles	9.9	11.6	10.7	11.7	11.1	12.1	9.8	9.8	10.9	10.0
Rigid trucks	11.0	14.3	12.0	15.1	14.3	14.3	9.9	9.0	12.8	12.1
Articulated trucks	9.7	11.4	10.6	10.2	12.1	9.6	10.5	7.9	10.7	9.9
Non-freight carrying trucks	13.2	14.2	13.2	14.1	15.9	15.3	11.2	14.1	14.3	12.8
Buses	8.8	9.7	9.0	10.8	8.5	12.3	5.2	6.9	9.2	9.8
Motor cycles	9.0	9.4	9.8	8.9	10.0	9.7	8.3	8.9	9.4	8.6
Total	**9.5**	**11.0**	**10.2**	**11.4**	**10.8**	**11.8**	**9.4**	**9.8**	**10.4**	**9.8**

Source: Motor Vehicle Census, Australia (supplementary ABS statistics).

21.4 MOTOR VEHICLES ON REGISTER ('000)

30 June	Passenger vehicles(a)	Light commercial vehicles(b), trucks, non-freight carrying trucks(c)	Total (excludes motor cycles)	Motor cycles
1988	7,243.6	1,977.6	9,221.1	323.3
1989	7,442.2	2,047.3	9,489.5	316.6
1990	7,672.3	2,104.3	9,776.6	304.0
1991	7,734.1	1,915.4	9,649.5	284.6
1992(d)	7,913.2	2,041.3	9,954.5	292.4
1993	8,050.0	2,089.8	10,139.8	291.7

(a) Formerly described as motor cars and station wagons. From 1 July 1991 includes forward control passenger vehicles of less than 10 seats. (b) Combination of utilities and panel vans. From 1 July 1991 includes cab chassis vehicles 3.5 tonnes gross vehicle mass or less. (c) Formerly 'Other truck type vehicles'. (d) From 1 July 1991 some vehicles were reclassified from rigid trucks into light commercial vehicles and from buses into passenger vehicles.

Source: Motor Vehicle Registrations, Australia (9304.0).

21.5 MOTOR VEHICLES(a) ON REGISTER PER 1,000 OF POPULATION

30 June	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1988	523.8	589.8	568.0	580.3	587.4	607.2	440.5	498.5	559.9
1989	532.7	583.3	574.9	584.9	597.0	617.0	465.8	512.3	564.6
1990	537.8	590.0	580.5	593.3	612.2	630.5	479.7	539.2	572.3
1991	508.1	611.6	535.9	569.2	617.4	635.3	486.1	522.1	558.4
1992	525.3	587.3	584.8	590.8	629.7	633.2	456.7	543.5	569.3
1993	527.0	593.5	590.5	600.6	641.6	644.9	474.7	564.2	575.2

(a) Excludes motor cycles, tractors, plant and equipment, caravans and trailers.

Source: Motor Vehicle Registrations, Australia (9304.0).

Registrations of new motor vehicles

Annual registrations of new vehicles processed by motor vehicle registration authorities in all States and Territories are shown in table 21.6 and graph 21.7.

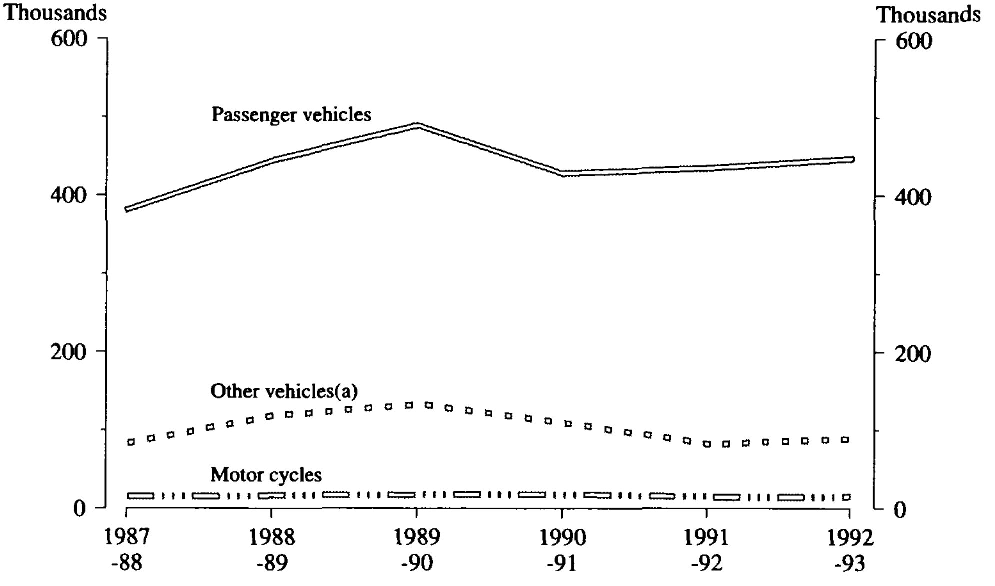
21.6 REGISTRATIONS OF NEW MOTOR VEHICLES

Year	Passenger vehicles(a)	Light commercial vehicles(b)	Trucks: Rigid	Trucks: Articulated	Non-freight carrying trucks(c)	Buses	Total (excludes motor cycles)	Motor cycles
1987–88	384,203	48,113	28,596	2,811	1,602	5,495	470,820	18,532
1988–89	447,913	72,330	36,973	3,669	1,668	6,671	569,224	19,076
1989–90	492,235	82,021	41,074	4,065	1,815	6,552	627,762	20,453
1990–91	430,874	72,395	29,173	2,142	1,648	6,222	542,454	20,506
1991–92(d)	437,075	67,804	9,924	1,634	787	3,848	521,072	16,675
1992–93	449,843	74,748	9,780	2,199	708	4,230	541,508	17,513
1992–93								
NSW	160,087	23,062	3,518	633	203	1,143	188,646	4,597
Vic.	106,215	14,134	2,009	571	166	795	123,890	4,528
Qld	81,657	18,916	2,316	524	91	899	104,403	3,865
SA	32,894	4,555	519	224	103	176	38,471	1,469
WA	45,568	9,578	1,008	125	84	757	57,120	2,118
Tas.	10,039	2,193	175	72	44	85	12,608	364
NT	3,999	1,334	120	40	11	307	5,811	329
ACT	9,384	976	115	10	6	68	10,559	243

(a) Formerly described as motor cars and station wagons. From 1 July 1991 includes forward control passenger vehicles of less than 10 seats. (b) Combination of utilities and panel vans. From 1 July 1991 includes cab chassis vehicles 3.5 tonnes gross vehicle mass or less. (c) Formerly 'Other truck type vehicles'. (d) From 1 July 1991 some vehicles were reclassified from rigid trucks into light commercial vehicles and from buses into passenger vehicles.

Source: Motor Vehicle Registrations, Australia (9304.0).

21.7 REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE



(a) Other motor vehicles include trucks, light commercial vehicles, non-freight carrying trucks and buses.
Source: Motor Vehicle Registrations, Australia (9304.0).

Use of motor vehicles

A Survey of Motor Vehicle Use has been undertaken by the ABS every three years since 1976. The following are some of the main statistics from the latest survey, undertaken in 1991.

Motor vehicles in Australia are estimated to have travelled a total of 151,154 million kilometres in the 12 months ending September 1991, a decrease of 1.8 per cent over the corresponding period in 1988. 34.8 per cent of the total distance travelled was for business purposes, 22.5 per cent for travel to and from work and 42.7 per cent for private purposes. Passenger vehicles accounted for 76.2 per cent of total distance travelled in Australia; freight carrying vehicles (including light commercial vehicles, rigid trucks and articulated trucks) 21.8 per cent; motor cycles 1.1 per cent; and buses 0.9 per cent (table 21.8).

The average distance travelled annually by all vehicles was 15,000 kilometres (15,300 kilometres if unused vehicles are disregarded), a decrease of approximately 8.5 per cent over the corresponding 1988 period. Table 21.9 shows the average kilometres travelled by different types of vehicles, and where they travelled.

Total tonne-kilometres by load carrying vehicles was estimated to be 88,449.3 million tonne-kilometres (table 21.10), with vehicles registered in New South Wales and Victoria accounting for about 52.1 per cent of the total (23,213.0 and 22,907.7 million tonne-kilometres, respectively).

21.8 TOTAL KILOMETRES TRAVELLED, BY TYPE OF VEHICLE AND PURPOSE TWELVE MONTHS ENDED 30 SEPTEMBER 1991 (million kilometres)

	Purpose					
	Business					
Type of vehicle	*Laden*	*Unladen*	*Total(a)*	*Total to and from work*	*Private*	*Total*
Passenger vehicles	. .	. .	27,709.4	28,566.9	58,739.1	115,015.4
Motor cycles	. .	. .	165.5	643.5	806.5	1,615.4
Light commercial vehicles	9,831.4	2,883.1	13,566.8	4,495.9	4,791.0	22,853.7
Rigid trucks	4,328.5	1,386.2	5,798.9	247.0	113.8	6,159.7
Articulated trucks	2,935.2	1,000.4	3,935.6	25.0	4.3	3,964.9
Other truck types	. .	. .	158.1	2.5	1.6	162.2
Buses	. .	. .	1,302.5	27.1	52.9	1,382.4
Total	**17,095.1**	**5,269.6**	**52,636.7**	**34,007.9**	**64,509.1**	**151,153.7**

(a) Includes business travel of non-load carrying vehicles except for articulated trucks.
Source: Survey of Motor Vehicle Use, Australia (9208.0).

21.9 AVERAGE KILOMETRES TRAVELLED(a), BY TYPE OF VEHICLE AND AREA OF OPERATION, TWELVE MONTHS ENDED 30 SEPTEMBER 1991 ('000 kilometres)

	Area of operation					
Type of vehicle	*Capital city(b)*	*Provincial urban*	*Other areas of State or Territory*	*Total within State of registration*	*Interstate*	*Australia*
Passenger vehicles	10.8	5.4	6.7	14.1	3.8	14.6
Motor cycles	5.4	4.1	3.4	5.8	3.7	6.1
Light commercial vehicles	14.6	8.8	11.2	16.8	6.5	17.3
Rigid trucks	19.8	13.0	11.5	18.5	12.1	19.1
Articulated trucks	26.0	24.3	47.2	59.0	68.1	77.8
Non-freight carrying types	18.9	11.2	6.2	13.1	8.4	13.2
Buses	26.2	17.1	20.8	30.7	23.0	33.6
Total	**11.4**	**6.0**	**7.7**	**14.6**	**4.9**	**15.3**

(a) As this table relates to actual vehicle usage, vehicles which travelled zero distance are excluded from the calculation of averages.
(b) Includes all of Australian Capital Territory for Australian Capital Territory registered vehicles.
Source: Survey of Motor Vehicle Use, Australia (9208.0).

21.10 TOTAL TONNE-KILOMETRES(a), BY TYPE OF VEHICLE AND STATE/TERRITORY OF REGISTRATION, TWELVE MONTHS ENDED 30 SEPTEMBER 1991 (million tonne-kilometres)

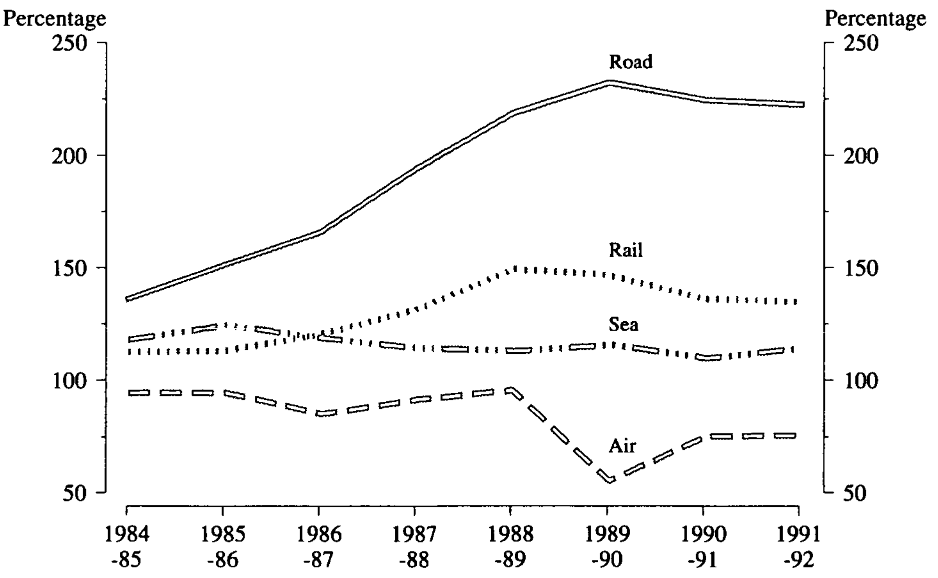
	State of registration								
Type of vehicle	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Light commercial vehicles	1,386.9	1,102.2	995.2	384.8	614.8	118.8	86.2	76.5	4,765.4
Rigid trucks	5,608.7	5,078.1	4,468.9	1,628.8	2,559.8	786.0	265.5	261.5	20,657.3
Articulated trucks	16,217.5	16,727.3	11,453.0	6,062.0	7,725.9	1,624.8	2,832.3	383.7	63,026.6
Total	**23,213.0**	**22,907.7**	**16,917.0**	**8,075.6**	**10,900.5**	**2,529.7**	**3,184.0**	**721.7**	**88,449.3**

(a) Total tonne-kilometres is the product of reported average load and total business kilometres travelled while laden.
Source: Survey of Motor Vehicle Use, Australia (9208.0).

Interstate freight movement

Graph 21.11 compares trends in freight movements by different modes of transport over time. The graph indicates relative movements from a common base year and cannot be used to compare actual levels of activity. Movements of freight interstate by road and rail have declined somewhat since peaking in the late 1980s. Movements by sea have shown a relative decline since reaching a peak in 1985–86. Transport of freight interstate by air partly recovered after the large decline in freight moved by air in 1989–90 which was mainly due to the airline pilot's dispute.

21.11 INDEXES OF INTERSTATE FREIGHT MOVEMENTS: MODE OF TRANSPORT (Reference base year 1982–83 = 100.0)



Source: Interstate Freight Movement, Australia (9212.0).

Bus and tram services

Bus services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal bus services which are located in all capital cities and Newcastle, New South Wales; Rockhampton, Queensland; Launceston and Burnie, Tasmania; and for country road services operated by the Victorian Railways, the State Rail Authority of New South Wales, the Western Australian Government Railways and the Australian National Railways.

Tram services operate in Melbourne and Adelaide. Additionally, services are operated in Ballarat and Bendigo on an irregular basis, generally during holiday periods as a tourist attraction.

Tables 21.12 and 21.13 contain selected statistics on bus and tram services.

21.12 BUS AND TRAM SERVICES: GOVERNMENT AND MUNICIPAL, BY STATE/TERRITORY, 1992–93

	NSW	*Vic.(a)*	*Qld*	*SA*	*WA(b)*	*Tas.*	*NT*	*ACT*
Route-kilometres at 30 June								
Bus (kilometres)	1,260	n.a.	999	1,121	8,416	524.4	528	n.a.
Tram (kilometres)	. .	236	. .	11	. .	. .	. .	. .
Vehicle-kilometres								
Bus ('000)	67,800	63,860	31,319	38,189	52,415	10,592	2,606	20,180
Tram ('000)	. .	21,380	. .	773	. .	. .	. .	. .
Rolling stock at 30 June								
Bus (number)	1,442	1,360	599	714	924	243	53	422
Tram (number)	. .	616	. .	21	. .	. .	. .	. .
Passenger journeys								
Bus ('000)	189,091	91,619	44,099	40,088	39,777	11,958	2,8 66	23,760
Tram ('000)	. .	100,658	. .	1,469	. .	. .	. .	. .
Gross revenue(c)(d)								
Bus and tram ($'000)	283,072	n.a.	46,571	n.a.	45,156	15,614	2,471	17,024
Working expenses(d)								
Bus and tram ($'000)	281,395	n.a.	112,947	n.a.	127,150	31,252	7,053	75,495
Net revenue(d)								
Bus and tram ($'000)	1,677	n.a.	– 66,376	n.a.	– 81,994	– 15,638	– 4,582	– 58,471
Employees at 30 June								
Bus and tram (number)	3,520	3,937	1,678	n.a.	2,269	508	75	1,003

(a) Public and private transport State-wide merged into the Public Transport Corporation. (b) Excludes operations of Eastern Goldfields Transport Board. (c) Excludes government grants. (d) Figures are not comparable with those shown for previous years because of the adoption of accrual accounting concepts for the Brisbane City Council. The most significant differences are the inclusion of depreciation and the use of the revenue concepts adopted by the council. Figures include river ferry operation.

Source: Various State and Territory bus and tram authorities.

21.13 BUS AND TRAM SERVICES: GOVERNMENT AND MUNICIPAL

	1987–88(a)	1988–89(a)	1989–90(b)	1990–91	1991–92	1992–93
Route-kilometres at 30 June						
Bus (kilometres)	n.a.	n.a.	n.a.	16,217	n.a.	n.a.
Tram (kilometres)	343	351	239	239	246	247
Vehicle kilometres						
Bus ('000)	214,687	254,355	289,291	287,201	287,404	286,961
Tram ('000)	24,621	24,971	24,940	23,183	23,425	22,113
Rolling stock at 30 June						
Bus (number)	5,962	5,950	5,957	5,967	5,876	5,762
Tram (number)	641	651	684	626	656	637
Passenger journeys						
Bus ('000)	387,601	494,476	472,770	441,683	453,192	443,258
Tram ('000)	117,876	121,444	97,593	109,343	113,721	102,127

(a) Excludes details of metropolitan bus and tram services in South Australia. (b) Victorian public and private transport State-wide merged into the Public Transport Corporation in 1989–90.
Source: Various State and Territory tram and bus authorities.

Drivers' and riders' licences

21.14 DRIVERS' AND RIDERS' LICENCES, 30 JUNE 1993

Type of licence	NSW	Vic.	Qld(a)	SA	WA	Tas.	NT	ACT
Motor vehicle	3,670,695	2,858,683	n.a.	n.a.	n.a.	260,737	114,185	253,679
Motor cycle	332,501	172,357	315,897	n.a.	n.a.	180	18,594	34,481
Combined	(a)332,589	—	1,781,886	—	—	27,493	—	22,924
Total	**4,335,785**	**3,031,040**	**2,498,497**	**947,134**	**1,100,478**	**288,410**	**132,779**	**311,084**

(a) As at 31 December 1993.
Source: Motor Registry in each State and Territory.

Road traffic accidents

The number of persons killed in Australia as a result of road traffic accidents has fallen significantly between 1985 and 1993. This decline is reflected in all States and Territories, with the most notable falls in New South Wales, Victoria and Queensland.

21.15 ROAD TRAFFIC ACCIDENTS INVOLVING FATALITIES

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
ACCIDENTS INVOLVING FATALITIES									
1988	926	615	483	204	200	68	45	32	2,573
1989	783	681	376	201	213	68	57	27	2,406
1990	702	492	346	187	181	63	54	24	2,049
1991	585	435	362	166	187	65	60	16	1,876
1992	578	365	364	142	171	56	42	18	1,734
1993	524	373	356	191	189	46	40	11	1,730
PERSONS KILLED									
1988	1,037	701	539	223	230	75	51	32	2,888
1989	960	776	428	222	242	83	61	32	2,804
1990	797	548	399	226	196	71	68	26	2,331
1991	663	503	395	184	207	75	67	17	2,113
1992	649	396	416	165	200	74	54	20	1,974
1993	586	437	395	218	208	57	43	12	1,956

Source: Federal Office of Road Safety, Road Fatality Statistics.

21.16 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a) NUMBER OF PERSONS KILLED OR INJURED, 1990

			Per 100,000 of mean population		*Per 10,000 motor vehicles registered(b)*	
State/ Territory	*Persons killed*	*Persons injured*	*Persons killed*	*Persons injured*	*Persons killed*	*Persons injured*
NSW	797	7,546	13.6	130.2	2.5	21.4
Vic.	548	7,084	12.4	163.2	2.0	26.7
Qld	399	3,965	13.6	138.4	2.2	22.6
SA	226	2,397	15,6	168.3	2.5	27.1
WA	196	2,644	11.9	165.9	1.8	25.5
Tas.	71	609	15.5	132.7	2.4	20.7
NT	68	521	42.9	320.8	8.4	65.5
ACT	26	207	9.0	74.3	1.6	13.1
Australia	**2,331**	**24,973**	**13.5**	**147.6**	**2.3**	**24.8**

(a) Accidents reported to the police or other relevant authority which occurred in public thoroughfares and which resulted in death within thirty days or personal injury to the extent that the injured person was admitted to hospital. (b) Number of motor vehicles (excluding tractors, plant and equipment) on register at 30 June 1990.
Source: Federal Office of Road Safety.

RAIL TRANSPORT

Government railways

The six government owned railway systems are operated by:

- the State Rail Authority of New South Wales;
- the Public Transport Corporation Victoria (operating 'V/Line' and 'The Met');
- Queensland Rail;
- the Western Australian Government Railways (Westrail);
- the State Transport Authority of South Australia; and
- the Australian National Railways Commission.

The Australian National system includes routes in more than one State, and the Victorian system extends into New South Wales, therefore the system route-kilometres shown in table 21.17 do not represent route-kilometres exclusively within each State and Territory.

The National Rail Corporation (operating as 'National Rail') was incorporated on 19 September 1991. Its shareholders are the Commonwealth Government, and the Governments of New South Wales, Victoria and Western Australia.

National Rail will take over interstate rail freight operations and the ownership of rail assets, including infrastructure, in mainland States during the next few years.

21.17 GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPERATED (kilometres)

30 June	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Australian National*	*Aust.*
1988	9,917	5,289	10,089	127	5,553	7,187	38,162
1989	7,755	5,200	10,094	125	5,553	7,050	35,777
1990	7,747	5,196	10,107	125	5,554	6,757	35,486
1991	9,810	5,179	10,015	125	5,554	6,612	37,295
1992	9,810	5,179	10,011	120	5,554	6,559	37,233
1993	9,810	5,107	9,797	120	5,583	6,235	36,652

Source: Various rail authorities and the Rail Industry Council.

The following information relating to train-kilometres, passenger journeys, freight-tonnes carried, and freight tonne-kilometres refers only to operations for which revenue was received.

21.18 GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, 1992–93

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Australian National*	*Aust.*
Train-kilometres ('000)(a)(b)							
Suburban passenger	31,291	15,981	7,090	n.a.	7,957	—	n.a.
Country passenger	3,874	7,036	2,488	—	957	1,078	15,433
Goods(b)	17,172	5,387	19,346	—	6,061	7,905	55,870
Total	**52,337**	**28,404**	**28,924**	**n.a.**	**14,975**	**8,983**	**n.a.**
Passenger journeys ('000)(c)							
Suburban	229,814	106,015	39,404	7,540	10,315	—	393,088
Country(d)	1,540	5,309	988	—	269	200	8,306
Total	**231,354**	**111,324**	**40,392**	**7,540**	**10,584**	**200**	**401,394**
Freight							
Tonnes carried ('000)(d)	61,597	9,646	90,303	—	2,654	13,899	178,099
Net tonne-kilometres (million)(e)	14,813	3,678	24,614	—	4,970	8,480	56,555

(a) One train (that is, a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one kilometre for revenue purposes. (b) Includes mixed train-kilometres. (c) Based on ticket sales making allowances for periodical tickets. Tickets sold at concession rates are counted as full journeys. (d) Inter-system traffic is included in the total for each system over which it passes. (e) One tonne carried one kilometre.

Source: Various rail authorities and the Rail Industry Council.

21.19 GOVERNMENT RAILWAYS: TRAIN-KILOMETRES TRAVELLED(a) ('000 kilometres)

Year	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Australian National*	*Aust.*
1987–88	61,954	27,435	34,099	n.a.	9,465	r10,754	n.a.
1988–89	61,503	26,826	33,572	n.a.	9,472	r11,329	n.a.
1989–90	60,442	26,332	32,927	n.a.	10,873	r10,379	n.a.
1990–91	54,540	25,519	31,744	n.a.	10,250	9,733	n.a.
1991–92	n.a.	24,428	29,509	n.a.	13,197	8,679	n.a.
1992–93	52,337	28,404	28,925	n.a.	14,975	8,983	n.a.

(a) One train (that is, a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one kilometre for revenue purpose.

Source: Various rail authorities and the Rail Industry Council.

21.20 GOVERNMENT RAILWAYS: FREIGHT CARRIED, NET TONNE-KILOMETRES AND FREIGHT EARNINGS

Year	*NSW*	*Vic.*	*Qld*	*WA*	*Australian National*	*Aust.*
FREIGHT CARRIED ('000 tonnes)						
1987–88	54,412	10,901	74,893	21,946	11,269	173,421
1988–89	50,188	9,950	80,508	24,294	13,821	178,761
1989–90	53,700	10,250	82,543	24,906	14,132	185,531
1990–91	58,266	9,659	82,965	24,410	13,189	188,489
1991–92	57,341	8,475	90,658	25,890	13,082	195,446
1992–93	61,597	9,646	90,303	26,524	13,899	201,969
NET TONNE-KILOMETRES (million)						
1987–88	14,212	r3,474	20,676	4,203	7,165	49,730
1988–89	13,552	r3,365	20,884	4,881	8,082	50,764
1989–90	14,100	r3,672	22,579	4,872	8,115	53,338
1990–91	14,222	3,700	22,869	4,583	7,789	53,163
1991–92	13,811	2,704	24,719	4,878	7,799	53,911
1992–93	14,813	3,678	24,614	4,970	8,480	56,555
FREIGHT EARNINGS ($'000)						
1987–88	767,820	176,161	910,409	204,330	236,782	2,295,502
1988–89	667,038	166,526	r1,021,854	231,749	284,905	r2,372,072
1989–90	667,000	172,603	r1,062,988	235,983	282,638	r2,421,212
1990–91	783,602	164,175	1,124,800	235,420	275,294	2,583,291
1991–92	789,236	135,393	1,154,813	254,619	266,194	2,600,253
1992–93	815,336	151,311	1,192,523	248,314	276,553	2,684,037

Source: Various rail authorities and the Rail Industry Council.

Non-government railways

Statistics shown in table 21.21 relate to non-government railways with a route distance exceeding two kilometres which operate outside industrial estates, harbour precincts, mines and quarries.

21.21 ACTIVITIES OF AUSTRALIAN NON-GOVERNMENT RAILWAYS

Year	*Iron ore railways*	*Sugar tramways*	*Coal railways(a)*	*Other non-government railways*	*Total(a)*
TONNES CARRIED (million)					
1987–88	r94.7	r23.1	r7.6	r11.4	r136.8
1988–89	90.5	23.6	7.4	14.1	135.6
1989–90	103.9	r24.3	8.7	13.2	150.2
1990–91	113.6	22.2	7.9	r14.2	158.0
1991–92	111.1	18.6	9.3	12.0	150.8
1992–93	112.9	26.0	8.5	11.8	159.2
TONNE-KILOMETRES (million)					
1987–88	r30,225	r416	r108	r183	r30,932
1988–89	27,866	425	106	274	28,671
1989–90	31,654	438	123	263	32,478
1990–91	34,533	400	114	r299	35,347
1991–92	34,362	334	123	259	35,078
1992–93	34,929	468	117	253	35,767

(a) Includes transfers to and from government railways.

Source: Bureau of Transport and Communications Economics, Transport Indicators Unit.

WATER TRANSPORT

International shipping carried $35 billion worth of goods to Australia's ports in 1990–91 and $43 billion worth of exports from Australia's ports (32 million tonnes and 304 million tonnes respectively). Details of overseas shipping movements and cargo through Australian sea and air ports were contained in the 1994 and earlier Year Books, but since 1990–91 these statistics have not been available for publication.

The Australian fleet

Together, New South Wales and Queensland account for 57 per cent of ships registered in Australia. The majority of these ships are used for non-commercial purposes (table 21.22).

Of the 76 ships which comprise the major Australian trading fleet (2,000 dead weight tonnes and over), 48 operated on coastal routes (table 21.23).

21.22 SHIPS REGISTERED(a) IN AUSTRALIA AT 30 JUNE 1993

	Nature of registration					
Location	*Recreational*	*Fishing*	*Government*	*Demise chartered(b)*	*Other(c)*	*Total*
New South Wales	1,473	288	4	8	232	2,005
Victoria	512	182	1	5	115	815
Queensland	1,167	648	27	7	329	2,178
South Australia	235	284	2	—	42	563
Western Australia	486	411	1	—	126	1,024
Tasmania	191	224	5	1	59	480
Northern Territory	191	52	1	—	19	263
Total	**4,255**	**2,089**	**41**	**21**	**922**	**7,328**

(a) Any Australian ship longer than 24 metres must be registered. Any Australian ships travelling overseas must be registered regardless of length. A ship less than 24 metres may be registered, but this is not required by law. (b) A demise chartered ship is a foreign owned ship chartered by way of a charter party to an Australian-based operator, who is an Australian national and who under the charter party has whole possession and control of the ship, including the right to appoint the master and crew of the ship. (c) Relates to vessels used for commercial purposes.

Source: Australian Maritime Safety Authority.

21.23 SUMMARY OF THE AUSTRALIAN TRADING FLEET OF SHIPS 150 GROSS TONNES OR MORE, 30 JUNE 1993

Ships	*Number*	*DWT(a)*	*Gross tonnes*
Major Australian fleet(b)			
Coastal			
Australian owned and registered	42	1,254,098	867,929
Overseas owned, Australian registered	4	94,032	55,697
Overseas owned and registered	2	9,590	5,662
Coastal fleet	*48*	*1,357,720*	*929,288*
Overseas			
Australian owned and registered	19	1,505,206	1,082,368
Overseas owned, Australian registered	8	563,204	338,694
Overseas owned and registered	1	4,260	3,236
Overseas fleet	*28*	*2,072,670*	*1,424,298*
Major Australian fleet	*76*	*3,430,390*	*2,353,586*
Other trading ships			
Australian owned and registered	14	5,324	8,071
Australian trading fleet	**90**	**3,435,174**	**2,361,657**

(a) Dead weight tonnage. (b) 2,000 DWT and over.

Source: Department of Transport.

Coastal shipping cargo

Table 21.24 shows the gross weight of shipping cargo loaded at an Australian port for discharge at another Australian port. Both interstate and intrastate cargo movements are included. Cargo loaded or to be discharged at an overseas port is excluded.

21.24 COASTAL CARGO LOADED AND DISCHARGED AT AUSTRALIAN PORTS, 1992–93 ('000 gross weight tonnes)

Australian port	*Loaded*	*Discharged*
New South Wales		
Sydney	52	1,777
Botany Bay	636	3,781
Newcastle	315	4,715
Port Kembla	2,106	5,935
Other	1,294	111
Total	*4,402*	*16,319*
Victoria		
Melbourne	1,716	2,649
Geelong	1,546	856
Hastings	4,994	809
Other	15	648
Total	*8,271*	*4,962*
Queensland		
Brisbane	1,299	4,011
Gladstone	1,604	8,341
Other	8,984	1,969
Total	*11,887*	*14,321*
South Australia		
Adelaide	875	1,868
Port Stanvac	519	70
Other	4,561	1,415
Total	*5,955*	*3,353*
Western Australia		
Fremantle	1,792	1,566
Other	7,930	998
Total	*9,722*	*2,564*
Tasmania		
Hobart	475	983
Burnie	893	648
Devonport	651	497
Launceston	335	19
Other	1,099	851
Total	*3,453*	*2,998*
Northern Territory		
Darwin	140	358
Other	402	50
Total	*542*	*408*
Total all ports	**44,232**	**44,925**

Source: Department of Transport.

AIR TRANSPORT

International activity

International scheduled services. At 30 June 1993, 43 international airlines were operating regular scheduled air services to and from Australia. The carriers (and contracting states) were:

Aeroflot Russian International Airlines	(Russia)
Aerolineas Argentinas	(Argentina)
Air Caledonie International	(New Caledonia)
Air China International	(People's Republic of China)
Air France	(France)
Air India	(India)
Air Lanka	(Sri Lanka)
Air Mauritius	(Mauritius)
Air Nauru	(Nauru)
Air New Zealand	(New Zealand)
Air Niugini	(Papua New Guinea)
Air Pacific	(Fiji)
Air Vanuatu	(Vanuatu)
Alitalia	(Italy)
All Nippon Airways	(Japan)
British Airways	(UK)
Canadian Airlines International	(Canada)
Cathay Pacific Airways	(Hong Kong)
Continental Airlines	(USA)
Federal Express	(USA)
Garuda Indonesia Airways	(Indonesia)
Gulf Air	(Bahrain)
Japan Airlines	(Japan)
KLM Royal Dutch Airlines	(Netherlands)
Korean Air	(Korea)
Lauda Air	(Austria)
Lufthansa German Airlines	(Germany)
Malaysia Airline System	(Malaysia)
Mandarin Airlines	(Taiwan)
Merpati Nusantara Airlines	(Indonesia)
Northwest Airlines	(USA)
Olympic Airways	(Greece)
Pel-Air	(New Zealand)
Philippine Airlines	(Philippines)
Polynesian Airlines	(Western Samoa)
PT Sempati Air	(Indonesia)
Qantas	(Australia)
Royal Brunei Airlines	(Brunei)
Singapore Airlines	(Singapore)
Solomon Airlines	(Solomon Islands)
South African Airways	(South Africa)
Thai Airways International	(Thailand)
United Airlines	(USA)

Canadian Airlines International operates a code-share arrangement with Qantas: CAI operates the Canada–Honolulu sector whilst Qantas operates the Australia–Honolulu sector of the code-share flights.

Polynesian Airlines also operates services on behalf of Cook Islands International (Cook Islands).

Qantas, Australia's international airline, operates a fleet of 31 Boeing 747 and 20 Boeing 767 jet aircraft. Twenty-five per cent of Qantas

Airways Limited was purchased by British Airways on 10 March 1993.

International non-scheduled services. Passenger and freight charter policies in Australia encourage in-bound tourism and freight carriage by non-scheduled services, particularly over routes not served by the scheduled carriers.

International traffic. Particulars of scheduled international airline operations and passenger traffic during 1992–93 and freight traffic during 1992–93 moving into and out of an area which embraces Australia and Norfolk Island are shown in tables 21.25 and 21.26. These figures do not include traffic between Australia and Norfolk Island. Statistics of the operations of Australia's regular overseas services include all stages of Qantas flights linking Australia with overseas countries.

Domestic activity

The Commonwealth Government deregulated domestic aviation in Australia and opened the nation's interstate air services to free competition from 31 October 1990.

Major airlines. At 30 June 1993, the Ansett group's fleet consisted of 12 Airbus A320s, 5 Boeing 767-200s, 5 Boeing 727-200s, 16 Boeing 737-300s, 5 Fokker F28-1000s, 2 Fokker F28-3000s, 7 Fokker F28-4000s, 5 Fokker F50's and 6 British Aerospace 146-200s.

Australian Airlines (owned by Qantas Ltd) operates a fleet of 4 Airbus A300s, 16 Boeing 737-300s and 15 Boeing 737-400s.

Australian Airlink (a fully owned subsidiary of Australian Airlines) operates four British Aerospace 146-100 series aircraft on routes previously serviced by Australian Airlines.

Eastwest Airlines operated a fleet of one Boeing 727-200s and six British Aerospace 146-300s.

The Interstate Parcel Express Company Australia Pty Ltd, trading as IPEC Aviation, operates cargo airline services using two DC9 aircraft.

Regional services. At 31 December 1992, 49 regional operators provided regular public transport air services to approximately 220 ports in Australia.

The aircraft types used by regional operators are predominantly in the six to nine seats category, such as the Piper PA31 and Cessna 310, 402 and 404 series. However, an increasing number of larger types utilised include De Havilland Canada Twin Otter and Dash 8, Embraer Bandeirante and Brasilia, Shorts 330 and 360, the SAAB 340 and the Metroliner. During 1992–93, regional operators carried an estimated 2.3 million passengers.

Scheduled domestic air services. Statistics of all regular domestic airline services and the number of domestic airline passengers passing through airports are set out in tables 21.27 and 21.28.

Other aviation matters

In addition to scheduled services, there is a wide range of other activities undertaken by the aviation industry, including business flying, aerial agriculture, charter, training and private flying. Charter operations and training have, in recent years, made up over 50 per cent of general aviation hours flown. Charter operations involve the use of aircraft in non-scheduled operations for the carriage of passengers and cargo for hire or reward.

Aerodromes. At 30 June 1992, there were 395 licensed aerodromes in Australia and its Territories of which 11 were international airports. The majority of licensed airports were owned and operated by local councils, State government departments and private companies. The remaining 65 airports were owned and operated by the Federal Airports Corporation, the Department of Defence or the Department of Transport and Communications.

Air transport registrations and licences in force in Australia. At 30 June 1993, there were 9,321 aircraft registered in Australia. At the same time there were 35,135 current aeroplane pilot licence holders, including 20,811 private pilots, 8,033 commercial and senior commercial pilots and 5,261 air transport pilots.

In addition, there were 1,911 current helicopter pilot licence holders of which 369 were private pilots, 1,588 commercial and senior commercial pilots and 320 air transport pilots. There were also 67 commercial balloon, 867 flight engineer and 14 navigator licences in force.

21.25 SCHEDULED INTERNATIONAL AIRLINE TRAFFIC TO AND FROM AUSTRALIA(a), 1992–93

Type of traffic	*Number of flights(b)(c)*	*Passengers*	*Freight tonnes*	*Mail tonnes*
Traffic to Australia				
Qantas Airways Limited	8,234	1,941,384	70,132	2,150
Other airlines	17,973	2,961,309	121,369	7,743
All airlines	**26,207**	**4,902,693**	**191,500**	**9,893**
Traffic from Australia				
Qantas Airways Limited	8,224	1,910,149	87,796	5,111
Other airlines	17,864	2,945,423	153,514	2,169
All airlines	**26,088**	**4,855,572**	**241,310**	**7,280**

(a) Australia and Norfolk Island. (b) Includes Qantas flights using aircraft leased from other airlines and vice versa. (c) The difference between in/out numbers arises because some outward flights are operated as non-scheduled, and thus not counted in the above table.
Source: Department of Transport.

21.26 OPERATIONS OF AUSTRALIA'S SCHEDULED OVERSEAS AIRLINE SERVICES

		1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Hours flown	number	126,812	140,172	148,706	163,332	r174,568	188,818
Kilometres flown	'000	98,999	109,102	115,783	127,421	136,533	160,520
Passengers							
Embarkations	number	3,612,197	3,947,544	4,078,669	3,880,533	4,468,149	5,222,783
Passenger-kilometres	'000	24,535,745	26,516,771	27,054,999	26,774,074	28,396,869	33,189,062
Freight							
Tonnes uplifted	tonnes	119,202	130,635	146,937	155,638	172,790	197,249
Tonne-kilometres	'000	855,260	929,458	1,072,999	1,131,729	1,140519	1,269,456
Mail							
Tonnes uplifted	tonnes	5,858	5,988	5,963	6,992	8,324	8,737
Tonne-kilometres	'000	57,946	61,049	59,398	75,110	70,488	73,442

Source: Department of Transport.

21.27 DOMESTIC AIRLINE ACTIVITY

Domestic airlines	*1988–89*	*r1989–90*	*r1990–91*	*1991–92*	*1992–93*
Domestic airlines					
Passengers carried (thousands)(a)	15,133.2	10,401.9	14,753.3	18,490.2	18,577.6
Passenger kilometres performed (millions)	13,742.8	9,997.1	14,516.0	19,081.6	18,996.3
Revenue passenger load factor (per cent)	76.3	72.2	70.8	78.4	76.7
Cargo tonnes (thousands)(b)	176.6	99.0	139.8	138.1	144.1
Cargo tonnes kilometres (millions)(b)	161.6	93.9	141.0	156.3	170.9
Total tonnes kilometres (millions)	1,398.4	993.6	1,447.4	1,873.7	1,880.6
Revenue weight load factor (per cent)	63.7	59.4	57.0	61.3	60.2
Hours flown (thousands)	290.3	192.9	281.7	336.8	356.5
Aircraft movements (thousands)	420.0	256.4	375.0	427.3	448.8
Regional airlines(c)					
Passenger (thousands)	1,330.6	1,493.9	1,793.6	2,049.7	p2,325
Cargo tonnes (thousands)(b)	4	2.7	2.9	2.8	p2.6

(a) Measurement has been changed to passengers on board and adjusted for previous years. (b) Includes freight and mail. (c) Data has been revised.
Source: Department of Transport.

21.28 SCHEDULED MAJOR DOMESTIC AIRLINES PASSENGER UPLIFTS AND DISCHARGES AT PRINCIPAL AUSTRALIAN AIRPORTS(a)

	1987–88	*1988–89*	*1989–90(b)*	*1990–91*	*1991–92*	*1992–93*
Sydney	7,388,889	7,582,179	5,518,578	7,638,310,	10,003,034	10,042,329
Melbourne	5,831,588	6,003,133	4,643,905	6,421,644	8,146,380	8,111,797
Brisbane	3,361,044	3,650,719	2,702,822	3,916,012	5,078,712	5,139,481
Adelaide	1,845,523	1,889,251	1,418,577	2,023,096	2,558,179	2,552,132
Perth	1,437,425	1,479,853	1,056,551	1,563,444	2,083,363	1,943,425
Canberra	1,104,623	1,080,215	677,200	1,058,602	1,267,842	1,260,161
Coolangatta	1,113,136	1,251,040	646,451	1,075,806	1,478,099	1,543,469
Cairns	778,114	824,952	545,964	827,926	1,184,103	1,183,958
Hobart	512,490	519,405	430,041	566,437	666,523	689,123
Townsville(c)	932,711	824,674	379,769	418,486	379,771	446,332
Launceston(d)	579,800	553,579	269,664	347,980	401,949	402,138
Darwin	371,470	390,154	304,927	404,861	452,641	478,715

(a) The unit of measurement is passengers on board. (b) Data is severely affected by Pilots' dispute. (c) Prior to August 1989, Townsville formed part of the major route to/from Cairns, accounting for the large number of passengers transiting this port. Services are now more direct, with far less transit activity at Townsville airport. (d) Launceston data was inflated with transiting passengers on the Hobart route.
Source: Department of Transport.

Accidents and casualties

21.29 AIR TRANSPORT: NUMBER OF ACCIDENTS AND FATALITIES

	Accidents	*Fatalities*
1987	299	44
1988	325	70
1989	348	83
1990	344	81
1991	323	54
1992	310	61

Source: Department of Transport.

GOVERNMENT TRANSPORT ORGANISATIONS

General

The Australian Transport Advisory Council comprises Commonwealth, State and Territory ministers responsible for transport, roads and marine and ports matters. The New Zealand and the Papua New Guinea Ministers for Transport are also represented on the Council as observers.

The Council meets bi-annually and its primary role is to review and coordinate various aspects of transport policy, development and administration. The Council initiates discussion and reports on issues raised by Council members, and provides advice on policies which will promote better coordination and development of transport to the benefit of Australia.

The Australian Road Transport Advisory Committee was established in April 1990 as part of the continuing push to reform the land transport sector.

Its function is to provide the Minister for Land Transport with direct industry-based advice on all aspects of the road transport industry. The specialist advice from the Committee also assists the task of integrating road and rail with other forms of transport.

The Bureau of Transport and Communications Economics is a centre for applied economic research in the Department of Transport and Communications. It undertakes studies and investigations that contribute to an improved understanding of the factors influencing the efficiency and growth of the transport and communications sector and the development of effective transport and communication policies.

Road and Rail

AUSTROADS, the national association of road and traffic authorities, provides strategic direction for the development, management and use of Australia's road system through consultation and discussion with peak bodies that have a stake in the road industry. Its functions are the coordination of research, preparation of guides and standards, and improvements in and harmonisation of practices within an agreed national policy framework.

The Australian Road Research Board (ARRB) is a non-profit national organisation owned by the Federal Department of Transport and Communications, the State and Territory road/transport authorities and the Australian Local Government Association. It conducts research into all aspects of roads and road transport including freight and heavy vehicles, human behaviour, intersection design and capacity, the environment, road safety, construction and maintenance of infrastructure, and the development of equipment for traffic analysis and road condition measurement. This work is undertaken for all three levels of government and for industry.

ARRB provides an information service to many external customers — government, industry, educational and research organisations and the general public. The service is supported by ARRB research staff, an extensive library, and an information network encompassing access to worldwide electronic databases and a network of contacts, both in Australia and abroad.

National Road Transport Commission was established as the result of the Special Premiers Conference in 1991. The principles behind its establishment were that there should be improvements in road safety and transport efficiency and reductions in the cost of the administration of road transport.

The Commission has responsibility for road vehicles, their drivers, other road users and related matters.

Water

ANL Limited was incorporated as a public company on 1 July 1989 taking over all the assets, liabilities and operations of the former Australian Shipping Commission. All shares in ANL Limited are currently held by the Commonwealth Government.

ANL is an integrated international and domestic shipping operation participating in both blue-water and shore-based shipping activities, either in its own right or in joint venture arrangements with private sector interests. ANL has a primary focus on liner (container) trades, both domestic and international; domestic bulk trades; and through a 50 per cent shareholding in National Terminals (Australia) Ltd, container terminal activities in Australia. The geographic focus of ANL's activities is in the Australasian region.

As at 30 June 1993, ANL Ltd fleet consisted of 14 vessels. The overseas fleet comprised 7 liner vessels totalling 175,967 DWT. The coastal fleet comprised 4 bulk carriers totalling 217,033 DWT, and 3 liner vessels totalling 20,731 DWT.

Australian Maritime Safety Authority is a government business enterprise established under the *Australian Maritime Safety Authority Act 1990* on 1 January 1991. It is responsible for maritime safety regulatory activities in Australia and provision of the Australian marine navigational aids network. It operates the Marine Rescue Co-ordination Centre, which coordinates major maritime search and rescue activities in Australian waters. It is responsible for oil pollution prevention and clean up, and for the registration of Australian vessels.

Air

The Civil Aviation Authority, an independent government business enterprise established under the *Civil Aviation Act 1988*, is responsible for the safety regulation of civil aviation in Australia and of Australian aircraft operating overseas. It also provides air route and airway facilities and associated services to the aviation industry including air traffic control, flight service, rescue and fire fighting, search and rescue and aeronautical information.

The Federal Airports Corporation owns, manages and develops Australia's major airports and oversees the commercial activities in the airports including arrangements with airlines and other operators for the use of airports and for leasing of property and the letting of business concessions. The Corporation is a statutory transport business undertaking of the Commonwealth and is required to be financially self-supporting. It has been established with a capital base and debt/equity ratio determined by the Commonwealth Government.

International organisations. Australia is one of the 169 members (at 30 June 1993) of the International Civil Aviation Organisation (ICAO). Australia has been a member of the governing Council since ICAO was established in 1947. Australia is also represented on the 15 member Air Navigation Commission which is responsible for drawing up international standards and procedures for the safety and efficiency of air navigation. In addition, Australia participates in the Commonwealth Air Transport Council, the South Pacific Regional Civil Aviation Council, the Airport Operators Council International and the International Civil Airports Association.

International agreements. Australia had air services agreements with 33 countries at 30 June 1992. Thirty of these agreements have full treaty status while Hong Kong, Switzerland and Zimbabwe, will be upgraded to treaty status when draft agreements are ratified. Australia also has eight air service arrangements which are of less than treaty status. These agreements and arrangements enable airlines of both Australia and its bilateral partners to operate a network of international air services to and from Australia.

Multiple designation and the International Air Services Commission. In February 1992 the Prime Minister announced a range of reforms to aviation policy including the introduction of multiple designation of Australia's international air services, enabling Australian carriers in addition to Qantas to operate international services. To develop the necessary legislative and administrative framework to implement multiple designation, including a mechanism for the allocation of international aviation capacity and route entitlements, a detailed analysis of overseas practices and views of major Australian carriers was undertaken.

As a result, the International Air Services Commission was established on 1 July 1992, having the role of making determinations on the allocation of international aviation capacity and route entitlements among Australia's international airlines. The Commission determines the merits of competing claims according to a strict public benefit test laid down by the Government. This test includes matters such as tourism and trade, route economies, competition policy benefits and broader national interests. The Commission reports separately to Parliament.

COMMUNICATIONS

Radio and television broadcasting

Radio and television broadcasting falls within the jurisdiction of the Commonwealth Minister for Communications and the Arts. Commonwealth bodies which are involved include the Australian and Overseas Telecommunications Corporation (AOTC), the Australian Broadcasting Corporation (ABC), the Special Broadcasting Service (SBS), the Australian Broadcasting Authority (ABA), the Department of Communications and the Arts, and the Australian Telecommunications Authority AUSTEL.

Basically, the Australian broadcasting system comprises the following types of services:

- national radio and television services broadcasting programs produced by the Australian Broadcasting Corporation and the Special Broadcasting Service;
- commercial radio and television services operated by companies under licence;
- public radio services operated by incorporated associations under licence on a non-profit basis; and
- Parliamentary radio service to State capitals, Canberra and Newcastle.

National Transmission Agency (NTA), which is attached to the Department of Communications and the Arts, is responsible for the design, construction, operation and maintenance of a complex network of transmission facilities used primarily for the transmission of the programs for the ABC and the SBS throughout Australia. In regional and remote areas, commercial licensees make extensive use of the NTA's transmission facilities to deliver their services, as do radiocommunications operators.

The Australian Broadcasting Corporation (ABC) is an independent statutory corporation receiving 90 per cent of its funding from Commonwealth Parliament appropriations and the remainder from sales and other revenue.

The *Australian Broadcasting Act 1983* requires the ABC to:

- provide within Australia innovative and comprehensive radio and television services of a high standard;

- provide programs that contribute to a sense of national identity, inform and entertain, and reflect the cultural diversity of the Australian community;
- provide radio and television programs of an educational nature;
- promote Australia's musical, dramatic and other performing arts; and
- transmit to other countries radio and television programs of news, current affairs, entertainment and cultural enrichment that encourage awareness of Australia and an international understanding of Australian attitudes on world affairs.

At 30 June 1993, the ABC provided:

- five main radio services across Australia on over 528 transmitters which include Metropolitan Radio, Regional Radio, Radio National, ABC-FM, and the Triple J youth radio network;
- a national television service on over 546 transmitters;
- Radio Australia, the ABC's international broadcasting service;
- an international office network so that an Australian perspective is available on major world events; and
- six State Symphony Orchestras.

Television and radio programs produced by the ABC are broadcast through transmitters operated by the National Transmission Agency.

International broadcasting service. The international short-wave service known as Radio Australia provides an emphasis on news and current affairs, information programs and sports coverage serving the needs and interests of the Asia/Pacific region. The broadcasts — in English, Indonesian, Standard Chinese, Cantonese, Tok Pisin, French, Thai and Vietnamese — are directed to the Pacific, South East/South Asia and North Asia. The English Service is also heard in the Middle East, United Kingdom, Europe and North and South America. Overall, the services reach an estimated 50 million regular listeners.

The Special Broadcasting Service (SBS) was established by the Commonwealth Government on 1 January 1978 and provide multilingual radio and television services.

Commercial radio and television services. At 30 June 1993, there were 166 commercial radio services (including four supplementary services) and 44 commercial television services in operation in Australia.

At 30 June 1993, there were three remote commercial television services licensed, transmitting their programs via satellite to remote localities in the Western Zone (Western Australia), Central Zone (Northern Territory, South Australia, western New South Wales and north-western Victoria) and North-East Zone (Queensland and north-western New South Wales). There was also one remote radio service providing a monophonic service via satellite to remote localities in the Western Zone.

Public broadcasting services. As at 30 June 1993, there were 44 commercial television broadcasting licences, 166 commercial radio broadcasting licences and 211 community broadcasting licences. The community broadcasting licences include 82 licences for remote Aboriginal community services.

21.30 AUTHORISED BROADCASTING FACILITIES

Type and sector	*Number of transmitters 30 June 1991*	*Number of transmitters 30 June 1992*	*Number of transmitters 30 June 1993*
ABC television	474	535	546
ABC AM radio	108	108	108
ABC FM radio	288	341	420
SBS television	37	56	59
SBS AM radio	4	4	4
Commercial television	563	777	815
Commercial AM radio	140	(a)126	127
Commercial FM radio	63	82	84
Community AM radio	10	13	13
Community FM radio	106	111	114
Community television	—		—
BRACS FM radio	—	(b)69	69
BRACS television		(b)70	71
Narrowcasting radio AM	—	—	2
Narrowcasting radio FM	—	—	(c)280
Narrowcasting television	—	—	6
Total	**1,793**	**2,292**	**2,718**

(a) Decrease is a result of AM to FM conversions. (b) Facilities for the Broadcasting for Remote Aboriginal Communities Scheme were licensed as Limited Licences under the *Broadcasting Act 1942*. BRACS facilities became community broadcasting services under the *Broadcasting Services (Transitional Provisions and Consequential Amendments) Act 1992*. *(c) The majority of these services are low-powered (under 1 watt in a residential area, under 10 watts in a non-residential area) tourist information services.*
Source: Annual Report, Australian Broadcasting Authority.

The Australian Broadcasting Authority. From 5 October 1992, the Australian Broadcasting Tribunal was replaced by a new regulatory body, the Australian Broadcasting Authority, established under the Broadcasting Services Act. The Tribunal had been the independent statutory authority established to regulate aspects of commercial and public radio and commercial television in Australia. It was empowered to grant, renew, suspend or revoke licences, to determine program and advertising standards applicable to licensed stations, to authorise changes to the ownership and control of licences, and to collect and make available information about broadcasting in Australia. In particular, the Tribunal conducted public inquiries into the granting of licences following the invitation of applications by the Minister.

The Authority subsumed many of the functions of the Tribunal but has wider discretionary powers to support its decisions, and will also assume a significant role in planning of broadcasting services previously undertaken by the Department of Communications and the Arts on behalf of the Minister.

Radiocommunication stations

At 30 June 1993, there were 928,229 radiocommunication stations authorised for operation in Australia and its territories. Of these, 328,006 were associated with land mobile services, 57,649 were fixed services, 77,371 were for marine services, and 397,176 were citizen band (CB) stations.

Telecommunications services within Australia

Telecom Australia and OTC were merged on 1 February 1992 to form the Australian and Overseas Telecommunications Corporation (AOTC). Telecom was Australia's domestic carrier (the Australian Telecommunications Corporation), supplying telecommunications services within Australia; OTC provided Australia's links with the world, and was a founding member of both the International Telecommunications Satellite Organisation, and the International Maritime Satellite Organisation. AOTC continues to carry out these functions, in competition with a new telecommunications carrier, Optus Communications Pty Ltd.

Postal communications

Australian Postal Corporation. The Australian Postal Corporation's principal function is to supply postal services within Australia and between Australia and overseas. Its subsidiary function is to carry on any business or activity relating to postal services either domestically or overseas.

The Australian Postal Corporation is the authority for the issue of postage stamps throughout the Commonwealth of Australia and its external territories. The following tables provide details of the Corporation's finances, services and operation.

21.31 AUSTRALIAN POSTAL CORPORATION PROFIT AND LOSS STATEMENT YEARS ENDING 30 JUNE(a) ($'000)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Revenue						
Mail services	1,501,487	1,605,998	1,779,573	1,966,639	2,099,880	2,211,182
Philatelic sales	n.a.	38,871	41,474	41,471	41,424	38,614
Commission on agency services	89,803	88,031	79,780	89,900	91,487	99,767
Postal money order services	13,242	16,792	19,029	21,647	25,768	24,772
Other revenue	51,847	61,516	60,617	63,807	51,527	46,183
Total	*1,656,379*	*1,811,208*	*1,980,473*	*2,183,464*	*2,309,835*	*2,420,518*
Expenditure						
Labour and related expenditure	1,131,190	1,235,530	1,324,254	1,323,253	1,331,501	1,346,376
Carriage of mail by contractors	132,832	151,131	158,311	172,222	172,270	167,292
Accommodation	n.a.	79,334	103,601	124,081	120,802	114,921
Stores and supplies	n.a.	101,801	112,055	106,095	119,177	119,689
Depreciation	(b)38,454	34,466	44,947	54,337	69,534	92,915
Interest	(b)n.a.	5,282	6,246	2,440	3,527	2,641
Other operating expenditure	298,955	142,051	160,976	254,857	317,087	330,317
Total	*1,601,431*	*1,749,595*	*1,910,390*	*2,037,285*	*2,133,898*	*2,174,151*
Operating profit	**54,948**	**61,613**	**70,083**	**146,179**	**175,937**	**246,367**

(a) Does not include appropriations. (b) Depreciation and Interest are combined for 1987–88 data.
Source: Australian Postal Corporation.

21.32 AUSTRALIAN POSTAL CORPORATION: PERSONS ENGAGED IN PROVIDING POSTAL SERVICES AT 30 JUNE 1992 AND 1993

	1993							
	HQ	*NSW (incl. ACT)*	*Vic. and Tas.*	*Qld*	*SA (incl. NT)*	*WA*	*Aust.*	*1992 Aust.*
Official staff(a)								
Full-time permanent	546	12,209	9,162	3,991	2,413	2,288	30,609	32,332
Full-time temporary	6	486	479	226	48	80	1,325	1,273
Part-time	2	1,572	1,084	596	350	395	3,999	3,979
Other staff(b)	—	2,623	2,348	1,686	664	611	7,932	8,126
Total	**554**	**16,890**	**13,073**	**6,499**	**3,475**	**3,374**	**43,865**	**45,710**

(a) 'Official staff' are those whose employment is governed by the *Australian Postal Corporation Act 1989*. (b) Includes persons who are not employed under the Australian Postal Corporation Act, but who are engaged on the basis of business transacted. Also included are persons or organisations who hold road mail service contracts with the Australian Postal Corporation.
Source: Australian Postal Corporation.

21.33 AUSTRALIAN POSTAL CORPORATION: MAIL DELIVERY NETWORK AND POST OFFICES AT 30 JUNE 1992 AND 1993
(number)

	1993						
Number	NSW (incl. ACT)	Vic. & Tas.	Qld	WA	SA (incl. NT)	Aust.	1992 Aust.
Households receiving mail	2,315,177	1,819,742	1,166,804	636,381	625,767	6,563,871	6448,969
Businesses receiving mail	271,719	192,141	125,561	65,749	63,799	718,969	698,910
Post offices	488	346	225	124	118	1,301	1,348
Agencies	834	979	488	269	362	2,932	2,977
Total post offices and agencies	**1,322**	**1,325**	**713**	**393**	**480**	**4,233**	**4,325**

Source: Australian Postal Corporation.

21.34 AUSTRALIAN POSTAL CORPORATION: TOTAL POSTAL ARTICLES HANDLED
(million)

Year ended 30 June	Posted for delivery within Australia	Posted for places abroad	Received from abroad	Total postal articles handled
1988	3,342.2	142.3	177.4	3,662.0
1989	3,564.4	157.6	194.0	3,916.0
1990	3,665.3	171.3	213.7	4,050.3
1991	3,721.9	176.7	219.9	4,118.5
1992	3,733.1	173.8	213.0	4,119.9
1993	3,793.8	171.3	201.1	4,166.2

Source: Australian Postal Corporation.

BIBLIOGRAPHY

ABS Publications

Commonwealth Government Finance, Australia (5502.0)

Company Profits, Australia (5651.0)

Interstate Freight Movement, Australia (9212.0)

Interstate Road Freight Movement, Australia (9214.0)

Motor Vehicle Census: Australia (9309.0)

Motor Vehicle Registrations, Australia (9303.0) — monthly

Motor Vehicle Registrations, Australia (9304.0) — annual

Rail Transport, Australia (9213.0)

Road Freight Transport Activity of Private Enterprises by Industry Division, Australia and States (9107.0)

Road Traffic Accidents Involving Casualties, Australia (9405.0)

Road Traffic Accidents Involving Fatalities, Australia (9401.0)

BIBLIOGRAPHY — *continued*

Survey of Motor Vehicle Use, Australia (9208.0)

Survey of Motor Vehicle Use, Australia, Preliminary (9202.0)

Transport Establishments: Details of Operations by Industry Class, Australia (9104.0)

Transport Establishments: Selected Items of Data Classified by Industry and Size Group, Australia (9105.0)

Transport Establishments: Summary of Operations by Industry Class, Australia and States (9103.0)

Other Publications

FEDERAL OFFICE OF ROAD SAFETY. Road Fatality Statistics Australia, Annual Report

Information additional to that contained in ABS publications is available in the annual reports and other statements of the Departments of Transport and Communications and the Arts, the various harbour boards and trusts, the several government railway authorities, the Federal Airports Corporation, the Australian Postal Corporation, the Australian Telecommunications Corporation, and the Australian Broadcasting Corporation.

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twenty-two

Science and Technology

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Science and technology directly influence the strength and competitiveness of industry by providing a basis for technological change and thereby encouraging economic growth and development. They can be seen as making major contributions to the achievement of many of Australia's social, economic and industrial goals.

OFFICIAL ORGANISATIONS AND ADMINISTRATION

There are many organisations in Australia concerned in some way with the development of science and technology in Australia.

The Commonwealth Government's conviction of the importance of science and technology is reflected in the functions of the Department of Industry, Science and Technology. Apart from having general responsibility for science and technology, the Department is concerned with the development and maintenance of Australia's scientific and technological capability.

A number of other Commonwealth government organisations either support or carry out scientific and technological activities. State Governments are also involved in science and technology via State government departments, science and technology councils and other organisations. Non-government organisations participating in scientific and technological activities include higher education institutions, professional and learned bodies, private organisations and industry groups.

The Department of Industry, Science and Technology

The main scientific and technological bodies and activities of the portfolio include the Commonwealth Scientific and Industrial Research Organisation, the Australian Nuclear Science and Technology Organisation, the Australian Institute of Marine Science and the 150 per cent tax concession for research and development (R&D), which are described below. Details of others, such as R&D grants and assistance schemes; the Australian Space Office; and the National Standards Commission, are contained in *Year Book Australia 1991.*

The Commonwealth Scientific and Industrial Research Organisation (CSIRO)

CSIRO was established as an independent statutory authority by the *Science and Industry Research Act 1949,* which has been amended on a number of occasions since then. Its primary role is as an applications-oriented research organisation in support of major industry sectors and selected areas of community interest, with a strong commitment to the effective transfer of its results to users.

Briefly, CSIRO's primary statutory functions are to:

- carry out scientific research for the benefit of Australian industry, the community, national objectives, national or international responsibilities, or for any other purpose determined by the Minister; and
- encourage or facilitate the application or utilisation of the results of such research.

Other functions include dissemination and publication of scientific information, international liaison in scientific matters, and provision of services and facilities.

The research work of the organisation is carried out in Institutes, each headed by a Director and each specifically established to undertake work in support of industry or community interest sectors of the Australian economy. Institutes are composed of Divisions, which are individually responsible for broad programs of research in support of the objectives of the Institute.

Institute of Information, Science and Engineering: Divisions of Information Technology; Radiophysics; Mathematics and Statistics.

Institute of Industrial Technologies: Divisions of Manufacturing Technology; Materials Science and Technology; Applied Physics; Chemicals and Polymers; Biomolecular Engineering.

Institute of Minerals, Energy and Construction: Divisions of Building, Construction and Energy (now incorporates National Building Technology Centre); Exploration and Mining; Mineral and Process Engineering; Mineral Products; Coal and Energy Technology; Petroleum Resources.

Institute of Animal Production and Processing: Divisions of Animal Health; Animal Production; Wool Technology; Tropical Animal Production; Food Science and Technology; Human Nutrition.

Institute of Plant Production and Processing: Divisions of Plant Industry; Tropical Crops and Pastures; Horticulture; Entomology; Soils; Forestry and Forest Products.

Institute of Natural Resources and Environment: Divisions of Water Resources; Fisheries; Oceanography; Atmospheric Research; Wildlife and Ecology; Centre for Environmental Mechanics; Office of Space Science and Applications; Australia Telescope.

CSIRO has a staff of approximately 7,000 in more than 70 locations throughout Australia. About one-third of the staff are professional scientists, with the others providing technical, administrative or other support. CSIRO's budget for 1993–94 was $682.1 million.

The Australian Nuclear Science and Technology Organisation (ANSTO)

ANSTO is established as a statutory authority under the *Australian Nuclear Science and Technology Organisation Act Number 3 of 1987* as amended, and replaced the Australian Atomic Energy Commission. Its mission is to benefit the Australian community by the development and peaceful application of nuclear science and technology in industry, medicine, agriculture, science and other fields.

The Australian Institute of Marine Science

The Australian Institute of Marine Science (AIMS) is the premier institute in Australia involved in marine research, with emphasis on tropical marine science. The Institute was established in 1972 and has its headquarters at Cape Ferguson, 50 kilometres south of Townsville. It is a federally funded statutory authority governed by a Council appointed by the Australian Government.

The general objective of AIMS is to gain a coherent understanding of static patterns and dynamic processes involved in complex tropical marine systems, and to develop a predictive capability for these systems. AIMS research effort is organised within four research groups — coastal processes and resources, coral reef ecosystems, environmental studies and biotechnology and tropical oceanography.

The Institute's activities in marine science and technology are associated principally with an understanding of marine communities of tropical Australia, South East Asia, and in the Pacific and Indian Oceans. Its long-term research into complex marine ecosystems and the impacts of human activities on the marine environment is used by industry and natural resources management agencies to ensure the conservation and sustainable use of marine resources in these regions.

Most of the attention of AIMS is focused currently on the environment and living communities of the tropical coast, Great Barrier Reef, North-West Shelf and surrounding pelagic systems of the tropical seas. This geographical emphasis reflects AIMS' financial, technical and operational capabilities and its relationship with other national and State agencies and academic institutions which work in oceans surrounding Australia.

Tax Concession for Research and Development

The 150 per cent tax concession for Research and Development (R&D) which commenced from July 1985 is the major program in the Government's package of measures to encourage R&D in Australia.

The concession allows companies incorporated in Australia, public trading trusts and partnerships of eligible companies to deduct up to 150 per cent of eligible expenditure incurred on R&D activities when lodging their corporate tax return. This effectively reduces their after tax cost of R&D to 50.5 cents in the dollar at the 33 per cent corporate tax rate.

The concession is broad-based, being available to the majority of companies undertaking R&D in Australia. The concession is market driven, being structured in a manner which is neither industry nor product oriented, allowing individual companies to determine both the specific area of innovation and direction of their R&D activities.

Expenditure eligible under the concession at 150 per cent include: salaries, wages and other overhead costs which are directly related to the company's Australian R&D activities; contract expenditure; and capital expenditure on R&D plant and equipment (over three years). Expenditure on acquiring, or acquiring the right to use, technology for the purposes of the company's own R&D activities is 100 per cent deductible.

The R&D projects must satisfy the adequate Australian content requirement. In addition the results of the R&D must be exploited on normal commercial terms and to the benefit of Australia.

To attract the 150 per cent deduction, annual eligible R&D expenditure must exceed $20,000. Where R&D is contracted to an approved Registered Research Agency this expenditure threshold is waived.

RESEARCH AND DEVELOPMENT — EXPENDITURE AND HUMAN RESOURCES

The statistics which follow are based on the OECD definitions for national research and development (R&D) surveys. The OECD defines R&D as comprising 'creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications'.

Statistics on the amount of expenditure and human resources devoted to R&D in the business enterprise sector are collected, in varying degrees of detail, annually. Comparable statistics on the general government, higher education, and private non-profit sectors are only collected biennially. Tables 22.1 and 22.2 provide a summary of the latest statistics available for these four sectors.

22.1 EXPENDITURE ON RESEARCH AND DEVELOPMENT IN AUSTRALIA AT CURRENT AND AVERAGE 1984–85 PRICES ($ million)

Sector	*1986–87r*	*1987–88r*	*1988–89r*	*1989–90r*	*1990–91*	*1991–92*
			AT CURRENT PRICES			
Business enterprises						
Private sector	1,165.1	1,338.2	1,646.1	1,802.6	1,835.4	1,973.3
Public sector	123.5	117.6	149.2	187.0	203.6	214.5
General government						
Commonwealth	786.5	797.0	868.9	n.a.	1,039.7	n.a.
State	368.4	394.6	474.4	n.a.	611.4	n.a.
Higher education						
Universities	844.9	929.8	1,018.4	n.a.	} 1,332.8	n.a.
CAEs	36.7	53.8	54.5	n.a.		n.a.
Private non-profit	49.1	53.9	51.9	n.a.	68.3	n.a.
Total	**3,374.2**	**3,684.9**	**4,263.5**	**n.a.**	**5,091.2**	**n.a.**

... continued

22.1 EXPENDITURE ON RESEARCH AND DEVELOPMENT IN AUSTRALIA AT CURRENT AND AVERAGE 1984–85 PRICES — *continued*
($ million)

Sector	*1986–87r*	*1987–88r*	*1988–89r*	*1989–90r*	*1990–91*	*1991–92*
	AT AVERAGE 1984–85 PRICES					
Business enterprises						
Private sector	999.7	1,070.7	1,253.2	1,265.1	1,230.9	n.a.
Public sector	106.6	97.6	119.3	139.4	143.0	n.a.
General government						
Commonwealth	693.8	655.7	679.9	n.a.	717.9	n.a.
State	322.5	324.2	371.1	n.a.	427.0	n.a.
Higher education						
Universities	750.8	788.7	819.8	n.a.	972.7	n.a.
CAEs	32.2	40.3	41.0	n.a.		n.a.
Private non-profit	45.5	47.3	43.4	n.a.	49.2	n.a.
Total	**2,951.1**	**3,024.5**	**3,327.7**	**n.a.**	**3,540.7**	**n.a.**

Source: Research and Experimental Development: All Sector Summary, Australia (8112.0).

22.2 HUMAN RESOURCES DEVOTED TO RESEARCH AND DEVELOPMENT
(person years)

Sector	*1986–87*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*
Business enterprises						
Private sector	16,198	16,952	19,177	18,572	18,636	18,315
Public sector	1,393	1,527	1,597	1,729	1,867	2,054
General government						
Commonwealth	11,529	11,491	11,705	n.a.	11,386	n.a.
State	6,796	7,133	7,992	n.a.	8,295	n.a.
Higher education						
Universities	21,690	22,435	22,939	n.a.	27,081	n.a.
CAEs	1,529	1,888	1,963	n.a.		n.a.
Private non-profit	945	1,016	990	n.a.	1,049	n.a.
Total	**60,080**	**62,442**	**66,363**	**n.a.**	**68,314**	**n.a.**

Source: Research and Experimental Development: All Sector Summary, Australia (8112.0).

Source of funds

In 1990–91, 94 per cent of funding for R&D carried out by businesses came from the business sector and has remained at this level since 1988–89. General government organisations provided three per cent (table 22.3).

Sixty per cent of general government sector R&D was funded by Commonwealth government organisations and 30 per cent by State government organisations. These percentages have fallen slightly since 1988–89 and have been offset by increases from both business enterprises and private non-profit organisations.

Eighty-nine per cent of higher education funding came from the Commonwealth Government with a further six per cent from the private non-profit sector. A further two per cent each from State governments and business enterprises made up most of the remainder.

For the private non-profit sector, Commonwealth government organisations funded 31 per cent of the R&D in 1990–91 (down from 37% in 1988–89) while State Governments doubled their contribution to 15 per cent.

22.3 EXPENDITURE ON RESEARCH AND DEVELOPMENT IN AUSTRALIA BY SECTOR BY SOURCE OF FUNDS
($'000)

	Source of funds						
Sector	*Common-wealth government*	*State government*	*Business enterprises*	*Higher education*	*Private non-profit and other Australian*	*Overseas*	*Total*
			1988–89				
Business enterprises							
Private sector	59,074	2,709	1,539,980	168	4,060	40,676	1,646,116
Public sector	2,900	1,642	144,126			—	149,217
General government							
Commonwealth	816,248	3,862	40,617	—	2,651	5,563	868,940
State	43,369	388,377	22,651	299	18,543	1,162	474,400
Higher education							
Universities	940,066	11,856	18,676	—	40,961	6,824	1,018,383
CAEs	11,228	4,779	8,906	28,057	1,180	369	54,519
Private non-profit	19,382	5,660	4,305	632	19,735	2,193	51,906
Total	**1,892,265**	**418,885**	**1,779,260**	**29,156**	**87,130**	**56,786**	**4,263,480**
			1990–91				
Business enterprises							
Private sector	48,501	8,889	1,734,565	2,441	3,542	41,003	1,835,414
Public sector	5,611		194,491			—	203,629
General government							
Commonwealth	922,933	7,482	48,801	13	51,285	9,161	1,039,676
State	68,891	480,827	35,944	2,099	20,883	2,731	611,376
Higher education	1,190,555	29,556	29,917	n.a.	73,438	9,334	1,332,799
Private non-profit	21,466	10,304	5,650	890	27,259	2,776	68,344
Total	**2,257,957**	**537,058**	**2,049,368**	**5,443**	**176,407**	**65,005**	**5,091,238**

Source: Research and Experimental Development: All Sector Summary, Australia (8112.0).

Business sector

Business expenditure on R&D in Australia in 1991–92 (table 22.4) was estimated to be $2,188 million at current prices, an increase of seven per cent over 1990–91.

Of the total business expenditure in 1991–92, 56 per cent of expenditure ($1,225 million) and 56 per cent of human resources (11,421 person years) were devoted to R&D in the manufacturing sector. The major industries contributing to this were Appliances and electrical equipment (25% of expenditure, 31% of human resources); Chemical, petroleum and coal products (16% and 16%, respectively) and Transport equipment (13% and 12%, respectively).

After manufacturing, the next largest R&D activity was in Property and business services. In 1991–92 this industry contributed 13 per cent of expenditure and 14 per cent human resources for all business enterprises in Australia.

Business expenditure on R&D represents 0.57 per cent of Gross Domestic Product (GDP). This ratio increased fairly rapidly in the early 1980s but plateaued from 1986–87. It is relatively low when compared with other OECD countries (table 22.5).

22.4 RESEARCH AND DEVELOPMENT BY BUSINESS ENTERPRISES

Industry of enterprise		*Expenditure on R&D ($m)*			*Person years of effort on R&D*		
ASIC code	*Description*	*1988–89r*	*1990–91*	*1991–92*	*1988–89r*	*1990–91*	*1991–92*
11–15	Mining (excluding services to mining)	96.1	90.5	136.9	745	693	760
	Manufacturing						
21	Food, beverages & tobacco	87.4	86.3	109.5	891	954	981
23–24	Textiles; Clothing & footwear	18.8	14.2	16.8	154	112	138
25	Wood, wood products & furniture	10.4	7.3	16.9	122	107	104
26	Paper, paper products, printing & publishing	24.1	35.9	48.6	234	239	225
27	Chemical, petroleum & coal products	159.2	195.7	194.4	1,816	1,943	1,820
28	Non-metallic mineral products	22.2	17.5	20.8	204	159	192
29	Basic metal products	91.4	141.7	152.4	948	1,034	1,014
31	Fabricated metal products	26.1	27.9	30.0	383	349	352
32	Transport equipment	162.3	158.0	163.5	1,804	1,475	1,426
334	Photographic, professional & scientific equipment	37.5	41.9	50.9	513	490	516
335	Appliances & electrical equipment	236.9	278.5	314.5	3,450	3,678	3,590
336	Industrial machinery & equipment	56.1	60.0	60.1	799	695	682
34	Miscellaneous manufacturing	27.1	35.4	46.7	399	388	383
C	*Total manufacturing*	*959.6*	*1,100.3*	*1,224.9*	*11,715*	*11,622*	*11,421*
	Other industries						
F	Wholesale & retail trade	159.4	175.6	191.6	1,690	1,642	1,469
61–62	Finance	115.7	136.6	94.7	1,461	1,597	1,423
63	Property & business services	229.3	250.9	282.7	2,831	2,520	2,898
8461	Research & scientific institutions	78.2	63.6	63.1	747	645	681
	Other n.e.c.	156.8	221.5	193.8	1,584	1,784	1,718
16, D–L	*Total other industries*	*739.6*	*848.3*	*826.0*	*8,313*	*8,188*	*8,189*
Total all industries		**1,795.3**	**2,039.0**	**2,187.8**	**20,774**	**20,503**	**20,369**
Private sector contribution		1,646.1	1,835.4	1,973.3	19,177	18,636	18,315
Public sector contribution		149.2	203.6	214.5	1,597	1,867	2,054

Source: Research and Experimental Development, Business Enterprises, Australia (8104.0).

22.5 BUSINESS EXPENDITURE ON R&D AS A PERCENTAGE OF GDP — OECD COUNTRIES

Country	*Per cent*
Japan	2.15
Switzerland	2.14
Germany	2.02
United States	1.90
Sweden	1.61
United Kingdom	1.36
Finland	1.17
Denmark	0.85
Italy	0.80
Canada	0.77
Ireland	0.65
Australia	**0.57**
Spain	0.49

Source: Research and Experimental Development, Business Enterprises, Australia (8104.0).

22.6 GOVERNMENT EXPENDITURE ON R&D AS A PERCENTAGE OF GDP — OECD COUNTRIES

Country	*Per cent*
France	0.56
Iceland	0.51
Australia	**0.44**
Germany	0.37
New Zealand	0.37
Finland	0.35
United Kingdom	0.34
United States	0.34
Italy	0.32
Denmark	0.29
Canada	0.27
Japan	0.23
Ireland	0.15
Sweden	0.11

Source: Research and Experimental Development, General Government and Private Non-Profit Organisations, Australia (8109.0).

General government sector

Government expenditure on R&D carried out in Australia in 1990–91 was estimated to be $1,651 million at current prices, an increase of 23 per cent over the two years since 1988–89. At average 1984–85 prices expenditure in 1990–91 increased by nine per cent compared with 1988–89 (table 22.1).

The socio-economic objectives on which most government R&D expenditure was carried out were: agriculture ($403 million), defence ($233 million), environment ($226 million) and manufacturing ($178 million). Much the same pattern applies in terms of the human resources devoted to R&D. Labour costs continue to be the main component of R&D expenditure (57%) but, as a proportion of total R&D costs, have been decreasing for a number of years (table 22.7).

Government expenditure on R&D represents 0.44 per cent of GDP. This ratio is at a similar level to the early 1980s after a downward trend in the late 1980s, and is relatively high when compared with other OECD countries (table 22.6).

22.7 EXPENDITURE ON RESEARCH AND DEVELOPMENT BY GENERAL GOVERNMENT ORGANISATIONS, 1990–91
($'000)

	Type of expenditure				
Socio-economic objective	*Land and buildings*	*Other capital expend-iture*	*Labour costs*	*Other current expend-iture*	*Total*
Defence	11,855	25,082	137,503	58,706	233,145
Economic development					
Agriculture	18,975	23,638	249,968	110,145	402,726
Forestry	2,002	1,823	18,879	9,033	31,738
Fishing	1,635	2,250	25,135	14,321	43,341
Other agriculture, forestry and fishing	380	971	5,752	7,297	14,401
Mineral	1,188	5,989	51,229	42,444	100,849
Energy	1,017	3,915	18,025	9,322	32,279
Manufacturing	7,741	17,685	99,423	53,614	178,463
Construction	622	2,546	19,292	8,456	30,916
Transport	239	1,578	16,039	7,705	25,561
Information and communication services	1,785	4,290	19,634	13,099	38,809
Commercial services	151	302	2,272	1,350	4,074
Economy	1,581	1,545	12,535	4,682	20,342
Environmental aspects	2,961	7,208	70,608	35,882	116,659
Total economic development	*40,277*	*73,741*	*608,789*	*317,351*	*1,040,158*
National welfare					
Environment	3,212	7,646	57,451	40,932	109,241
Health	24,518	8,370	66,313	24,337	123,538
Education and training	499	810	7,285	3,756	12,349
Social and community development	1,781	6,098	22,497	15,966	46,343
Total national welfare	*30,010*	*22,924*	*153,546*	*84,991*	*291,472*
Advancement of knowledge					
Natural sciences, technologies and engineering	11,453	8,137	32,385	32,467	84,442
Humanities and social sciences	352	55	1,005	423	1,835
Total advancement of knowledge	*11,805*	*8,192*	*33,390*	*32,891*	*86,278*
Total	**93,947**	**129,939**	**933,227**	**493,939**	**1,651,052**

Source: Research and Experimental Development, General Government and Private Non-profit Organisations, Australia (8109.0).

22.8 HUMAN RESOURCES DEVOTED TO RESEARCH AND DEVELOPMENT BY GENERAL GOVERNMENT ORGANISATIONS, 1990–91
(person years)

	Type of employee			
Socio-economic objective	*Researchers*	*Technicians*	*Other supporting staff*	*Total*
Defence	1,230	804	949	2,984
Economic development				
Agriculture	1,948	1,913	1,372	5,233
Forestry	191	167	86	444
Fishing	205	230	130	565
Other agriculture, forestry and fishing	40	27	31	97
Mineral	491	264	241	996
Energy	164	87	65	316
Manufacturing	859	476	644	1,979
Construction	200	85	98	383
Transport	179	65	79	324
Information and communication services	243	52	79	374
Commercial services	29	7	9	46
Economy	172	54	44	270
Environmental aspects	694	409	318	1,420
Total economic development	*5,415*	*3,835*	*3,197*	*12,447*
National welfare				
Environment	520	340	307	1,167
Health	1,099	606	189	1,894
Education and training	109	20	20	149
Social and community development	263	88	89	441
Total national welfare	*1,991*	*1,055*	*606*	*3,652*
Advancement of knowledge				
Natural sciences, technologies and engineering	311	178	89	578
Humanities and social sciences	17	3	1	21
Total advancement of knowledge	*328*	*180*	*90*	*599*
Total	**8,965**	**5,874**	**4,842**	**19,681**

Source: Research and Experimental Development, General Government and Private Non-profit Organisations, Australia (8109.0).

Higher education sector

The estimate of expenditure on R&D carried out in Australia by the higher education sector in 1990 ($1,333 million) increased by 24 per cent over the two years from 1988. At average 1984–85 prices expenditure increased by 13 per cent over the same period (table 22.1).

Table 22.9 shows that the socio-economic objectives on which most higher education expenditure was carried out in 1990 were natural sciences, technologies and engineering ($343 million), health ($251 million) and humanities and social sciences ($225 million). Slightly more human resources were devoted to humanities than health. These three objectives accounted for 61 per cent of expenditure.

All categories of expenditure increased as a percentage of total expenditure since 1988 except labour costs which declined from 71 per cent in 1986, 69 per cent in 1988 to 62 per cent in 1990.

22.9 EXPENDITURE ON RESEARCH AND DEVELOPMENT BY HIGHER EDUCATION ORGANISATIONS, 1990
($ million)

	Type of expenditure				
Socio-economic objective	*Land and buildings*	*Other capital expend-iture*	*Labour costs*	*Other current expend-iture*	*Total*
Defence	—	0.2	1.3	0.4	1.9
Economic development					
Agriculture	2.4	6.0	40.9	17.1	66.5
Forestry	0.2	0.4	2.9	1.0	4.6
Fishing	1.1	0.5	3.4	1.8	6.8
Other agriculture, forestry and fishing	—	0.4	2.6	0.9	4.0
Mineral	1.2	2.7	16.4	7.2	27.5
Energy	0.5	2.1	8.9	3.7	15.2
Manufacturing	2.8	10.6	43.5	16.7	73.4
Construction	0.5	1.9	11.3	3.6	17.3
Transport	0.1	0.4	1.9	0.7	3.2
Information and communication services	1.5	3.7	16.6	4.7	26.4
Commercial services	0.9	0.9	6.0	2.2	10.0
Economy	5.0	3.9	36.5	12.8	58.3
Environmental aspects	1.6	1.9	13.6	4.9	22.1
Total economic development	*18.2*	*35.2*	*204.7*	*77.3*	*335.6*
National welfare					
Environment	3.7	6.7	35.0	15.2	60.6
Health	11.2	22.0	162.6	55.3	251.2
Education and training	6.9	5.1	47.9	14.8	74.9
Social and community development	3.4	3.0	25.3	8.3	40.0
Total national welfare	*25.3*	*36.8*	*270.8*	*93.6*	*426.7*
Advancement of knowledge					
Natural sciences, technologies and engineering	14.6	45.1	207.1	76.4	343.2
Humanities and social sciences	9.6	17.6	150.7	47.4	225.4
Total advancement of knowledge	*24.3*	*62.7*	*357.7*	*123.8*	*568.5*
Total	**67.9**	**135.0**	**834.6**	**295.1**	**1,332.8**

Source: Research and Experimental Development: Higher Education Organisations, Australia (8111.0).

22.10 HUMAN RESOURCES DEVOTED TO RESEARCH AND DEVELOPMENT BY HIGHER EDUCATION ORGANISATIONS, 1990
(person years)

	Type of employee			
Socio-economic objective	*Researchers*	*Technicians*	*Other supporting staff*	*Total*
Defence	31	6	10	47
Economic development				
Agriculture	1,038	330	109	1,477
Forestry	64	15	6	85
Fishing	82	30	29	140
Other agriculture, forestry and fishing	53	25	5	83
Mineral	441	113	41	595
Energy	247	70	36	354
Manufacturing	1,268	242	81	1,590
Construction	262	42	21	325
Transport	46	10	4	60
Information and communication services	488	75	35	597
Commercial services	142	42	25	210
Economy	712	59	101	871
Environmental aspects	373	69	33	474
Total economic development	*5,215*	*1,120*	*525*	*6,861*
National welfare				
Environment	983	220	118	1,321
Health	3,244	1,272	435	4,951
Education and training	1,310	69	125	1,504
Social and community development	658	61	71	790
Total national welfare	*6,194*	*1,622*	*749*	*8,566*
Advancement of knowledge				
National sciences, technologies and engineering	4,842	1,191	525	6,557
Humanities and social sciences	4,384	226	440	5,051
Total advancement of knowledge	*9,226*	*1,417*	*965*	*11,608*
Total	**20,666**	**4,166**	**2,249**	**27,081**

Source: Research and Experimental Development: Higher Education Organisations, Australia (8111.0).

Private non-profit sector

Private non-profit expenditure on R&D carried out in 1990–91 ($68 million) increased 32 per cent at current prices and 13 per cent at average 1984–85 prices over 1988–89 (table 22.1).

Health is the leading socio-economic objective in terms of R&D expenditure, accounting for 81 per cent or $55 million of total R&D expenditure in 1990–91 in the private non-profit sector. The same applies in terms of human resource usage. Labour costs continue to be the main component of R&D expenditure (58%) (tables 22.11 and 22.12).

22.11 EXPENDITURE ON RESEARCH AND DEVELOPMENT BY PRIVATE NON-PROFIT ORGANISATIONS, 1990–91 ($'000)

	Type of expenditure				
Socio-economic objective	*Land and buildings*	*Other capital expenditure*	*Labour costs*	*Other current expenditure*	*Total*
Defence	—	—	—	—	—
Economic development					
Agriculture	—	4	113	25	142
Forestry	—	—	—	—	—
Fishing	—	—	—	—	—
Other agriculture, forestry and fishing	—	—	11	—	11
Mineral	—	—	—	—	—
Energy	—	9	110	146	265
Manufacturing	—	343	726	239	1,308
Construction	—	2	62	137	201
Transport	—	2	49	131	181
Information and communication services	—	—	—	—	—
Commercial services	12	66	180	70	328
Economy	—	—	597	545	1,142
Environmental aspects	—	8	50	50	108
Total economic development	*12*	*435*	*1,897*	*1,343*	*3,687*
National welfare					
Environment	—	5	274	159	438
Health	2,563	5,234	32,498	15,056	55,351
Education and training	—	48	2,006	1,403	3,456
Social and community development	6	32	238	23	299
Total national welfare	*2,569*	*5,319*	*35,015*	*16,640*	*59,543*
Advancement of knowledge					
Natural sciences, technologies and engineering	113	351	2,893	1,655	5,012
Humanities and social sciences	—	7	92	4	102
Total advancement of knowledge	*113*	*358*	*2,985*	*1,659*	*5,114*
Total	**2,694**	**6,112**	**39,898**	**19,642**	**68,344**

Source: Research and Experimental Development, General Government and Private Non-profit Organisations, Australia (8109.0).

22.12 HUMAN RESOURCES DEVOTED TO RESEARCH AND DEVELOPMENT BY PRIVATE NON-PROFIT ORGANISATIONS, 1990–91
(person years)

	Type of employee			
Socio-economic objective	*Researchers*	*Technicians*	*Other supporting staff*	*Total*
Defence	—	—	—	—
Economic development				
Agriculture	2	—	—	2
Forestry	—	—	—	—
Fishing	—	—	—	—
Other agriculture, forestry and fishing	—	—	—	—
Mineral	—	—	—	—
Energy	2	—	—	2
Manufacturing	12	—	1	14
Construction	—	—	2	2
Transport	—	—	1	2
Information and communication services	—	—	—	—
Commercial services	3	1	2	5
Economy	9	3	5	17
Environmental aspects	1	—	—	1
Total economic development	*30*	*4*	*12*	*45*
National welfare				
Environment	5	1	1	6
Health	429	301	147	877
Education and training	26	4	10	39
Social and community development	5	1	1	6
Total national welfare	*464*	*307*	*158*	*929*
Advancement of knowledge				
Natural sciences, technologies and engineering	35	31	6	72
Humanities and social sciences	2	—	—	2
Total advancement of knowledge	*36*	*31*	*7*	*74*
Total	**530**	**342**	**177**	**1,049**

Source: Research and Experimental Development, General Government and Private Non-profit Organisations, Australia (8109.0).

USE OF ADVANCED TECHNOLOGIES IN THE MANUFACTURING AND MINING INDUSTRIES

The ABS has undertaken Surveys of Advanced Technologies in the manufacturing industry as at 30 June 1988 and 31 December 1991, and in the mining industry as at 30 June 1991. These surveys collected information on the current and planned technological status. In particular, information was collected on the current and future use of selected technologies, on management techniques and on technology related issues such as staff resources. Some of the main findings from the surveys are outlined below.

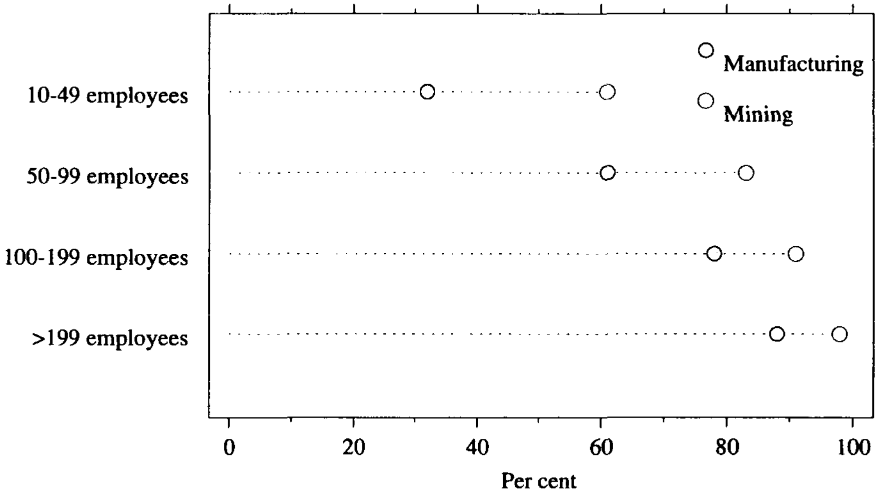
Of some 14,200 manufacturing establishments with 10 or more employees at 31 December 1991, 41 per cent had acquired at least one of the surveyed advanced manufacturing technologies. Corresponding figures from 1988 were 16,000 establishments of which 33 per cent were using advanced technology. In contrast, of the 486 mining establishments with 10 or more employees at 30 June 1991, 75 per cent had acquired one or more surveyed technologies.

The most common advanced manufacturing technologies were computer aided design and/or engineering followed by stand-alone numerically controlled machines and programmable logic controllers with 18 per cent and 17 per cent of establishments having each technology, respectively. The most common mining technologies were non-core drilling followed by rehabilitation design with 52 per cent and 50 per cent of establishments having each technology, respectively.

In the manufacturing sector the Other machinery and equipment industry (ASIC subdivision 33) continued to have the highest proportion (64%) of establishments having one or more technologies. In the mining sector the coal industry has the highest proportion (95% of the 88 establishments) having at least one of the advanced mining technologies.

These surveys show a strong relationship between the employment size of an establishment and the acquisition of advanced technologies. Larger establishments were more likely to be using advanced technologies.

22.13 USE OF TECHNOLOGY IN MANUFACTURING AND MINING BY EMPLOYMENT SIZE, 1991



Source: Manufacturing Technology Statistics, Australia (8123.0) and Mining Technology Statistics, Australia (8413.0).

More than half of manufacturing establishments with advanced technologies acquired them primarily from overseas sources. This is in contrast to mining technologies where most were acquired primarily from Australian sources.

Manufacturers continue to have difficulty in obtaining staff skilled in the normal operation or maintenance of advanced technologies (30% reported difficulties in 1991, down slightly from 35% in 1988). In contrast, 81 per cent of mining establishments with advanced technologies reported no difficulty getting staff skilled in the normal operation, maintenance or programming associated with the surveyed technologies.

Further information on the use of advanced technology in the manufacturing industry is contained in the chapter Manufacturing, Retail and Service Industries.

BIBLIOGRAPHY

ABS Publications

Manufacturing Technology Statistics, Australia (8123.0)

Mining Technology Statistics, Australia (8413.0)

Research and Experimental Development: All Sector Summary, Australia (8112.0)

Research and Experimental Development, Business Enterprises, Australia (8104.0)

Research and Experimental Development, Business Enterprises (Inter Year Survey), Australia (8114.0)

Research and Experimental Development, General Government and Private Non-Profit Organisations, Australia (8109.0)

Research and Experimental Development: Higher Education Organisations, Australia (8111.0)

Other Publications

DEPARTMENT OF EMPLOYMENT, EDUCATION AND TRAINING. Selected Higher Education Statistics. Australia, 1988

DEPARTMENT OF INDUSTRY, TECHNOLOGY AND COMMERCE. Australian Science and Innovation Resources Brief, 1992

DEPARTMENT OF INDUSTRY, TECHNOLOGY AND COMMERCE. Measures of Science and Innovation, Australian Science and Technology Indicators Report, 1987. Canberra

DEPARTMENT OF THE PRIME MINISTER AND CABINET. CRC Compendium, Cooperative Research Centres Program. Australia, 1993

OECD. Main Science and Technology Indicators, 1992

BIBLIOGRAPHY — *continued*

Additional information

Additional information on topics presented in this chapter may be found in the annual reports of the organisations mentioned, particularly the Department of Industry, Science and Technology, the CSIRO, and in the annual Science and Technology Statements. Statistical information on R&D for the years 1968–69, 1973–74 and 1976–77 may be found in the reports on Project SCORE published by the (then) Department of Science. Statistical information on R&D relating to 1978–79, 1981–82, and 1984–85 to 1991–92 may be obtained from the Australian Bureau of Statistics. Further statistical information on higher education is obtainable from the Department of Employment, Education and Training.

The Department of Industry, Technology and Regional Development's *Australian Science and Innovation Resources Brief 1992*, published in 1992, uses science and technology indicators to give a good overview and analysis of science and technology information in Australia. It presents information on R&D effort and expenditure; science and technology work force; science and technology information resources; scientific equipment and facilities; patent activity; technology training; financial support for technological development; and transfer of technical knowledge.

Chapter Twenty-three

Financial Institutions

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FINANCIAL SECTOR

This chapter provides information about Australia's financial sector, the institutions that comprise it and their role as financial 'intermediaries'. The financial sector comprises institutions engaged in the acquisition of financial assets and the incurring of liabilities, for example, borrowing and lending, providing superannuation, supplying all types of insurance cover, leasing, and investing in financial assets. These financial institutions are for the most part incorporated businesses owned by the private sector, but public sector institutions (for example, Reserve Bank of Australia) and large unincorporated enterprises (for example, unit trusts, superannuation funds) are also included, provided they operate in the capital market.

For national accounting purposes financial institutions are grouped into *Deposit Taking Institutions*, *Life Offices and Superannuation Funds*, and *Other Financial Institutions*. Deposit Taking Institutions are those institutions which are included in the Reserve Bank of Australia's 'broad money' measure and include the Reserve Bank, banks, building societies, credit cooperatives, authorised money market dealers, money market corporations, pastoral finance companies, finance companies, general financiers and cash management trusts. Life Offices and Superannuation Funds cover the statutory funds of life offices, separately constituted superannuation funds, approved deposit funds, friendly societies and long-service leave boards. Other Financial Institutions cover health, export and general insurance companies; common funds; mortgage, fixed interest and equity unit trusts; issuers of asset-backed securities; economic development corporations; cooperative housing societies; and credit union leagues.

The following table shows the relative size of these groupings of financial institutions in terms of value of total assets. This table has been compiled on a consolidated basis, that is, financial claims between institutions in the same grouping have been eliminated. The total is also consolidated, that is, financial claims between the groupings have been eliminated. For this reason, and because there are a number of less significant adjustments made for national accounting purposes, the statistics in the summary table will differ from those presented later in this chapter and published elsewhere.

23.1 ASSESTS OF FINANCIAL INSTITUTIONS
($ billion)

	Deposit institutions					
Year ended 30 June	*Reserve Bank*	*Banks*	*Other*	*Life and superannuation funds*	*Other financial institutions*	*Consolidated total*
1989	24.2	240.1	135.1	143.4	70.6	545.6
1990	25.3	269.0	140.3	161.9	79.7	596.6
1991	29.4	298.9	133.2	174.5	92.2	636.7
1992	32.1	310.3	127.2	196.9	101.3	674.3
1993	37.4	331.7	117.0	211.0	101.6	706.8

Source: Australian National Accounts: Financial Accounts (5232.0).

These institutions intermediate in a variety of ways. (Financial 'intermediation' is the process whereby the nation's savings, or the savings of overseas investors, are directed to individuals, companies, governments and others that require funds to produce or acquire goods and/or services, or to invest in capital equipment. Financial 'intermediation' is conducted in the capital market. Savings that are not directly invested in capital equipment find their way to the capital markets through the stock market or financial intermediaries.) Intermediation takes place mainly through accepting deposits, making loans or managing the funds of their customers. Intermediation is conducted using financial assets which are either non-marketable (for example, deposits, loans) or marketable (for example, bills of exchange, promissory notes) which are traded on secondary markets. The type of intermediation used by a financial institution is usually governed by the credit worthiness of the borrower or the financial knowledge and resources available to the lender.

In the early stages of development, Australian financial institutions tended to specialise in intermediation for particular types of customers or types of finance (for example, housing finance for home buyers; seasonal finance for farmers). However, with deregulation of the financial markets in the 1980s most institutions have increased their range of products and services so that both savers and borrowers have a wide choice of markets in which to invest or borrow funds, be they domestic or international markets.

BANKS

In Australia the regulation of banks is provided for under both Commonwealth and State legislation. Banks are the largest deposit taking institutions in Australia and each bank is authorised to operate by this legislation.

Commonwealth legislation

The major acts of Federal Parliament relating to the management and operations of banks in Australia are as follows:

- *The Banking Act 1959,* which applies to all banks operating in Australia, except the so-called State banks owned by State governments and trading mainly in their own State. Originally the objectives of the Act were to provide a uniform legal framework for regulating the banking system; to safeguard depositors of the banks from loss; to provide for the coordination of banking policy under the direction of the Reserve Bank; to control the volume of credit in circulation and bank interest rates; and to provide the machinery for the control of foreign exchange. In recent years successive Federal Governments have sought to decrease the degree of regulation imposed on the financial sector and the banks in particular, such that controls on most bank interest rates and foreign exchange have been relaxed. Significant amendments were made to the Act in January *1990,* which formalised supervision requirements and restructured the banking industry (for example, by abolishing the distinction between trading and savings banks).
- *The Reserve Bank Act 1959* which establishes Australia's central bank, the Reserve Bank of Australia, provides for the management of the Bank, the administration of the *Banking Act 1959* and the management of Australian note issue. Prior to 1959 central banking business was the responsibility of the Commonwealth Bank.
- *The Commonwealth Banks Act 1959* which establishes and provides for the management of the Commonwealth Banking Corporation, Commonwealth Bank of Australia, Commonwealth Savings Bank of Australia and the Commonwealth Development Bank of Australia. Until 1991 when 30 per cent of its shares were sold to the general public, this group of banks was the only commercial banking group wholly owned and controlled by the Australian Government.

The general functions of the Reserve Bank are set out in section 10 of the Act, which states:

> 'It is the duty of the Board, within the limits of its powers, to ensure that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia and that the powers of the Bank under this Act, the Banking Act 1959, and regulations under that Act are exercised in such a manner as, in the opinion of the Board, will best contribute to
>
> (a) the stability of the currency of Australia;
> (b) the maintenance of full employment in Australia; and
> (c) the economic prosperity and welfare of the people of Australia.'

23.2 RESERVE BANK OF AUSTRALIA: LIABILITIES AND ASSETS
($ million)

LIABILITIES

30 June	Capital and reserve funds	Special reserve-IMF special drawing right	Australian notes on issue	Deposits by banks(a) Non-callable deposits/ Statutory Reserve Deposit accounts	Deposits by banks(a) Other	All other liabilities	Total
1991	248	238	14,621	2,541	24	10,457	28,129
1992	333	206	15,243	2,608	16	12,553	30,959
1993	533	119	16,266	2,923	13	16,558	36,412

ASSETS

30 June	Gold and foreign exchange(b)	Commonwealth government securities(c)	Loans, advances and bills discounted	All other assets	Total
1991	24,308	2,960	89	772	28,129
1992	21,121	8,839	87	912	30,959
1993	19,844	15,796	94	678	36,412

(a) The Statutory Reserve Deposit ratio was set at zero on 27 September 1988 and the balances transferred to non-callable deposit accounts. Further details are provided in the Reserve Bank press release of 23 September 1988 which was reprinted in the October 1988 *Reserve Bank Bulletin*. (b) Includes currency at short call and International Monetary Fund drawing rights. (c) Includes Treasury bills and Treasury notes.
Source: Reserve Bank of Australia.

State legislation

In some States there is also legislation for the incorporation of State government bodies which operate as banks. These banks operate in New South Wales, South Australia and Western Australia and are the State Bank of New South Wales Limited (incorporated in 1990), the State Bank of South Australia and the Rural and Industries Bank of Western Australia Ltd (incorporated in 1991).

Commercial banks

Commercial banking in Australia is conducted by 39 banks, including the development banks and 18 foreign owned banks. Of these, Australia and New Zealand Banking Group, National Australia Bank, Westpac Banking Corporation and the Commonwealth Bank of Australia account for over half the total assets of all banks. These banks provide widespread banking services and an extensive retail branch network throughout Australia. The remaining banks, all privately-owned except for three State banks, provide similar banking services through limited branch networks. As well, there are 'development banks' which are special purpose banks set up to finance specific sectors of the economy.

At 30 June 1993, banks operated 7,064 branches and 6,288 agencies. Of the total branches, 4,158 were located in metropolitan areas. Banking facilities were also available at 2,563 metropolitan agencies throughout Australia.

23.3 BANKS: LIABILITIES AND ASSETS
($ million)

	1991	1992	June 1993
LIABILITIES			
Deposits repayable in Australia			
Residents	189,181	197,090	216,973
Non-residents	5,560	6,034	5,546
Total	*194,741*	*203,124*	*222,519*
Other borrowings			
Banks(a)	11,857	12,420	8,818
Other	12,806	14,446	16,358
Bill acceptance liabilities	55,071	49,372	49,531
All other $A liabilities	12,701	14,524	11,054
Total resident $A liabilities	272,188	276,462	290,291
Total non-resident $A liabilities	14,988	17,424	17,990
Total $A liabilities	*287,176*	*293,886*	*308,280*
Foreign currency liabilities	33,615	37,909	43,381
Total liabilities(b)	**320,791**	**331,795**	**351,661**
ASSETS			
Coin, Australian notes and cash with Reserve Bank	1,244	1,283	1,356
Non-callable deposits with Reserve Bank	2,541	2,608	2,923
Public sector securities	23,437	24,975	25,484
Loans, advances and bills held	226,757	238,604	255,386
Bills receivable	53,573	48,474	48,659
Premises	6,657	6,527	5,967
All other $A assets	22,465	25,076	25,535
Total resident $A assets	335,469	345,164	362,213
Total non-resident $A assets	1,203	2,382	3,097
Total $A assets	*336,672*	*347,546*	*365,310*
Foreign currency assets	17,062	14,362	17,538
Total assets	**353,733**	**361,908**	**382,848**

(a) Includes issues of term subordinated debt, loan capital and similar instruments. (b) Excludes shareholders' funds.
Source: Reserve Bank of Australia Bulletin.

NON-BANK FINANCIAL INSTITUTIONS

In addition to banks, there are a number of other categories of financial institution such as building societies, credit cooperatives and money market corporations which play an important part in financial activities in Australia. Like the banks, regulation of these institutions is provided for by both Commonwealth and State legislation.

Commonwealth legislation

Part of the regulatory framework is provided by the *Financial Corporations Act 1974* under which non-bank financial institutions (NBFIs) with assets in excess of one million dollars are registered. Under the Act information and statistics on NBFI operations are provided to the Reserve Bank of Australia.

State legislation

In each State and Territory there is legislation designed to regulate the activities and monitor the solvency position of particular types of financial institutions, such as permanent building societies, credit cooperatives and cooperative housing societies, which operate on a cooperative basis and lend predominantly to members or consumers. In July 1992 the Australian Financial Institutions Commission was established to coordinate standards for the prudential supervision of building societies and credit unions. Responsibility for day to day supervision of these financial institutions remains with individual State Supervisory

Authorities replacing the State Registrars which operated under the previous legislation.

The following table contains unconsolidated summary data on the assets and liabilities of each category of financial corporation covered by the *Financial Corporations Act 1974*, plus cooperative housing societies which are covered only by State legislation. It is followed by an outline of the definitions, assets, liabilities, income and expenditure of each category.

23.4 FINANCIAL CORPORATIONS: ASSETS AND LIABILITIES(a), 1992–93
($ million)

LIABILITIES				
Category	*Share capital and reserves*	*Borrowings liabilities*	*Other liabilities*	*Total*
Permanent building societies	837.4	10,980.7	346.5	12,164.6
Cooperative housing societies	41.8	1,989.3	13.2	2,044.4
Credit cooperatives	978.9	10,111.5	201.5	11,291.8
Authorised money market dealers	118.9	5,348.8	152.2	5,619.9
Money market corporations	1,707.1	39,887.3	2,659.2	44,253.7
Finance companies	3,290.0	25,353.8	1,427.3	30,071.0
General financiers	596.7	7,586.8	503.8	8,687.3
Total	**7,570.8**	**101,258.2**	**5,303.7**	**114,132.7**

ASSETS					
Category	*Amount owing on loans*	*Cash placements and deposits*	*Bills, bonds and other securities*	*Other assets*	*Total*
Permanent building societies	9,567.1	858.4	1,285.0	454.0	12,164.6
Cooperative housing societies	2,001.2	38.0	0.6	4.6	2,044.4
Credit cooperatives	8,455.6	1,814.0	434.8	587.4	11,291.8
Authorised money market dealers	9.6	164.1	5,425.2	20.9	5,619.9
Money market corporations	24,604.8	4,718.8	10,597.8	4,332.3	44,253.7
Finance companies	26,886.2	801.2	1,226.8	1,156.9	30,071.0
General financiers	6,763.0	319.1	634.2	971.0	8,687.3
Total	**78,287.5**	**8,713.6**	**19,604.4**	**7,527.1**	**114,132.7**

(a) At the balance date of corporations within the year shown.
Source: See the tables which follow for each category.

Permanent building societies

A permanent building society is an organisation that is registered under relevant State or Territory legislation. Permanent building societies as such are distinguished from terminating building societies in that their rules do not set any fixed date, certain event or result following which they are to terminate.

The societies are authorised to accept money on deposit and operate on a cooperative basis by borrowing predominantly from members and providing finance to members, principally in the form of housing loans.

Information relating to the housing finance operations of permanent building societies is provided in the chapter, Construction and Housing.

23.5 PERMANENT BUILDING SOCIETIES: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a)
($ million)

	1990–91	*1991–92*	*(b)1992–93*
Liabilities			
Share capital	5,587.1	4,445.2	205.6
Reserves	518.1	452.6	631.8
Deposits	13,821.2	15,273.0	10,648.6
Loans	1,699.8	1,859.8	332.1
Other liabilities	539.3	382.2	346.5
Total liabilities	**22,165.5**	**22,412.8**	**12,164.6**
Assets			
Amount owing on loans	16,569.8	17,209.9	9,567.1
Cash on hand	89.1	117.7	59.9
Deposits with			
Banks	948.4	985.7	605.0
Other	281.3	162.6	193.5
Bills, bonds, etc.	3,382.5	3,115.2	1,285.0
Physical assets	499.9	446.9	285.5
Other assets	394.5	374.8	168.5
Total assets	**22,165.5**	**22,412.8**	**12,164.6**
Expenditure			
Interest on			
Shares	566.4	339.7	552.4
Deposits	1,450.2	1,151.8	
Interest on loans	270.4	175.6	29.2
Wages and salaries	231.4	232.3	156.0
Administrative expenses	207.2	190.8	123.3
Other expenditure	422.1	244.5	143.1
Total expenditure	**3,147.7**	**2,334.7**	**1,004.0**
Income			
Interest from			
Loans	2,412.7	1,935.5	886.6
Deposits	145.9	109.2	141.3
Income from bills, bonds, etc.	396.7	327.3	
Other income	133.6	164.2	103.7
Total income	**3,088.9**	**2,536.2**	**1,131.7**

(a) At the balance dates of societies within the financial year shown. (b) The comparability of 1992–93 data with earlier years has been affected by the change in status of two building societies which have become banks.

Source: For 1990–91 and 1991–92, unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0); for 1992–93, the Australian Financial Institutions Commission.

Cooperative housing societies

A cooperative housing society is defined as an organisation registered under the relevant State or Territory legislation. Cooperative housing societies are not authorised to accept money on deposit and are only allowed to raise money by way of loans. They can only provide finance to members in the form of housing loans.

23.6 COOPERATIVE HOUSING SOCIETIES: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a)
($ million)

	1990–91	*1991–92*	*1992–93*
Liabilities			
Share capital and reserves	42.8	49.1	41.8
Borrowings	2,625.4	2,478.5	1,989.3
Other liabilities	16.9	16.2	13.2
Total liabilities	**2,685.1**	**2,543.8**	**2,044.4**
Assets			
Loan outstanding	2,600.3	2,480.0	2,001.2
Placements and deposits	77.8	56.3	38.0
Physical assets	0.6	0.9	0.6
Other assets	6.4	6.5	4.6
Total assets	**2,685.1**	**2,543.8**	**2,044.4**
Expenditure			
Interest paid	324.8	288.1	199.2
Administrative expenses	30.9	31.4	30.6
Other expenditure	12.5	12.8	14.9
Total expenditure	**368.2**	**332.3**	**244.8**
Income			
Interest on loans	334.0	297.5	204.9
Other income	42.2	43.0	40.1
Total income	**376.2**	**340.5**	**245.0**

(a) At the balance dates of cooperative housing societies within the financial year shown.
Source: Unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0).

Credit cooperatives

A credit cooperative (or credit union) is defined as an organisation registered under relevant State or Territory legislation that operates on a cooperative basis by predominantly borrowing from and providing finance to its own members.

23.7 CREDIT COOPERATIVES: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a)
($ million)

	1990–91	*1991–92*	*1992–93*
Liabilities			
Share capital	26.8	27.0	4.6
Reserves	662.3	797.0	974.3
Deposits	7,943.8	8,699.0	10,017.4
Loans	107.5	105.0	94.1
Other liabilities	95.1	110.0	201.5
Total liabilities	**8,835.5**	**9,738.0**	**11,291.8**
Assets			
Amount owing on loans(b)	6,945.4	7,522.0	8,455.6
Cash on hand	51.3	60.0	68.6
Deposits with			
Banks	237.3	263.0	198.5
Other	905.2	1,123.0	1,546.9
Bills, bonds, etc.	317.1	358.0	434.8
Physical assets	255.1	132.0	310.5
Other assets	124.1	280.0	276.9
Total assets	**8,835.5**	**9,738.0**	**11,291.8**
Expenditure			
Interest on			
Deposits	834.9	670.0	468.7
Loans	19.0	8.0	5.7
Wages and salaries	187.7	184.0	213.9
Administrative expenses	165.6	171.0	177.2
Other expenditure	201.6	228.0	169.8
Total expenditure	**1,408.8**	**1,261.0**	**1,035.3**
Income			
Interest from			
Loans	1,262.7	1,145.0	956.1
Deposits	132.8	130.0	111.0
Income from bills, bonds, etc.	35.8	30.0	
Other income	69.8	81.0	103.3
Total income	**1,501.1**	**1,386.0**	**1,170.4**

(a) At the balance of credit cooperatives within the financial year shown. (b) Net of unearned interest and allowance for doubtful debts.
Source: Unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0); for 1992–93, the Australian Financial Institutions Commission.

Authorised money market dealers

For some years prior to 1959, leading stockbrokers were actively engaged in operations which formed the basis of a short-term money market in Australia. The stockbrokers' operations involved the acceptance of short-term funds which were secured against government securities. These operations were severely limited by the lack of suitable short-term securities and by liquidity constraints. In February 1959, the Reserve Bank established the Official Short-Term Money Market by making available 'lender of last resort' facilities to selected dealers. In May 1989 this arrangement was changed to an 'end-of-day repurchase facility'. Dealers are expected to use this facility only after reasonable effort has been made to raise the funds in the market. The terms of the repurchase agreements set by the Bank usually are aimed at discouraging excessive use of the facility.

23.8 AUTHORISED MONEY MARKET DEALERS: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a)
($ million)

	1990–91	*1991–92*	*1992–93*
Liabilities			
Paid up capital	74.5	66.9	61.7
Reserves	23.3	23.3	28.4
Accumulated surplus (net)	20.5	28.8	28.8
Subordinated loans	—	—	—
Borrowings from residents			
Banks	2,526.7	2,449.9	3,868.9
Other financial institutions	61.8	278.0	528.1
Government and public authorities	80.4	778.3	666.0
Other	376.2	303.8	285.8
Borrowings from non-residents	0.3	0.3	—
Other liabilities	171.1	27.2	152.2
Total liabilities	**3,334.8**	**3,956.6**	**5,619.9**
Assets			
Amount owing on loans	0.1	14.1	9.6
Cash and bank deposits	398.5	115.6	158.2
Other placements and deposits	16.1	0.4	5.9
Bills, bonds and other securities	2,908.5	3,801.8	5,425.2
Other financial assets	11.0	24.3	20.7
Other assets	0.5	0.4	0.2
Total assets	**3,334.8**	**3,956.6**	**5,619.9**
Expenditure			
Interest on borrowings	642.5	508.0	383.7
Wages and salaries	2.0	1.6	1.8
Administrative expenses	23.9	14.4	27.3
Other expenditure	6.0	4.8	3.7
Total expenditure	**674.5**	**528.8**	**416.4**
Income			
Interest on loans	81.7	0.6	—
Income from placements and other deposits	160.6	55.2	6.7
Income from holdings of			
Government and public authority securities	287.4	306.8	271.7
Other securities	132.4	170.5	127.7
Other income	30.8	12.7	28.0
Total income	**692.9**	**545.7**	**434.1**

(a) At the balance dates of companies within the financial year shown. Included are only those corporations registered under the *Financial Corporations Act 1974* and categorised as authorised money market dealers during the reference periods.

Source: Unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0).

Authorised dealers are required by the Reserve Bank to accept loans overnight, at call or for fixed periods, in minimum amounts of $50,000 and invest these funds in Commonwealth government and other approved securities. They must at all times be willing traders in the buying and selling of approved securities; have a minimum capital (that is, paid-up capital, share premium reserves and retained earnings) level of $10 million; adhere to a gearing limit whereby the aggregate risk weighted assets cannot exceed 33 times shareholders' funds; consult regularly with the Reserve Bank on all money market matters; and furnish detailed information about their portfolios, operations, interest rates, balance sheets and profit and loss accounts.

Money market corporations

This category consists of registered corporations whose short-term borrowings are a substantial proportion of their total outstanding provision of finance which is mainly in the form of loans to authorised dealers in the short-term money market and other liquidity placements, business loans and investments in government, commercial and corporate paper.

23.9 MONEY MARKET CORPORATIONS: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a)
($ million)

	1990–91	*1991–92*	*1992–93*
Liabilities			
Paid up capital	2,539.0	2,682.7	3,515.6
Reserves	851.4	814.6	1,683.7
Accumulated surplus (net)	- 4,202.1	- 4,543.1	- 3,492.2
Subordinated loans	230.4	133.1	134.4
Borrowings from residents			
By issue of securities	2,759.3	2,448.3	2,401.3
Banks	8,565.5	8,536.0	7,341.7
Other financial institutions	3,156.8	3,318.4	2,662.4
Other	14,888.0	12,921.2	7,211.1
Borrowings from non-residents	16,757.0	17,884.5	20,136.4
Other liabilities	3,537.2	2,990.6	2,659.2
Total liabilities	**49,082.5**	**47,186.3**	**44,253.7**
Assets			
Amount owing on loans	26,428.9	25,583.1	22,942.4
Finance lease receivables	1,960.0	1,574.6	1,662.4
Cash and bank deposits	2,705.1	1,983.7	1,484.2
Other placements and deposits	4,526.4	4,259.1	3,234.6
Bills, bonds and other securities	10,124.6	9,863.3	10,597.8
Other financial assets	1,420.1	1,860.1	2,247.6
Other assets	1,917.4	2,062.5	2,084.7
Total assets	**49,082.5**	**47,186.3**	**44,253.7**
Expenditure			
Interest on borrowings	7,689.8	5,834.4	3,930.0
Wages and salaries	320.6	268.6	281.4
Administrative expenses	527.9	276.1	484.7
Other expenditure	3,667.7	1,421.5	1,631.5
Total expenditure	**12,206.0**	**7,800.6**	**6,327.6**
Income			
Interest on loans	3,945.9	3,391.7	2,153.7
Income from finance leasing	283.0	211.7	203.1
Income from placements and other deposits	1,657.7	1,194.0	795.3
Income from bills, bonds, etc.	1,828.3	1,193.7	994.7
Other income	1,450.9	1,306.6	1,657.1
Total income	**9,165.8**	**7,297.7**	**5,803.9**

(a) At the balance dates of companies within the financial year shown. Included are only those corporations registered under the *Financial Corporations Act 1974* and categorised as money market corporations during the reference periods.
Source: Unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0).

Money market corporations also include registered corporations providing short-term finance but which are themselves financed by related corporations with funds raised on a short-term basis, as well as corporations which borrow principally short term and lend predominantly to related money market corporations.

Finance companies

Finance companies are corporations which rely substantially on borrowing in financial markets (for example, by the issue of securities) in Australia and/or from abroad and whose provision of finance is predominantly in the form of business and commercial lending, instalment credit to finance retail sales by others and/or other loans to individuals.

23.10 FINANCE COMPANIES: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a)
($ million)

	1990–91	*1991–92*	*1992–93*
Liabilities			
Paid up capital	1,343.4	1,361.8	1,404.9
Reserves	758.5	1,129.2	1,999.7
Accumulated surplus (net)	992.5	566.7	- 114.6
Subordinated loans	70.3	209.4	212.3
Borrowings from residents			
By issue of securities	20,495.3	17,286.6	16,062.3
Banks	3,495.8	4,901.1	2,810.0
Other	4,041.3	2,926.8	3,813.5
Borrowings from non-residents	4,867.6	3,343.4	2,455.7
Other liabilities	1,966.4	1,235.8	1,427.3
Total liabilities	**38,031.0**	**32,960.7**	**30,071.0**
Assets			
Amount owing on loans	24,727.0	20,392.2	18,993.2
Finance lease receivables	10,530.3	9,720.2	7,893.0
Cash and bank deposits	290.7	381.8	325.9
Other placements and deposits	801.5	477.0	475.3
Bills, bonds and other securities	784.2	1,037.3	1,226.8
Other financial assets	467.4	511.4	764.4
Other assets	429.9	440.8	392.5
Total assets	**38,031.0**	**32,960.7**	**30,071.0**
Expenditure			
Interest on borrowings	4,797.9	3,725.2	2,684.3
Wages and salaries	370.8	375.5	277.9
Administrative expenses	476.6	521.5	520.9
Other expenditure	936.5	1,396.2	1,812.8
Total expenditure	**6,581.8**	**6,018.4**	**5,295.8**
Income			
Interest on loans	4,614.3	3,802.3	2,773.7
Income from finance leasing	1,333.9	1,343.4	1,048.0
Income from placements and deposits	132.7	107.5	73.6
Income from bills, bonds, etc.	328.5	49.3	76.0
Other income	404.0	449.3	391.4
Total income	**6,813.4**	**5,751.9**	**4,362.7**

(a) At the balance dates of companies within the financial year shown. Included are only those corporations registered under the *Financial Corporations Act 1974* and categorised as finance companies during the reference periods.
Source: Unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0).

General financiers

General financiers are corporations which lend predominantly for business and commercial purposes, provide instalment credit finance for retail sales of others, and/or provide other loans to individuals. They do not rely substantially on borrowings (such as the issue of securities) in financial markets in Australia and from abroad.

23.11 GENERAL FINANCIERS: ASSETS, LIABILITIES, INCOME AND EXPENDITURE(a) ($ million)

	1990–91	*1991–92*	*1992–93*
Liabilities			
Paid up capital	573.7	516.6	549.0
Reserves	99.0	404.8	116.0
Accumulated surplus (net)	2.5	-71.5	-68.3
Subordinated loans	289.5	212.4	184.0
Borrowings from residents			
By issue of securities	693.0	1,011.2	266.3
Banks	2,259.9	2,541.9	2,330.5
Other financial institutions	4,243.5	2,936.6	2,814.5
Other	1,550.6	731.9	479.8
Borrowings from non-residents	1,293.8	1,174.6	1,511.7
Other liabilities	563.3	440.0	503.8
Total liabilities	**11,568.8**	**9,898.5**	**8,687.3**
Assets			
Amount owing on loans	5,274.2	4,799.6	4,389.8
Finance lease receivables	2,883.4	2,483.1	2,373.2
Cash and bank deposits	558.9	505.4	164.9
Other placements and deposits	95.6	164.5	154.2
Bills, bonds and other securities	1,683.2	689.8	634.2
Other financial assets	297.5	267.3	201.0
Other assets	776.0	988.8	770.0
Total assets	**11,568.8**	**9,898.5**	**8,687.3**
Expenditure			
Interest on borrowings	1,555.8	1,194.5	831.0
Wages and salaries	77.5	63.6	58.8
Administrative expenses	171.2	155.8	184.2
Other expenditure	402.7	405.0	329.7
Total expenditure	**2,207.2**	**1,818.9**	**1,403.6**
Income			
Interest on loans	921.2	724.6	667.4
Income from finance leasing	615.6	569.3	530.8
Income from placements and deposits	108.7	46.4	9.6
Income from bills, bonds, etc.	271.7	174.3	58.9
Other income	322.7	312.2	233.9
Total income	**2,239.9**	**1,826.7**	**1,500.6**

(a) At the balance dates of companies within the financial year shown. Included are only those corporations registered under the *Financial Corporations Act 1974* and categorised as general financiers during the reference periods.

Source: Unpublished ABS data available under the title Annual Statistics on Financial Institutions (5661.0).

LIFE INSURANCE

The major acts of Parliament relating to the management and operations of life insurance offices are as follows:

- *The Insurance and Superannuation Commissioner Act 1987* which created the statutory office of Insurance and Superannuation Commissioner. The Act provides for the Commissioner to assume overall responsibility (subject to the Treasurer's direction) for the supervision of the insurance industry and for the occupational superannuation standards.
- *The Life Insurance Act 1945* (amended in 1987) which regulates life insurance business in Australia. This Act replaced all State legislation on the subject of life insurance except that relating to life insurance operations of State government insurance offices within the State concerned. It thereby provided uniform legislation for the whole of Australia. It provides for the Insurance and Superannuation Commissioner to exercise active supervision of the activities of life insurance companies, with a view to securing the greatest possible protection for policy holders; and to set up adequate machinery for dealing with any company that fails to maintain a required minimum standard of solvency.

Life insurance offices' major activity is to accumulate public savings to provide funding for life insurance and superannuation funds. They are large institutions, many with Australia-wide branch networks, which are active in both the money and share markets.

23.12 LIFE INSURANCE

	Insurance and endowment policies			
	Number of policies ('000)	*Sum insured ($ million)*	*Business issued by single premiums ($ million)*	*Annual premiums ($ million)*
ORDINARY AND INDUSTRIAL BUSINESS				
New policies issued				
1991	838	46,853	1,617.5	544.0
1992	714	41,259	1,494.7	469.6
1993	607	45,200	1,000.8	380.2
Policies discounted or reduced(a)				
1991	841	44,500	..	569.3
1992	837	38,998	..	597.6
1993	883	32,573	..	494.8
Policies existing at end of				
1991	6,610	197,650	..	2,592.1
1992	6,492	197,855	..	2,513.8
1993	6,213	210,718	..	2,396.7

For footnotes *see* end of table.

23.12 LIFE INSURANCE — *continued*

	Insurance and endowment policies			
	Number of policies ('000)	*Sum insured ($ million)*	*Business issued by single premiums ($ million)*	*Annual premiums ($ million)*
	SUPERANNUATION BUSINESS			
New policies issued				
1991	423	81,060	3,532.0	1,713.5
1992	375	72,587	4,073.3	1,529.3
1993	354	86,124	5,556.8	1,403.8
Policies discontinued or reduced(a)				
1991	204	51,043	..	1,303.0
1992	203	53,069	..	1,531.9
1993	198	57,503	..	1,512.8
Policies existing at end of				
1991	2,687	290,349	..	6,371.4
1992	2,922	304,079	..	6,349.4
1993	3,074	332,746	..	6,232.5

(a) Includes transfers.
Source: Insurance and Superannuation Commission, Life Insurance Group, June Quarterly Statistical Bulletin on Life Insurance.

A feature of life insurance offices in recent years has been the growth of superannuation business.

The statistics in table 23.12 relate to life insurance and superannuation business conducted through statutory funds of life companies with head offices in Australia and the Australian business of life companies with head offices overseas. Also included are the life business operations reported by four State Government Insurance Offices. Information contained in the table does not relate to uniform accounting periods but to the balance dates of organisations falling within the calendar year shown.

SUPERANNUATION FUNDS AND APPROVED DEPOSIT FUNDS

The major acts of Parliament relating to the management of Superannuation Funds and Approved Deposit Funds are the *Occupational Superannuation Standards Act 1987* (OSSA) and the *Insurance and Superannuation Commissioner Act 1987*. The latter Act provides for the statutory office of the Insurance and Superannuation Commissioner who is responsible for administering OSSA.

Superannuation funds are funds which have been constituted to provide retirement benefits for their members. They can be either employer sponsored (that is, with the employer paying some or all of the contributions on behalf of employees) or employee operated funds (that is, employees paying some or all of the contributions). Most superannuation arrangements involve both the employer and employee making contributions with the employer either contributing regularly to the fund or, as is the case with many public sector funds, when the benefit falls due. The contributions made regularly are used by fund managers to purchase investments and the resulting assets finance the payment of benefits to fund members.

Approved deposit funds were established in 1984 to enable employees who terminate their employment with a particular employer to preserve their superannuation benefits until retirement age.

23.13 SUPERANNUATION FUNDS AND APPROVED DEPOSIT FUNDS, ASSETS
($ million)

	June quarter		
	1991	*1992*	*1993*
Assets in Australia			
Financial assets			
Cash and deposits	7,950	8,593	6,704
Loan and placements	9,730	9,614	9,720
Short-term assets	9,619	12,667	14,225
Long-term assets	30,249	35,147	39,444
Shares	32,488	42,455	45,540
Unit and other	8,504	10,159	12,790
Non-financial assets			
Land and buildings	17,928	15,622	13,597
Other	1,680	1,402	1,409
Assets overseas	16,495	18,395	25,741
Total	**134,643**	**154,054**	**169,170**
Of which			
Superannuation funds	126,417	144,408	159,152
Approved deposit funds	8,226	9,646	10,018

Source: Assets of Superannuation Funds and Approved Deposit Funds (5656.0).

CASH MANAGEMENT TRUSTS

A cash management trust is a unit trust which is governed by a trust deed, is open to the public, generally confines its investments to financial securities available through the short-term money market and issues units that are redeemable by the trustee to the unit holder on demand.

23.14 CASH MANAGEMENT TRUSTS

June	*Number of trusts*	*Units in issue at end of period ($ million)*	*Weighted average net yield at end of period (% per annum)*	Assets ($ million): *Cash and deposits with banks*	*All other deposits and loans*	*Bills of exchange purchased and held*	*Promissory notes purchased and held*	*Other assets*	*Total*
1991	15	5,659.8	9.8	1,599.0	354.1	2,727.5	1,059.7	14.7	5,755.0
1992	18	5,286.1	5.9	1,246.2	290.8	2,197.9	1,433.3	175.7	5,343.9
1993	19	5,089.4	4.3	1,343.9	276.8	2,270.0	1,166.4	78.5	5,135.6

Source: Cash Management Trusts, Australia (5635.0).

PUBLIC UNIT TRUSTS

A public unit trust is defined as an arrangement (fund) which is governed by a trust deed between a management company and a trustee company; is open to the public within Australia for the purpose of investing the pooled funds of unit holders to yield returns in the form of income and/or capital gains; and allows unit holders to dispose of their units within a relatively short period of time. They are categorised as either property, equity, mortgage, trading, public security or gold trusts. They exclude cash management trusts, private trusts and trusts exempted from providing redemption facilities (for example, film and agricultural trusts).

Public unit trusts may be listed or unlisted unit trusts. A listed unit trust's units must be listed on Australian Stock Exchanges and the trust must adhere to listing requirements similar to those for companies.

23.15 PUBLIC UNIT TRUSTS

			Assets ($ million)					
June quarter	*Number of trusts*	*Units in issue at end of the period ($ million)*	*Cash and deposits*	*Shares*	*Property at the end of the quarter*	*Loan outstandings secured by mortgages on land and buildings*	*Other assets*	*Total*
			UNLISTED					
1991	368	13,823.1	1,080.8	3,773.1	5,471.1	1,379.8	3,638.2	15,343.0
1992	332	12,427.1	784.1	5,395.1	2,103.2	1,013.0	4,352.9	13,648.3
1993	319	14,715.4	862.2	7,172.9	1,513.2	1,225.5	6,170.5	16,944.3
			LISTED					
1991	39	7,230.4	343.7	417.1	6,264.4	90.3	3,319.7	10,435.2
1992	40	9,088.0	475.6	611.7	7,621.8	99.6	3,141.7	11,950.4
1993	38	9,326.4	426.5	586.9	8,016.7	168.9	2,253.1	11,452.2
			TOTAL					
1991	407	21,053.5	1,424.5	4,190.2	11,735.5	1,470.1	6,957.9	25,778.2
1992	372	21,515.1	1,259.7	6,006.8	9,725.0	1,112.6	7,494.7	25,598.8
1993	357	24,041.8	1,288.7	7,759.9	9,529.9	1,394.4	8,423.6	28,396.5

Source: Public Unit Trusts, Australia (5645.0).

COMMON FUNDS

Common funds are categorised as either cash funds, equity funds, mortgage funds, property funds or other funds (funds where the primary asset is other than those listed above, for example, interest bearing securities). Common funds are set up to enable trustee companies (the managers of common funds) to combine depositors' funds and other funds held in trust in an investment pool with the intention of investing in specific types of securities and/or assets.

23.16 COMMON FUNDS, ASSETS ($ million)

	June		
	1991	*1992(a)*	*1993*
Assets in Australia			
Financial assets			
Cash and deposits	1,128	527	552
Loans and placements	840	872	950
Short-term assets	4,055	2,081	1,817
Long-term assets	38	49	119
Equities	434	655	975
Other	39	7	48
Non-financial assets			
Land and buildings	174	143	105
Other	1	—	—
Assets overseas	25	39	7
Total assets	**6,734**	**4,373**	**4,573**

(a) Caution should be used when comparing June 1992 data with the previous year due to a significant change in the population of Common Funds.
Source: Common Funds, Assets and Liabilities, Australia (5657.0).

FRIENDLY SOCIETIES

When founded in 1840 friendly societies were formed on the basis of group interests such as craft or religion. They have since evolved to offer a full range of financial services to the public at large, including investment services. Friendly societies are registered under relevant State legislation and operate in all States.

Table 23.17 summarises the assets of the 28 largest friendly societies which represent approximately 95 per cent of the assets of all societies in Australia.

23.17 FRIENDLY SOCIETIES, ASSETS ($ million)

	June		
	1991	*1992*	*1993*
Financial assets			
Cash and deposits	2,494	1,937	1,636
Loans and placements	942	858	647
Short-term assets	1,992	2,914	3,488
Long-term assets	2,144	2,633	2,686
Equities	202	118	110
Other	170	123	107
Non-financial assets			
Land and buildings	311	333	315
Other	27	72	193
Total assets	**8,282**	**8,988**	**9,182**

Source: Friendly Societies, Assets and Liabilities, Australia (5660.0).

GENERAL INSURANCE COMPANIES

General insurance companies cover those institutions whose primary activity is the provision of insurance, except life and health insurance.

The major acts of Parliament relating to the management and operations of general insurers are as follows:

- The *Insurance and Superannuation Commission Act 1987*, which created the statutory office of Insurance and Superannuation Commissioner. The Act provides for the Commissioner to have overall responsibility (subject to the Treasurer's direction) for the supervision of the general insurance industry.
- *The Insurance Act 1973* which provides for the Commissioner to exercise active supervision with a view to ensuring the solvency of companies carrying on general insurance business, and therefore their ability to meet claims as they arise. The Act does not apply to State government insurance offices or to insurance business carried on by specified bodies such as registered medical benefits of hospital benefits organisations.

The statistics in table 23.18 relate to the operations of bodies corporate authorised to carry on insurance business under the *Insurance Act 1973* and government instrumentalities, that is, State government insurance offices and Commonwealth and State government instrumentalities in respect of their general insurance business.

The statistics employ the following definitions:

- Premiums comprise the full amount receivable in respect of direct insurance and reinsurance business written or renewed within Australia during the year. Premiums are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts differ from 'earned premium income' appropriate to the year.
- Claims comprise, for direct insurance and reinsurance business, payments made during the year. Salvage and other amounts recoverable, other than reinsurance recoveries, have been deducted.

The statistics do not relate to uniform accounting periods but to the financial years of the organisations which ended during the years shown.

23.18 GENERAL INSURANCE: PREMIUMS AND CLAIMS BY PRINCIPAL CLASS OF BUSINESS
($ million)

Class of business	*1989–90*	*1990–91*	*1991–92*
	PREMIUMS		
Fire(a)	914.9	874.2	957.9
House Owners' and House-holders'	1,039.3	1,094.2	1,347.0
Contractors' All Risks	93.4	70.2	70.4
Marine and Aviation	286.6	278.0	263.6
Motor Vehicle Comprehensive	2,304.3	2,392.4	2,553.0
Compulsory Third Party (Motor Vehicle)	1,031.5	1,049.2	878.0
Employers Liability(b)	304.5	262.7	221.0
Public Liability(c)	635.0	637.7	663.5
All other	984.7	902.2	994.3
Total	**7,594.2**	**7,560.8**	**7,948.7**
	CLAIMS		
Fire(a)	533.5	795.2	733.9
House Owners' and House-holders'	593.3	906.3	891.9
Contractors' All Risks	57.3	50.3	44.3
Marine and Aviation	171.8	196.2	176.6
Motor Vehicle Comprehensive	1,826.3	2,084.1	2,143.4
Compulsory Third Party (Motor Vehicle)	116.5	137.1	204.9
Employers Liability(b)	747.8	508.9	527.7
Public Liability(c)	217.6	254.3	357.1
All other	431.3	519.1	548.9
Total	**4,695.4**	**5,451.5**	**5,628.7**

(a) Includes sprinkler leakage, loss of profits, and crop and hailstone insurance. (b) Excludes workers' compensation insurance in the coal mining industry in New South Wales. (c) Includes product liability and professional indemnity insurance.
Source: Insurance and Superannuation Commission, General Insurance Group, Selected Statistics on the General Insurance Industry.

STOCK MARKET

The Australian stock market is where equity (shares), units in listed trusts, options, government bonds and other fixed-interest securities are traded. It is operated on a national basis by the Australian Stock Exchange Ltd (ASX) which is responsible for the day-to-day running and surveillance of stock market trading.

The share market comprises two different markets — the primary market where new issues and additional issues are raised, and the secondary market where previously issued shares are traded. The companies listed on the exchange are classified according to size and type of activity, for example, large companies (over $300,000 issued capital) are listed on the Main Board while newer or smaller companies (over $200,000 issued capital) are listed on the Second Board. Companies are classified according to their major type of activity and the ASX publishes various indexes (for example, All Ordinaries, All Industrials, All

Resources), which represent the price performance of the shares in particular types of categories.

Trading of shares on the stock market is generally conducted through stockbrokers who act as agents for buyers and sellers of shares. In addition they provide advisory and underwriting services and in some cases buy and sell shares on their own account.

The stock market is controlled and regulated using a cooperative system drawn up between the Commonwealth Government and State Governments, which allows for a uniform companies' and securities' law. The major legislation involved are the *Trade Practices Act 1974*, the *Companies Act 1981*, the *Securities Industry Act 1980*, and the *Australian Securities Commission Act 1989*. The Australian Securities Commission is responsible for the administration of company law and the regulation of the securities industry. It oversees the operation of stock exchanges to prevent fraudulent practices such as insider trading. The Trade Practices Commission administers trade practices legislation on behalf of both private enterprise and consumers, authorises certain restrictive trade practices, deals with consumer protection and provides guidance on the operation of Trade Practices legislation. The ASX oversees market trading and sets uniform standards in regards to business rules and listing requirements.

23.19 AUSTRALIAN STOCK MARKET INDEXES
(Base: 31 December 1979 = 500)

	1990–91	*1991–92*	*1992–93*
All ordinaries			
Index(a)	1,504.9	1,652.7	1,722.6
High	1,624.0	1,696.3	1,760.4
Low	1,240.5	1,502.1	1,357.2
All industrials			
Index(a)	2,330.7	2,550.0	2,665.7
High	2,522.8	2,650.0	2,701.2
Low	1,817.5	2,288.7	2,170.1
All resources			
Index(a)	873.5	965.7	1,002.7
High	968.0	976.4	1,043.0
Low	730.0	870.6	734.9

(a) Share prices on joint trading floors; average of daily figures for the last month of the year.
Source: Australian Stock Exchange, Monthly Index Analysis.

Table 23.20 shows the value of Australian shares and units in trusts on issue classified by sector of holder at market value or, for some of the public sector, at book value. The estimates are partially consolidated, with intra-group claims (that is, shares issued by a company in a group and held by another member of the same group) being eliminated from the aggregates. Definitions of the sectors and subsectors shown in this table can be found in *Australian National Accounts, Financial Accounts* (5232.0).

Total equities and units in trusts represent the value level of outstanding equities issued by residents. This total is dissected into the sectors which issue these instruments (in italics), followed by the sectors that hold the equities as assets.

23.20 THE EQUITY MARKET(a)
($ billion)

	Amounts outstanding at end of June quarter		
	1991	*1992*	*1993*
Total equities & units in trusts	*318.1*	*342.1*	*371.9*
Issued by			
Commonwealth public trading enterprises(b) & held by	*20.2*	*19.6*	*21.3*
Private corporate trading enterprises	—	—	0.6
Commonwealth general government	20.2	19.6	20.7
State & local public trading enterprises(c) & held by	*7.9*	*8.2*	*8.4*
State & local public trading enterprises	0.1	0.1	0.1
Private corporate trading enterprises	—	—	0.3
State & local general government	7.7	8.1	8.0
Private corporate trading enterprises(d) & held by	*211.0*	*232.9*	*254.9*
Commonwealth public trading enterprises	0.1	0.3	0.3
Private corporate trading enterprises(e)	25.4	24.3	20.6
Banks	3.0	3.0	4.0
Non-bank deposit taking institutions	2.5	2.5	2.2
Life offices & superannuation funds	41.4	49.1	51.9
Other financial institutions	9.9	12.2	14.2
Households & unincorporated businesses	41.3	49.8	58.4
Rest of world	87.3	91.6	103.4
Banks(c) & held by	*41.2*	*45.7*	*45.7*
Banks(d)	5.5	4.4	4.2
Life offices & superannuation funds	5.1	6.1	6.6
Other financial institutions	1.3	1.5	1.4
Commonwealth general government	6.1	6.3	5.5
State & local general government(c)	4.4	4.9	3.8
Households & unincorporated businesses	11.6	14.8	16.9
Rest of world	7.1	7.7	7.2
Non-bank deposit taking institutions(d) & held by	*11.5*	*12.4*	*14.5*
Private corporate trading enterprises	0.4	0.3	0.8
Banks	5.9	4.7	4.4
Life offices & superannuation funds	0.6	0.8	0.9
Other financial institutions	0.6	0.6	1.6
Households & unincorporated businesses	1.4	3.2	3.4
Rest of world	2.7	2.9	3.3
Life offices & superannuation funds(c) & held by	*6.8*	*1.1*	*1.1*
Life offices & superannuation funds(f)	5.8	—	—
Rest of world	1.0	1.1	1.1
Other financial institutions(d) & held by	*17.1*	*19.7*	*23.9*
Life offices & superannuation funds	3.9	3.8	4.6
Other financial institutions	1.2	1.1	1.8
Commonwealth general government(c)	0.2	0.2	0.2
State & local general government	0.6	1.8	0.5
Households & unincorporated businesses	8.0	9.4	13.2
Rest of world	3.3	3.5	3.6
State & local general government(c) & held by	*2.5*	*2.5*	*2.1*
State & local general government	2.5	2.5	2.1

(a) Includes units in trusts. (b) Net asset values. (c) Book values. (d) These estimated market values are considered to be of poor quality. They should be used cautiously. (e) Excludes holdings by related enterprises in this subsector. (f) Excludes holdings by related enterprises in this subsector. There are breaks in series at September 1990 and 1991 caused by changes in administrative arrangements in this subsector.

Source: Australian National Accounts, Financial Accounts (5232.0).

FINANCIAL ACTIVITY

Money

Australia has a decimal system of currency, the unit being the dollar, which is divided into 100 cents. Australian notes are issued in the denominations of $5, $10, $20, $50 and $100 and coins in the denominations of 5c, 10c, 20c, 50c, $1 and $2. $1 and $2 notes were replaced by coins in 1984 and 1988, respectively, and 1c and 2c coins ceased to be issued from 1 February 1992.

23.21 VALUE OF AUSTRALIAN NOTES ON ISSUE ($ million)

	Last Wednesday in June		
	1991	*1992*	*1993*
$1	43	43	42
$2	73	71	70
$5	249	261	297
$10	679	589	591
$20	2,048	1,857	1,813
$50	5,345	5,763	6,284
$100	6,356	6,672	7,269
Total	**14,793**	**15,256**	**16,367**
Increase %	14.0	3.1	7.3

Source: Reserve Bank of Australia.

23.22 AUSTRALIAN DECIMAL COIN ON ISSUE ($ million)

	Last Wednesday in June		
	1991	*1992*	*1993*
1c	29.2	26.0	24.2
2c	44.0	37.2	33.4
5c	79.8	82.5	87.3
10c	87.6	90.2	95.0
20c	132.9	130.0	131.4
50c	179.3	180.6	183.6
$1	220.2	221.6	237.3
$2	352.1	362.5	385.7
Total	**1,125.1**	**1,130.6**	**1,177.9**

Source: Reserve Bank of Australia.

Money supply measures

The supply of money in the market is an important measure reflecting interest rates and the inflation rate. Basically the money supply, as measured and published by the Reserve Bank of Australia, refers to the amount of cash held by the public plus deposits with banks. The measures range from the narrowest category, money base, through to the widest category, broad money, with other measures in-between. The measures mainly used are as follows:

- money (cash) base, which refers to currency in circulation plus bank deposits with the Reserve Bank of Australia.
- M3, which refers to currency plus bank deposits of the private non-bank sector.
- broad money, which is M3 plus borrowings from the private sector by non-bank financial institutions (including cash management trusts) less their holdings of currency and bank deposits.

In the past Australian monetary authorities have mainly used M3 as the major measure of money supply. However, with deregulation of the financial system and increasing movements in deposits between banks and non-banks, authorities now tend to use all three major measures.

23.23 LEVELS OF MONEY SUPPLY MEASURES ($ million)

Year	*Money base(a)*	*M3(b)*	*Broad money(c)*
1990–91	18,717	202,650	266,402
1991–92	19,135	208,523	270,167
1992–93	20,497	229,612	279,659

(a) Holdings of notes and coins by the private sector, plus deposits of banks with the Reserve Bank and Reserve Bank liabilities to the private non-bank sector. (b) Currency plus bank deposits (including certificates of deposit with banks) of the non-bank sector. (c) M3 plus borrowings from private sector by non-bank financial institutions less the latter's holdings of currency and bank deposits.
Source: Reserve Bank of Australia.

Interest rates

Interest rates, as the price for money and credit, fluctuate with the supply of and demand for money or credit. They are also affected by other factors such as government monetary policy, government regulation, borrower credit risk, and the maturity and marketability of the particular investment or asset involved. Table 23.24 shows the fluctuations in but a few of the key rates offered to individuals and businesses in the market.

23.24 KEY INTEREST RATES

			At end of June
	1991	*1992*	*1993*
Private			
Authorised dealers weighted average rate(a)	10.39	6.41	5.21
90-day bank bills(b)	10.50	6.40	5.25
Fixed bank deposits $5,000 to $100,000 — 1 year	10.00	6.00	5.20
Unofficial market rate(c)	10.55	6.55	5.25
Business indicator — large business(d)	14.00/14.25	10.25/10.75	9.40/9.50
Business indicator — small/medium business(d)	14.25/14.50	10.75/11.25	9.70/9.90
New bank housing loans	13.00	10.50	9.50
Commonwealth government securities 13 week			
Treasury notes	10.11	6.17	5.08
Treasury bonds			
2 year	10.55	6.35	5.45
5 year	11.05	7.85	6.85
10 year	11.15	8.90	7.35

(a) Official cash rate. Data are the weighted average for the last month of the year. (b) Data are the weighted average of the last week of the period. (c) The 11 a.m. call rate. Data are the average of daily figures. (d) Indicator rates on variable rate business loans (that is, overdrafts and fully drawn loans). In most cases, a margin is added when setting rates on individual loans.

Source: Reserve Bank of Australia Bulletin.

FOREIGN EXCHANGE

The foreign exchange market is the means whereby currencies of different countries can be bought and sold. In October 1983 the Australian Government decided to float the Australian dollar allowing its value to be determined by market forces with few exchange controls and little Reserve Bank intervention. Prior to 1983 the Australian dollar was pegged to a basket of currencies which were weighted according to their trading significance to Australia.

Currencies are traded for many reasons, including to facilitate overseas trade (exports, imports), for financing overseas borrowing and investments, for arbitrage (that is, taking advantage of short-term discrepancies in rates with minimal risk) and for speculation on possible exchange rate movements with a view to making a significant profit.

These activities are conducted in three markets — the foreign exchange market, the currency hedge market, and the currency futures market. The foreign exchange market deals with the actual trading of foreign currency for all types of customers, ranging from tourists to large corporations and governments. This market is operated by authorised traders (all licensed banks and 44 non-bank financial institutions). The currency hedge market is used as a means of insurance against future exchange rate fluctuations and is especially useful for long-term contracts. It is operated by licensed banks and money market corporations. The currency futures market operates from the Sydney Futures Exchange and involves contracts to buy and sell a specific currency for a set price at a specified future date. The contracts are arranged by brokers who are members of the exchange.

23.25 EXCHANGE RATES FOR THE AUSTRALIAN DOLLAR

	At end of June		
	1991	1992	1993
United States dollar	0.7681	0.7448	0.6722
United Kingdom pound	0.4712	0.3945	0.4453
German Deutschemark	1.3818	1.1438	1.1366
Japanese yen	106.1900	94.0500	71.5400
New Zealand dollar	1.3303	1.3752	1.2478

Source: Reserve Bank of Australia Bulletin.

MAJOR LENDING BY FINANCIAL INSTITUTIONS

The lending activities of financial institutions are grouped for statistical purposes into four major types of lending — housing, personal, commercial and leasing. Information regarding housing finance is presented in the chapter, Construction and Housing.

23.26 LENDING COMMITMENTS BY FINANCIAL INSTITUTIONS
($ million)

Type of lending activity	*1990–91*	*1991–92*	*1992–93*
Housing finance	20,775.7	28,538.4	36,778.0
Personal finance	20,205.0	19,598.4	20,682.1
Commercial finance	87,294.0	76,644.9	86,700.6
Lease finance	5,209.4	4,476.7	4,914.1
Total	**133,484.1**	**129,258.4**	**149,074.8**

Source: See the tables which follow for each type of lending.

Personal finance

The following tables present statistics of commitments made by significant lenders (that is, banks, credit cooperatives, finance companies, etc.) to lend to individuals for their own personal (non-business) use.

23.27 PERSONAL FINANCE COMMITMENTS(a), BY TYPE OF LENDER
($ million)

Year	*All banks*	*Finance companies*	*Credit cooperatives*	*Other lenders(b)*	*Total*
1990–91	13,288.4	4,154.4	2,183.8	578.5	20,205.0
1991–92	12,211.8	3,691.4	2,532.1	1,163.0	19,598.4
1992–93	13,399.7	3,909.6	2,457.9	914.9	20,682.1

(a) Includes both fixed loan facilities and new and increased lending commitments under revolving credit facilities. (b) Includes permanent building societies, general financiers and retailers.

Source: Personal Finance, Australia (5642.0).

23.28 PERSONAL FINANCE COMMITMENTS, BY TYPE OF FACILITY
($ million)

		Revolving credit commitments			
				Credit limits	
Year	Fixed loan commitments	New and increased credit limits	Cancellations and reductions in credit limits	Total	Used
1990–91	12,622.6	7,582.4	7,042.2	28,094.8	13,172.0
1991–92	12,711.8	6,886.5	5,972.9	32,251.9	13,846.4
1992–93	13,392.2	7,289.9	5,831.0	33,425.6	13,954.0

Source: Personal Finance, Australia (5642.0).

Commercial finance

The statistics in the following tables measure commitments, made by significant lenders (that is, banks, finance companies, money market corporations, etc.), to lend to government, private and public enterprises, non-profit organisations and to individuals for investment and business purposes.

23.29 COMMERCIAL FINANCE COMMITMENTS(a), BY TYPE OF LENDER
($ million)

Year	Banks	Finance companies	Money market corporations	Other lenders(b)	Total
1990–91	68,797.7	6,283.9	10,266.3	1,946.2	87,294.0
1991–92	59,936.8	5,383.8	9,257.0	2,067.2	76,644.9
1992–93	69,211.2	5,774.5	9,029.0	2,686.0	86,700.6

(a) Includes both fixed loan facilities and new and increased lending commitments under revolving credit facilities. (b) Includes permanent building societies, general financiers and pastoral finance companies.
Source: Commercial Finance, Australia (5643.0).

23.30 FIXED COMMERCIAL FINANCE COMMITMENTS, BY PURPOSE
($ million)

Year	Construction	Purchase of real property	Purchase of plant and equipment	Re-financing	Other purposes	Total
1990–91	3,208.4	7,533.1	2,948.2	8,225.5	13,070.6	34,985.7
1991–92	2,319.1	8,254.0	3,218.7	5,883.1	11,954.4	31,629.2
1992–93	2,933.2	10,464.4	4,289.3	6,945.1	11,702.1	36,334.1

Source: Commercial Finance, Australia (5643.0).

Lease finance

The statistics in the following tables measure lease finance commitments made by significant lenders (that is, banks, money market corporations, finance companies, general financiers, etc.) to trading and financial enterprises, non-profit organisations, governments, public authorities and individuals.

23.31 LEASE FINANCE COMMITMENTS, BY TYPE OF LESSOR
($ million)

Year	All banks	Money market corporations	Finance companies	General financiers	Total
1990–91	1,304.8	278.7	2,912.5	713.4	5,209.4
1991–92	1,275.4	328.1	2,559.3	313.8	4,476.7
1992–93	1,612.4	338.8	2,304.2	658.7	4,914.1

Source: Lease Finance, Australia (5644.0).

23.32 LEASE FINANCE COMMITMENTS, BY TYPE OF GOODS LEASED
($ million)

Types of goods	1990–91	1991–92	1992–93
Motor vehicles and other transport equipment	2,933.5	2,733.7	3,070.3
Construction and earth moving equipment	260.5	205.9	235.2
Agricultural machinery and equipment	125.9	131.3	182.7
Automatic data processing equipment and office machinery	884.1	643.2	754.7
Shop and office furniture, fittings and equipment	400.4	251.1	217.1
Other goods	605.0	511.6	454.1
Total	**5,209.4**	**4,476.7**	**4,914.1**

Source: Lease Finance, Australia (5644.0).

MANAGED FUNDS — THE CONSOLIDATED POSITION

Certain types of financial institutions can be collectively described as 'managed funds' and it is useful to present consolidated statistics for them as a group.

The significant growth in managed funds has been a major development in the financial sector over the last decade. A managed fund is an arrangement whereby the funds of a number of investors are 'pooled' together to invest in a particular type or mix of financial and non-financial assets, with a view to receiving an on-going return, or a capital gain. Managed funds exclude funds of a speculative nature that do not offer redemption facilities (for example, agriculture and film trusts), and funds not established for investment purposes (for example, health funds, general insurance funds).

The development of managed funds has occurred in parallel with changes resulting from the deregulation of the financial system. They offer a wide range of investment alternatives to small and institutional investors based on the underlying asset, specialist managers, income returns, taxation benefits and investment strategy. The funds' products can be structured to satisfy individual investor requirements such as the degree of risk, the mix of capital and income growth and the degree of asset diversification.

The major types of managed funds are cash management trusts, public unit trusts, common funds, superannuation funds and approved deposit funds, friendly societies, and statutory funds of life offices.

To arrive at a figure for the total assets of managed funds in Australia, it is necessary to eliminate the cross investment between the various types of funds. For example, investments by superannuation funds in public unit trusts are excluded from the assets of superannuation funds in a consolidated presentation.

While statistics for each of these institutions has been presented previously in this chapter, the following tables summarise their consolidated position (that is, after the cross investment between the institutions have been eliminated), by type of fund and by type of investment.

23.33 ASSETS OF MANAGED FUNDS BY TYPE OF FUND AS AT 30 JUNE 1993
($ million)

			Assets
Type of fund	Cross invested	Consolidated	Total
Statutory funds of life offices	4,039	103,100	107,139
Superannuation and approved deposit funds	8,859	88,186	97,045
Public unit trusts	2,270	26,126	28,396
Friendly societies	11	9,171	9,182
Common funds	99	4,474	4,573
Cash management trusts	—	5,136	5,136
Total	**15,278**	**236,193**	**251,471**

Source: Managed Funds: Australia (5655.0).

23.34 CONSOLIDATED ASSETS OF MANAGED FUNDS, BY TYPE OF INVESTMENT
($ million)

Type of investment	30 June 1991	30 June 1992	30 June 1993
Deposits, loans and placements	31,690	28,791	26,617
Short-term assets	24,018	26,965	27,982
Long-term assets	39,254	45,985	51,317
Equities and units in trusts	38,680	56,087	59,769
Land and buildings	35,382	30,029	26,892
Overseas assets	21,733	25,658	34,757
Other assets	11,980	7,880	8,859
Total	**202,736**	**221,395**	**236,193**

Source: Managed Funds: Australia (5655.0).

A further development within the managed funds industry is the emergence of the professional or wholesale fund manager. These entities act on a fee for service basis as managers for smaller funds and agents for other funds, including unit trusts and superannuation funds. While they accept individual portfolios to manage, for example, for charities, their existence is generally not visible to the small investor. The professional fund managers fall into two groups — those attached to insurance agencies, who also act as agents for outside institutions as well as their own company's clients, and those attached to other institutions. Professional fund managers provide a sophisticated level of service matching assets and liabilities. They act in the main as the managers of pooled funds, but also manage clients' investments on an individual portfolio basis.

A considerable proportion of the assets of managed funds, particularly statutory funds of life offices and assets of superannuation funds, is invested through professional fund managers. At 30 June 1993, $195.9 billion, or 82.9 per cent of consolidated assets of managed funds, were invested through professional fund managers. Table 23.35 shows the total unconsolidated assets of each type of managed fund and the amount of these assets invested through professional fund managers.

23.35 ASSETS OF MANAGED FUNDS MANAGED BY PROFESSIONAL FUND MANAGERS AT 30 JUNE 1993
($ million)

Type of fund	*Unconsolidated assets of managed funds*	*Assets invested with professional fund managers*
Statutory funds of life offices(a)	107,139	106,172
Superannuation and approved deposit funds	97,045	61,061
Public unit trusts	28,396	21,147
Friendly societies	9,182	3,401
Common funds	4,573	214
Cash management trusts	5,136	3,868
Total	**251,471**	**195,863**

(a) Includes both superannuation and ordinary business.
Source: Managed Funds: Australia (5655.0).

Professional fund managers also manage money from investors other than managed funds. At 30 June 1993, professional fund managers also invested $25.4 billion on behalf of government, general insurance and other sources.

BIBLIOGRAPHY

ABS Publications

Assets of Superannuation Funds and Approved Deposit Funds (5656.0)

Australian National Accounts, Financial Accounts (5232.0)

Authorised Dealers and Money Market Corporations: Assets, Liabilities, Income and Expenditure, Australia (5650.0)

Cash Management Trusts, Australia (5635.0)

Commercial Finance, Australia (5643.0)

Common Funds, Assets and Liabilities, Australia (5657.0)

Co-operative Housing Societies: Assets, Liabilities, Income and Expenditure, Australia (5633.0)

Credit Co-operatives: Assets, Liabilities, Income and Expenditure, Australia (5618.0)

Finance Companies: Assets, Liabilities, Income and Expenditure, Australia (5616.0)

Friendly Societies, Assets and Liabilities, Australia (5660.0)

General Financiers and Other Financial Corporations: Assets, Liabilities, Income and Expenditure, Australia (5648.0)

Housing Finance for Owner Occupation, Australia (5609.0)

Lease Finance, Australia (5644.0)

Managed Funds: Australia (5655.0)

Monthly Summary of Statistics, Australia (1304.0)

Permanent Building Societies: Assets, Liabilities, Income and Expenditure, Australia (5632.0)

Personal Finance, Australia (5642.0)

Public Unit Trusts, Australia (5645.0)

BIBLIOGRAPHY — *continued*

Other Publications

AUSTRALIAN STOCK EXCHANGE. Monthly Index Analysis

INSURANCE AND SUPERANNUATION COMMISSION GENERAL INSURANCE GROUP. Selected Statistics on the General Insurance Industry,

INSURANCE AND SUPERANNUATION COMMISSION LIFE INSURANCE GROUP. June Quarterly Statistical Bulletin on Life Insurance

RESERVE BANK OF AUSTRALIA. The Reserve Bank of Australia Bulletin

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twenty-four

Government Finance

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THE GOVERNMENT SECTOR

The statistics in this chapter measure activity of the government sector (excluding public financial enterprises) and are derived from the Australian system of government finance statistics (GFS). This system is based on international standards specified in the International Monetary Fund's *A Manual of Government Finance Statistics* and the United Nation's *A System of National Accounts* (SNA).

The government sector comprises all organisations owned or controlled by any of the three levels of government within the Australian political system:

- Commonwealth;
- State/Territory; and
- local.

It is further divided into institutional sectors based on the characteristics of the organisations it comprises. These sectors are:

- *General government* which primarily covers government departments, offices and other bodies engaged in providing services free of charge or at prices significantly below their cost of production; and
- *Public trading enterprises* which comprises undertakings which aim to cover their costs by revenue raising, for example, Telstra, Australia Post, Qantas, StateRail, and local electricity, bus and transport operations.

Public financial enterprises are excluded from government finance statistics since they play a separate and distinct role in the economy. Consequently, their inclusion would provide a less useful account of government sector activity.

The Australian GFS system presents statistics relating to:

- transactions of the various public authorities consolidated to eliminate transactions between them, so that the economic impact can be assessed;
- transactions of the different levels of government reflecting their different roles in the undertaking and financing of their expenditure programs; and
- transactions of each government so that the statistics can be used to indicate the comparative standing of each government in terms of its expenditure, its sources of revenue, and its financing transactions.

To assist users in understanding government finance statistics, the *Classification Manual of Government Finance Statistics, Australia* (1217.0) outlines the major concepts, provides definitions of the statistical units, and contains the main classifications employed. The GFS classifications applied in the tables in this chapter are:

- the Economic Transactions Framework (ETF) which categorises outlays, revenue and grants received and financing according to their economic character to facilitate the study of the macro-economic effect of government activity;
- the Government Purpose Classification (GPC) which classifies outlays according to the purpose or function served; and
- the Taxes, Fees and Fines Classification (TFFC) which classifies this major form of government revenue according to type of tax, fee or fine collected.

FINANCE OF ALL LEVELS OF GOVERNMENT COMBINED

The outlays, revenue and financing transactions of the government sector for all levels of government combined are shown in table 24.1.

In 1992–93, total government outlays for Australia totalled $163,527 million, a rise of 2.0 per cent over 1991–92, reflecting a rise of 5.2 per cent in current outlays offset by a fall of 17.5 per cent in capital outlays.

Total government revenue was $139,370 million, a rise of 2.9 per cent in 1992–93. Of this, $117,682 million (84.4%) was raised from taxes, fees and fines. Table 24.2 shows the total of these collected by all levels of government combined.

The deficit of the government sector for all levels of government combined was $18,326 million in 1992–93, a drop of $178 million over the previous year. A smaller increase in personal benefit payments by the Commonwealth of 8.4 per cent compared to 13.5 per cent in the previous year, a 17.5 per cent reduction in capital outlays, and an increase of 2.6 per cent in taxes, fees and fines contributed to the reduced deficit in 1992–93.

The outlays of each level of government are not additive as financial transactions may occur between the Commonwealth Government, State/Territory and local governments. For example, grants are paid by the Commonwealth Government to State or local governments (either directly or via the State for onpassing), interest is paid and advances are made across the three levels. Table 24.3 shows the transfers between each level of government that are eliminated in the derivation of consolidated totals for major economic categories in 1992–93.

24.1 ECONOMIC TRANSACTIONS OF COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED
($ million)

Item	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Current expenditure	53,236	57,748	64,759	70,918	75,763	79,774
Less sales of goods and services(a)	6,306	7,215	9,770	10,709	11,560	12,537
Equals final consumption expenditure	46,930	50,533	54,990	60,209	64,204	67,237
Interest payments	16,463	17,567	19,425	19,476	18,248	17,570
Subsidies paid to PTEs	2,801	2,793	2,653	3,671	3,186	3,028
Personal benefit payments	27,878	29,467	32,579	37,351	42,387	45,926
Other transfer payments	6,120	6,649	7,436	7,932	9,598	11,066
Total current outlays	*100,193*	*107,009*	*117,083*	*128,639*	*137,624*	*144,828*
Expenditure on new fixed assets	17,766	18,594	22,022	21,966	21,404	21,309
Plus expenditure on secondhand assets (net)	- 1,138	- 1,685	- 1,391	- 2,092	- 1,477	- 2,533
Equals gross fixed capital expenditure	16,628	16,908	20,631	19,874	19,928	18,775
Expenditure on land and intangible assets (net)	- 298	- 609	131	87	50	- 190
Other capital outlays	278	1,050	3,587	2,217	2,697	114
Total capital outlays	*16,608*	*17,350*	*24,349*	*22,178*	*22,675*	*18,699*
Total outlays	**116,801**	**124,359**	**141,432**	**150,817**	**160,299**	**163,527**
Taxes, fees and fines	94,389	106,017	115,205	118,916	114,661	117,682
Net operating surplus of public trading enterprises	9,140	9,999	9,722	10,899	10,886	11,546
Interest received	3,548	5,009	5,687	5,539	4,564	4,185
Other revenue	4,378	3,558	3,634	3,966	5,279	5,957
Total revenue	**111,454**	**124,582**	**134,249**	**139,320**	**135,390**	**139,370**
Increase in provisions	4,392	5,213	5,265	4,577	6,405	5,831
For depreciation	3,615	4,609	4,838	5,566	7,370	6,804
Other	778	604	426	- 989	- 965	- 973
Borrowing (net)	2,146	177	- 1,757	11,101	21,687	26,322
Other financing transactions	- 1,192	- 5,613	3,675	- 4,181	- 3,183	- 7,996
Total financing	**5,347**	**- 223**	**7,183**	**11,497**	**24,909**	**24,157**
Current deficit(b)	- 14,923	- 21,851	- 21,482	- 14,405	- 3,245	600
Capital deficit(c)	15,878	16,414	23,401	21,324	21,750	17,726
Total deficit(d)	**954**	**- 5,436**	**1,918**	**6,920**	**18,504**	**18,326**
Net financing requirement(e)	**954**	**- 5,436**	**1,918**	**6,920**	**18,504**	**18,326**

(a) This item provides an indication of the extent of government charges levied. The charges are offset against gross expenditure in calculating final consumption expenditure and comprise mainly sales to the private sector. However, note that it has not been possible to exclude all inter-agency charges and that some estimated data are included. (b) Revenue less current outlays plus increase in provisions less capital grants and other capital revenue. (c) Capital grants and other capital revenue less capital outlays. (d) The deficit is the sum of all financing transactions except for increases (decreases) in provisions. (e) The net financing requirement (NFR) is a measure of the extent to which the sector or combination of sectors contributes to the overall requirement for funds from outside the government sector. This measure can differ from the deficit because it excludes advances received as well as increases in provisions.
Source: Government Finance Statistics, Australia (5512.0).

24.2 TAXES, FEES AND FINES OF ALL LEVELS OF GOVERNMENT
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Income taxes levied on individuals	41,887	47,537	50,020	50,170	46,782	47,431
Income taxes levied on enterprises	8,573	9,982	12,982	15,088	14,377	14,929
Income taxes levied on non-residents	818	898	1,097	1,095	903	850
Taxes on income	*51,278*	*58,417*	*64,099*	*66,353*	*62,061*	*63,210*
General taxes (payroll tax)	4,058	4,723	5,210	5,802	5,904	5,810
Selective taxes (stevedoring industry charges)	26	28	35	51	54	45
Other employers' labour force taxes	852	990	1,168	1,262	1,330	1,346
Employers' payroll taxes	*4,935*	*5,740*	*6,414*	*7,114*	*7,289*	*7,201*
Taxes on immovable property	4,128	4,581	5,366	6,149	6,533	6,654
Estate, inheritance and gift duty	3	2	1	—	—	—
Taxes on financial and capital transactions	4,360	5,502	4,624	4,279	4,479	4,900
Taxes on property	*8,491*	*10,085*	*9,991*	*10,429*	*11,012*	*11,554*
General taxes (sales tax)	7,547	9,402	10,132	9,365	9,113	9,252
Excises and levies	11,099	10,209	10,834	11,975	10,639	10,777
Crude oil and LPG	2,056	1,188	1,232	1,354	64	116
Other excises	8,128	8,079	8,655	9,005	9,417	9,560
Agricultural production taxes	619	617	587	1,238	735	633
Levies on statutory authorities	295	325	360	378	423	468
Taxes on international trade	3,711	3,831	4,026	3,377	3,350	3,336
Taxes on gambling	1,377	1,571	1,757	1,889	1,952	2,161
Taxes on insurance	834	895	1,104	1,114	1,201	1,348
Taxes on provision of goods and services	*24,567*	*25,908*	*27,853*	*27,720*	*26,255*	*26,874*
Motor vehicle taxes	1,932	2,167	2,421	2,366	2,491	2,801
Franchise taxes	1,586	1,771	2,392	2,620	2,842	3,394
Other taxes on use of goods and performance of activities	205	169	241	195	269	276
Taxes on use of goods and performance of activities	*3,723*	*4,108*	*5,054*	*5,181*	*5,602*	*6,471*
Compulsory fees	1,097	1,418	1,401	1,661	1,904	1,827
Fines	297	342	395	458	537	545
Fees and fines	*1,394*	*1,760*	*1,795*	*2,119*	*2,441*	*2,372*
Total taxes, fees and fines	**94,389**	**106,017**	**115,205**	**118,916**	**114,661**	**117,682**

Source: Government Finance Statistics, Australia (5512.0) and Taxation Revenue, Australia (5506.0).

24.3 CONSOLIDATION OF OUTLAYS BY LEVEL OF GOVERNMENT, FOR THE COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED, 1992-93 ($ million)

Purpose	*State/ Territory govern-ments*	*Local govern-ments*	*Transfers between State/ Territory and local govern-ments*	*State/ Territory and local govern-ments*	*Common-wealth govern-ment*	*Transfers between Common-wealth, State/ Territory and local govern-ments*	*Common-wealth, State/ Territory and local govern-ments*
Final consumption expenditure	39,360	4,686	-3	44,048	23,189	—	67,237
Interest payments	11,673	820	27	12,467	7,211	2,108	17,570
Personal benefit payments	1,390	—	—	1,391	44,535	—	45,926
Subsidies paid	4,028	5	—	4,033	2,499	—	6,532
Current grants to	5,749	9	1,386	4,372	30,137	27,050	7,459
Non-profit institutions	4,362	8	—	4,370	1,893	—	6,263
Foreign governments & others	1	—	—	1	1,195	—	1,196
State/Territory or local governments	1,387	1	1,386	1	27,049	27,050	—
Other current outlays	107	185	182	110	50	56	105
Total current outlays	*62,308*	*5,704*	*1,592*	*66,420*	*107,622*	*29,213*	*144,828*
Gross fixed capital expenditure	11,195	2,802	—	13,998	4,778	—	18,775
Capital grants	743	28	416	355	5,522	5,210	668
Advances paid (net)	-1,078	-18	-25	-1,071	-2,508	-2,671	-909
Other capital outlays	-239	85	—	-154	319	—	165
Total capital outlays	*10,621*	*2,897*	*390*	*13,128*	*8,111*	*2,539*	*18,699*
Total	**72,929**	**8,601**	**1,982**	**79,548**	**115,733**	**31,753**	**163,527**

Source: Government Finance Statistics, Australia (5512.0).

The Government Purpose Classification (GPC) is designed to facilitate the study of the impact of government transactions on the economy in terms of the purposes for which the transactions are made. In conjunction with the Economic Transactions Framework (ETF), it provides information for the study of socio-economic effects of government transactions. Outlays on social security and welfare, for example, rose 8.0 per cent in 1992-93 and comprised 25.3 per cent of total government outlays.

24.4 OUTLAYS OF COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS ($ million)

Purpose	*1987-88*	*1988-89*	*1989-90*	*1990-91*	*1991-92*	*1992-93*
General public services	8,368	9,316	9,866	11,588	14,747	13,430
Defence	6,806	7,189	7,734	8,326	8,607	9,010
Public order and safety	3,847	4,453	5,029	5,363	5,646	5,635
Education	14,592	15,965	17,445	18,879	20,364	21,465
Health	15,410	17,154	18,771	20,135	21,111	22,295
Social security and welfare	24,157	25,400	28,227	33,035	38,238	41,298
Housing and community amenities	4,245	3,801	4,871	4,482	4,601	4,801
Recreation and culture	3,470	3,205	3,523	3,681	3,830	4,068
Fuel and energy	3,236	3,112	3,333	3,167	3,378	2,500
Agriculture, forestry and fishing	1,930	2,638	5,813	5,090	2,723	3,471
Mining, manufacturing and construction	1,036	882	1,118	890	898	719
Transport and communications	10,881	11,511	14,258	13,847	13,365	12,967
Other economic affairs	2,534	2,524	2,596	3,023	3,710	4,118
Other purposes	16,287	17,209	18,850	19,312	19,080	17,751
Total	**116,801**	**124,359**	**141,432**	**150,817**	**160,299**	**163,527**

Source: Government Finance Statistics, Australia (5512.0).

COMMONWEALTH GOVERNMENT FINANCE

The Commonwealth Government has exclusive responsibility under the Constitution for the administration of a wide range of functions including defence, foreign affairs and trade, and immigration. A distinctive feature of the Australian federal system is that the Commonwealth Government levies and collects all income tax, from individuals as well as from enterprises. It also collects a significant portion of other taxes, including taxes on the provision of goods and services. The Commonwealth distributes part of this revenue to other levels of government, principally the States and Territories.

Outlays, revenue and financing transactions

The outlays, revenue and financing transactions of the Commonwealth non-financial public sector for the six year period ending 1992–93 are summarised in the tables 24.5 and 24.6.

24.5 ECONOMIC TRANSACTIONS OF THE COMMONWEALTH GOVERNMENT
($ million)

Item	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Current expenditure	17,697	18,910	21,532	23,933	25,488	27,299
Less sales of goods and services(a)	1,251	1,299	2,995	3,277	3,582	4,110
Equals final consumption expenditure	16,447	17,611	18,538	20,655	21,907	23,189
Interest payments	9,127	8,841	9,141	8,304	7,837	7,211
Subsidies paid to PTEs	454	333	383	1,246	711	517
Personal benefit payments	26,923	28,410	31,360	36,022	40,973	44,535
Current grants	22,689	23,292	25,167	26,434	28,550	30,137
To private sector	1,863	2,100	2,283	2,239	2,694	3,088
To State governments	17,020	17,251	18,624	19,563	20,546	21,420
Onpassed through State governments	3,718	3,860	4,163	4,535	5,155	5,439
To local governments	89	81	97	97	155	190
Other transfer payments	1,521	1,477	1,535	1,600	1,798	2,032
Total current outlays	*77,160*	*79,965*	*86,123*	*94,261*	*101,776*	*107,622*
Expenditure on new fixed assets	4,452	5,102	6,853	6,887	6,517	5,227
Plus expenditure on secondhand assets (net)	-447	-829	-406	-885	-479	-450
Equals gross fixed capital expenditure	4,005	4,273	6,446	6,001	6,038	4,778
Expenditure on land & intangible assets (net)	-369	96	159	73	56	8
Capital grants to other governments	3,089	3,093	3,556	4,357	3,721	5,210
Advances paid to other governments (net)	-46	-111	-485	-1,858	-2,753	-2,669
Other capital outlays	-351	527	3,127	2,393	468	784
Total capital outlays	*6,328*	*7,878*	*12,803*	*10,965*	*7,530*	*8,111*
Total outlays	**83,488**	**87,844**	**98,926**	**105,227**	**109,306**	**115,733**
Taxes, fees and fines	75,392	83,975	91,242	93,339	87,404	88,665
Net operating surplus of public trading enterprises	3,437	3,872	3,304	4,068	3,539	3,993
Interest received	3,375	3,632	3,557	3,261	2,891	2,468
Other revenue	2,501	1,233	1,128	1,375	2,423	3,087
Total revenue	**84,705**	**92,713**	**99,231**	**102,044**	**96,256**	**98,213**
Increase in provisions	1,806	1,888	1,967	1,239	2,821	1,853
For depreciation	1,674	2,143	2,075	2,418	3,834	2,864
Other	132	-255	-107	-1,179	-1,013	-1,012
Borrowing (net)	-3,551	-4,098	-5,151	3,901	9,705	16,983
Other financing transactions	528	-2,660	2,879	-1,956	524	-1,316
Total financing	**-1,217**	**-4,869**	**-305**	**3,183**	**13,050**	**17,520**

For footnotes *see* end of table.

24.5 ECONOMIC TRANSACTIONS OF THE COMMONWEALTH GOVERNMENT — *continued*
($ million)

Item	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Current deficit(b)	-9,351	-14,636	-15,051	-9,019	2,699	7,557
Capital deficit(c)	6,328	7,878	12,779	10,963	7,530	8,110
Total deficit(d)	**-3,023**	**-6,758**	**-2,272**	**1,944**	**10,229**	**15,667**
Net financing requirement(e)	**-3,023**	**-6,758**	**-2,272**	**1,944**	**10,229**	**15,667**

(a) This item provides an indication of the extent of government charges levied. The charges are offset against gross expenditure in calculating final consumption expenditure and comprise mainly sales to the private sector. However, note that it has not been possible to exclude all inter-agency charges and that some estimated data is included. (b) Revenue less current outlays plus increase in provisions less capital grants and other capital revenue. (c) Capital grants and other capital revenue less capital outlays. (d) The deficit is the sum of all financing transactions except for increases (decreases) in provisions. (e) The net financing requirement (NFR) is a measure of the extent to which the sector or combination of sectors contributes to the overall requirement for funds from outside the government sector. This measure can differ from the deficit because it excludes advances received as well as increases in provisions.
Source: Government Finance Statistics, Australia (5512.0).

24.6 COMMONWEALTH GOVERNMENT OUTLAYS
($ million)

Purpose	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
General public services	4,646	5,473	5,779	6,334	6,960	7,370
Defence	6,867	7,189	7,732	8,324	8,606	9,009
Public order and safety	568	690	777	749	936	883
Education	5,852	6,205	6,674	7,552	8,442	9,259
Health	9,803	10,805	11,827	12,851	13,722	14,772
Social security and welfare	22,758	23,836	26,362	30,613	35,493	38,465
Housing and community amenities	1,398	1,251	1,306	1,037	1,225	1,347
Recreation and culture	946	985	1,036	1,116	1,105	1,097
Fuel and energy	733	528	521	579	690	701
Agriculture, forestry and fishing	858	1,470	4,589	3,906	1,529	2,123
Mining, manufacturing and construction	482	481	656	497	544	553
Transport and communications	4,712	5,415	7,431	7,061	6,607	5,650
Other economic affairs	1,534	1,489	1,560	2,054	2,469	3,114
Other purposes	22,331	22,028	22,676	22,554	20,978	21,391
Total	**83,488**	**87,844**	**98,926**	**105,227**	**109,306**	**115,733**

Source: Government Finance Statistics, Australia (5512.0).

Commonwealth government financial assistance to the States and Territories

The taxes levied by the Commonwealth Government are used to finance the Commonwealth's 'own-purpose' policy programs and are also distributed to other levels of government, principally the States and Territories, as grants. The distributions are based on principles applied by the Commonwealth Grants Commission. The following table shows details of grants to States/Territories and local governments classified by purpose.

24.7 COMMONWEALTH GRANTS TO STATES AND TERRITORIES, 1992–93
($ million)

Purpose	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
CURRENT									
General public services, defence, public order and safety	125	100	57	55	37	13	3	2	392
Education	1,855	1,503	923	452	528	144	60	57	5,522
Health	1,454	1,061	718	381	376	128	27	61	4,206
Social security	191	195	117	64	50	25	5	10	657
Housing and community amenities	2	2	—	1	1	7	1	7	21
Recreation and culture	—	—	13	—	—	—	—	—	13
Fuel and energy	19	—	6	—	1	—	10	—	36
Agriculture, forestry, fishing and hunting	68	22	54	40	16	20	14	—	234
Transport and communications	105	73	64	21	52	18	8	11	352
Other purposes	3,975	3,067	2,959	1,777	1,711	643	849	421	15,402
Total	**7,794**	**6,023**	**4,911**	**2,791**	**2,772**	**998**	**977**	**569**	**26,835**
CAPITAL									
General public services, defence, public order and safety	—	—	—	—	—	—	—	—	—
Education	329	233	162	68	79	21	21	5	918
Health	11	11	4	2	5	1	—	2	36
Social security	—	7	1	1	2	—	—	—	11
Housing and community amenities	300	236	168	93	113	27	30	17	984
Recreation and culture	1	1	5	1	1	1	—	—	10
Fuel and energy	—	—	—	—	—	—	—	—	—
Agriculture, forestry, fishing and hunting	6	7	1	4	—	—	—	—	18
Transport and communications	612	378	441	122	191	61	54	8	1,867
Other purposes	542	114	61	168	48	33	46	37	1,049
Total	**1,801**	**987**	**843**	**459**	**439**	**144**	**151**	**69**	**4,893**

Source: Unpublished ABS data.

Commonwealth government taxation

The following table shows Commonwealth government taxation revenue classified by type of tax for the six years ending 1992–93.

24.8 COMMONWEALTH GOVERNMENT TAXES, FEES AND FINES
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Income taxes levied on individuals	41,811	47,433	49,881	50,061	46,687	47,328
Personal income tax	40,928	46,228	48,285	48,810	45,601	46,146
Mining withholding tax	1	1	1	2	2	2
Prescribed payments by individuals	881	1,203	1,595	1,250	1,084	1,181
Income taxes levied on enterprises	8,650	10,103	13,144	15,220	14,480	15,041
Company income tax	8,562	9,990	12,629	14,058	13,246	13,416
Income tax paid by superannuation funds	11	7	376	1,053	1,139	1,522
Prescribed payments by enterprises	77	105	139	109	94	103
Income taxes levied on non-residents	818	898	1,097	1,095	903	850
Dividend withholding tax	125	97	115	109	50	88
Interest withholding tax	541	638	799	790	651	557
Other income tax levied on non-residents	153	162	183	196	202	205
Taxes on income	*51,278*	*58,433*	*64,122*	*66,376*	*62,070*	*63,220*
General taxes (payroll tax)	41	51	—	—	—	—
Selective taxes (stevedoring industry charges)	26	28	35	51	54	45
Other employers labour force taxes	852	990	1,168	1,262	1,330	1,346
Fringe benefits tax	852	990	1,168	1,262	1,330	1,346
Superannuation guarantee charge	—	—	—	—	—	—
Employers' payroll taxes	*919*	*1,069*	*1,204*	*1,312*	*1,385*	*1,391*
Taxes on immovable property	52	58	—	—	—	—
Estate, inheritance and gift duties	1	1	—	—	—	—
Taxes on financial and capital transactions	411	427	387	247	15	19
Stamp duties	61	60	—	—	—	—
Financial institutions' transaction taxes	342	358	378	229	3	1
Government borrowing guarantee levies	9	9	9	18	12	19
Taxes on property	*464*	*486*	*387*	*247*	*15*	*19*
General taxes (sales tax)	7,547	9,402	10,132	9,365	9,113	9,252
Excises and levies	10,793	9,874	10,462	11,587	10,204	10,294
Excises on crude oil and LPG	2,056	1,188	1,232	1,354	64	116
Other Excise Act duties	8,128	8,079	8,655	9,005	9,417	9,560
Agricultural production taxes	609	606	575	1,228	723	618
Taxes on international trade	3,711	3,831	4,026	3,377	3,350	3,336
Customs duties on imports	3,632	3,752	3,954	3,319	3,299	3,331
Customs duties on exports	55	54	61	54	49	2
Agricultural produce export taxes	24	24	11	3	2	3
Taxes on gambling	13	21	—	—	—	—
Taxes on insurance	7	5	—	—	—	—
Taxes on provision of goods and services	*22,071*	*23,132*	*24,620*	*24,329*	*22,667*	*22,882*

For footnotes *see* end of table.

24.8 COMMONWEALTH GOVERNMENT TAXES, FEES AND FINES — *continued*
($ million)

	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Motor vehicle taxes	30	38	21	18	19	21
Franchise taxes	21	21	—	—	—	—
Other taxes on use of goods etc.	176	149	217	166	219	206
Broadcast and TV station licences	86	108	177	125	135	101
Departure tax	66	38	39	38	82	93
Other taxes on use of goods etc. n.e.c.	25	2	2	3	2	12
Taxes on use of goods and performance of activities	*227*	*208*	*238*	*183*	*238*	*227*
Compulsory fees of which	422	643	663	864	1,014	910
Aviation en route charges	188	320	314	409	433	286
Light dues and navigation ACT charges	39	40	41	42	43	41
Fines	11	5	8	27	15	16
Fees and fines	*433*	*647*	*671*	*891*	*1,029*	*926*
Total taxes, fees and fines	**75,392**	**83,975**	**91,242**	**93,339**	**87,404**	**88,665**

Note: The Australian Capital Territory became self-governing on 11 May 1989. In these statistics it is included with the Commonwealth sector up until 1988–89 and then with the State and Territory sector from 1989–90.
Source: Government Finance Statistics, Australia (5512.0) and Taxation Revenue, Australia (5506.0).

STATE/TERRITORY GOVERNMENT FINANCE

State/Territory Governments perform the full range of government functions, other than those the Constitution deems the exclusive domain of the Commonwealth. The functions mainly administered by State/Territory Governments include public order, health, education, administration, transport, and maintenance of infrastructure. The revenue base of State/Territory Governments is narrower than that of the Commonwealth and consists of taxes on property, employers' payrolls, and on provision and use of goods and services. This revenue base is supplemented by grants from the Commonwealth as mentioned above. Tables 24.9, 24.10 and 24.11 summarise the economic transactions, outlays, and taxation revenue for the government sector of all State and Territory Governments combined.

24.9 ECONOMIC TRANSACTIONS OF STATE AND TERRITORY GOVERNMENTS
($ million)

Item	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Current expenditure	30,912	33,716	37,483	40,633	43,582	45,514
Less sales of goods and services(a)	3,404	4,036	4,775	5,229	5,674	6,155
Equals final consumption expenditure	27,508	29,679	32,708	35,405	37,908	39,360
Interest payments	9,062	10,345	11,802	12,566	11,916	11,673
Subsidies paid to PTEs	2,343	2,457	2,267	2,423	2,472	2,506
Current grants to other governments	909	885	929	982	1,344	1,387
Other transfer payments	3,692	4,136	4,874	5,483	6,555	7,382
Total current outlays	*43,516*	*47,502*	*52,581*	*56,857*	*60,195*	*62,308*
Expenditure on new fixed assets	10,660	10,804	12,210	11,942	11,949	12,843
Plus expenditure on secondhand assets (net)	- 573	- 832	- 1,078	- 894	- 733	- 1,648
Equals gross fixed capital expenditure	10,087	9,973	11,131	11,048	11,216	11,195
Expenditure on land and intangible assets (net)	108	- 650	- 201	- 74	- 83	- 279
Capital grants to other governments	431	471	499	581	266	388
Other capital outlays	645	536	591	- 181	2,198	- 682
Total capital outlays	*11,271*	*10,330*	*12,020*	*11,375*	*13,598*	*10,621*
Total outlays	**54,787**	**57,832**	**64,601**	**68,232**	**73,792**	**72,929**
Taxes, fees and fines	15,664	18,381	19,950	21,120	22,563	24,095
Net operating surplus of public trading enterprises	5,235	5,473	5,953	6,317	6,975	7,268
Interest received	2,304	3,367	3,905	4,082	3,462	3,445
Grants received	23,793	24,253	26,425	28,448	29,468	31,932
For own use	19,785	20,164	22,078	23,630	24,006	26,063
For onpassing	4,008	4,089	4,347	4,818	5,462	5,869
Other revenue	1,751	2,148	2,507	2,413	2,643	2,714
Total revenue	**48,747**	**53,623**	**58,739**	**62,380**	**65,111**	**69,454**
Increase in provisions	2,317	3,082	3,101	3,088	3,301	3,623
For depreciation	1,742	2,307	2,569	2,900	3,255	3,586
Other	575	775	532	188	46	37
Advances received (net)	- 48	- 113	- 488	- 1,856	- 2,735	- 2,731
Borrowing (net)	5,408	4,024	2,664	7,022	11,981	9,486
Other financing transactions	- 1,638	- 2,785	585	- 2,402	- 3,865	- 6,904
Total financing	**6,040**	**4,209**	**5,862**	**5,852**	**8,682**	**3,475**
Current deficit(b)	- 4,090	- 5,536	- 5,018	- 3,963	- 4,029	- 5,034
Capital deficit(c)	7,812	6,663	7,780	6,727	9,409	4,885
Total deficit(d)	**3,723**	**1,127**	**2,761**	**2,764**	**5,381**	**- 148**
Net financing requirement(e)	**3,770**	**1,240**	**3,249**	**4,620**	**8,115**	**2,582**

(a) This item provides an indication of the extent of government charges levied. The charges are offset against gross expenditure in calculating final consumption expenditure and comprise mainly sales to the private sector. However, note that it has not been possible to exclude all inter-agency charges and that some estimated data is included. (b) Revenue less current outlays plus increase in provisions less capital grants and other capital revenue. (c) Capital grants and other capital revenue less capital outlays. (d) The deficit is the sum of all financing transactions except for increases (decreases) in provisions. (e) The net financing requirement (NFR) is a measure of the extent to which the sector or combination of sectors contributes to the overall requirement for funds from outside the government sector. This measure can differ from the deficit because it excludes advances received as well as increases in provisions.
Source: Government Finance Statistics, Australia (5512.0).

24.10 OUTLAYS OF STATE AND TERRITORY GOVERNMENTS, BY PURPOSE
($ million)

Purpose	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
General public services	2,850	2,907	3,045	4,074	6,605	4,949
Defence	—	—	—	—	—	—
Public order and safety	3,306	3,786	4,314	4,684	4,792	4,828
Education	13,167	14,242	15,650	16,735	17,750	18,635
Health	8,502	9,384	10,348	10,954	11,248	11,603
Social security and welfare	1,619	1,845	2,229	2,784	3,202	3,401
Housing and community amenities	2,927	2,563	3,383	3,080	3,149	3,387
Recreation and culture	1,634	1,238	1,477	1,502	1,685	1,772
Fuel and energy	2,283	2,328	2,014	2,254	2,451	1,627
Agriculture, forestry and fishing	1,174	1,262	1,356	1,314	1,406	1,587
Mining, manufacturing and construction	485	310	378	290	269	69
Transport and communications	6,241	6,178	6,797	6,974	7,068	8,004
Other economic affairs	1,142	1,015	1,006	932	1,250	1,062
Other purposes	9,457	10,773	12,605	12,653	12,916	12,005
Total	**54,787**	**57,832**	**64,601**	**68,232**	**73,792**	**72,929**

Source: Government Finance Statistics, Australia (5512.0).

24.11 STATE AND TERRITORY GOVERNMENT TAXES, FEES AND FINES
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Employers' payroll taxes	4,017	4,672	5,210	5,802	5,904	5,810
Taxes on immovable property	945	1,099	1,591	1,944	2,141	2,056
Land taxes	816	956	1,295	1,602	1,774	1,492
Municipal rates	—	—	56	66	72	78
Metropolitan improvement rates	43	47	52	59	69	68
Property owners' contributions to fire brigades	77	87	91	105	111	119
Taxes on immovable property n.e.c.	8	9	97	111	116	299
Estate inheritance and gift duty	2	1	1	—	—	—
Taxes on financial and capital transactions	3,948	5,075	4,237	4,032	4,464	4,881
Stamp duties	3,495	4,569	3,645	2,926	3,027	3,341
Financial institutions' taxes	409	469	554	1,057	1,388	1,483
Government borrowing guarantee levies	45	37	38	49	49	57
Taxes on property	*4,896*	*6,175*	*5,828*	*5,976*	*6,606*	*6,937*
Excises and levies	305	336	371	388	436	483
Agricultural production taxes	11	11	11	10	12	15
Levies on statutory corporations	295	325	360	378	423	468
Taxes on gambling	1,364	1,549	1,757	1,889	1,952	2,161
Taxes on government lotteries	329	395	448	506	545	524
Taxes on private lotteries	256	259	304	325	325	318
Poker machine taxes	212	239	278	295	315	502
Casino taxes	55	75	78	93	97	115
Race betting taxes	506	574	639	651	646	682
Taxes on gambling n.e.c.	6	7	10	19	25	19
Taxes on insurance	827	890	1,104	1,114	1,201	1,348
Insurance companies' contributions to fire brigades	280	303	359	363	382	399
Third party insurance taxes	28	22	149	137	141	152
Taxes on insurance n.e.c.	519	566	596	614	678	798
Taxes on provision of goods and services	*2,496*	*2,775*	*3,233*	*3,391*	*3,589*	*3,992*

... continued

24.11 STATE AND TERRITORY GOVERNMENT TAXES, FEES AND FINES — *continued*
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Motor vehicle taxes	1,902	2,129	2,401	2,349	2,472	2,780
Vehicle registration fees and taxes	1,165	1,242	1,342	1,402	1,606	1,765
Stamp duty on vehicle registration	516	651	728	641	626	750
Drivers' licences	175	190	268	251	184	187
Road transport and maintenance taxes	45	47	63	56	55	78
Franchise taxes	1,565	1,751	2,392	2,620	2,842	3,394
Gas franchise taxes	9	10	11	11	15	15
Petroleum products franchise taxes	674	680	1,016	1,061	1,128	1,174
Tobacco franchise taxes	439	564	818	944	1,085	1,575
Liquor franchise taxes	443	496	546	603	615	630
Other taxes on use of goods etc.	29	20	23	30	50	70
Taxes on use of goods and performance of activities	*3,496*	*3,900*	*4,816*	*4,998*	*5,364*	*6,243*
Compulsory fees of which	529	584	544	599	660	661
Tertiary education charges	—	—	—	—	—	—
Fines	230	276	318	354	442	451
Fees and fines	*759*	*860*	*862*	*953*	*1,101*	*1,112*
Total taxes, fees and fines	**15,664**	**18,381**	**19,950**	**21,120**	**22,563**	**24,095**

Source: Government Finance Statistics, Australia (5512.0) and Taxation Revenue, Australia (5506.0).

LOCAL GOVERNMENT FINANCE

Local government authorities govern areas typically described as cities, towns, shires, boroughs, municipalities and district councils. Although the range of functions undertaken by local governments varies between the different jurisdictions, their powers and responsibilities are generally similar and cover such matters as:

- the construction and maintenance of roads, streets and bridges;
- water, sewerage and drainage systems;
- health and sanitary services;
- the supervision of building; and
- the administration of regulations relating to items such as weights and measures, slaughtering, and registration of dogs.

Also local governments provide transport facilities, electricity, gas and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, swimming pools, libraries, and museums.

Local governments' own-source revenue is derived mainly from property taxes. They also rely on grants from the Commonwealth and their parent State/Territory Governments (except for the Australian Capital Territory, which has no separate local government).

Tables 24.12, 24.13 and 24.14 show the economic transactions, outlays, and tax revenues for the general government and public trading enterprise activities of all local governments in Australia.

24.12 ECONOMIC TRANSACTIONS OF LOCAL GOVERNMENTS
($ million)

Item	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Current expenditure	4,626	5,121	5,743	6,352	6,693	6,961
Less sales of goods and services(a)	1,651	1,879	2,000	2,203	2,304	2,275
Equals final consumption expenditure	2,975	3,242	3,744	4,149	4,389	4,686
Interest payments	915	959	1,077	1,131	924	820
Other transfer payments	180	179	160	147	143	198
Total current outlays	*4,070*	*4,381*	*4,981*	*5,427*	*5,456*	*5,704*
Gross fixed capital expenditure	2,536	2,663	3,053	2,825	2,674	2,802
Expenditure on land and intangible assets (net)	-37	-55	173	88	77	82
Other capital outlays	-5	-4	152	-4	-9	12
Total capital outlays	*2,493*	*2,603*	*3,379*	*2,909*	*2,742*	*2,897*
Total outlays	**6,563**	**6,984**	**8,360**	**8,336**	**8,198**	**8,601**
Taxes, fees and fines	3,333	3,677	4,037	4,480	4,703	4,932
Net operating surplus of public trading enterprises	468	653	465	514	372	285
Interest received	499	595	833	722	528	415
Grants received	1,457	1,504	1,468	1,673	1,806	2,142
Other revenue	292	329	309	345	343	391
Total revenue	**6,048**	**6,759**	**7,112**	**7,734**	**7,752**	**8,166**
Increase in provisions	269	243	196	251	283	355
For depreciation	199	159	195	249	281	354
Borrowing (net)	273	368	743	158	10	-148
Other financing transactions	-28	-386	309	193	153	228
Total financing	**514**	**225**	**1,248**	**602**	**446**	**435**
Current deficit(b)	-1,523	-1,815	-1,542	-1,552	-1,809	-1,837
Capital deficit(c)	1,767	1,797	2,593	1,903	1,972	1,917
Total deficit(d)	**245**	**-17**	**1,052**	**351**	**163**	**80**
Net financing requirement(e)	**232**	**-25**	**893**	**360**	**184**	**102**

(a) This item provides an indication of the extent of government charges levied. the charges are offset against gross expenditure in calculating final consumption expenditure and comprise mainly sales to the private sector. However, note that it has not been possible to exclude all inter-agency charges and that some estimated data is included. (b) Revenue less current outlays plus increase in provisions less capital grants and other capital revenue. (c) Capital grants and other capital revenue less capital outlays. (d) The deficit is the sum of all financing transactions except for increases (decreases) in provisions. (e) The net financing requirement (NFR) is a measure of the extent to which the sector or combination of sectors contributes to the overall requirement for funds from outside the government sector. This measure can differ from the deficit because it excludes advances received as well as increases in provisions.
Source: Government Finance Statistics, Australia (5512.0).

24.13 OUTLAYS OF LOCAL GOVERNMENTS, BY PURPOSE
($ million)

Purpose	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
General public services	896	957	1,180	1,375	1,423	1,386
Defence	—	—	—	—	—	—
Public order and safety	112	132	105	116	120	126
Education	26	28	35	36	38	43
Health	130	148	153	163	167	169
Social security and welfare	230	256	281	311	358	407
Housing and community amenities	1,156	1,135	1,216	1,339	1,323	1,432
Recreation and culture	1,014	1,071	1,082	1,143	1,159	1,358
Fuel and energy	356	445	848	405	324	279
Agriculture, forestry and fishing	22	21	15	16	17	17
Mining, manufacturing and construction	80	91	107	119	117	120
Transport and communications	1,690	1,730	1,966	2,078	2,102	2,273
Other economic affairs	64	68	79	70	72	35
Other purposes	786	902	1,294	1,164	979	956
Total	**6,563**	**6,984**	**8,360**	**8,336**	**8,198**	**8,601**

Source: Government Finance Statistics, Australia (5512.0).

26.14 LOCAL GOVERNMENT TAXES, FEES AND FINES
($ million)

	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
Taxes on property	3,130	3,424	3,775	4,205	4,392	4,598
Fees and fines	202	253	262	275	311	334
Compulsory fees	146	192	194	198	231	256
Fines	56	61	68	77	80	78
Total taxes, fees and fines	**3,333**	**3,677**	**4,037**	**4,480**	**4,703**	**4,932**

Note: Excludes rates collected by local government business undertakings; they are regarded as charges for goods and services and not as taxes.
Source: Taxation Revenue, Australia (5506.0).

FINANCIAL ASSETS AND LIABILITIES

As well as providing transactions statistics, the GFS system provides levels (stocks) data on financial assets and liabilities, of the Australian government sector. The statistics encompass deposits made or held by Australian governments, equity and non-equity assets and liabilities and all lending and borrowing they have undertaken. Briefly defined:

- Financial assets cover the financial claims of the non-financial public sector on other organisations (including other government authorities and overseas organisations) and households, excluding shares and other equity and financial assets related to trade credit and accounts receivable. Financial assets are shown before deduction of provisions for doubtful debts.
- Liabilities include all financial claims on the non-financial public sector except those related to trade credit and other accounts payable. Liabilities include lease liabilities under finance leases or similar arrangements and repayable amounts held as security deposits. Monies held on trust (excluding employee superannuation contributions) are included both as assets and liabilities of government. Coin on issue is not included as a liability of government.

Tables 24.15, 24.16 and 24.17 summarise the financial assets, liabilities and the net financial position of the non-financial public sector of the three levels of government.

24.15 FINANCIAL ASSETS AND LIABILITIES OF COMMONWEALTH, STATE/TERRITORY AND LOCAL GOVERNMENTS COMBINED(a)
($ million)

	At 30 June 1992			At 30 June 1993		
	Liabilities	Financial assets	Net financial position(b)	Liabilities	Financial assets	Net financial position(b)
Cash and deposits	4,758	7,822	. .	5,601	7,440	. .
Advances	—	7,210	. .	—	7,050	. .
Other lending/borrowing(c)	167,151	26,504	. .	185,583	28,862	. .
Total	**171,909**	**41,536**	**130,373**	**191,184**	**43,352**	**147,833**

(a) Totals down do not always add because holdings of financial assets and liabilities between categories cancel out. (b) Total liabilities less total financial assets. (c) Loans and placements received/made, debt securities issued/held and finance lease liabilities.
Source: Public Sector Financial Assets and Liabilities, Australia (5513.0).

24.16 FINANCIAL ASSETS AND LIABILITIES OF THE COMMONWEALTH GOVERNMENT(a)
($ million)

	At 30 June 1992			At 30 June 1993		
	Liabilities	*Financial assets*	*Net financial position(b)*	*Liabilities*	*Financial assets*	*Net financial position(b)*
Cash and deposits	327	2,043	. .	308	2,322	. .
Advances	. .	23,280	. .	—	20,950	. .
Other lending/borrowing(c)	79,758	5,285	. .	94,662	4,468	. .
Total	**80,085**	**30,608**	**49,477**	**94,970**	**27,739**	**67,231**

(a) Totals down do not always add because holdings of financial assets and liabilities between categories cancel out. (b) Total liabilities less total financial assets. (c) Loans and placements received/made, debt securities issued/held and finance lease liabilities.
Source: Public Sector Financial Assets and Liabilities, Australia (5513.0).

24.17 FINANCIAL ASSETS AND LIABILITIES OF STATE/TERRITORY AND LOCAL GOVERNMENTS(a)
($ million)

	At 30 June 1992			At 30 June 1993		
	Liabilities	*Financial assets*	*Net financial position(b)*	*Liabilities*	*Financial assets*	*Net financial position(b)*
Cash and deposits	4,431	5,780	. .	5,294	5,119	. .
Advances	21,062	4,923	. .	18,609	4,430	. .
Other lending/borrowing(c)	88,776	22,670	. .	94,541	28,295	. .
Total	**114,269**	**33,373**	**80,896**	**118,444**	**37,844**	**80,600**

(a) Totals down do not always add because holdings of financial assets and liabilities between categories cancel out. (b) Total liabilities less total financial assets. (c) Loans and placements received/made, debt securities issued/held and finance lease liabilities.
Source: Public Sector Financial Assets and Liabilities, Australia (5513.0).

BIBLIOGRAPHY

ABS Publications

Classification Manual for Government Finance Statistics, Australia (1217.0)

Government Finance Statistics, Australia (5512.0)

Government Financial Estimates, Australia (5501.0)

Public Sector Financial Assets and Liabilities, Australia (Previously: Public Sector Debt, Australia) (5513.0)

Taxation Revenue, Australia (5506.0)

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twenty-five

National Accounts

Contents Page

In Australia, there is a wide range of economic data available to analyse the performance of various components of the economy over time. For example, data are regularly published on the number of houses being built, the number of cars produced, whether employment is rising or falling, the composition of exports and imports and so on. While these and other statistical series are important in their own right, none of them in isolation can provide an overall picture of the state of the economy.

National accounts are designed to provide a systematic summary of national economic activity and have been developed to assist in the practical application of economic theory. At their summary level, the national income, expenditure and product accounts reflect the key economic flows of the Keynesian economic system: production, the distribution of incomes, consumption, saving and investment. At their more detailed level, they are designed to present a statistical picture of the structure of the economy and the detailed processes that make up domestic production and its distribution. The national accounts include many detailed classifications (for example, by industry, by purpose, by commodity, by State and Territory, and by asset type) relating to major economic aggregates.

The performance of the economy, as represented in national accounting measures such as growth in the national income or gross domestic product, is not an end in itself. Movements in gross domestic product at constant prices are an important measure of economic growth, but there is no single indicator which can describe all aspects of the well-being of a country's citizens.

There are significant aspects of the 'quality of life' which cannot be comprehended in a system of economic accounts, just as there are significant aspects of an individual's well-being which are not measured in the conventional concept (or any other concept) of that individual's income.

Notwithstanding their limitations, especially in relation to uses for which they were never designed, the national accounts provide vital information for a range of important purposes. The system of national accounts also provides a framework or structure which can be, and has been, adapted and extended to facilitate the examination of other economic and social policy issues.

A detailed presentation of the concepts underlying the national accounts is provided in the ABS publication *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

The main output from the national accounts is a measure of the overall value of economic production in Australia in a given period, but without any double counting of the goods and services being produced. Many goods and services are bought by businesses for use in their own productive activities (for example, steel is bought by car manufacturers). If the value of all goods and services produced were simply added together there would be serious duplication because some goods and services would be added in several times at various stages of production. The overall measure of production, excluding double counting, is called gross domestic product, which is commonly referred to as 'GDP'. It is formally defined as:

> the total market value of goods and services produced in Australia after deducting the cost of goods and services used up (intermediate consumption) in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation).

Measurement of GDP

There are three ways of measuring GDP:

- The **income approach**, which measures GDP by summing the incomes accruing from production (wages, salaries and supplements; gross operating surplus (profits); and indirect taxes less subsidies).
- The **expenditure approach**, which involves summing all final expenditures on goods and services (that is, those goods and services which are not processed any further), adding on the contribution of exports and deducting the value of imports. Final expenditures consist of final consumption expenditure, gross fixed capital expenditure and increase in stocks. Exports are included in GDP because they are part of Australian production even though they are sold to overseas purchasers. Imports are deducted because, although they are included in final expenditures (for example, when someone buys an imported

video recorder its value is included as part of private final consumption expenditure) they are not part of Australian production.

- The **production approach**, which calculates GDP by taking the market value of goods and services produced by an industry (its gross output) and deducting the cost of goods and services used up by the industry in the productive process (intermediate consumption) which leaves the 'value added' by the industry (also called its gross product). GDP is then obtained by summing the gross product of all industries.

In theory, the three approaches result in identical estimates of GDP. In practice, because of the need to use different data sources for each method, the value of GDP obtained from each approach differs. The ABS refers to the above three alternative estimates of GDP as GDP(I), GDP(E) and GDP(P), respectively.

A fourth measure, the simple average of these three, referred to as GDP(A), is the preferred estimate of economic growth for Australia *when expressed in constant price terms*. Using movements in GDP(A) has been shown to provide a smoother and more reliable indicator of turning points in the economy than do changes in any of the individual measures of GDP. Quarterly changes in the constant price trend of GDP(A) are considered by the ABS to be the best indicator of short-term growth. Constant price data are published for all four estimates in original, seasonally adjusted and trend terms (*see* Constant price or 'real' GDP below).

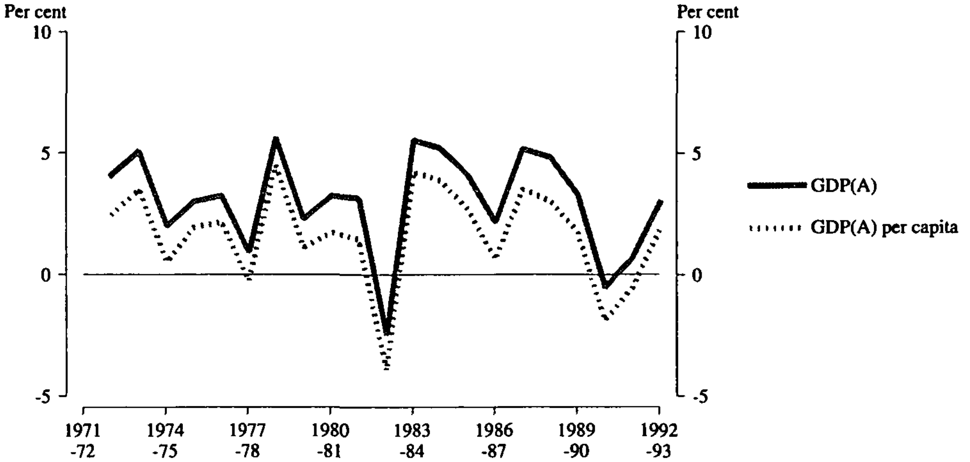
25.1 GROSS DOMESTIC PRODUCT AT AVERAGE 1989–90 PRICES
($ million)

Year	*GDP(I)*	*GDP(E)*	*GDP(P)*	*GDP(A)*
1962–63	126,915	127,532	127,710	127,386
1963–64	135,903	136,453	136,323	136,226
1964–65	145,506	145,099	146,022	145,543
1965–66	148,671	148,449	147,942	148,355
1966–67	158,447	158,691	157,186	158,107
1967–68	164,357	165,242	164,168	164,589
1968–69	178,817	179,312	179,389	179,173
1969–70	188,842	188,687	188,756	188,763
1970–71	197,896	198,834	196,913	197,881
1971–72	207,471	207,579	203,008	204,886
1972–73	215,452	214,850	209,446	213,250
1973–74	225,460	221,783	225,145	224,103
1974–75	229,720	227,143	228,789	228,552
1975–76	236,474	237,123	232,651	235,416
1976–77	243,322	244,415	241,306	243,014
1977–78	245,826	245,899	244,030	245,252
1978–79	259,522	261,760	255,987	259,089
1979–80	264,915	268,036	262,143	265,032
1980–81	274,252	275,665	270,881	273,600
1981–82	280,499	284,635	281,495	282,210
1982–83	275,700	278,418	271,348	275,155
1983–84	292,436	293,605	284,878	290,306
1984–85	307,309	307,126	301,723	305,386
1985–86	318,881	320,937	313,928	317,916
1986–87	326,913	327,161	319,867	324,647
1987–88	343,857	342,780	337,599	341,412
1988–89	360,494	354,876	358,132	357,834
1989–90	370,929	366,516	370,929	369,458
1990–91	369,189	365,325	367,755	367,423
1991–92	371,114	371,468	367,215	369,932
1992–93	382,897	382,013	377,843	380,918

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

GDP(A) at average 1989–90 prices increased by 3.0 per cent in 1992–93, following a rise of 0.7 per cent in 1991–92. For some analytical purposes it is important to allow for the impact of population growth on movements in GDP. Annual growth in GDP(A) per capita has been about 1.0 per cent to 1.8 per cent lower than that for GDP(A) since 1971–72 and was negative in 1990–91 and 1991–92.

25.2 GDP(A) AND GDP(A) PER CAPITA



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

Constant price or 'real' GDP

The expenditure approach to calculating GDP measures Australian production by summing the amounts spent by the final users on the goods and services produced. However, by itself this is not always a good measure of production, since the value of a particular good or service is affected by inflation.

For example, the national accounts may show that the amount spent on motor cars is 20 per cent higher this year than it was last year. If the price of cars has increased by 20 per cent over the last year, then the number of cars bought will not have changed — expenditure has risen only because the price of cars has risen.

For a lot of uses, it is necessary to know how much physical production (for example, the number of cars made) has changed, rather than just the current (or dollar) value of production. Constant price estimates are the way in which this is achieved. They provide a measure, in dollar values, which indicates changes in the actual *quantity* of items produced or purchased. Because of this, constant price estimates of GDP are often referred to as estimates of 'real' GDP.

In essence, estimates of GDP at constant prices involve finding indicators of price changes in the items included in the national accounts, and using these to remove the effects of inflation from the estimates of GDP. Constant price estimates are expressed in terms of the average prices prevailing in a selected base year (currently 1989–90). Some of the main indicators used in this process are the component series from the consumer price index, which measures changes over time in the price of a 'basket' of goods and services bought by households. Other price indexes produced by the ABS (such as the import price index) are also used extensively in compiling the constant price estimates.

Implicit price deflators

A by-product of the calculation of constant price estimates is the implicit price deflator (or IPD). An IPD is the price index obtained when a current price estimate is divided by the corresponding constant price estimate. The ABS publishes a time series of IPDs for each of the expenditure side aggregates (excluding increase in stocks) in the domestic production account.

IPDs calculated from the major national accounting aggregates such as gross national expenditure are widely used as a broader measure of inflation in the economy than that available from any of the individual price indexes published by the ABS. However, care has to be taken in the interpretation of IPDs as they do not compare the price of a constant basket of goods between any two periods except when comparing the base period with another period. Therefore, they reflect a combination of the effects of actual price changes and changes in the composition of the aggregate from which the deflator is derived. An alternative set of price indexes, based on the expenditure side of the domestic production account, is fixed-weighted price indexes for the major expenditure aggregates. They measure the change in price of the basket of goods and services included in GDP in the proportions measured in 1989–90.

PRESENTATION OF THE AUSTRALIAN NATIONAL ACCOUNTS

National income, expenditure and product accounts

The Australian national income, expenditure and product accounts are compiled and published in some detail every quarter, in *Australian National Accounts: National Income, Expenditure and Product* (5206.0), and in greater detail once a year, in *Australian National Accounts: National Income, Expenditure and Product* (5204.0).

Domestic production account. The domestic production account indicates changes in Australian production over time. Table 25.4 shows that, in 'real' terms (that is, after the effects of inflation are removed from the dollar value of Australia's production) there was a fall in production during the 1990–91 financial year. However, the two years since the recession in 1990–91 have both shown moderate growth, although growth in 1991–92 was relatively low, it accelerated in 1992–93 with growth of approximately three per cent in that year.

The domestic production account can also be used to show changes in the share of income accruing to labour (that is, wages, salaries and supplements) compared with the share accruing to capital (that is, profits). Graphs 25.5 and 25.6 show how the shares of each of wages and profits (defined as the gross operating surplus of private corporate trading enterprises) to GDP(I) at factor cost have changed since 1962–63.

The highest recorded value of the wages share of GDP(I) at factor cost is 63.4 per cent in 1974–75. The wages share has recovered somewhat from its recent low value of 55.4 per cent in 1988–89, but remains at a relatively low level compared with most of the 1970s and early 1980s.

The profits (GOS of private corporate trading enterprises) share of GDP(I) at factor cost reached its highest recorded value in 1984–85 (17.2%), slightly above the most recent high value of 17.1 per cent in 1988–89. Although the ratio fell to 15.8 per cent in 1991–92, it rose to 16.1 per cent in 1992–93, and is at a relatively high level by past standards.

National income and outlay account. The national income and outlay account shows how much of the national income is spent on final consumption. That part of income which is not spent in this way is saving.

25.3 DOMESTIC PRODUCTION ACCOUNT
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Final consumption expenditure											
Private	10,658	15,677	25,987	56,933	105,966	175,367	195,804	218,071	231,320	242,750	253,952
Government	1,995	3,711	6,357	17,272	32,474	52,571	56,820	61,767	66,655	71,324	74,344
Private gross fixed capital expenditure	2,800	4,496	7,726	15,455	27,985	54,938	67,402	67,802	60,688	55,623	59,452
Public gross fixed capital expenditure	1,331	2,178	3,270	7,194	13,120	17,405	17,920	21,646	20,801	20,722	19,837
Increase in stocks	253	113	– 270	– 430	– 2,437	– 466	3,799	4,460	– 1,726	– 1,832	– 477
Gross national expenditure	*17,037*	*26,175*	*43,070*	*96,424*	*177,108*	*299,815*	*341,745*	*373,746*	*377,738*	*388,587*	*407,108*
Exports of goods and services	2,483	3,559	7,007	14,213	25,430	51,080	54,728	60,133	65,154	68,828	74,878
Imports of goods and services	2,596	4,115	5,382	15,176	28,967	52,819	61,109	67,363	65,764	67,807	77,074
Gross domestic product (GDP(E))	**16,924**	**25,619**	**44,695**	**95,461**	**173,571**	**298,076**	**335,364**	**366,516**	**377,128**	**389,608**	**404,912**
Statistical discrepancy	– 83	– 136	98	– 67	– 1,722	918	5,278	4,413	3,992	– 361	948
Wages, salaries and supplements	8,361	13,212	23,562	53,066	94,949	147,367	165,730	184,607	192,791	197,303	204,576
Gross operating surplus											
Trading enterprises	6,687	9,527	16,586	31,859	56,259	114,512	132,828	142,350	143,608	146,884	153,864
Total	6,850	9,812	17,125	32,772	57,394	114,506	133,636	141,837	143,568	147,489	155,520
Indirect taxes less subsidies	1,630	2,459	4,106	9,556	19,506	37,121	41,276	44,485	44,761	44,455	45,764
Gross domestic product (GDP(I))	**16,841**	**25,483**	**44,793**	**95,394**	**171,849**	**298,994**	**340,642**	**370,929**	**381,120**	**389,247**	**405,860**

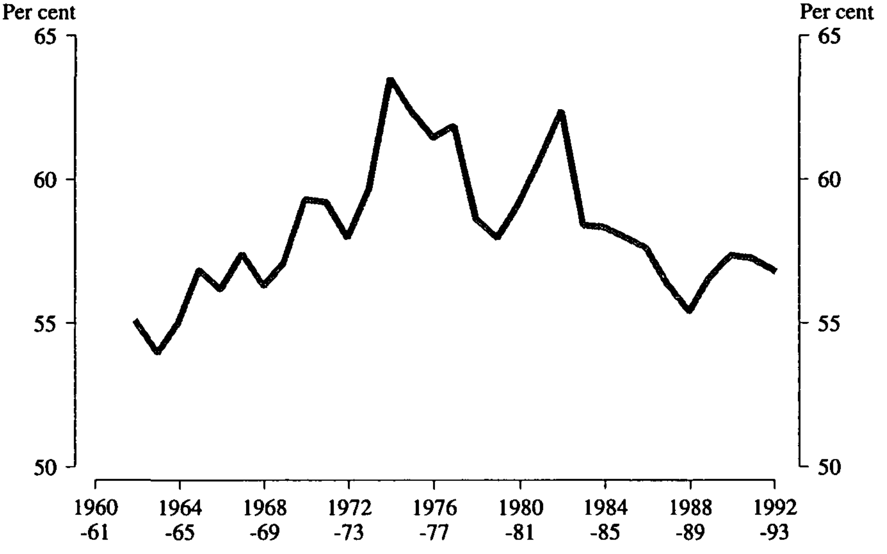
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.4 DOMESTIC PRODUCTION ACCOUNT AT CONSTANT PRICES (AVERAGE 1989–90 PRICES)(a)
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Final consumption expenditure											
Private	77,524	98,437	125,647	147,813	172,426	199,327	208,345	218,071	220,201	225,701	232,140
Government	17,750	26,528	31,174	41,254	47,265	58,190	59,542	61,767	63,308	65,784	66,767
Private gross fixed capital expenditure	21,375	30,575	40,472	40,704	46,448	62,126	71,192	67,802	59,990	55,079	57,559
Public gross fixed capital expenditure	10,422	14,373	16,398	18,267	19,426	19,236	18,864	21,646	20,340	20,290	19,301
Increase in stocks	1,374	1,242	- 1,128	- 1,021	- 3,624	- 383	4,043	4,460	- 1,279	- 2,020	- 61
Gross national expenditure	*130,127*	*171,192*	*212,444*	*247,082*	*282,420*	*338,496*	*361,986*	*373,746*	*362,560*	*364,834*	*375,706*
Exports of goods and services	13,660	18,691	27,956	32,815	36,650	56,263	57,012	60,133	66,791	72,852	76,691
Imports of goods and services	15,461	23,439	25,490	34,082	40,794	51,979	64,122	67,363	64,026	66,218	70,384
Gross domestic product (GDP(E))	**127,532**	**165,242**	**214,850**	**245,899**	**278,418**	**342,780**	**354,876**	**366,516**	**365,325**	**371,468**	**382,013**
Statistical discrepancy	- 617	- 885	602	- 73	- 2,718	1,077	5,618	4,413	3,864	- 354	884
Gross domestic product (GDP(I))	**126,915**	**164,357**	**215,452**	**245,826**	**275,700**	**343,857**	**360,494**	**370,929**	**369,189**	**371,114**	**382,897**

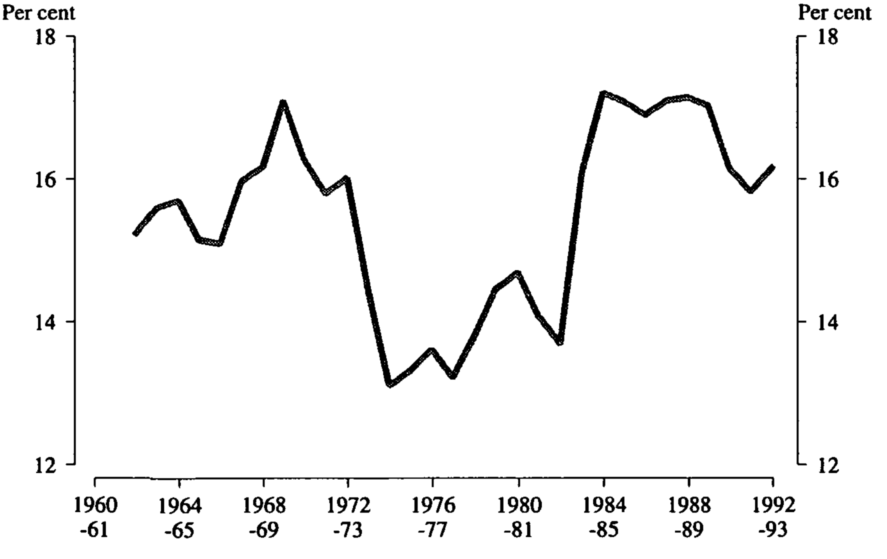
(a) Estimates prior to 1984–85 have been derived by linking estimates for earlier base years to estimates at average 1989–90 prices.
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.5 WAGES SHARE OF GDP(I) AT FACTOR COST



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.6 PROFITS SHARE OF GDP(I) AT FACTOR COST



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

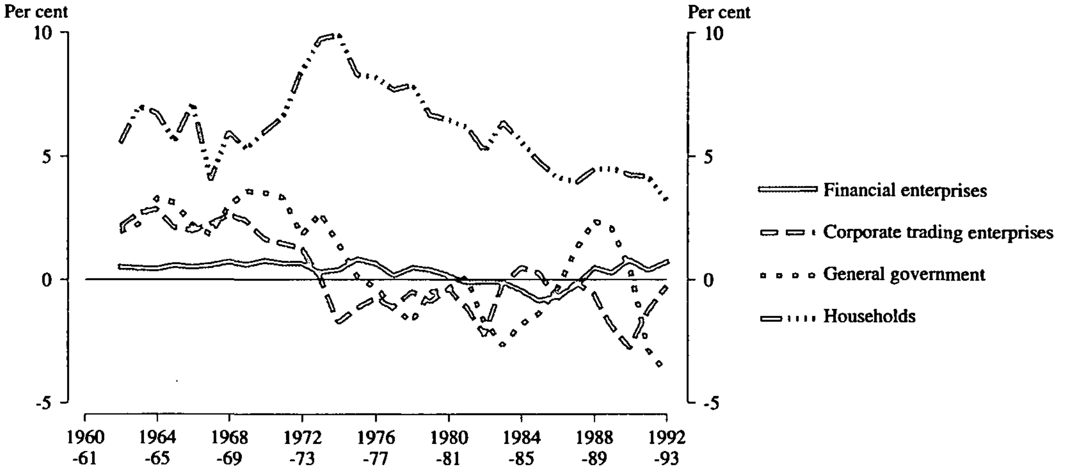
25.7 NATIONAL INCOME AND OUTLAY ACCOUNT
($ million)

	Five yearly					Annual					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Wages, salaries and supplements	8,361	13,212	23,562	53,066	94,949	147,367	165,730	184,607	192,791	197,303	204,576
Net operating surplus	4,709	6,493	11,276	18,431	29,593	67,803	82,357	85,979	85,261	87,563	92,950
Domestic factor incomes	*13,070*	*19,705*	*34,838*	*71,497*	*124,542*	*215,170*	*248,087*	*270,586*	*278,052*	*284,866*	*297,526*
Less net income paid overseas	233	343	550	1,210	3,579	10,252	13,655	17,480	17,656	15,690	14,099
Indirect taxes	1,738	2,680	4,572	10,848	22,686	41,521	45,808	49,028	50,481	50,354	52,264
Less subsidies	108	221	466	1,292	3,180	4,400	4,532	4,543	5,720	5,899	6,500
National income	*14,467*	*21,821*	*38,394*	*79,843*	*140,469*	*242,039*	*275,708*	*297,591*	*305,157*	*313,631*	*329,191*
Less net unrequited transfers to overseas	22	24	88	257	195	- 1,665	- 2,208	- 2,329	- 2,428	- 2,241	- 727
National disposable income	**14,445**	**21,797**	**38,306**	**79,586**	**140,274**	**243,704**	**277,916**	**299,920**	**307,585**	**315,872**	**329,918**
Final consumption expenditure											
Private	10,658	15,677	25,987	56,933	105,966	175,367	195,804	218,071	231,320	242,750	253,952
Government	1,995	3,711	6,357	17,272	32,474	52,571	56,820	61,767	66,655	71,324	74,344
Saving	1,792	2,409	5,962	5,381	1,834	15,766	25,292	20,082	9,610	1,798	1,622
Disposal of income	**14,445**	**21,797**	**38,306**	**79,586**	**140,274**	**243,704**	**277,916**	**299,920**	**307,585**	**315,872**	**329,918**
Gross national product	—	—	—	—	168,270	288,742	326,987	353,449	363,464	373,557	391,761

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

Household saving as a percentage of GDP(I) increased significantly between 1962–63 and 1974–75, but has fallen subsequently from its high of 9.9 per cent in 1974–75 to 3.2 per cent in 1992–93. General government saving has fallen for the fourth consecutive year as a percentage of GDP(I) (– 3.8% in 1992–93); in current value terms it was – $15.5 billion in 1992–93. Saving of corporate trading enterprises has been negative for 16 of the past 19 years. In 1992–93 it was – 0.2 per cent of GDP(I) (– $1.2 billion in current value terms).

25.8 SAVINGS, BY SECTOR, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

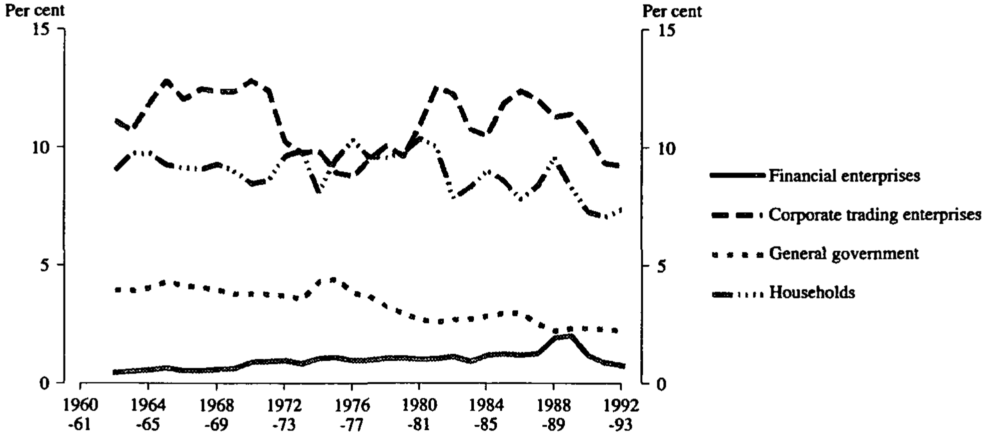
National capital account. The national capital account shows how the saving from the national income and outlay account is used to finance gross fixed capital expenditure. If, as is currently the case in Australia, the nation's saving is not sufficient to pay for all the capital equipment needed for Australian production, the shortfall must be borrowed from overseas. The amount borrowed from overseas is shown in the national capital account as a negative entry for net lending to overseas.

25.9 NATIONAL CAPITAL ACCOUNT
($ million)

	Five yearly					Annual					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Consumption of fixed capital	2,141	3,319	5,849	14,341	27,801	46,703	51,279	55,858	58,307	59,926	62,570
Saving											
Household	925	1,020	3,785	7,294	8,884	11,740	15,181	16,726	16,106	16,220	13,066
General government surplus on current transactions	325	465	802	- 1,116	- 2,933	3,367	8,032	7,697	1,850	- 11,208	- 15,506
Extraordinary insurance claims paid	—	—	—	—	200	—	—	654	—	—	—
Other	542	924	1,375	- 797	- 4,317	659	2,079	- 4,995	- 8,346	- 3,214	4,062
Finance of gross accumulation	**3,933**	**5,728**	**11,811**	**19,722**	**29,635**	**62,469**	**76,571**	**75,940**	**67,917**	**61,724**	**64,192**
Gross fixed capital expenditure											
Private	2,800	4,496	7,726	15,455	27,985	54,938	67,402	67,802	60,688	55,623	59,452
Public enterprises	666	1,143	1,615	3,695	8,495	9,895	10,348	13,011	12,026	11,747	10,925
General government	665	1,035	1,655	3,499	4,625	7,510	7,572	8,635	8,775	8,975	8,912
Increase in stocks											
Private non-farm	221	292	- 108	- 42	- 2,218	179	3,456	1,334	- 2,866	- 1,621	- 569
Farm and public authorities	32	- 179	- 162	- 388	- 219	- 645	343	3,126	1,140	- 211	92
Statistical discrepancy	- 83	- 136	98	- 67	- 1,722	918	5,278	4,413	3,992	- 361	948
Net lending to overseas	- 368	- 923	987	- 2,430	- 7,311	- 10,326	- 17,828	- 22,381	- 15,838	- 12,428	- 15,568
Gross accumulation	**3,933**	**5,728**	**11,811**	**19,722**	**29,635**	**62,469**	**76,571**	**75,940**	**67,917**	**61,724**	**64,192**

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

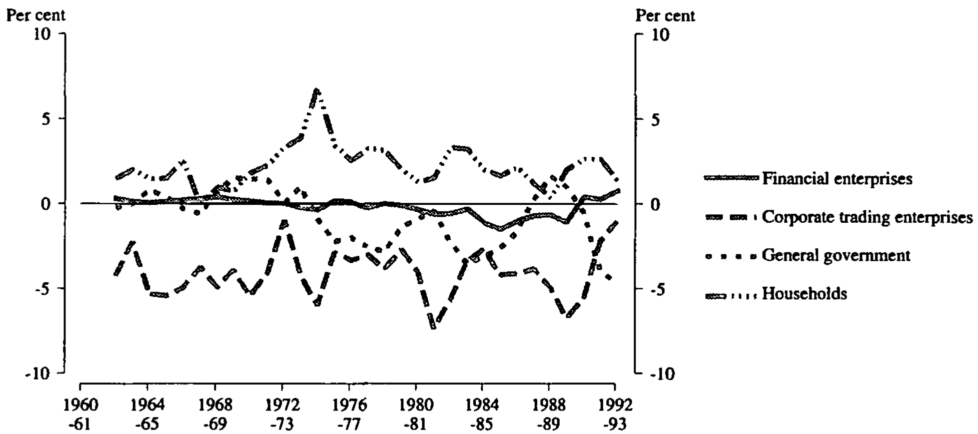
25.10 INVESTMENT, BY SECTOR, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

As a proportion of GDP(I), investment by corporate trading enterprises fell to very low levels during the 1970s and then rose to a peak of 12.4 per cent in 1986–87. It has subsequently fallen fairly steadily to 9.2 per cent in 1992–93. Household investment as a proportion of GDP(I) has fallen from 9.6 per cent in 1988–89 to 7.4 per cent in 1992–93. While general government investment as a proportion of GDP(I) peaked at 4.4 per cent in 1975–76, it has fallen steadily since then and is now 2.2 per cent of GDP(I).

25.11 NET LENDING, BY SECTOR, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.12 OVERSEAS TRANSACTIONS ACCOUNT
($ million)

	Five yearly					*Annual*					
	1962–63	*1967–68*	*1972–73*	*1977–78*	*1982–83*	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Imports of goods and services	2,596	4,115	5,382	15,176	28,967	52,819	61,109	67,363	65,764	67,807	77,074
Interest, dividends, etc. to overseas	290	428	827	1,531	4,619	11,921	15,568	20,389	20,995	19,063	17,296
Labour income to overseas	5	9	25	57	135	210	279	406	429	326	311
Unrequited transfers to overseas	128	240	471	863	1,515	1,880	2,002	2,189	2,283	2,343	2,392
Net lending to overseas	- 369	- 923	987	- 2,430	- 7,311	- 10,326	- 17,828	- 22,381	- 15,838	- 12,428	- 15,568
Use of current receipts	**2,651**	**3,869**	**7,692**	**15,197**	**27,925**	**56,504**	**61,130**	**67,966**	**73,633**	**77,111**	**81,505**
Exports of goods and services	2,483	3,559	7,007	14,213	25,430	51,080	54,728	60,133	65,154	68,828	74,878
Interest, dividends, etc. from overseas	58	85	278	301	937	1,708	1,953	2,778	3,166	3,227	2,994
Labour income from overseas	4	9	24	77	158	171	239	387	452	472	514
Extraordinary insurance claims from overseas	—	—	—	—	80	—	—	150	150	—	—
Unrequited transfers from overseas	106	216	383	606	1,320	3,545	4,210	4,518	4,711	4,584	3,119
Current receipts from overseas	**2,651**	**3,869**	**7,692**	**15,197**	**27,925**	**56,504**	**61,130**	**67,966**	**73,633**	**77,111**	**81,505**

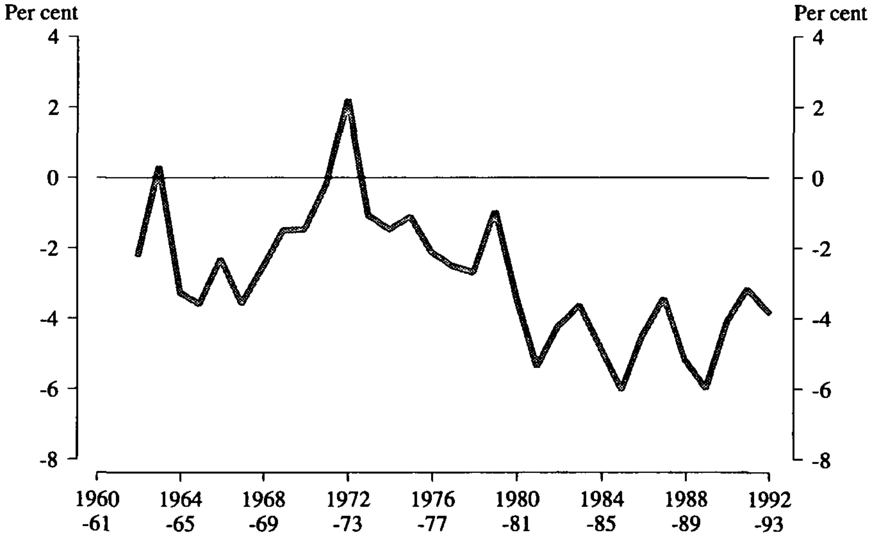
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

The household sector has been a lender to the other sectors in the economy for all years except 1967–68. As a proportion of GDP(I), lending by households in recent years has risen from 0.3 per cent in 1988–89 to 1.4 per cent in 1992–93. Borrowing (that is, negative net lending) by corporate trading enterprises has fluctuated significantly over the whole period from 1962–63 to 1992–93. However, there is no discernible increasing or decreasing trend as a proportion of GDP(I). After being a net lender for the period 1987–88 to 1989–90, general government has returned to being a significant borrower over the past three years.

Overseas transactions account. The overseas transactions account is actually derived from the detailed balance of payments current account — *see* Chapter 26. It shows Australia's exports and imports, incomes received by Australian residents from overseas, and incomes paid to overseas by Australian residents. The balance is net lending to overseas.

Australia has generally been a net borrower of capital from overseas. In the national accounts, this situation is reflected by a negative value for 'net lending to overseas'. Following one year where Australia actually loaned money to overseas in the early 1970s, net borrowing from overseas, expressed as a proportion of GDP(I), increased rapidly during the 1970s and has remained at relatively high levels since the early 1980s. The following graph shows this proportion since 1962–63.

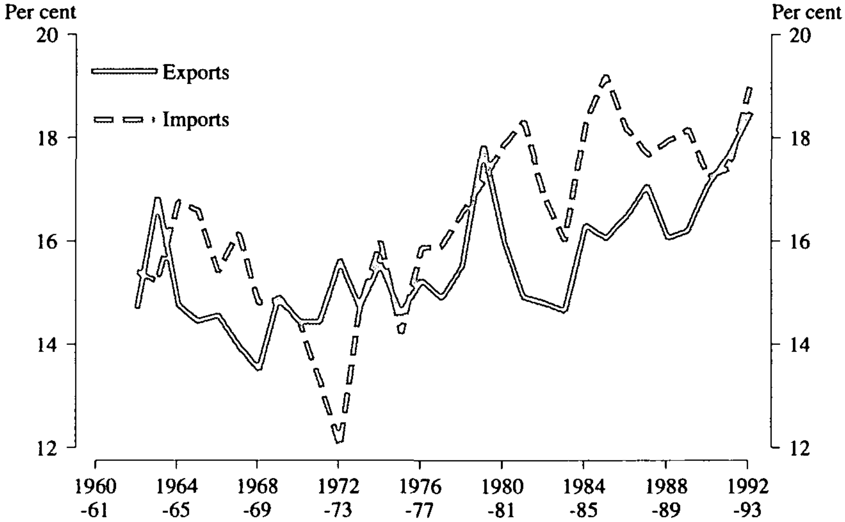
25.13 NET LENDING TO OVERSEAS, AS SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

The importance of foreign trade to the Australian economy is illustrated by the following graph, which shows the ratios of exports and imports of goods and services to GDP(I) for the financial years 1962–63 to 1992–93. In 1992–93 the import ratio was 19.0 per cent and the export ratio was 18.4 per cent. For a detailed discussion about a wide range of balance of payments ratios refer to *Balance of Payments, Australia, 1991–92* (5303.0).

25.14 EXPORTS AND IMPORTS, SHARE OF GDP(I)



Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

State accounts

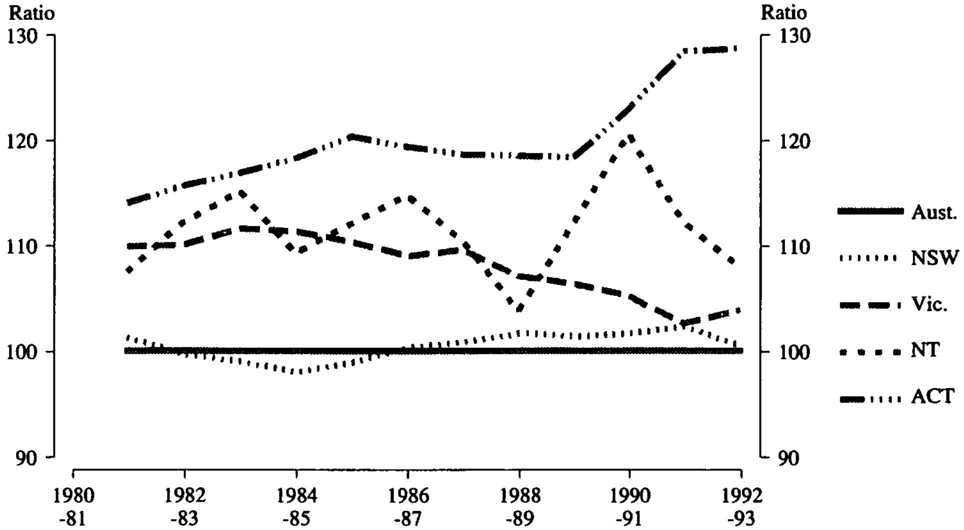
As well as Australia's national accounts, the ABS produces State accounts each quarter. These provide quarterly estimates of gross State product and State final demand. Gross State product is produced by summing the incomes generated in the production process (the income approach to measuring total production). At present, estimates of gross State product are only in current prices. State final demand is equal to the sum of private and government final consumption expenditure and gross fixed capital expenditure. Estimates of State final demand are available in both current and constant prices.

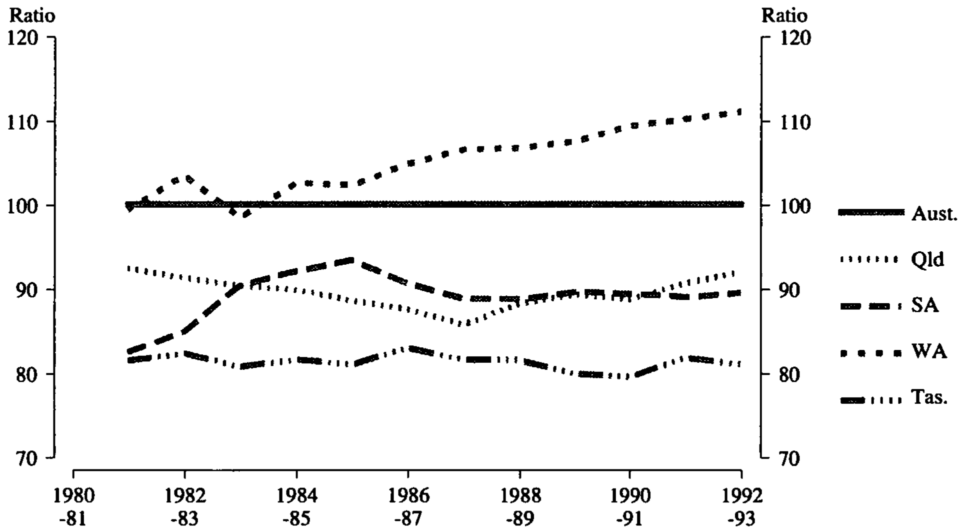
An important use of State accounts is to compare the performance of each State and Territory. The following graphs show gross State product, in current prices, per head of mean population for each State and Territory divided by the Australian value (GDP(I) per head of mean population) since 1980–81.

Gross State product per head of mean population in 1992–93 was above the national average in New South Wales, Victoria, Western Australia, the Northern Territory and the Australian Capital Territory. GSP per head of mean population has been below the national average for the whole length of the time series (that is, since 1980–81) in each of Queensland, South Australia and Tasmania.

The only States to experience a decline in this ratio in 1992–93 were New South Wales, Tasmania and the Northern Territory.

25.15 GROSS STATE PRODUCT PER HEAD OF MEAN POPULATION
(Australia = 100.0)





Source: Australian National Accounts: State Accounts (5220.0).

Input-output tables

Basic structure of input-output tables. Input-output tables show the structure of a country's entire production system for a particular period, usually one year. They show which goods and services are produced by each industry and how they are used (for example, some goods, such as cars, are sold to final consumers while others, such as steel, are used as inputs by other industries in producing more goods and services). The tables are based on the principle that the value of the output of each industry can be expressed as the sum of the values of all the inputs to that industry plus any profits made. All the goods and services produced in a period are identified as being used as inputs by industries in their production process, being sold to final users of the goods and services (either in Australia, or overseas as exports), or contributing to the change in stocks (an increase in stocks if more goods are produced than purchased or a run-down in stocks if purchases exceed production). For the production system as a whole, the sum of all outputs must equal the sum of all inputs and for the economy as a whole, total supply must equal total demand (stocks provide the mechanism which balances supply and demand).

Relationship to the national income and expenditure accounts. Input-output tables can be directly related to the domestic production account. The income side of the domestic production account shows the amount of income generated in the economy accruing to labour (in the form of wages, salaries and supplements) and to capital (as profits or, in national accounting terms, 'gross operating surplus'). The expenditure side of the account shows the value of goods and services entering into the various categories of final demand.

The input-output tables provide a much more detailed disaggregation of the domestic production account than is available in the national income, expenditure and product accounts. The latter only supply details of the end results of economic activity, whereas the input-output tables provide a means of tracing flows of goods and services step by step through the production process. The extra detail provided by the input-output tables is essential for many analyses.

7-sector input-output table. The following table and diagram show the flows of goods and services in respect of 1989–90.

The links between the table and the diagram are explained by working through the following formulas.

Intermediate usage ($296,957 million) in the diagram is derived by summing from column 8 of the table — Intermediate usage ($260,666 million); Sales by final buyers ($833 million); Competing imports ($34,005 million); and Complementary imports ($1,453 million).

Gross value added ($375,511 million) in the diagram is derived by summing from column 14 of the table — Wages, salaries, and supplements ($172,529 million); Gross operating surplus ($158,551 million); and taxes: Commodity taxes (net) ($24,010 million), Indirect taxes n.e.c. (net) ($16,979 million) and Duty on competing imports ($3,442 million).

Domestic production ($672,468 million) in the diagram is derived by summing Intermediate usage from column 8 of the table ($260,666 million); total final demand at basic values from column 13 ($392,307 million); and the indirect taxes payable on those final demand items (*see* column 13): Commodity taxes (net) ($14,882 million), Indirect taxes n.e.c. (net) ($2,617 million) and Duty on competing imports ($1,996 million).

Imports ($67,835 million) in the diagram is derived by summing from column 14 of the table — Competing imports c.i.f. ($65,660 million) and Complementary imports c.i.f. ($2,175 million).

Total supply ($740,303 million), which must be equal to Total Demand, is the sum of Domestic production ($672,468 million) and Imports ($67,835 million).

Domestic final demand ($382,489 million) in the diagram is derived from the table by subtracting total Exports ($60,857 million), column 12, from total Final demand ($443,346 million), column 13.

Exports ($60,857 million) in the diagram is total Exports, column 12, in the table.

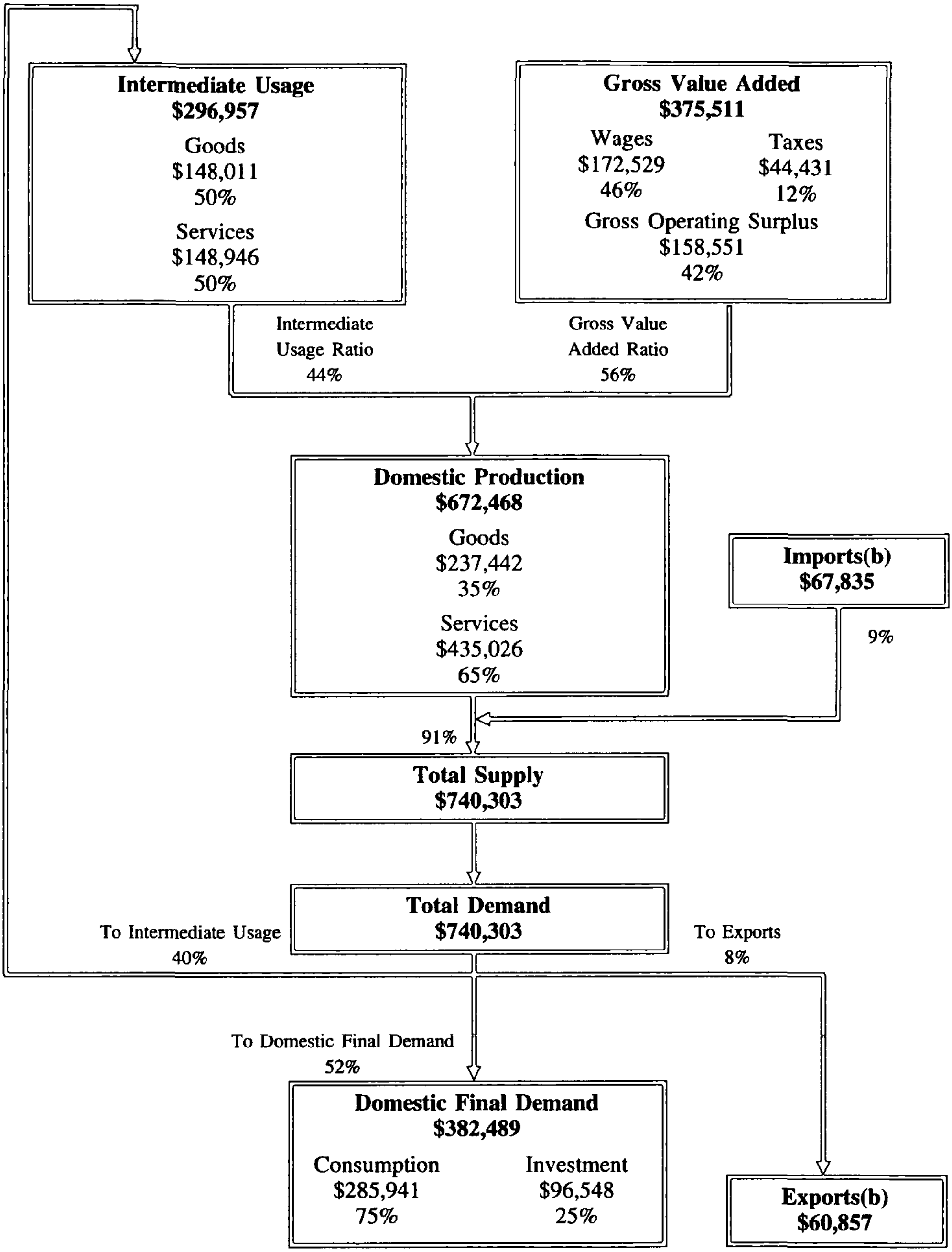
Total Demand ($740,303 million) is the sum of Domestic final demand ($382,489 million), Intermediate usage ($296,957 million), and Exports ($60,857 million).

25.16 INDUSTRY BY INDUSTRY FLOW MATRIX, BASIC VALUES, 1989–90
($ million)

Supply	*Agriculture (1)*	*Mining (2)*	*Manufacturing (3)*	*Construction (4)*	*Trade and transport (5)*	*Service industries (6)*	*Public admin. and defence (7)*	*Intermediate usage (8) =Sum (1)-(7)*	*Final consumption expenditure (9)*	*Gross fixed capital expenditure (10)*	*Increase in stocks (11)*	*Exports (12)*	*Final demand (13) = Sum (9)-(12)*	*Total supply (14) = Sum (8)+(13)*
	Use													
Agriculture	2,399	58	11,336	48	48	757	55	14,701	3,224	155	2,540	5,632	11,551	26,252
Mining	4	2,108	8,212	447	52	2,733	42	13,598	81	313	531	12,718	13,643	27,241
Manufacturing	3,362	2,267	40,944	15,902	11,673	10,518	3,533	88,199	39,893	15,611	1,354	22,012	78,870	167,069
Construction	17	181	106	68	623	1,504	314	2,813	3,884	49,549	2	81	53,516	56,329
Trade and transportation	1,937	2,038	15,824	5,217	12,965	10,669	2,791	51,441	57,342	7,738	244	11,523	76,847	128,288
Service industries	1,957	2,217	11,158	3,604	19,076	38,117	5,044	81,173	127,076	4,082	2	2,232	133,392	214,565
Public admin. and defence	86	40	874	546	628	955	5,612	8,741	24,329	—	—	159	24,488	33,229
Intermediate usage	*9,762*	*8,909*	*88,454*	*25,832*	*45,065*	*65,253*	*17,391*	*260,666*	*255,829*	*77,448*	*4,673*	*54,357*	*392,307*	*652,973*
Wages, salaries, supplements	3,268	4,104	27,835	12,276	39,950	73,076	12,020	172,529	—	—	—	—	—	172,529
Gross operating surplus	11,025	12,152	27,831	13,074	31,400	61,782	1,287	158,551	—	—	—	—	—	158,551
Commodity taxes (net)	627	307	2,759	637	3,031	1,767	—	9,128	12,670	1,766	88	358	14,882	24,010
Indirect taxes n.e.c. (net)	654	242	1,101	715	4,097	7,493	60	14,362	—	2,617	—	—	2,617	16,979
Sales by final buyers	—	5	800	1	—	27	—	833	3,188	-4,222	13	188	-833	—
Competing imports c.i.f.	882	1,445	17,046	3,459	4,425	4,842	1,906	34,005	12,308	13,048	345	5,954	31,655	65,660
Duty on competing imports	30	58	817	245	142	154	—	1,446	1,241	746	9	—	1,996	3,442
Complementary imports c.i.f.	2	20	425	89	178	174	565	1,453	705	37	-20	—	722	2,175
Duty on complementary imports	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Australian production	**26,250**	**27,242**	**167,068**	**56,328**	**128,288**	**214,568**	**33,229**	**652,973**	**285,941**	**91,440**	**5,108**	**60,857**	**443,346**	**1,096,319**

Source: Derived from Australian National Accounts: Input-Output Tables (5209.0).

25.17 THE AUSTRALIAN ECONOMY, FLOW OF GOODS AND SERVICES (a)
($ million)



(a) Flows are based on 1989–90 Input-Output tables. (b) Includes re-exports
Source: Derived from Australian National Accounts: Input-Output Tables (5209.0).

Financial accounts

In addition to the national accounts, the ABS produces quarterly information on the level of financial assets and liabilities of each institutional sector of the economy, the market for financial instruments and inter-sectoral transactions in financial assets and liabilities classified by financial instrument — *see* Chapter 23.

Further developments in Australia's national accounts

Environmental satellite accounts. The 1993 System of National Accounts (SNA) recommends the development of a system of environmental satellite accounts designed to enable the adjustment of GDP to take account of the depletion of natural resources and the degradation of the environment as a result of economic activity. International standards for environmental accounting are being developed and the ABS is monitoring the development of these standards with the ultimate aim of developing a system of environmental satellite accounts for Australia at some time in the future.

The value of unpaid work. Not all production that occurs in an economy is recorded in the national accounts. For example, the value of unpaid work, particularly unpaid work in the home and volunteer work, is excluded in accordance with prevailing international statistical standards. There is considerable interest, however, in the contribution of unpaid work to the economy and the 1993 SNA has recommended that the value of this work should be shown in satellite accounts.

Although it can be argued that unpaid household work comes within the definition of economic production, it has been excluded from the scope of GDP as defined by the SNA. This is because the major focus of the national accounts is on changes in the economic market sector. There are also significant conceptual problems and practical difficulties associated with the availability of data and the selection of appropriate shadow prices.

The ABS has produced a series of estimates of the value of unpaid household work based on different assumptions about the prices that could be assigned to value the various activities. The estimates were based on the results of the 1992 national Time Use Survey. Using the ABS preferred valuation method (individual function replacement cost method) unpaid work in 1992 was estimated to be 58 per cent of GDP.

BIBLIOGRAPHY

ABS Publications

Australian National Accounts: Capital Stock (5221.0)

Australian National Accounts: Concepts, Sources and Methods (5216.0)

Australian National Accounts: Financial Accounts (5232.0)

Australian National Accounts: Input–Output Tables (5209.0)

Australian National Accounts: Input–Output Tables (Commodity Details) (5215.0)

Australian National Accounts: Multifactor Productivity (5234.0)

Australian National Accounts: National Income, Expenditure and Product (5204.0) — annual

Australian National Accounts: National Income, Expenditure and Product (5206.0) — quarterly

Australian National Accounts: Quarterly Data on Floppy Disk (5228.0)

BIBLIOGRAPHY — *continued*

Australian National Accounts: State Accounts (5220.0) — annual

Australian National Accounts: State Accounts (5242.0) — quarterly

Gross Domestic Product at Purchasing Power Parity in OECD Countries (5226.0)

ABS Occasional Papers

ASPDEN, C. Estimates of Multifactor Productivity: Australia (5233.0)

BAILEY, CHERYLEE. Studies in National Accounting: Current Cost Depreciation and Net Capital Stock (1981/1)

BURRELL, S., DANIEL, J., JOHNSON, A. AND WALTERS, R. State Accounts, Australia: Issues and Experimental Estimates (1984/4)

CASTLES, I. Productivity, Prices, Profit and Pay, 1964–65 to 1989–90 (5239.0)

DIPPELSMAN, R. The Effects of Rebasing the Constant Price Estimates of the Australian National Accounts (1985/1)

JOHNSON, A.G. The Accuracy and Reliability of the Quarterly Australian National Accounts (1982/2)

Unpaid Work and the Australian Economy (5240.0)

Measuring Unpaid Household Work: Issues and Experimental Estimates (5236.0)

National Balance Sheets for Australia: Issues and Experimental Estimates (5241.0)

WALTERS, R. AND DIPPELSMAN, R. Estimates of Depreciation and Capital Stock, Australia (1985/3)

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

Chapter Twenty-six

International Accounts and Trade

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BALANCE OF PAYMENTS

The Australian balance of payments is a systematic record of Australia's economic transactions with the rest of the world. Balance of payments statistics are essential for the examination of external influences on the domestic economy.

Conceptual framework

Balance of payments transactions can be broadly divided into three categories. The first comprises transactions in goods, services and income between residents of Australia and non-residents. The second covers financial transactions involving claims on and liabilities to the rest of the world. The third category, described as unrequited transfers, records only the offsetting entries for one-sided balance of payments transactions, such as gifts in cash and kind which have no 'quid pro quo'. Two changes not arising from transactions — specifically changes in Australia's official reserve assets arising from the allocation (or cancellation) of Special Drawing Rights (SDRs) by the International Monetary Fund (IMF) and the monetisation (or demonetisation) of gold — are included by convention, to make the accounts more analytically useful.

By convention, the first and third of the above categories are combined to form the current account while the second, together with the two changes not arising from transactions, are shown separately in what is known as the capital account.

The double entry accounting system is used for recording balance of payments transactions. Under this system, credit entries, which are shown with no arithmetic sign, are used to record exports of goods and services, income receivable and financial transactions involving either a reduction in the country's foreign financial assets or an increase in its foreign liabilities. Conversely, debit entries, which are identified by a minus sign (–), are used to record imports of goods and services, income payable and financial transactions involving either an increase in foreign financial assets or a decrease in foreign liabilities. Transactions in a double entry accounting system are reflected in pairs of equal credit and debit entries. For example, an export transaction for which payment is received through the banking system involves a credit entry for the export to a non-resident and a debit entry for the increase in foreign exchange assets due to the receipt of foreign exchange in payment of the export. Any entries that are not automatically paired are matched by special offsetting entries. Such offsetting entries are required for the category of unrequited transfers, for which there is no 'quid pro quo', and for the other changes not arising from transactions referred to in the previous paragraph, namely the allocation (or cancellation) of SDRs and the monetisation (or demonetisation) of gold.

In principle, the net sum of all credit and debit entries is zero. In practice, some transactions are not measured accurately (errors), while others are not measured at all (omissions). Equality between the sum of the credit and debit entries is then brought about by the inclusion of a balancing item which reflects net errors and omissions. The balancing item is shown separately after both the current and capital accounts, since it reflects the net effects of errors and omissions in both accounts.

In principle, transactions and other changes should be valued in the balance of payments at market prices. However, for practical reasons, transactions are generally valued in the statistics at transaction prices as this basis provides the closest practical approximation to the market price principle.

Transactions and other changes recorded in the balance of payments should, in principle, be recorded at the time of change of ownership (either actual or imputed). For current account transactions, this occurs when ownership of goods changes, services are rendered, reinvested earnings attributable to direct investors are earned, and when interest and dividends become due for payment. In the case of unrequited transfers, these should be recorded when the goods, services, cash, etc. to which they are offsets change ownership. Those, such as taxes and fines, which are imposed by one party on another, should ideally be recorded at the time they become due for payment without penalty. For capital account transactions the time of change of ownership is, by convention, the time at which transactions are entered in the books of the transactors.

In practice, the nature of the available data sources is such that the time of recording of transactions will often differ from the time of change of ownership. Where practical, timing adjustments are made for transactions in certain goods to ensure that they are recorded in the time period in which change of ownership occurs.

Classification

In the tables that follow, global estimates of the current and capital accounts of the Australian balance of payments are presented. Current transactions are recorded gross and capital transactions net. This means that for each item in the current account the credit entries are recorded separately from the debit entries. For example, travel credits is shown separately from travel debits. For each item in the capital account, however, debit and credit transactions are combined to produce a single result for the item which may be either a net credit or a net debit. For example, in a given period, foreign purchases of shares issued by companies in Australia (credit) are netted against foreign sales of similar shares (debit) and the net result is recorded in the appropriate item in the capital account.

The current account records transactions between Australian residents and non-residents in merchandise, other goods and services, income and unrequited transfers. Merchandise includes all movable goods, with a few exceptions, which change ownership from residents to non-residents (exports) and from non-residents to residents (imports). Services covers services rendered by Australian residents to non-residents (credits) and by non-residents to residents (debits), together with transactions in a few types of goods (for example, goods purchased by travellers). Income covers income earned by Australian residents from non-residents (credits) or by non-residents from residents (debits). It includes investment income (for example, dividends and interest), other property income (for example, royalties) and labour income. Unrequited transfers cover the offsetting entries required when resources are provided, without something of economic value being received in return, by non-residents to Australian residents (offsetting credits required) and by residents to non-residents (offsetting debits required). It includes foreign aid and migrants' transfers.

The capital account records transactions in Australia's foreign financial assets and liabilities, including the creation and extinction of claims on or by the rest of the world and a few specified other changes. Capital transactions are grouped into two broad institutional sectors called official and non-official. The official sector comprises general government and the Reserve Bank of Australia. Public business enterprises are excluded from this sector and included in the non-official sector. The non-official sector covers transactions of all other resident entities including banks, non-bank financial enterprises, trading enterprises and households.

Statistical overview

As shown in table 26.1, the balance on current account for 1992–93 was a deficit of $15,956 million, an increase of $3,331 million (or 26%) on the deficit recorded for 1991–92 but $354 million (2%) below the deficit recorded for 1990–91. The increase in the deficit in 1992–93 was due to a decrease of $3,229 million in the merchandise trade surplus and a decrease of $1,514 million in the net unrequited transfer surplus. These movements in merchandise trade and net unrequited transfers were partly offset by a decrease of $1,400 million in the net income deficit and a decrease of $12 million in the net services deficit.

Tables 26.4 and 26.5 show details of exports and imports of goods and services at current and constant prices. Comments on these components are provided in the section on foreign trade.

The net income deficit for 1992–93 fell to $14,487 million, the lowest level of this deficit since 1988–89. Income credits increased by $1,184 million (28%) to $5,438 million due largely to increases in reinvested earnings, dividends receivable on direct investment abroad and interest receivable on lending to unrelated enterprises abroad. Income debits decreased by $216 million (1%) to $19,925 million due largely to a decrease in interest payable on general government borrowing domiciled in Australia and a decrease in interest payable on borrowing from unrelated enterprises abroad.

As table 26.2 shows, the balance on capital account for 1992–93 recorded a net inflow of $16,895 million, an increase of $451 million on the net inflow for 1991–92. This increase was due largely to an increase of $4,969 million, to $7,356 million, in the inflow from net equity transactions, partly offset by a decrease of $3,102 million, to $9,404 million, in the inflow in respect of net debt transactions and a decrease of $1,417 million, to $134 million, in the inflow from the 'other' capital transactions.

Values of exports and imports of goods and services (balance of payments basis)

Tables 26.4 and 26.5 show annual values of Australian exports and imports of goods and services at current and constant (average 1989–90) prices. These estimates are compiled quarterly on a balance of payments basis within the framework outlined below. *See* Relationship to Balance of Payments section under Foreign Trade later in this chapter regarding the difference between the balance of payments and the foreign trade bases for exports and imports.

The current price value of a transaction may be expressed conceptually as the product of a price and quantity. The value of the transaction at constant prices may then be thought of as being derived by substituting, for the current price, the corresponding price in the chosen base year. There are, however, many transactions recorded in statistics of overseas trade for which it is not possible to apply such an approach. In such cases it is necessary to make assumptions and approximations (for example, revaluing by means of the price index which is considered to be most closely related to the commodity involved). The published estimates at constant prices should be viewed in this light.

A surplus was recorded on merchandise trade in 1992–93 at current prices. Merchandise exports rose nine per cent to $60,015 million with significant increases recorded in cereal grains; sugar; machinery; 'other' manufactures; transport equipment; and 'other' mineral fuels. Decreases were recorded in wool and gold. Merchandise imports increased 16 per cent to $59,426 million. The most significant increases occurred in machinery; 'other' manufactures; chemicals; fuels; road vehicles; and metals and metal manufactures. The only decrease recorded was in civil aircraft.

The reduction in the net services deficit of $12 million to $2,785 million, at current prices, was mainly due to an increase in the 'other' transportation surplus and a reduction in the 'other' services deficit.

In constant price terms, exports of goods and services increased $3,839 million (5%), while imports of goods and services increased $4,166 million (6%). The fall in the surplus on goods and services made a negative contribution of 0.1 percentage point to the expenditure-based estimates of GDP at average 1989–90 prices. The merchandise trade surplus was down $1,230 million (or 14%) while the net services deficit fell $903 million (or 38%).

The published components of merchandise exports and imports of goods free-on-board are defined in terms of groupings of items in the United Nations' Standard International Trade Classification (SITC).

26.1 CURRENT ACCOUNT
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Current transactions						
Goods and services						
Merchandise(a)						
Exports f.o.b.	41,515	43,894	48,564	52,155	54,874	60,015
Imports f.o.b.	-40,386	-47,032	-50,991	-49,256	-51,056	-59,426
Balance on merchandise trade	*1,129*	*-3,138*	*-2,427*	*2,899*	*3,818*	*589*
Services						
Credits						
Shipment	515	513	510	571	569	614
Other transportation	2,965	3,086	3,297	3,693	3,937	4,475
Travel	3,565	4,330	4,368	4,983	5,437	5,707
Other services	2,520	2,905	3,394	3,752	4,011	4,067
Total services credits	*9,565*	*10,834*	*11,569*	*12,999*	*13,954*	*14,863*
Debits						
Shipment	-2,923	-3,250	-3,443	-3,188	-3,257	-3,772
Other transportation	-2,510	-2,912	-3,424	-3,443	-3,642	-3,756
Travel	-3,749	-4,363	-5,135	-5,230	-5,122	-5,599
Other services	-3,251	-3,552	-4,370	-4,647	-4,730	-4,521
Total services debits	*-12,433*	*-14,077*	*-16,372*	*-16,508*	*-16,751*	*-17,648*
Net services	*-2,868*	*-3,243*	*-4,803*	*-3,509*	*-2,797*	*-2,785*
Balance on goods and services	*-1,739*	*-6,381*	*-7,230*	*-610*	*1,021*	*-2,196*
Income						
Credits						
Property income						
Reinvested earnings	2,163	2,166	1,364	205	555	1,930
Other	1,708	1,953	2,778	3,166	3,227	2,994
Labour and other income	171	239	537	602	472	514
Total income credits	*4,042*	*4,358*	*4,679*	*3,972*	*4,254*	*5,438*
Debits						
Property income						
Reinvested earnings	-2,428	-2,132	-1,126	-676	-752	-2,318
Other	-11,921	-15,568	-20,389	-20,995	-19,063	-17,296
Labour and other income	-210	-279	-406	-429	-326	*-311*
Total income debits	*-14,559*	*-17,979*	*-21,921*	*-22,100*	*-20,141*	*-19,925*
Net income	*-10,517*	*-13,621*	*-17,242*	*-18,128*	*-15,887*	*-14,487*
Unrequited transfers						
Credits	3,545	4,210	4,518	4,711	4,584	3,119
Debits	-1,880	-2,002	-2,189	-2,283	-2,343	-2,392
Net unrequited transfers	*1,665*	*2,208*	*2,329*	*2,428*	*2,241*	*727*
Balance on current account	**-10,591**	**-17,794**	**-22,143**	**-16,310**	**-12,625**	**-15,956**

(a) Balance of payments basis.
Source: Balance of Payments, Australia, December Quarter 1993 (5302.0).

26.2 CAPITAL ACCOUNT AND BALANCING ITEM
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Net capital transactions						
Official						
General government						
Foreign investment in Australia						
Borrowing	3,935	3,170	3,748	742	2,095	11,621
Other	– 71	– 188	– 74	– 5	– 29	– 35
Total	*3,864*	*2,982*	*3,674*	*737*	*2,066*	*11,586*
Australian investment abroad	462	30	– 31	– 420	656	44
Total general government	*4,325*	*3,012*	*3,643*	*317*	*2,723*	*11,630*
Reserve Bank						
Foreign investment in Australia	– 8	—	24	– 22	21	39
Australian investment abroad						
Reserve assets	– 3,924	– 873	– 2,156	– 1,446	3,929	3,950
Other	—	—	—	—	—	—
Total	*– 3,924*	*– 873*	*– 2,156*	*– 1,446*	*3,929*	*3,950*
Total Reserve Bank	*– 3,932*	*– 873*	*– 2,132*	*– 1,468*	*3,950*	*3,989*
Total official	*393*	*2,139*	*1,511*	*– 1,151*	*6,673*	*15,619*
Non-official						
Foreign investment in Australia						
Direct investment						
Reinvestment of earnings	2,428	2,132	1,126	674	750	2,318
Other	5,684	9,958	6,235	7,872	6,134	2,738
Portfolio and other investment	16,207	17,731	13,679	12,958	6,483	2,030
Total foreign investment in Australia	*24,318*	*29,821*	*21,041*	*21,504*	*13,368*	*7,086*
Australian investment abroad						
Direct investment						
Reinvestment of earnings	– 2,163	– 2,166	– 1,364	– 205	– 555	– 1,930
Other	– 7,983	– 4,458	– 901	1,018	– 410	– 1,297
Portfolio and other investment	– 2,666	– 5,262	– 963	– 2,762	– 2,632	– 2,584
Total Australian investment abroad	*– 12,812*	*– 11,886*	*– 3,228*	*– 1,949*	*– 3,597*	*– 5,811*
Total non-official	*11,506*	*17,936*	*17,812*	*19,555*	*9,771*	*1,275*
Balance on capital account	**11,900**	**20,074**	**19,324**	**18,404**	**16,444**	**16,895**
Of which						
Net equity	– 1,742	1,660	4,229	11,761	2,387	7,356
Net debt	13,749	18,266	15,902	7,284	12,506	9,404
Net other	– 107	148	– 807	– 641	1,551	134
Balancing item	– 1,309	– 2,280	2,819	– 2,094	– 3,819	– 939

Source: Balance of Payments, Australia, December Quarter 1993 (5302.0).

26.3 OFFICIAL RESERVE ASSETS AND EXCHANGE RATES

	Financial year ending 30 June					
	1988	*1989*	*1990*	*1991*	*1992*	*1993*
			— $ million —			
Levels of official reserve assets(a)						
Foreign exchange						
United States dollars	8,015	6,813	8,464	8,537	5,553	5,684
Other	6,926	8,924	9,076	10,925	12,203	9,702
Special drawing rights	420	398	379	360	375	133
Reserve position in IMF	312	414	411	421	471	855
Gold	4,509	3,861	3,541	3,804	3,639	4,448
Total	**20,182**	**20,410**	**21,871**	**24,047**	**22,240**	**20,823**
		— Units of foreign currency per $A —				
Exchange rates						
End of year(b)						
United States dollar	0.7940	0.7553	0.7890	0.7681	0.7488	0.6722
United Kingdom pound	0.4612	0.4882	0.4536	0.4712	0.3945	0.4453
German mark	1.441	1.480	1.318	1.382	1.144	1.137
Japanese yen	105.17	108.79	120.41	106.19	94.05	71.54
Special drawing right	0.6059	0.6051	0.5967	0.5825	0.5213	0.4818
Period average(c)						
United States dollar	0.7290	0.8160	0.7697	0.7853	0.7694	0.7030
United Kingdom pound	0.4167	0.4755	0.4733	0.4240	0.4381	0.4363
German mark	1.262	1.512	1.367	1.248	1.274	1.103
Japanese yen	97.58	106.95	113.27	107.60	100.97	84.22
Special drawing right	0.5448	0.6244	0.5958	0.5656	0.5580	0.4982

(a) SDRs, and Australia's reserve position in the IMF are based on the IMF basket valuation for the SDR, which is published in terms of US dollars crossed with the representative rate for the Australian dollar in terms of the US dollar. Gold is valued at the average London gold price for the month, converted to Australian dollars at the market rate of exchange applying on the last trading day of the month. The foreign currency value of all other overseas assets has been based, where applicable, on market quotations. Accrued interest is normally taken into account. Conversion to Australian dollar equivalent is based on end of period market rates of exchange. (b) These exchange rates relate to the last trading day of the reference period. (c) These exchange rates are derived by averaging figures for each trading day.

Source: Reserve Bank of Australia for official reserve assets and Balance of Payments, Australia, December Quarter 1993 (5302.0) for exchange rates.

26.4 EXPORTS OF GOODS AND SERVICES (BALANCE OF PAYMENTS BASIS) AT CURRENT AND AVERAGE 1989–90 PRICES
($ million)

	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
AT CURRENT PRICES						
Rural exports f.o.b.						
Meat and meat preparations	2,557	2,270	2,936	3,173	3,434	3,752
Cereal grains and cereal preparations(a)	2,298	2,828	3,288	2,436	2,352	2,953
Sugar, sugar preparations and honey	701	934	1,104	948	747	1,073
Wool and sheepskins	5,806	5,984	3,753	2,887	3,829	3,365
Other rural	3,979	4,053	4,263	4,578	5,241	5,936
Total rural	*15,341*	*16,069*	*15,344*	*14,022*	*15,603*	*17,079*
Non-rural exports f.o.b.						
Metal ores and minerals(a)	5,480	6,689	7,600	8,557	7,938	7,942
Mineral fuels						
Coal, coke and briquettes	4,866	4,805	5,932	6,480	6,949	7,620
Other mineral fuels	1,786	1,285	2,068	3,595	3,402	3,913
Metals						
Gold	3,107	3,021	3,764	4,136	4,605	4,583
Other metals	3,863	4,669	4,650	4,737	4,702	5,211
Machinery	1,836	1,917	2,468	3,123	3,471	4,347
Transport equipment	1,022	912	1,178	1,907	1,655	2,020
Other manufactures	3,006	3,299	4,061	4,355	5,268	6,017
Other non-rural(a)	1,208	1,225	1,499	1,243	1,281	1,283
Total non-rural	*26,174*	*27,825*	*33,220*	*38,133*	*39,271*	*42,936*
Total exports f.o.b.	*41,515*	*43,894*	*48,564*	*52,155*	*54,874*	*60,015*
Exports of services	9,565	10,834	11,569	12,999	13,954	14,863
Total exports of goods and services	**51,080**	**54,728**	**60,133**	**65,154**	**68,828**	**74,878**
AT AVERAGE 1989-90 PRICES						
Rural exports f.o.b.						
Meat and meat preparations	2,793	2,438	2,936	3,259	3,511	3,761
Cereal grains and cereal preparations(a)	3,346	3,078	3,288	3,466	2,713	3,105
Sugar, sugar preparations and honey	1,015	1,110	1,104	1,029	923	1,229
Wool and sheepskins	5,524	5,125	3,753	4,002	5,781	5,220
Other rural	4,081	4,174	4,263	4,683	5,230	5,668
Total rural	*16,759*	*15,925*	*15,344*	*16,439*	*18,158*	*18,983*
Non-rural exports f.o.b.						
Metal ores and minerals(a)	7,420	7,623	7,600	8,729	8,756	8,765
Mineral fuels						
Coal, coke and briquettes	5,814	5,588	5,932	6,401	6,923	7,225
Other mineral fuels	1,737	1,464	2,068	2,615	2,884	3,178
Metals						
Gold	2,577	3,055	3,764	4,394	5,300	4,964
Other metals	4,096	4,294	4,650	5,140	5,700	6,142
Machinery	1,877	1,925	2,468	3,200	3,667	4,519
Transport equipment	1,116	997	1,178	1,885	1,548	1,758
Other manufactures	3,053	3,347	4,061	4,384	5,485	6,019
Other non-rural(a)	1,459	1,381	1,499	1,302	1,383	1,358
Total non-rural	*29,149*	*29,674*	*33,220*	*38,050*	*41,646*	*43,928*
Total exports f.o.b.	*45,908*	*45,599*	*48,564*	*54,489*	*59,804*	*62,911*
Exports of services	10,355	11,413	11,569	12,302	13,048	13,780
Total exports of goods and services	**56,263**	**57,012**	**60,133**	**66,791**	**72,852**	**76,691**

(a) Entries from 1990–91 are not strictly comparable with entries for earlier periods because of changed confidentiality embargo procedures applied in the compilation of certain merchandise trade statistics. *See* 'Changes in this issue' in the September quarter 1991 issue of *Balance of Payments, Australia* (5302.0).

Source: Balance of Payments, Australia, December Quarter 1993 (5302.0).

26.5 IMPORTS OF GOODS AND SERVICES (BALANCE OF PAYMENTS BASIS) AT CURRENT AND AVERAGE 1989–90 PRICES ($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
AT CURRENT PRICES						
Food, beverages and tobacco	2,013	2,200	2,285	2,323	2,443	2,669
Fuels	2,036	2,014	2,520	3,147	2,824	3,754
Chemicals (incl. plastics)(a)	4,280	4,973	5,203	5,163	5,551	6,623
Textile, fabrics etc.	1,931	2,002	1,946	1,830	2,013	2,145
Metals and metal manufactures	2,205	2,625	2,764	2,484	2,476	2,980
Machinery	12,230	13,793	15,522	14,228	14,712	17,751
Transport equipment	4,152	6,849	7,759	7,684	7,372	8,132
Other manufactures	8,563	9,766	10,308	10,108	11,108	12,560
Other imports(a)	2,976	2,810	2,684	2,289	2,557	2,812
Total imports f.o.b.	*40,386*	*47,032*	*50,991*	*49,256*	*51,056*	*59,426*
of which						
Exogenous	3,829	4,186	4,770	5,648	5,206	5,463
Endogenous						
Consumption goods	9,348	11,432	12,125	12,207	13,579	15,859
Capital goods	8,578	10,583	11,743	10,588	10,260	12,778
Other goods	18,631	20,831	22,353	20,813	22,011	25,326
Total endogenous	*36,557*	*42,846*	*46,221*	*43,608*	*45,850*	*53,963*
Imports of services	12,433	14,077	16,732	16,508	16,751	17,648
Total imports of goods and services	**52,819**	**61,109**	**67,723**	**65,764**	**67,807**	**77,074**
AT AVERAGE 1989–90 PRICES						
Food, beverages and tobacco	1,912	2,260	2,285	2,310	2,381	2,435
Fuels	2,096	2,492	2,520	2,588	2,929	3,543
Chemicals (incl. plastics)(a)	4,171	5,083	5,203	5,161	5,455	6,316
Textiles, fabrics etc.	1,866	2,075	1,946	1,778	1,950	2,002
Metals and metal manufactures	2,297	2,689	2,764	2,470	2,400	2,736
Machinery	11,366	14,061	15,522	14,507	15,431	17,601
Transport equipment	3,910	7,045	7,759	7,476	6,600	6,230
Other manufactures	8,610	10,359	10,308	9,966	10,929	11,532
Other imports(a)	3,178	2,957	2,684	2,372	2,707	2,724
Total imports f.o.b.	*39,406*	*49,021*	*50,991*	*48,628*	*50,782*	*55,119*
of which						
Exogenous	3,834	4,845	4,770	5,073	5,217	5,018
Endogenous						
Consumption goods	9,064	11,768	12,125	12,041	12,889	13,781
Capital goods	7,850	10,942	11,743	10,572	10,247	11,799
Other goods	18,657	21,466	22,353	20,942	22,430	24,520
Total endogenous	*35,572*	*44,176*	*46,221*	*43,555*	*45,565*	*50,101*
Imports of services	12,573	15,101	16,732	15,398	15,436	15,265
Total imports of goods and services	**51,979**	**64,122**	**67,723**	**64,026**	**66,218**	**70,384**

(a) Entries from 1990–91 are not strictly comparable with entries for earlier periods because of changed confidentiality embargo procedures applied in the compilation of certain merchandise trade statistics. *See* 'Changes in this issue' in the September quarter 1991 issue of *Balance of Payments, Australia* (5302.0).

Source: Balance of Payments, Australia, December Quarter 1993 (5302.0).

INTERNATIONAL MERCHANDISE TRADE

Scope

The international merchandise trade statistics presented in this chapter relate to merchandise exports and imports. They are compiled in broad agreement with the United Nations' recommendations for the compilation of international trade statistics.

Merchandise trade covers all movable goods which add to (imports) or subtract from (exports) Australia's stock of material resources.

Excluded are:

- direct transit trade, that is, goods being transshipped or moved through Australia for purposes of transport only;
- ships and aircraft moving through Australia while engaged in the transport of passengers or goods between Australia and other countries; and
- non-merchandise trade, consisting primarily of goods moving on a temporary basis (for example, mobile equipment, goods under repair and goods for exhibition) and passengers' effects.

Coverage

International merchandise trade statistics are compiled by the Australian Bureau of Statistics from information submitted by exporters and importers or their agents to the Australian Customs Service.

The United Nations' recommendations for the compilation of merchandise trade statistics recognise that the basic sources used by most compiling countries — customs records — will not be able to capture certain transactions. In Australia the following types of goods, which fall within the scope of merchandise trade, are excluded because customs entries are not required:

- certain materials under intergovernmental agreements for defence and similar projects;
- migrants' and passengers' effects exported or imported and parcel post exports and imports of small value, for which Customs' entries are not required; and
- the sale or delivery of certain ships intended for use on overseas routes.

For exports only:

- sales of aircraft (and parts or components) which were imported into Australia prior to 1 July 1987 for use on overseas routes. (Sales of aircraft (and parts or components) which were imported into Australia on or after 1 July 1987 for use on overseas routes are included in recorded export statistics);
- fish and other sea products landed abroad directly from the high seas by Australian ships; and
- export consignments where the value of the goods in each transaction is less than $500.

For imports only:

- bunkers, aviation fuel and stores supplied abroad to Australian ships and aircraft;
- the delivery of certain aircraft (and parts and components) prior to 1 July 1987 intended for use on overseas routes; and
- entries lodged on informal clearance documents (ICDs) for values not exceeding $250, and ICDs for postal articles valued up to $1,000.

Valuation

For exports, the *point of valuation* adopted is free-on-board (f.o.b.) at the Australian port of shipment while the *basis of valuation* is transactions values or the actual price at which the goods are sold.

For imports, from 1 July 1989 the *point of valuation* is the point of containerisation (in most cases), or f.o.b. at the customs frontier of the exporting country or the port of loading, whichever comes first. For prior periods a number of points of valuation, depending upon contractual arrangements for delivery, have applied. The *basis of valuation* is the customs value, which for transactions between independent buyers and sellers will generally be the price actually payable. Where traders are not independent, that is, they may be related or affiliated in some way, an appropriate customs value may be determined.

Relationship to balance of payments statistics

The basic source of balance of payments data on merchandise exports and imports is 'international merchandise trade statistics'. However, because of conceptual differences, various coverage, timing and (imports only) valuation adjustments are necessary before international merchandise trade statistics can be put on a balance of payments basis. Therefore, the merchandise exports and imports statistics, and the excess of exports (+) or imports (–), shown in this section will differ from those shown in the balance of payments section of this chapter. For more information on the relationship between merchandise trade measures in international merchandise trade and balance of payments statistics *see* either Appendix A of *Foreign Trade, Australia: Merchandise Exports and Imports* (5410.0) or chapter 9 of *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0).

Total merchandise exports and imports

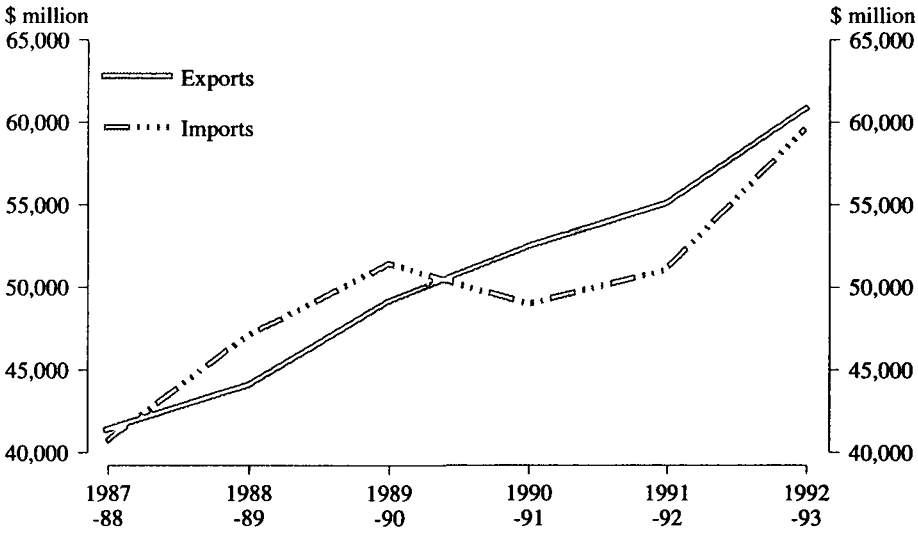
In the year ended June 1993, merchandise exports rose 10 per cent to reach $60,778 million while merchandise imports rose 17 per cent to $59,577 million. Exports exceeded imports by $1,201 million, representing a 70 per cent decrease from the surplus of exports recorded in the previous year.

26.6 TOTAL MERCHANDISE EXPORTS AND IMPORTS(a)
($ million)

Period	*Exports*	*Imports(b)*	*Excess of exports or imports(c)*
1987–88	41,307	40,597	710
1988–89	44,007	47,040	- 3,033
1989–90	49,078	51,333	- 2,255
1990–91	52,398	48,912	3,487
1991–92	55,027	50,984	4,043
1992–93	60,778	59,577	1,201

(a) For periods from 1 July 1987 exports and imports of gold coins, whether or not they are legal tender, and other coins which are legal tender are included in merchandise exports and imports. *See* Appendix A of the 1988–89 issue of *Foreign Trade, Australia: Merchandise Exports and Imports* (5410.0). (b) Due to changes in Customs' valuation, data for periods prior to 1 July 1989 are not fully comparable with data for later periods. For further details, *see* the Explanatory Notes in *International Merchandise Trade, Australia* (5422.0). (c) A minus sign denotes excess of imports.
Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

26.7 MERCHANDISE EXPORTS AND IMPORTS



Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992-93 (5410.0).

Merchandise exports and imports by State

The following table classifies merchandise trade by Australian States/Territories. For exports, State/Territory refers to where the final stage of production or manufacturing occurs. For imports, State/Territory refers to the State where imported goods were released from Customs' control, also called the State of final destination. The State of final destination is not necessarily the State in which the port of discharge of the goods is located. Goods can be forwarded interstate after discharge, either under Customs' control or not, but are recorded as being imported into the State where they are released by Customs.

26.8 MERCHANDISE EXPORTS AND IMPORTS, BY STATE/TERRITORY
($ million)

			Exports			*Imports*
State/Territory	*1990–91*	*1991–92*	*1992–93*	*1990–91*	*1991–92*	*1992–93*
New South Wales	11,992	11,700	13,246	22,383	23,317	26,436
Victoria	8,803	9,545	11,044	14,902	15,353	18,147
Queensland	10,727	10,865	11,789	4,903	5,627	6,334
South Australia	3,007	3,431	3,756	2,194	2,397	3,068
Western Australia	12,659	14,055	14,993	3,636	3,548	4,966
Tasmania	1,341	1,439	1,521	299	287	334
Northern Territory	1,783	1,481	1,280	567	430	273
Australian Capital Territory	7	11	8	28	26	19
State not available for publication(a)	82	160	387	—	—	—
Total	*50,403*	*52,687*	*58,023*	*48,912*	*50,984*	*59,577*
Re-exports	1,996	2,340	2,754	—	—	—
Total	**52,399**	**55,027**	**60,778**	**48,912**	**50,984**	**59,577**

(a) Includes revisions of $62 million in exports for November 1992 resulting from the omission of certain export entries for that month which cannot be allocated by State/Territory.
Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

Merchandise exports and imports by country

For the purposes of international merchandise trade statistics, a country is defined as a geographical entity which trades, or has the potential to trade, with Australia in accordance with Australian Customs Service provisions. External territories under Australian administration are treated as separate countries while self-governing territories and dependent territories under the administration of other countries may be treated as individual countries in Australian merchandise trade statistics.

For exports, country refers to the country to which the goods were consigned at the time of export. For imports, country refers to the country of origin of the goods, which is defined as the country of production for Customs' purposes. Where the country of consignment or the country of origin is not known at the time of export or import, goods are recorded as *Destination unknown* (exports) or *Origin unknown* (imports).

Table 26.9 shows merchandise trade classified by country and the two country groups of ASEAN and the European Community. The main changes in 1992-93 from the previous year in the pattern of trade with other countries which contributed to the $2,842 million decrease in the merchandise trade surplus were:

- a $1,541 million (24%) rise in the deficit with the USA as a result of a fall in exports of $280 million (mainly meat) and a rise in imports of $1,261 million (mainly machinery, manufactured goods and articles, and chemicals);

- a $1,219 million (23%) fall in the surplus with Japan with an increase in imports of road vehicles being most significant;
- a $477 million (25%) rise in the deficit with Germany as a result of a fall in exports of $102 million (mainly crude materials and machinery) and a rise in imports of $375 million (mainly chemicals, machinery, and miscellaneous manufactured articles); and
- a $330 million (471%) rise in the deficit with Papua New Guinea as a result of a fall in exports of $28 million and a rise in imports of $301 million (mainly due to an increase in crude petroleum, partly offset by a decrease in non-monetary gold).

These contributions to the decrease in the overall surplus were partly offset by:

- a $487 million (37%) rise in the surplus with Hong Kong with increases in exports of non-ferrous metals and non-road transport equipment being most significant; and
- a $389 million (21%) rise in the surplus with Singapore as a result of a $598 million increase in exports (mainly gold, machinery and transport equipment) that was partly offset by a $208 million rise in imports (mainly computers and petroleum).

26.9 MERCHANDISE EXPORTS AND IMPORTS, BY COUNTRY
($ million)

	1990–91		*1991–92*		*1992–93*	
Country	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
Association of South East Asian Nations (ASEAN)						
Brunei	15	41	19	82	53	50
Indonesia	1,462	784	1,627	995	1,715	1,305
Malaysia	985	732	1,103	867	1,310	974
Philippines	437	129	513	143	598	177
Singapore	2,769	1,271	3,189	1,301	3,787	1,509
Thailand	665	505	816	647	1,205	756
Total ASEAN	*6,334*	*3,461*	*7,267*	*4,035*	*8,667*	*4,770*
European Community (EC)						
Belgium–Luxembourg	448	380	594	387	618	512
Denmark	89	207	95	230	67	274
France	774	1,233	939	1,336	851	1,481
Germany	1,056	3,115	1,092	3,007	990	3,383
Greece	30	45	46	49	41	51
Ireland	16	199	19	193	22	255
Italy	923	1,390	979	1,229	872	1,349
Netherlands	1,016	550	856	588	876	624
Portugal	32	52	28	59	41	63
Spain	196	204	286	179	289	218
United Kingdom	1,796	3,302	1,930	3,102	2,395	3,395
Total EC	*6,375*	*10,678*	*6,865*	*10,360*	*7,061*	*11,605*
Other countries						
Algeria	69	—	36	—	21	10
Angola	2	—	1	—	—	19
Argentina	138	70	102	66	73	76
Austria	26	203	24	210	27	226
Bahrain(a)	156	11	88	17	29	4
Bangladesh	78	25	86	23	81	18
Brazil	138	316	225	316	289	329
Bulgaria	3	4	13	4	11	4

For footnotes *see* end of table.

26.9 MERCHANDISE EXPORTS AND IMPORTS, BY COUNTRY — *continued*
($ million)

	1990–91		1991–92		1992–93	
Country	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
Cambodia	1	—	46	—	46	—
Canada	802	902	845	849	1,158	984
Cayman Islands	—	10	1	8	—	11
Chile	52	40	48	41	87	33
China	1,348	1,503	1,458	1,976	2,268	2,557
Christmas Island	9	—	10	—	12	—
Colombia	4	8	9	10	13	11
Cyprus	3	1	11	1	10	1
Czech and Slovak Federal Republic(b)	23	35	22	38	20	29
Czech Republic(b)	—	—	—	—	5	14
Egypt(a)	246	2	381	3	279	5
Ethiopia	2	—	13	—	14	1
Fiji	240	90	246	101	327	130
Finland	80	303	114	322	116	415
French Polynesia	88	—	66	1	85	—
Ghana	18	—	21	1	25	1
Guam	16	—	29	—	25	—
Hong Kong	1,560	741	2,106	792	2,596	796
Hungary	2	26	3	25	17	30
India	667	260	754	288	888	362
Iran	477	10	261	14	371	14
Iraq	6	—	187	—	24	—
Israel	45	145	71	139	66	173
Japan	14,378	8,849	14,574	9,290	15,204	11,139
Jordan	22	1	25	2	39	11
Kiribati	13	—	15	—	15	—
Korea, Democratic People's Republic of	41	—	—	—	8	—
Korea, Republic of	3,237	1,254	3,365	1,213	3,969	1,696
Kuwait	7	42	56	29	100	59
Laos	1	—	5	—	28	—
Libya	8	—	10	—	11	—
Macau	3	34	20	19	14	15
Malawi	—	10	1	12	—	8
Marshall Islands	3	—	11	—	3	—
Mauritius	42	3	59	5	61	2
Mexico	64	94	90	89	129	90
Mozambique	4	1	17	1	11	—
Myanmar	29	5	15	4	7	11
Nauru	21	17	24	20	40	28
New Caledonia	81	16	124	29	154	39
New Zealand	2,545	2,150	2,830	2,399	3,363	2,787
Nigeria	5	—	3	—	10	—
Norfolk Island	10	—	9	—	9	—
Norway(a)	24	148	39	106	117	124

For footnotes *see* end of table.

26.9 MERCHANDISE EXPORTS AND IMPORTS, BY COUNTRY — *continued*
($ million)

	1990–91		1991–92		1992–93	
Country	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
Oman	70	37	62	14	89	1
Pakistan	153	76	206	96	253	132
Panama	25	1	2	16	1	—
Papua New Guinea	779	584	883	953	854	1,254
Peru	14	7	15	11	22	19
Poland	26	30	14	25	17	23
Puerto Rico	8	215	5	187	5	202
Qatar	26	13	35	4	32	22
Romania	44	6	80	7	63	8
Russian Federation(c)	—	—	—	—	157	25
Samoa (American)	27	2	18	2	18	3
Saudi Arabia	218	843	266	643	329	812
Slovenia(d)	—	—	—	10	5	24
Solomon Islands	38	4	50	2	47	3
South Africa	178	99	226	114	334	192
Sri Lanka	39	33	47	39	77	39
Sweden	127	767	145	793	136	1,013
Switzerland	1,256	664	655	580	302	721
Syria	1	26	1	—	6	—
Taiwan	1,962	1,752	2,519	1,979	2,682	2,213
Tonga	13	2	13	2	13	2
Turkey	169	32	171	46	264	39
USSR(c)	431	52	203	14	18	4
United Arab Emirates	278	419	329	469	407	698
United States of America	5,778	11,475	5,220	11,743	4,940	13,004
United States Virgin Islands	—	13	1	11	—	11
Uruguay	1	4	12	6	34	3
Vanuatu	36	2	32	1	35	1
Venezuela	27	21	19	4	19	4
Vietnam	25	18	50	79	76	237
Virgin Islands, British	34	—	—	—	—	—
Western Samoa	18	2	25	16	25	52
Yemen	113	53	72	36	55	17
Yugoslavia(d)	61	50	35	33	8	2
Zimbabwe	19	14	8	13	8	9

For footnotes *see* end of table.

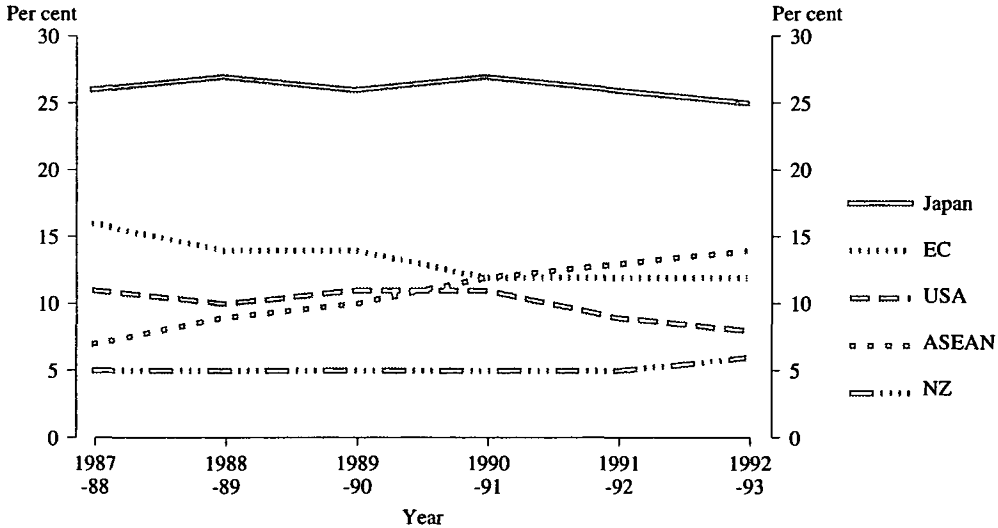
26.9 MERCHANDISE EXPORTS AND IMPORTS, BY COUNTRY — *continued*
($ million)

	1990–91		*1991–92*		*1992–93*	
Country	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
Other countries	87	58	113	64	153	76
International waters	—	—	58	—	188	1
Destination or Origin unknown(e)	6	21	5	35	64	40
Ships' stores	679	—	568	—	703	—
No country details(a)	82	—	160	—	325	—
Re-imports	—	43	—	75	—	37
Total	**52,399**	**48,912**	**55,027**	**50,984**	**60,778**	**59,577**

(a) Exports of alumina to Egypt and Iceland are excluded from country totals and included in the 'No country details' category. This treatment also applies to exports of alumina to Norway up until February 1992 and to Bahrain from March 1992. (b) The scope of the former Czech and Slovak Republic has changed during the period covered in this table and care should be taken when comparing data over time. Trade has been separately identified from 10 March 1993 for the Czech Republic and the Slovak Republic. (c) The scope of the former USSR has changed during the periods covered in this table and care should be taken when comparing data over time. Trade has been separately identified from October 1991 for each of the three Baltic republics (Estonia, Latvia and Lithuania) and from September 1992 for each of the remaining 12 republics. Also, beginning in September 1992, the USSR has ceased to be identified. (d) The scope of Yugoslavia has changed during the periods covered in this table and care should be taken when comparing data over time. Trade has been separately identified from January 1992 for Bosnia Herzegovina, Croatia, the former Yugoslav Republic of Macedonia and Slovenia. (e) Includes revisions of $62 million in exports for November 1992 resulting from the omission of certain export entries for that month which cannot be allocated by country.

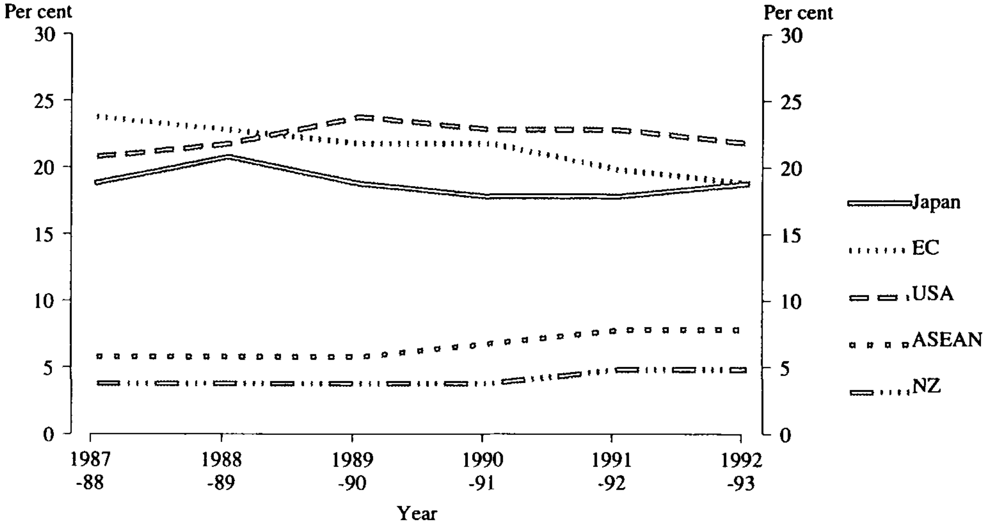
Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

26.10 PERCENTAGE OF AUSTRALIAN MERCHANDISE EXPORTS GOING TO SELECTED COUNTRIES AND COUNTRY GROUPS



Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992-93 (5410.0).

26.11 PERCENTAGE OF AUSTRALIAN MERCHANDISE IMPORTS COMING FROM SELECTED COUNTRIES AND COUNTRY GROUPS



Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992-93 (5410.0).

Maps 26.12, 26.13 and 26.14 show the main flows of Australia's exports and imports.

Merchandise exports and imports by commodity

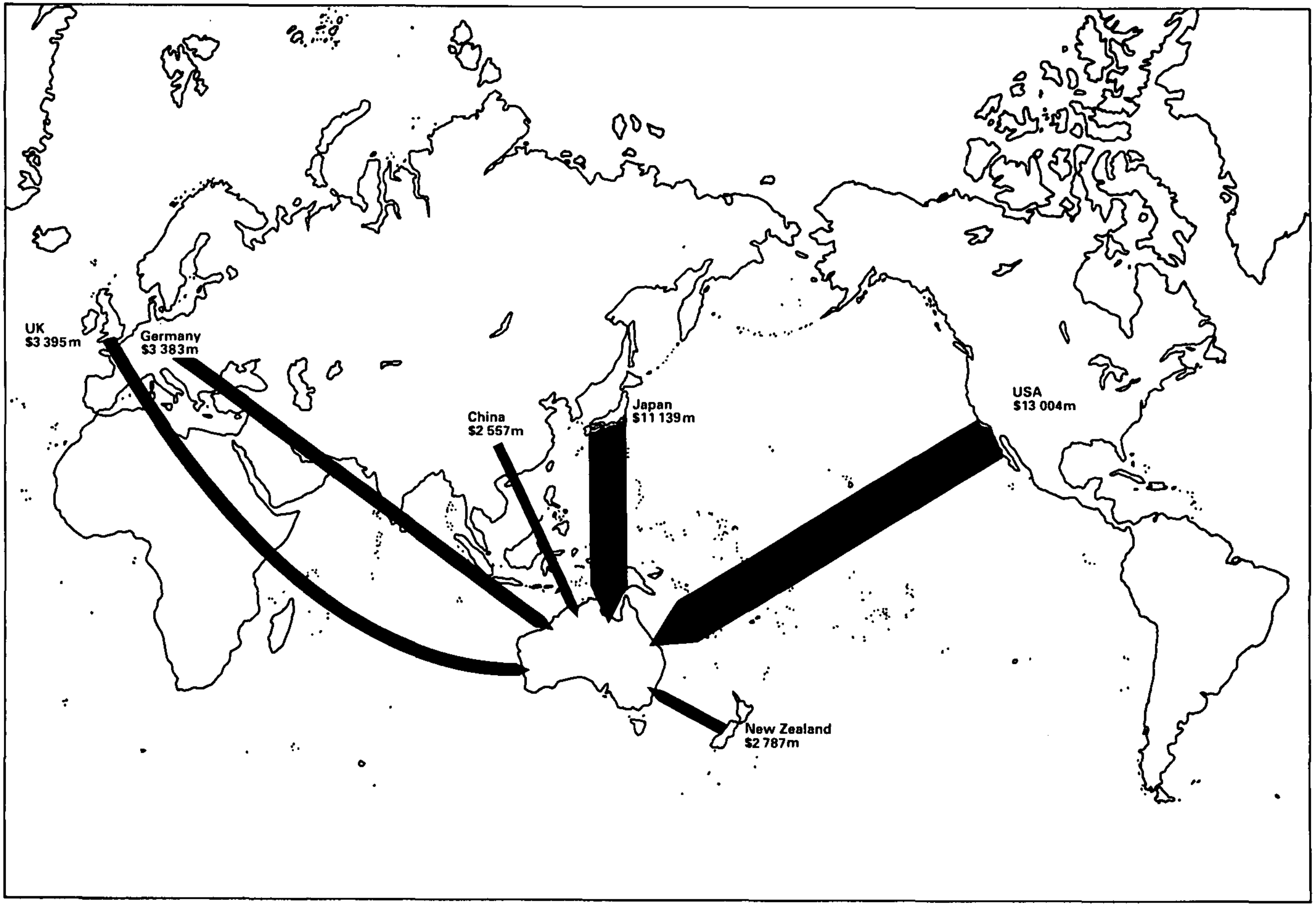
Commodity export and import statistics are presented according to the codes and descriptions of the third revision of the United Nations' Standard International Trade Classification (SITC Rev. 3). This classification groups commodities according to their stage of processing — from food and crude raw materials through to highly transformed manufactures.

Exports and imports of merchandise trade are also classified according to the 19 categories of the United Nations' classification Broad Economic Categories (BEC). The BEC classifies foreign trade statistics for the purposes of general economic analysis according to the main end use of the commodities traded.

Tables 26.15 and 26.16 show the values of major commodities exported and imported in 1992–93 and their percentage of the total value of exports and imports.

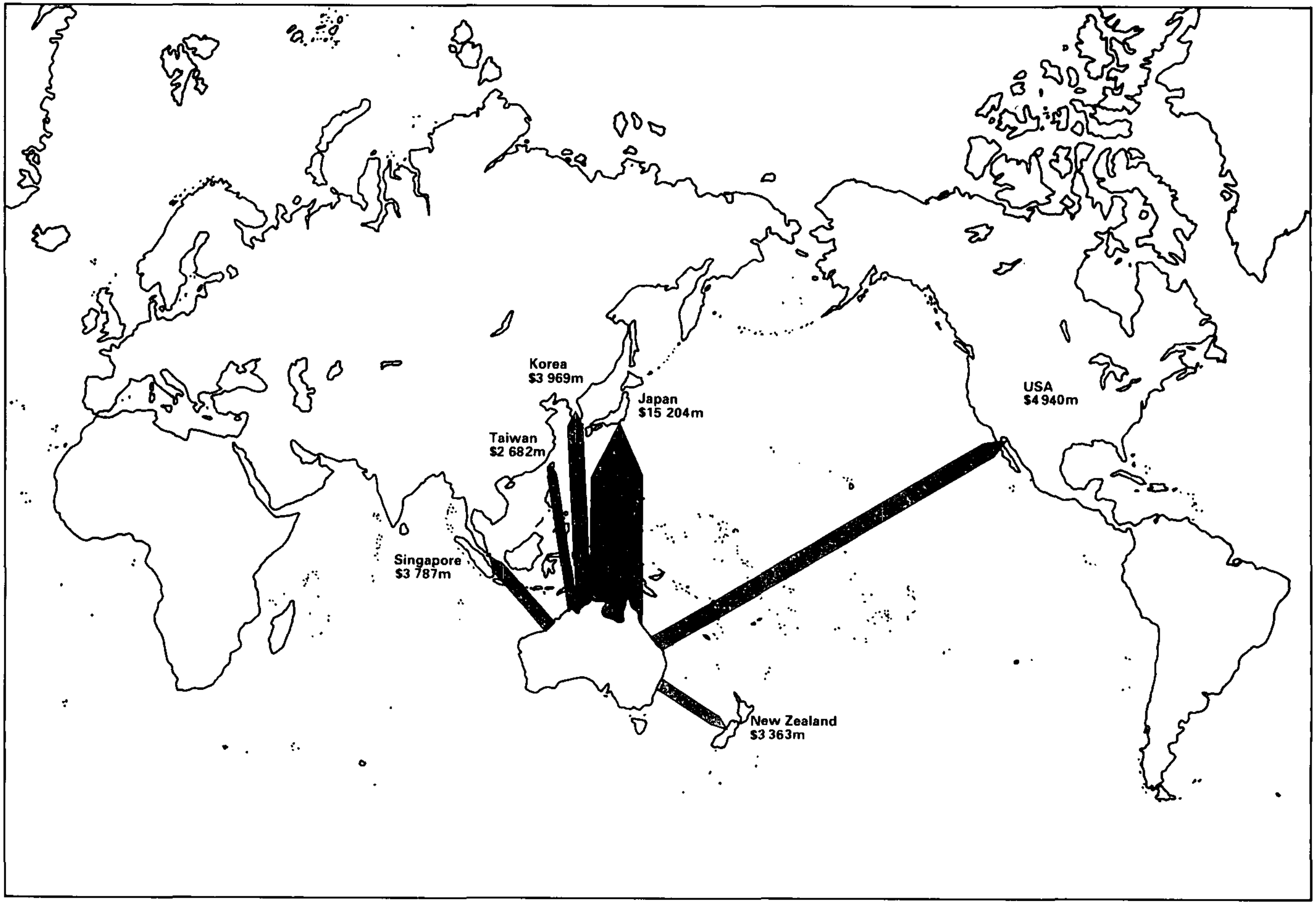
Table 26.17 shows the value of all exports and imports, at broad commodity level, for 1990–91 to 1992–93. For the year ended June 1993, exports were $60,778 million, up $5,751 million (10%) on the previous financial year. The most significant contributors to the rise were coal, coke and briquettes, up $674 million (10%) to $7,623 million; cereal and cereal preparations, up $600 million (25%) to $2,953 million; non-ferrous metals, up $438 million (12%) to $3,995 million; and petroleum, petroleum products and related materials, up $418 million (14%) to $3,329 million. The commodities recording the biggest falls were textile fibres and their wastes, down $601 million (13%) to $4,013 million; and metalliferous ores, down $67 million (1%) to $7,572 million.

26.12 AUSTRALIAN MERCHANDISE IMPORTS: MAJOR SOURCE COUNTRIES, 1992-93



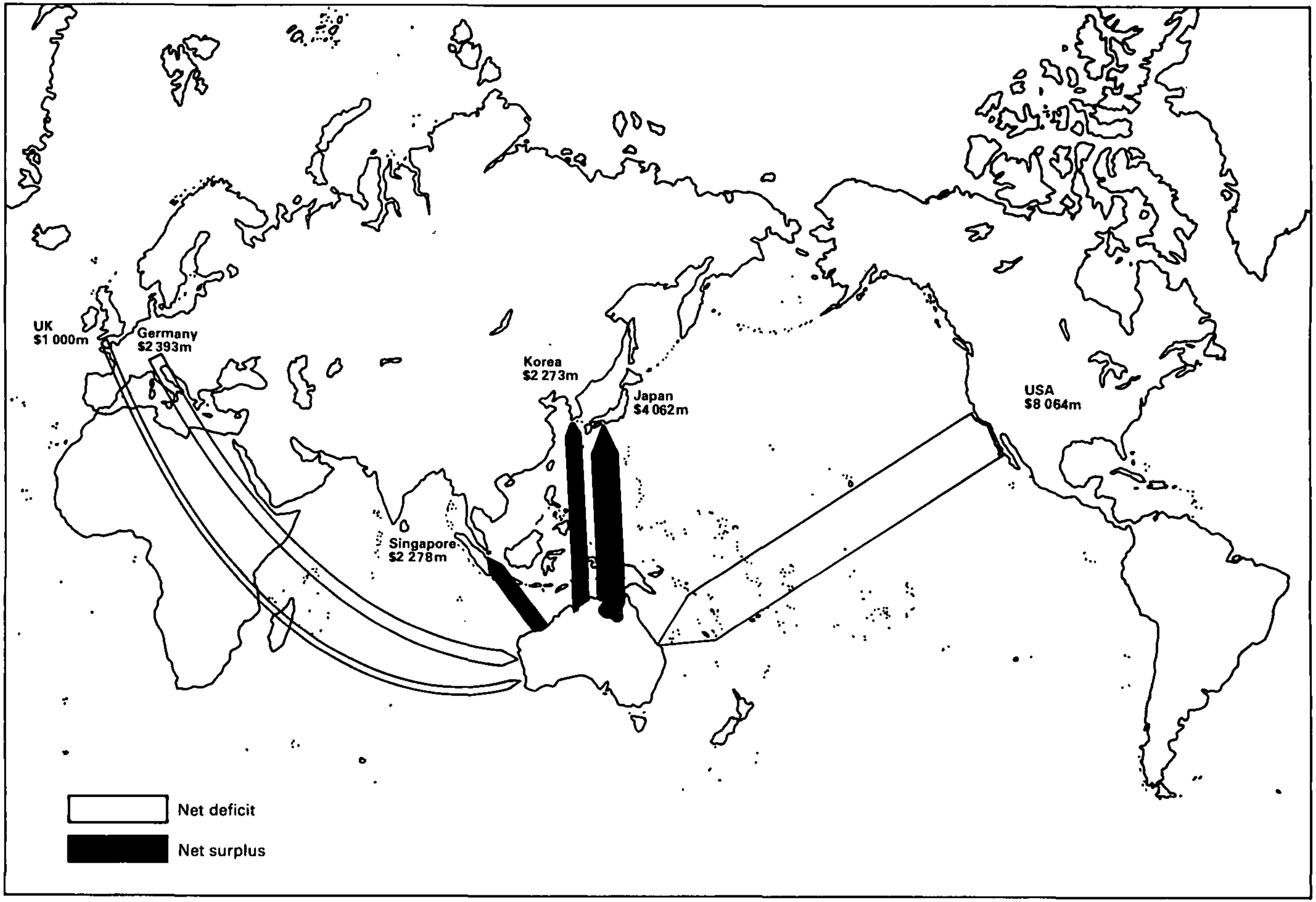
Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992-93 (5410.0).

26.13 AUSTRALIAN MERCHANDISE EXPORTS: MAJOR DESTINATIONS, 1992–93



Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

26.14 AUSTRALIA'S NET BALANCE OF TRADE: MAJOR PARTNER COUNTRIES(a), 1992–93



(a) Map shows the countries with which Australia has the largest net trade surpluses and deficits.
Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

Australia's major exports for 1992–93 and their principal markets were:

- coal, $7,538 million — 12 per cent of total exports: Japan (50%), Republic of Korea (12%), Taiwan (6%) and India (5%);
- non-monetary gold, $4,315 million — 7 per cent of total exports: Singapore (44%), Japan (19%) and Hong Kong (14%);
- beef, $2,991 million — 5 per cent of total exports: Japan (42%), USA (32%) and Canada (8%); and
- iron ore, $2,895 million — 5 per cent of total exports: Japan (49%), Republic of Korea (17%) and China (15%).

For the year ended June 1993, imports were $59,577 million, up $8,593 million (17%) compared to the previous year. The most significant rises were recorded for: road vehicles, up $1,352 million (28%) to $6,161 million; petroleum, petroleum products and related materials, up $1,117 million (41%) to $3,829 million; machinery specialised for particular industries, up $745 million (39%) to $2,649 million; and office machines, and ADP machines, up $601 million (17%) to $4,238 million. Partly offsetting these rises were falls in transport equipment (excluding road vehicles), down $345 million (14%) to $2,154 million; and inorganic chemicals, down $65 million (9%) to $655 million.

Australia's major commodity imports for 1992–93 and their principal sources were:

- passenger motor vehicles, $3,195 million — 5 per cent of total imports: Japan (79%), Germany (9%) and Republic of Korea (5%);
- computers, $2,323 million — 4 per cent of total imports: USA (41%), Taiwan (15%), Japan (14%) and Singapore (14%);
- crude petroleum, $2,258 million — 4 per cent of total imports: United Arab Emirates (26%), Indonesia (16%) and Saudi Arabia (11%); and
- aircraft and associated equipment, $1,697 million — 3 per cent of total imports: USA (87%) and UK (4%).

26.15 MERCHANDISE EXPORTS OF MAJOR COMMODITIES, 1992–93

Commodity description and SITC Rev. 3 code	*$ million*	*Per cent*
Aircraft and associated equipment; spacecraft (incl. satellites) and spacecraft launch vehicles; and parts thereof) (792)	539	1
Alumina (aluminium oxide) (285.20)	2,302	4
Aluminium (684)	2,047	3
Barley, unmilled (043)	405	1
Cars and other road vehicles (incl. air-cushion vehicles) (78)	989	2
Cheese and curd (024)	318	1
Coal, whether or not pulverised but not agglomerated (321)	7,538	12
Copper ores and concentrates (283.10)	267	—
Copper and copper alloys, unwrought (excl. master alloys) (682.11,12,14)	571	1
Cotton (other than linters), not carded or combed (263.10)	752	1
Crustaceans, molluscs and aquatic invertebrates (except canned or bottled) (036)	718	1
Fruit and nuts, fresh, dried or preserved and fruit preparations (incl. fruit juices) (057 - 059)	500	1
Gas, natural and manufactured (34)	1,235	2
Gold, non-monetary (excl. gold ores and concentrates) (971)	4,315	7
Hides and skins, bovine and equine, raw (211.11–13,20)	232	—
Iron and steel (67)	1,211	2
Iron ore concentrates and agglomerates (excl. roasted iron pyrites) (281.50,60)	2,895	5
Lead and lead alloys, unwrought (685.11,12)	336	1
Machinery specialised for particular industries (72)	697	1
Meat of bovine animals, fresh, chilled or frozen (011.11–22)	2,991	5
Meat of sheep and goats fresh, chilled or frozen (012.11–13)	468	1
Milk and cream and milk products other than butter or cheese (022)	627	1
Nickel and nickel alloys, unwrought (683.11,12)	250	—
Nickel oxide sinters (284.22)	314	1
Office machines and automatic data processing machines (75)	995	2
Ores and concentrates of molybdenum, noibium, titanium, etc. (287.81–85)(a)	251	—
Petroleum oils and oils obtained from bituminous minerals, crude (333)	1,801	3
Petroleum products (334,335)	1,528	3
Photographic and cinematographic supplies (882)	263	—
Plastics in primary and non-primary form (57,58)(a)	309	1
Power generating machinery and equipment (71)	615	1
Rice (042)(a)	228	—
Sheep and goats, live (001.21,22)	122	—
Skins, sheep and lamb, with wool on, raw (211.60)	116	—
Sorghum, unmilled (045.30)	34	—
Sugar, beet or cane, raw, in solid form (061.11,12)	979	2
Uranium and thorium ores and concentrates (286.10,20)(a)	125	—
Wheat (incl. spelt) and meslin unmilled (041)	1,987	3
Wood, in chips or particles (246.11,15)	422	1
Wool, greasy (incl. fleece-washed wool) (268.11,19)	2,142	4
Wool, other, not carded or combed (268.21,29)	844	1
Zinc and zinc alloys, unwrought (686.11,12)	481	1
Zinc ores and concentrates (287.50)	539	1
Total major commodities(a)	*46,299*	*76*
Total exports	**60,778**	**100**

(a) Excludes commodities subject to a 'No Commodity Details' restriction. For further information *see* the confidentiality appendices in *International Merchandise Trade, Australia* (5422.0).

Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

26.16 MERCHANDISE IMPORTS OF MAJOR COMMODITIES, 1992–93

Commodity description and SITC Rev. 3 code	*$ million*	*Per cent*
Aircraft and associated equipment; spacecraft (including satellites) and spacecraft launch vehicles; and parts thereof (792)	1,697	3
Articles of apparel and clothing accessories (84)	1,330	2
Automatic data processing machines and units thereof (752)	2,323	4
Baby carriages, toys, games and sporting goods (894)	694	1
Chemical materials and products, n.e.s. (59)(a)	773	1
Civil engineering and contractors' plant and equipment (723)	1,022	2
Clay and refractory construction materials and mineral manufactures n.e.s. (662,663)	420	1
Coffee and coffee substitutes (071)	125	—
Electrical apparatus for switching or protecting electrical circuits (772)	670	1
Electrical machinery and apparatus n.e.s. (778)	991	2
Fish, crustaceans, molluscs, and aquatic invertebrates, and preparations thereof (03)	500	1
Glass, glassware and pottery (664,665,666)	414	1
Household type, electrical and non-electrical equipment n.e.s. (775)	525	1
Inorganic chemicals (52)(a)	655	1
Internal combustion piston engines, and parts thereof n.e.s. (713)	759	1
Iron and steel (67)	945	2
Machinery and equipment specialised for particular industries and parts thereof (728)	622	1
Manufactures of base metals n.e.s. (699)	573	1
Measuring, checking, analysing and controlling instruments and apparatus n.e.s. (874)	1,123	2
Medical and pharmaceutical products (54)	1,393	2
Motor vehicles for the transport of goods (782.10)	1,267	2
Non-electrical parts and accessories of machinery n.e.s. (749)	146	—
Organic chemicals (51)(a)	1,402	2
Paper, paperboard and articles of paper pulp, of paper or of paperboard (64)(a)	1,419	2
Parts and accessories of motor vehicles and tractors, track-laying and wheeled (784)	1,252	2
Parts and accessories for office and automatic data processing machines (759)	1,591	3
Passenger motor vehicles (other than public transport type vehicles) including station wagons and racing cars (781)	3,195	5
Petroleum oils and oils obtained from bituminous minerals, crude (333)	2,258	4
Petroleum oils and oils obtained from bituminous minerals (other than crude) (334)	1,402	2
Photographic and cinematographic supplies (882)(a)	412	1
Plastics in primary and non-primary forms (57,58)(a)	1,268	2
Printed matter (892)	825	1
Printing and bookbinding machinery, and parts thereof (726)	193	—
Pumps, centrifuges, filtering or purifying apparatus and parts thereof (743)	627	1
Rubber tyres, interchangeable tyre treads, tyre flaps and inner tubes for wheels of all kinds (625)	503	1
Ships, boats (including hovercraft) and floating structures (793)	410	1
Telecommunication equipment n.e.s. and parts n.e.s. and accessories (764)	1,415	2
Television and radio broadcast receivers (761,762)	593	1
Textile yarn (651)(a)	573	1
Tools for use in the hand or in machines (695)	323	1

For footnotes *see* end of table.

26.16 MERCHANDISE IMPORTS OF MAJOR COMMODITIES, 1992–93 — *continued*

Commodity description and SITC Rev. 3 code	*$ million*	*Per cent*
Tractors, track-laying and wheeled (722)	185	—
Wood, sawn or chipped lengthwise, sliced or peeled (248.20,40)	474	1
Woven cotton fabrics (excl. narrow or special fabrics) (652)	301	1
Woven fabrics of man-made textile material (excl. narrow or special fabrics) (653)	395	1
Total major commodities(a)	*39,985*	*67*
Total imports	**59,577**	**100**

(a) Excludes commodities subject to a 'No Commodity Details' restriction. For further information *see* the confidentiality appendices in *International Merchandise Trade, Australia* (5422.0).
Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

26.17 MERCHANDISE EXPORTS AND IMPORTS BY COMMODITY
($ million)

Commodity description (Section and division of the SITC Rev. 3)	*1990–91*		*1991–92*		*1992–93*	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
0 FOOD AND LIVE ANIMALS						
00 Live animals other than fish, crustaceans, molluscs and aquatic invertebrates	160	73	209	60	246	60
01 Meat and meat preparations	3,180	36	3,436	43	3,747	33
02 Dairy products and birds' eggs	721	124	815	135	1,102	159
03 Fish (not marine mammals) crustaceans, molluscs and aquatic invertebrates and preparations thereof	720	447	832	474	951	499
04 Cereals and cereal preparations(a)	2,438	105	2,353	112	2,953	136
05 Vegetables and fruit	628	383	728	469	873	470
06 Sugars, sugar preparations and honey(a)	948	61	747	59	1,074	77
07 Coffee, tea, cocoa, spices and manufactures thereof	88	309	97	309	124	337
08 Feeding stuff for animals (excl. unmilled cereals)	257	65	356	90	467	67
09 Miscellaneous edible products and preparations	113	313	145	306	144	389
Total section 0(a)	*9,252*	*1,916*	*9,716*	*2,058*	*11,681*	*2,228*
1 BEVERAGES AND TOBACCO						
11 Beverages	289	293	345	281	385	319
12 Tobacco and tobacco manufactures	21	102	21	111	32	119
Total section 1	*310*	*395*	*366*	*392*	*417*	*438*

For footnotes *see* end of table.

26.17 MERCHANDISE EXPORTS AND IMPORTS BY COMMODITY — *continued*
($ million)

Commodity description (Section and division of the SITC Rev. 3)	*1990–91*		*1991–92*		*1992–93*	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
2 CRUDE MATERIALS, INEDIBLE, EXCEPT FUELS						
21 Hides, skins and furskins, raw	413	10	362	6	389	5
22 Oil seeds and oleaginous fruits	48	58	63	61	80	68
23 Crude rubber (incl. synthetic and reclaimed)	9	77	9	81	11	104
24 Cork and wood	437	436	444	459	465	571
25 Pulp and waste paper	28	147	7	142	12	157
26 Textile fibres and their wastes (not manufactured into yarn or fabric)	3,745	132	4,614	141	4,013	144
27 Crude fertilisers (excl. those of Division 56) and crude minerals (excl. coal, petroleum and precious stones)(b)	263	118	297	139	369	147
28 Metalliferous ores and metal scrap(c)	8,296	132	7,639	129	7,572	165
29 Crude animal and vegetable materials, n.e.s.	159	110	181	123	197	146
Total section 2(b)(c)	*13,398*	*1,220*	*13,617*	*1,280*	*13,108*	*1,506*
3 MINERAL FUELS, LUBRICANTS AND RELATED MATERIALS						
32 Coal, coke and briquettes	6,481	5	6,948	9	7,623	7
33 Petroleum, petroleum products and related materials	3,220	3,116	2,912	2,712	3,329	3,829
34 Gas, natural and manufactured	1,006	8	1,017	10	1,235	21
Total section 3	*10,706*	*3,129*	*10,878*	*2,731*	*12,186*	*3,857*
4 ANIMAL AND VEGETABLE OILS, FATS AND WAXES						
41 Animal oils and fats	118	2	115	2	156	2
42 Fixed vegetable fats and oils, crude, refined or fractionated(a)(b)	4	115	3	134	4	171
43 Fats and oils (processed), waxes and inedible mixtures or preparations, of animal or vegetable origin, n.e.s.	16	13	18	13	31	17
Total section 4(a)(b)	*138*	*129*	*136*	*150*	*192*	*190*
5 CHEMICAL AND RELATED PRODUCTS, N.E.S.						
51 Organic chemicals(b)	113	1,004	89	1,095	88	1,402
52 Inorganic chemicals(a)(b)	201	661	229	720	197	655
53 Dyeing, tanning and colouring materials	186	233	241	270	328	320
54 Medicinal and pharmaceutical products(a)	321	942	456	1,053	564	1,393
55 Essential oils and resinoids and perfume materials; toilet, polishing and cleansing preparations	124	338	132	383	172	463
56 Fertilisers (excl. crude)	19	276	14	312	12	351
57 Plastics in primary forms(a)(b)	161	595	189	602	210	706
58 Plastics in non-primary forms(b)	77	439	86	483	100	562
59 Chemical materials and products, n.e.s.(b)	175	629	226	659	324	773
Total section 5(a)(b)	*1,377*	*5,118*	*1,662*	*5,575*	*1,994*	*6,624*

For footnotes *see* end of table.

26.17 MERCHANDISE EXPORTS AND IMPORTS BY COMMODITY — *continued*
($ million)

Commodity description (Section and division of the SITC Rev. 3)	*1990–91*		*1991–92*		*1992–93*	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
6 MANUFACTURED GOODS CLASSIFIED CHIEFLY BY MATERIAL						
61 Leather, leather manufactures, and dressed furskins, n.e.s.	180	121	221	127	284	134
62 Rubber manufactures, n.e.s.(b)	65	661	79	748	108	812
63 Cork and wood manufactures (excl. furniture)(a)	37	214	63	238	66	259
64 Paper, paperboard and articles of paper pulp, of paper or of paperboard(a)(b)	188	1,155	212	1,334	258	1,419
65 Textile yarn, fabrics, made-up articles, n.e.s., and related products(b)	210	1,818	236	2,021	307	2,144
66 Non-metallic mineral manufactures, n.e.s.(a)(b)	507	958	616	928	558	1,033
67 Iron and steel	981	883	1,144	825	1,211	945
68 Non-ferrous metals(a)(b)	3,758	385	3,558	380	3,995	465
69 Manufactures of metals, n.e.s.(b)	477	1,201	561	1,283	551	1,569
Total section 6(a)(b)	*6,404*	*7,396*	*6,690*	*7,884*	*7,338*	*8,779*
7 MACHINERY AND TRANSPORT EQUIPMENT						
71 Power generating machinery and equipment	543	1,259	610	1,292	615	1,605
72 Machinery specialised for particular industries	517	2,148	535	1,903	697	2,649
73 Metal working machinery	82	317	84	320	105	288
74 General industrial machinery and equipment, n.e.s. and machine parts, n.e.s.	475	2,716	536	2,718	719	3,110
75 Office machines and automatic data processing machines	720	3,375	832	3,637	995	4,238
76 Telecommunications and sound recording and reproducing apparatus and equipment	320	1,737	307	1,981	502	2,346
77 Electrical machinery, apparatus, appliances, parts (incl. non-electrical counterparts of electrical domestic equipment)	470	2,521	595	2,836	763	3,362
78 Road vehicles (incl. air-cushion vehicles)	847	4,459	770	4,808	989	6,161
79 Transport equipment (excl. road vehicles)	657	3,156	765	2,499	1,031	2,154
Total section 7	*4,630*	*21,687*	*5,033*	*21,995*	*6,416*	*25,913*
8 MISCELLANEOUS MANUFACTURED ARTICLES						
81 Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures and fittings, n.e.s.	43	139	72	155	63	177
82 Furniture parts thereof; bedding mattresses, mattress supports, cushions and similar stuffed furnishings	34	291	42	320	64	350
83 Travel goods, handbags and similar containers	5	215	4	241	7	270
84 Articles of apparel and clothing accessories	130	956	154	1,100	198	1,330
85 Footwear	24	384	30	411	41	512
87 Professional, scientific and controlling instruments and apparatus, n.e.s.	276	1,199	329	1,282	395	1,569
88 Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks(b)	255	778	287	839	397	977
89 Miscellaneous manufactured articles, n.e.s.	553	2,994	701	3,419	720	3,733
Total section 8(b)	*1,319*	*6,955*	*1,619*	*7,768*	*1,884*	*8,918*

For footnotes *see* end of table.

26.17 MERCHANDISE EXPORTS AND IMPORTS BY COMMODITY — *continued* ($ million)

Commodity description (Section and division of the SITC Rev. 3)	*1990–91*		*1991–92*		*1992–93*	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
9 COMMODITIES AND TRANSACTIONS NOT CLASSIFIED ELSEWHERE IN THE SITC						
93 Special transactions and commodities not classified according to kind	174	214	211	28	219	30
95 Gold coin whether or not legal tender, and other coin being legal tender	230	20	300	9	267	2
96 Coin (excl. gold coin) not being legal tender	1	2	—	—	1	—
97 Gold non-monetary (excl. gold ores and concentrates)	3,672	623	4,023	1,040	4,315	1,021
98 Combined confidential items of trade(d)(e)	787	108	775	74	760	69
Total section 9(d)(e)	*4,865*	*966*	*5,309*	*1,150*	*5,562*	*1,122*
Total	**52,399**	**48,912**	**55,027**	**50,984**	**60,778**	**59,577**

(a) Excludes export commodities subject to a confidentiality restriction. These are included in Division 98. (b) Excludes import commodities subject to a confidentiality restriction. These are included in Division 98. (c) Excludes some commodities subject to a 'No Commodity Details' restriction. (d) Includes export and import commodities subject to a confidentiality restriction. (e) Includes revisions of $62 million in exports for November 1992 resulting from the omission of certain export entries for that month which cannot be allocated to commodity classification codes.

Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

Merchandise exports and imports by industry of origin

The following two tables classify merchandise trade statistics according to divisions and selected subdivisions of the Australian Standard Industrial Classification (ASIC). The statistics are compiled by allocating foreign trade data for a commodity to an ASIC industry of origin category based upon the industry with which that commodity is primarily associated.

26.18 MERCHANDISE EXPORTS BY INDUSTRY OF ORIGIN

Australian Standard Industrial Classification (ASIC) Division/subdivision	*1990–91*		*1991–92*		*1992–93*	
	$ million	*Per cent*	*$ million*	*Per cent*	*$ million*	*Per cent*
Agriculture, forestry, fishing and hunting						
01 Agriculture	5,002	10	5,311	10	5,651	9
03 Forestry and logging	18	—	17	—	42	—
04 Fishing and hunting	170	—	274	—	348	1
Total	*5,190*	*10*	*5,601*	*10*	*6,042*	*10*
Mining						
11 Metallic minerals	4,925	9	4,998	9	5,061	8
12 Coal	6,372	12	6,858	12	7,542	12
13 Oil and gas	2,785	5	2,608	5	3,036	5
14 Construction materials	22	—	7	—	11	—
15 Other non-metallic minerals	164	—	161	—	211	—
Total	*14,268*	*27*	*14,632*	*27*	*15,860*	*26*

... continued

26.18 MERCHANDISE EXPORTS BY INDUSTRY OF ORIGIN — *continued*

Australian Standard Industrial Classification (ASIC) Division/subdivision	*1990–91*		*1991–92*		*1992–93*	
	$ million	*Per cent*	*$ million*	*Per cent*	*$ million*	*Per cent*
Manufacturing						
21 Food, beverages and tobacco	7,324	14	7,902	14	9,149	15
23 Textiles	1,809	3	2,284	4	2,168	4
24 Clothing and footwear	160	—	192	—	249	—
25 Wood, wood products and furniture	503	1	552	1	586	1
26 Paper, paper products, printing and publishing	349	1	374	1	450	1
27 Chemical, petroleum and coal products	2,850	5	3,017	5	3,535	6
28 Non-metallic mineral products	146	—	221	—	249	—
29 Basic metal products	11,528	22	11,205	20	11,916	20
31 Fabricated metal products	671	1	818	1	768	1
32 Transport equipment	1,907	4	1,994	4	2,426	4
33 Other machinery and equipment	3,378	6	3,809	7	4,937	8
34 Miscellaneous manufacturing	809	2	962	2	1,015	2
Total	*31,432*	*60*	*33,331*	*61*	*37,448*	*62*
Other industries						
Wholesale, retail and service industries	74	—	96	—	89	—
Confidential items; Waste and scrap n.e.s.; Second hand goods n.e.s.; Special goods(a)	1,434	3	1,367	2	1,339	2
Total	*1,508*	*3*	*1,463*	*3*	*1,428*	*2*
Total exports	**52,399**	**100**	**55,027**	**100**	**60,778**	**100**

(a) Includes revisions of $62 million in exports for November 1992 resulting from the omission of certain export entries for that month which cannot be allocated to commodity classification codes.

Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

26.19 MERCHANDISE IMPORTS BY INDUSTRY OF ORIGIN

Australian Standard Industrial Classification (ASIC) Division/subdivision	*1990–91*		*1991–92*		*1992–93*	
	$ million	*Per cent*	*$ million*	*Per cent*	*$ million*	*Per cent*
Agriculture, forestry, fishing and hunting						
01 Agriculture	519	1	541	1	546	1
03 Forestry and logging	3	—	3	—	4	—
04 Fishing and hunting	24	—	22	—	20	—
Total	*546*	*1*	*565*	*1*	*570*	*1*
Mining						
11 Metallic minerals	99	—	100	—	130	—
12 Coal	1	—	1	—	1	—
13 Oil and gas	1,510	3	1,587	3	2,279	4
14 Construction materials	13	—	13	—	13	—
15 Other non-metallic minerals	96	—	98	—	127	—
Total	*1,720*	*4*	*1,798*	*4*	*2,551*	*4*

... continued

26.19 MERCHANDISE IMPORTS BY INDUSTRY OF ORIGIN — *continued*

Australian Standard Industrial Classification (ASIC) Division/subdivision	*1990–91*		*1991–92*		*1992–93*	
	$ million	*Per cent*	*$ million*	*Per cent*	*$ million*	*Per cent*
Manufacturing						
21 Food, beverages and tobacco	2,081	4	2,232	4	2,521	4
23 Textiles	2,127	4	2,205	4	2,356	4
24 Clothing and footwear	1,280	3	1,452	3	1,769	3
25 Wood, wood products and furniture	884	2	956	2	1,116	2
26 Paper, paper products, printing and publishing	2,065	4	2,289	4	2,401	4
27 Chemical, petroleum and coal products	6,336	13	6,276	12	7,684	13
28 Non-metallic mineral products	865	2	885	2	931	2
29 Basic metal products	1,968	4	2,343	5	2,561	4
31 Fabricated metal products	1,432	3	1,563	3	1,837	3
32 Transport equipment	8,021	16	7,944	16	9,159	15
33 Other machinery and equipment	15,947	33	16,763	33	20,019	34
34 Miscellaneous manufacturing	3,127	6	3,427	7	3,819	6
Total	*46,132*	*94*	*48,333*	*95*	*56,174*	*94*
Other industries						
Wholesale, retail and service industries	160	—	157	—	151	—
Confidential items; Waste and scrap n.e.s.; Second hand goods n.e.s.; Special goods	354	1	130	—	132	—
Total	*515*	*1*	*287*	*1*	*283*	—
Total imports	**48,912**	**100**	**50,984**	**100**	**59,577**	**100**

Source: Foreign Trade, Australia: Merchandise Exports and Imports, 1992–93 (5410.0).

INTERNATIONAL TRADE IN SERVICES

As shown in table 26.1 the current account of Australia's balance of payments includes trade in services with the rest of the world. For 1992–93, services trade accounted for exports of $14,863 million and imports of $17,648 million, 20 per cent and 23 per cent of all exports and imports of goods and services, respectively. Table 26.20 provides details of this trade in services.

26.20 INTERNATIONAL TRADE IN SERVICES ($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
			CREDITS			
Shipment						
Freight on exports	506	502	498	559	557	602
Insurance on exports	9	11	12	12	12	12
Total	*515*	*513*	*510*	*571*	*569*	*614*
Other transportation						
Passenger services	1,348	1,422	1,363	1,594	1,782	2,141
Port services etc.	1,617	1,664	1,934	2,099	2,155	2,334
Total	*2,965*	*3,086*	*3,297*	*3,693*	*3,937*	*4,475*
Travel						
Student's expenditure	457	646	860	936	1,027	1,065
Other	3,108	3,684	3,508	4,047	4,410	4,642
Total	*,565*	*4,330*	*4,368*	*4,983*	*5,437*	*5,707*
Other services						
Official	200	249	270	299	246	262
Non-official						
Financial services	185	191	191	249	297	262
Insurance services n.e.c.	29	22	24	24	29	28
Other(a)	2,106	2,443	2,909	3,180	3,439	3,515
Total	*2,520*	*2,905*	*3,394*	*3,752*	*4,011*	*4,067*
Total	**9,565**	**10,835**	**11,569**	**12,999**	**13,954**	**14,863**
			DEBITS			
Shipment						
Freight on imports	2,899	3,226	3,419	3,164	3,233	3,748
Insurance on imports	24	24	24	24	24	24
Total	*2,923*	*3,250*	*3,443*	*3,188*	*3,257*	*3,772*
Other transportation						
Passenger services	1,547	1,849	2,223	2,292	2,462	2,499
Port services n.e.c.	963	1,063	1,201	1,151	1,180	1,257
Total	*2,510*	*2,912*	*3,424*	*3,443*	*3,642*	*3,756*
Travel						
Student's expenditure	129	191	247	268	294	379
Other	3,620	4,172	4,888	4,962	4,828	5,220
Total	*3,749*	*4,363*	*5,135*	*5,230*	*5,122*	*5,599*
Other services						
Official	311	307	385	447	387	429
Non-official						
Financial services	163	193	137	241	193	151
Insurance services n.e.c.	288	357	360	378	379	382
Other(a)	2,489	2,695	3,488	3,581	3,771	3,559
Total	*3,251*	*3,552*	*4,370*	*4,647*	*4,730*	*4,521*
Total	**12,433**	**14,077**	**16,372**	**16,508**	**16,751**	**17,648**

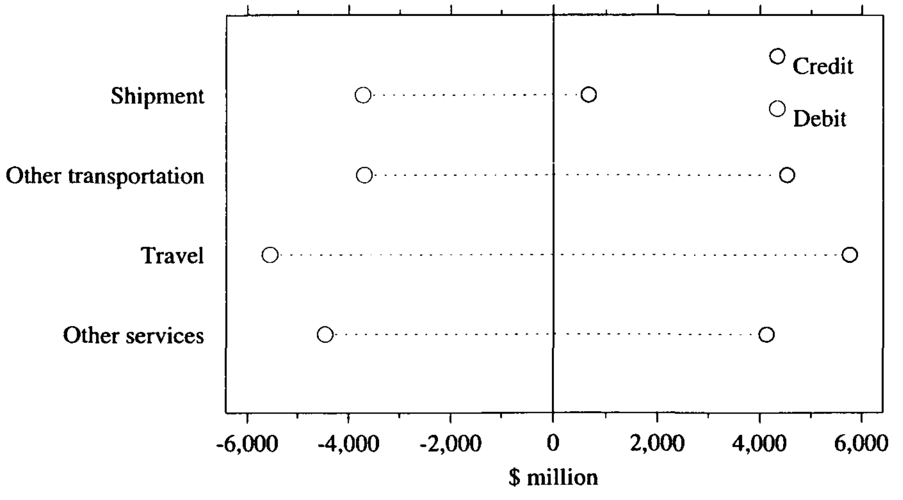
For footnotes *see* end of table.

26.20 INTERNATIONAL TRADE IN SERVICES — *continued*
($ million)

	1987–88	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
			BALANCE			
Shipment						
Freight	– 2,393	– 2,724	– 2,921	– 2,605	– 2,676	– 3,146
Insurance	– 15	– 13	– 12	– 12	– 12	– 12
Total	*– 2,408*	*– 2,737*	*– 2,933*	*– 2,617*	*– 2,688*	*– 3,158*
Other transportation						
Passenger services	– 199	– 427	– 860	– 698	– 680	– 358
Port services etc.	654	601	733	948	975	1,077
Total	*455*	*174*	*– 127*	*250*	*295*	*719*
Travel						
Student's expenditure	328	455	613	668	733	686
Other	– 512	– 488	– 1,380	– 915	– 418	– 578
Total	*– 184*	*– 33*	*– 767*	*– 247*	*315*	*108*
Other services						
Official	– 111	– 58	– 115	– 148	– 141	– 167
Non-official						
Financial services	22	– 2	54	8	104	111
Insurances services n.e.c.	– 259	– 335	– 335	-354	– 350	– 354
Other(a)	– 383	– 252	– 579	– 401	– 332	– 44
Total	*– 731*	*– 647*	*– 976*	*– 895*	*– 719*	*– 454*
Total	**– 2,868**	**– 3,243**	**– 4,803**	**– 3,509**	**– 2,797**	**– 2,785**

(a) A dissection of this data is provided by the International Trade in Services Survey.
Source: Balance of Payments, Australia, December Quarter 1993 (5302.0).

26.21 INTERNATIONAL TRADE IN SERVICES, BY COMPONENT, 1992–93



Source: Balance of Payments, Australia, December Quarter 1993 (5302.0).

INTERNATIONAL INVESTMENT

Conceptual framework

International investment statistics provide information on the *levels* (stock) of Australia's foreign financial assets and liabilities, *capital transactions* (investment flows) which increase and decrease these assets and liabilities, *other changes* in the value of these assets and liabilities, and *income* receivable and payable on these assets and liabilities.

These statistics form an integral part of Australia's balance of payments as well as being useful in their own right, for example, in determining the impact of foreign investment policies and the level of Australia's foreign assets and liabilities, including foreign debt. They are also useful when analysing the behaviour of financial markets.

Market price is the principle method of valuation in international investment statistics. Capital transactions are recorded on a change of ownership basis, that is, at the time when the foreign financial asset or liability is acquired, sold, repaid or otherwise disposed of. By convention, this is taken to be the time at which the event is recorded in the books of the transactors. Investment income is generally recorded at the time it becomes due for payment.

Classification

The primary classification used in international investment statistics is the direction of investment. This classification refers to the basic distinction between inward and outward investment, that is, foreign investment in Australia or Australian investment abroad. Broadly, *foreign investment in Australia* refers to the stock of financial assets in Australia owned by non-residents and capital transactions which increase or decrease this stock. Conversely, *Australian investment abroad* refers to the stock of financial assets abroad owned by Australian residents and capital transactions which increase or decrease this stock.

International investment is undertaken by means of instruments of investment. Many types of instruments of investment can be identified, but for analytical reasons and ease of reporting similar instruments are combined.

- *Equity* includes ordinary and preference shares, units in trusts and net equity in branches.
- *Borrowing* (foreign investment in Australia) or lending (Australian investment abroad) comprises deposits, loans, finance leases, bonds, bills, IMF credit and Bank of International Settlements placements.
- *Reserve Assets* includes monetary gold, Special Drawing Rights and reserve position in the IMF and foreign exchange held by the Reserve Bank of Australia.
- *Other investments* consist of amounts outstanding in respect of goods, services, interest, dividends, etc.
- *Reinvestment of earnings* of direct investors refers to income retained from after tax profits attributable to direct investors.

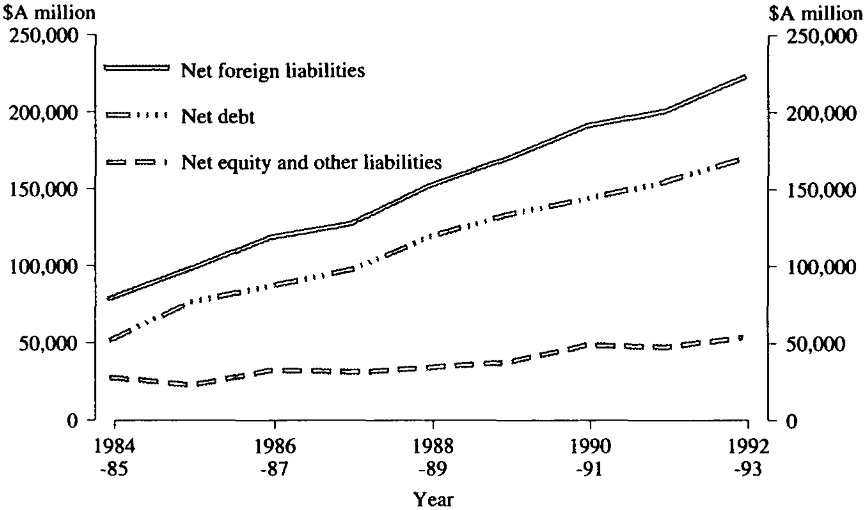
International investment position

Australia's net international investment position is the difference between the levels of Australia's foreign liabilities (foreign investment in Australia) and the levels of Australia's foreign financial assets (Australian investment abroad). Historically, Australia has had a net liabilities position with the rest of the world.

Table 26.23 shows a reconciliation between opening and closing levels for foreign investment in Australia, Australian investment abroad and Australia's net international investment position. The table also shows income payable on foreign investment in Australia, income receivable on Australian investment abroad and net income payable.

Australia's net foreign liabilities at 30 June 1993 totalled $221,110 million, up 11 per cent on 30 June 1992. The rise in Australia's net foreign liabilities since 30 June 1992 was the net effect of rises of $28,994 million in the level of foreign investment in Australia and $7,420 million in the level of Australian investment abroad. Of the rise in the level of foreign investment in Australia, $17,076 million (59%) was attributable to foreign borrowing.

26.22 NET INTERNATIONAL INVESTMENT POSITION AT END OF YEAR BY INSTRUMENT OF INVESTMENT



Source: International Investment Position, Australia, December Quarter 1993 (5306.0).

26.23 INTERNATIONAL INVESTMENT POSITION AND INCOME ($ million)

Year	Levels of investment at beginning of year	Reinvestment of earnings of direct investors (Changes in levels of investment during the year)	Other transactions	Exchange rate variations	Other changes	Total	Levels of investment at end of year	Investment income (a)
FOREIGN INVESTMENT IN AUSTRALIA								
Equity								
1990–91	94,279	674	9,898	-9	-2,550	8,013	102,292	5,193
1991–92	102,292	750	4,660	70	-124	5,356	107,648	4,744
1992–93	107,648	2,318	8,206	139	1,240	11,904	119,552	6,470
Borrowing								
1990–91	163,137	—	12,132	2,387	1,168	15,687	178,824	14,886
1991–92	178,824	—	9,428	4,806	-2,651	11,584	(b)190,408	13,359
1992–93	190,408	—	7,887	9,402	-213	17,076	207,483	11,368
Other investment								
1990–91	6,425	—	-485	66	426	7	6,431	170
1991–92	6,431	—	617	54	-357	314	6,745	93
1992–93	6,745	—	301	33	-319	15	6,760	103
Total								
1990–91	263,841	674	21,545	2,444	-956	23,707	287,547	20,248
1991–92	287,547	750	14,705	4,930	-3,132	17,253	304,801	18,196
1992–93	304,801	2,318	16,394	9,574	708	28,994	333,795	17,941

For footnotes *see* end of table.

26.23 INTERNATIONAL INVESTMENT POSITION AND INCOME — *continued*
($ million)

Year	*Levels of investment at beginning of year*	*Changes in levels of investment during the year* — *Reinvestment of earnings of direct investors*	*Other transactions*	*Exchange rate variations*	*Other changes*	*Total*	*Levels of investment at end of year*	*Investment income (a)*
			AUSTRALIAN INVESTMENT ABROAD					
Equity								
1990–91	56,411	205	– 1,392	– 149	– 1,193	– 2,530	53,881	817
1991–92	53,881	555	2,469	2,827	2,059	7,910	61,791	1,161
1992–93	61,791	1,930	1,238	2,194	– 486	4,876	66,668	2,644
Reserve assets								
1990–91	21,871	. .	1,446	631	99	2,176	24,047	1,573
1991–92	24,047	. .	– 3,929	2,287	– 165	– 1,807	22,240	1,654
1992–93	22,240	. .	– 3,950	1,706	827	– 1,417	20,823	1,465
Lending								
1990–91	9,035	. .	3,402	7	– 138	3,270	12,305	658
1991–92	12,305	. .	851	752	760	2,364	14,668	677
1992–93	14,668	. .	2,433	1,022	– 251	3,205	17,873	623
Other investment								
1990–91	7,857	. .	156	– 6	– 343	– 194	7,663	120
1991–92	7,663	. .	– 935	85	– 248	– 1,098	6,565	54
1992–93	6,565	. .	165	169	422	756	7,321	21
Total								
1990–91	95,174	205	3,611	482	– 1,575	2,722	97,896	3,168
1991–92	97,896	555	– 1,543	5,950	2,406	7,369	105,265	3,545
1992–93	105,265	1,930	– 113	5,091	512	7,420	112,685	4,753
			NET INTERNATIONAL INVESTMENT POSITION(c)					
Net equity								
1990–91	37,868	470	11,291	141	– 1,358	10,543	48,411	4,376
1991–92	48,411	195	2,191	– 2,757	– 2,183	– 2,554	45,857	3,583
1992–93	45,857	388	6,968	– 2,055	1,726	7,027	52,884	3,826
Net foreign debt(d)								
1990–91	132,231	. .	7,284	1,749	1,207	10,241	142,472	12,655
1991–92	142,472	. .	12,506	1,767	– 3,246	(e)11,027	153,499	11,027
1992–93	153,499	. .	9,403	6,674	– 789	15,288	168,787	9,280
Other investment								
1990–91	– 1,433	. .	– 641	72	769	201	– 1,232	50
1991–92	– 1,232	. .	1,551	– 30	– 110	1,411	179	40
1992–93	179	. .	135	– 136	– 740	– 741	– 562	82
Total								
1990–91	168,666	470	17,934	1,962	619	20,985	189,651	17,080
1991–92	189,651	195	16,249	– 1,020	– 5,539	9,885	199,536	14,650
1992–93	199,536	388	16,507	4,483	197	21,574	221,110	13,188

(a) Investment income is calculated before the deduction of withholding tax. Includes reinvested earnings of direct investors. (b) As a result of a change in the methodology used to value non-equity issued on foreign capital markets, levels of borrowing from 30 June 1992, are not strictly comparable with levels for earlier periods. The change in methodology accounts for – $971 million of the amount shown as 'other changes' in 1991–92. (c) Australia's net international investment position equals foreign investment in Australia less Australian investment abroad. (d) Foreign borrowing by Australian residents less the sum of reserve assets and Australian lending abroad. (e) As a result of a change in the methodology used to value non-equity securities issued on foreign capital markets, levels of net foreign debt for 30 June 1992 are not strictly comparable with levels for earlier periods. The change in methodology accounts for – $973 million of the amount shown as 'other changes' in 1991–92.

Source: International Investment Position, Australia, December Quarter 1993 (5306.0).

Foreign debt

Foreign debt is a subset of financial obligations that comprise a country's international investment position. The level of borrowing by Australian residents at a particular date can be equated with Australia's gross foreign debt. The level of Australian lending abroad and official reserve assets at the same date are deducted from the level of borrowing to arrive at Australia's net foreign debt.

As table 26.24 shows, the level of net foreign debt at 30 June 1993 was $168,787 million, up 10 per cent on 30 June 1992. Capital transactions added $9,403 million to the level of net foreign debt, while exchange rate variations added $6,674 million and other factors reduced the level by $789 million.

Table 26.24 shows that net foreign debt of the public sector (official sector plus public trading and financial enterprises) rose by 35 per cent during 1992–93, reaching $63,776 million at 30 June 1993 and accounting for 38 per cent of total net foreign debt at that date. Net foreign debt of the private sector decreased by one per cent to $105,011 million. The increase in total net foreign debt was attributable to the official sector and financial enterprises, with trading enterprises recording a small decrease.

26.24 LEVELS OF FOREIGN DEBT
($ million)

	At 30 June					
	1988	*1989*	*1990*	*1991*	*1992*	*1993*
FOREIGN BORROWING (GROSS DEBT)(a)						
Official						
Commonwealth government and Reserve Bank	22,909	18,607	19,654	16,530	15,327	19,815
State government	10,219	18,230	19,788	24,435	28,425	37,963
Total official	*33,128*	*36,837*	*39,443*	*40,966*	*43,752*	*57,778*
Non-official						
Financial enterprises						
Public sector	10,997	16,771	20,489	20,408	21,300	23,262
Private sector	25,303	33,421	41,281	53,110	63,494	64,368
Total	*36,300*	*50,192*	*61,770*	*73,518*	*84,794*	*87,630*
Trading enterprises						
Public sector	12,739	11,439	12,301	13,331	12,522	11,708
Private sector	40,954	48,671	49,623	51,010	49,340	50,367
Total	*53,693*	*60,110*	*61,924*	*64,340*	*61,862*	*62,075*
Total non-official	*89,993*	*110,302*	*123,694*	*137,858*	*146,656*	*149,705*
Total	**123,122**	**147,139**	**163,137**	**178,824**	**190,408**	**207,483**
of which						
Public sector						
Official	33,128	36,837	39,443	40,966	43,752	57,778
Non-official	23,736	28,210	32,790	33,739	33,821	34,970
Total	*56,865*	*65,047*	*72,233*	*74,704*	*77,573*	*92,748*
Private sector	66,257	82,092	90,904	104,119	112,834	114,735
AUSTRALIAN LENDING ABROAD AND RESERVE ASSETS						
Official						
Reserve assets	20,182	20,410	21,871	24,047	22,240	20,823
Lending	448	677	770	452	175	140
Total official	*20,630*	*21,087*	*22,641*	*24,499*	*22,415*	*20,963*
Non-official						
Financial enterprises	5,229	7,983	10,895	11,144	13,638	15,626
Trading enterprises	1,014	377	−2,630	709	855	2,107
Total non-official	*6,244*	*8,361*	*8,265*	*11,853*	*14,494*	*17,733*
Total	**26,873**	**29,448**	**30,906**	**36,352**	**36,908**	**38,696**
of which						
Public sector						
Official	20,630	21,087	22,641	24,499	22,415	20,963
Non-official	2,333	4,685	5,925	5,494	7,963	8,009
Total	*22,962*	*25,772*	*28,566*	*29,993*	*30,377*	*28,972*
Private sector	3,911	3,676	2,340	6,359	6,531	9,724

For footnotes *see* end of table.

26.24 LEVELS OF FOREIGN DEBT — *continued*
($ million)

						At 30 June
	1988	*1989*	*1990*	*1991*	*1992*	*1993*
	NET FOREIGN DEBT(a)(b)					
Official	12,499	15,750	16,802	16,467	21,337	36,815
Non-official						
Financial enterprises	31,071	42,209	50,875	62,373	71,156	72,004
Trading enterprises	52,679	59,732	64,554	63,632	61,007	59,968
Total non-official	*83,750*	*101,941*	*115,430*	*126,005*	*132,162*	*131,972*
Total	**96,248**	**117,691**	**132,231**	**142,472**	**153,499**	**168,787**
of which						
Public sector						
Official	12,499	15,750	16,802	16,467	21,337	36,815
Non-official	21,403	23,525	26,865	28,245	25,859	26,961
Total	*33,902*	*39,275*	*43,666*	*44,712*	*47,196*	*63,776*
Private sector	62,346	78,416	88,565	97,760	106,303	105,011

(a) As a result of a change in the methodology used to value non-equity securities issued on foreign capital markets, levels from 30 June 1992 are not strictly comparable with levels for earlier periods. (b) Foreign borrowings by Australian residents less the sum of Australian lending abroad and reserve assets.

Source: International Investment Position, Australia, December Quarter 1993 (5306.0) and International Investment Position, Australia, 1992–93 (5305.0).

International investment ratios

Table 26.25 shows that, at 30 June 1993, the ratio of Australia's net foreign liabilities to GDP was 55 per cent. This was the highest financial year result for this ratio on record. The ratio of net foreign debt to GDP was 42 per cent, again the highest financial year result on record, with net equity and other investment accounting for the remaining 13 per cent. This growth in Australia's net foreign liabilities as a proportion of GDP largely reflected the continuing high balance of payments current account deficits over the decade.

As shown in table 26.27, the ratio of net investment income payable abroad to exports of goods and services was 18 per cent in 1992–93, a decrease of four percentage points over the previous year. This is due to a decrease of $1,462 million (10%) in net investment income payable abroad and an increase of $6,050 million (9%) in exports of goods and services in 1992–93.

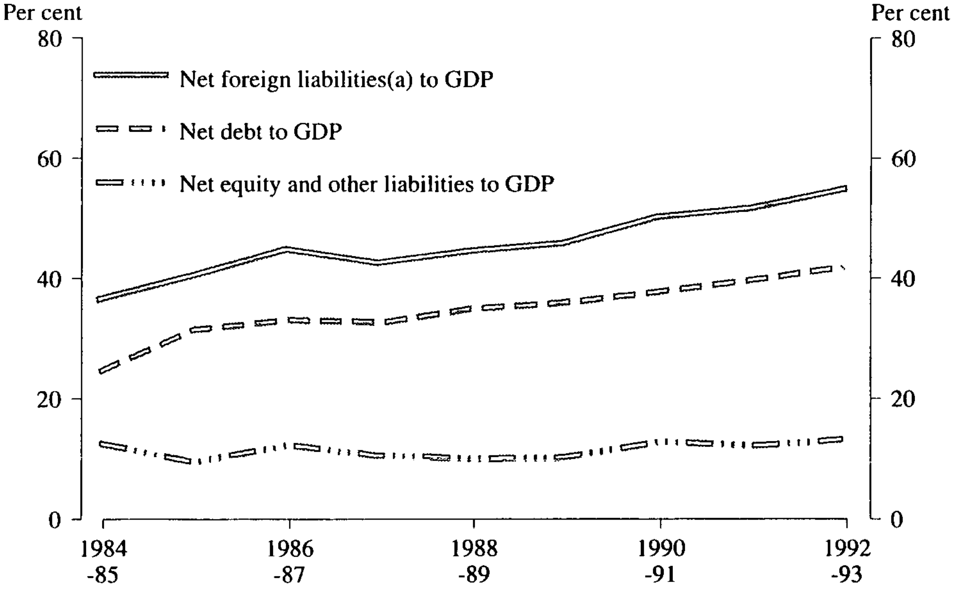
The net debt service ratio, that is, net interest payable abroad on net foreign debt as a percentage of exports of goods and services, fell four percentage points to 12 per cent in 1992–93. The ratio of net investment income payable on equity and other foreign investment to exports of goods and services remained the same over the year at five per cent.

26.25 NET FOREIGN LIABILITIES: RATIOS TO GDP

Year	Annual GDP at current cost	Net foreign liabilities at end of period ($ million): Foreign debt	Equity & other investment	Total	Ratios of net foreign liabilities to GDP(a) (%): Foreign debt	Equity & other investment	Total
1987–88	298,994	96,248	29,925	126,173	32.2	10.0	42.2
1988–89	340,642	117,691	32,818	150,509	34.5	9.6	44.2
1989–90	370,929	132,231	36,435	168,666	35.6	9.8	45.6
1990–91	381,120	142,472	47,179	189,651	37.4	12.4	49.8
1991–92	389,247	153,499	46,036	199,536	39.4	11.8	51.3
1992–93	405,805	168,787	52,322	221,110	41.6	12.9	54.5

(a) These ratios are derived by expressing net foreign liabilities at end of year as a percentage of GDP for that year.
Source: International Investment Position, Australia, December Quarter 1993 (5306.0) and International Investment Position, Australia, 1992–93 (5305.0).

26.26 RATIO OF NET FOREIGN LIABILITIES TO GROSS DOMESTIC PRODUCT (GDP)



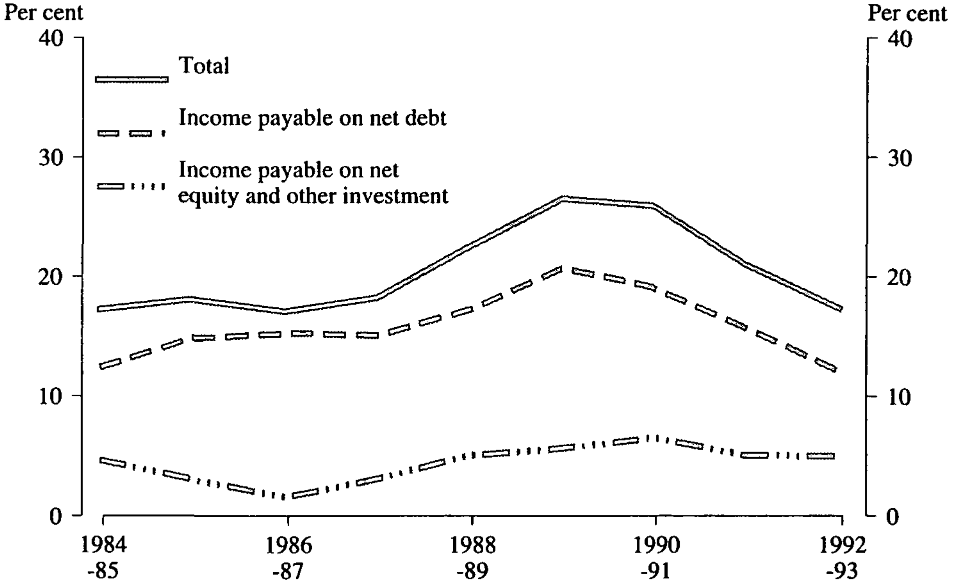
(a) Net international investment position.
Source: International Investment Position, Australia, December Quarter 1993 (5306.0).

26.27 NET INVESTMENT INCOME: RATIOS TO EXPORTS

		Net investment income payable abroad ($ million)			Ratios of net investment income to exports(a) (%)		
Year	*Exports of goods & services*	*Foreign debt*	*Equity & other investment*	*Total*	*Foreign debt*	*Equity & other investment*	*Total*
1987–88	51,080	7,793	1,674	9,467	15.3	3.3	18.5
1988–89	54,728	9,592	2,904	12,496	17.5	5.3	22.8
1989–90	60,133	12,610	3,521	16,131	21.0	5.9	26.8
1990–91	65,154	12,655	4,426	17,080	19.4	6.8	26.2
1991–92	68,828	11,027	3,623	14,650	16.0	5.3	21.3
1992–93	74,878	9,280	3,908	13,188	12.4	5.2	17.6

(a) These ratios are derived by expressing net investment income payable as a percentage of exports of goods and services.
Source: International Investment Position, Australia, December Quarter 1993 (5306.0) and International Investment Position, Australia, 1992–93 (5305.0).

26.28 RATIO OF NET INVESTMENT INCOME TO EXPORTS(a)



(a) Net investment income payable abroad as a percentage of Australia's exports of goods and services.
Source: International Investment Position, Australia, December Quarter 1993 (5306.0).

International investment by country

Tables 26.29 and 26.30 show the countries investing in Australia or receiving investment from Australia. The classification is based upon the country of residence of the foreign creditor or debtor holding Australia's liabilities or financial assets. It does not necessarily reflect either the country of ultimate beneficial ownership of the investment, the country of immediate source of funds or the country to which amounts borrowed will in fact be repaid.

The USA, for the third consecutive year, was the main source of the net inflow of foreign investment into Australia in 1992–93, accounting for $10,324 million, followed by borrowings raised on international capital markets (for example, Euro-bonds and similar issues) which accounted for $6,381 million, an increase of $1,750 million (38%) over the previous year. The inflow of investment from the United Kingdom into Australia increased during 1992–93, rising from $1,875 million to $3,663 million. Japan, for the second consecutive year, withdrew investment from Australia. The net outflow due to this withdrawal increased from $220 million in 1991–92 to $3,219 million during 1992–93.

At 30 June 1993, the USA was the leading investor country with $75,303 million (23%) of the total stock of foreign investment in Australia, followed by the United Kingdom with $60,215 million, international capital markets with $55,649 million and Japan with $51,204 million.

Of the net outflow of investment by Australian residents that can be allocated by country, the major recipient in 1992–93 was New Zealand, with $1,166 million or 64 per cent of the total outflow.

At 30 June 1993, Australian investment abroad was most substantial in the USA, with a level of $29,055 million (26%), followed by the United Kingdom with $18,464 million and New Zealand with $8,159 million.

26.29 FOREIGN INVESTMENT IN AUSTRALIA, BY COUNTRY
($ million)

Country of investor	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
			CAPITAL TRANSACTIONS			
OECD						
USA	668	6,374	1,903	7,554	5,276	10,324
Japan	7,362	7,944	7,799	2,131	– 220	– 3,219
Switzerland	653	383	485	– 936	– 237	23
EC						
UK	6,113	2,649	113	5,226	1,875	3,663
Other(a)	1,154	2,480	690	– 636	– 839	711
Total EC	*7,266*	*5,129*	*803*	*4,591*	*1,036*	*4,373*
Other OECD	1,847	779	175	1,988	380	761
Total OECD	*17,797*	*20,610*	*11,164*	*15,327*	*6,234*	*12,263*
ASEAN	108	– 996	645	– 1,084	635	– 1,252
Other countries(b)	1,994	2,282	658	1,834	2,230	1,606
International capital markets	5,438	7,957	10,242	3,086	4,631	6,381
International institutions	– 71	– 259	– 30	757	82	– 954
Unallocated	2,910	3,209	2,060	2,298	1,642	668
Total	**28,176**	**32,803**	**24,738**	**22,219**	**15,456**	**18,711**

For footnotes *see* end of table.

26.29 FOREIGN INVESTMENT IN AUSTRALIA, BY COUNTRY — *continued*
($ million)

Country of investor	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
INVESTMENT INCOME						
OECD						
USA	3,603	3,509	4,359	4,018	3,256	5,065
Japan	1,861	2,670	3,686	3,201	2,925	2,263
Switzerland	368	479	541	479	406	478
EC						
UK	2,272	3,382	3,287	3,026	2,719	3,153
Other(a)	1,254	1,325	1,430	998	948	1,083
Total EC	*3,526*	*4,708*	*4,717*	*4,024*	*3,667*	*4,236*
Other OECD	362	182	373	150	74	549
Total OECD	*9,719*	*11,547*	*13,676*	*11,872*	*10,329*	*12,591*
ASEAN	480	652	690	545	356	351
Other countries(b)	333	730	635	998	787	925
International capital markets	1,565	2,538	4,003	4,885	4,498	3,221
International institutions	22	18	34	39	25	40
Unallocated	982	923	1,020	1,909	2,201	813
Total	**13,101**	**16,407**	**20,059**	**20,248**	**18,196**	**17,941**
LEVELS OF INVESTMENT AT 30 JUNE						
OECD						
USA	40,572	47,838	47,460	55,652	59,425	75,303
Japan	29,849	39,152	48,115	51,008	52,047	51,204
Switzerland	7,403	7,129	7,530	7,234	6,601	8,098
EC						
UK	44,257	48,511	47,522	50,949	55,908	60,215
Other(a)	18,792	20,266	22,141	21,282	21,859	22,421
Total EC	*63,049*	*68,778*	*69,662*	*72,232*	*77,767*	*82,636*
Other OECD	8,487	11,222	9,775	12,235	11,973	11,196
Total OECD	*149,359*	*174,120*	*182,541*	*198,361*	*207,813*	*228,437*
ASEAN	8,203	7,445	7,723	6,701	8,002	7,366
Other countries(b)	8,245	11,318	11,805	13,295	15,953	23,620
International capital markets	26,357	34,883	46,482	50,066	52,796	55,649
International institutions	239	287	257	1,014	1,097	142
Unallocated	8,388	11,902	15,032	18,111	19,140	18,580
Total	**200,792**	**239,955**	**263,841**	**287,547**	**304,801**	**333,795**

(a) From 1990–91 includes the former Federal Republic of Germany. Prior to 1990–91, the German Democratic Republic is included in 'other countries'. (b) Includes the former German Democratic Republic up to 1989–90. From 1990–91 the former German Democratic Republic is included in 'EC-Other'.

Source: International Investment Position, Australia, December Quarter 1993 (5306.0).

26.30 AUSTRALIAN INVESTMENT ABROAD, BY COUNTRY
($ million)

Country of investment	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
	CAPITAL TRANSACTIONS					
OECD						
USA	2,471	5,964	2,136	246	- 380	15
New Zealand	1,494	648	1,625	349	- 333	1,166
UK	5,108	2,056	1,266	1,580	- 166	659
Other OECD(a)(b)	2,661	2,332	899	5,986	- 2,018	- 2,458
Total OECD	*11,734*	*10,999*	*5,926*	*8,160*	*- 2,897*	*- 618*
ASEAN	- 109	801	752	- 282	307	520
Papua New Guinea	404	178	157	129	137	175
Other countries(c)	2,413	- 565	- 403	- 4,095	1,621	1,534
Reserve Bank gold(d)	—	—	—	—	—	- 19
Unallocated	1,832	1,315	- 1,018	- 98	- 156	226
Total	**16,274**	**12,728**	**5,415**	**3,815**	**- 988**	**1,817**
	INVESTMENT INCOME					
OECD						
USA	686	1,159	1,952	1,259	860	1,595
New Zealand	326	307	338	237	305	249
UK	676	710	- 95	10	602	759
Other OECD(a)(b)	641	691	319	1,069	986	1,308
Total OECD	*2,330*	*2,868*	*2,514*	*2,575*	*2,753*	*3,910*
ASEAN	113	139	217	121	106	214
Papua New Guinea	3	81	- 10	207	226	236
Other countries(c)	1,044	571	906	69	116	300
Unallocated	145	253	300	195	345	92
Total	**3,634**	**3,911**	**3,928**	**3,168**	**3,545**	**4,753**
	LEVELS OF INVESTMENT AT 30 JUNE					
OECD						
USA	20,808	25,976	26,520	25,981	27,409	29,055
New Zealand	5,107	5,230	6,498	7,122	7,271	8,159
UK	13,032	15,461	17,865	18,263	20,563	18,464
Other OECD(a)(b)	13,804	18,753	19,829	25,875	25,362	26,198
Total OECD	*53,751*	*65,420*	*70,712*	*77,242*	*80,604*	*81,877*
ASEAN	1,542	3,088	4,380	3,952	4,644	5,238
Papua New Guinea	1,725	1,494	1,620	1,693	1,908	2,293
Other countries(c)	10,691	10,736	10,221	6,472	7,902	10,294
Reserve Bank gold(d)	4,509	3,861	3,541	3,804	3,639	4,448
Unallocated	2,402	4,847	4,700	4,735	6,567	8,534
Total	**74,619**	**89,446**	**95,174**	**97,896**	**105,265**	**112,685**

(a) The foreign exchange part of reserve assets, with the exception of those held in the USA, are not available by country and are therefore included in 'Other OECD'. (b) From 1990–91 includes the former Federal Republic of Germany and Germany, Democratic Republic. Prior to 1990–91 Germany, Democratic Republic is included in 'Other countries'. (c) Includes the former Germany, Democratic Republic up to 1989–90. From 1990–91 the former Germany, Democratic Republic is included in 'Other OECD'. (d) Gold held by the Reserve Bank as part of reserve assets which cannot be allocated by country.

Source: International Investment Position, Australia, 1992–93 (5305.0).

International investment by industry

The industry classification used in Australian international investment statistics is based upon the Australian Standard Industrial Classification (ASIC), 1983 edition. For both foreign investment in Australia and Australian investment abroad, investment is classified by the industry of the enterprise group receiving that investment. Industry statistics should be treated with some caution as they do not necessarily reflect the industry in which the funds are ultimately employed.

In 1992–93, the *Finance, property and business services* industry group, which includes banks, received an inflow of foreign investment of $9,958 million, or 53 per cent, of the total, followed by *Manufacturing* ($4,131 million) and *Public administration and defence* ($3,536 million).

At 30 June 1993, the level of foreign investment was highest in the *Finance, property and business services* category, with $164,461 million (49%). This was followed by *Manufacturing*, $58,859 million (18%); *Mining*, $32,830 million (10%); and *Wholesale and retail trade*, $30,917 million (9%).

26.31 FOREIGN INVESTMENT IN AUSTRALIA, BY INDUSTRY(a)
($ million)

		Industry of investment (ASIC division/subdivision)	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
		CAPITAL TRANSACTIONS						
B	Mining							
	12,13	Coal, oil and gas	1,106	1,026	1,469	482	-94	-737
	11,14,15	Other mining	839	617	-73	1,639	119	632
	16	Services to mining (incl. exploration)	353	31	65	-155	-197	-469
		Total mining	*2,298*	*1,674*	*1,461*	*1,966*	*-173*	*-573*
C	Manufacturing							
	21	Food, beverages and tobacco	1,822	1,592	8	1,885	1,268	1,213
	23	Textiles	-30	8	22	-82	56	39
	24	Clothing and footwear	-10	62	31	—	-4	-3
	25	Wood products and furniture	-73	-18	2	-10	43	-32
	26	Paper products and publishing	776	802	670	7	-138	1,575
	27	Chemicals, petroleum and coal products	161	383	307	375	-14	362
	28	Non-metallic mineral products	-409	402	-77	-91	-78	32
	29	Basic metal products	551	539	-555	-345	907	343
	31	Fabricated metal products	95	-138	279	285	45	63
	32	Transport equipment	250	436	-59	-325	-139	90
	33	Other machinery and equipment	125	-1	92	12	103	38
	34	Miscellaneous manufacturing	635	1,119	1,343	373	52	411
		Total manufacturing	*3,895*	*5,187*	*2,063*	*2,084*	*2,101*	*4,131*
Other industries								
A	Agriculture, forestry, fishing and hunting		-122	120	143	375	-225	95
D	Electricity, gas and water		-105	-1,797	146	-123	-774	-699
E	Construction		-57	-345	-46	70	440	219
F	Wholesale and retail trade		1,678	2,009	1,370	2,265	2,020	1,015
G	Transport and storage		155	1,312	723	928	-522	-244
I	Finance, property and business services(b)		19,608	26,935	16,566	18,046	13,054	9,958
I	Public administration, and defence(c)		-8	-4,770	687	-3,183	-1,946	3,536
H,K,L	Other industries(d)		517	950	352	409	91	517
M	Unallocated		318	1,527	1,274	-621	1,391	758
	Total other industries		*21,983*	*25,941*	*21,214*	*18,167*	*13,528*	*15,156*
Total			**28,176**	**32,803**	**24,738**	**22,217**	**15,456**	**18,714**

For footnotes *see* end of table.

26.31 FOREIGN INVESTMENT IN AUSTRALIA, BY INDUSTRY(a) — *continued*
($ million)

Industry of investment (ASIC division/subdivision)			1987–88	1988–89	1989–90	1990–91	1991–92	1992–93
		INVESTMENT INCOME						
B	Mining							
	12,13	Coal, oil and gas	749	562	1,095	1,173	1,000	1,421
	11,14,15	Other mining	464	808	764	1,163	743	449
	16	Services to mining (incl. exploration)	97	-17	86	12	28	27
		Total mining	*1,309*	*1,352*	*1,945*	*2,347*	*1,771*	*1,896*
C	Manufacturing							
	21	Food, beverages and tobacco	833	927	779	823	876	881
	23	Textiles	33	26	56	12	26	22
	24	Clothing and footwear	10	15	12	24	2	20
	25	Wood products and furniture	20	12	10	6	6	4
	26	Paper products and publishing	77	99	311	292	511	681
	27	Chemicals, petroleum and coal products	332	483	423	251	242	392
	28	Non-metallic mineral products	77	68	46	-34	16	43
	29	Basic metal products	947	1,012	1,233	987	593	359
	31	Fabricated metal products	57	66	56	50	37	50
	32	Transport equipment	33	233	84	-408	-286	239
	33	Other machinery and equipment	254	292	251	229	199	284
	34	Miscellaneous manufacturing	159	445	568	339	326	587
		Total manufacturing	*2,832*	*3,680*	*3,828*	*2,570*	*2,548*	*3,563*
Other industries								
A	Agriculture, forestry, fishing and hunting		10	53	9	65	20	7
D	Electricity, gas and water		452	436	295	317	277	224
E	Construction		119	74	47	6	66	6
F	Wholesale and retail trade		1,147	1,971	2,097	1,382	617	1,243
G	Transport and storage		420	595	815	763	663	658
I	Finance, property and business services(b)		3,913	4,902	6,947	9,401	9,408	8,114
J	Public administration, and defence(c)		2,251	2,409	2,619	1,928	1,631	1,382
H,K,L	Other industries(d)		104	114	76	109	174	-99
M	Unallocated		544	822	1,382	1,358	1,020	950
	Total other industries		*8,960*	*11,375*	*14,287*	*15,330*	*13,876*	*12,484*
Total			**13,101**	**16,407**	**20,059**	**20,247**	**18,195**	**17,943**
		LEVELS OF INVESTMENT AT 30 JUNE						
B	Mining							
	12,13	Coal, oil and gas	8,570	9,714	11,422	11,962	11,963	11,706
	11,14,15	Other mining	13,126	14,358	13,035	12,833	14,106	15,983
	16	Services to mining (incl. exploration)	4,142	3,763	4,224	4,266	3,980	5,141
		Total mining	*25,838*	*27,836*	*28,681*	*29,062*	*30,050*	*32,830*
C	Manufacturing							
	21	Food, beverages and tobacco	9,722	12,316	12,792	14,448	13,731	14,534
	23	Textiles	383	553	432	365	419	408
	24	Clothing and footwear	85	211	112	135	80	189
	25	Wood products and furniture	81	56	73	61	99	65
	26	Paper products and publishing	2,500	3,696	4,156	3,765	4,115	8,511
	27	Chemicals, petroleum and coal products	4,721	5,302	5,374	4,994	5,227	6,228
	28	Non-metallic mineral products	643	1,138	959	1,035	909	816
	29	Basic metal products	10,417	11,242	10,625	11,263	12,581	13,764
	31	Fabricated metal products	979	843	1,180	1,415	1,254	1,254
	32	Transport equipment	2,198	2,335	2,406	2,533	2,877	2,672
	33	Other machinery and equipment	2,868	2,917	2,632	2,726	2,560	2,816
	34	Miscellaneous manufacturing	4,042	5,851	7,749	7,270	7,499	7,602
		Total manufacturing	*38,640*	*46,458*	*48,490*	*50,011*	*51,352*	*58,859*

For footnotes *see* end of table.

26.31 FOREIGN INVESTMENT IN AUSTRALIA, BY INDUSTRY(a) — *continued*
($ million)

Industry of investment (ASIC division/subdivision)		*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Other industries							
A	Agriculture, forestry, fishing and hunting	541	1,312	1,335	2,396	1,662	1,946
D	Electricity, gas and water	7,267	5,071	5,290	5,317	4,775	4,363
E	Construction	1,655	1,527	1,608	1,944	2,439	2,665
F	Wholesale and retail trade	20,059	23,731	24,712	28,444	30,699	30,917
G	Transport and storage	6,029	7,490	7,987	9,089	8,943	8,803
I	Finance, property and business services(b)	70,694	100,412	116,788	137,902	150,750	164,461
J	Public administration, and defence(c)	23,131	18,720	19,579	16,471	15,217	19,632
H,K,L	Other industries(d)	2,372	3,281	3,292	4,122	5,011	5,520
M	Unallocated(e)	4,568	4,119	6,078	2,791	3,903	3,799
	Total other industries	*136,314*	*165,661*	*186,669*	*208,475*	*223,398*	*242,106*
Total		**200,792**	**239,955**	**263,841**	**287,547**	**304,801**	**333,795**

(a) The industry categories shown are based on the 1983 edition of ASIC and relate to the predominant activity of the enterprise group receiving the investment funds. This is not necessarily the industry of the end use of the funds. (b) Includes the Reserve Bank and the State government components of General government. (c) Includes the Commonwealth government components of general government. (d) Consists of: Division H — Communications; Division K — Community services; and Division L — Recreation, personal and other services. (e) Details of accounts payable/prepayments received, a component of portfolio and other investment, are not classified by industry prior to 1988–89 and are therefore included in 'Other industries'.

Source: International Investment Position, Australia, 1992–93 (5305.0).

FOREIGN OWNERSHIP IN AUSTRALIA

Table 26.32 contains estimates of foreign ownership of Australian equity.

Of the total equity on issue by Australian enterprise groups at 31 December 1993, non-residents held equity valued at $145.4 billion (32%) and residents held $310 billion (68%).

When analysed by sector, it can be seen that equity held by non-residents in private corporate trading enterprises rose from 38 per cent at 30 June 1990 to 41 per cent at 30 June 1991. It has varied between 39 and 41 per cent since then, with 39 per cent being recorded at 31 December 1993.

The value of non-residents' equity in banks has risen steadily over the period since 1989–90. However, as a proportion of the total equity issued by banks, a decrease is observed from 24 per cent at 30 September 1992 to 17 per cent at 31 December 1993.

Non-resident equity holdings in non-bank deposit-taking institutions rose as a proportion of the amount on issue from 17 per cent at 30 June 1990 to 23 per cent at 30 June 1991. This was partly due to the decrease in the level of equity on issue by these institutions. This fall may have reflected structural changes whereby enterprises formerly belonging to this sector became banks. The level of equity and the proportion of that amount on issue held by non-residents has increased steadily since 30 June 1992. The proportion held by non-residents was 27 per cent at 31 December 1993.

The other financial institutions sector is largely comprised of general insurers. Foreign ownership of equity in these institutions remained between 15 and 16 per cent over the period 30 June 1990 to 30 June 1992 but subsequently decreased, reaching 10 per cent at 31 December 1993.

It should be noted that there are some problems with the data which may impact on the accuracy of the analysis. The estimated market value of equity, as shown in table 26.32, is considered to be of poor quality for some sectors. In particular, estimates of the market value of the amount issued by private corporate trading enterprises are considered poor because they are largely built up from counterpart and other information obtained from ABS Surveys of Foreign Investment and Balance Sheet Information. This sector covers equity issued by both listed and unlisted private corporate trading enterprises, of which there are over half a million.

These problems aside, it should also be noted that it is possible to supplement the information on foreign ownership derived from the financial accounts by making use of the comprehensive information about the rest of the world sector from the international investment database. This is described in the article *Foreign Ownership of Equity in Australian Enterprise Groups* published in the March quarter 1994 issue of *International Investment Position, Australia* (5306.0). The article includes a regional analysis and an analysis by degree of foreign influence.

26.32 OWNERSHIP OF EQUITY(a) IN AUSTRALIAN ENTERPRISE GROUPS
($ billion)

	Value of equity outstanding at end of period								
				1992–93				*1993–94*	
	1989 –90	*1990 –91*	*1991 –92*	*Sept.*	*Dec.*	*Mar.*	*June*	*Sept.*	*Dec.*
ALL SECTORS									
Amount issued	305.1	315.6	337.5	323.6	339.5	362.5	377.4	413.8	455.4
Amount held by rest of world	94.3	102.3	107.6	106.1	109.0	113.7	119.6	132.9	145.4
Percentage of foreign ownership	31	32	32	33	32	31	32	32	32
SELECTED SUB-SECTORS(b)									
Private corporate trading enterprises									
Amount issued(c)	212.3	213.1	235.5	222.2	233.2	248.8	258.1	290.2	323.2
Amount held by rest of the world	81.6	87.7	92.0	89.9	92.9	97.0	101.9	115.7	127.1
Percentage foreign ownership	38	41	39	40	40	39	39	40	39
Banks									
Amount issued(c)	31.9	35.2	36.1	35.2	35.5	40.2	43.6	49.3	52.8
Amount held by rest of the world	5.8	7.1	7.6	8.3	8.2	8.3	8.9	8.7	9.2
Percentage foreign ownership	18	20	21	24	23	21	20	18	17
Non-bank deposit taking institutions									
Amount issued(c)	13.4	11.5	12.4	13.2	14.1	14.0	14.5	13.9	14.2
Amount held by rest of the world	2.3	2.7	2.8	2.9	3.2	3.3	3.5	3.5.3.8	
Percentage foreign ownership	17	23	23	22	23	24	24	25	27
Other financial institutions(d)									
Amount issued(c)	18.5	19.7	22.9	22.5	24.4	26.1	28.0	31.3	35.7
Amount held by rest of the world	3.0	3.1	3.4	3.2	2.8	3.1	3.2	3.2	3.4
Percentage foreign ownership	16	16	15	14	11	12	11	10	10

(a) Includes units in trusts. (b) Not all sub-sectors have been shown. In particular, data for Life Offices and Superannuation Funds are not shown due to unresolved measurement and conceptual issues. Data for General Government, Reserve Bank and Public Trading Enterprises are also not shown as there is no foreign ownership in these sub-sectors. (c) These estimated market values are considered to be of poor quality. They should be used cautiously. (d) Excludes Life Offices and Superannuation Funds. *See* footnote (b).
Source: Australian National Accounts, Financial Accounts, December Quarter 1993 (5232.0).

BIBLIOGRAPHY

ABS Publications

Balance of Payments, Australia (5301.0) — monthly

Balance of Payments, Australia (5302.0) — quarterly

Balance of Payments, Australia (5303.0) — annual

Balance of Payments, Australia: Concepts, Sources and Methods (5331.0)

Balance of Payments, Australia: Summary of Concepts, Sources and Methods (5351.0)

Foreign Control of Exports from Australia, 1985–86 (5348.0)

Foreign Control of Imports into Australia, 1984–85 (5341.0)

Foreign Control in Mineral Exploration, Australia, 1984–85 (5323.0)

Foreign Control of New Fixed Capital Expenditure by Private Enterprises in Selected Industries, Australia, 1982–83 (5333.0)

Foreign Control of Research and Experimental Development: Business Enterprises, Australia, 1986–87 (5330.0)

Foreign Investment, Australia: Summary of Concepts, Sources and Methods (5355.0)

Foreign Ownership and Control in Agriculture, Australia, 1983–84 (5336.0)

Foreign Ownership and Control of the Banking Industry, Australia, June 1986 (5347.0)

Foreign Ownership and Control of the General Insurance Industry, Australia, 1983–84 (5309.0)

Foreign Ownership and Control of the Life Insurance Industry, Australia, 1983–84 (5311.0)

Foreign Ownership and Control of the Manufacturing Industry, Australia, 1986–87 (5322.0)

Foreign Ownership and Control of the Mining Industry, Australia, 1984–85 (5317.0)

Foreign Ownership and Control of the Private Sector Construction Industry, Australia, 1984–85 (5343.0)

Foreign Ownership and Control of Registered Financial Corporations, Australia, June 1986 (5334.0)

Foreign Ownership and Control of the Transport Industry, Australia, 1983–84 (5335.0)

Foreign Trade, Australia: Merchandise Exports and Imports (5410.0)

Foreign Trade, Australia: Merchandise Exports and Imports by Country (5422.0)

Information Paper: Seasonal Adjustment of Australia's Monthly Balance of Payments Statistics (5359.0)

International Investment Position, Australia (5305.0) — annual

International Investment Position, Australia (5306.0) — quarterly

International Trade in Services, Australia (5354.0)

Other Publications

Related publications are available from Australian Customs Service —

Australian Customs Tariff

Customs (Prohibited Imports) Regulations

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

List of Special Articles contained in previous issues

LIST OF SPECIAL ARTICLES CONTAINED IN PREVIOUS ISSUES

The figures below indicate, respectively, the year and page of the *Year Book* to which reference is made. In cases where matter has been published in more than one previous issue, the volume and page for the more recent issue is given.

A more comprehensive list of previous one-off material and miscellaneous matter has been published in *Year Book Australia 1990* and previous issues.

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2130100012950
ISSN 0312-4746

Recommended retail price: $71.00