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Australian Statistician

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Table of contents

Preface	vii
Acknowledgements	viii
Symbols and abbreviations	xii
Geography and climate	1
Government	23
International relations	39
Defence	65
Demography	75
Special Article— A Profile of Australia's Indigenous People	113
Labour	123
Social security and welfare	185
Special Article— Poverty and deprivation in Australia	226
Health	241
Education	271
Law and order	301
Culture and recreation	323
Overview of Australian industry	351
Tourism	363
Environment	379
Agriculture	395
Forestry and fishing	433
Mining and energy	451
Manufacturing, wholesale, retail and service industries	479
Construction and housing	519
Transport and communications	551
Science and technology	575
Financial institutions	597
Government finance	623
National accounts	639
International accounts and trade	661
List of Special Articles	705
Index	707

Preface

Year Book Australia is the principal reference work produced by 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 previously.

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.

I would like to take this opportunity to acknowledge the valuable contribution made by Mr Ian Castles, who retired in November 1994 after 8 years as Australian Statistician, to official statistics generally. He had a strong commitment to the independence of the ABS, and to the need for objectivity, integrity and professionalism within the ABS. During his term as Australian Statistician the reputation of the ABS for the quality of its statistical services to governments and to the community generally was significantly enhanced; indeed, this is shown in the improvements made in *Year Book Australia*.

I extend my thanks and appreciation to those organisations which have kindly supplied material for inclusion in *Year Book Australia 1996*.

Australian Bureau of Statistics
Canberra
March 1996

W. McLennan
Australian Statistician

Acknowledgements

ABS publications, including *Year Book Australia*, 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. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

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- AusAID
- Australia Council
- Australian Archives
- The Australian Ballet
- Australian Broadcasting Authority
- Australian Bureau of Agricultural and Resource Economics
- Australian Children's Television Foundation
- Australian Cultural Development Council
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Introduction

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.

Many 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 the information is also contributed by other, predominantly government, organisations. The official nature of the contributors to 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 Australia.

This current (78th) 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.

Year Book Australia 1996 is also available on CD-ROM.

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.

Further information

While the statistics and descriptive information contained in the Year Book provide a comprehensive overview of Australia, they represent only a relatively small part of the statistics and other information

available. 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.

For those requiring information in greater depth, the Year Book also serves as a directory to more detailed sources, with the source shown for each statistical table, graph and map. Where the ABS is the source, the title and catalogue number of the relevant publication are 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. 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*, for the State or Territory concerned.

In many cases, the ABS can also provide information which is not published or which is compiled from a variety of published and unpublished sources. Information of this kind may be obtained through the Information Consultancy Service. Charges are generally made for such information. Inquiries may be made by contacting the Inquiries Section in the nearest ABS office (see page ix).

The annual reports of government departments and agencies also provide a valuable source of more detailed information on 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 the same year. Readers wishing to obtain or clarify the latest available statistics should contact the relevant source.

Comments 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 National Office.

Symbols and abbreviations

The following symbols, where shown in columns of figures of 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 high standard errors and should be used with caution

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, for example, as 1994, refer to the year ended 31 December 1994; those shown, for example, as 1994–95, refer to the year ended 30 June 1995. Other yearly periods are specifically indicated. The range of years shown in the table headings, for example, 1901 to 1994–95, 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 dollar (\$) or cents (c) unless another currency is specified.

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

Geography and climate

Geography of Australia	3
Position and area	3
Landforms and their history	4
Rivers and lakes	9
Climate of Australia	9
Climatic controls	9
Rainfall and other precipitation	10
Annual	10
Seasonal	11
Rainday frequency	11
Rainfall intensity	11
Thunderstorms and hail	12
Snow	13
Temperature	13
Average temperatures	13
Average monthly maxima	13
Average monthly minima	13
Extreme maxima	13
Extreme minima	14
Heat waves	14
Other aspects of climate	15
Frost	15
Humidity	15
Global radiation	16
Sunshine	16
Cloud	16
Fog	16
Winds	17
Droughts	17
Floods	17
Water resources	18
Bibliography	21

Geography and climate

Geography of Australia

Position and area

Australia comprises a land area of 7,682,300 sq km. The land lies between latitudes 10°41' south (Cape York) and 43°39' south (South Cape, Tasmania) and between longitudes 113°09' east (Steep Point) and 153°39' east (Cape Byron). The most southerly point on the mainland is South

Point (Wilson's Promontory) 39°08' south. The latitudinal distance between Cape York and South Point is about 3,180 km, while the latitudinal distance between Cape York and South East Cape, Tasmania, is 3,680 km. The longitudinal distance between Steep Point and Cape Byron is about 4,000 km.

1.1 Area, coastline, tropical and temperate zones, and standard times

State/Territory	Estimated area		Length of coastline (km)	% of total area		Standard times	
	Total (km ²)	% of total area		Tropical zone	Temperate zone	Meridian selected	Ahead of GMT (hours)(a)
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% greater than Europe (excluding the former 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 sq km)

Country	Area
Continents	
Asia	44 614
Africa	30 319
North, Central America & West Indies	24 247
South America	17 834
Europe	10 600
Australia & Oceania	8 504
Countries (seven largest)	
Russia	17 073
Canada	9 976
China	9 590

...continued

1.2 Areas of continents and selected countries — *continued* (‘000 sq km)

Country	Area
Countries (seven largest) — (continued)	
United States of America	9 363
Brazil	8 512
Australia	7 682
India	3 288
Selected other countries	
Belorus	208
France	544
Germany	357
Indonesia	1 919
Japan	372
Kazakhstan	2 717
Papua New Guinea	462
New Zealand	269
Ukraine	604
United Kingdom	244
Total land mass excluding Arctic & Antarctic continents	135 774

Source: *Encyclopedia Britannica and The World Book Encyclopedia.*

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, Macdonnells, 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 m) 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.

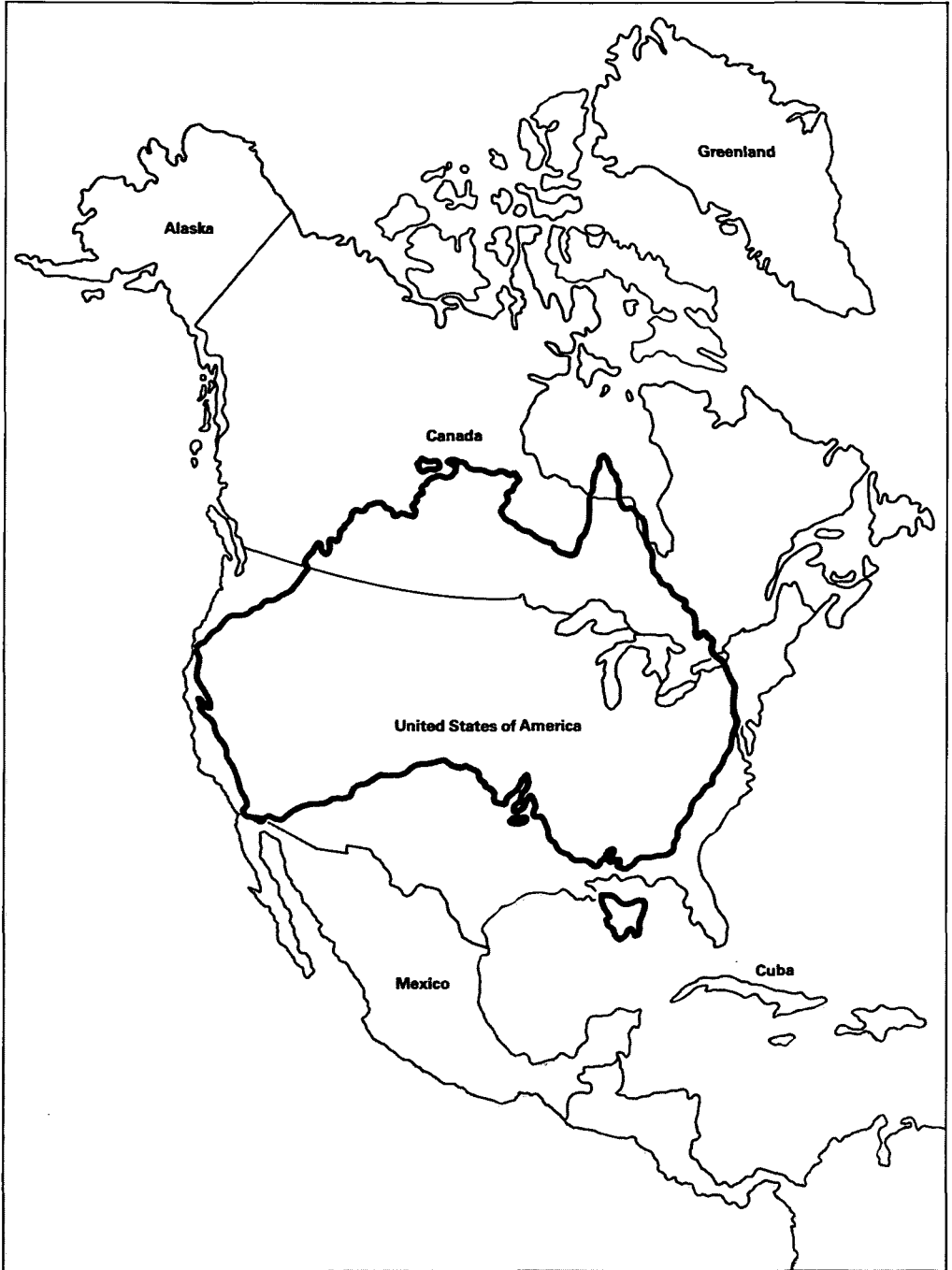
Some plateaus in the Eastern Highlands are dissected by erosion into rugged hills, and the eastern edges of plateaus tend to form high escarpments. Many of these are united to

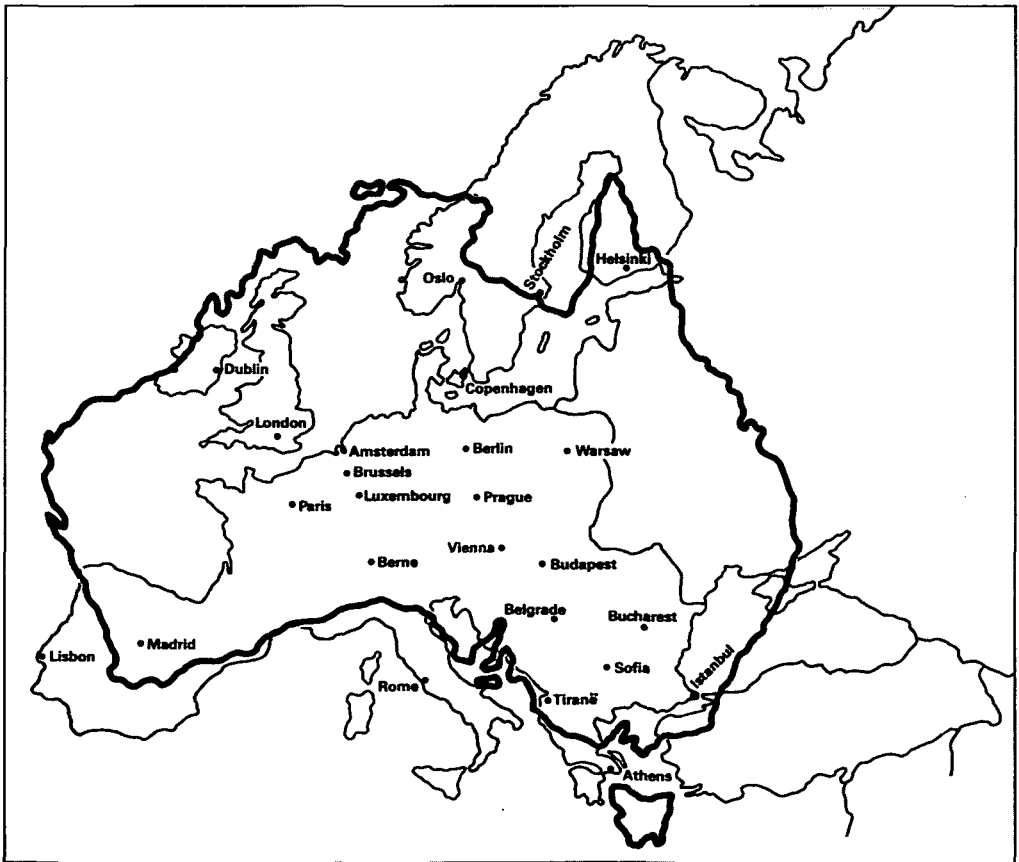
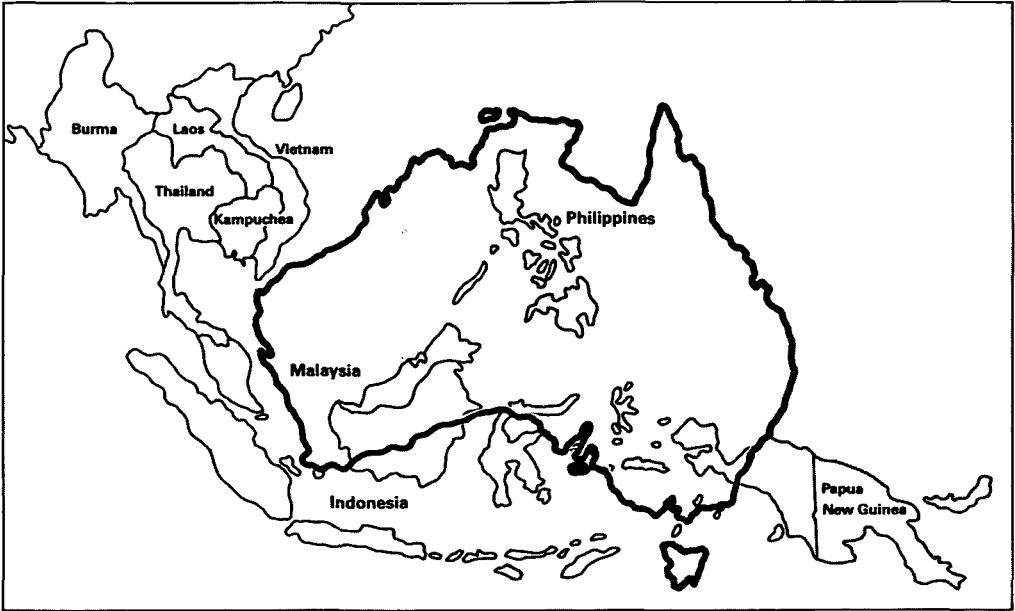
form a Great Escarpment that runs from northern Queensland to the Victorian border. Australia's highest waterfalls (Wollombi on the Macleay, Wallaman Falls on a tributary of the Herbert, Barron Falls near Cairns, and Wentworth Falls in the Blue Mountains) all occur where rivers flow over the Great Escarpment. 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 Quaternary ice age. There were many glacial and interglacial periods (over 20) during this time, the last glacial period occurring 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 sq km, 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 m 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 with 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 km and the Darling and Upper Darling together are also just over 2,000 km 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 lake 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 sq km, Lake Torrens 5,900 sq km and Lake Gairdner 4,300 sq km.

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, through 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% having a

median rainfall less than 600 mm per year and 50% less than 300 mm. 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 km 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 km. 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 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), a 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 Niño years. Wet extreme years are called La Niña years.

Rainfall and other precipitation

Annual

The area of lowest rainfall is in the vicinity of Lake Eyre in South Australia, where the median annual rainfall is only about 100 mm. Another very low rainfall area is in Western Australia in the Giles-Warburton Range region, which has a median annual rainfall of about 150 mm. 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 mm. 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 mm 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 mm (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 mm (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 mm.

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 mm, and it is likely that small areas have a median annual rainfall approaching 4,000 mm on the western slopes above 2,000 m elevation.

1.6 Area distribution of median annual rainfall (%)

Median annual rainfall	NSW(a)	Vic.	Qld	SA	WA	Tas.	NT	Aust.
Under 199 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.

Rainfall 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 mm) 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 (mm)

Station	Period of record	Years of complete records	Period in hours				
			1	3	6	12	24
Adelaide	1897-1991	91	69	133	141	141	141
Alice Springs	1951-1994	44	75	87	108	160	207
Brisbane	1911-1991	81	99	142	182	266	327
Broome	1948-1991	44	112	157	185	313	353
Canberra	1938-1990	45	40	57	67	76	120
Carnarvon	1956-1991	36	44	63	83	95	108
Charleville	1953-1992	35	42	66	75	111	142
Darwin (Airport)	1953-1994	42	89	160	214	260	291
Esperance	1963-1991	27	39	50	62	75	86
Hobart	1911-1991	81	28	56	87	117	168
Meekatharra	1953-1991	39	60	67	81	99	112
Melbourne	1873-1994	108	76	83	86	97	130
Mildura	1953-1993	41	49	60	65	66	91
Perth	1946-1991	45	31	43	52	77	97
Sydney	1913-1991	75	121	194	200	244	340
Townsville	1953-1992	39	94	168	235	296	319

Source: Pluviograph records in Bureau of Meteorology archives.

1.8 Highest daily rainfalls(a)

State/Territory	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)
NSW	Tallowood Point	1950	4 540
Vic.	Falls Creek SEC	1956	3 739
Qld	Bellenden Ker (Top Station)	1979	11 251
SA	Aldgate State School	1917	1 853
WA	Armadale (Jarrahdale PO)	1917	2 169
Tas.	Lake Margaret	1948	4 504
NT	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. Convective 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 mm 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 mm 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 m for varying periods from late autumn to early spring. Similarly, in Tasmania the mountains are covered fairly frequently above 1,000 m in these seasons. The area, depth and duration are highly variable. In some years, snow falls in the altitude range of 500–1,000 m. Snowfalls at levels below 500 m 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 m from Victoria to south-eastern Queensland have been covered with snow for several weeks. In ravines around Mount Kosciusko (2,228 m) 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 km 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 km 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, are shown in the following table.

1.10 Extreme maximum temperatures

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

Source: Bureau of Meteorology.

1.11 Extreme minimum temperatures

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

Source: Bureau of Meteorology.

Extreme minima

The lowest temperatures in Australia have been recorded in the Snowy Mountains, where Charlotte Pass (elevation 1,760 m) recorded -23.0°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 km 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.

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

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 m in altitude in the southern parts of these uplands have more than 100 heavy frosts annually, and in the upland areas below 1,000 m 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 m 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

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% 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% 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 more common 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 km per hour; Canberra is the least windy with an average speed of 5.4 km per hour.

The highest wind speeds and wind gusts recorded in Australia have been associated with tropical cyclones. The highest recorded gust was 259 km per hour at Mardie (near Onslow), Western Australia on 19 February 1975, and gusts reaching 200 km per hour have been recorded on several occasions in northern Australia with cyclone visitations. The highest gusts recorded at Australian capitals were 217 km per hour at Darwin and 156 km 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% 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 sq km) and latitudinal range (3,700 km) 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 mm 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

State/Territory	Area of aquifers (km ²)	Ground water resource (gigalitres)					Abstraction during 1983-84
		Major divertible resource					
		Fresh	Marginal	Brackish	Saline	Total	
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 are 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 (km ²)	Average yearly rainfall (mm)	Run-off (mm)	Run-off (km ³)	Run-off (%)
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% 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

State/ Territory	Area (km ²)	Mean annual run-off	Mean annual outflow	Surface water resource (gigalitres)					Developed resource
				Major divertible resource				Total	
				Fresh	Marginal	Brackish	Saline		
NSW	802 000	42 400	37 200	16 900	—	—	—	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	97 700	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 its 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*.

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Government

Introduction	25
Parliamentary government	25
Scheme of parliamentary government	25
The Sovereign	26
The Governor-General	26
Powers and functions	26
Holders of office	26
Administrators	26
Governors of the States	26
Powers and functions	26
Holders of office	27
Commonwealth Government	28
Parliaments and Ministries	28
Leader of the Opposition	31
State of the parties in the Commonwealth Parliament	31
Numbers and salaries of Commonwealth Government Ministers	31
Parliaments and elections	31
Commonwealth Parliament	31
Qualifications for membership and for franchise	31
Representation and elections	32
Parliamentary salaries and allowances	35
Referendums	35
The States and Territories	35
Acts of the parliaments	36
The enactment of Commonwealth Parliament legislation	37
National Anthem and colours of Australia	37

Government

Introduction

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 1995, Australia had 841 elected members of Parliament, of whom 223 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 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 (or British subjects who were on the Commonwealth Roll as at 25 January 1984) who are 18 years of age or more.

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

As at the end of 1995, the 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, from time to time, have 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/her jurisdiction, and may remit fines and penalties due to the Crown in right of the State. In the performance of his/her functions generally, particularly those conferred by statute, the Governor of a State acts on the advice of Ministers of State for the State.

Holders of office

The following table shows the Governors of the States and the Administrator of the Northern Territory at August 1995.

2.1 State Governors, holders of office, August 1995

State	State Governors
New South Wales	His Excellency Rear Admiral Peter Ross Sinclair, AC
Victoria	His Excellency the Honourable Richard McGarvie
Queensland	Her Excellency Mrs Leneen Forde, AC
South Australia	Her Excellency the Honourable Dame Roma Mitchell, AC, DBE
Western Australia	His Excellency Major General Michael Jeffery, AO, MC
Tasmania	His Excellency General Sir Phillip Bennett, AC, KBE, DSO
Northern Territory(a)	His Honour the Honourable Austin Asche, QC

(a) Administrator of the Northern Territory.

Source: *Department of the Parliamentary Library*.

Commonwealth Government

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	1 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.

Table 2.3 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 since 1901

	Ministry	Period of office
(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
(xliiii)	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. *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 August 1995 are shown below.

2.4 Second Keating Ministry, at August 1995

Minister	
Cabinet Ministers	
Prime Minister	The Hon. Paul John Keating
Deputy Prime Minister; Minister for Finance; Leader of the House	The Hon. Kim Christian Beazley
Leader of the Government in the Senate; Minister for Foreign Affairs	Senator the Hon. Gareth John Evans QC
Minister for Trade	Senator the Hon. Robert Francis McMullan
Deputy Leader of the Government in the Senate; Minister for Defence	Senator the Hon. Robert Francis Ray
Treasurer	The Hon. Ralph Willis
Minister for Housing and Regional Development	The Hon. Brian Leslie Howe
Minister for Industry, Science and Technology; Minister Assisting the Prime Minister for Science	Senator the Hon. Peter Francis Salmon Cook
Minister for Immigration and Ethnic Affairs; Minister Assisting the Prime Minister for Multicultural Affairs	Senator the Hon. Nick Bolkus
Minister for Employment, Education and Training	The Hon. Simon Findlay Crean
Minister for Primary Industries and Energy	Senator the Hon. Robert Lindsay Collins
Minister for Social Security	The Hon. Peter Jeremy Baldwin
Minister for Industrial Relations; Minister for Transport	The Hon. Laurence John Brereton
Attorney-General	The Hon. Michael Hugh Lavarch
Minister for Communications and the Arts; Minister for Tourism	The Hon. Michael John Lee
Minister for the Environment, Sport and Territories; Manager of Government Business in the Senate	Senator the Hon. John Philip Faulkner
Minister for Human Services and Health; Minister Assisting the Prime Minister for the Status of Women	The Hon. Carmen Mary Lawrence
Other Ministers	
Minister for Resources	The Hon. David Peter Beddall
Minister for Development Cooperation and Pacific Island Affairs	The Hon. Gordon Neil Bilney
Minister for Aboriginal and Torres Strait Islander Affairs	The Hon. Robert Edward Tickner
Minister for Schools, Vocational Education and Training	The Hon. Ross Vincent Free
Minister for Consumer Affairs	The Hon. Jeannette McHugh
Minister for Family Services	Senator the Hon. Rosemary Anne Crowley
Assistant Treasurer	The Hon. George Gear
Minister for Justice	The Hon. Duncan James Colquhoun Kerr
Minister for Small Business, Customs and Construction	Senator the Hon. Christopher Cleland Schacht
Minister for Administrative Services	The Hon. Francis John Walker QC
Special Minister of State; Vice-President of the Executive Council; Minister Assisting the Prime Minister for Public Services Matters	The Hon. Gary Thomas Johns
Minister for Veterans' Affairs; Minister Assisting the Treasurer for Superannuation	The Hon. Concetto Antonio Sciacca
Minister for Defence Science and Personnel	The Hon. Gary Francis Punch
Parliamentary Secretary to the Attorney-General	The Hon. Peter Duncan
Parliamentary Secretary to the Minister for Employment, Education and Training; Parliamentary Secretary to the Minister for the Environment, Sport and Territories	The Hon. Warren Edward Snowdon

...continued

2.4 Second Keating Ministry, at August 1995 — *continued*

Minister	
Other Ministers — <i>(continued)</i>	
Parliamentary Secretary to the Minister for Social Security	The Hon. Janice Ann Crosio MBE
Parliamentary Secretary to the Minister for Industry, Science and Technology	The Hon. Eamon John Lindsay RFD
Parliamentary Secretary to the Minister for Transport	The Hon. Neil Patrick O'Keefe
Parliamentary Secretary to the Minister for Primary Industries and Energy	Senator the Hon. Nicholas John Sherry
Parliamentary Secretary to the Prime Minister; Parliamentary Secretary to the Minister for Human Services and Health	The Hon. Andrew Charles Theophanous
Parliamentary Secretary to the Treasurer; Parliamentary Secretary to the Minister for Communications and the Arts	The Hon. Robert Paul Elliott
Parliamentary Secretary to the Minister for Housing and Regional Development	The Hon. Mary Catherine Crawford
Parliamentary Secretary to the Minister for Defence	The Hon. Archibald Ronald Bevis

Source: *Department of the Parliamentary Library.*

Leader of the Opposition

As at August 1995, the Hon. J.W. Howard, MP (Liberal Party) is the leader of the Opposition.

State of the parties in the Commonwealth Parliament

2.5 State of the parties in the Commonwealth Parliament, August 1995

House	No.
House of Representatives	
Australian Labor Party	79
Liberal Party	48
National Party Australia	16
Independent	4
Senate	
Australian Labor Party	29
Liberal Party	30
Australian Democrats	7
National Party Australia	6
Greens	2
Independent	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. As at 12 January 1995 the number of Ministers was 30 and ministerial salaries ranged from \$114,412 for the Prime Minister, to \$74,236 for the Deputy Prime Minister, \$60,503 for the Treasurer and for the Leader of the Government in the Senate, \$53,694 for the Leader of the House, and \$50,029 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

Commonwealth Parliament

Qualifications for membership and for franchise

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 who are prohibited non-citizens under that Act, are excluded from enrolment and voting.

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. As the population of Australia had more than doubled since its inception, the Parliament passed the *Representation Act 1948*. This Act 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), 1991 (New South Wales, Queensland, South Australia, Tasmania and the Australian Capital Territory) and 1994 (Victoria, Queensland 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% 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% 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 and Territories at the most recent determinations are shown in table 2.6, which also shows 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	1994
New South Wales	43	51	51	50	50
Victoria	33	39	38	38	37
Queensland	19	24	24	25	26
South Australia	11	13	13	12	12
Western Australia	11	13	14	14	14
Tasmania	5	5	5	5	5
Northern Territory	1	1	1	1	1
Australian Capital Territory	2	2	2	2	3
Total Parliament	125	148	148	147	148

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 enrolled and first preference 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 shown in table 2.7.

2.7 Commonwealth Parliament elections, 13 March 1993

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Electors enrolled									
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	1 889 152	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 \$75,949 at 12 January 1995. 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 sq km, \$29,202 in the case of a Member representing an electorate of 2,000 sq km or more but less than 5,000 sq km, or \$35,611 in the case of a Member representing an electorate of 5,000 sq km 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 Aboriginal people 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 in tables 2.8, 2.9 and 2.10; for greater detail refer to State Year Books.

2.8 Government leaders in States and Territories, August 1995

State/Territory	Government Leader
New South Wales	The Hon. R. J. Carr, MP (ALP)
Victoria	The Hon. J. G. Kennett, MP (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. S. Leslie, MLA (CLP)
Australian Capital Territory	The Hon. K. Camell, MLA (LP)

Source: Department of the Parliamentary Library.

2.9 Opposition leaders in States and Territories, August 1995

State/Territory	Opposition Leader
New South Wales	The Hon. P. Collins, MP (LP)
Victoria	J. M. Brumby, MP (ALP)
Queensland	R. E. Borbidge, MLA (NP)
South Australia	The Hon. M. Rann, MP (ALP)
Western Australia	J. A. McGinty, MP (ALP)
Tasmania	The Hon. M. W. Field, MHA (ALP)
Northern Territory	B. R. Ede, MLA (ALP)
Australian Capital Territory	The Hon. R. Follett, MLA (ALP)

Source: Department of the Parliamentary Library.

2.10 State of the parties in the States and Territories, August 1995

	No.
New South Wales	
Legislative Assembly	
Australian Labor Party	50
Liberal Party	29
National Party of Australia	17
Independent	3
Legislative Council	
Australian Labor Party	17
Liberal Party	12
National Party of Australia	6
Independent	4
Australian Democrats	2
The Greens	1
Victoria	
Legislative Assembly	
Australian Labor Party	27
Liberal Party	52
National Party of Australia	9
Legislative Council	
Australian Labor Party	14
Liberal Party	24
National Party of Australia	6
Queensland	
Legislative Assembly	
Australian Labor Party	45
National Party of Australia	29
Liberal Party	14
Independent	1
South Australia	
House of Assembly	
Australian Labor Party	11
Liberal Party	36
Legislative Council	
Australian Labor Party	9
Liberal Party	11
Australian Democrats	2
Western Australia	
Legislative Assembly	
Australian Labor Party	23
Liberal Party	26
National Party of Australia	6
Independent	2
Legislative Council	
Australian Labor Party	14
Liberal Party	15
National Party of Australia	3
Independent	1
The Greens	1

...continued

2.10 State of the parties in the States and Territories, August 1995 --- continued

	No.
Tasmania	
House of Assembly	
Liberal Party	19
Australian Labor Party	11
The Greens	5
Legislative Council	
Liberal Party	1
Australian Labor Party	2
Independent	16
Northern Territory	
Legislative Assembly	
Country-Liberal Party	17
Australian Labor Party	7
Independent	1
Australian Capital Territory	
Legislative Assembly	
Australian Labor Party	6
Liberal Party	7
Independent	2
The Greens	2

Source: Department of the Parliamentary Library.

Acts of the 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 1994 the number of enactments of the Commonwealth Parliament was 184.

National Anthem and colours of Australia

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.



International relations

Introduction	41
South and South-east Asia	41
Indonesia	41
Philippines	42
Singapore	42
Malaysia	42
Thailand	42
Brunei	42
Vietnam	42
Myanmar	43
Cambodia	43
India	43
Pakistan	43
Bangladesh	43
Sri Lanka	43
North Asia	43
China	43
Hong Kong	44
Taiwan	44
Japan	44
Korea	44
South Pacific	45
New Zealand	45
Papua New Guinea	45
The Americas	46
Europe	46
The Middle East	47
Africa	47
Indian Ocean	48
APEC	48
Regional security dialogue — the ASEAN Regional Forum (ARF)	49
ANZUS	50
Nuclear issues	50
Disarmament and arms control	51

The Commonwealth	52
International trade relations	52
Law of the Sea	54
International environment	54
Antarctica	55
Treaties	55
Human rights	56
Status of women	56
Cultural relations	56
Consular services and passports	57
Australian overseas aid program	57
Country aid programs	58
Papua New Guinea	58
South Pacific	58
South-east Asia	59
Other regions	59
Cross-regional programs	59
Global programs	59
Multilateral development organisations and programs	59
Emergencies and refugees	60
Community programs	60
Commercial programs	60
Australian Centre for International Agricultural Research (ACIAR)	61
Australian representation overseas	61
Permanent missions	63
Other consulates	63
Trade missions	63

International relations

Introduction

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 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% of global trade. More than 60% of Australian merchandise exports are sold to Asian economies, and North Asia and South East Asia accounted for over 60% 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 and to develop 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 and South-east Asia

Indonesia

Indonesia's importance to Australia is dictated by its position as Australia's largest, most populous neighbour, its location across important air and sea routes, its key role in regional affairs, and its export and investment market potential. Australia's relationship with Indonesia is a vital part of its engagement with Asia and provides a springboard for closer strategic and economic involvement in South-east Asia. It is in this context that Australia is working with Indonesia on major regional and multilateral issues. Consultation with Indonesia on post-Uruguay Round implementation issues and the post-Round agenda is taking place bilaterally, regionally through APEC and more broadly through the Cairns Group. The Australia-Indonesia Ministerial Forum, established by Prime Minister Keating and President Soeharto in 1992, gives government impetus to strengthening and broadening the bilateral economic relationship.

Philippines

The bilateral relationship with the Philippines continues to expand and develop, reflecting the new era of political stability and economic growth which the Philippines is experiencing under the Ramos Administration. While expanding trade and investment flows remains a priority objective for Australia, particular emphasis is also placed on enhancing cooperation on a range of regional economic and security issues, given the Philippines' changed relationship with the USA, and its increasing focus on the Asia-Pacific region. The visit of President Fidel Ramos in August 1995 was the first state visit to Australia by a Philippine President and a clear sign of the maturing bilateral relationship.

Singapore

The bilateral relationship between Australia and Singapore continues to develop into a broader partnership, flowing from similar approaches to regional and multilateral issues, and is underpinned by strong defence and economic links. Throughout 1994 the bilateral agenda was driven particularly by initiatives promulgated jointly by Prime Ministers Keating and Goh Chok Tong. One such initiative was the establishment of a special Singapore-Australia Business Alliance Forum (SABAF) and a dedicated \$2 million Joint Feasibility Fund to enable Australian and Singaporean businesses to forge strategic alliances in third country markets. Two-way trade between Australia and Singapore in 1994 amounted to \$5,500 million, an increase of 4.1% over 1993.

Malaysia

Malaysia's rapid economic development, location, active participation in the South East Asian region and its long-standing relationship with Australia in many spheres have a direct impact on Australia's interests. The bilateral relationship has active and cooperative relations in a number of areas including defence (embracing bilateral links as well as the Five Power Defence Arrangements (FPDA) and the related Integrated Air Defence System (IADS)) trade and investment, education, and other diverse activities including narcotics control, tourism, and aviation. Total bilateral trade reached \$3,200 million in 1994, with Australia's exports totalling \$1,960 million, and imports

at \$1,200 million. Malaysia's views have become an increasingly important factor in Australia's regional economic and security concerns, as Malaysia has expanded its influence and taken an increasingly active role in regional fora, particularly ASEAN and APEC.

Thailand

Australia's relations with Thailand are of long standing, close and cordial. Our bilateral relationship spans a wide range of fields, including trade, defence cooperation, tourism, education, narcotics control, refugee resettlement and development cooperation. We maintain a constructive dialogue with Thailand on a range of bilateral, regional and international economic and political matters including APEC, the Cairns Group and regional security issues including Cambodia and Myanmar. Prime Minister Keating visited Thailand in April 1994 for the opening of the Australian-funded and built "Friendship Bridge" between Thailand and Laos. Mr Banharn Silpa-archa, who was elected Prime Minister of Thailand in general elections in July 1995, paid an official visit to Australia in March 1995 in his capacity as Leader of the Opposition. Total two-way merchandise trade reached over \$2,200 million in 1994, with the balance in Australia's favour.

Brunei

Brunei is a country of increasing importance to Australia. Although a small nation, it is situated in a region of major strategic, political and economic interest and is a member of three regional groupings of significant importance to Australia — APEC, ASEAN and the ASEAN Regional Forum. As Australia's consultative partner in ASEAN, Brunei has provided useful insight into internal ASEAN dialogue. Brunei is an important link in Australia's developing partnership and integration with South East Asia. Trade between Australia and Brunei, valued at \$54 million in 1994, is an important component of the bilateral relationship.

Vietnam

Despite the increased profile of Vietnam's other regional relationships, in particular with the other ASEAN nations and major investors such as Taiwan and South Korea, Australia has maintained its position as an established and

long-term political and economic partner and has consolidated and expanded relations with Vietnam across a range of issues. Dialogues on strategic, security and human rights matters have been added to the bilateral relationship, which was hitherto dominated by aid and trade.

Myanmar

Australia continues to play a prominent role in international and regional efforts to press the Myanmar State Law and Order Restoration Council (SLORC), the country's ruling body, to implement political reforms and adhere to universally accepted standards of human rights. Australia welcomed the release of Aung San Suu Kyi in July but called on the SLORC to implement further reforms.

Cambodia

Australia's principal policy objectives in Cambodia are to support the democratically elected Government in its efforts to contain the Khmer Rouge, to raise overall living standards and to rebuild the structures of a civil society. As a signatory to the Paris Accords, Australia takes an active interest in developments in Cambodia, particularly in the areas of military reform, good governance and responsible economic management.

India

India is rapidly emerging as one of Australia's major relationships and is increasingly a focus of wide-ranging Australian government and private sector attention. Business opportunities in India for Australian companies have increased markedly as a result of the program of economic reforms set in train by the government of Prime Minister Rao. These reforms have opened important sectors of India's economy by reducing tariffs and other import controls and encouraging foreign investment and partnership arrangements.

Pakistan

Australia increased high-level contacts with Pakistan on Indian Ocean regional cooperation, disarmament, non-proliferation, human rights, narcotics, the environment and other bilateral, regional and global issues of importance to Australia. Successful negotiations have Australia poised to sign an extradition treaty with Pakistan. Some

negative domestic developments during the year, particularly the deterioration in security conditions in Karachi — the country's largest city and commercial hub — have contributed to a down-turn in Australian trade and investment activity, resulting in a 30% reduction in Australian exports in 1994.

Bangladesh

The political environment in Bangladesh in 1994–95 was dominated by a long-running dispute between the Government of Prime Minister Khaleda Zia and opposition political parties. Even with the unsettled political climate, the Bangladesh economy performed relatively well, achieving GDP growth of around 5% in 1994. Bangladesh will nevertheless continue to depend on significant international financial assistance, and Australia's relationship with Bangladesh will remain centred on development cooperation with a focus on health and population sectors, training and food aid.

Sri Lanka

The Sri Lankan economy continues to grow despite the high costs of the long-standing ethnic conflict with the Liberation Tigers of Tamil Eelam (LTTE). Trade and investment between Australia and Sri Lanka are now significant, with bilateral trade reaching \$200 million in 1994 — an increase of 60% over the previous year. Australia has become one of the largest investors in Sri Lanka, with a 63% increase (approximately \$300 million) in existing investments and contracts, and with investments currently in the pipeline amounting to a further \$776 million. New investment opportunities are also expected to emerge as a consequence of the Sri Lankan Government's privatisation plans.

North Asia

China

Australia's relationship with China continues to expand rapidly, supported by frequent Ministerial exchanges. China is now Australia's 6th largest trading partner, 9th largest market for exports and 6th largest as a source of imports. In 1994–1995, total two-way trade reached \$6,600 million. Australia's exports totalled \$2,960 million, while imports were \$3,650 million. Australia is an important supplier of the industrial raw materials,

foodstuffs and, increasingly, the manufactures China needs for its modernisation. Australia's main imports from China include clothing, sporting goods, toys, textile yarns and fabrics. Besides widening the scope for trade, structural change and rapid growth in the Chinese economy are increasing the volume of trade. The Joint Ministerial Economic Commission (JMEC) is the key institutional support for the economic relationship. The eighth session of JMEC was held in September 1995.

Hong Kong

In 1994-95, Hong Kong was Australia's tenth largest trading partner with two-way trade valued at \$3,500 million. Exports to Hong Kong totalled \$2,600 million, making it Australia's eighth largest export market. Hong Kong is Australia's sixth largest market for export of services, worth \$813 million in 1993-94. Some 30,000 Australians live in the territory and more than 350 Australian companies are based in Hong Kong. Hong Kong is Australia's fifth largest destination for foreign investment, worth \$3,500 million in 1993-94 and the fourth largest source of foreign investment in Australia with investment of HK\$14,400 million in 1993-94.

Taiwan

Australia's commercial relationship with Taiwan has expanded significantly over recent years, with two-way trade reaching \$5,700 million in 1994-95. Taiwan is Australia's sixth largest export market, valued at \$3,100 million. In the absence of diplomatic relations with Taiwan, Australian commercial interests are represented by the Australian Commerce and Industry Office (ACIO) in Taipei. Direct airlinks were established in 1991, and arrangements on investment promotion and patents were signed in August 1993 by the Australian Commerce and Industry Office and the relevant Taiwan agencies. Nearly 150,000 Taiwanese tourists visited Australia last year, making Taiwan Australia's sixth largest source of visitors.

Japan

Japan remains Australia's largest trading partner, with two-way trade in 1994-95 of \$29,000 million, over 20% of Australia's total trade, and with a surplus of \$3,500 million in Australia's favour. While agriculture, mineral and energy products continue to constitute

the bulk of Australian exports to Japan, about one-third of our exports there are now manufactured or processed products. Tourism continues to expand, with more than 721,000 Japanese visitors to Australia in 1994. Japan is the third largest source of foreign investment in Australia, behind the EU and USA. While total 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 visit by Prime Minister Keating to Japan in May 1995 resulted in a very strong Joint Declaration on the status of the relationship. The 1995 meeting of the most important consultative forum, the Australia-Japan Ministerial Committee (AJMC) was held in Canberra in August 1995. Some five Japanese and nine Australian Ministers took part in these discussions, which resulted in over thirty outcomes covering bilateral, regional and global issues.

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 second largest export market, with exports of \$4,730 million in 1994. 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. There is an active agenda of bilateral consultations, both at Ministerial and officials' levels, with President Kim Young-Sam's visit to Australia in November 1994 being the highlight of that year. Korean participation in the second National Trade and Investment Outlook Conference in December 1994 was very successful. The Australia-Korea Foundation continued its 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 1994 Australia

continued to play 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 (IAEA). In this context Australia welcomed the DPRK's decision, following the third round of US–DPRK high-level talks in Geneva, to reaffirm its membership of the NPT and accept implementation of its IAEA safeguard obligations under the treaty. This decision by the DPRK provided for the first time a reasonable basis for the resolution of the DPRK nuclear issue by negotiation — the long-held position of the Australian Government.

South Pacific

Australia, as the major power in the South Pacific region, maintains active and friendly relations with Pacific island countries and seeks to encourage sound government, balanced development and sustainable resource management in the region.

Australia is the largest single aid donor in the South Pacific, conducting substantial aid and defence cooperation programs in the region, budgeted respectively at \$459 million and \$51 million in 1995–96 (including Papua New Guinea). Australia also assists Pacific island countries to broaden and diversify their export capacity through a range of trade and investment development activities under the SPARTECA and PATCRA agreements.

Australia actively participates in and strongly supports a range of South Pacific regional bodies, including the South Pacific Forum, the South Pacific Commission, the Forum Fisheries Agency and the South Pacific Regional Environmental Program. Australia hosted the South Pacific Forum in Brisbane in August 1994 and, as Forum Chair, has worked hard to implement the key decisions and outcomes of this meeting. Australia also took the lead in articulating the response of South Pacific countries to France's announcement in June 1995 of resumed nuclear testing on Mururoa Atoll.

New Zealand

Relations between Australia and New Zealand reflect their shared history, similarities in political and social structure and the

importance of economic links. Although some differences of view exist in the area of defence policy, Australia and New Zealand also share mutual security arrangements which are embodied in the ANZUS Treaty. The cooperative nature of the relationship between the two countries is exemplified in the Closer Economic Relations Trade Agreement (CER), which has achieved full free trade in goods and most services between the two countries, partly through a process of regular review in 1988, 1992 and again in 1995. Work on CER is now focusing on "third generation" trade facilitation initiatives such as a scheme for mutual recognition of regulations relating to goods and the registration of occupations, the development of a joint food standards-setting system and the finalisation of a review of the CER Protocol on Trade in Services. Australia and New Zealand also often work closely in their approaches to the international political and economic environment.

Papua New Guinea

Australia and Papua New Guinea (PNG) have a very close relationship based on ties that have continued at all levels of society since PNG attained its independence in 1975. In 1994 Australian exports were valued at \$964 million and imports at \$1,121 million. The total level of Australian investment in PNG was about \$2,293 million during 1992–93 (most recent figures available).

The 1987 Joint Declaration of Principles (JDP) provides a framework for bilateral relations between Australia and PNG and covers a 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 Australia–PNG Ministerial Forum. The seventh Forum took place in Melbourne in December 1994.

PNG is the largest single recipient of Australian development assistance, accounting for about one-fifth of the development cooperation program, at around \$300 million per annum. The 1989 Treaty on Development Cooperation establishes principles, levels and forms of Australia's aid to PNG. Under the Treaty, budget support is being progressively phased out and by the year 2000 will be wholly replaced by jointly programmed aid

directed at fostering PNG's development and self-reliance.

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

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, and at the annual Australia-United States Ministerial (AUSMIN) Talks in April 1995, the US re-affirmed its commitment to the ANZUS alliance and to a continued strategic and economic engagement in the Asia-Pacific region.

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 links.

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 nations. Australia's relations with Canada strengthened during the year with a number of high level political exchanges. Some of these were related to the celebration of 100 years of Australia-Canada trade relations.

Australia is taking an increasing interest in developments in Latin America, especially those related to trade. Although some Latin American regional trade arrangements are relatively restrictive by nature, there has been a move towards progressive trade liberalisation, privatisation and budget consolidation in most countries. A trend towards democracy in many of the countries has also contributed to a more positive business environment for foreign firms. Australia initiated exchanges with Latin

American countries on trade liberalisation matters. There was a significant increase in political and official contacts during the year including through meetings of APEC, the Cairns Group, the OECD, and the NAM and in the World Trade Organisation. Senator Evans's visit to Cuba in January 1995 paved the way for a normalisation of commercial links. In contrast to other regions, the focus of Australia's links with the Caribbean is in sport and culture.

Europe

Australia maintains constructive relations with the countries of Western Europe and the European Union (EU) and its institutions. Bilateral relations with the individual countries of Western Europe continue to be of very considerable importance to Australia. One indication of the breadth and depth of Australia's links with the region is the fact that the Prime Minister and 34 ministers and 95 Federal and State parliamentarians visited the region during the year. This was in addition to a number of high-level visits to Australia from Western Europe.

Australia's historical, cultural and social links with Europe underpin these bilateral ties and Europe is a leading source 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. One area of difference was the decision of France's President Chirac to conduct nuclear tests at Mururoa Atoll. This provoked a strong response from the Australian Government, which included a freeze on defence contacts.

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 raw materials and an increasingly important market for Australian manufactured products. Australia and the EU developed a new, broader relationship during the year. The bilateral agenda with the European Commission was extended to include constructive exchanges on a wide range of issues on which the two sides share concerns and interests. Negotiations were concluded on a number of trade issues.

The promotion of trade and investment links with Russia and the countries of the former Soviet Union were the key objectives in that region. Australian business interest in Russia has increased steadily in investment opportunities, particularly in Pacific Russia. Increased trade and investment opportunities in some parts of the Commonwealth of Independent States (CIS) led to the opening of an Australian Embassy in Almaty, Kazakhstan, in May 1995.

Many countries in Central and Eastern Europe and in the former Soviet Union experienced continuing political and economic volatility. The disintegration of the former Yugoslavia was a primary concern. During the State Visit to Australia in June 1995 by the Croatian President, Dr Franjo Tudjman, Australia made clear its support for efforts to reach a negotiated settlement to the conflict in the former Yugoslavia and its commitment to the promotion and protection of human rights. The visit to Poland in July 1994 by Senator Evans and the visit of the Czech President, Vaclav Havel, to Australia in March 1995 acted as catalysts for closer economic and political ties. Australia's commercial interests in Romania were given a boost during the Australian–Romanian Joint Governmental Commission meeting in June 1995.

The Middle East

Australia has substantial trading interests and long-standing friendly relations in the area. Australia's policy towards the region 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. The Middle East peace process has achieved substantial successes, such as the Israel–Jordan peace treaty of 26 October 1994 and the agreement on Palestinian autonomy, and Australia remains committed to supporting a negotiated settlement to the Arab–Israel conflict, which it believes offers the best prospects for a just and lasting peace in the region.

Australia is continuing to give material support to the peace process. The Government has provided some \$18 million

to assist the development of Palestinian autonomy, and in mid-1995, established a bilateral assistance program with the Palestinian Authority. Australia is an active participant in the Working Groups on Arms Control and Regional Security, and Water Resources, which are part of the multilateral track of the peace process.

Australia contributes a contingent of 26 military personnel to the Multinational Force and Observers (MFO), which monitors the border security arrangements agreed in the Egypt–Israel peace treaty of March 1979. An Australian Army officer, Major-General David Ferguson, was appointed MFO Force Commander in April 1994.

Africa

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

The relationship with southern African countries is the central focus of Australian interests in Africa. However, the profound changes that are occurring in sub-Saharan Africa generally have broadened Australia's interests in the region. Australia wishes to promote regional security through fostering of regional peace-building and preventive diplomacy and is assisting in economic reconstruction and development. The positive political developments that have occurred in recent years in Angola, Mozambique and Malawi are encouraging.

The formation in South Africa of a transitional Government of National Unity in April 1994 was warmly welcomed by Australia. Australia's relations with South Africa in the period following the transition to a non-racial coalition government are substantially different from our past relationship, which was dominated by Australia's opposition to apartheid and the adoption of sanctions policies directed at discouraging trade, investment and access to international finance, and restricting institutional links. By contrast, the present relationship between South Africa and Australia has widened to encompass a broad range of interests. The economic relationship is of primary importance.

Institutional contacts and cooperation in areas of common interest in both bilateral and multilateral areas have deepened.

Australia has reviewed the effectiveness of its aid program and refocused it on southern Africa in recognition of the relationship already established and of the considerable progress being made in political and economic reform. In 1994–95 Australia provided about \$101 million in aid to 30 countries in Africa. A further \$68 million was directed to Africa as part of Australia's contribution to international agencies and the World Bank. In 1995–96 approximately \$190 million, or 12% of Australia's aid program, will be directed to Africa. Direct bilateral Australian aid to countries in West Africa such as Nigeria, Sierra Leone, Ghana and Gambia, will be phased out.

Indian Ocean

The combination of economic reforms in the region, 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, as an Indian Ocean littoral state with wide interests in the region, has sought to make a constructive contribution to the identification of possible strategies for enhancing regional cooperation among the Indian Ocean littoral and island countries. As part of Australia's 'Look West' strategy, Australia was host to the International Forum on the Indian Ocean Region (IFIOR) in Perth from 11 to 13 June 1995. Jointly sponsored by the Commonwealth and the Western Australian Governments, IFIOR brought together for the first time 122 participants from 23 countries in the region, representing academia, business and officials in their personal capacities, to discuss prospects for dialogue and cooperation in the region.

There was strong and wide support at IFIOR for accelerating cooperation in the Indian Ocean region to enhance economic and social development. Two region-wide networks covering the business community (the Indian Ocean Consultative Business Network) and the academic community (the Indian Ocean Research Network) were launched at IFIOR, and a practical program of action on economic and a range of other issues was

adopted. Participants also welcomed the networking opportunities presented by IFIOR.

IFIOR demonstrated the benefit of the 'second-track' approach towards exploring regional co-operation and its success has been significant for the region. It recognised that the inter-governmental process, started at the Mauritius meeting of seven Indian Ocean countries in March 1995, had an important role in advancing the agendas identified in IFIOR. However, this will depend on the expansion of the membership of the Mauritius process to include all interested countries in the Indian Ocean region, including all those countries represented at IFIOR.

Australia is also 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.

APEC

The Asia-Pacific (including East Asia and North America) has included a number of the fastest growing economies in the world in recent decades. Rapid development has been accompanied by massive structural change, with the impetus of manufactures export-led growth increasingly spreading from Japan and the newly industrialising economies (South Korea, Taiwan, Hong Kong and Singapore) to China, ASEAN and other regional economies. The Asia-Pacific region now accounts for around half of world output and about 40% of world trade. Economic interdependence has increased as the region has developed, reflecting strong economic complementarities and substantial intra-regional flows of trade, investment and technology.

The Asia-Pacific Economic Cooperation process, established in 1989 as a result of an Australian initiative, has developed rapidly against this background. APEC's initial Ministerial Meeting, held in Canberra in November 1989, included 12 economies: Australia, New Zealand, ASEAN(6), Japan, Korea, the United States and Canada. Membership was expanded in 1991 to include

the economies of China, Hong Kong and Taiwan. In 1993, Mexico and Papua New Guinea were admitted, and Chile joined in 1994. APEC's agenda has expanded quickly, with initial cooperation and consultation broadening to a much stronger focus on trade and investment facilitation and liberalisation. An important step forward occurred in November 1993, when the first meeting of APEC Economic Leaders was hosted by President Clinton.

The second meeting of APEC Economic Leaders, hosted by President Soeharto in Bogor Indonesia, in November 1994, set in train a further expansion of APEC as an economic forum. APEC Leaders made a firm commitment at Bogor to achieving free, open trade and investment in the region by 2020, with industrialised economies achieving this goal by the earlier date of 2010. APEC economies are currently addressing ways to implement effectively this Declaration, in the lead-up to the Ministerial and Leaders' Meetings held in Osaka in November.

About 77% of Australia's exports were directed to APEC in 1994, up from 66% to those economies two decades ago. Exports to ASEAN have been growing particularly rapidly. Imports from APEC have risen to 69% of total merchandise imports by 1994, up from 55% in 1974. Australia has a strong stake in trade and investment liberalisation in the region and in steps to harmonise trade-related practices and procedures, particularly in the areas of standards and customs. The further development of APEC, consistent with the Bogor Declaration, should also contribute to the broader objective of building regional cohesiveness in the context of rapid change.

Regional security dialogue — the ASEAN Regional Forum (ARF)

Over the last five years Australia has worked actively with countries of the Asia-Pacific to encourage, for the first time in the history of the region, the development of a multilateral, cooperative approach to regional security issues.

The establishment of the ASEAN Regional Forum (ARF) as a region-wide venue to discuss security-related issues is the most important step forward to date in the

emergence of new multilateral processes. The ARF met first on 25 July 1994 in Bangkok and held its second meeting on 1 August 1995 in Bandar Seri Begawan, Brunei. It is attended by the Foreign Ministers, accompanied by only one senior official, of the seven ASEAN countries (Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam), the seven ASEAN Dialogue Partners (Australia, Canada, the EU, Japan, the ROK, New Zealand and the US) along with China, Russia, PNG, Laos and, for the first time in 1995, Cambodia. It thus brings together all the major countries in the Asia-Pacific region. The Foreign Ministers meet in an informal setting to discuss regional political and security issues of concern or potential concern and to agree on cooperative measures which they might take to contribute to maintenance of peace and security in the region and to the avoidance of conflict.

In addition to the Ministerial-level discussions of the ARF, and linked directly to it, are a number of 'first track', official-level meetings and 'second track', unofficial, academic forums in which officials participate in their private capacity. The most important of these at the official-level is the ARF Senior Officials' Meeting, which as well as being a preparatory meeting for the ARF is also a regional security dialogue process in its own right, as it discusses current political and security issues in the region. The ARF at its second meeting also established a number of official-level groups or meetings to discuss confidence-building measures, peacekeeping and search and rescue. Officials from all ARF countries participate in these activities, which are directed to elaborating concrete cooperative measures for adoption by the ARF. The ARF has also indicated a number of proposals which it would like to see considered in second-track ARF meetings. For example, Russia has offered to host a seminar in 1996 on proposed Principles of Security and Stability on the Asia-Pacific region.

There are a large number of other important second-track, quasi-official, academic meetings which contribute to multilateral regional security dialogue. One second-track dialogue process is the Council for Security Cooperation in the Asia-Pacific (CSCAP), founded by 'strategic studies' institutes in June 1994. CSCAP currently has thirteen country/institution members (Australia, Canada, the DPRK, Indonesia, Japan, Malaysia,

New Zealand, Philippines, ROK, Russia, Singapore, Thailand and the US) and two associate member institutions from India and the EU. The Australian National Committee of CSCAP is co-chaired by Professor Ball of the Strategic and Defence Studies Centre and Professor Harris of the Research School of Pacific and Asian Studies at the Australian National University.

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 of denying 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.

The 1994 Defence White Paper *Defending Australia* noted that Australia's defence alliance with the United States continued to be a key element of Australia's defence policy and that the relationship formalised in the ANZUS Treaty reflected the close alignment of enduring strategic interests.

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 currently has 179 member states and is a central part of the international security framework. The NPT was made a permanent treaty at the NPT Review and Extension Conference which was held in April–May 1995, twenty-five years after the Treaty's entry into force.

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 safeguards 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 14 bilateral nuclear safeguards agreements covering 24 countries.

Australia has long recognised the importance of effective controls on nuclear and nuclear dual-use items and is an active member of the Nuclear Suppliers' Group and the Zangger Committee. These groups bring together countries that are principal suppliers of nuclear material and associated material, equipment and technology, and have established guidelines governing export control mechanisms to ensure that trade and cooperation in the peaceful uses of nuclear technology do not contribute to proliferation of nuclear weapons.

Australia is also a member of the Nuclear Energy Agency (NEA) of the Organisation for Economic Co-operation and Development (OECD), which consists of all European Member countries of OECD as well as Canada, Japan, the ROK, Mexico and the United States.

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 the 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 has been a central and active player in the formal negotiations for a CTBT in the CD since their commencement. Australia, which has also been a strong supporter of efforts to strengthen the NPT regime, worked actively to promote the successful outcome of indefinite extension of this Treaty at the NPT Review and Extension Conference held in New York in April–May. 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 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 long-standing Australian objective. When it enters into force (180 days after the 65th ratification), the CWC will put in place a global ban on chemical weapons, including a requirement that all existing stocks of these weapons be

destroyed. It also provides for an effective mechanism to verify compliance with the Convention. The CWC is expected to enter into force in 1996. Australia was instrumental in accelerating the final stages of the CWC negotiations and has also been an active participant in the Preparatory Commission for the international organisation based in The Hague which will be responsible for implementation of the CWC. Australia was the sixth country to ratify the CWC, following enactment of the *Chemical Weapons (Prohibition) Act 1994*. A Chemical Weapons Convention Office has been established to manage implementation of the CWC within Australia. Australia has also maintained, since 1988, a program of cooperation with South-east Asian and South Pacific countries on CWC issues — the Chemical Weapons Regional Initiative — which has recently been focused on helping these countries with their national implementation of the Convention.

Australia has been a strong supporter of efforts to strengthen the Biological Weapons Convention (BWC) through the development of verification arrangements. Means to verify compliance are needed if the BWC is to provide an effective global ban on these inhumane and potentially devastating weapons. Australia was pleased by the decision of a special conference of BWC States Parties in September 1994 to establish a negotiating process which is expected to result in the development of protocol to the BWC which will contain verification measures. Australia is taking a prominent role in these negotiations.

Australia chairs a group of 29 countries called the Australia Group, which works towards harmonising the export licensing measures of participating countries over chemicals, biological agents and equipment which can be used in the production of chemical and biological weapons. The Group's activities assist the achievement of the non-proliferation objectives of the CWC and BWC. As well as participating in the work of the Nuclear Suppliers' Group, Australia is an active participant in the Missile Technology Control Regime: these two bodies enable similar cooperation in the nuclear weapons and missile fields.

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 our regional neighbours to participate at the CD and the UN in discussions on further multilateral measures to increase transparency in the area of conventional armaments.

Australia has taken an active role in negotiations to strengthen the Inhumane Weapons Convention and believes these should result in practical measures to prevent the widespread civilian suffering caused by the use of anti-personnel mines, which are covered by Protocol II of that Convention. Australia has also been active in encouraging other Asia-Pacific countries to accede to this 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 Chemical Weapons Convention, the Biological Weapons Convention, the Environmental Modification Convention, the Antarctic Treaty, the Inhumane Weapons Convention, the Moon Treaty and the South Pacific Nuclear Free Zone Treaty.

The Commonwealth

The Commonwealth is an association of countries drawn from every region of the globe and comprising 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 Auckland, New Zealand, in November 1995. The Commonwealth Heads of Government at the Auckland CHOGM agreed to suspend Nigeria's membership until satisfactory progress towards democracy has been achieved. Leaders also agreed to admit Mozambique as the 53rd member.

International trade relations

High priority continues to be given to strengthening Australia's international economic and trade performance. By complementing domestic structural

adjustment programs and micro-economic reforms with strategies which advance bilateral, regional and multilateral trading goals, the Government is able to foster Australia's economic growth.

Australia has maintained a strong commitment to the advancement of a more liberal multilateral trading system as the most effective means of supporting and promoting global and national economic growth. Central to this commitment have been the agenda for trade liberalisation pursued through Australia's participation over the seven years of the Uruguay Round negotiations, continuing participation in the work the General Agreement on Tariffs and Trade (GATT), now institutionalised by the establishment of the World Trade Organisation (WTO), and the promotion of a trade-liberalising agenda in APEC as well as other trade and economic forums.

The WTO is now responsible for facilitating the implementation and operation of all the agreements and legal instruments which constitute the WTO Agreement, including managing the new committee structure. Australia has been closely involved in the arrangements for a smooth transition from the GATT to the World Trade Organisation and to make it quickly operational. With Australian representatives as Chairs of a number of WTO committees including the Negotiating Group on Maritime Transport Services, the Dispute Settlement Body and the Working Party on State Trading Enterprises, Australia has played a key role in the strengthening of its institutional development.

At this stage in its development, the WTO offers excellent opportunities for Australia to contribute to, and influence the direction of, further developments in the multilateral trading system. For a middle-sized trading nation like Australia, the multilateral system provides the best form of protection against the excesses of unilateral, bilateral and regional protectionist pressures. Australia is therefore an active and consistent participant in the establishment and monitoring of multilateral rules for the trading system. Bilateral and regional approaches reinforce these multilateral approaches. As with any negotiation, this cannot guarantee the outcomes we are seeking but it does provide for our positions to be taken into account in the final trade-offs and thus offers generally

better results than we could expect given the actual level of Australia's international trade.

The conclusion of the Uruguay Round brought to an end the most ambitious and far-reaching multilateral trade negotiations ever undertaken. The post-Uruguay Round multilateral trading system is much more complex than the range of activities conducted previously under the GATT. As well as the work of the new committees and structures of the WTO, Australia must continue to pursue the Uruguay Round's "in-built" agenda, which provides for follow-up negotiations in certain areas to pursue further market access opportunities, including in agriculture and services. Australia is participating in the WTO work program on trade and the environment and in debate on new multilateral trade issues such as regionalism, trade and labour, trade and culture, trade and competition policy, and trade and investment.

The formation of the WTO Committee on Agriculture (COA) was one of the most important outcomes for Australia of the Uruguay Round. The COA is to monitor and review the implementation of the member countries' Uruguay Round commitments on agriculture. Maintaining an influential role for the Cairns Group of agricultural traders in the activities of the COA is an important element of Australia's strategy for continuing reform of agricultural trade. A paramount challenge for Australia will be to maintain and strengthen the commitment of the Cairns Group to ongoing agriculture reform.

Australia has been strongly supportive of activities to bring intellectual property rules and disciplines into the multilateral trade framework with the aim of improving standards in the protection of intellectual property rights in accordance with the Agreement on Trade Related Intellectual Property Rights (TRIPs). At Sydney in May 1995, Australia hosted a seminar which was the first forum for APEC members to address intellectual property rights and cooperate on strengthening the regional IP infrastructure. The vigorous pursuit of Australia's interests has included the development of technical cooperation programs in intellectual property with Indonesia, the Philippines and Thailand, among others.

Underpinning Australia's commitment to continued strengthening of the multilateral trading system is the development of policy initiatives aimed at securing improved market access for Australian business in various international, regional, and bilateral forums. Australia continues to pursue the goal of reduced tariffs and the dismantling of non-tariff measures for our major exports, especially to ASEAN nations.

One such example of Australia's focus in this area is the current effort being directed at regional cooperation between AFTA (ASEAN Free Trade Area) and CER (Australia–New Zealand Closer Economic Relations) members. A range of ways to remove or reduce impediments to trade and investment are currently under examination.

A number of projects, to be completed by the end of 1996, have been agreed by ASEAN and CER Ministers. These include establishment of a customs compendium to facilitate ease of access to appropriate channels for potential exporters and importers, and the creation of an integrated trade and investment database and cooperation on trade-related product standards and certification systems.

By facilitating trade and business cooperation, through practical efforts that improve efficiency and reduce the costs of trade transactions for business, Australia is continuing its efforts to improve our economic integration with ASEAN and thereby also to contribute to continued trade and investment liberalisation through APEC and the WTO. Ensuring that these opportunities and developments are effectively communicated to the business community is a task of equal importance. Sectoral consultative committees have been useful forums for engaging industry representatives in all stages of the process. As the circumstances allow, these arrangements will continue to be strengthened.

Australia also encourages developments in the United Nations Conference on Trade and Development (UNCTAD), the OECD and the United Nations Economic and Social Council (ECOSOC), including building up their analytical capacities. A broad-ranging review of Australia's OECD involvement was conducted during 1994–95 to assess the

benefits and costs of membership in the light of APEC and the WTO. This was the first such review since Australia joined the OECD in 1971. It concluded that the OECD remained a key international organisation of great value for Australia.

Australia now participates in UNCTAD's Trade Point Program. This is a computer-based information system designed to provide exporters with easy access to key service providers relevant to developing exports. It is a gateway to global networking through an electronic link with other trade points around the world.

Law of the Sea

The United Nations Convention on the Law of the Sea entered into force on 16 November 1994. Australia had ratified the Convention on 5 October 1994 and was therefore an original party to the Convention. The Convention provides a framework governing all issues relating to the law of the sea.

Australia is a major beneficiary of the Convention. By reason of Australia's lengthy coastline and broad continental margin, the Convention accords Australia a large exclusive economic zone and continental shelf (and consequently significant resource benefits). It also guarantees rights of navigation for vessels, including passage through international straits and archipelagoes, which is important to a trading nation such as Australia. Further, the Convention provides a comprehensive legal basis for the protection of the marine environment. Following the Agreement Implementing Part XI of the Convention (which was also ratified by Australia on 5 October 1994), the Convention creates a regime for the mining of the deep sea-bed beyond national jurisdiction which meets Australia's interests as a land-based producer of minerals also found on the deep sea-bed.

Since the Convention's entry into force, attention has been focused on the establishment of the various institutions provided for by it. These include the International Sea-bed Authority and the International Tribunal for the Law of the Sea.

International environment

Australia continues to be actively involved in addressing environmental issues of international importance. Many of these issues have transboundary or global effects. Others are localised but occur in many localities simultaneously. These problems include depletion of the ozone layer, climate change, loss of biological diversity, desertification and transfer/disposal of hazardous waste. Australia has a significant national interest in many of these issues, being a diverse country in terms of its species and habitat; having an important agricultural industry which is a significant exporter; being a dry continent with very limited supplies of freshwater; having a huge coastline and surrounding oceans; and extensive Antarctic territories. International efforts to address these issues not only have important environmental implications but affect trade, human health, political/economic/ environmental security and social welfare in general.

The United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, brought to the world's attention the need for development to be placed on a more "sustainable" path whereby development meets the needs of the present without jeopardising the ability of future generations to meet their own needs. Outcomes of UNCED included Agenda 21, the Rio Declaration on Environment and Development, the Framework Convention on Climate Change, the Framework Convention on Biological Diversity and a Statement of Principles on Forests. Internationally, attention is focusing on elaborating protocols to the post-Rio Conventions objectives, as well as on addressing other areas of Agenda 21. Australia is heavily involved in addressing the domestic regulatory and economic implications of these conventions. Australia has placed priority on coalition-building to increase the level of cooperation with countries which share similar views on environmental issues of international importance, such as the Group of Temperate Southern Hemisphere Countries on Environment, known as the Valdivia Group, and cooperation in international environment

forums within the grouping of non-EU OECD countries known as JUSCANZ. Australia was also an active participant in the establishment of the International Coral Reef Initiative (ICRI), a collaborative effort among a number of nations, to ensure the conservation and sustainable use of coral reefs and similar ecosystems.

Australia participated in the first meeting in Berlin of the Conference of the Parties to the Framework Convention on Climate Change (FCCC). The meeting adopted a mandate for negotiation of a protocol or other legal instrument to apply for the period beyond the year 2000. Australia supported the major outcome of the first Conference of the Parties (COP-1) to the Convention on Biological Diversity which established a process to consider the need for a protocol on genetically modified organisms which may have adverse effects on biological diversity. Australia continues to address environmental risks associated with the use of dangerous and toxic chemicals, through international negotiations dealing with activities on chemical risk reduction. Australia participated in the third session of the Commission for Sustainable Development (CSD3), which examined progress in implementing Agenda 21. The creation of an ad hoc intergovernmental panel on forests, under the CSD, with a work program encapsulating a wide range of forests issues, was the main outcome of the session.

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 twelve 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 nineteenth ATCM was held in

Seoul in May 1995. 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. On 22 May 1989, the Australian Government announced that it was opposed to mining taking place in Antarctica and that it would not sign the Convention on the Regulation of Antarctic Mineral Resource Activities but 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) and (1994 No. 41), which was up-to-date at 31 December 1994, 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. Australia is actively involved in human rights promotion through multilateral channels including the UN General Assembly, the Commission on Human Rights and the Commission on the Status of Women, as well as numerous other UN bodies and meetings. Australia believes that strategies to ensure the observance of human rights have a preventive security dimension. Consistent with this, Australia supports technical assistance for the promotion of the human rights through the UN and has established its own modest human rights fund to support small, catalytic projects to encourage human rights observance. Australia also promotes the establishment of national institutions for the promotion and protection of human rights, particularly in the Asia-Pacific region, on the basis that positive action at the national level is the surest means of improving human rights observance.

In addition to multilateral and institution-building activity, Australia works to promote human rights through direct contact with other governments. Australia regularly makes representations, on behalf of individuals or groups, to governments. Many of these representations were made on behalf of the Amnesty International Group of the Australian Parliament. Since 1987, when the

Department of Foreign Affairs and Trade started maintaining a register of human rights representations, the Australian Government has raised over 3,500 individual and group cases with other governments.

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 1995 was the UN Fourth World Conference on Women held in Beijing 4 to 15 September and the associated NGO Forum. The UN Conference adopted a Declaration and a Platform for Action. The Platform for Action links strategies and actions to areas of critical concern to the advancement of women — including the burden of poverty; unequal access to education, health care and resources; inequality with men at all levels in sharing power and decision-making; the violation of the human rights of women and the girl-child — and builds on progress made at earlier UN Conferences including that on human rights in Vienna in 1993, on population and development in Cairo in 1994 and on social development in Copenhagen in 1995. While the Platform for Action is not binding like a treaty, it does give the areas of critical concern new visibility among governments, non-governmental organisations and international agencies and serves as a guide for international and national policies.

Cultural relations

The Government seeks to project Australia overseas as a diverse, creative, technologically advanced and sophisticated country which is making its own distinctive and significant contribution to the Asia-Pacific and global community. This activity has the objective of seeking to influence international perceptions of Australia and, thereby, to promote Australia's vital economic and foreign policy interests. The Australia Abroad Council (AAC) and a number of bilateral Foundations, Councils and Institutes have been established to develop Australia's bilateral relations with a number of countries, through cultural, educational, scientific and other exchanges.

Consular services and passports

The Department of Foreign Affairs and Trade assists and protects, where necessary, the interests of Australians' overseas in accordance with international law. For example, assistance may be given, where requested, to Australians who are in hospital overseas, who have been victims of crimes or who have been arrested or imprisoned. Such consular services to Australian citizens are provided by all Australian diplomatic and consular posts and by 24 Honorary Consuls. There are also 13 countries, mostly in Africa, where Canadian diplomatic and consular

posts provide consular services to Australians under the Australia Canada Consular Sharing Agreement.

In 1994–95, 678,699 passports were issued to eligible Australian citizens. 75.7% 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 527,000 calls were handled in 1994–95. To support the Department's consular operations the telephone information service incorporates a facility to handle large numbers of phone enquires from the public about overseas crises which might involve Australians.

3.1 Australian Honorary Consulates, 30 June 1995

City	Country	Responsible office
Barcelona	Spain	Madrid
Bogota	Colombia	Caracas
Boston	USA	New York
Bucharest	Romania	Belgrade
Chicago	USA	Washington
Denver	USA	Los Angeles
Edinburgh	United Kingdom	London
Guadalajara	Mexico	Mexico City
Guayaquil	Ecuador	Caracas
Helsinki	Finland	Stockholm
Kiev	Ukraine	Moscow
Kuching	Malaysia	Kuala Lumpur
Lae	Papua New Guinea	Port Moresby
La Paz	Bolivia	Santiago de Chile
Lisbon	Portugal	Paris
Ljubljana	Slovenia	Vienna
Monterrey	Mexico	Mexico City
Port of Spain	Trinidad & Tobago	Bridgetown
Prague	Czech Republic	Warsaw
Pusan	Republic of Korea	Seoul
Riga	Latvia	Copenhagen
Seville	Spain	Madrid
Tallinn	Estonia	Stockholm
Vladivostok	Pacific Russia	Moscow
Zagreb	Croatia	Vienna

Source: Department of Foreign Affairs and Trade.

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, foreign policy and commercial interests. 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 Asian and Pacific regions.

In 1995–96 Australia's official development assistance (ODA) totals \$1563.2 million (current dollars). This represents an increase in real terms of about 1.8% or \$28 million on expenditure in 1994–95. Australia's ODA to gross national product (GNP) ratio in 1995–96 is expected to be 0.33%. This places Australia above the current weighted average of 0.31% for donor members of the Development Assistance Committee (DAC) of the OECD.

The aid program is administered by the Australian Agency for International Development (AusAID) and is divided into three sub-programs: Country Programs, Global Programs and Corporate Services. In 1994–95, Country Program expenditure totalled \$852.5 million, Global Program expenditure totalled \$540.1 million and Corporate Services expenditure totalled \$45.2 million.

Although AusAID administers most of Australia's development cooperation, expenditure on ODA-related activities also takes place in other government departments and agencies. In 1994–95, more than \$49.8 million of total ODA was spent by other government agencies. In 1995–96, \$44 million of total ODA is projected to be spent by other government agencies.

3.2 Total Australian aid flows to major recipients, 1995–96 estimate(a)

Country	\$ million
Papua New Guinea	325.3
Indonesia	129.3
China	85.7
Vietnam	72.1
Philippines	68.5
Thailand	37.4
India	30.0
Bangladesh	29.3
Cambodia	29.0
Fiji	20.5
Laos	17.5
Solomon Islands	14.5
Mozambique	14.0
Vanuatu	13.5
Western Samoa	12.5
Tonga	10.7
South Africa	10.0
Ethiopia	10.0
Malaysia	9.6

(a) This includes assistance provided under both Country Programs and Global Programs.

Source: AusAID.

Country aid 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 partner countries, usually during annual high-level consultations. Additional support to individual countries is also provided through regional organisations, globally funded and multi-country activities.

For the majority of recipient countries the level of Australia's development cooperation is based on an annual programming amount. 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 equitably between women and men. Program activities are evaluated on a regular basis to ensure that objectives are being met.

Papua New Guinea

Papua New Guinea (PNG) receives the largest share of the Australian aid program, with total flows in 1995–96 expected to be over \$325 million, which represents about one fifth of the total Australian development cooperation program.

Well over 50% of this assistance is in the form of budget support, but both Governments have agreed that there will be a progressive transition to 100% jointly programmed activities by the turn of the century. The next few years will see a rapidly increasing pace of implementation of Australian activities in six mutually agreed sectors: education and training, health, infrastructure, law and order, renewable resources and the private sector.

South Pacific

Australia has clearly signalled a more rigorous approach to the provision of assistance to the South Pacific. Increasing priority is being given to cooperating with South Pacific governments in their efforts to pursue the reforms necessary to achieve sustainable development. In 1995–96, bilateral, multi-country and regional programs in the South Pacific will total around \$112.2 million.

The focus will be on education, health, sustainable resource use, private sector development and institution-strengthening.

South-east Asia

Sustained economic growth in many countries of South-east Asia has led to changes in the nature of Australia's aid relationship with these countries. In 1995–96 total country programmed flows to South-east Asia will be about \$252 million. In the rapidly growing economies of the region, country programs increasingly emphasise the development of closer economic relations and the pursuit of mutual benefits, whilst also promoting social and economic development. The region also includes three of the poorest countries in the world: Laos, Cambodia and Vietnam. In these countries, Australian development cooperation concentrates on direct poverty alleviation, reconstruction of basic infrastructure and the development of long-term commercial links with Australia. In Indonesia and the Philippines Australian assistance supports human resource development, rural infrastructure development and the fostering of closer economic and trade linkages with Australia. In 1995–96, the Private Sector Linkages Program will continue to promote sustainable development and economic growth in the South-east Asian region through activities which link market-oriented enterprises in Australia and selected developing countries.

Other regions

Country programs in North Asia, South Asia and Africa will receive \$124.3 million in 1995–96. Australia's aid program to the region focuses on human resource development, technology transfer, health, agriculture, the environment and community development.

In 1995–96, \$38.5 million will be directed to Africa through country programs. Of this, \$10 million will be provided for South Africa to help meet basic human needs, to assist in capacity-building, institutional strengthening and human resource development and to continue the democratisation of the state and society. Assistance to China will total \$19 million (although total aid flows to China, including financing through the Development Import Finance Facility, are estimated to reach \$86 million in 1995–96). Other major beneficiaries of Australian development cooperation in the area include Bangladesh

(\$18.3 million), India (\$20.6 million) and Pakistan (\$3.1 million).

Cross-regional programs

Human resource development is a key element in the achievement of sustainable social and economic development and, as such, remains a priority in Australia's development cooperation program; 17% of the program is allocated to the education sector.

There are two in-Australia tertiary education scholarships: Australian Sponsored Training Scholarships (ASTAS) and Australian Development Cooperation Scholarships (ADCOS). The former comprises a program of scholarships for individuals who have been nominated by their governments. Under the latter program, individuals apply direct, without the need of government nomination.

Aid-sponsored student programs continue to make an important contribution to the internationalisation of Australian education services, which now generate more than \$1,000 million annually in export earnings for Australia. Over 6,000 sponsored students are expected to study in Australia in 1995–96.

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 cooperation partner. The Government recognises that multilateral cooperation can bring results that are unachievable in a bilateral program alone, especially for a medium-sized donor like Australia. Through support for these agencies, Australia also contributes to their policies and program directions. To ensure Australia is achieving its goals through multilateral development organisations, close monitoring of the various agencies is undertaken.

Contributions to international organisations in 1995–96 will total \$309.5 million. United Nations development agencies will receive \$85.8 million, with the largest contributions directed to the World Food Programme (\$51.9 million), the United Nations Development Programme (\$18.6 million) and the United Nations Children's Fund (\$4.8 million). Australia's

contributions of \$191.2 million to the multilateral development banks will go mainly to the concessional lending arms of the World Bank and the Asian Development Bank, the International Development Association and the Asian Development Fund, respectively. Other beneficiaries of Australia's contributions to international organisations in 1995–96 include Commonwealth development organisations, international health and environment programs and international non-government organisations.

Emergencies and refugees

In response to the rapid escalation in the global need for humanitarian relief, the allocation for emergency and refugee assistance has been increased from \$70.9 million in 1994–95 to \$84 million in 1995–96, a real increase of over 14%. Activities supported include assistance for emergency prevention and disaster preparedness measures, rapid-response emergency assistance and longer-term relief and rehabilitation options. Australia also supports the programs of a number of international relief agencies by making contributions to their core budgets. Agencies which benefit include the United Nations High Commissioner for Refugees, the United Nations 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.

Total funding to non-government organisations (NGOs) is estimated to be about \$100 million in 1995–96. This includes overseas development projects, volunteer programs, emergency relief assistance and some development education activities. A key element of this funding is the AusAID–NGO Cooperation Program (ANCP), which subsidises development activities designed and implemented by the NGOs themselves. The ANCP has been allocated \$13.5 million of funding in 1995–96. Funding is also provided through a number of NGO windows in Country Programs.

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. The Government also commissions development-related research from other research institutions in Australia.

Commercial programs

Australian commercial organisations play an important role in the development cooperation program. Development assistance is provided through AusAID's commercial programs by internationally competitive Australian suppliers.

Expenditure on the Development Import Finance Facility (DIFF) is expected to total \$120 million in 1995–96. DIFF provides opportunities for Australian businesses to supply goods and services to developing countries for use in high-priority development projects. Australia's DIFF financing package combines an aid grant through AusAID with export credits provided by the Export Finance Insurance Corporation to provide concessional, mixed credit finance packages.

Within the DIFF scheme, support will continue for Green DIFF, which was introduced in 1994. Green DIFF provides opportunities for Australian business to supply developmentally important goods and services with an environmental focus to developing countries.

The Private Sector Linkages Program (PSLP) aims to provide sustainable development and economic growth in the Asian region by supporting the establishment or expansion of long-term links between Australian market-oriented enterprise and counterpart enterprises in selected developing countries.

Development activities which may be considered for funding support include: short-term training secondments and work attachments; pre-feasibility, feasibility studies and expert advice; pre-investment studies; and demonstration and adaptation of proven and appropriate Australian technologies.

Australian Centre for International Agricultural Research (ACIAR)

Funding provided to ACIAR in 1995–96 is \$39.6 million. ACIAR is a statutory body with its own Board, Director and Policy Advisory Council. It promotes research into improving sustainable agricultural production and natural resource management in developing countries. ACIAR facilitates research collaboration between Australia and individual developing countries for mutual advantage by mobilising appropriate Australian research expertise to help developing countries to help themselves.

As well as commissioning research, ACIAR promotes project-related training and

conducts pilot development studies to enhance the application of research results. The centre is also responsible for Australia's contributions to the international agricultural research centres, such as the International Rice Research Institute (IRRI).

Australian representation overseas

As at 30 June 1995, 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
Argentina	Buenos Aires
Austria	Vienna
Bangladesh	Dhaka
Belgium	Brussels
Barbados	Bridgetown
Brazil	Brasilia
Brunei	Bandar Seri Begawan
Cambodia	Phnom Penh
Canada	Ottawa
Chile	Santiago
China	Beijing, Shanghai(a)
Cyprus	Nicosia
Denmark	Copenhagen
Egypt	Cairo
Federal Republic of Germany	Berlin(a), Bonn
Fiji	Suva
France	Paris
New Caledonia	Noumea(a)
Greece	Athens
Hong Kong	Hong Kong(a)
Hungary	Budapest
India	New Delhi
Indonesia	Jakarta, Bali(b)
Iran	Tehran
Ireland	Dublin
Israel	Tel Aviv
Italy	Rome
Japan	Tokyo
Jordan	Amman

For footnotes see end of table.

...continued

3.3 Diplomatic and consular representation overseas —
continued

Country	Post
Kazakstan	Almaty
Kenya	Nairobi
Kiribati	Tarawa
Korea	Republic of Seoul
Lebanon	Beirut
Malaysia	Kuala Lumpur
Malta	Malta
Mauritius	Port Louis
Mexico	Mexico City
Micronesia	Federated States of Pohnpei
Myanmar(Burma)	Rangoon
Nauru	Nauru
Nepal	Kathmandu
Netherlands	The Hague
New Caledonias	Noumea(a)
New Zealand	Wellington
Nigeria	Lagos
Pakistan	Islamabad
Papua New Guinea	Port Moresby
Philippines	Manila
Poland	Warsaw
Russia	Moscow
Saudi Arabia	Riyadh
Singapore	Singapore
Solomon Islands	Honiara
South Africa	Pretoria
Spain	Madrid
Sri Lanka	Colombo
Sweden	Stockholm
Switzerland	Berne(b)
Syria	Damascus
Thailand	Bangkok
Tonga	Nuku'alofa
Turkey	Ankara
United Kingdom	London
United States	Washington, Honolulu(a), New York(a)
Vanuatu	Port Villa
Vatican	Holy See
Venezuela	Caracas
Vietnam	Hanoi, Ho Chi Minh City
Western Samoa	Apia
Yugoslavia	Belgrade
Zimbabwe	Harare

(a) Consulate-General. (b) Consulate.

Source: *Department of Foreign Affairs and Trade.*

Permanent missions

Australia also maintained five separate permanent missions in:

New York	UN
Geneva	UN
Geneva	Disarmament
Geneva	GATT
Paris	OECD

Other consulates

The Department of Immigration and Ethnic Affairs maintained offices with consular status in:

Manchester	Consulate
Vancouver	Consulate

Trade missions

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

Atlanta	Consulate-General
Auckland	Consulate-General
Bombay	Consulate-General
Dubai	Consulate-General
Frankfurt	Consulate-General
Fukuoka	Consulate
Guangzhou	Consulate
Houston	Consulate-General
Istanbul	Consulate-General
Los Angeles	Consulate-General
Milan	Consulate-General
Nagoya	Consulate
Osaka	Consulate-General
San Francisco	Consulate-General
Sao Paulo	Consulate-General
Sapporo	Consulate
Sendai	Consulate
Toronto	Consulate-General

Defence

Introduction	67
Defence policy	67
The Defence Organisation	68
Defence planning	68
Planning	68
Changing directions	69
Defence Programs	69
Defence Forces Executive	70
Navy	70
Army	70
Air Force	70
Strategy and Intelligence	70
Acquisition and Logistics	71
Budget and Management	71
Science and Technology	71
Australia's defence contribution to UN activities	71
Resources	71
Budget and expenditure	71
Personnel	72
Bibliography	74

Defence

Introduction

This chapter outlines Australia's defence policy. It presents an overview of the Defence Organisation, its functions and how it operates.

Defence policy

Australia's defence policy is part of an integrated national effort that seeks to guarantee the nation's future security and prosperity. It contributes to this objective in two related ways — by ensuring that we are able to defend Australia from armed attack, and by sustaining our alliances and contributing to a global and regional environment in which attack on Australia is less likely.

Australia's strategic environment is expected to change over the next fifteen years under the influence of two major trends. One is the changing strategic postures and relationships of the major powers in Asia following the end of the Cold War. The other is economic change throughout Asia, which is increasing the military and strategic potential of countries in the region. As a result of these trends and of political change which can be expected in a number of countries, the strategic environment in Asia and the Pacific will become more fluid and complex, and military capabilities throughout our region will grow. Australia's strategic environment thus will become more demanding.

To ensure we retain the capacity to defend our nation now and into a more demanding future, Australia pursues a policy of defence self-reliance. This requires the maintenance of military capabilities sufficient to defeat the use of armed force against us, without depending on help from other countries' combat forces. A key feature of self-reliance is the capacity to support our forces as much as practicable from within Australia's wider resources. This involves drawing on the full range of skills and capabilities from within the Australian community, and promoting the development of capabilities within Australian industry to

maintain and support the national defence effort.

As well as providing a capacity to defeat armed force in the event it were to be used against us, the existence of a capable, self-reliant defence force is also an important means of discouraging the use of such force. A further means of discouraging attack is to promote a regional and global environment in which the use of armed force against Australia is less likely. Australia's defence policy seeks to achieve this objective by supporting alliance relationships, encouraging cooperation and understanding between the countries of the region, and contributing to global security arrangements.

Australia's alliance with the United States helps strengthen regional security by supporting US strategic engagement and activities in the Asia Pacific region. In addition, the relationship helps Australia maintain its own defence capabilities. Australia also maintains a particularly close defence relationship with New Zealand, and cooperates with other regional countries within a framework of both bilateral relationships and multilateral activities. Activities range from discussions on strategic issues of mutual concern, to combined military exercises and training, and defence personnel exchanges. At the global level, Australia is a proponent of consultative and multilateral security and arms control regimes. Our national interests are served by ensuring the existence of effective UN mechanisms for conflict prevention, management and resolution, fostering an orderly international system in which agreed norms of conduct constrain the use of force, and in supporting international institutions which give us important opportunities to shape that system.

Australia's defence policy is outlined more fully in *Strategic Review 1993* and the Government's 1994 Defence White Paper, *Defending Australia*.

The Defence Organisation

Australia's defence policy is implemented through an integrated civil-military Defence Organisation which comprises the Department of Defence and the Australian Defence Force (ADF). The ADF consists of the Royal Australian Navy (RAN), the Australian Army, the Royal Australian Air Force (RAAF) and Headquarters ADF. The Department of Defence provides policy advice to Government as well as procurement, scientific, logistic, financial and other support services to the ADF, and a range of services to government agencies and industry.

In fulfilling its mission to promote the security of Australia and to protect its people and its interests, the Defence Organisation maintains a posture based on the concept of depth in defence. Geographically, depth is derived from the ability to detect and engage hostile forces with a layered series of capabilities from distant surveillance and strike, through maritime and air patrol and interdiction forces, to air defence and land forces on and over our own territory. Technological depth ensures that the ADF has the capacity to detect and defeat those capabilities which could conceivably be brought to bear against Australia. Finally, depth is also derived at the national level through the ability to draw fully on a wide range of national resources to provide the greatest possible opposition to an adversary.

Australia's defence posture gives primacy to ensuring timely warning of significant developments in our strategic environment, maintaining a force able to defeat current or planned capabilities which could credibly be used against us with relatively short warning, and maintaining the adaptability to expand or redirect our efforts to meet the more demanding forms of conflict which could possibly emerge only in the longer term. This approach ensures that our forces will have the versatility to contribute to a variety of other activities, including global security arrangements and peacetime support for the Australian community.

In peacetime, ADF resources are used for civil tasks of national importance, such as coastal surveillance, fisheries protection, search and rescue, natural disaster coordination and relief, and counter-terrorism operations. In these areas Federal and State authorities closely coordinate their work. The ADF is also

involved in a number of multinational operations to demonstrate Australia's commitment to UN ideals, including the peaceful resolution of international conflicts. In recent years, the ADF has been involved in UN peacekeeping operations in many locations including Cambodia, Somalia and Rwanda.

To maintain appropriate skills and preparedness for the defence of Australia, the ADF undertakes a comprehensive program of training and exercises. This includes bilateral and multilateral exercises with the military forces of neighbouring countries and our major allies. As well, the ADF maintains stocks of material and goods sufficient to ensure it could be sustained through credible forms of conflict.

Defence planning

Planning

To provide a management framework for its activities, the Defence Organisation works to a ten-year capability planning horizon and a five-year financial programming horizon. Proposals for capability development and other policy initiatives are examined in detail prior to submission to the Government for consideration, generally in the context of the annual Defence Budget. Each year, planning and financial programming documents are reviewed, and modified as appropriate, 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*, *Strategic Review 1993* and the 1994 Defence White Paper, *Defending Australia*. The Corporate Plan, which is updated periodically, sets out corporate goals and strategies for the Defence Organisation for the next five years. It outlines the mission, goals and objectives of the Defence Organisation and identifies major areas for attention or development. The 1994 Defence White Paper and *Strategic Review 1993* represent current Government policy guidance for defence development. The White Paper is the third such policy document produced by an Australian Government since 1976, and will remain the basis for defence

planning for several years. Strategic Review documents are updated every three years or as strategic circumstances require.

The performance of the Defence Organisation over the previous financial year is reported to the Minister for Defence through the *Defence Annual Report* which is tabled in Parliament.

Changing directions

The 1994 White Paper, *Defending Australia*, is the latest in a series of documents to refine Australia's defence policies in response to the changing regional and global strategic outlook and domestic environment. It explains how the Government will manage Australia's defence into the next century. *Defending Australia* builds on important changes to Australia's defence policies announced in a number of statements and reviews published over the last four years, including the *1990 Report on the Defence Force and the Community*, the *1991 Force Structure Review*, the *1992 Price Report on Defence Policy and Industry* and the *1993 Strategic Review*. From that foundation, it looks ahead fifteen years to describe the key international trends that will shape Australia's strategic environment, and to explain how the different elements of Australian defence policy will develop to meet the challenges ahead.

Defence planning in the 1990s aims to achieve a balance between investment in new and improved capabilities, technology and infrastructure, and investment in personnel and training. It places a heavy emphasis on improving the combat capability of the ADF, with the need for a significant level of investment in new equipment and facilities to meet strategic priorities. A small reduction in the numbers of Regular service personnel and civilians will reduce costs and allow the reallocation of resources to areas of greater priority, principally to combat forces. In 1994–95, investment accounted for about 29% of Defence spending, personnel about 38%, and operating costs about 33%. These proportions are expected to remain broadly at these levels over the next five years. More extensive and efficient use of private sector capabilities in support of defence activities through the *Commercial Support Program* is providing financial savings which are available for investment in capability development.

Defending Australia sets out improvements planned for the combat capability of the ADF

over the remainder of this decade. It identifies as a high priority the development of effective joint command arrangements with appropriate command support and intelligence information systems. The capacity to mount effective maritime operations is also considered to be a high priority capability, and so developments in this area are underway, including the entry into service of the highly capable Collins class submarines, eight ANZAC frigates and six coastal minehunters. The Guided-missile frigates will be upgraded, while additional maritime helicopters will also be acquired.

The 1994 Defence White Paper also endorses or proposes a series of plans relating to air operations. The F/A-18 fighter fleet will be upgraded. Australia will acquire an Airborne Early Warning and Control capability, which will dramatically improve its ability to detect and localise enemy aircraft movement in maritime approaches. The sensors on Australia's P3C maritime patrol aircraft will be upgraded. The Macchi lead-in fighter trainers will be replaced by the year 2000, and the F111 fleet kept effective by improving its self-protection systems and precision weapons.

The ADF will improve its capacity to operate across the Australian land mass through the formation of an additional regular infantry battalion. The Kiowa light reconnaissance helicopters will be replaced, and a range of additional ground vehicles acquired to increase the mobility of Army units.

Australia will continue to develop the infrastructure needed to support its forces. It will complete the air bases across northern Australia, and continue to move Navy elements to Western Australia and Army units to northern Australia.

Defence Programs

The Defence organisation, its resources and activities are managed through eight major programs: Forces Executive, Navy, Army, Air Force, Strategy and Intelligence, Acquisition and Logistics, Budget and Management, and Science and Technology.

The objectives and functions of these Programs are described below.

Defence Forces Executive

The objective of this program is to provide an effective ADF strategic level command structure and policy direction in the areas of force structure and preparedness, personnel planning and practices, Reserve service, explosive ordinance safety, health, legal services, public services, public information, Defence housing, emergency management, corporate communications services, and ADF Superannuation.

The program supports the Chief of the Defence Force (CDF) in his role as the Commander of the ADF, and the principal military adviser to Government. It seeks to enhance ADF corporate planning and to facilitate better command, control and communication arrangements for joint and combined operations. The Program develops guidance for Force Development Planning, capability investment options, concomitant military and personnel policies, and the management of corporate communications.

Navy

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

Australia's geographic location, extensive coastline and island territories emphasise the significance of maritime operations in the defence of Australia. The Royal Australian Navy places an emphasis on surveillance and patrol operations in our immediate sea approaches in concert with the Royal Australian Air Force (RAAF), as well as developing, through exercises, the capability to undertake effective maritime operations in our area of primary strategic interest.

Army

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

The nature of Australia's territory and environment dictates the need for highly mobile land forces, capable of rapid deployment across considerable distances and able to conduct protracted and dispersed operations in harsh terrain where the existing infrastructure and resources are sparse. The demands imposed by such operations dictate that the Army be structured as a total force comprising Regular, Ready Reserve, General Reserve and civilian components, with each contributing significantly to the achievement of the Army's objectives.

Air Force

The objective of the RAAF is to provide air forces capable of conducting effective air 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 a more substantial conflict. The essence of the Air Force mission is encapsulated in the phrase 'Air Power for Australia's security'.

Air Power plays a major role in surveillance and intelligence-gathering in our sea and air approaches, denying those approaches to an adversary and defeating incursions into our territory. The RAAF emphasises joint operations with Army and Navy, contributing to enhanced regional security and supporting the civilian community.

Strategy and Intelligence

The objective of the Strategy and Intelligence Program is to provide the Government with advice and options on strategic and defence policies and capabilities most appropriate to Australia's circumstances and to ensure defence activities and capabilities that are consistent with Government policies and priorities. It also provides intelligence services for Defence and other Government departments and agencies, and initiates and supports defence cooperation activities consistent with Government defence policy.

The Strategy and Intelligence Program guides and undertakes activities which are central to Australia's defence policy and international defence relationships and interests. These include: coordination of medium-term and long-term defence planning; analysis of force structure and capability; development of the

new major capital equipment program; collection, assessment and distribution of intelligence information relevant to Australia's defence; and coordination of defence-based international cooperation. Much of the work of the Program aims to guide and improve corporate-level performance.

Acquisition and Logistics

The objectives of this Program are to realise the Government's priorities for the development of Australian defence capabilities through timely acquisition, and introduction into service, of capital equipment and systems that meet endorsed operational requirements, achieve value for money and are supportable; to provide logistic policies, selected support and advice on asset management with an emphasis on efficiency and effectiveness and readiness and sustainability, with optimal use of the civilian infrastructure and commercial practice; and to develop policies to enhance the capability of Australian industry in support of defence self-reliance.

Australia is proceeding with a program of major defence equipment acquisitions costing more than \$21 billion over the coming decade. The Acquisition and Logistics Program is central to these activities.

Budget and Management

The objective of the Program is to provide *efficient and equitable corporate management* policy advice and service to enhance the achievement of the Defence Mission. The Budget and Management Program seeks to improve the way Defence manages and uses resources to achieve its objectives. The Program develops policy and provides corporate services on resource and personnel management, program evaluation and management audit, facilities and property management, physical, personnel, computing and project security, Ministerial support, Parliamentary liaison 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 give advice that is professional, impartial and informed on the

application of science and technology that is best suited to Australia's defence and security needs.

DSTO's research covers a very wide range of disciplines — mostly in the physical and mathematical sciences, electronics, computing and engineering — but also includes such fields as *person-machine interactions*, systems engineering, organic chemistry, pharmacology and toxicology, food sciences and the degradation of materials by the environment.

Backed up by its national and international networks, joint projects, substantial technology base and some outstanding facilities, DSTO is able to assist the Australian Defence Organisation, 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 1994, Australia participated in seven separate UN operations: Cambodia, Somalia, Iraq, Western Sahara, the Middle East, Rwanda, and Mozambique. These operations involved over 500 ADF personnel. The areas of primary involvement were in the UN Assistance Mission in Rwanda (UNAMIR) and the UN Operation in Somalia (UNOSOM).

Resources

Budget and expenditure

The 1995–96 Defence budget of \$9,992 million will enable Defence to maintain its capital investment programs, exercises, deployments and training activities.

The Defence share of GDP for 1995–96 is estimated to be 2.0%. Defence outlays are estimated to be 8.1% of 1995–96 Commonwealth outlays, compared with an estimated 2.1% of GDP and 8.0% of Commonwealth outlays in 1994–95.

The proportion of Defence expenditure spent in Australia continues at a high level reflecting greater local industry involvement and

increased self-reliance. Some 89% of total Defence expenditure is estimated to be spent in Australia during 1995–96, including over 67% of capital equipment expenditure. Current levels of expenditure compare favourably with the 76% spent in Australia during 1984–85, which included only 25% of all capital equipment expenditure.

The following table shows the actual outlay by each program of the Department of Defence in 1994–95.

4.1 Defence outlay, 1994–95 (\$'000)

Program	Outlay
Forces Executive	589 562
Navy	1 599 979
Army	2 268 548
Air Force	1 816 297
Strategy and Intelligence	220 016
Acquisition and Logistics	2 707 616
Budget and Management	302 459
Science and Technology	226 690
Total	9 731 067

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 over 58,000 Regular personnel and 27,500 Reserves, while the Department of Defence has almost 21,000 civilians.

Of the civilian employees in the Defence Organisation, some 12,500 work directly for the ADF, some 2,600 are in the Defence Science and Technology Organisation, over 1,100 are in regional offices, and some 4,800 are in the central office.

Women represent 12.9% of the ADF. Some 90% of ADF positions are now available to women.

See table 4.2 for details of Defence personnel.

4.2 Defence service and civilian personnel, 30 June 1995

Program	Males		Females		Persons	
	No.	%	No.	%	No.	%
Navy						
Trained force						
Officers	1 979	13.5	308	2.1	2 287	15.6
Other ranks	9 215	62.8	1 373	9.3	10 588	72.1
Training force						
Officers	426	2.9	199	1.4	625	4.3
Other ranks	943	6.4	236	1.6	1 179	8.0
Apprentices	—	—	—	—	—	—
Total	12 563	85.6	2 116	14.4	14 679	100.0
Army						
Trained force						
Officers	3 852	14.8	496	1.9	4 348	16.7
Other ranks	17 919	68.9	1 820	7.0	19 739	75.9
Training force						
Officers	554	2.1	110	0.4	664	2.5
Other ranks	816	3.2	191	0.7	1 007	3.9
Apprentices	236	0.9	15	0.1	251	1.0
Total	23 377	89.9	2 632	10.1	26 009	100.0
Air Force						
Trained force						
Officers	2 832	16.2	409	2.3	3 241	18.5
Other ranks	10 918	62.4	2 079	11.9	12 997	74.3
Training force						
Officers	533	3.1	77	0.4	610	3.5
Other ranks	463	2.6	189	1.1	652	3.7
Apprentices	—	—	—	—	—	—
Total	14 747	84.3	2 754	15.7	17 501	100.0
Total Australian Defence Force						
Trained force						
Officers	8 663	14.9	1 213	2.1	9 876	17.0
Other ranks	38 052	65.4	5 272	9.1	43 324	74.5
Training force						
Officers	1 513	2.6	386	0.7	1 899	3.3
Other ranks	2 222	3.8	616	1.0	2 838	4.8
Apprentices	236	0.4	15	—	251	0.4
Total	50 686	87.1	7 502	12.9	58 188	100.0
Civilians						
Senior executive staff	99	0.5	9	—	108	0.5
Other staff	14 041	67.6	6 618	31.9	20 659	99.5
Total	14 140	68.1	6 627	31.9	20 767	100.0
Reserves						
Navy	1 040	4.3	199	0.8	1 239	5.1
Army	17 750	73.0	3 994	16.4	21 744	89.4
Air Force	1 102	4.5	235	1.0	1 337	5.5
Total	19 892	81.8	4 428	18.2	24 320	100.0
Ready Reserves						
Navy	175	5.4	16	0.5	191	5.9
Army	2 674	83.3	97	3.0	2 771	86.3
Air Force	250	7.8	—	—	250	7.8
Total	3 099	96.5	113	3.5	3 212	100.0

Source: Department of Defence.

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Demography

Introduction	77
Population size and growth	77
Population distribution	78
Aboriginal and Torres Strait Islander population	81
Age/sex profile	82
Households	85
Families	86
Births and deaths	87
Births	87
Deaths	90
Marriages and divorces	93
Registered marital status of the population	93
Marriages	94
Divorces	97
Remarriages	100
Overseas migration	101
Birthplace of the population	102
Migration to Australia	104
Refugees	107
Permanent departures	108
Internal migration	108
Citizenship	110
Bibliography	111
Special Article — A Profile of Australia's Indigenous People	113

Demography

Introduction

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 Census was conducted in 1991. 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 1994 was 17.8 million, an increase of 1% over the previous year. The total increase of 184,904 since 1993 comprised 135,301 from natural increase and 49,603 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

Year ended 30 June	Population ('000)	Annual rate of growth (%)		
		Natural increase	Net overseas migration	Total(a)
1974	13 722.6	1.0	0.6	1.6
1984	15 579.4	0.8	0.3	1.2
1987	16 263.3	0.8	0.7	1.5
1988	16 532.2	0.8	0.9	1.7
1989	16 814.4	0.8	1.0	1.7
1990	17 065.1	0.8	0.7	1.5
1991	17 284.0	0.8	0.5	1.3
1992	17 489.1	0.8	0.4	1.2
1993	17 656.4	0.8	0.2	1.0
1994	17 843.3	0.8	0.3	1.1

(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 but were rising in 1994–95.

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% in 1981–82, the total growth rate slumped to 1.2% 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% in 1989. In the 1990s the total growth rate has fallen back again as the migration intake has eased. The total growth of 1% in the year ended 30 June 1994, follows 1993 as being the lowest since the year ended 30 June 1976, which also recorded a 1% growth.

The most recent projections of the Australian population show it growing from 17.8 million in 1994 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 four year period 1990 to 1993 is shown in

table 5.2. Australia's average annual rate of population growth, at 1.1%, was greater than the rates of growth in New Zealand (0.9%), the United Kingdom (0.4%) and Japan (0.1%) but lower than those in Canada (2.6%), Papua New Guinea (2.0%) and Indonesia (1.7%). The average population density of two persons per square kilometres 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, 30 June 1993

	Population			
	No. ('000)	Average annual rate of growth (%)	Area ('000 km ²)	Population (persons/km ²)
Australia	17 661	1.1	7 713	2
Canada	28 755	2.6	9 976	3
China	1 196 360	1.2	9 597	124
Indonesia	189 136	1.7	1 905	99
Japan	123 653	0.1	378	327
Korea	44 056	0.9	99	445
New Zealand	3 451	0.9	271	13
Papua New Guinea	3 922	2.0	463	8
United Kingdom	58 191	0.4	244	238
United States of America	258 233	1.1	9 809	26

Source: *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 1994, 71.5% of the Australian population lived in the State/Territory capitals (including Canberra, 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 1994, the State and Territory populations were, in order of size, Queensland (3.2 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).

5.3 Estimated resident population of Australia

30 June	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1974	4 894 053	3 755 726	2 008 340	1 241 538	1 127 598	406 151	102 924	186 241	13 722 571
1984	5 402 729	4 076 492	2 523 859	1 360 048	1 391 237	437 760	142 154	245 112	15 579 391
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	5 958 707	4 451 045	3 032 834	1 457 595	1 657 350	469 685	167 403	294 453	17 489 072
1993	5 997 432	4 464 188	3 116 018	1 462 894	1 676 341	471 350	169 304	298 900	17 656 427
1994	6 051 446	4 476 100	3 196 934	1 469 784	1 701 879	472 357	171 134	300 912	17 843 268

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

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 1994 were, in order of size, Queensland (2.7%), Western Australia (1.5%), Northern Territory (1.1%), New South Wales (0.9%), Australian Capital Territory (0.7%), South Australia (0.5%), Victoria (0.3%) and Tasmania (0.1%).

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% 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% to 14.6%, 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.

Australia's two dominant population centres — Sydney (3.7 million) and Melbourne (3.2 million) — both in the south-east, accounted for 38.9% of the total population in June 1994 (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.

5.4 Urban-rural distribution of persons(a)(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 a usual residence basis have been used. Excludes some Aboriginal people prior to 1961.

(b) Urban and rural proportions do not add up to 100% as the proportion of migratory population is not included.

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

5.5 Estimated resident population of capital cities

Capital city	1976	1984	1988	1989	1990	1991	1992	1993	1994
Population ('000 persons)									
Sydney	3 143.8	3 382.9	3 591.0	3 622.9	3 643.7	3 672.9	3 699.8	3 719.0	3 738.5
Melbourne	2 723.7	2 884.6	3 043.6	3 086.6	3 126.9	3 156.7	3 177.9	3 187.5	3 198.2
Brisbane	1 000.9	1 161.2	1 264.5	1 300.2	1 330.9	1 358.0	1 385.5	1 421.7	1 454.8
Adelaide	924.1	984.3	1 021.1	1 033.5	1 044.6	1 057.2	1 065.8	1 070.2	1 076.4
Perth	840.2	995.6	1 110.5	1 147.4	1 175.4	1 188.5	1 205.3	1 221.3	1 239.4
Hobart	164.3	175.5	184.2	185.9	189.0	191.0	192.3	193.3	194.2
Darwin	44.2	68.9	75.9	76.0	76.5	76.7	77.2	77.4	78.1
Canberra	201.8	241.3	272.5	277.6	283.9	288.2	293.3	297.8	300.5
Total	9 043.0	9 894.3	10 563.3	10 730.1	10 870.9	10 989.5	11 097.3	11 188.2	11 280.1
Proportion of State population (%)									
Sydney	63.4	62.6	62.9	62.7	62.5	62.3	62.1	62.0	61.9
Melbourne	71.5	70.8	71.4	71.4	71.4	71.4	71.4	71.4	71.4
Brisbane	47.8	46.0	46.2	46.0	45.9	45.9	45.7	45.6	45.6
Adelaide	72.5	72.4	72.7	72.8	72.9	73.1	73.1	73.2	73.2
Perth	71.3	71.6	72.3	72.7	72.9	72.7	72.7	72.9	72.9
Hobart	39.8	40.1	40.8	40.8	40.9	40.9	40.9	41.0	41.0
Darwin	45.0	48.5	47.7	47.2	46.7	46.3	46.1	45.7	45.7
Canberra	99.8	99.1	99.6	99.6	99.6	99.9	99.9	99.9	99.9
Total	64.6	63.7	63.9	63.8	63.7	63.6	63.5	63.4	63.2

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

Aboriginal and Torres Strait Islander population

In 1967, the provision in section 127 of the Constitution, which required the exclusion of some Aboriginal people from the official population counts, was repealed. This has had a substantial impact on demographic matters generally.

As shown by the provisional projections in table 5.6, the Aboriginal and Torres Strait Islander population at 30 June 1994 was 303,261, representing 1.7% of the total population. The projection shows an increase of 19,630 (6.9%) over the 283,631 Aboriginal and Torres Strait Islander people in 1991, and an increase of 75,616 (33.2%) from 1986.

The average annual growth rate of the indigenous population of Australia for the periods 1986 to 1991 and 1991 to 1994 was 2.4% and 4.7% respectively. This is higher than the rate of growth for the total population of 1.5 and 1.1% respectively for the same period.

The sex ratio of males to females in the indigenous population at 30 June 1994 was 101.0 (101 males to 100 females) compared to the total population ratio of 99.2. For most States/Territories the sex ratios of the indigenous population were higher than for the total population. The sex ratio of the indigenous population ranged from 104.7 in Tasmania to 99.3 in the Australian Capital Territory.

New South Wales had the largest indigenous population at 30 June 1994 with 80,440, or 26.5% of the total indigenous population, followed by Queensland with 26.3%. However, they comprised only a small proportion of the population in all States and Territories, except the Northern Territory, where more than one in four people were of Aboriginal or Torres Strait Islander origin. The indigenous population of the Northern Territory comprised 26.9% of its total population, the highest proportion of any State/Territory. The lowest was 0.4% (19,183) for Victoria.

5.6 Aboriginal and Torres Strait Islander persons

State/Territory	1994				
	Population (No.)	Proportion of Australian indigenous (%)	Proportion of State's total (%)	1986 population(a) (No.)	1991 population(a) (No.)
New South Wales	80 437	26.5	1.3	66 041	75 020
Victoria	19 183	6.3	0.4	15 766	17 890
Queensland	79 842	26.3	2.5	65 933	74 214
South Australia	18 425	6.1	1.2	15 324	17 239
Western Australia	47 251	15.6	2.8	39 001	44 082
Tasmania	10 113	3.3	2.1	8 244	9 461
Northern Territory	46 041	15.2	26.9	38 885	43 273
Australian Capital Territory	1 969	0.7	0.6	1 384	1 616
Australia	303 261	100.0	1.7	250 738	282 979

(a) Census counts by place of usual residence.

Source: *Experimental Estimates of the Aboriginal and Torres Strait Islander Population* (3230.0).

At 30 June 1994, 27% of the Aboriginal and Torres Strait Islander population lived in capital cities and just under 20% in rural and remote areas, with 50% 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 (48%), while in Queensland and Western Australia 20% and 28% respectively were counted in the capital city.

In Queensland, South Australia, Western Australia and the Northern Territory in 1991, 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% were counted in such localities.

At 30 June 1994, Australia's indigenous population had a median age of 20.3 years, about 13 years younger than for the total population. The median age of the indigenous population ranged from 19.6 years in Tasmania to 21.0 years in Victoria. The median age of the indigenous population increased by 1.1 years from 1986 to 1991, and 0.3 years from 1991 to 1994. For the total population this increase was 1.3 years and 1.0 years respectively.

The median age of indigenous males at 30 June 1994 was 19.9 years and for indigenous females 20.9 years. The median age for females was about one year higher than for males for all States and Territories except Tasmania where the median age for males was about the same for females.

The age structure of the indigenous population differed greatly from that of the total Australian population. The major differences were in the younger and older ages, reflecting the high mortality and high fertility for the indigenous population. Of the total indigenous population, almost 40% were children aged less than 15 years and almost 15% were aged less than 5 years. These figures compare with 21% and 7%, respectively for the non-indigenous population.

In the older age groups, the difference is even greater. Only 6% of indigenous people were aged over 55 years compared with 20% of the non-indigenous population. The age distributions were generally similar in all States and Territories and have changed relatively little since 1991. These differences are illustrated in table 5.7.

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 the Overseas Migration section of this chapter). In 1994 the Australian population had 99.2 males for every 100 females.

The age distribution of the population is shown in graph 5.8, comparing the years 1984 and 1994. 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.

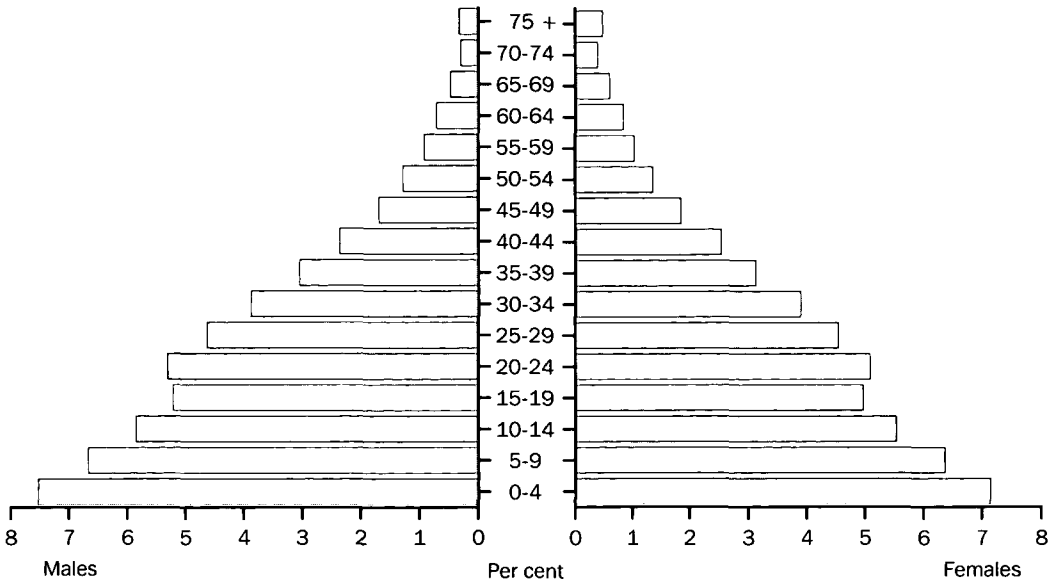
The median age of the population at 30 June 1994 was 33.4 years. It has been rising consistently since the beginning of the 1970s as a result of lower birth rates as well as lower mortality rates at most ages. (The proportion of the population aged 65 years and over has risen from 10.1% in 1984 to 11.8% in 1994.) In descending order, the median ages of the State/Territory populations at 30 June 1994 were South Australia (34.6), New South Wales (33.8), Victoria (33.7), Tasmania (33.6), Queensland (32.7), Western Australia (32.6), Australian Capital Territory (30.4) and the Northern Territory (28.0). The median age of the population in all States/Territories has 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 15.3 in 1984 to 17.7 in 1994, while the child-dependency ratio (population aged under 15 per 100 population of working ages) has declined sharply from 36.4 to 32.3 during the same period. The combined effect is that the total dependency ratio has declined from 57.4 in 1984 to 50.1 in 1994.

5.7 Indigenous and non-indigenous persons: age and sex profile, 1991

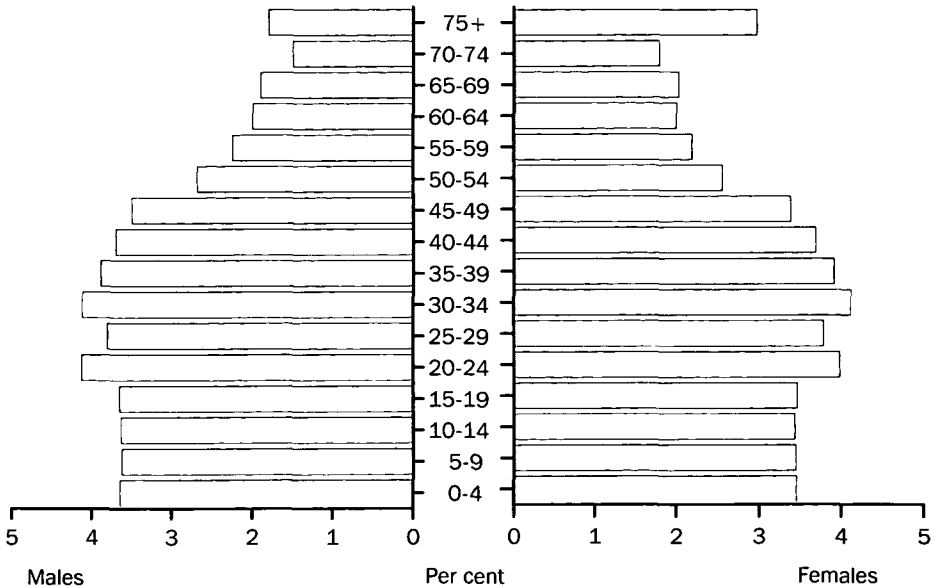
Indigenous population

Age group (years)



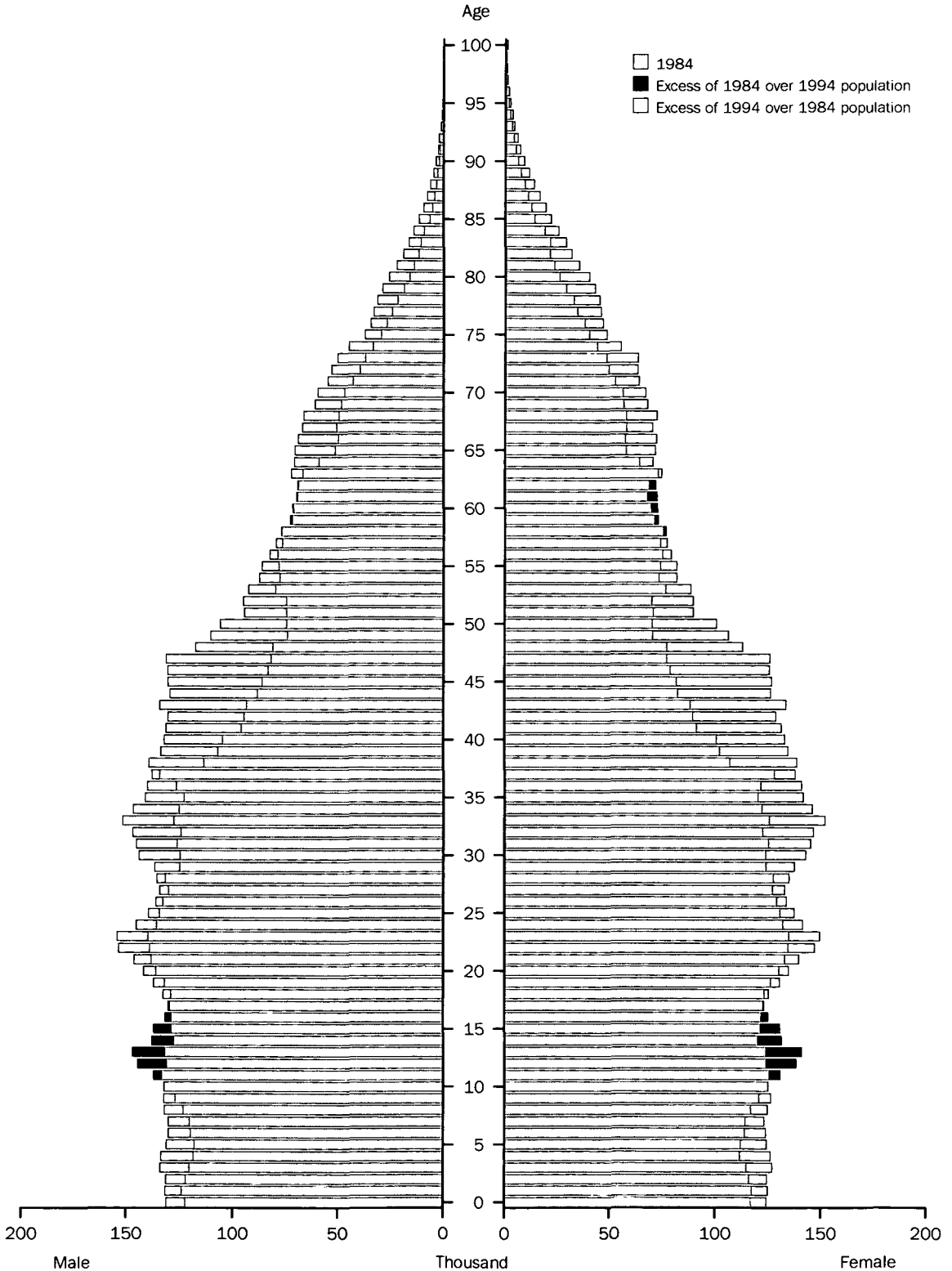
Non-indigenous population

Age groups (years)



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

5.8 Estimated resident population of Australia 30 June 1984 and 1994



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

5.9 Sex ratios, percentage age distribution and median ages

	Sex ratios at ages(a)					% of population aged				Median ages(b)
	0-14	15-44	45-64	>64	Total	0-14	15-44	45-64	>64	
1974	105.1	105.1	100.2	72.4	100.8	27.9	43.5	20.0	8.6	27.8
1984	104.9	103.2	101.6	72.3	99.7	24.0	46.8	19.1	10.1	30.5
1987	105.2	102.7	102.7	73.4	99.7	22.7	47.6	19.0	10.7	31.3
1988	105.3	102.5	102.9	73.7	99.6	22.4	47.8	19.0	10.8	31.6
1989	105.3	102.3	103.0	74.1	99.5	22.2	47.8	19.0	11.0	31.8
1990	105.4	102.1	103.1	74.5	99.5	22.0	47.8	19.1	11.1	32.1
1991	105.5	101.8	103.0	75.0	99.4	21.9	47.5	19.3	11.3	32.4
1992	105.4	101.7	103.0	75.5	99.3	21.8	47.1	19.7	11.5	32.7
1993	105.4	101.6	103.0	76.0	99.3	21.7	46.7	20.0	11.7	33.0
1994	105.4	101.5	102.8	76.4	99.2	21.6	46.3	20.4	11.8	33.4

(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

	1974	1984	1988	1989	1990	1991	1992	1993	1994
0-14	44.3	43.9	36.4	33.1	32.9	32.8	32.6	32.6	32.3
>64	11.2	13.6	15.3	16.4	16.6	16.9	17.2	17.5	17.7
Total	55.5	57.4	51.7	49.6	49.5	49.7	49.8	50.1	50.1

(a) A dependency ratio is the ratio of the dependent 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

For the first time this publication contains estimates of households and the household population on a usual residence basis from 1986 to 1994. The household population is the resident population of Australia that usually lives in private dwellings. Most previous ABS estimates of household numbers were based on census counts of households according to the household structure and place of enumeration on Census night, and were not calculated on the basis of usual residence.

Household estimates calculated on the basis of usual residence address the problem of people who are temporarily absent from their usual residence on Census night. This includes Australian residents temporarily overseas and households staying in a non-private dwelling.

Table 5.11 shows that the estimated number of households in Australia on 30 June 1994, calculated on the basis of usual residence, was 6,636,100, an increase of 1,007,200 households

(17.9%) from 1986, and an increase of 464,000 households (7.5%) from 1991. At 30 June 1994, 98% of Australia's population was living in a private dwelling.

The incidence of household formation in Australia has been exceeding population growth rates. This has been acting in concert with the average number of persons per household declining from 2.79 in 1986 to 2.63 in 1994. Much of the decline in the number of persons per household can be attributed to reductions in 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 51.7% of all households in 1986 to 52.9% at the 1991 Census.

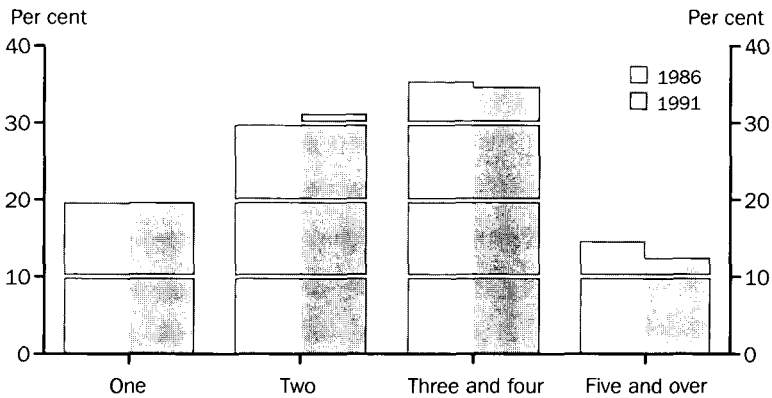
5.11 Persons(a) in private households

Year	Persons in private households	Private households	Persons per private household
1986(a)	15 690 731	5 628 900	2.79
1991(a)	16 929 354	6 172 100	2.74
1992	17 129 224	6 319 000	2.71
1993	17 291 646	6 425 500	2.69
1994	17 469 756	6 636 100	2.63

(a) Census counts, place of enumeration.

Source: ABS Household Estimates 1981-1994 (3229.0).

5.12 Proportion of households by number of persons



Source: 1991 Census Australia in Profile (2821.0).

Families

Figures from the 1986 Census indicate that 77% of households contained families. In the 1991 Census this had decreased to 73%. Only a small proportion of households include more than one family, about 2.4% at the 1986 Census, which declined further to 1.5% at the 1991 Census. The 1992 Family Survey indicated that 51.7% of families had dependent children. Among families with dependent children, 36.6% had one child and 63.4% had two or

more dependent children. Single-parent families comprised 13.0% of total families and were mostly composed of parent and dependent children (61.3%); the balance included an additional adult family member (38.7%).

Detailed information on the welfare of Australian families is contained in *Chapter 7, Social security and welfare*.

5.13 Family type and composition, 1992

Family type	No.	%
Families without dependent children		
Couple	1 619 981	33.9
Couple & adult family member	434 877	9.1
Related adults	255 189	5.3
Families with dependent children		
Couple & 1 dependent child	497 521	10.4
Couple & 2 or more dependent children	1 218 961	25.5
Couple & 1 dependent child & adult family member	193 494	4.1
Couple & 2 or more dependent children & adult family member	121 406	2.5
Single parent & 1 dependent child	185 776	3.9
Single parent & 2 or more dependent children	170 041	3.6
Single parent & 1 dependent child & adult family member	51 258	1.1
Single parent & 2 or more dependent children & 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
1974	245 177	115 833	129 344
1984	234 034	109 914	124 120
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
1993	260 229	121 599	138 630
1994	258 247	126 709	131 538

Source: Births, Australia (3301.0) and Deaths, Australia (3302.0).

Births

Recent fertility levels in Australia have been lower than at any time since records began. In 1994 the total fertility rate was 1.8 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)	Latest year
Australia	1.9	1992
New Zealand	2.1	1992
Canada	1.8	1992
United States of America	2.1	1992
United Kingdom	1.9	1992
China	2.2	1992
Japan	1.7	1992
Korea, Republic of	1.8	1992
Indonesia	3.1	1992
Papua New Guinea	4.9	1992

(a) The total fertility rate is the sum of the age-specific birth rates. 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 1994 (258,051) 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%, but since 1987 the rate has shown little change. Declines in the age-specific fertility rates between 1984 and 1994 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 65% (table 5.16).

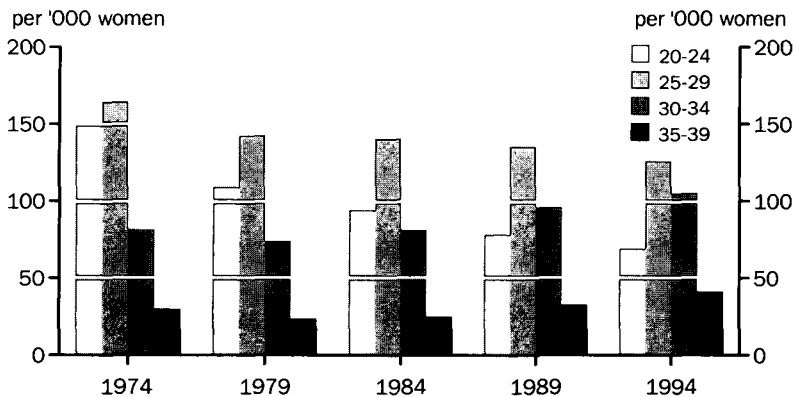
In 1984, 70% of all births were to mothers aged under 30 years. By 1994 the corresponding percentage was 58%. The 25 to 29 years age group remains the peak fertility group.

5.16 Age-specific birthrates and total fertility rate

Year	Age specific birth rate (per '000 women)							Total fertility rate (per woman)
	Age group (years)							
	15-19(a)	20-24	25-29	30-34	35-39	40-44	45-49(b)	
1974	45.2	150.1	164.5	81.5	30.0	7.4	0.5	2.40
1984	23.2	94.3	140.4	81.2	25.0	4.3	0.3	1.84
1988	20.3	81.5	136.9	93.3	30.5	4.6	0.2	1.84
1989	20.6	78.4	135.4	96.1	32.6	5.0	0.2	1.84
1990	22.1	79.4	137.9	101.7	34.7	5.5	0.2	1.91
1991	22.1	75.0	132.0	100.2	36.0	5.5	0.2	1.85
1992	21.9	74.9	132.6	104.6	38.4	6.1	0.3	1.89
1993	20.9	71.1	130.0	105.5	39.0	6.3	0.2	1.87
1994	20.7	69.2	126.0	105.1	41.2	6.7	0.3	1.85

(a) Includes births to mothers aged less than 15. (b) Includes births to mothers aged 50 and over.
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

Year	Ex-nuptial confinements		Married mothers — number of previous issue to the current marriage						Not stated	Total
	Number	% of total	0	1	2	3	4	>4		
1974	23 200	9.5	86 248	75 996	34 810	13 362	4 784	4 429	—	242 829
1984	34 337	14.8	79 295	69 312	33 027	10 802	3 013	1 825	32	231 643
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	81 356	67 459	33 066	10 856	2 874	1 688	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	23.0	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
1993	64 185	24.9	77 718	68 389	31 801	10 145	2 731	1 733	1	256 703
1994	65 387	25.6	77 166	67 123	31 118	9 598	2 500	1 655	—	254 547

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 1974 and 1984 in the proportion of nuptial confinements to women with larger families has since slowed considerably. Of the nuptial confinements registered in 1994, 76% resulted in first or second born children.

The median age of mothers and fathers has risen steadily since 1974.

5.19 Confinements — median age of parents

Year	Median age of mother			Median age of father			
	First nuptial	All nuptial	Ex-nuptial	Paternity acknowledged	Total	All nuptial	Paternity acknowledged
1974	23.9	25.9	21.1	n.a.	25.7	28.4	n.a.
1984	26.0	27.6	22.8	23.3	27.1	30.2	26.3
1988	27.1	28.6	23.7	24.2	27.9	31.0	27.0
1989	27.3	28.8	24.0	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
1993	28.3	29.7	24.5	24.8	28.9	32.0	27.5
1994	28.5	29.9	24.6	24.9	29.0	32.3	27.6

Source: Births, Australia (3301.0).

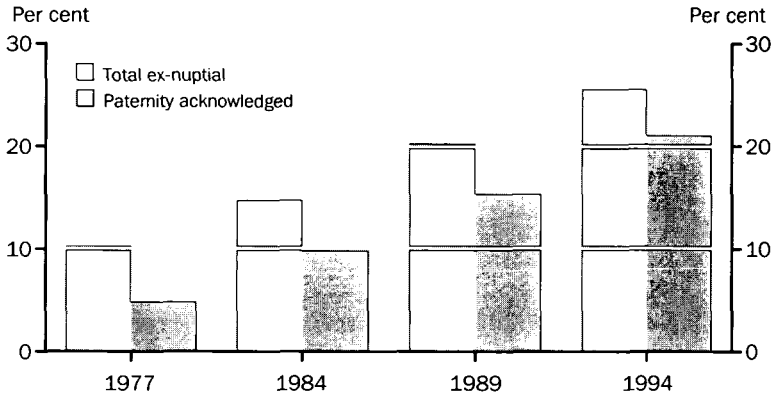
The long established upward trend in the proportion of births that are ex-nuptial is continuing. In 1994, 26% of all births registered were ex-nuptial. This compares with 15% in 1984. While the percentage of births that are ex-nuptial is increasing, the percentage of these births where paternity has been acknowledged has also increased substantially, from 67% in 1984 to 82% in 1994 (table 5.20).

5.20 Ex-nuptial births

Year	Ex-nuptial	Paternity acknowledged	
		Number	% of ex-nuptial births
1974	23 408	n.a.	n.a.
1984	34 629	23 200	67.0
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
1993	64 874	53 016	81.7
1994	66 092	54 333	82.2

Source: Births, Australia (3301.0).

5.21 Ex-nuptiality of births



Source: *Births, Australia (3301.0)*.

Deaths

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

The number of deaths registered in 1994 was 126,709, an increase of 4.2% from the previous year which, in terms of the crude death rate (the number of deaths per thousand mean population), 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.

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 1991 as the standard, the adjusted death rate fell from 12.8 per thousand in 1976 to 9.3 per thousand in 1986 and to 8.7 per thousand in 1994 for males; and from 7.6 in 1976 to 5.5 in 1986 and to 5.2 in 1994 per thousand for females during the same period.

One of the most important measures of mortality is the infant mortality rate, expressed as the number of deaths of infants under one year of age per thousand live births in a given year. There were 1,512 infant deaths registered in Australia in 1994, a 35% decrease on 1984 (2,327), and a 61.8% decrease from 1974 (3,958). The infant mortality rate fell from 16.1 in 1974 to 9.2 in 1984, and continued the established downward trend to 5.8 in 1994. The infant mortality rate for males fell from 10.5 in 1984 to 6.6 in 1994, and for females it fell from 7.9 to 5.2.

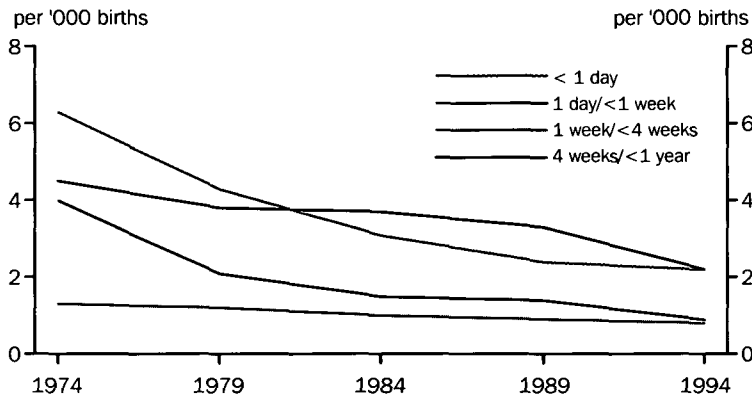
The greatest incidence of infant deaths occurs in the days and weeks immediately following birth. In 1994 neonatal deaths (deaths under 4 weeks of age) accounted for 63.6% of male infant deaths and 64.3% of female infant deaths. It has been in this area, however, that most improvements in infant mortality have been made over the last decade.

5.22 Infant mortality rates and expectation of life at birth, selected countries

	Infant mortality		Life expectancy at birth		
	Rate (per '000 live births)	Year	Males	Females	Year
Australia	5.8	1994	75.0	80.9	1994
New Zealand	8.3	1991	71.9	78.0	1988-90
Canada	6.8	1990	74.0	80.8	1990
United States of America	8.4	1992	72.0	78.9	1991
United Kingdom	6.6	1992	73.5	79.1	1992
China	32.0	1985-90	68.0	70.9	1985-90
Japan	4.5	1992	76.1	82.2	1992
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)*.

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 1994, 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 34 years where in 1994 the female rate was 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.

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 72.6 years to 75.0 years between the periods 1984 and 1994, and correspondingly for females from 79.1 years to 80.9 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 10.4 per thousand and 7.9 per thousand for males and females, respectively in 1984 to 6.6 and 5.2, respectively in 1994.

5.24 Age-specific death rates(a)

Age group (years)	1974	1984	1988	1989	1990	1991	1992	1993	1994
Males									
Under 1	18.4	10.4	9.7	8.8	9.1	7.9	7.9	6.9	6.5
1-14	1.7	1.1	1.0	0.9	0.9	0.8	0.8	0.9	0.8
15-19	1.6	1.0	1.1	1.0	0.9	0.9	0.8	0.8	0.8
20-24	1.7	1.5	1.6	1.4	1.4	1.3	1.2	1.2	1.1
25-29	1.4	1.2	1.5	1.5	1.4	1.3	1.3	1.2	1.2
30-34	1.5	1.3	1.4	1.4	1.4	1.3	1.4	1.4	1.3
35-39	2.1	1.4	1.5	1.7	1.5	1.6	1.5	1.5	1.6
40-44	3.4	2.4	2.3	1.9	2.1	2.0	2.0	1.9	2.0
45-49	6.1	3.8	3.4	3.3	3.1	3.1	3.0	2.8	2.8
50-54	9.9	6.8	6.0	5.7	5.4	5.2	5.1	4.8	4.6
55-59	16.2	11.8	10.1	9.9	9.5	8.9	8.7	8.4	8.0
60-64	26.1	18.9	17.2	16.6	16.0	15.4	15.2	14.3	14.1
65-69	40.0	29.9	27.2	27.3	26.2	24.9	25.0	23.7	23.7
70-74	63.2	48.5	45.0	45.2	41.2	39.3	39.8	38.0	38.4
75-79	96.6	75.4	72.4	72.6	67.5	65.5	66.4	62.4	63.8
80-84	147.4	115.6	110.9	114.0	104.8	105.5	104.4	100.9	102.7
85+	245.6	203.6	189.0	200.0	183.9	175.7	180.5	177.0	187.5
Females									
Under 1	13.7	7.9	7.5	7.1	7.2	6.3	6.0	5.3	5.2
1-14	1.3	0.8	0.8	0.8	0.6	0.5	0.7	0.6	0.6
15-19	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
20-24	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
25-29	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
30-34	0.8	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.5
35-39	1.3	0.9	0.8	0.8	0.8	0.8	0.7	0.8	0.8
40-44	2.1	1.4	1.2	1.3	1.1	1.1	1.1	1.1	1.1
45-49	3.6	2.2	2.1	2.1	1.9	1.9	1.8	1.7	1.8
50-54	5.5	3.8	3.4	3.3	3.3	3.1	3.1	2.8	2.8
55-59	8.3	5.7	5.5	5.3	5.0	4.8	4.9	4.7	4.6
60-64	12.5	9.5	8.7	8.7	8.1	8.0	7.8	7.7	7.4
65-69	20.3	15.2	13.9	13.8	13.4	13.0	12.7	12.2	12.3
70-74	33.3	25.2	23.5	24.2	22.8	21.9	21.7	20.8	20.5
75-79	56.3	41.3	41.1	40.8	39.2	38.0	38.0	36.2	36.1
80-84	100.0	76.4	71.7	72.9	67.2	64.9	67.3	64.4	66.2
85+	195.1	158.4	149.5	159.9	149.6	143.5	148.9	141.4	150.0

(a) Deaths per 1 000 mid-year population.

Source: Deaths, Australia (3302.0).

5.25 Life expectancy at various ages (years)

Year	At age 0		At age 1		At age 25		At age 45		At age 65	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1974	68.4	75.4	68.8	75.5	46.1	52.2	27.5	33.2	12.6	16.5
1984	72.6	79.1	72.4	78.7	49.3	55.2	30.5	35.9	14.4	18.5
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
1993	75.0	80.9	74.5	80.3	51.3	56.7	32.5	37.4	15.7	19.5
1994	75.0	80.9	74.5	80.4	51.3	57.2	32.6	37.7	15.7	19.7

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 1994 collectively accounted for 60.8% of deaths registered.

Detailed information on causes of death is contained in *Chapter 8, Health*.

Marriages and divorces

Registered marital status of the population

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

5.26 Estimated resident population aged 15 and over by marital status and sex at 30 June ('000)

Year	Never married	Married	Widowed	Divorced	Total
Males					
1984	1 880.8	3 606.1	142.1	236.3	5 865.3
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
1992	2 281.9	3 969.2	167.0	341.5	6 759.6
1993	2 319.3	3 990.3	168.7	359.5	6 832.7
1994p	2 357.0	4 007.3	170.9	378.9	6 914.1
Females					
1984	1 427.9	3 616.9	642.9	290.6	5 978.3
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
1992	1 828.1	3 984.5	685.5	421.1	6 919.2
1993	1 858.2	4 007.3	689.7	442.7	6 997.9
1994p	1 897.2	4 026.3	694.8	466.0	7 084.2

Source: *Marriages and Divorces, Australia (3310.0)*.

Between 1984 and 1994 the total population aged 15 years and over increased by 18.2%. Of these, the numbers of persons never married, married, widowed and divorced increased by 28.6%, 11.2%, 10.3% and 60.4 %, 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.

The number of females exceeds the number of 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.

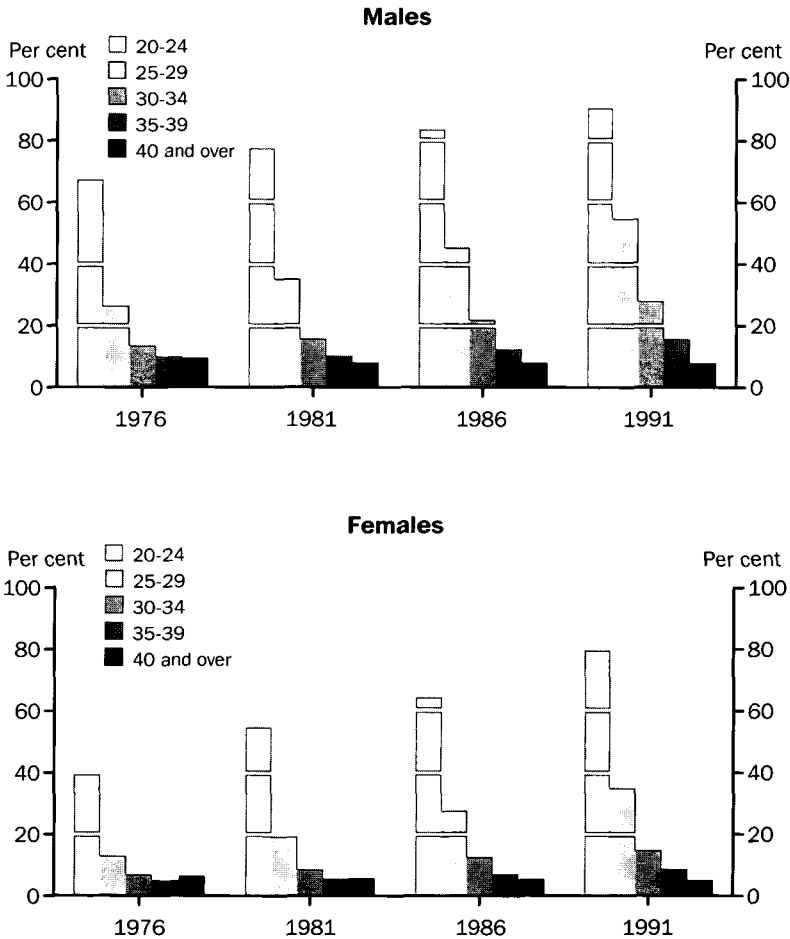
Marriages

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 the 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 111,174 marriages in 1994), the crude marriage rate (number of marriages per thousand mean population) has continued to

drop. In 1994 it was 6.2 per thousand mean population, a fall from 8.1 in 1974 and 7.0 in 1984.

The passing of the Family Law Act in 1976 had a significant effect on the composition of marriages. Prior to the Act 80–85% of marriages were first marriages for both partners, but after 1976 this proportion fell to 65–70%. In 1994 the figure was 67.5% (table 5.28).

5.27 Proportion of persons never married by age group, at 30 June



Source: *Marriages and Divorces, Australia* (3310.0).

5.28 Marriages registered — relative previous marital status and crude marriage rate

Year	Both partners never married		One or both partners previously married		All marriages	Crude marriage rate (per '000 mean population)
	No.	%	No.	%		
1974	92 367	83.5	18 306	16.5	110 673	8.1
1984	72 540	66.8	36 115	33.2	108 655	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
1993	75 968	67.1	37 287	32.9	113 255	6.4
1994	75 045	67.5	36 129	32.5	111 174	6.2

Source: *Marriages and Divorces, Australia (3310.0)*.

Since 1971 there has been a reversal in the post-war 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 1974 to

27.2 years in 1994 for males and from 20.9 to 25.1 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

	Median age of bridegrooms				Median age of brides			
	Never married	Widowers	Divorced	Total	Never married	Widows	Divorced	Total
1974	23.3	58.1	36.7	23.8	20.9	51.2	33.0	21.4
1984	25.1	60.4	37.1	26.7	22.9	52.3	33.9	24.2
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
1993	27.0	62.0	40.4	28.8	24.8	52.8	36.8	26.4
1994	27.2	62.1	40.9	29.0	25.1	53.9	37.4	26.6

Source: *Marriages and Divorces, Australia (3310.0)*.

The first marriage rate enables a comparison of each age group of the population of either sex marrying for the first time. The number of people marrying for the first time continued to decline in 1994. When compared with ten years ago, first marriage rates for both men and women declined in all age groups with the exception of the 35–39 years age group for men and 30–34 years age group for women.

In 1994 the peak age group for men, 25–29 years, remained the same as in 1984 (88 per 1,000 population in 1994 compared with 106 per 1,000 in 1984). Women are waiting longer before marrying as the peak group for women, over the same period, changed from

the 20–24 years age group to the 25–29 years age group. The rate for the 20–24 years age group was only 68 per 1,000 in 1994 compared with 117 in 1984. For the peak group, the 25–29 years age group, first marriage rates were 105 per 1,000 in 1994 compared with 113 in 1984.

The first marriage rates for both sexes reflect the increasing median age at first marriage, and that the falling 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).

5.30 First marriage rates(a)

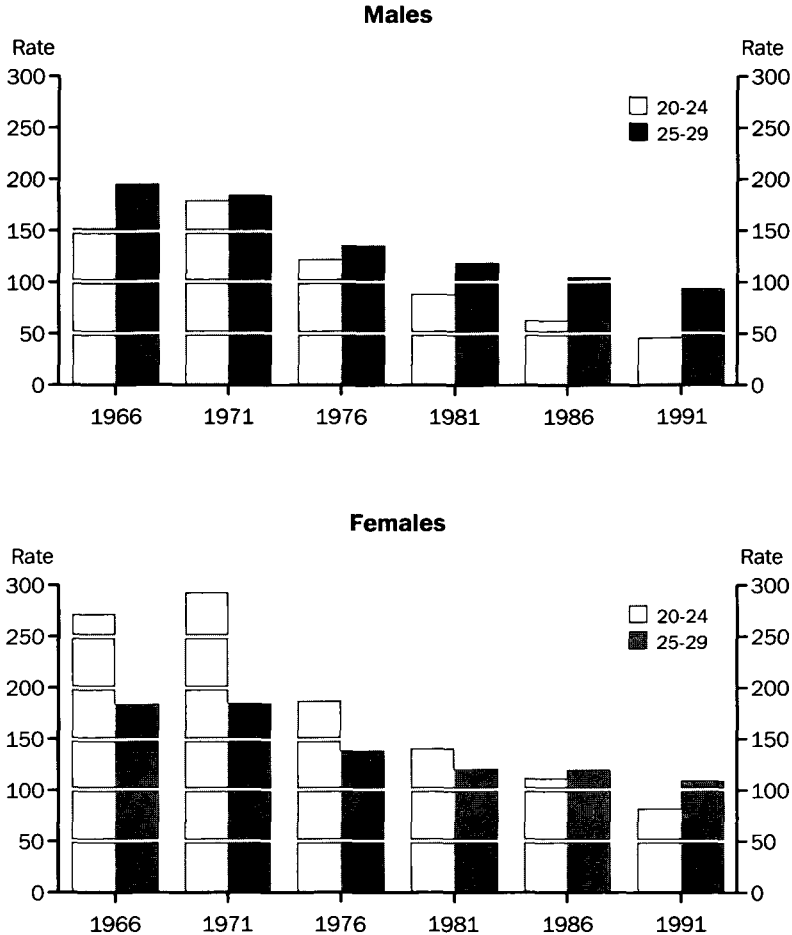
Year	To 19	20-24	25-29	30-34	35-39	40-44	45-49	50+
Males								
1976	9.9	122.6	135.9	81.8	45.9	25.5	15.7	6.4
1984	3.1	68.0	105.6	73.8	41.1	21.3	12.7	4.7
1988	2.4	55.7	100.8	78.0	44.7	23.0	13.2	4.2
1989	2.2	53.8	98.2	78.0	43.8	23.3	13.9	4.3
1990	2.1	48.8	95.8	74.3	43.9	22.7	13.3	4.4
1991	1.9	46.6	94.0	73.0	42.5	21.7	12.6	3.8
1992	1.5	43.3	93.3	74.3	41.2	22.3	12.3	3.7
1993	1.4	40.5	90.4	72.3	42.0	21.9	12.1	4.0
1994	1.2	36.9	87.7	71.5	41.2	21.0	11.2	3.7
Females								
1976	49.0	187.5	138.8	86.5	49.8	26.3	15.5	3.9
1984	19.2	117.0	113.2	67.9	37.2	20.6	12.0	2.1
1988	12.9	99.9	119.8	76.4	41.0	21.2	12.6	2.4
1989	12.1	94.4	116.1	75.9	41.7	21.4	11.6	2.0
1990	10.7	85.9	119.0	79.5	40.8	20.6	12.8	2.2
1991	9.5	82.4	109.6	69.4	36.6	16.8	11.0	2.1
1992	8.0	77.9	109.8	70.3	36.3	18.7	10.9	2.0
1993	7.4	73.7	105.9	69.8	35.6	17.8	9.8	2.3
1994	6.6	67.7	104.7	69.0	35.5	17.0	10.1	2.0

(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.
Source: *Marriages and Divorces, Australia (3310.0)*.

The decline in first marriage rates 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 (5% of total couples). In 1992, the number of de facto couples had increased to 344,400 (8% of total couples).

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 1994 the number of divorces granted was 48,256.

5.32 Divorces

Year	Number
1974	17 744
1984	43 124
1988	41 007
1989	41 383
1990	42 635
1991	45 630
1992	45 665
1993	48 324
1994	48 256

Source: *Marriage and Divorces, Australia (3310.0)*.

The median duration of marriage of divorcing couples decreased from 11.8 years in 1974 to 10.9 years in 1994.

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 19.7% in 1994 and within the first 10 years it was 46.4% (table 5.33).

5.33 Divorces — duration of marriage (%)

Year	Duration of marriage (years)					Total	Median
	<5	5-9	10-14	15-19	>19		
At date decree made absolute							
1974	9.4	31.7	20.2	13.5	25.2	100.0	11.8
1984	20.8	26.6	19.6	13.8	19.1	100.0	10.6
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
1993	20.5	26.3	18.1	12.9	22.1	100.0	10.7
1994	19.7	26.7	18.7	12.5	22.5	100.0	10.9
At date of final separation							
1974	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1984	36.9	22.7	16.8	11.1	12.5	100.0	7.7
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
1993	37.4	22.1	14.3	11.8	14.4	100.0	7.6
1994	37.0	22.2	14.5	11.5	14.8	100.0	7.7

Source: *Marriage and Divorces, Australia (3310.0)*.

The highest divorce rates for males occurred in the 30-34 year age group (20.2 per thousand married men), while for females they occurred in the under 25-29 year age group (21.7 per thousand married women). The incidence of divorce in 1994 was

12.0 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

Year	Age group (years)									Total
	<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	>59	
Husband										
1984	12.9	20.8	19.6	17.0	14.5	11.7	8.3	6.0	2.4	12.0
1988	12.6	19.3	18.3	15.6	13.3	11.0	8.0	5.2	2.1	10.8
1989	10.7	19.0	18.1	15.4	13.5	11.2	8.1	5.6	2.1	10.8
1990	9.9	19.4	18.4	15.8	13.8	11.7	8.5	5.6	2.0	10.9
1991	10.6	20.5	19.7	17.0	14.7	12.5	9.0	5.9	2.2	11.6
1992	10.6	19.9	19.5	17.4	14.7	12.5	9.3	6.0	2.2	11.5
1993	11.5	20.3	20.5	17.7	16.2	13.3	10.2	6.5	2.4	12.1
1994	10.6	20.1	20.2	18.0	16.1	13.5	10.5	6.7	2.4	12.0
Wife										
1984	16.8	21.2	17.7	15.5	13.3	9.7	6.1	4.0	1.8	11.9
1988	17.0	19.6	16.6	14.1	12.0	9.5	5.7	3.6	1.4	10.8
1989	15.1	19.8	16.5	14.2	12.3	9.4	6.1	3.6	1.4	10.7
1990	15.1	20.5	16.8	14.4	12.7	9.7	6.3	3.6	1.3	10.9
1991	16.1	21.5	18.3	15.6	13.5	10.6	6.5	3.8	1.4	11.5
1992	16.2	21.4	18.1	15.9	13.4	10.7	6.9	3.8	1.4	11.5
1993	16.6	21.9	19.1	16.9	14.4	11.7	7.4	4.2	1.6	12.1
1994	15.9	21.7	19.1	16.8	14.9	11.7	8.0	4.3	1.5	12.0

Source: *Marriage and Divorces, Australia (3310.0)*.

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 reducing the proportion of divorcing couples with children. The proportion of

divorces in which children were involved declined from 61.0% in 1984 to 52.6% in 1993. The average number of children per divorce involving children from 1984 to 1993 has continued to remain at 1.9 (table 5.35).

5.35 Divorces — number of children of the marriage

Year	Number of children (%)					Total divorces	Total children	Average no. of children(a)
	0	1	2	3	4+			
1974	31.7	23.4	25.1	12.4	4.9	17 688	25 505	2.1
1984	39.1	21.6	26.2	9.8	3.3	43 124	50 713	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
1993	47.4	20.0	21.8	8.2	2.7	48 324	40 055	1.9

(a) Divorces involving one or more children.

Source: *Marriage and Divorces, Australia (3310.0)*.

Remarriages

In the decade to 1994, 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 1994 total of 36,129 remarriages, which represented 32.5% of all marriages, is similar to the number of remarriages in 1984 which was 36,115 or 33.2% of all marriages (table 5.36).

The reason for the sudden rise in remarriages at the beginning of the 1980s was 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).

5.36 Marriages in which one or both partners have been previously married

Year	Both partners divorced		One partner divorced		Other(a)		Total
	No.	%	No.	%	No.	%	
1974	3 523	19.3	11 266	61.5	3 517	19.2	18 306
1984	11 956	33.1	21 814	60.3	2 390	6.6	36 160
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
1993	12 548	33.1	23 227	61.2	2 151	5.7	37 926
1994	12 405	34.3	21 717	60.1	2 007	5.6	36 129

(a) Includes 'not stated' previous marital status.

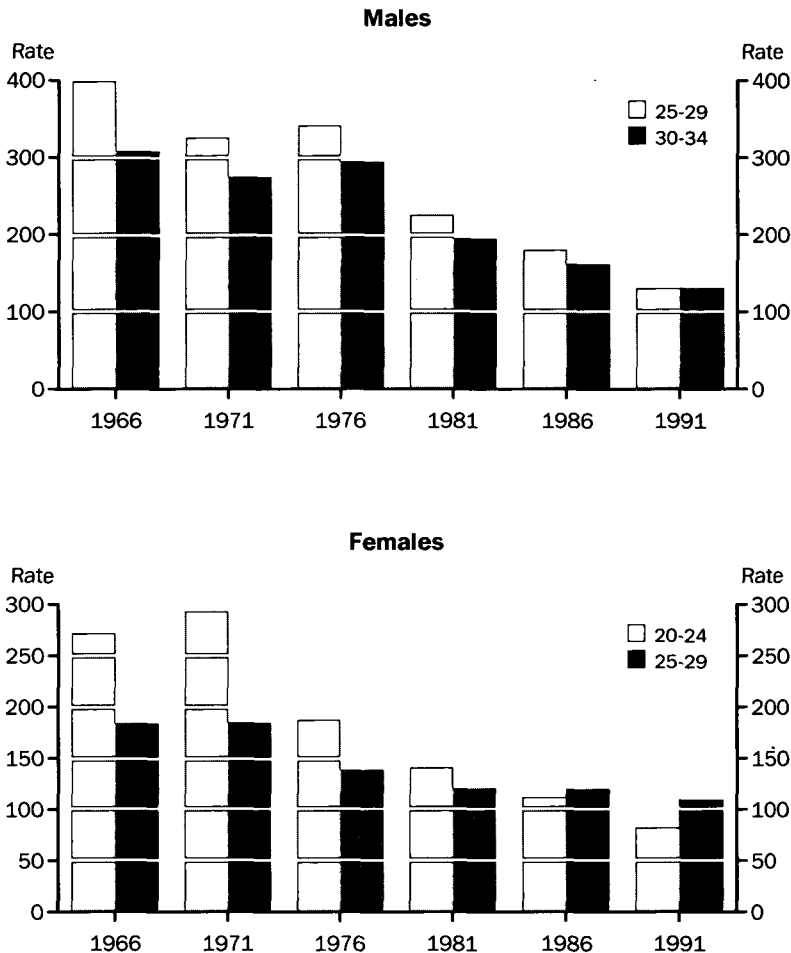
Source: *Marriages and Divorces, Australia* (3310.0).

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 48.5 per thousand widowed and divorced male population in 1994, down from 70.0 in 1984. The female rate has fallen from 27.1 in 1984 to 21.9 in 1994. 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.

Remarriage rates for both men and women, after divorce or widowhood, also continued to fall in 1994. When 1994 and 1984 are

compared remarriage rates declined in all age groups for men and in all but two of the older age groups for women (50–54 and 55–59 years age groups). In 1994 the peak remarriage age group for men was the 30–34 years age group (114 per 1,000 population) and for women the 25–29 years age group (115 per 1,000). Ten years ago, for both men and women, the peak remarriage age groups were to be found in the preceding age group. In 1984 the peak remarriage age group for men was the 25–29 years age group (193 per 1,000 population), while the peak group for women was the 20–24 years age group (181 per 1,000 population).

5.37 Remarriage rates(a): selected age groups



(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* and *Migration Reform Act 1992*. 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 (10.8 million in 1994), 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 41.5% of the total population increase between 1984 and 1994.

5.38 Overseas migration — net permanent and long-term movement

	1984	1989	1990	1991	1992	1993	1994
Arrivals							
Permanent	68 810	145 320	121 230	121 690	107 390	76 330	69 770
Long-term	76 470	104 570	110 690	114 710	126 780	127 440	137 600
Total	145 280	249 880	231 920	236 400	234 170	203 770	207 370
Departures							
Permanent	24 300	21 650	27 860	31 130	29 120	27 910	27 280
Long-term	74 440	90 990	100 200	110 510	115 160	113 190	112 710
Total	98 750	112 640	128 060	141 640	144 280	141 100	139 990
Net permanent & long-term migration	46 530	137 240	103 870	94 760	89 890	62 670	67 380
Category jumping(a)	2 560	20 195	20 781	-8 325	-20 892	-32 213	-20 619
Net overseas migration gain	49 090	157 435	124 651	86 435	68 998	30 457	46 761

(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 (3401.0).

Birthplace of the population

At the 1947 Census, the proportion of the population (excluding some Aboriginal people) born in Australia had risen to its highest level (90.2%) since the beginning of European settlement and 97.9% 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% 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 1994, from 7.7% to 8.4%. However,

overseas-born persons from other countries increased from 2.1% to 14.4% during the same period. Overseas countries of birth contributing 0.1% or more of the total population — apart from the United Kingdom, Ireland and New Zealand — increased in number from 4 in 1947 to 40 in 1994.

The largest overseas-born group at the present time remains those born in the United Kingdom and Ireland, comprising 1,216 100 or 6.8% of the population in 1994. By comparison, the second largest overseas-born group, New Zealanders, comprised only 1.6% of the Australian population in 1994 (285,500). 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% in 1982 to 13.3% in 1994, 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	1984	1989	1990	1991	1992	1993	1994(p)
Australia	12 300.4	13 041.2	13 179.5	13 318.8	13 470.9	13 623.4	13 779.6
Overseas							
UK & Ireland	1 189.4	1 225.8	1 238.6	1 244.3	1 236.2	1 224.7	1 216.1
New Zealand	189.1	280.2	287.2	286.4	285.5	284.4	285.5
Italy	278.4	272.5	271.7	272.0	269.3	266.6	263.9
Former Yugoslav Republics	157.7	166.1	167.3	168.0	169.4	171.7	174.8
Greece	149.9	148.2	147.9	147.4	146.5	145.7	145.2
Viet Nam	72.4	103.9	114.3	124.8	133.1	137.3	142.0
Germany	120.8	121.3	121.2	120.4	119.9	119.2	118.8
Netherlands	102.0	100.6	100.4	100.9	100.0	98.9	98.2
Philippines	25.6	64.2	71.5	79.1	83.6	85.5	88.4
Malaysia	43.1	69.2	75.7	79.9	83.0	84.7	88.0
Lebanon	55.2	72.3	75.3	78.5	79.4	80.1	80.9
Other	895.2	1 149.0	1 214.5	1 263.6	1 312.3	1 334.2	1 361.8
Total overseas	3 279.0	3 773.3	3 885.6	3 965.3	4 018.2	4 033.0	4 063.6
Total	15 579.4	16 814.4	17 065.1	17 284.0	17 489.1	17 656.4	17 843.3

Source: Migration, Australia (3412.0).

Of Northeast, Southeast and Southern Asia, the people born in Southeast Asia comprise the greatest numbers in the Australian population. In 1994 there were 446,760 people from Southeast Asia, an increase of 236,640 or 113% since 1984. However, the group with the highest percentage increase over the same period is Northeast Asia, which has risen by 245% from 70,620 in 1984 to 243,380 in 1994. 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 93% from 70,430 in 1984 to 135,960 in 1994. Predominant countries of birth of Australia's Northeast, Southeast and Southern Asia populations are Viet Nam (142,010), China (9,350), Philippines (88,420), Malaysia (88,040), Hong Kong (85,830) and India (74,890).

In June 1994, the median age of the overseas-born population was 43.6 years, almost 10 years older than the median

(33.4 years) for the population as a whole. The median age of the Australian-born population was 29.5 years. Australia's high levels of post-war immigration has contributed to this median age differential, where migrants who predominantly arrived as adults in the 1950's and 1960's are starting to swell the numbers at older ages. Overseas-born population groups from recent source countries, for example, Lebanon, South Africa, and those in Southeast Asia and South America are noticeably younger than those from European sources.

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

5.40 Birthplace of parents of Australian-born persons(a)

Birthplace of parents	No.	%
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: Census 1991, 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% of settler arrivals, however, by 1994 this contribution had fallen to 13.2%. 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 29.5% of all settler arrivals in 1994. 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. However,

there have 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 Southeast, Northeast and Southern Asia have increased substantially. In 1982, European-born settlers accounted for 54.5% of arrivals in Australia, compared with only 3.3% from Northeast Asia. By 1994, Northeast Asia alone accounted for 11% of total settler arrivals compared with 29.5% 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% of arrivals from Northeast Asia. The level of Vietnamese-born settlers arriving in Australia has been consistently high since 1984 when the intake was 9,900 compared to 5,350 in 1994, accounting for 36.2% of arrivals from Southeast Asia. Indian-born settlers have increased from 1,730 in 1984 to 3,128 in 1994 accounting for 49% of arrivals from Southern Asia. Other countries belonging to the three Asian regions from where settler arrivals have increased between 1984 and 1994 were China, the Philippines, Taiwan and Malaysia.

5.41 Birthplace of settler arrivals(a)

Birthplace	1974	1982	1984	1989	1990	1991	1992	1993	1994
No.									
United Kingdom & Ireland	53 230	34 800	11 750	26 490	23 530	18 940	12 290	9 240	10 330
Hong Kong	950	1 350	3 070	7 400	10 520	14 490	9 820	3 830	3 640
Viet Nam	n.a.	8 380	9 900	10 050	13 730	10 670	7 390	5 660	5 350
New Zealand	3 400	9 810	6 860	17 340	8 970	6 730	7 310	6 840	8 970
India	2 580	1 620	1 730	2 990	3 760	5 790	5 110	2 490	3 130
Philippines	770	3 090	2 950	6 940	6 150	6 480	4 930	3 740	4 050
China	n.a.	1 070	2 600	3 440	3 270	3 390	3 360	2 580	2 940
Former USSR & Baltic States	250	240	150	1 530	1 200	1 550	3 320	1 820	2 350
Former Yugoslav Republics	65 207	1 520	1 310	2 180	1 830	2 300	3 000	4 600	2 870
Sri Lanka	1660	540	2 570	2 010	3 120	2 800	2 490	1 150	1 830
Taiwan	n.a.	140	180	2 910	3 140	3 710	2 220	910	710
Malaysia	1 090	2 120	1 870	6 920	6 210	4 380	2 170	1 310	1 160
Fiji	300	720	580	2 510	2 510	2 460	1 940	1 270	1 280
Poland	440	6 190	1 380	1 590	1 570	1 820	1 540	670	660
United States of America	3 620	1 960	1 570	1 960	1 980	1 710	1 530	1 270	1 550
South Africa	1 250	3 060	1 360	2 680	2 150	1 700	1 240	990	2 390
Lebanon	3 000	830	2 440	2 270	2 610	2 420	1 120	1 030	1 150
Germany, Fed. Rep.	1 890	4 040	1 140	1 150	970	860	730	610	780
Italy	3 070	830	510	340	340	310	290	240	360
Greece	3 700	660	650	520	350	300	230	270	260
Other	33 600	24 200	18 570	27 840	23 650	23 840	22 220	15 160	21 080
Total	121 320	107 170	73 110	131 060	121 560	116 650	94 250	65 680	77 940
%									
United Kingdom & Ireland	43.9	32.5	16.1	20.2	19.4	16.2	13.0	14.0	13.3
Hong Kong	0.8	1.3	4.2	5.6	8.7	12.4	10.4	5.8	4.7
Viet Nam	n.a.	7.8	13.5	7.7	11.3	9.1	7.8	8.6	6.9
New Zealand	2.8	9.2	9.4	13.2	7.4	5.8	7.8	10.4	11.5
India	2.1	1.5	2.4	2.3	3.1	5.0	5.4	3.8	4.0
Philippines	0.6	2.9	4.0	5.3	5.1	5.6	5.2	5.7	5.2
China	n.a.	1.0	3.5	2.6	2.7	2.9	3.6	3.9	3.8
Former USSR & Baltic States	0.2	0.2	0.2	1.2	1.0	1.3	3.5	2.8	4.4
Former Yugoslav Republics	5.4	1.4	1.8	1.7	1.5	2.0	3.2	7.0	3.7
Sri Lanka	1.4	0.5	3.5	1.5	2.6	2.4	2.6	1.8	2.3
Taiwan	n.a.	0.1	0.2	2.2	2.6	3.2	2.4	1.4	0.9
Malaysia	0.9	2.0	2.6	5.3	5.1	3.8	2.3	2.0	1.5
Fiji	0.2	0.7	0.8	1.9	2.1	2.1	2.1	1.9	1.6
Poland	0.4	5.8	1.9	1.2	1.3	1.6	1.6	1.0	0.8
United States of America	3.0	1.8	2.1	1.5	1.6	1.5	1.6	1.9	2.0
South Africa	1.0	2.9	1.9	2.0	1.8	1.5	1.3	1.5	3.1
Lebanon	2.5	0.8	3.3	1.7	2.1	2.1	1.2	1.6	1.5
Germany, Fed. Rep.	1.6	3.8	1.6	0.9	0.8	0.7	0.8	0.9	1.0
Italy	2.5	0.8	0.7	0.3	0.3	0.3	0.3	0.4	0.5
Greece	3.0	0.6	0.9	0.4	0.3	0.3	0.2	0.4	0.3
Other	27.7	22.6	25.4	21.2	19.5	20.4	23.6	23.1	27.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Permanent arrivals only.

Source: *Migration, Australia (3412.0)*.

Since 1979, family immigration has increased in importance, with migration of family members now amounting to over 40% 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 9.4% of total permanent settlement in 1984, peaking at 24,870 in 1988 (16.4%) and falling to 11.5% in 1994.

The age composition of settlers arriving 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 4.8% of migrants arriving in 1984, which contrasts with the proportion of this age group of Australia's total population in the same year, which was 10.7%. In 1994, only 3.3% of settlers were aged 65 years and over, whereas the proportion of the total population had risen to 11.8%.

5.42 Permanent arrivals, distribution by age and sex (%)

Year	Age group (years)							Total
	0-14	15-24	25-34	35-44	45-54	55-64	>64	
Males								
1972	29.6	24.7	24.5	11.4	4.7	2.7	2.4	57 820
1984	30.2	18.3	24.3	13.5	4.9	4.4	4.4	35 530
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
1993	26.8	15.2	30.7	14.4	5.9	3.9	3.2	30 860
1994	26.0	14.4	31.4	15.5	5.6	4.0	3.1	36 880
Females								
1972	29.3	26.3	22.2	9.5	5.0	4.4	3.3	54 650
1984	27.3	18.7	25.1	12.1	5.1	6.5	5.2	37 580
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
1993	22.2	20.3	30.9	13.1	5.7	4.6	3.3	34 810
1994	23.0	18.7	30.6	13.9	5.7	4.6	3.5	41 060

Source: Unpublished ABS Overseas Arrivals and Departures data.

Despite the comparative youthfulness of the settlers, their median age has been rising. Since 1984, when the numbers of migrants under the 'family reunion' category began to increase, the median age of settlers has risen from 26.1 years to 28.1 years in 1994. Settlers in the 15-24 year age group increased by 10% in 1994 compared to 1991 and those in the 25-44 year age group decreased by 11.5% over the same period. Conversely, the 45-64 and 65 plus year age groups increased over the same period by 36.1% and 32.0% respectively.

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 1994 the sex ratio was 89.7 males per 100 females. In 1994, males predominated in only the 0 to 14 year age group.

5.43 Permanent arrivals — sex ratios(a) by age

Year	Age group (years)							Total
	0-14	15-24	25-34	35-44	45-54	55-64	>64	
1972	106.9	99.1	117.1	126.8	101.0	65.6	74.9	105.8
1984	104.9	92.2	91.6	105.0	91.6	64.2	79.2	94.5
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
1993	107.0	66.4	87.9	97.4	91.9	76.3	86.0	88.7
1994	105.0	67.6	90.7	99.6	89.8	79.1	83.4	89.7

(a) The number of males per 100 females.

Source: Unpublished ABS Overseas Arrivals and Departures data.

Refugees

Australia's Humanitarian Program consists of three main categories: Refugee, Special Humanitarian and Special Assistance Categories. 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 1993-94 was 11,350 persons, an increase of 3.8% from 1992-93 (10,939), and an increase of 58.6% from 1991-92 (7,157). This was a reflection of the large increase in numbers from the former Yugoslav Republics (3,655) and the former USSR and Baltic States (820), which together made up 39.5% of Australia's total refugee intake for 1993-94. Refugees from Asian regions were in similar numbers to the previous year, although their proportion of total refugee arrivals was down from 76% in 1982-83, to 44% in 1991-92 and 37% in 1993-94.

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 — years ended 30 June

Birthplace	1989	1990	1991	1992	1993	1994
Romania	280	311	38	82	9	—
Former USSR & Baltic States	475	1 065	97	18	1 605	820
Former Yugoslav Republics	4	5	—	337	3 133	3 665
Iran	521	321	338	318	97	156
Iraq	33	58	98	1 231	1 333	949
Lebanon	91	484	1 147	230	8	4
Indonesia	36	17	15	130	446	148
Cambodia	1 217	172	35	14	5	452
Laos	352	241	301	197	23	46
Viet Nam	3 851	5 679	3 126	1 561	1 902	2 298
Chile	361	109	—	—	—	—
El Salvador	1 492	1 848	1 460	1 194	343	95
Ethiopia	62	111	111	210	493	440
Other	2 093	1 527	967	1 633	1 540	2 277
Total	10 868	11 948	7 745	7 157	10 939	11 350

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 1984 and 1994, total permanent departures numbered 268,820 persons or an average of 24,438 per year, a level which is 23.5% of the total permanent arrivals over this period. The ratio of permanent departures to permanent arrivals in 1994 was 34.7%. The highest ratio in the post World War II period was recorded in 1975 (53.7%).

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 1984 and 1994, 'former settlers' represented 50.6% 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 14,280 in 1994.

5.45 Permanent departures and arrivals

Year	Permanent departures			Permanent arrivals	Departures as % of arrivals
	Former settlers	Other residents	Total		
1972	33 170	12 710	45 880	112 470	40.8
1984	12 550	9 760	22 310	73 110	30.5
1988	10 480	9 840	20 320	151 550	13.4
1989	11 940	12 890	24 830	131 060	18.9
1990	14 220	16 150	30 370	121 560	25.0
1991	15 870	14 030	29 900	116 650	25.6
1992	14 040	14 090	28 140	94 250	29.9
1993	13 280	14 800	28 070	65 680	42.7
1994	12 740	14 280	27 020	77 940	34.7

Source: *Migration, Australia* (3412.0).

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.

5.46 Net interstate migration ('000)

Year ended 30 June	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT
1974	-19 500	-9 200	19 000	-2 000	3 000	-1 100	2 800	7 000
1984	-10 267	-3 340	9 957	553	732	695	726	942
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	-15 199	-21 131	38 170	-133	-1 441	-343	-1 591	1 668
1993	-19 077	-28 442	53 811	-4 650	-311	-1 553	-1 403	1 625
1994	-13 541	-31 895	49 066	-3 466	3 664	-2 162	-1 515	-151

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 55,811 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.

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 twenty 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 5–9 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 20–39 years, after which it steadily declined with age. The highest mobility rates occurred at ages 25–29 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 25–45 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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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 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% of the population were Australian citizens, with 11.9% of these being born overseas. At the 1991 Census the proportion of the population who were Australian citizens had fallen to 87.7%, but the share of those born overseas who have Australian citizenship increased to 12.2%.

5.48 Country of citizenship(a)

	Persons			%		
	1981	1986	1991	1981	1986	1991
Australia						
Born in Australia	11 393 861	11 917 624	12 725 164	78.2	76.4	75.5
Born overseas	1 537 212	1 919 474	2 051 589	10.5	12.3	12.2
Other(b)	1 645 257	1 765 058	2 073 787	11.3	11.3	12.3
Total	14 576 330	15 602 156	16 850 540	100.0	100.0	100.0

(a) Census counts, place of enumeration. (b) Includes not stated.

Source: Census 1991, unpublished data.

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1994 National Aboriginal and Torres Strait Islander Survey

The Royal Commission into Aboriginal Deaths in Custody recommended that a special national survey be conducted to provide information about a range of characteristics of the Aboriginal and Torres Strait Islander population. The ABS commenced development of the national survey in early 1992, in consultation with many Aboriginal and Torres Strait Islander organisations. Over 15,700 Aboriginal and Torres Strait Islander people were interviewed for the survey in mid 1994. Most of the interviewees were Aboriginal or Torres Strait Islander people. The results were released in February 1995.

The National Aboriginal and Torres Strait Islander Survey (NATSIS) results provide a wealth of information about health; family and culture; housing, education and training; employment and income; and law and justice. This article provides an overview of the information available from the NATSIS. Only a small selection of the total available information is included. Many of the statistics in this article come from the first major publication, *Detailed Findings* (4190.0) which is a national summary of results.

The Aboriginal and Torres Strait Islander population

The NATSIS interviewed a sample of the total Aboriginal and Torres Strait Islander population. The ABS estimated that there were over 303,250 Aboriginal and Torres Strait Islander people in Australia at 30 June 1994.

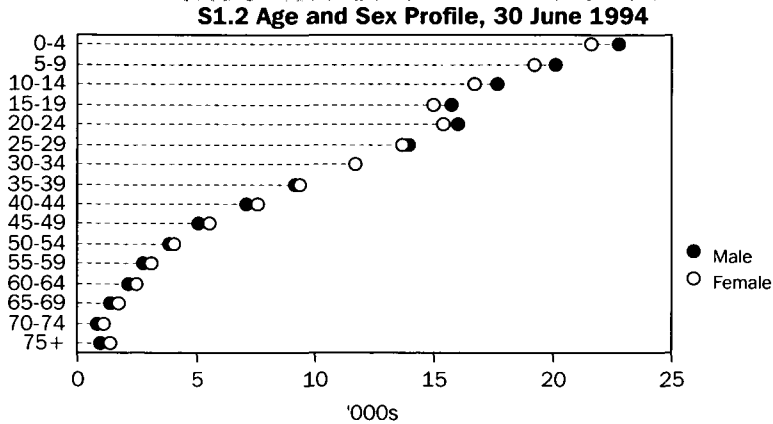
Table S1.1 shows that New South Wales and Queensland had the highest number of Aboriginal and Torres Strait Islander people, while there were fewest Aboriginal and Torres Strait Islander people in Tasmania. Aboriginal and Torres Strait Islander people made up 27.4% of the total population in the Northern Territory, but less than 3% in all other States.

S1.1 Estimated population, 30 June 1994

State	Males	Females	Persons	% of total population
New South Wales(a)	40 460	39 970	80 430	1.3
Victoria	9 590	9 590	19 180	0.4
Queensland	40 080	39 760	79 840	2.6
South Australia	9 220	9 200	18 420	1.3
Western Australia	23 790	23 450	47 240	2.8
Tasmania	5 160	4 950	10 110	2.1
Northern Territory	23 100	22 950	46 050	27.4
Australia (including ACT)	152 400	150 850	303 250	1.7

(a) Information for the Australian Capital Territory is included in New South Wales.

Source: 1994 National Aboriginal and Torres Strait Islander Survey.



Source: 1991 Census of Population and Housing.

Graph S1.2 highlights the young age structure of the Aboriginal and Torres Strait Islander population. At the 1991 Census, almost 40% of Aboriginal and Torres Strait Islander people were aged less than 15 years, compared with 22% for the non-indigenous population.

It was estimated that, in June 1994, 28% of Aboriginal and Torres Strait Islander people lived in capital cities. The most centralised states were Victoria (48% in Melbourne) and South Australia (43% in Adelaide). The least centralised were Queensland (19% in Brisbane) and the Northern Territory (14% in Darwin).

Health

The NATSIS asked questions about health status and health actions; attitudes to health; illness conditions; health risk factors; and access to health services. Overall, 88% of

people considered themselves to be in good, very good, or excellent health. Despite this self reported health status, 44% of people took a health related action (which may have included admission to hospital, consulting a doctor, or using bush medicine) in the two weeks leading up to the survey and 41% reported a current health condition or illness.

Almost 35% of people had a health condition which they had experienced for six months or more (long-term sufferers). Table S1.3 lists the major health conditions reported during the survey, and the percentage of males and females who experienced those conditions. Table S1.3 is concerned with all sufferers of current health conditions, not only those considered to be long-term sufferers.

S1.3 Type of current health conditions by sex, 1994 (%)

Condition	Males	Females	Persons
Asthma	13.8	16.8	15.3
Diabetes	11.7	10.2	10.9
Heart problems	7.2	8.5	7.8
Chest problems	6.6	8.9	7.7
Skin problems	6.8	6.5	6.6
High blood pressure	4.5	4.8	4.6
Ear or hearing problems	3.8	5.2	4.5
Eye problems(a)	3.1	4.4	3.6
Kidney problems	3.1	2.8	3.0

(a) Excludes eye problems which can be corrected by glasses.

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

The major reported current health conditions included asthma, which was a condition experienced by over 15% of people, diabetes, heart problems and chest problems. Diabetes was more common amongst males, while asthma, heart and chest problems were more common amongst females.

Alcohol was perceived by survey respondents as the major health problem in Aboriginal and Torres Strait Islander communities, as well as being the major substance use problem. Almost 60% of people aged 13 years and over stated that alcohol was one of the main health problems in their local area. Similarly, 76.2% of people aged 13 years and over also listed alcohol as a common social problem for Aboriginal and Torres Strait Islander people in their area.

In the 1989–90 National Health Survey, 84% of people aged 18 years and over stated that they had consumed alcohol in the past year. The 1994 NATSIS found that 70% of Indigenous people aged 18 years or over had consumed alcohol in the past year.

The proportion of people who had consumed alcohol in the past year was higher in the south-eastern ATSI Regions, and lower in the centre and north. The Hobart ATSI Region (Tasmania) had the highest percentage (84%), while the

Nhulunbuy Region (north-east Northern Territory) had the lowest percentage (34%). Seventy-nine per cent of adults said that they were happy with local health services, and 77% said there were no problems with local health services. Aboriginal or Torres Strait Islander involvement in health services was considered to be important by 78% of adults. Nearly 68% of people had access to Aboriginal health workers within 25 kilometres of where they lived.

Family and culture

The NATSIS asked questions about family size and structure, separation from families, child care, cultural affiliation, and language. Of the 76,400 households containing families in June 1994, 7,100 (9.3%) contained more than one standard family unit. The ABS defines a family unit as a collection of related individuals residing together, where at least one of the individuals is aged 15 years or over. The survey found that over half (53%) of the families in which Aboriginal or Torres Strait Islander people lived consisted of couples with children, and less than one third (29%) were single parent families.

Over 10% of persons aged 25 years and over reported being taken away from their natural family. This compared to less than 2% for people aged 14 years or under.

S1.4 Persons aged 25 years or over — whether taken from natural family and who raised by, 1994 (%)

	25–34	35–44	45–54	55+	Total
Taken away	8.6	12.0	10.6	10.8	10.3
Raised by(a)					
Unrelated Aboriginal/Torres Strait Islander people	6.9	2.3	7.2	1.2	4.5
Non-Aboriginal/Torres Strait Islander adoptive or foster parents	44.5	34.7	13.5	17.1	31.7
Orphanage/children's home	24.7	40.3	23.8	14.4	27.9
Mission	9.0	28.3	42.5	68.4	30.7
Other people	13.8	8.5	19.2	1.6	10.8
Not stated	2.9	0.5	—	0.6	1.3
Not taken away	89.2	86.4	87.1	85.7	87.7
Did not answer	2.2	1.6	2.3	3.5	2.0
Total	100.0	100.0	100.0	100.0	100.0

(a) People could answer that they were bought up by more than one agent.

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

Of the 12,500 people taken away from their natural families, 31.7% were raised by non-Aboriginal or Torres Strait Islander adoptive or foster parents, 30.7% by missions, and 27.9% by orphanages or children's homes.

Graph S1.5 summarises some of the main findings of the survey in relation to Aboriginal and Torres Strait Islander cultural affiliation and practices. Over 84% of people aged 13 years and over saw elders as important, while slightly less than 60% identified with a clan, tribal or language

group. Graph S1.5 also shows the percentage of people who recognised an area as their homelands (75%) and who had attended Aboriginal and Torres Strait Islander cultural activities in the past year (72%). The level of cultural affiliation is higher in rural areas than in urban areas.

Twenty-one per cent of persons aged 5 years and over spoke an Aboriginal or Torres Strait Islander language. For 14% of people aged 13 years and over, an Aboriginal or Torres Strait Islander language was their main language.

S1.5 Cultural affiliation and practices, 1994



Source: 1994 National Aboriginal and Torres Strait Islander Survey.

Housing

The NATSIS collected information about a range of housing issues including nature of occupancy, satisfaction with housing, and housing costs.

Ninety-eight per cent of households containing an Aboriginal or Torres Strait Islander person were living in private dwellings, and 2% in special dwellings such as hostels or boarding schools. Just under 2% of all private dwellings were improvised dwellings (that is, dwellings without permanent amenities). The mean household size, according to the survey, was 3.5 persons.

More than three quarters of households (77%) were living in dwellings which satisfied their housing needs. Over 21% of households were living in dwellings which did not satisfy their needs, usually because the dwelling needed repair or did not have enough bedrooms. A higher percentage of renters were dissatisfied with their housing (24%) than purchasers (9%) or owners (5%).

S1.6 Households in private dwellings — nature of occupancy and type of landlord, 1994
(%)

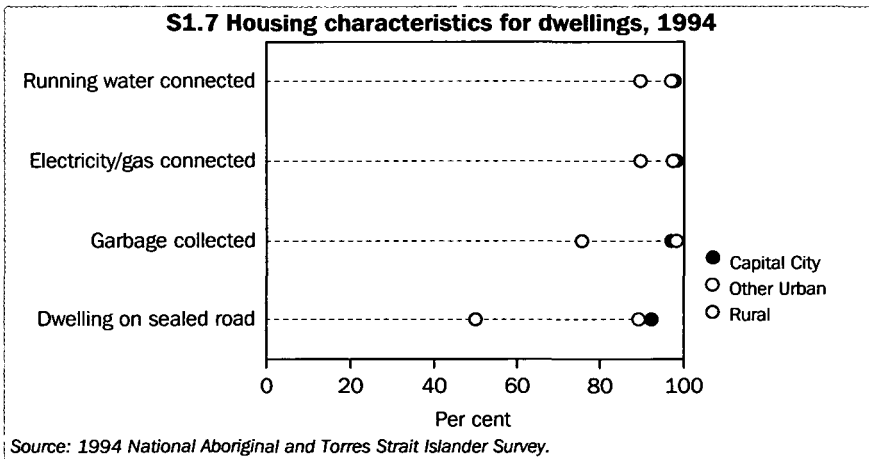
	Capital city	Other urban	Rural	Total
Renters	63.6	76.7	62.4	69.0
Purchasers	20.6	9.4	6.8	12.5
Owners	13.3	11.5	13.2	12.5
Other/not stated	2.4	2.7	17.1	6.0
<i>Type of landlord for rented dwellings</i>				
Private	42.3	21.3	14.1	26.2
Community	4.4	15.0	57.0	21.0
State housing	47.3	53.5	10.9	42.6
Other government	3.8	2.8	7.0	3.9
Other(a)	2.7	7.3	10.2	6.5

(a) Includes employer provided housing and not stated.

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

Over 42% of rented dwellings were rented from state housing authorities. There were more privately rented dwellings in capital cities (42.3%) than in other urban areas (26.3%) or rural areas (14.1%). Community housing was a far more prevalent renting option in rural areas (57%) than in other urban areas (15%) or capital cities (4.4%).

Graph S1.7 shows that capital cities and other urban areas had consistently higher rates of housing amenities and infrastructure, particularly sealed roads and garbage collection, than rural areas. The lower rates of housing amenities and infrastructure in rural areas was additionally important considering that there were more people, on average, in households in rural areas (4.9 persons per household) than urban areas (4.1) or capital cities (3.5).

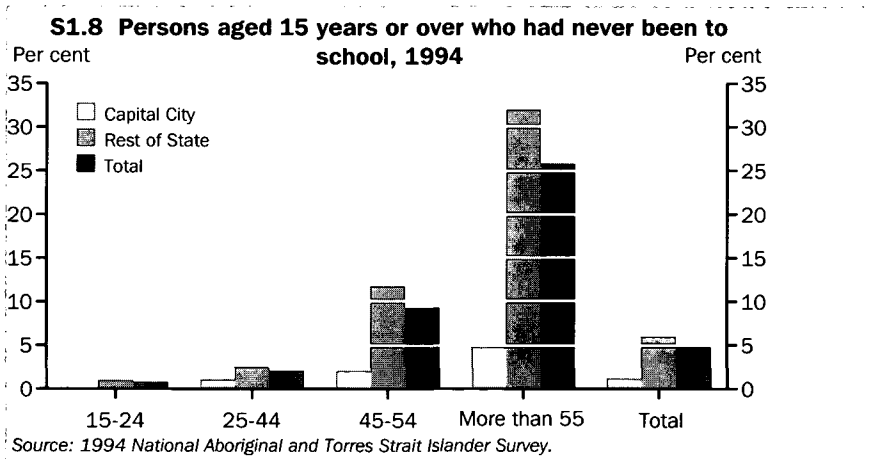


Education and training

The NATSIS collected information about types and levels of schooling, attitudes to schooling, and access to post-school education. Overall, 86% of parents stated that they were happy with their children's education, and 84% said that they were made to feel welcome at their children's school.

Five per cent of Aboriginal and Torres Strait Island people aged 15 years and over had never been to school. The 1994 Survey of Education Attainment found that only 0.3% of the total population aged 15 years and over had never been to school.

Graph S1.8 shows a sharp decline in the percentage of people who had never been to school from a peak of over 26% for people aged 55 years and over, to less than 1% for people aged 15 to 24 years. Far fewer people living in capital cities than the rest of the State/Northern Territory had never been to school. This is particularly highlighted in the 55 years and over age group, where 5% of people in capital cities had never been to school, compared to 32% of those in the rest of the State.



Seventeen per cent of Aboriginal and Torres Strait Islander people aged 15 years or over had obtained a post-school qualification, and a further 7% had obtained the year twelve school certificate. Six per cent of Aboriginal and Torres Strait Islander people aged 15 years and over who had left school were studying for a qualification, mainly diplomas or bachelors degrees at universities or TAFE colleges.

Over half (52%) of the students were taught about Aboriginal or Torres Strait Islander cultures at school. In addition, 18% were taught Aboriginal or Torres Strait Islander languages. Over 8% of Aboriginal and Torres Strait Islander students attended Aboriginal

Independent schools, while 87% went to government schools.

Table S1.9 shows the percentage of students taught about Aboriginal or Torres Strait Islander cultures and language, and whether they were taught by any Aboriginal or Torres Strait Islander teacher, education worker, or community member. More students were taught about culture and language at Aboriginal Independent schools than other types of schools. Students at Catholic, Aboriginal Independent or government schools were more likely to be taught about culture and language, or by Indigenous staff, than students at non-government schools.

S1.9 School students : characteristics of schooling by type of school attended, 1994 (%)

	Government	Aboriginal Independent	Catholic	Other non- government	Don't know/ not stated	Total
Taught about culture	51.1	88.5	55.6	33.7	51.9	52.2
Taught language	16.9	74.4	17.4	9.0	25.1	18.4
Taught by Indigenous teacher	12.7	45.4	15.5	4.5	19.0	13.7
Taught by Indigenous education worker	22.5	43.0	10.7	4.4	17.1	21.8
Taught by Indigenous community member	12.3	15.9	6.4	8.3	10.4	11.9

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

Employment and income

The NATSIS collected information about labour force status, income, voluntary work and difficulties in finding a job.

S1.10 Persons aged 15 years and over — labour force status, 1994 (%)

State/Territory	Employed			Unemployed	Total labour force	Not in the labour force	Total	Participation rate
	Full-time	Part-time	Total employed					
New South Wales	21.8	10.6	32.4	27.1	59.5	40.5	100.0	59.5
Victoria	31.1	8.6	39.7	24.7	64.4	35.6	100.0	64.4
Queensland	22.8	16.7	39.5	19.4	58.9	41.1	100.0	58.9
South Australia	19.8	10.8	30.6	25.5	56.1	43.9	100.0	56.1
Western Australia	17.4	19.3	36.7	21.3	58.0	42.0	100.0	58.0
Tasmania	31.2	13.1	44.3	18.3	62.6	37.4	100.0	62.6
Northern Territory	15.3	16.1	31.4	18.3	49.7	50.3	100.0	49.7
Australia	21.4	14.4	35.8	22.2	58.0	42.0	100.0	58.0

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

The labour force participation rate is the total percentage of people aged 15 years or over who are in the labour force, either employed or unemployed. Victoria had the highest participation rate (63%), and the Northern Territory had the lowest (50%). In 1994 the participation rate for the total population was 63%.

Part-time employment was a major component of all employment in each State and the Northern Territory. There was a higher percentage of people employed part-time in the Northern Territory, Western Australia and Queensland, and a lower percentage in Victoria, New South Wales and South Australia.

Approximately one fifth of employed Aboriginal and Torres Strait Islander people in Queensland (17.2%), Western Australia (20.7%) and Northern Territory (18.0%) were employed in Community Development Employment Project (CDEP) schemes.

Around 27% of persons aged 15 years and over engaged in voluntary work including: hunting, fishing, or gathering food; working for community or sporting organisations; working on committees and working at a school or with youth groups.

For unemployed people, the main difficulty in finding a job was that there were no jobs available in the local area, or that people had insufficient education. Over 46% of employed people felt that their work allowed them to meet their cultural obligations.

The mean income for employed persons in Australia in June 1994 was \$27,100. The NATSIS showed a mean income for employed Aboriginal and Torres Strait Islander people of \$21,300, although this figure changed to \$24,300 when people employed in CDEP schemes were excluded.

S1.11 Employed persons — mean annual income, 1994 (\$)

	Employed non-CDEP	Employed CDEP	Total employed
New South Wales			
Males	27 000	13 500	24 800
Females	22 200	13 400	21 300
Total	25 100	13 500	23 500
Victoria			
Males	26 200	11 500	24 600
Females	19 300	22 100	19 400
Total	23 700	13 600	22 800
Queensland			
Males	25 800	13 300	21 500
Females	22 000	14 500	20 100
Total	24 300	13 700	21 000
South Australia			
Males	25 600	13 400	22 600
Females	21 800	15 500	20 300
Total	24 300	14 000	21 800
Western Australia			
Males	29 200	9 800	21 000
Females	20 200	11 900	17 300
Total	25 100	10 600	19 400
Tasmania			
Males	26 600	5 000	26 400
Females	16 900	*	16 900
Total	22 600	5 000	22 500
Northern Territory			
Males	22 200	11 800	17 000
Females	21 100	14 400	19 200
Total	21 600	12 600	17 900
Australia (Including ACT)			
Males	26 500	12 200	22 300
Females	21 200	13 800	19 600
Total	24 300	12 700	21 300

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

Employed females consistently earned less than males except in the Northern Territory, where female incomes were higher than male incomes. Female incomes from CDEP were generally higher than male incomes. The Northern Territory had the lowest mean incomes and New South Wales had the highest.

Government payments were the main source of income for 55% of Aboriginal and Torres Strait Islander people aged 15 years and over. The highest rate was 62% in South Australia and the lowest rate was 48% in Tasmania.

Law

The NATSIS collected information about the use of legal services, arrest rates, personal safety and attitudes to police.

One fifth of people aged 13 years and over stated that they had been arrested at least once in the five years prior to the survey. A much greater proportion of males (32%)

than females (9%) had been arrested. Approximately 25% of people aged between 15 and 44 years had been arrested in comparison to 8% of people aged 45 years and over. Fifty-seven per cent of those arrested reported having been arrested more than once.

S1.12 Persons arrested in past five years — reasons for most recent arrest, 1994 (%)

	Males	Females	Total
Arrested	31.5	9.2	20.4
Not arrested	68.4	90.6	79.6
Reasons for most recent arrest(a)			
Drink driving	26.1	13.8	23.5
Disorderly conduct/Drinking in public	30.6	37.2	32.2
Outstanding warrants/Breach of order	18.1	11.7	16.6
Assault	16.1	19.1	16.8
Theft/Burglary	15.8	12.8	15.1
Other reasons	18.7	18.1	18.3
No answer	4.8	6.4	5.7

(a) More than one reason for arrest could be given.

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

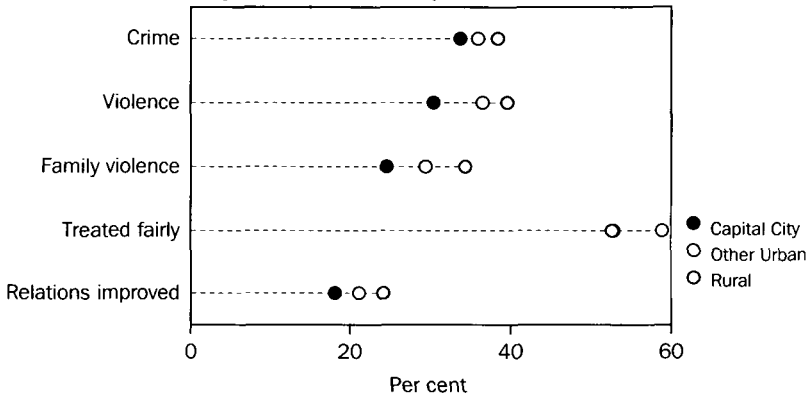
The most common reasons for arrest were disorderly conduct/drinking in public, and drink driving. Females had a lower percentage of drink driving arrests than males but a higher percentage of disorderly conduct/drinking in public and assault.

Approximately 13% of persons aged 13 years and over had been physically attacked or verbally threatened in the 12 months preceding the survey.

Graph S1.13 depicts how well people aged 13 years and over in capital cities, urban and rural areas thought that police performed their jobs. Graph S1.13 records whether people thought police did a good job in dealing with crime, violence, and family

violence, whether people felt they were treated fairly by police, and whether relations with police were better at the time of the survey than five years ago.

Generally, people in rural areas had more positive perceptions of police performance than people in urban areas or capital cities. Over half of those aged 13 years and over thought that they were treated fairly by police. Thirty per cent thought that police did a good job in dealing with family violence, and 37% felt that police did a good job in dealing with crime or violence. Around 20% felt that relations with police were better than five years ago, and a further 39% thought that relations were 'about the same'.

S1.13 Perceptions of how well police deal with issues, 1994

Source: 1994 National Aboriginal and Torres Strait Islander Survey.

Conclusion

This article has provided an overview of the status of Aboriginal and Torres Strait Islander people based on the results of the 1994 NATSIS.

Only a small selection of the total information available from the survey has been included here. There are opportunities for in-depth analysis of a range of issues that are important for planning, community development, and equity and social justice issues.

The National Centre for Aboriginal and Torres Strait Islander Statistics within the ABS is planning a range of publications for release throughout 1995 and 1996 which will provide detailed information in each of the major topic areas examined in this article, and for each ATSI Region, State and the Northern Territory.

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Labour

Introduction	125
The labour force	125
Characteristics of the labour force	127
Employment	130
Multiple jobholders	134
Career experience	136
Unemployment	137
Job search experience	139
The long-term unemployed	141
Job vacancies	144
Persons not in the labour force	145
Retirement and retirement intentions	146
Wage rates, earnings, costs of labour and hours of work	148
Industrial conciliation and arbitration	148
Award rates of pay indexes	149
Average weekly earnings	150
Composition and distribution of earnings	151
Non-wage benefits	155
Superannuation	158
Labour costs	161
Hours of work and work patterns	164
Working arrangements	166
Industrial relations	169
Industrial disputes	169
Trade unions	171
Training	173
Training expenditure	173
Who received training?	173
Length of training course	174
Employment status of persons undertaking training courses	174
Reasons for training employees	174
Training practices	175

Government employment and training programs	175
1994 White Paper on Employment and Growth	176
Industry based vocational education and training	177
Support for apprentices	177
Support for traineeships	178
Special trade training	178
Skills enhancement	178
Workplace English Literacy Program	178
Australian Vocational Certificate Training System (AVCTS)	179
Pre-vocational training program	179
Employment participation	179
Worksearch	179
JobNeeds	179
JobFunds	179
JobClub	179
JobPlace	179
Workskills	179
SkillTrain	179
Workstart	180
JobStart	180
JobSkills	180
Landcare and Environment Action Program (LEAP)	180
New Work Opportunities (NWO) Program	180
National Training Wages (NTW) Program	180
Industry Labour Adjustment Packages (LAPs)	180
Assistance to firms implementing change	181
New Enterprise Incentive Schemes (NEIS)	181
Case management services	181
Aboriginal Employment and Training Assistance	182
Bibliography	182

Labour

Introduction

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.

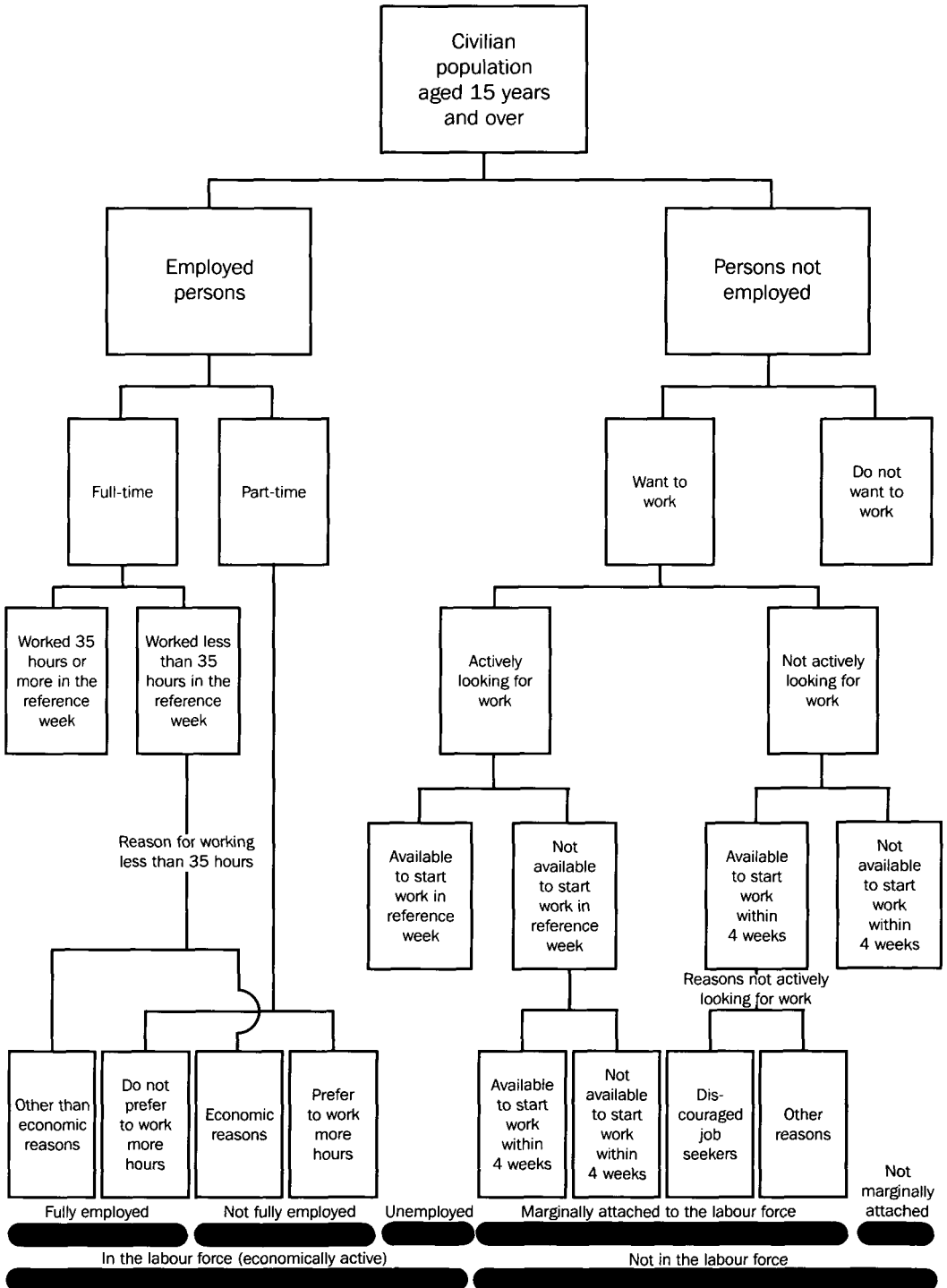
The labour force

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.

6.1 The Australian labour force framework



This section presents some summary statistics on the civilian labour force drawn from the ABS monthly Labour Force Survey and associated supplementary surveys. The data present 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.

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 and 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, before increasing slightly in 1993–94.

6.2 Labour force — components of change (%)

	Annual average(a)					
	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94
Males						
Percentage change in labour force	1.8	2.2	1.3	—	0.5	0.9
Percentage points change due to						
Population growth	2.0	1.7	1.5	1.3	1.2	1.2
Labour force participation	-0.2	0.5	-0.2	-1.3	-0.7	-0.3
Females						
Percentage change in labour force	4.1	4.8	2.4	0.7	0.9	2.2
Percentage points change due to						
Population growth	2.1	1.9	1.6	1.4	1.2	1.2
Labour force participation	2.0	2.9	0.8	-0.7	-0.4	1.0
Persons						
Percentage change in labour force	2.8	3.3	1.8	0.3	0.7	1.4
Percentage points change due to						
Population growth	2.0	1.8	1.6	1.4	1.2	1.2
Labour force participation	0.7	1.4	0.2	-1.1	-0.5	0.2

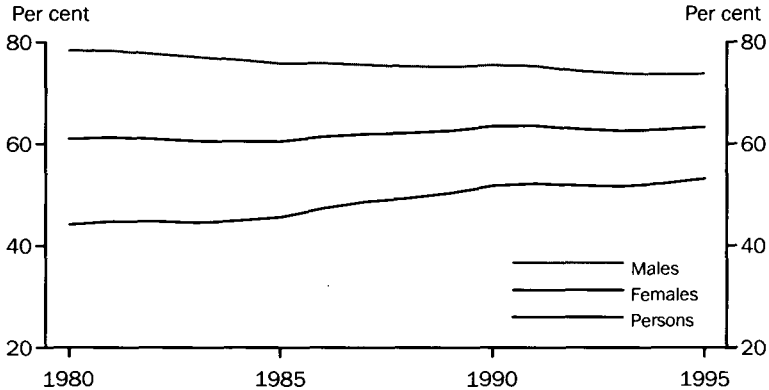
(a) Averages calculated on monthly estimates.

Source: *The Labour Force, Australia* (6203.0).

The participation rate is one of the most important descriptions 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% in 1987–88 to 73.6% in 1993–94. For females, the participation rate has increased steadily from an average of 49.4% in 1987–88 to 52.3% in 1990–91. After falling over the next two years, the female rate again increased in 1993–94, to 52.2% (graph 6.3).

6.3 Participation rates, annual average (%)



Source: *The Labour Force, Australia (6203.0)*.

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 1993-94, the labour force participation rate for 15 to 19 year olds stood

at 55.8% compared with 62.8% 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.

6.4 Civilian labour force, annual average(a), 1993-94

Age group (years)	No. ('000)					Participation rate (%)				
	Males				Persons	Females				Persons
	Males	Married	Not married	Total		Males	Married	Not married	Total	
15-64	4 940.8	2 149.0	1 495.1	3 644.1	8 584.9	83.5	59.8	66.2	62.3	73.0
15-19	369.3	11.3	335.5	346.8	716.1	56.2	54.9	55.4	55.4	55.8
20-24	628.1	141.5	406.4	547.9	1 176.0	87.0	68.4	80.8	77.2	82.1
25-34	1 299.8	600.1	332.9	933.0	2 232.7	93.5	61.8	76.3	66.3	79.8
35-44	1 237.6	730.8	209.1	939.9	2 177.5	93.0	69.4	72.7	70.1	81.5
45-54	949.7	519.3	156.3	675.6	1 625.3	88.5	64.5	69.4	65.5	77.3
55-59	283.1	107.3	37.7	145.0	428.1	72.6	37.5	39.5	38.0	55.5
60-64	173.1	38.7	17.3	56.0	229.2	49.1	15.7	16.1	15.8	32.4
>64	80.5	18.3	12.4	30.6	111.1	8.9	3.8	1.8	2.6	5.3
Total	5 021.3	2 167.2	1 507.5	3 674.7	8 696.0	73.6	53.1	51.0	52.2	62.8

(a) Averages calculated on monthly estimates.

Source: *The Labour Force, Australia (6203.0)*.

6.5 Civilian population aged 15 years and over — labour force status

	Annual average(a)					
	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Males						
Employed ('000)	4 489.5	4 607.9	4 534.3	4 417.2	4 396.9	4 472.3
Unemployed						
Looking for full-time work ('000)	263.1	247.1	373.4	491.5	531.3	500.0
Looking for part-time work ('000)	32.4	34.3	43.9	44.2	50.2	49.0
Total unemployed ('000)	295.5	281.4	417.3	535.7	581.5	549.0
Labour force ('000)	4 785.0	4 889.3	4 951.6	4 952.9	4 978.4	5 021.3
Not in the labour force ('000)	1 579.2	1 584.7	1 619.9	1 706.1	1 760.0	1 797.0
Civilian population ('000)	6 364.2	6 473.9	6 571.5	6 659.1	6 738.3	6 818.3
Unemployment rate (%)	6.2	5.8	8.4	10.8	11.7	10.9
Participation rate (%)	75.2	75.5	75.4	74.4	73.9	73.6
Females						
Employed ('000)	3 059.1	3 224.1	3 248.2	3 219.5	3 237.0	3 308.3
Unemployed						
Looking for full-time work ('000)	160.9	154.6	201.2	252.5	259.8	262.3
Looking for part-time work ('000)	78.3	77.7	90.5	93.4	99.3	104.2
Total unemployed ('000)	239.2	232.3	291.7	345.9	359.0	366.4
Labour force ('000)	3 298.3	3 456.4	3 539.9	3 565.5	3 596.0	3 674.7
Not in the labour force ('000)	3 246.0	3 209.5	3 232.0	3 303.0	3 356.7	3 360.5
Civilian population ('000)	6 544.3	6 665.9	6 771.9	6 868.5	6 952.7	7 035.3
Unemployment rate (%)	7.3	6.7	8.2	9.7	10.0	10.0
Participation rate (%)	50.4	51.9	52.3	51.9	51.7	52.2

(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 1994 was 59.5% compared with the participation rate of 65.5% for the Australian born. The participation rate for overseas-born

persons born in other than main English-speaking countries was 55.9%. Of all overseas born, persons born in New Zealand had the highest participation rate (75.0%).

6.6 Civilian labour force by birthplace, May 1994 ('000)

	Employed		Unemployed		Total labour force ('000)	Unemployment rate (%)	Participation rate (%)
	Full-time workers ('000)	Total ('000)	Looking for full-time work ('000)	Total ('000)			
Born in Australia	4 464.5	5 971.9	485.2	593.1	6 565.0	9.0	65.5
Born outside Australia	1 499.5	1 907.3	219.0	256.8	2 164.1	11.9	59.5
English speaking countries	674.2	880.1	65.8	80.5	960.6	8.4	64.9
Other countries	825.3	1 027.2	153.2	176.3	1 203.5	14.6	55.9
Oceania							
New Zealand	120.1	155.7	15.6	18.0	173.7	10.4	75.0
Total Oceania	153.5	195.3	19.0	22.2	217.5	10.2	74.2
Europe & the former USSR							
Germany	50.2	64.4	4.6	5.1	69.5	7.4	58.2
Greece	51.6	63.2	7.2	7.8	71.0	11.0	54.1
Italy	85.7	105.8	7.9	9.1	114.8	7.9	43.9

...continued

6.6 Civilian labour force by birthplace, May 1994 — continued
(**'000**)

	Employed		Unemployed		Total labour force ('000)	Unemployment rate (%)	Participation rate (%)
	Full-time workers ('000)	Total ('000)	Looking for full-time work ('000)	Total ('000)			
Europe & the former USSR — (continued)							
Netherlands	37.9	49.0	*2.3	*2.3	51.4	*4.5	54.9
UK & Ireland	505.8	657.3	46.9	57.5	714.7	8.0	62.4
Former Yugoslav Republics	63.7	76.7	15.9	17.5	94.3	18.6	55.9
Total Europe & the former USSR	915.1	1 172.4	104.9	122.7	1 295.1	9.5	56.9
The Middle East & N. Africa							
Lebanon	23.3	30.1	9.7	10.1	40.2	25.2	51.2
Total Middle East & N. Africa	57.3	72.8	26.6	28.8	101.6	28.4	53.4
South-East Asia							
Malaysia	24.7	31.2	*1.2	*2.8	34.0	*8.2	65.0
Philippines	35.1	42.4	*3.7	4.9	47.3	10.3	68.5
Viet Nam	51.6	60.2	26.7	27.9	88.1	31.6	62.0
Total South-East Asia	149.6	179.5	38.1	44.4	223.9	19.8	62.1
North-East Asia							
China	33.2	42.2	5.6	6.3	48.5	13.1	65.0
Total North-East Asia	64.0	83.2	7.9	9.6	92.8	10.4	56.0
The Americas	54.3	73.4	7.4	10.8	84.2	12.8	67.1
Other							
India	33.2	39.9	4.0	4.7	44.6	10.6	63.4
Total other	105.7	130.6	15.1	18.2	148.9	12.3	67.2

Source: *The Labour Force, Australia* (6203.0).

Statistics on labour force status according to level of educational attainment are contained in *Chapter 9, Education*.

Employment

Broadly, persons are considered to be employed if they are doing any work at all, regardless of the number of hours worked. Employment statistics are 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. 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% 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 41.6% in 1992–93 but in 1993–94, the ratio rose slightly to 42.5%.

6.7 Employed persons — employment/population ratios(a) (%)

Annual average(b)	Age group (years)							Total	
	15-19	20-24	25-34	35-44	45-54	55-59	60-64		>64
Males									
1988-89	51.7	81.7	89.0	90.8	85.4	69.8	45.4	9.0	70.5
1989-90	53.0	81.9	89.8	90.8	86.4	71.3	46.0	9.1	71.2
1990-91	47.4	77.4	86.7	89.4	85.8	70.4	45.9	8.9	69.0
1991-92	42.6	73.1	84.3	86.8	83.5	65.9	43.7	8.9	66.3
1992-93	41.0	72.2	83.0	85.9	82.8	64.4	41.2	8.4	65.3
1993-94	42.8	72.9	83.6	85.9	82.3	64.6	41.2	8.8	65.6
Females									
1988-89	49.2	70.3	59.2	65.2	55.6	31.1	14.6	2.3	46.7
1989-90	50.6	71.1	61.8	68.2	57.6	31.3	14.9	2.2	48.4
1990-91	46.3	69.7	60.8	67.5	59.1	34.2	15.7	2.6	48.0
1991-92	42.4	66.6	59.9	66.8	59.2	34.0	14.5	2.4	46.9
1992-93	42.3	65.6	59.1	65.5	60.8	34.6	14.2	2.1	46.6
1993-94	42.3	66.8	60.4	64.7	61.4	35.3	15.4	2.6	47.0
Persons									
1988-89	50.5	76.0	74.1	78.1	70.8	50.7	29.8	5.1	58.5
1989-90	51.8	76.5	75.7	79.5	72.4	51.5	30.4	5.1	59.6
1990-91	46.9	73.6	73.7	78.5	72.8	52.5	30.7	5.3	58.3
1991-92	42.5	69.8	72.1	76.8	71.6	50.1	29.1	5.2	56.5
1992-93	41.6	69.0	71.0	75.7	72.0	49.7	27.6	4.8	55.8
1993-94	42.5	72.5	71.9	75.2	72.1	50.2	28.3	5.2	56.2

(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, (i.e. employers, own-account workers, employees and contributing family workers) 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 own-account workers have increased relatively steadily

from a low of 708,400 in 1987-88 to 829,000 in 1993-94, estimates for employees increased from 6,080,100 in 1987-88 to 6,652,700 in 1989-90, before declining to 6,363,100 in 1992-93. In 1993-94, the estimate for employees rose to 6,500,300, still slightly lower than the 1989-90 peak.

6.8 Employed persons — status of worker ('000)

Annual average(a)	Employers	Own-account workers	Employees	Contributing family workers	Total
1988-89	367.5	734.9	6 368.4	66.6	7 548.7
1989-90	372.6	736.2	6 652.7	60.9	7 832.0
1990-91	368.1	761.9	6 564.8	67.1	7 782.4
1991-92	347.9	796.5	6 405.9	73.0	7 636.7
1992-93	339.3	816.8	6 363.1	81.9	7 633.9
1993-94	348.3	829.0	6 500.3	77.8	7 780.6

(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 in 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. Average weekly hours worked by all employed

persons rose to a peak of 34.7 in 1991-92, before falling to 34.4 in 1992-93. By 1993-94, the average had again risen to 34.6. The average weekly hours worked estimate for

employed males reached a peak of 39.3 hours per week in 1993-94 while for females, the average weekly hours worked was 28.2 (still lower than the 1991-92 peak of 28.4).

6.9 Employed persons by industry and average weekly hours worked, annual average(a), 1993-94

ANZSIC Division	No. ('000)			Average weekly hours worked		
	Males	Females	Persons	Males	Females	Persons
Agriculture, forestry & fishing	284.8	124.4	409.2	48.7	30.1	43.1
Mining	80.1	9.4	89.4	44.0	34.4	43.0
Manufacturing	793.5	288.7	1 082.1	40.8	32.8	38.7
Food, beverages & tobacco	112.1	50.8	162.9	40.2	32.4	37.8
Metal products manufacturing	156.0	23.5	179.5	40.5	31.0	39.3
Other manufacturing	59.6	18.7	78.3	41.7	30.1	38.9
Electricity, gas & water supply	78.9	13.4	92.2	36.5	33.4	36.1
Construction	479.7	79.9	559.6	40.7	21.0	37.9
Wholesale trade	347.8	156.2	503.9	42.8	32.0	39.4
Retail trade	548.2	575.6	1 123.8	39.1	25.5	32.2
Accommodation, cafes & restaurants	150.2	197.3	347.4	38.9	27.9	32.7
Transport & storage	285.6	80.8	366.4	42.6	31.9	40.3
Communication services	88.3	40.3	128.5	37.4	31.6	35.6
Finance & insurance	141.1	175.7	316.8	40.4	31.4	35.4
Property & business services	384.9	288.8	673.6	42.3	30.1	37.1
Government administration & defence	216.5	151.9	368.3	36.7	31.0	34.3
Education	192.9	359.5	552.4	39.2	31.9	34.4
Health & community services	160.9	511.4	672.3	38.9	28.5	31.0
Cultural & recreational services	85.8	82.4	168.2	37.4	27.5	32.5
Personal & other services	134.2	167.0	301.2	36.5	29.4	32.6

(a) Averages calculated on quarterly estimates.
Source: *The Labour Force, Australia* (6203.0).

6.10 Employed persons by occupation, annual average(a), 1993-94 ('000)

Occupation(b)	Males	Married females	All females	Persons
Managers & administrators	662.0	173.2	222.2	884.2
Professionals	596.2	283.5	453.9	1 050.1
Para-professionals	241.6	138.1	220.6	462.2
Tradespersons	1 023.0	69.0	118.2	1 141.1
Clerks	289.1	655.0	1 004.8	1 293.9
Salespersons & personal service workers	428.9	388.3	788.6	1 217.4
Plant & machine operators, & drivers	469.2	56.3	83.2	552.4
Labourers & related workers	743.1	267.3	410.9	1 154.0

(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 1993-94, there were 4,008,900 males employed full-time (89.6% of male employment), whereas the number of females employed full-time stood at 1,920,300 (58.0% of female employment).

6.11 Employed persons — full-time and part-time workers by age, annual average(a), ('000)

	Age group (years)							Total	
	15-19	20-24	25-34	35-44	45-54	55-59	60-64		>64
Males									
Full-time workers	149.9	448.2	1 095.0	1 085.7	834.7	228.5	120.0	46.9	4 008.9
Part-time workers	131.0	78.0	67.8	56.9	48.7	23.6	25.4	32.1	463.3
Total	280.9	526.2	1 162.7	1 142.6	883.4	252.1	145.3	79.0	4 472.3
Females									
Full-time workers	82.0	342.8	553.6	467.9	368.9	69.6	25.0	10.6	1 920.3
Part-time workers	182.7	130.9	296.4	399.3	264.2	65.2	29.7	19.5	1 388.0
Total	264.7	473.8	850.1	867.2	633.1	134.7	54.7	30.1	3 308.3

(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 9.5% in the level of employment in the private sector to 4,156,900 in May 1994.

The number of employees in the public sector has also fallen over this time period, from 1,729,900 in December 1989 to 1,588,300 in May 1994 (8.2%).

6.12 Employed wage and salary earners — industry by sector ('000)

Industry	Private sector			Public sector		
	May 1992	May 1993	May 1994	May 1992	May 1993	May 1994
Agriculture, forestry, fishing & hunting(a)	..	..	..	5.9	4.7	5.0
Mining	73.2	65.4	59.6	4.9	4.3	1.7
Manufacturing	887.2	876.2	841.4	25.2	22.2	14.0
Electricity, gas & water	3.1	2.9	2.6	100.0	92.3	80.4
Construction	212.2	221.4	211.9	42.2	42.2	33.2
Wholesale & retail trade	1 182.3	1 184.8	1 208.0	2.5	2.4	1.8
Transport & storage	152.5	144.9	167.4	115.4	105.6	99.1
Communication	*0.7	1.1	1.9	118.9	108.3	103.1
Finance, property & business services	655.4	656.9	653.6	104.7	100.3	81.1
Public administration & defence(b)	..	..	..	325.3	334.8	328.8
Community services						
Health	257.5	270.6	259.6	286.4	282.7	286.2
Education, museums & library services	117.0	108.5	134.2	406.9	405.6	397.8
Other	167.5	187.9	200.4	137.2	148.0	132.9
Total	541.9	567.0	594.1	830.5	836.3	816.9
Recreation, personal & other services	422.9	416.2	416.4	22.6	21.7	23.0
Total all industries	4 131.5	4 136.8	4 156.9	1 698.0	1 675.1	1 588.3

(a) Out of scope of survey for private sector. (b) Excludes members of permanent defence forces and employees of overseas embassies, consulates etc.

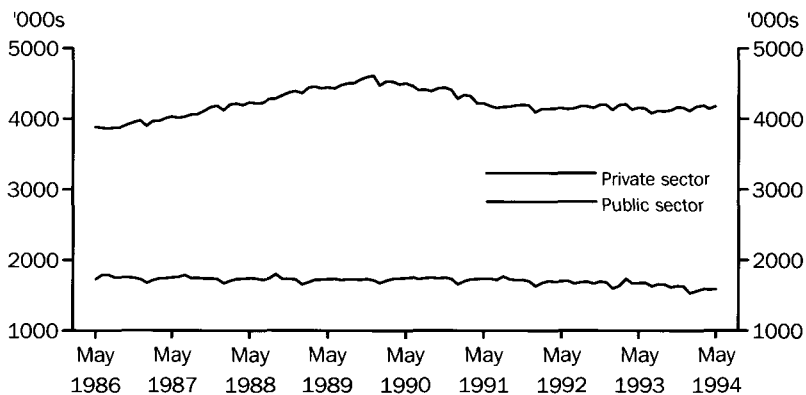
Source: *Employed Wage and Salary Earners, Australia* (6248.0).

6.13 Employed wage and salary earners by sector, May 1994 ('000)

Sector	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Private	1 471.9	1 098.6	682.9	331.6	383.6	96.1	36.0	56.3	4 156.9
Public									
Commonwealth	115.1	87.1	44.7	24.8	22.1	7.6	3.8	54.5	359.8
State	344.7	242.3	191.3	103.8	117.3	34.0	15.9	20.0	1 069.3
Local	53.1	44.8	33.8	9.1	13.3	3.9	1.2	—	159.2
Total	513.0	374.2	269.8	137.7	152.7	45.5	20.9	74.5	1 588.3
Total	1 984.9	1 472.8	952.7	469.3	536.2	141.6	56.9	130.8	5 745.2

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 August 1994, there were 404,100 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.

The proportion of employed persons who were multiple jobholders has steadily increased from 2.8% in August 1983 to 5.1% in August 1994.

Male multiple jobholders were distributed across all industry divisions in their main job, ranging from 4.5% in the Accommodation, cafes and restaurants industry division to 13% in the Retail trade industry division.

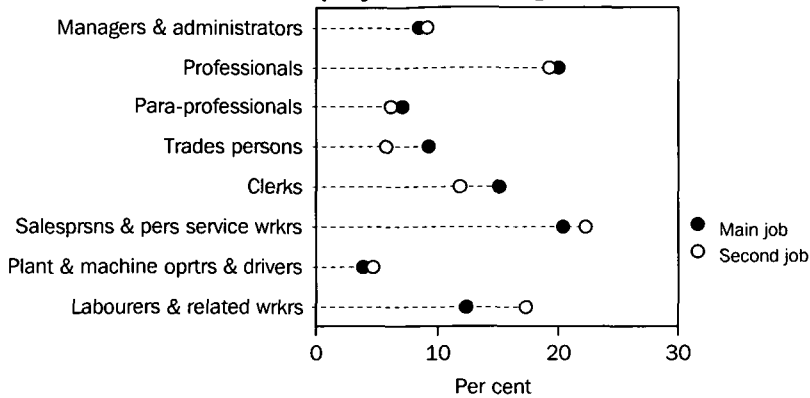
In comparison, over half of female multiple jobholders were employed in just three industries in their main job, namely Health

and community services (21%), Education (16%) and Retail trade (15%). These three industries were also the largest employers of female multiple jobholders in their second job, employing 17, 16 and 15% respectively.

Of the 404,100 multiple jobholders in August 1994, 32% worked in the same industry in both their main and second job. For those multiple jobholders whose main job was in the Health and community services industry, 55% had their second job in the same industry.

The 35–44 years age group had the highest proportion of employed persons who were multiple jobholders; about one third of all multiple jobholders were in this group.

6.15 Multiple job holders, August 1994



Source: *Multiple Jobholding, Australia (6216.0)*.

6.16 Multiple jobholders — selected characteristics, August 1994

Characteristics	No. ('000)			Proportion of employed persons (%)			Proportion of labour force (%)		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Marital status									
Married	134.5	129.4	263.8	4.5	6.2	5.2	4.2	5.8	4.9
Not married	66.8	73.5	140.3	4.3	5.9	5.0	3.7	5.1	4.3
Birthplace & period of arrival									
Born in Australia	159.4	163.7	323.1	4.7	6.3	5.4	4.3	5.8	5.0
Born outside Australia									
Born in main English speaking countries	21.8	21.3	43.2	4.4	5.8	5.0	4.0	5.4	4.6
Born in other countries	20.1	17.7	37.8	3.1	4.5	3.6	2.7	3.8	3.1
Total born outside Australia	41.9	39.1	81.0	3.7	5.1	4.2	3.3	4.5	3.8
Arrived before 1981	29.1	26.7	55.8	3.8	5.2	4.3	3.4	4.8	3.9
Arrived after 1981	12.8	12.3	25.3	3.5	4.8	4.1	3.0	4.0	3.4
Age (years)									
15-19	11.3	13.0	24.3	4.0	4.9	4.5	3.3	3.9	3.6
20-24	27.7	32.2	59.9	5.2	6.8	6.0	4.4	6.0	5.1
25-34	53.5	45.9	99.5	4.6	5.3	4.9	4.2	4.9	4.5
35-44	58.7	69.9	128.7	5.1	7.9	6.3	4.7	7.4	5.9
45-54	35.9	35.0	70.9	4.0	5.4	4.6	3.7	5.1	4.3
>54	14.2	6.7	20.9	2.9	3.1	3.0	2.6	3.0	2.7
Total	201.3	202.8	404.1	4.4	6.1	5.1	4.0	5.5	4.7

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% 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% had been promoted in the last 12 months and 8% had transferred to another position with their employer. Part-time employees reported a lower rate of promotion and transfer (2% and 4% respectively) than full-time employees (8% and 9% respectively).

Along with the changes occurring in the workplace, 42% 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 Employees who have worked with their current employer for one year or more, February 1993 ('000)

Characteristics	Full-time		Part-time		All employees		Total
	Males	Females	Males	Females	Males	Females	
Last twelve months							
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
Total	2 668.3	1 379.8	143.3	751.1	2 811.6	2 131.0	4 942.5
Length of time with current employer							
1 & under 2 years	268.8	183.3	41.5	128.8	310.4	312.1	622.5
2 & under 3 years	304.5	210.2	35.0	130.9	339.5	341.1	680.6
3 & under 5 years	558.6	342.7	36.0	200.1	594.6	542.8	1 137.5
5 & 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).

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.

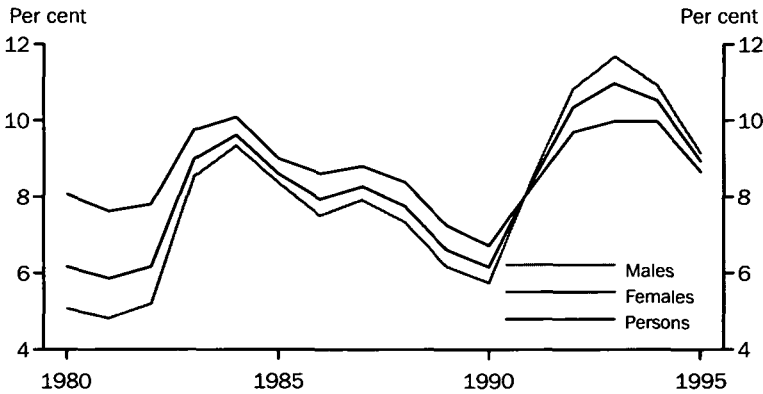
The number of unemployed persons increased from an average of 534,600 in 1988–89 to peak at 940,500 in 1992–93. In 1993–94, the average number of unemployed persons fell to 915,500.

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 from 5.8% in 1989–90, to 11.7% in 1992–93. By 1993–94, the average for males had fallen to 10.9%. For females, the unemployment rate rose from 6.7% in

1989–90, to 10.0% in 1993–94, unchanged from the previous year (graph 6.18). After reaching a peak of 11.9% in late 1992, the seasonally adjusted estimate of the unemployment rate for males has been generally declining since August 1993 and stood at 8.7% in August 1995. For females, the seasonally adjusted unemployment rate rose to a peak of 10.6% in November 1993, before falling steadily to 7.9% in August 1995.

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 6.19, provide additional perspectives.

6.18 Unemployment rate, annual average (%)



Source: *Labour Force, Australia* (6203.0).

6.19 Unemployed persons — age and whether looking for full-time or part-time work, annual average(a), 1993–94

Age group (years)	No. unemployed ('000)				Unemployment rate (%)			
	Males	Married females	All females	Persons	Males	Married females	All females	Persons
Looking for full-time work								
Aged 15–19								
Total aged 15–19	62.0	4.1	48.7	110.7	29.3	49.9	37.3	32.3
Looking for first job	33.8	1.4	30.3	64.1	..	..	..	..
Attending school	3.8	n.a.	2.9	6.7	n.a.	n.a.	n.a.	n.a.
Attending a tertiary educational institution full-time	2.8	n.a.	3.1	5.9	n.a.	n.a.	n.a.	n.a.
Aged >19								
Total aged >19	438.0	93.5	213.6	651.5	10.2	7.9	10.4	10.3
20–24								
Total aged 20–24	93.9	13.5	61.9	155.8	17.3	13.0	15.3	16.5
Looking for first job	18.4	3.3	18.7	37.1	..	..	..	..
25–34	131.5	31.3	60.5	192.0	10.7	8.9	9.9	10.4
35–44	92.8	29.2	51.2	144.0	7.9	8.0	9.9	8.5
45–54	63.7	15.8	32.1	95.8	7.1	5.5	8.0	7.4
>54	56.1	3.7	7.9	64.0	12.4	5.0	7.0	11.3
Aged 15–64	499.1	97.6	262.2	761.2	11.2	8.3	12.1	11.5
Total	500.0	97.6	262.3	762.2	11.1	8.2	12.0	11.4
Looking for part-time work								
Aged 15–19								
Total aged 15–19	26.4	0.6	33.4	59.8	16.8	19.2	15.5	16.0
Attending school	17.4	n.a.	21.7	39.1	19.6	n.a.	18.5	19.0
Attending a tertiary educational institution full-time	5.9	n.a.	7.8	13.7	17.1	n.a.	14.6	15.6
Aged >19								
Total aged >19	22.7	44.9	70.8	93.4	6.4	4.6	5.6	5.7
20–24								
Total aged 20–24	8.0	3.6	12.2	20.2	9.3	9.7	8.5	8.8
Attending a tertiary educational institution full time	5.3	n.a.	5.5	10.7	14.2	n.a.	11.5	12.7
25–34	5.5	15.8	22.5	28.0	7.5	6.3	7.0	7.1
35–44	2.2	15.6	21.5	23.7	3.8	4.3	5.1	4.9
>44	6.9	9.9	14.6	21.5	5.1	3.1	3.7	4.1
Aged 15–64	48.4	45.3	103.8	152.2	10.1	4.7	7.1	7.8
Total	49.0	45.5	104.2	153.2	9.6	4.6	7.0	7.6

(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 1988–89 and 1993–94, increasing from 145,600 to 334,800. Some 36.6% of all unemployed

persons in 1993–94 had been unemployed for 52 weeks or more (table 6.20). See also the later article on the long-term unemployed.

6.20 Unemployed persons — duration of unemployment

Annual average(a)	Duration of unemployment (weeks)					Total
	Under 4	4 & under 13	13 & under 26	26 & under 52	52 & over	
1988–89	113.6	128.7	72.5	74.3	145.6	534.6
1989–90	118.6	134.8	72.0	72.0	116.4	513.7
1990–91	131.8	184.5	127.0	116.3	149.5	709.0
1991–92	122.9	179.6	143.3	180.2	255.7	881.7
1992–93	121.7	173.0	134.0	175.4	336.3	940.5
1993–94	124.5	169.6	127.2	159.3	334.8	915.5

(a) Averages calculated on monthly estimates.
Source: *The Labour Force, Australia* (6203.0).

Job search experience

An estimated 89% of unemployed persons looking for full-time work in July 1994 were registered with the Commonwealth Employment Service (CES) compared with 37% of those looking for part-time work.

In July 1994, 81% of unemployed persons were registered with the CES. This is a decrease from the highest percentage recorded for the survey in July 1993 of 83%.

6.21 Unemployed persons — active steps taken to find work and whether looking for full-time or part-time work, July 1994 ('000)

Active steps taken to find work	Looking for full-time work			Looking for part-time work			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Registered with the CES & Took no other active steps	*0.7	*1.3	*2.0	*0.3	*0.4	*0.7	*1.1	*1.6	*2.7
Contacted prospective employers	368.6	179.2	547.7	13.8	26.2	40.0	382.4	205.4	587.8
Took other active steps	14.6	11.2	25.8	*1.8	5.2	7.0	16.3	16.5	32.8
Total	383.9	191.7	575.6	15.9	31.8	47.7	399.8	223.5	623.3
Not registered with the CES & Took no other active steps									
Contacted prospective employers	30.2	36.4	66.6	21.0	53.3	74.3	51.2	89.7	140.9
Took other active steps	*1.6	*2.4	*3.9	*2.0	*4.1	6.0	*3.5	6.4	10.0
Total	31.7	38.8	70.5	23.0	57.4	80.4	54.7	96.1	150.8
Total	415.6	230.4	646.1	38.9	89.2	128.1	454.5	319.6	774.2

Source: *Job Search Experience of Unemployed Persons, Australia* (6222.0).

In July 1994, the most commonly reported main difficulty in finding work was 'considered too young or too old by employers' which was nominated by 134,100 persons or 17% of the unemployed. For the 156,500 unemployed persons aged 45 and over, 51% reported age-related reasons as their main difficulty in finding work.

The proportion of unemployed persons who reported their main difficulty in finding work was 'no vacancies at all' has decreased from a high of 33% recorded in June 1991 to 17% in July 1994.

Other common difficulties reported were 'no vacancies in line of work' (14%), 'insufficient work experience' (12%) and 'lacked necessary skills or education' (11%).

There were 282,800 persons (37% of total unemployed) whose current period of unemployment, as at July 1994, was one year or more. For this group, the most frequently reported main difficulties in finding work were 'age' (25%) and 'no vacancies at all' (19%).

Of all the persons reporting 'language difficulties' as the main difficulty in finding work, 58% had been unemployed for one year

or more. Similarly, 54% of the 134,100 persons whose reported main difficulty was age-related had been unemployed for one year or more.

Unemployed persons without post-school qualifications had, on average, been unemployed for 9 weeks more than those with post-school qualifications (67 weeks compared to 58 weeks).

6.22 Unemployed persons(a) — main difficulty in finding work and duration of current period of unemployment, July 1994

Main difficulty in finding work	Duration of current period of unemployment (weeks)					Total ('000)	Average duration (weeks)
	Under 4 ('000)	4 & under 13 ('000)	13 & under 26 ('000)	26 & under 52 ('000)	52 & over ('000)		
Considered too young or too old by employers	8.5	13.0	17.6	22.9	72.1	134.1	91.8
No vacancies at all	9.4	23.5	20.4	25.8	53.0	132.1	66.5
No vacancies in line of work	14.8	24.0	19.5	22.6	28.0	109.0	47.1
Insufficient work experience	9.2	17.6	13.8	18.5	31.3	90.4	52.0
Lacked necessary skills or education	9.3	12.0	14.4	19.2	32.4	87.3	54.8
Too far to travel, transport problems	*3.8	8.0	6.2	9.5	15.9	43.3	66.2
Own ill health or disability	5.0	*3.3	*3.9	6.2	15.6	33.9	85.3
Language difficulties	*0.1	*3.0	*4.6	*4.8	17.6	30.1	116.5
Unsuitable hours	*3.2	5.4	*4.1	*4.5	*3.1	18.4	34.8
Difficulties with child-care, other family responsibilities	*3.5	*3.3	*0.8	*2.3	*3.5	13.3	39.4
Other difficulties(b)	*4.4	5.8	7.6	6.7	8.8	33.2	45.2
No difficulties reported	24.0	12.8	6.7	*3.9	*1.6	49.0	9.5
Total	95.2	129.7	119.6	146.8	282.8	774.2	62.2

(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)*.

In the 12 months to July 1994, an estimated 1,731,500 persons started a job for wages or salary (lasting two weeks or more). Of these persons, 601,800 had changed employer to start the job.

Of the persons who started a job for wages or salary, 38% obtained their job by approaching the employer without prior knowledge that the job was available and 38% approached the employer knowing that the job was available.

The remaining 24% 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% of those aged 15 to 34 years approached an employer for a job compared with 73% of persons aged 35 to 54 years and 59% of those aged 55 and over.

6.23 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 1994 ('000)

Whether job started was in preferred occupation	Age group (years)						Total
	15-19	20-24	25-34	35-44	45-54	>54	
Out of work prior to starting job							
Job was in preferred occupation	160.8	140.4	184.6	120.2	59.1	21.9	687.1
Job was not in preferred occupation	56.8	57.2	54.7	32.3	18.8	*3.1	222.9
Preferred occupation not specified	9.8	*4.2	7.0	5.2	*1.5	*0.6	28.3
Did not have a preferred occupation	68.6	35.0	37.1	29.5	15.1	6.0	191.4
Total	295.9	236.8	283.4	187.3	94.5	31.7	1 129.6
Changed employer to start job							
Job was in preferred occupation	47.6	113.9	170.0	89.4	43.0	11.8	457.6
Job was not in preferred occupation	9.9	13.5	21.9	14.7	4.8	*0.8	65.6
Preferred occupation not specified	*1.8	*2.7	*1.7	*2.9	*0.6	—	9.6
Did not have a preferred occupation	11.9	14.2	11.2	8.2	4.6	*0.9	51.0
Total	71.1	144.3	204.7	115.2	53.1	13.4	601.8
Total							
Job was in preferred occupation	208.4	254.3	354.6	209.6	102.1	33.7	1 162.7
Job was not in preferred occupation	66.6	70.7	76.6	47.0	23.6	*3.9	288.4
Preferred occupation not specified	11.5	6.9	8.6	8.1	*2.1	*0.6	37.9
Did not have a preferred occupation	80.4	49.2	48.4	37.8	19.7	6.9	242.5
Total	367.0	381.1	488.1	302.6	147.6	45.1	1 731.5

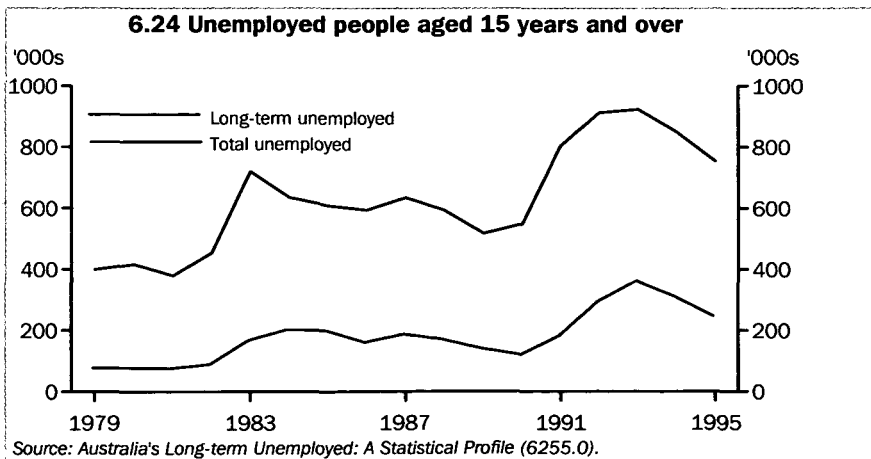
Source: Successful and Unsuccessful Job Search Experience, Australia (6245.0).

The long-term unemployed

In May 1995, there were 246,400 long-term unemployed persons in Australia. The long-term unemployed are those who have been unemployed for 52 weeks or more. This was significantly below the peak level of 366,000 persons reached in March 1993, but was still above the pre-1990-91 recession levels. The long-term unemployed

represented 32.7% of all unemployed persons, and 2.7% of the labour force.

There were a further 398,400 family members living in the same households as the long-term unemployed. Of these, 188,100 were dependent children.



Of the long-term unemployed in May 1995, 67% were male, which exceeded their labour force share of 57.1%. Long-term unemployment rates for males were higher than for females across all age groups, except for those aged 15 to 19 years. While younger males had high long-term unemployment rates, the rates were highest for older males. More than half of unemployed males aged 45 years and over, were long-term unemployed.

The average duration of unemployment (i.e. the average length of the current spell of unemployment for all unemployed persons within a particular group) tended to increase with age for both males and females. In May 1995, the average duration of unemployment for long-term unemployed males was shorter than for females across most age groups. However, the average duration of unemployment for all long-term unemployed males

(142.5 weeks) was longer than that for all long-term unemployed females (133.4 weeks). This reflects the high concentration of long-term unemployed males in older age groups, which have relatively higher average duration of unemployment.

Evidence suggests that there is a relationship between the unemployment and long-term unemployment experience of one family member and the labour market experience of other family members. In May 1995, of the 102,300 married couple families that had at least one partner long-term unemployed, only 31,900 (31.2%) had a partner in employment. Furthermore, there were 7,500 married couple families in which both partners were long-term unemployed. These married couple families tend to be more isolated from the work force and may have fewer informal contacts to assist in their search for employment.

6.25 Long-term unemployed married couple families — number and rates, husbands and wives aged 15 years and over, May 1995

Labour force status of partner	Husband		Wife	
	No. ('000)	Rate (%)	No. ('000)	Rate (%)
Employed -	16.2	0.8	15.7	0.8
Short-term unemployed	3.5	5.1	5.2	10.1
Long-term unemployed	7.5	26.3	7.5	27.4
Not in the labour force	50.9	5.3	3.4	3.1
Total	78.1	2.5	31.7	1.4

Source: *Labour Force Status and Other Characteristics of Families, Australia* (6224.0).

Sole parents also experience higher rates of long-term unemployment. In May 1995, the long-term unemployment rate for female sole parents (5.4%) was considerably higher than that for wives with dependants (1.5%). In addition, since the height of the 1990-91 recession, the long-term unemployment rate for female sole parents has fallen at a slower rate than that for wives with dependants.

The birthplace of migrants is another factor which can influence a person's labour force experience. In May 1995, 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.

6.26 Unemployment and long-term unemployment rates for persons aged 15 years and over — birthplace, May 1995 (%)

Birthplace	Unemployment rate	Long-term unemployment rate
Australia	7.9	2.3
Main English-speaking background countries(a)	7.4	2.2
Non-English-speaking background countries	12.0	5.6
Total	8.4	2.7

(a) Comprises the United Kingdom, Ireland, Canada, South Africa, United States of America and New Zealand.
Source: *The Labour Force, Australia* (6203.0).

For migrants from non-English speaking backgrounds, long-term unemployment rates decreased as their length of residence increased. Those who had recently arrived in Australia experienced a long-term unemployment rate of 10.7% in May 1995. This compares to 3.7% for migrants who arrived prior to 1971.

In February 1994, long-term unemployment rates were significantly higher among people without post-school qualifications. Those who had not completed the highest level of secondary school had the highest long-term unemployment rate (6.8%).

6.27 Unemployment and long-term unemployment rates for persons aged 15 to 19 — educational attainment, February 1994 (%)

Educational attainment	Unemployment rate	Long-term unemployment rate
Males		
With post-school qualifications	7.6	2.7
Without post-school qualifications	15.4	6.7
Total(a)	11.7	4.7
Females		
With post-school qualifications	7.6	2.1
Without post-school qualifications	13.5	4.7
Total(a)	11.2	3.5
Persons		
With post-school qualifications	7.6	2.5
Without post-school qualifications	14.6	5.8
Total(a)	11.5	4.2

(a) Includes persons still at school.
Source: *Labour Force Status and Educational Attainment, Australia* (6235.0).

Over the last decade, the proportion of the long-term unemployed with post-school qualifications increased from 21.1% to 27.6%. 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.

There is significant variation in the long-term unemployment rates between the various States and Regions in Australia. In May 1995, Tasmania (3.6%), South Australia (3.5%) and Victoria (3.3%), had the highest long-term unemployment rates, well above the national average of 2.7%. For Tasmania and Victoria, these high long-term unemployment rates were reflected in Hobart (3.6%) and Melbourne (3.3%), as well as throughout the remainder of these

States. While Adelaide had a long-term unemployment rate of 3.9%, the rest of South Australia experienced a rate less than the national average.

The highest regional long-term unemployment rates were experienced in the western suburbs of Sydney and

Melbourne, as well as along the coastal areas of south-east Queensland and southern New South Wales.

A more detailed analysis of long-term unemployment can be found in *Australia's Long-term Unemployed: A Statistical Profile* (6255.0).

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 73,100 in May 1989 and then fell rapidly to a low of 24,300 in May 1992. The number of job vacancies increased to its latest peak of 68,700 in August 1994 and then fell steadily to 53,700 in May 1995.

6.28 Job vacancies ('000)

Month	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
May 1990	19.9	13.1	7.1	*3.4	2.7	1.0	0.7	2.3	50.1
May 1991	10.5	3.8	4.4	*1.5	2.1	0.7	0.3	1.8	25.1
May 1992	6.5	5.8	5.1	1.4	3.2	0.6	0.4	1.3	24.3
May 1993	12.9	5.4	4.9	*1.8	*2.5	0.4	*0.6	*1.6	30.2
May 1994	17.7	15.3	6.1	*2.4	4.4	0.8	0.7	*1.9	49.4
May 1995	23.9	10.2	6.1	3.3	6.2	*1.7	1.0	1.3	53.7

Source: *Job Vacancies and Overtime, Australia* (6354.0).

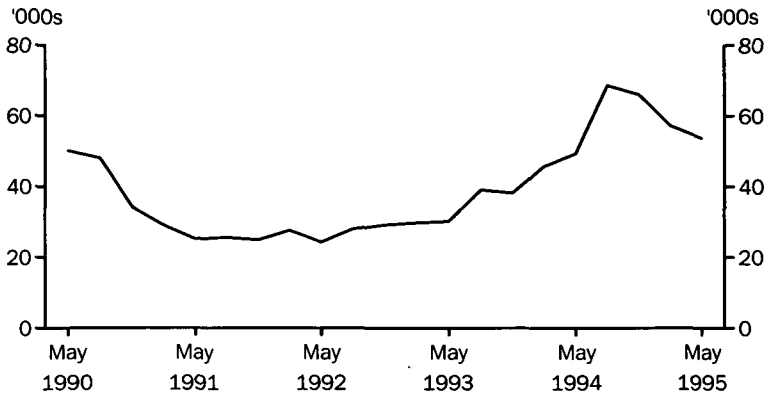
6.29 Job vacancy rates(a) (%)

Month	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
May 1990	0.95	0.83	0.82	*0.70	0.56	0.69	1.30	1.90	0.86
May 1991	0.51	0.24	0.52	*0.30	0.43	0.44	0.46	1.43	0.43
May 1992	0.33	0.36	0.56	0.30	0.61	0.41	0.65	1.03	0.42
May 1993	0.64	0.34	0.49	*0.40	*0.47	0.29	*0.81	*1.24	0.51
May 1994	0.85	1.03	0.64	*0.54	0.79	0.54	1.08	*1.39	0.84
May 1995	1.06	0.60	0.62	0.75	1.08	*1.08	1.65	0.91	0.85

(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).

6.30 Job vacancies



Source: *Job Vacancies and Overtime*, (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 3.6 million persons aged 15 to 69 years not in the labour force at September 1994, 21% reported marginal attachment to the labour force and therefore were potential participants in it. An estimated 72% 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 1994 there were 106,500 discouraged jobseekers. In September 1993, there were 147,400 discouraged jobseekers.

6.31 Civilian population aged 15 to 69 — labour force status ('000)

	September				
	1990	1991	1992	1993	1994
Persons in the labour force					
Persons in the labour force	8 514.2	8 591.5	8 647.5	8 744.6	8 875.5
Persons not in the labour force					
With marginal attachment to the labour force					
Wanted to work & were actively looking for work					
Were available to start work within four weeks	31.5	24.2	33.8	34.8	38.4
Were not available to start work within four weeks	26.1	22.5	25.3	23.5	22.9
Total	57.6	46.7	59.1	58.3	61.4

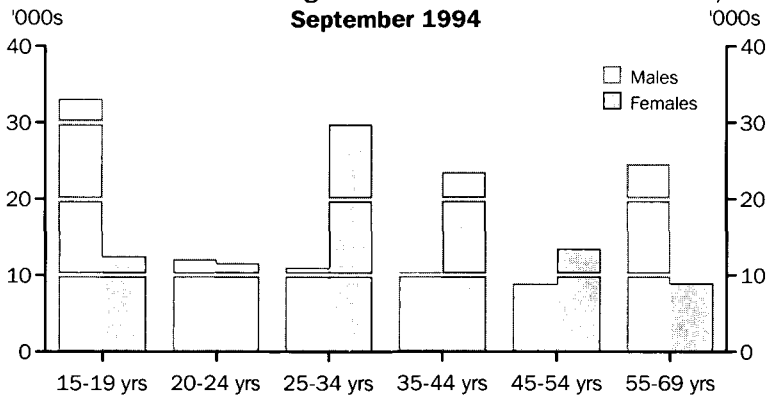
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6.31 Civilian population aged 15 to 69 — labour force status (^{'000}) — *continued*

	September				
	1990	1991	1992	1993	1994
Persons not in the labour force — (<i>continued</i>)					
With marginal attachment to the labour force —					
(continued)					
Wanted to work but not actively looking for work & available to start work within 4 weeks					
Discouraged jobseekers	100.9	138.2	145.6	147.4	106.5
Other	594.1	634.5	641.7	702.0	605.5
Total	694.9	772.7	787.3	849.5	712.0
Total with marginal attachment to the labour force	752.5	819.3	846.4	907.8	773.3
Without marginal attachment to the labour force	2 797.6	2 824.6	2 891.7	2 848.7	2 895.5
Total persons not in the labour force	3 550.1	3 643.9	3 738.1	3 756.4	3 668.8
Civilian population aged 15 to 69					
Civilian population aged 15 to 69	12 064.3	12 235.4	12 385.7	12 501.0	12 544.3

Source: *Persons Not in the Labour Force, Australia (6220.0)*.

6.32 Persons with marginal attachment to the labour force, September 1994



Source: *Persons Not in the Labour Force, Australia (6220.0)*.

Retirement and retirement intentions

In November 1994, the Australian population included 5,771,500 persons aged 45 and over. Of these, 3,146,100 (55%) had retired from full-time work and 1,898,500 (33%) intended to retire from full-time work. A further 518,400 persons (9%) had never worked full-time and did not intend to work full-time and 208,500 (4%) who were working did not intend to retire from full-time work.

Changing patterns of retirement are evident. For males there is a clear trend towards earlier retirement. In November 1994, 42% of males who had retired from full-time work, had retired aged younger than 60 years. This compares with 41% in October 1992 and 37% in November 1989. Fewer women are retiring aged less than 45 years than was the case 5 years ago, but an increasing proportion are

retiring aged between 45 and 59 years inclusive. In November 1989, 61% of females who had retired from full-time work, had retired aged less than 45 years compared with 57% in November 1994. The proportion who had retired aged 45 to 59 years has increased from 28% to 31% over the same period.

Of the 1,898,500 persons aged 45 and over who intended to retire from full-time work, 32% of males and 19% 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 28% of males and 29% of females.

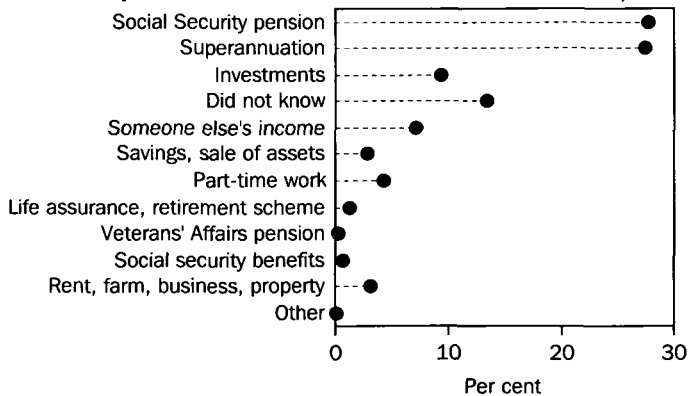
6.33 Persons aged 45 and over who had not yet retired from full-time work, November 1994 ('000)

Age (years)	Had retired	Intended to retire	Did not intend to retire	Never had a full-time job & did not intend to work full-time	Total(a)
Age group					
45-49	299.4	828.9	60.5	41.5	1 230.2
50-54	282.7	558.9	55.3	45.4	942.3
55-59	369.6	333.7	37.2	48.1	788.6
60-64	467.7	142.9	27.2	59.6	697.4
65-69	571.0	24.8	16.3	73.2	685.3
>69	1 155.8	9.3	12.0	250.5	1 427.6
Males	1 269.2	1 320.7	157.8	26.4	2 774.0
Females	1 876.9	577.8	50.8	492.0	2 997.5
Persons	3 146.1	1 898.5	208.6	518.3	5 771.5

(a) Includes a small number of persons whose retirement status could not be determined.

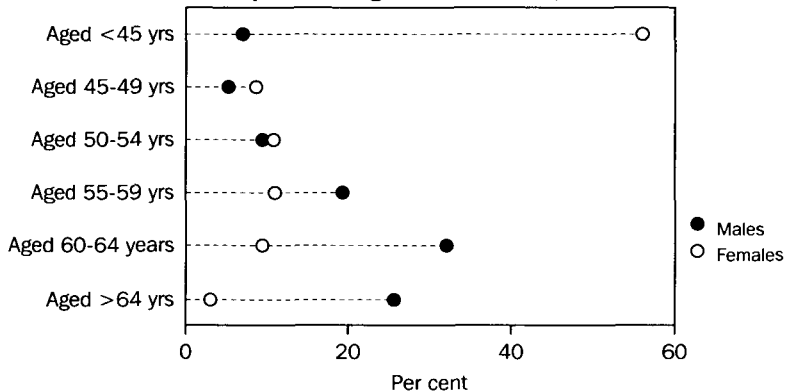
Source: *Retirement and Retirement Intentions, Australia (6238.0)*.

6.34 Expected main source of income at retirement, November 1994



Source: *Retirement and Retirement Intentions, Australia (6238.0.40.001)*.

6.35 Retired persons: age at retirement, November 1994



Source: Retirement and Retirement Intentions, Australia (6238.0.40.001).

6.36 Persons aged 45 and over who had retired from full-time work — age at retirement, November 1989 to November 1994(a)
(%)

Age at retirement	November 1989			October 1992			November 1994		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Less than 45	5.7	60.7	39.1	7.0	59.9	38.7	7.2	56.5	36.6
45-49	3.7	7.6	6.1	4.5	7.4	6.2	5.4	8.7	7.3
50-54	8.7	11.0	10.1	9.8	10.9	10.5	9.5	11.0	10.4
55-59	18.5	9.3	12.9	19.2	9.5	13.4	19.6	11.1	14.5
60-64	35.4	8.5	19.1	33.4	9.2	18.9	32.3	9.6	18.7
65-69	24.9	2.5	11.3	23.2	2.6	10.8	22.7	2.5	10.7
70 & over	3.1	0.5	1.5	2.9	0.5	1.4	3.2	0.7	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(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% 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% 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% 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 4%, a maximum rate set by the Commission, negotiable between employees and employers.
- In February 1988, the Commission awarded a flat \$6 per week 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 3% which was payable from 1 September 1988 and the second was an increase of \$10 per week 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 per week (or 3% whichever was the greater) for skilled workers, \$12.50 per week for semi-skilled workers and \$10 per week 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% increase was awarded to all States, subject to application to and ratification by the Commission.
- In December 1993, the first of a possible three \$8.00 per week increases 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 6.37 shows changes in the index for full-time adult males and females by industry as at August 1993 to 1995. In the 12 months to August 1995, the index rose by 1.2% for full-time adult males and 1.4% for full-time adult females.

**6.37 Weekly award rates of pay indexes for full-time adult employees, by industry
(Reference base year June 1985 = 100.0)**

Industry	Males			Females		
	June 1993	June 1994	June 1995	June 1993	June 1994	June 1995
Mining	142.2	142.7	144.1	..	..	..
Manufacturing						
Food, beverages, tobacco	138.8	141.3	142.8	138.6	141.6	143.2
Textiles; Clothing, & footwear	151.5	154.8	157.4	152.0	156.2	158.9
Metal products, machinery & equipment						
Basic metal products	138.9	139.8	140.5	..	..	..
Fabricated metal products; other machinery & equipment	143.2	145.9	148.5	..	..	..
All metal products, machinery & equipment	141.4	143.2	144.9	143.0	145.9	148.4
Transport equipment	140.9	142.0	143.3	..	..	..
Other manufacturing(a)	145.0	147.5	149.6	146.1	149.1	151.6
Total manufacturing	141.6	143.8	145.5	144.7	148.0	150.2
Construction	137.1	139.4	141.2	..	..	..
Wholesale & retail trade						
Wholesale trade	142.2	145.2	147.5	140.8	144.2	146.5
Retail trade	147.6	151.0	153.6	144.8	148.6	150.9
Total wholesale & retail trade	145.1	148.2	150.7	143.5	147.1	149.4
Finance, property & business services	136.8	137.4	138.9	137.5	139.1	141.0
Community services	139.1	139.7	141.2	143.1	143.8	145.3
All industries(b)	139.6	141.2	142.8	142.0	143.9	145.9

(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 6.38 shows the average weekly ordinary time earnings (AWOTE) of both males and female employed wage and salary earners

over the six years ending May 1990 to May 1995. For males the AWOTE increased by 21.4% from \$566.60 to \$687.80 over this period and for females by 22.4% from \$470.20 to \$575.50. The slightly higher growth in AWOTE for females has resulted in the ratio of female to male AWOTE increasing from 83.0% to 83.7% over the six years to May 1995.

6.38 Average weekly earnings of employees (\$)

	Pay period ending on or before					
	May 1990	May 1991	May 1992	May 1993	May 1994	May 1995
Males						
Full-time adult employees						
Average weekly ordinary time earnings	566.60	592.00	624.80	632.90	654.00	687.80
Average weekly total earnings	613.30	632.70	665.50	679.60	705.90	743.00
All male employees						
Average weekly total earnings	555.80	569.90	597.40	612.50	625.10	652.70
Females						
Full-time adult employees						
Average weekly ordinary time earnings	470.20	500.50	519.70	533.00	552.10	575.50
Average weekly total earnings	483.00	512.40	531.20	545.60	566.70	589.80
All female employees						
Average weekly total earnings	361.80	378.90	397.00	406.30	422.80	429.90
Persons						
Full-time adult employees						
Average weekly ordinary time earnings	534.10	560.80	587.30	597.80	617.50	647.30
Average weekly total earnings	569.30	591.70	617.60	632.60	656.10	687.80
All employees						
Average weekly total earnings	470.00	484.30	504.50	517.50	531.80	548.10

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 6.39 shows the distribution of average weekly earnings across different occupations

and categories of employees in May 1994. The highest weekly total earnings for full-time adult employees were recorded in the following major occupation groups: Managers and administrators (males \$937.00, females \$752.70); Professionals (males \$995.10, females \$737.90); and Para-professionals (males \$912.40, females \$664.00).

6.39 Average weekly total earnings — major occupation groups by category of employee, May 1994 (\$)

Occupation	Full-time employees							Part-time employees	All employees
	Managerial		Non-managerial			Total			
	Adult	Adult	Junior	Total	Adult	Junior	Total		
Males									
Managers & administrators	937.00	814.60	162.00	806.40	933.30	162.00	933.00	309.90	922.10
Professionals	995.10	832.90	388.70	831.10	857.50	388.70	855.80	359.20	797.20
Para-professionals	912.40	750.00	347.20	747.90	757.40	347.20	755.40	235.70	718.40
Tradespersons	540.80	629.80	296.80	591.10	623.00	296.80	587.60	253.00	575.60
Clerks	668.60	596.00	332.20	586.70	601.30	332.20	592.40	215.50	553.40
Salespersons & personal service workers	766.20	591.10	304.50	577.70	613.40	304.50	600.80	163.90	469.60

...continued

6.39 Average weekly total earnings — major occupation groups by category of employee, May 1994 — continued (\$)

Occupation	Full-time employees							Part-time employees	All employees
	Managerial		Non-managerial			Total			
	Adult	Adult	Junior	Total	Adult	Junior	Total		
Males — (continued)									
Plant & machine operators, & drivers	533.60	692.00	305.20	689.30	689.30	305.20	686.70	228.10	646.50
Labourers & related workers	459.80	551.80	300.20	535.00	551.10	300.20	534.50	187.40	453.00
Total	886.80	660.20	302.40	642.40	704.20	302.40	687.90	216.10	629.90
Females									
Managers & administrators	752.70	636.60	—	636.60	749.40	—	749.40	314.00	710.40
Professionals	737.90	732.70	353.50	732.00	732.80	327.90	731.90	325.30	591.40
Para-professionals	664.00	672.90	312.70	672.80	672.80	312.70	672.60	396.60	546.00
Tradespersons	301.00	477.80	247.90	408.80	466.20	247.90	403.70	235.80	345.30
Clerks	497.20	523.00	306.90	508.20	521.50	306.90	507.60	255.10	432.20
Salespersons & personal service workers	436.10	502.00	289.20	483.40	500.30	289.20	482.30	200.70	300.50
Plant & machine operators, & drivers	441.00	472.70	332.70	465.30	472.60	332.70	465.30	242.40	401.90
Labourers & related workers	324.10	444.30	296.10	439.70	443.70	296.10	439.20	208.90	298.70
Total	673.40	562.90	292.90	547.30	574.60	292.80	559.90	246.50	422.80
Persons									
Managers & administrators	896.00	777.70	162.00	771.60	892.40	162.00	892.20	312.40	872.20
Professionals	960.80	788.40	379.90	787.10	806.10	369.20	804.70	334.30	697.20
Para-professionals	865.00	722.40	345.70	721.10	727.60	345.70	726.30	373.60	635.40
Tradespersons	528.20	620.50	288.10	577.10	613.40	288.10	573.90	243.80	550.90
Clerks	553.50	544.00	311.20	530.20	544.60	311.20	531.60	251.30	460.80
salespersons & personal service workers	709.40	543.60	293.90	526.40	556.20	293.90	539.40	194.10	354.70
Plant & machine operators & drivers	533.00	671.30	317.60	667.30	669.20	317.60	665.20	232.50	617.10
Labourers & related workers	438.40	526.40	299.70	513.10	525.70	299.70	512.60	200.40	396.10
Total	837.10	623.00	298.40	605.90	657.80	298.40	641.70	239.20	533.00

Source: *Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)*.

Table 6.40 presents the components of average weekly earnings and hours for full-time adult non-managerial employees, by industry and sector.

In 1994, 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 \$138.80, females \$33.90). Male and female employees in the Finance and insurance

industry received higher average over-award pay (\$15.80 and \$10.30, respectively) than employees in any other industry. Significant amounts of overtime earnings were recorded for full-time adult non-managerial males in the Mining, Manufacturing, Transport and storage, and Construction industries (\$146.40, \$100.50, \$112.40 and \$105.00, respectively).

In May 1994, females in the private sector earned 82.5%, on average, of their male counterparts' total weekly earnings. In the public sector, female employees received 88.6% of total male earnings.

6.40 Composition of average weekly total earnings and average weekly total hours paid for — full-time adult non-managerial employees, by industry and sector, May 1994

	Average weekly total earnings (\$)						Average weekly total hours paid for		
	Average weekly ordinary time earnings					Total	Ordinary time	Overtime	Total
	Base pay(a)	Payment by measured result	Overaward & over-agreement pay	Total ordinary time	Overtime				
Males									
Industry(b)									
Mining	788.20	138.80	14.30	941.30	146.40	1087.70	39.30	5.30	44.60
Manufacturing	519.60	9.20	15.10	543.90	100.50	644.50	37.90	4.60	42.50
Electricity, gas & water	647.50	0.30	* 3.00	650.80	53.50	704.30	37.10	2.10	39.20
Construction	570.30	*5.90	7.10	583.30	105.00	688.30	38.00	4.40	42.40
Wholesale trade	513.00	*11.50	12.10	536.60	42.10	578.80	38.30	2.00	40.40
Retail trade	439.00	15.00	13.30	467.30	30.90	498.10	38.40	1.70	40.10
Accommodation, cafes & restaurants	474.10	*0.10	7.80	482.00	12.60	494.60	39.20	0.70	39.90
Transport & storage	578.40	*18.20	* 3.10	599.80	112.40	712.20	38.50	5.10	43.60
Communication services	628.90	*3.00	—	631.90	97.50	729.40	36.60	3.70	40.30
Finance & insurance	599.30	*2.50	15.80	617.50	18.70	636.30	37.70	*0.80	38.50
Property & business services	626.90	*8.20	* 3.40	638.50	28.30	666.90	40.30	1.30	41.60
Public administration & defence(c)	584.30	*0.20	2.50	587.00	28.10	615.10	37.10	1.30	38.40
Education	766.20	—	* 1.60	767.80	7.80	775.60	36.60	0.30	36.90
Health & community services	634.00	*0.10	* 1.80	635.90	48.70	684.60	38.20	1.60	39.80
Cultural & recreational services	620.10	*14.60	* 27.40	662.10	*31.30	693.40	38.40	*1.40	39.80
Personal & other services	662.60	*0.90	* 1.70	665.20	46.50	711.70	38.10	1.90	39.90
Sector									
Private	539.40	15.10	12.00	566.60	73.00	639.60	38.50	3.30	41.80
Public	652.00	0.70	1.70	654.40	47.40	701.80	37.20	1.90	39.10
Total	576.80	10.30	8.60	595.70	64.50	660.20	38.10	2.80	40.90
Females									
Industry(b)									
Mining	656.70	*33.90	*4.90	695.60	*49.20	744.80	39.10	*2.50	41.50
Manufacturing	464.40	6.00	10.00	480.30	31.00	511.30	37.80	1.70	39.40
Electricity, gas & water	563.60	—	1.40	565.10	*14.50	579.50	36.50	*0.50	37.00
Construction	509.20	*0.30	*3.20	512.80	*13.90	526.70	38.20	*0.70	38.80
Wholesale trade	481.50	*8.90	*8.70	499.10	12.50	511.60	38.20	0.70	38.90
Retail trade	433.30	*3.80	*2.70	439.90	*15.20	455.10	38.20	*0.90	39.10
Accommodation, cafes & restaurants	443.80	—	*3.70	447.50	*6.30	453.80	38.50	*0.40	38.90
Transport & storage	550.90	*2.60	*0.80	554.30	42.30	596.60	38.20	1.80	39.90
Communication services	568.50	*2.70	*0.10	571.30	31.90	603.10	35.80	1.40	37.20
Finance & insurance	519.10	*0.80	10.30	530.20	12.20	542.40	37.70	0.60	38.20
Property & business services	541.40	*5.40	8.40	555.20	8.20	563.40	37.50	0.40	37.90
Public administration & defence(c)	568.20	*0.70	1.20	570.10	7.60	577.70	36.50	0.30	36.90

For footnotes see end of table.

...continued

6.40 Composition of average weekly total earnings and average weekly total hours paid for — full-time adult non-managerial employees, by industry and sector, May 1994 —
continued

	Average weekly total earnings (\$)						Average weekly total hours paid for		
	Average weekly ordinary time earnings					Total	Ordinary time	Overtime	Total
	Base pay(a)	Payment by measured result	Overaward & over-agreement pay	Total ordinary time	Overtime				
<i>Females — (continued)</i>									
Industry(b) — (continued)									
Education	660.70	*0.10	*1.40	662.10	1.90	663.90	36.40	*0.10	36.50
Health & community services	577.90	—	1.40	579.30	11.60	590.90	38.10	0.40	38.50
Cultural & recreational services	584.20	*3.40	*12.10	599.70	*30.00	629.70	37.80	*1.10	38.90
Personal & other services	525.50	*5.80	*2.10	533.40	*12.40	545.80	37.30	*0.60	37.90
Sector									
Private	499.90	4.30	7.30	511.40	16.30	527.80	37.90	0.80	38.80
Public	609.90	*0.30	0.50	610.70	10.80	621.50	36.90	0.40	37.30
Total	541.10	2.80	4.70	548.60	14.30	562.90	37.50	0.70	38.20
<i>Persons</i>									
Industry(b)									
Mining	778.00	130.70	13.60	922.30	138.90	1061.20	39.30	5.10	44.40
Manufacturing	507.20	8.50	14.00	529.70	85.00	614.70	37.90	3.90	41.80
Electricity, gas & water	637.00	0.30	*2.80	640.10	48.60	688.70	37.00	1.90	39.00
Construction	563.00	*5.20	6.60	574.90	94.10	669.00	38.00	3.90	42.00
Wholesale trade	503.60	*10.70	11.10	525.40	33.20	558.60	38.30	1.60	39.90
Retail trade	436.60	10.30	8.80	455.70	24.20	479.90	38.30	1.40	39.70
Accommodation, cafes & restaurants	459.70	—	5.80	465.50	9.60	475.10	38.90	0.60	39.40
Transport & storage	572.00	*14.60	*2.60	589.20	96.10	685.30	38.40	4.30	42.70
Communication services	611.60	*2.90	—	614.60	78.70	693.30	36.40	3.10	39.40
Finance & insurance	549.80	*1.40	12.40	563.60	14.70	578.30	37.70	0.70	38.30
Property & business services	587.50	*6.90	5.70	600.10	19.10	619.20	39.00	0.90	39.90
Public administration & defence(c)	578.50	*40.00	2.00	580.90	20.70	601.60	36.90	0.90	37.80
Education	703.30	—	*1.50	704.80	4.30	709.10	36.50	0.20	36.60
Health & community services	594.00	—	1.50	595.50	22.20	617.80	38.10	0.80	38.90
Cultural & recreational services	603.40	*9.40	*20.30	633.00	*30.70	663.70	38.10	*1.30	39.40
Personal & other services	615.00	*2.60	*1.80	619.40	34.60	654.10	37.80	1.40	39.20
Sector									
Private	524.90	11.20	10.30	546.40	52.20	598.60	38.30	2.40	40.70
Public	634.70	0.50	1.20	636.40	32.40	668.80	37.10	1.30	38.40
Total	563.10	7.50	7.10	577.70	45.30	623.00	37.90	2.00	39.90

(a) Includes payments from enterprise bargaining awards and agreements. (b) Industry classified according to Australian and New Zealand Standard Industry Classification (ANZSIC). (c) Excludes permanent defence forces.

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 leave and superannuation benefits. A smaller proportion receive other non-wage benefits, such as holiday costs, low-interest finance, goods and services, housing, electricity, telephone, transport, medical, union dues, club fees, entertainment allowance, shares, study leave 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 97–98% each year since 1990.

The non-wage benefits most widely available to employees are leave benefits and superannuation (table 6.41). 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 93% in 1994 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 6.42) and by occupation (table 6.43), and a comparison of selected benefits received in the public and private sectors (graph 6.44).

6.41 Employees in main job(a) — type of benefit received and proportion of full-time and part-time employees receiving them (%)

Type of benefit received	Working full-time		Working part-time		Total employees	
	August 1989	August 1994	August 1989	August 1994	August 1989	August 1994
Superannuation	55.1	93.1	17.8	67.4	48.1	87.1
Holiday leave	92.1	89.6	32.0	34.0	80.8	76.6
Sick leave	91.5	89.4	31.8	34.4	80.3	76.6
Long-service leave	75.3	77.3	26.2	28.1	66.0	65.8
Goods & services	15.5	16.5	17.1	18.8	15.8	17.1
Transport	19.9	17.7	5.4	4.8	17.2	14.7
Telephone	9.7	9.3	3.7	3.2	8.6	7.9
Holiday expenses	4.3	4.0	0.7	0.8	3.6	3.2
Medical	4.1	3.8	1.1	1.2	3.5	3.2
Housing	3.8	3.5	1.2	1.2	3.3	2.9
Low-interest finance	3.1	3.1	0.8	0.9	2.6	2.6
Study leave	2.6	3.4	1.8	2.7	2.5	3.2
Shares	2.9	4.5	0.5	1.8	2.4	3.9
Union dues/prof. association	3.3	3.2	0.6	0.7	2.8	2.6
Electricity	2.2	2.2	0.9	1.1	1.9	2.0
Entertainment allowance	2.2	1.9	*0.2	*0.3	1.8	1.5
Club fees	1.8	2.1	0.3	0.4	1.5	1.7
Child care/education expenses	0.4	0.5	*0.2	*0.2	0.3	0.4
No benefits	3.5	2.2	42.7	21.7	10.9	6.8

(a) Excluding those attending school.

Source: *Employment Benefits, Australia* (6334.0).

**6.42 Full-time employees in main job — type of benefit received by weekly earnings,
August 1994
('000)**

Type of benefit received	Weekly earnings in main job							Total
	Under \$160	\$160-\$319	\$320-\$479	\$480-\$639	\$640-\$799	\$800-\$959	\$960 & over	
Superannuation	36.5	298.9	1 242.4	1 345.7	770.0	408.8	441.6	4 536.0
Holiday leave	32.6	277.5	1 197.8	1 299.2	744.4	397.2	415.8	4 364.5
Sick leave	34.2	276.2	1 190.4	1 298.7	744.8	395.5	413.9	4 353.7
Long-service leave	17.0	189.0	952.7	1 155.5	697.9	374.1	378.8	3 765.0
Goods & services	9.9	67.0	280.1	230.0	103.5	54.2	61.4	806.2
Transport	18.3	47.4	125.9	198.6	175.5	112.5	186.5	864.7
Telephone	15.7	30.0	55.3	88.8	83.6	67.8	110.4	451.5
Holiday expenses	*1.5	7.2	30.3	61.6	38.1	19.3	35.0	193.0
Medical	*3.5	9.2	24.3	43.0	33.4	25.8	45.8	185.1
Housing	12.4	21.4	28.3	33.3	25.7	15.6	31.9	168.6
Low-interest finance	—	*3.1	29.6	48.8	24.5	17.7	29.7	153.3
Study leave	*1.6	5.8	25.8	49.8	37.4	21.8	22.3	164.5
Shares	*3.9	6.7	43.1	57.8	36.5	26.8	46.0	220.9
Union dues/prof. association	*2.8	6.7	15.4	30.3	33.2	26.7	42.8	158.0
Electricity	12.9	15.6	20.5	20.4	14.7	9.6	15.7	109.3
Entertainment allowance	*1.2	*1.8	6.1	12.7	21.8	13.5	35.5	92.5
Club fees	5.0	*3.8	13.3	20.9	17.7	13.4	26.7	100.9
Child care/education expenses	*2.0	*2.5	*3.7	4.5	*3.6	*2.4	*3.9	22.6
No benefits	13.0	20.6	32.0	21.9	9.8	4.7	6.8	108.7
Total	72.4	354.6	1 353.0	1 409.8	800.0	421.1	461.6	4 872.4

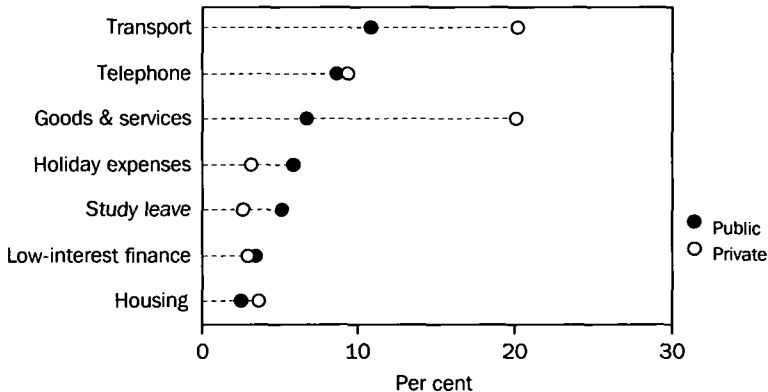
Source: *Employment Benefits, Australia* (6334.0.40.001).

6.43 All employees — type of benefit received and occupation in main job, August 1994 ('000)

Type of benefit received	Occupation								Total
	Managers & administrators	Professionals	Para-professionals	Tradespersons	Clerks	Salespersons & personal service workers	Plant & machine operators, & drivers	Labourers & related workers	
Superannuation	432.9	877.3	390.6	776.2	1 070.4	810.1	419.8	754.2	5 531.5
Holiday leave	406.0	799.6	366.6	720.4	964.8	601.9	380.2	626.4	4 865.9
Sick leave	406.3	805.0	365.6	715.7	964.0	603.1	379.2	622.6	4 861.4
Long-service leave	346.3	726.1	347.9	589.5	851.7	479.4	328.0	511.2	4 180.1
Goods & services	100.5	80.9	35.0	133.1	161.9	340.7	74.8	156.8	1 083.7
Transport	220.7	156.6	50.6	152.6	103.7	140.0	48.8	62.2	935.3
Telephone	141.7	94.8	29.0	68.7	77.9	46.5	15.4	24.5	498.6
Holiday expenses	27.7	22.5	10.1	23.3	44.3	39.4	15.6	22.6	205.4
Medical	32.1	36.4	18.5	15.4	49.5	24.9	14.3	12.0	203.3
Housing	45.7	40.5	13.1	20.1	18.6	13.9	11.3	22.9	186.0
Low-interest finance	26.8	17.7	*4.4	7.4	65.5	34.6	5.3	4.7	166.4
Study leave	19.5	54.6	23.8	13.1	46.0	24.9	6.1	15.6	203.7
Shares	47.0	34.5	6.8	22.3	50.7	48.3	17.6	20.7	247.8
Union dues/prof. association	29.8	71.6	8.8	15.7	15.0	12.6	8.0	6.8	168.1
Electricity	29.7	23.5	5.7	18.6	19.9	8.8	7.9	12.2	126.3
Entertainment allowance	41.8	17.7	*2.5	*3.0	9.7	19.0	*0.2	*2.3	96.3
Club fees	32.0	29.7	*3.9	6.7	11.2	17.0	*2.5	*4.1	107.2
Child care/education expenses	6.8	6.9	*1.6	*1.5	6.6	*1.5	*0.4	*0.6	25.9
No benefits	9.7	38.5	14.3	38.6	55.1	116.1	31.4	125.4	429.1
Total	480.8	956.0	420.9	865.4	1 177.7	1 021.5	472.4	953.8	6 348.5

Source: *Employment Benefits, Australia (6334.0)*.

6.44 Full-time employees receiving selected benefits, August 1994



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 3% 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 6.45 shows details of superannuation costs in the private sector by industry. These costs have increased 68% over the period 1989-90 to 1993-94 to be \$1,480 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 6.46 shows the growth in the percentage of employees covered by superannuation in each industry up to 1993-94. The Superannuation Guarantee Legislation, introduced in July 1992, provided superannuation cover for all employees who earned more than the tax free threshold (currently \$5,400 per annum or \$450 per month). For the 1993-94 financial year this became compulsory and has contributed to the large increase in superannuation coverage in Australia.

6.45 Superannuation — cost to employers, private sector

Industry	1989-90	1990-91	1991-92	1993-94
Total superannuation cost (\$m)				
Mining	128	155	177	206
Manufacturing	*965	1 063	1 082	1 407
Electricity, gas & water supply	1	8	8	10
Construction	*394	327	349	412
Wholesale trade	*506	577	533	754
Retail trade	265	338	401	630
Accommodation, cafes & restaurants	78	103	*170	259
Transport & storage	*137	169	208	273
Communication services	1	2	*3	11
Finance & insurance	436	521	535	517
Property & business services	*438	668	843	984
Government administration & defence	—	—	—	—
Education	*74	78	115	143
Health & community services	*223	284	296	509
Cultural & recreational services	43	*84	*96	103
Personal & other services	59	78	99	*223
Total industry	3 747	4 455	4 915	6 440

...continued

6.45 Superannuation — cost to employers, private sector — continued

Industry	1989-90	1990-91	1991-92	1993-94
Superannuation cost per employee (\$)				
Mining	1 860	2 235	2 861	3 430
Manufacturing	*1 000	1 155	1 281	1 605
Electricity, gas & water supply	2 105	2 954	3 073	3 726
Construction	*1 556	1 533	1 709	1 785
Wholesale trade	*1 136	1 311	1 358	1 917
Retail trade	332	461	516	756
Accommodation, cafes & restaurants	263	379	*659	801
Transport & storage	*828	981	1 143	1 780
Communication services	793	1 430	*1 389	1 646
Finance & insurance	1 789	2 306	2 715	2 399
Property & business services	*914	1 444	1 610	1 798
Government administration & defence	—	—	—	—
Education	*952	1 085	1 286	1 332
Health & community services	*782	969	911	1 527
Cultural & recreational services	407	*1 033	*725	832
Personal & other services	770	897	1 035	*1 548
Total industry	879	1 101	1 203	1 480

Source: *Labour Costs, Australia* (6348.0).

6.46 Superannuation — employees covered, private and public sectors (%)

Industry	1989-90	1990-91	1991-92	1993-94
Mining	86.2	86.5	93.2	96.6
Manufacturing	78.5	83.3	87.1	96.1
Electricity, gas & water supply	96.6	95.2	98.4	98.1
Construction	67.3	71.1	73.5	92.5
Wholesale trade	64.2	75.2	79.7	93.2
Retail trade	40.6	51.3	55.0	81.8
Accommodation, cafes & restaurants	24.9	47.7	48.2	87.6
Transport & storage	70.9	77.8	81.8	96.4
Communication services	99.1	99.3	98.9	97.8
Finance & insurance	78.3	86.0	87.1	88.0
Property & business services	49.9	64.4	69.8	90.9
Government administration & defence	89.4	93.9	95.1	96.9
Education	85.9	87.0	86.0	94.2
Health & community services	76.0	84.2	83.3	91.6
Cultural & recreational services	43.0	52.9	67.0	84.3
Personal & other services	69.9	75.1	78.8	92.3
Total industry	66.9	75.3	77.6	91.5

Source: *Labour Costs, Australia* (6348.0).

Table 6.47 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% compared with 55% of employers and 37% 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.

As shown in table 6.48 for those employees making personal contributions, superannuation was expected to be the main source of income after retirement for 42% of the 888,300 employees aged 45 to 74. A further 21% 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 (46%)

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% nominated superannuation as their expected main income compared with 54% of employees earning \$600 or more per week.

6.47 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	3238.1	2412.0	5650.1	341.7	392.4	734.0	3579.7	2804.4	6384.1
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 & 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	1069.5
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	1059.1	112.9	1172.0
Clerks	258.7	855.5	1114.2	18.0	153.5	171.5	276.7	1009.0	1285.7
Salespersons & personal service workers	304.9	497.6	802.5	103.0	204.6	307.6	407.9	702.2	1110.1
Plant & machine operators, & drivers	394.5	64.7	459.2	70.9	21.9	92.9	465.4	86.6	552.1
Labourers & related workers	536.4	278.3	814.7	154.2	100.7	255.0	690.7	379.0	1069.7
Total	3625.0	2520.5	6145.5	792.1	700.6	1492.7	4417.1	3221.1	7638.2

Source: Superannuation, Australia (6319.0).

6.48 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							Employer or business contributions only	Total(a)
	Super-annuation	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	Did not know		
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 & under \$400	25.1	43.0	7.3	15.8	11.6	17.5	191.1	313.1	
\$400 & under \$600	96.1	89.5	14.6	21.1	19.1	40.6	191.6	477.3	
\$600 & under \$800	107.1	32.9	12.9	9.6	18.1	25.5	79.0	289.8	
\$800 & under \$1 000	67.6	10.2	9.6	*4.0	14.1	13.7	34.8	157.3	
\$1 000 & over	63.1	5.5	14.0	*1.3	8.5	9.6	35.1	142.5	
Did not know	9.0	*1.9	*1.6	*1.2	*1.6	*4.1	24.8	44.7	

For footnotes see end of table.

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6.48 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 — continued ('000)

Status	Makes personal contributions						Employer or business contributions only	Total(a)
	Super-annuation	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		
Full-time	352.5	166.0	52.9	36.9	66.6	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	75.0	114.7	629.3	1 517.6
Average usual gross weekly pay (\$)	751.7	514.1	749.6	478.4	669.7	647.9	490.1	593.3

(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

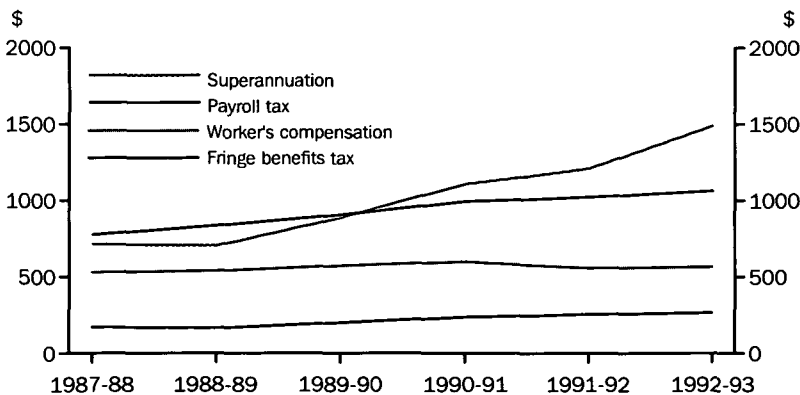
Labour costs are those costs incurred by employers in the employment of labour. Labour costs can be split into those payments for time actually worked by employees and additional labour costs incurred by employers.

Graph 6.49 shows how the non-earnings components of labour costs in the private sector have increased in the period 1986–87 to 1993–94. Over the past eight years these

costs have increased by approximately 63% compared to earnings which have increased by approximately 41%.

Table 6.50 details labour costs by industry for 1990–91, 1991–92 and 1993–94. 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.

6.49 Average labour costs per employee - private sector



Source: Labour Costs, Australia (6348.0).

6.50 Labour costs by industry

Type of labour cost & year	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
Total costs (\$m)											
Earnings											
1990-91	3 615	27 027	3 597	7 042	24 735	13 190	24 652	9 473	27 322	10 725	151 396
1991-92	3 578	26 907	3 696	7 103	24 450	14 322	26 755	10 275	29 181	11 645	157 912
1993-94	3 585	28 468	3 903	7 820	27 791	14 402	28 290	13 490	31 465	14 762	173 977
Other labour costs											
Superannuation(a)											
1990-91	174	1 124	576	426	922	1 083	1 446	509	1 097	430	7 787
1991-92	198	1 142	404	484	941	1 439	1 718	622	1 255	562	8 765
1993-94	223	1 432	396	499	1 393	1 406	1 853	1 076	1 892	820	10 990
Payroll tax											
1990-91	200	1 327	221	246	950	682	1 096	154	685	347	5 909
1991-92	202	1 367	228	224	932	738	1 197	173	771	388	6 220
1993-94	194	1 441	216	279	1 134	774	1 148	280	825	503	6 793
Workers' compensation											
1990-91	104	1 009	119	246	496	397	263	210	484	221	3 549
1991-92	93	893	119	261	439	384	256	212	485	213	3 355
1993-94	104	948	107	275	487	386	229	274	508	273	3 590
Fringe benefits tax											
1990-91	53	181	17	56	191	67	487	29	25	48	1 154
1991-92	50	183	19	50	224	67	543	38	33	56	1 261
1993-94	61	184	23	49	269	86	555	91	52	71	1 441
Total other costs											
1990-91	530	3 641	932	975	2 560	2 230	3 291	902	2 291	1 046	18 399
1991-92	543	3 585	769	1 019	2 534	2 629	3 715	1 044	2 545	1 218	19 601
1993-94	582	4 005	742	1 102	3 282	2 652	3 785	1 721	3 277	1 666	22 814
Total labour costs											
1990-91	4 144	30 668	4 529	8 017	27 295	15 420	27 943	10 376	29 613	11 771	169 795
1991-92	4 122	30 492	4 465	8 121	26 984	16 951	30 469	11 319	31 726	12 863	177 513
1993-94	4 167	32 473	4 645	8 923	31 074	17 054	32 074	15 212	34 741	16 428	196 791

For footnotes see end of table.

...continued

6.50 Labour costs by industry — continued

Type of labour cost & year	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
Earnings											
1990-91	48 813	28 712	34 373	28 237	21 040	30 353	29 790	28 691	25 847	19 652	26 373
1991-92	53 811	31 036	36 557	29 516	20 869	33 407	31 357	29 453	26 759	19 593	27 404
1993-94	57 763	32 059	43 351	30 990	22 587	38 728	31 810	32 089	28 529	21 071	28 958
Other labour costs											
Superannuation(a)											
1990-91	2 346	1 194	5 501	1 710	784	2 493	1 747	1 543	1 038	787	1 357
1991-92	2 974	1 318	3 992	2 012	803	3 357	2 014	1 782	1 151	945	1 521
1993-94	3 596	1 613	4 397	1 977	1 132	3 781	2 083	2 560	1 716	1 170	1 829
Payroll tax											
1990-91	2 696	1 410	2 108	988	808	1 570	1 324	467	648	636	1 029
1991-92	3 038	1 576	2 254	930	795	1 722	1 403	497	707	652	1 079
1993-94	3 123	1 623	2 399	1 106	922	2 081	1 291	665	748	718	1 131
Workers' compensation											
1990-91	1 401	1 072	1 133	987	422	914	318	637	458	404	618
1991-92	1 404	1 030	1 176	1 086	374	896	300	606	445	358	582
1993-94	1 683	1 068	1 188	1 090	395	1 037	257	652	460	389	598
Fringe benefits tax											
1990-91	711	192	163	225	163	155	588	86	24	88	201
1991-92	751	211	188	206	191	157	636	108	30	94	219
1993-94	975	208	253	195	219	231	624	217	47	101	240
Total other costs											
1990-91	7 153	3 867	8 906	3 910	2 177	5 132	3 977	2 733	2 168	1 916	3 205
1991-92	8 167	4 135	7 609	4 233	2 163	6 132	4 354	2 993	2 333	2 050	3 401
1993-94	9 377	4 511	8 237	4 368	2 668	7 131	4 256	4 094	2 971	2 378	3 797
Total labour costs											
1990-91	55 966	32 579	43 278	32 147	23 217	35 485	33 767	31 424	28 015	21 568	29 578
1991-92	61 978	35 171	44 166	33 749	23 033	39 539	35 711	32 445	29 093	21 642	30 805
1993-94	67 140	36 570	51 588	35 357	25 255	45 859	36 066	36 183	31 499	23 449	32 755

(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 1993–94 by various categories of employed persons, and in different industries are shown in tables 6.51 and 6.52.

6.51 Employed persons — aggregate and average weekly hours worked(a), annual average(b), 1993–94

	Females				Persons
	Males	Married	Not married	Total	
Aggregate weekly hours worked (million)					
By all workers	175.8	55.8	37.4	93.2	269.0
By full-time workers	168.9	41.3	31.0	72.2	241.2
By part-time workers	6.9	14.5	6.4	21.0	27.9
Average weekly hours worked					
By all workers	39.3	27.5	29.1	28.2	34.6
By full-time workers	42.1	37.8	37.3	37.6	40.7
By part-time workers	14.9	15.6	14.2	15.1	15.0
By wage & salary earners	38.1	27.4	29.1	28.1	33.7
By other than wage & salary earners	45.0	28.2	29.6	28.5	39.4
By all workers who worked one hour or more in the reference week	42.1	30.2	31.1	30.6	37.2
By full-time workers who worked one hour or more in the reference week	45.1	41.3	40.0	40.7	43.7
By part-time workers who worked one hour or more in the reference week	15.9	17.1	15.1	16.4	16.3

(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).

6.52 Employed persons — average weekly hours worked(a) by industry, annual average(b), 1993–94

	Females			Persons
	Males	Married	Total	
Agriculture, forestry, fishing & hunting				
Agriculture	49.8	30.9	30.5	43.6
Services to agriculture; Hunting & trapping	40.2	22.6	25.4	36.4
Forestry & logging	38.8	30.1	30.5	38.2
Commercial fishing	47.3	24.1	23.9	42.2
Total agriculture, forestry, fishing & hunting	48.7	30.4	30.1	43.1
Mining	44.0	31.6	34.4	43.0
Manufacturing				
Food, beverages & tobacco manufacturing	40.2	32.1	32.4	37.8
Metal product manufacturing	40.5	29.6	31.0	39.3
Other manufacturing	41.7	27.8	30.1	38.9
Total manufacturing	40.8	31.8	32.8	38.7
Electricity, gas & water supply	36.5	31.8	33.4	36.1
Construction	40.7	19.1	21.0	37.9

For footnotes see end of table.

...continued

6.52 Employed persons — average weekly hours worked(a) by industry, annual average(b), 1993–94 — continued

	Females			Persons
	Males	Married	Total	
Wholesale trade	42.8	30.4	32.0	39.4
Retail trade	39.1	29.2	25.5	32.2
Accommodation, cafes & restaurants	38.9	30.2	27.9	32.7
Transport & storage	42.6	29.8	31.9	40.3
Communication services	37.4	30.8	31.6	35.6
Finance & insurance	40.4	29.6	31.4	35.4
Property & business services	42.3	27.2	30.1	37.1
Government administration & defence	36.7	29.5	31.0	34.3
Education	39.2	30.8	31.9	34.4
Health & community services	38.9	27.0	28.5	31.0
Cultural & recreational services	37.4	25.9	27.5	32.5
Personal & other services	36.5	28.4	29.4	32.6
All industries	40.8	28.9	29.3	35.9

(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.

6.53 Overtime by industry

Industry	February					
	1989	1990	1991	1992	1993	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 & 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 & storage; Communication	8.6	8.0	7.7	8.0	8.0	7.9
Public administration & 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
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 & 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 & storage; Communication	29.8	28.2	28.5	26.1	25.9	32.3
Public administration & 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% and 18%, 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).

6.54 All employees — working arrangements, August 1993 (‘000)

	Permanent			Casual			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Full-time employees in main job									
Start & finish times not fixed									
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
Total start & 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
Start & finish times are fixed									
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 start & 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
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									
Start & finish times not fixed									
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
Total start & finish times not fixed	18.9	102.9	121.8	132.6	286.8	419.3	151.5	389.7	541.1
Start & finish times are fixed									
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 start & finish times are fixed	38.9	342.2	381.1	165.3	445.8	611.0	204.2	788.0	992.2
Total	57.8	445.1	502.9	297.8	732.6	1 030.4	355.6	1 177.6	1 533.3

...continued

6.54 All employees — working arrangements, August 1993 — *continued* (‘000)

	Permanent			Casual			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
	Total								
Start & finish times not fixed									
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
Total start & 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
Start & finish times are fixed									
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 start & 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
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% of males and 56% 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% of employees in Public administration and defence to 12% in Agriculture, forestry, fishing and hunting.

6.55 Employees entitled to a rostered day off, August 1993



Source: Working Arrangements, Australia, August 1993 (6342.0).

Of the 4.8 million full-time employees, 39% 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).

**6.56 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

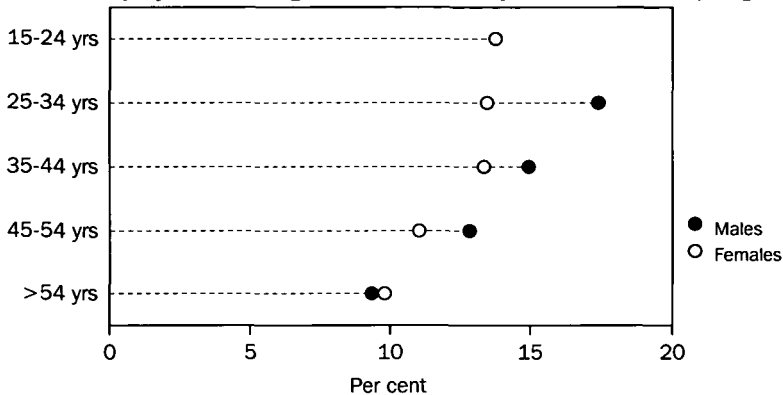
Source: Working Arrangements, Australia, August 1993 (6342.0).

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% of employees (15% of males and 13% of females).

Of the 513,900 male shift workers, 456,500 (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).

6.57 Employees working shift work in the previous 4 weeks, Aug 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 6.58, 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 1994, the reported number of working days lost in any one year varied between 6.3 million (in 1974) and 0.5 million (in 1994). The number has been consistently less than one million since 1992.

6.58 Industrial disputes

Year	No. of disputes(a)		Employees involved ('000)		Working days ('000)
	Commenced in year	Total(a)	Newly involved(b)	Total(a)	
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
1994	554	558	262.9	264.5	501.0

(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.

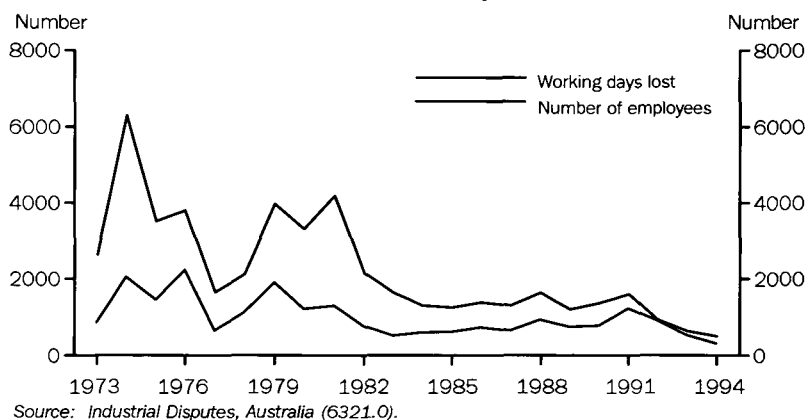
(b) Comprises workers involved in disputes which commenced during the year and additional workers involved in disputes which continued from the previous year.

Source: Industrial Disputes, Australia (6321.0).

In 1994 there were 558 disputes reported involving 264,500 employees and the loss of 501,000 working days. The number of disputes was the lowest recorded for a

calendar year since 1940 (350). The number of working days lost was the lowest reported for a calendar year since 1959 when 365,000 working days were lost.

6.59 Industrial disputes



6.60 Industrial disputes — working days lost by industry ('000)(a)

Industry(a)	1989	1990	1991	1992	1993	1994
Mining						
Coal	164.8	150.5	129.6	76.8	78.6	151.0
Other	34.2	86.7	37.1	50.8	14.4	18.3
Manufacturing						
Metal product; Machinery & equipment	201.1	536.3	664.0	121.4	160.4	44.9
Other	186.7	133.4	169.3	154.6	77.7	78.3
Construction	117.0	62.2	120.7	38.4	13.1	20.2
Transport & storage; Communication services	70.7	129.9	98.1	82.4	15.6	59.4
Education; Health & community services	224.1	199.2	201.1	238.9	147.5	73.8
Other industries(b)	203.9	78.3	190.7	177.7	128.7	55.2
All industries	1 202.4	1 376.5	1 610.6	941.2	635.8	501.0

(a) Prior to January 1994, industry information was classified according to ASIC. From that time, industry data has been classified to ANZSIC. (b) Includes: Agriculture, forestry and fishing; Electricity, gas and water supply; Wholesale trade; Retail trade; Accommodation, cafes and restaurants; Finance and insurance; Property and business services; Government administration and defence; Cultural and recreational services; Personal and other services.

Source: *Industrial Disputes, Australia (6321.0)*.

Working days lost per thousand employees decreased from 100 in 1993 to 76 in 1994. The Coal mining industry continued to report

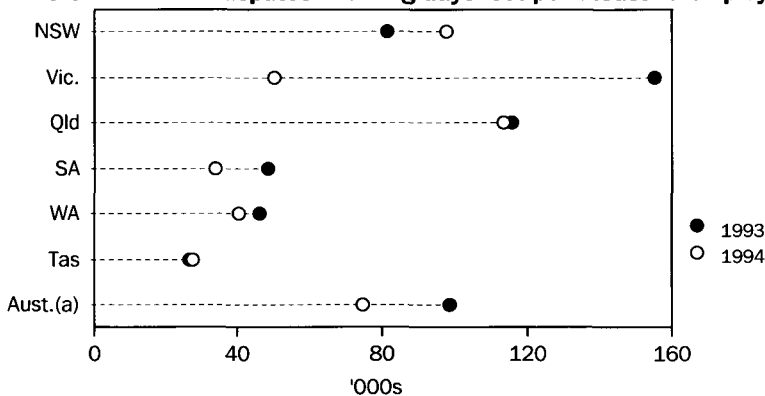
the highest number of working days lost per thousand employees (table 6.61) — 5,964 in 1994.

6.61 Industrial disputes — working days lost per thousand employees, by industry(a)(b)

Industry(b)	1989	1990	1991	1992	1993	1994
Mining						
Coal	5 505	4 966	4 465	3 078	2 915	5 964
Other	642	1 284	597	840	254	323
Manufacturing						
Metal product; Machinery & equipment	473	1 181	1 555	309	426	116
Other	283	197	268	243	121	123
Construction	374	161	349	126	41	59
Transport & storage; Communication services	160	279	214	192	37	137
Education; Health & community services	176	149	147	172	106	63
Other industries(c)	65	24	60	57	41	16
All industries	190	207	248	147	100	76

(a) The basis for the calculation of working days lost per thousand employees was changed in January 1995 to use estimates of employees taken from the Labour Force Survey only. Estimates have been recalculated on this basis for each 12 monthly period back to December 1990. (b) Prior to January 1994, industry information was classified according to ASIC. From that time, industry data has been classified to ANZSIC. (c) Includes: Agriculture, forestry and fishing; Electricity, gas and water supply; Wholesale trade; Retail trade; Accommodation, cafes and restaurants; Finance, and insurance; Government administration and defence; Cultural and recreational services; Personal and other services.

Source: *Industrial Disputes, Australia (6321.0)*.

6.62 Industrial disputes: working days lost per thousand employees

Source: *Industrial Disputes, Australia (6321.0)*.

Industrial disputes which lasted 5 and less than 10 days accounted for 29% of all time lost in 1994. The major reported cause of disputes that ended in 1994 was Managerial policy (including award restructuring). This cause accounted for 158,900 working days lost (31%). Resumption without negotiation was the main reported method of settlement of disputes that ended in 1994 (47%).

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 89 in 1993 to 76 in 1994. Unions with membership of 50,000 or more have increased their percentage of total union membership from 65.2% in 1992 to 77.2% in 1994.

6.63 Number of unions and membership, by size of union

Size of union (no. of members)	30 June 1992			30 June 1993			30 June 1994		
	No. of unions	No. of members ('000)	Cumulative % of total members	No. of unions	No. of members ('000)	Cumulative % of total members	No. of unions	No. of members ('000)	Cumulative % of total members
Under 1 000	104	31.4	1.0	89	27.2	1.0	76	21.7	0.8
1 000 – 4 999	51	122.0	4.9	44	109.5	4.6	33	76.0	3.3
5 000 – 19 999	34	336.1	15.6	22	201.5	11.3	20	200.2	10.3
20 000 – 49 999	18	601.6	34.8	12	391.8	24.3	11	360.5	22.8
50 000 & over	20	2 044.0	100.0	21	2 269.9	100.0	17	2 231.8	100.0
Total	227	3 135.1	—	188	3 000.1	—	157	2 890.2	—

Source: Trade Union Statistics, Australia (6323.0).

A survey conducted in August 1994 found that of the 6,525,800 employees aged 15 and over, 2,283,400 were trade union members (in connection with their main job).

The survey revealed that trade union membership declined from 50% in 1982 to 35% in 1994.

The Electricity, gas and water supply, and Communication services industry groups were the most unionised with 66% of employees being trade union members while the Agriculture, forestry and fishing industry group, with 12%, was the least unionised.

6.64 Proportion of all employees who were trade union members by industry and whether permanent or casual employee, August 1994 (%)

Industry	Males			Females			Persons		
	Permanent employee	Casual employee	Total	Permanent employee	Casual employee	Total	Permanent employee	Casual employee	Total
Agriculture, forestry & fishing	15.3	9.5	12.9	*19.5	*6.4	10.9	16.0	8.4	12.4
Mining	50.8	*26.1	49.0	*8.2	11.1	*6.1	47.2	*18.6	44.5
Manufacturing	47.3	15.8	44.3	35.6	16.0	30.7	44.6	15.9	40.8
Electricity, gas & water supply	69.9	*20.0	69.0	51.3	*35.6	49.9	67.5	*26.9	66.4
Construction	44.6	20.2	37.4	14.2	—	9.3	41.3	17.5	34.1
Wholesale trade	19.1	*3.5	17.5	8.6	*5.3	7.8	16.3	*4.4	14.6
Retail trade	19.2	19.0	19.1	33.5	21.3	27.0	25.6	20.5	23.3
Accommodation, cafes & restaurants	22.1	15.7	19.3	22.7	17.2	19.3	22.4	16.7	19.3
Transport & storage	64.7	24.6	58.3	35.4	*8.7	30.0	58.4	20.3	51.9
Communication services	73.8	*30.5	70.4	58.8	*4.3	55.2	69.0	*23.3	65.6
Finance & insurance	42.7	—	40.0	47.1	*5.3	44.1	45.3	*3.3	42.4
Property & business services	22.2	7.8	18.7	11.8	5.8	10.1	17.4	6.8	14.6
Government administration & defence	64.7	*2.8	61.9	50.7	*4.9	44.3	59.3	*4.2	54.7
Education	63.0	*13.9	58.1	64.4	14.8	55.0	63.9	14.6	56.1
Health & community services	42.5	*7.4	36.2	44.5	11.3	37.2	44.1	10.6	37.0
Cultural & recreational services	32.9	*11.0	25.3	24.7	20.4	22.4	29.4	16.8	23.8
Personal & other services	56.5	*5.7	50.5	27.3	*6.2	20.4	44.9	*6.0	36.6
Total	43.0	14.8	37.9	38.8	14.5	31.3	41.3	14.7	35.0

Source: Trade Union Members, Australia (6325.0).

Training

Training continues to be a major element of labour market reform in Australia. To provide the information necessary for the analysis of training issues and the development and evaluation of training policies and programs, the ABS has conducted a number of training surveys.

Training expenditure

Estimates of the expenditure by employers on the formal training of their employees, and of the paid time employees spent receiving

formal training were collected in the 1993 Employer Training Expenditure survey, which covered the September quarter 1993. The survey defined formal training as all training activities which have a structured plan and format designed to develop job related skills and competence, and found that total expenditure on formal training during 1 July to 30 September 1993 by Australian employers was estimated at \$1,100 million. More detailed information on this survey was presented in *Year Book Australia 1995*.

6.65 Training expenditure by employer size, July to September 1993

	Number of employees			Total
	1-19	20-99	>99	
Total training expenditure (% of gross wages & 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	5.3	6.17	5.55
Employers reporting training expenditure (% of all employers)(a)	18.0	80.3	97.9	24.6
Total training expenditure (\$m)	112.3	177.8	818.8	1 109

(a) The percentage of employers is based on the statistical unit for the survey.

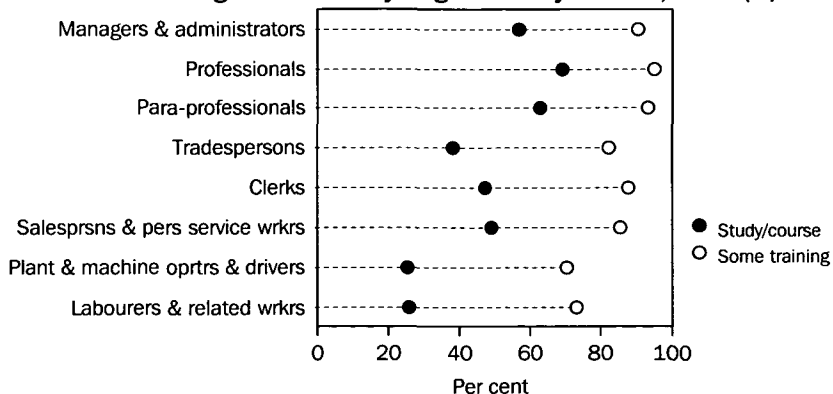
Source: *Employer Training Expenditure, Australia (6353.0)*.

Who received training?

The 1993 Survey of Training and Education found that in the twelve months prior to the survey being undertaken, an estimated 86% of those who had a wage or salary job in the previous twelve months undertook some form of training. The greatest proportion of wage or salary earners by occupation who undertook training in 1993 were

professionals. An estimated 96% of professionals received some form of training in the twelve month period and 70% undertook study or training courses. Plant and machine operators, and drivers had the lowest proportion receiving some form of training (72%).

6.66 Training undertaken by wage or salary earners, 1993 (%)



Source: *Training and Education Experience, Australia (6278.0)*.

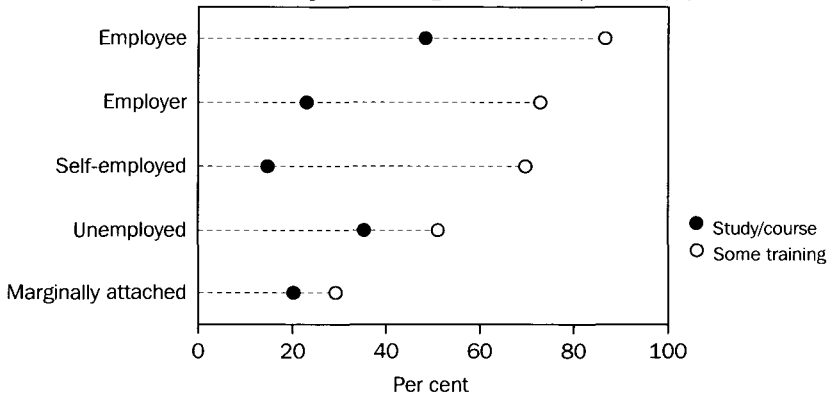
Length of training course

Of the 5,581,900 wage and salary earners who attended an in-house training course in the twelve months prior to the survey, some 35% of the courses lasted 40 hours or more. Male participants had more attendances at these longer courses than did female participants (42% compared with 27%).

Employment status of persons undertaking training courses

Of the estimated 9,241,900 persons who were employed, unemployed or marginally attached to the labour force at the time of the survey, almost 50% of employees had undertaken study or training courses compared with 23% of employers and 15% of self-employed persons. Almost twice as many unemployed persons as marginally attached persons undertook study or training courses (36% compared with 21%).

6.67 Summary of training undertaken, 1993 (%)



Source: *Training and Education Experience, Australia (6278.0)*.

Reasons for training employees

The 1994 Training Practices Survey found that 32% of Australian employers reported providing some formal training for their employees during the twelve month period ending February 1994. Improved work performance was reported by 80% of employers as a reason for training employees. The next two most common reasons for training were to enable employees to move to other positions within the organisation, and to multi-skill employees, (reported by 41% and 40% of employer respectively). Almost half the employers who reported training (44%) also reported that their training expenditure increased during the previous twelve months. Technological change was the factor most often reported as having increased training expenditure (30% of

employers), followed by quality assurance (26% of employers). Time constraints and cost constraints were reported as the most common limitations to the amount of training provided by employers for their employees (56% and 41% of employers respectively).

Almost all employers who formally trained employees used external training providers to meet part, or all of their training needs (92%). A lesser proportion (62%) reported providing in-house training for their employees during the reference period. In February 1994, it is estimated that employers in Australia employed 15,800 full-time trainers to provide training for their employees. There was approximately one full-time trainer for every three hundred and fifty employees.

6.68 Reasons for training employees(a) during the last 12 months, February 1994

Reasons for training	1-19 employees	20-99 employees	100 or more employees	Total
Private employers				
Improve work performance of employees	75.7	86.4	95.6	79.4
Enable movement to other positions within organisation(b)	34.9	47.9	66.9	39.9
Multi-skill employees	32.5	51.4	66.0	39.0
Meet Training Guarantee requirements	23.6	45.9	30.5	29.1
Public employers				
Improve work performance of employees	72.4	99.2	97.1	93.8
Enable movement to other positions within organisation(b)	68.9	48.7	75.5	62.9
Multi-skill employees	82.4	*47.9	84.2	68.3
Meet Training Guarantee requirements	*48.7	46.4	31.5	40.8
Total employers				
Improve work performance of employees	75.6	87.2	95.8	79.8
Enable movement to other positions within organisation(b)	35.2	47.9	68.5	40.6
Multi-skill employees	32.9	51.2	69.3	39.9
Meet Training Guarantee requirements	23.8	46.0	30.7	29.5

(a) Employers may have more than one reason for training employees. (b) Includes employees being trained to move to more highly skilled or responsible positions within the organisation, or to fill identified vacant positions from within the organisation.

Source: *Employer Training Practices, Australia (6356.0)*.

Training practices

Sixty-two per cent of all employers who formally trained employees provided in-house training during the reference period. A higher proportion of employers in the Northern Territory and the Australian Capital Territory provided in-house training for their employees than their state counterparts.

Excluding the two territories, Queensland was the state that had the highest proportion of employers who provided in-house training (72%), had a written training plan (42%), had a qualified trainer(s) (40%) and employed a full-time trainer(s) (6%).

6.69 Employers reporting training in the last 12 months, February 1994 (%)

Training practices	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Employers reporting in-house training	59.0	60.1	72.0	64.9	61.4	n.p.	94.8	81.1	61.6
Employers with a written training plan(s)	27.3	25.7	41.6	36.9	27.3	n.p.	*53.3	52.5	29.9
Employers with a qualified trainer(s)	30.7	31.9	39.7	32.9	37.7	n.p.	58.3	*41.6	33.3
Employers with a full-time trainer(s)	4.1	4.5	5.6	2.6	*2.7	n.p.	n.p.	*5.9	4.1
Employers used formal training needs analysis	16.3	17.9	25.0	28.1	27.8	n.p.	*36.4	48.4	21.1

Source: *Employer Training Practices, Australia (6356.0)*.

Government employment and training programs

The Commonwealth Government, generally 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.

Considerable focus is also being given to the development of 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.

The following section provides a description of the major training and labour market programs administered by the Department of Employment, Education and Training during 1994-95.

There is a degree of interrelationship between individual programs and with some of the provisions contained in *Chapter 7, Social security and welfare*.

More detail on each of these programs and other training and labour market programs can be obtained from the Department of Employment, Education and Training.

6.70 Expenditure on main training and labour market programs, 1994-95

Type of program	Allocation (\$m)	No. participating
Industry based vocational education and training		
Support of Apprentices	137.5	n.a.
Support for Traineeships	53.0	n.a.
Special Trade Training	1.6	n.a.
Skills Enhancement		
Workplace English Literacy	11.6	n.a.
Australian Vocational Certificate Training System	8.8	n.a.
Pre-vocational training	33.0	n.a.
Employment Participation		
Job Needs	6.0	n.a.
Job Funds	25.7	13 200
Job Clubs	36.3	58 200
Job Place	8.8	4 900
Skill Train	414.0	125 200
Advanced English for Migrants Program	5.0	4 800
Skill Share	201.1	130 000
Job Start	458.9	189 700
Job Skills	150.5	12 600
Landcare and Environment Action Program	101.7	12 700
New Work Opportunities	74.8	11 700
National Training Wage Subsidy Program	7.9	5 100
Industry Adjustment Packages	32.0	n.a.
Assistance to firms implementing change	17.0	n.a.
New Enterprise Incentive Scheme	91.3	6 000
Case Management Services	171.9	500 000
Aboriginal Employment and Training Assistance	44.8	n.a.

Source: Department of Employment, Education and Training.

1994 White Paper on Employment and Growth

The Government's White Paper on Employment and Growth, *Working Nation*, which was announced by the Prime Minister on 4 May 1994, is the key element of the Employment Program and is designed to boost jobs growth, increase skills formation in the workforce and ensure that the long-term unemployed are able to participate in the

economic recovery. The major initiatives announced in *Working Nation* are:

- a Job Compact — which provides individual case management and access to a range of labour market programs leading to a firm offer of a job placement for all people aged 18 years or over who have

been receiving JobSearch/Newstart Allowance continuously for more than 18 months. In return, the Government is requiring a reciprocal obligation from Job Compact participants to accept any reasonable job placement offer or lose their entitlement to income support for a period;

- Non-Compact Assistance — assistance for unemployed job seekers not eligible under the Job Compact will be maintained and improved and more tightly targeted to those most at risk of becoming long term unemployed;
- the National Training Wage — Workers employed under the National Training Wage Award (NTWA) will receive wages which reflect the level of training and skills required to become fully competent in the job. In combination with the NTWA, training subsidies will be offered to employers engaging long term unemployed and otherwise disadvantaged job seekers through the National Training Wage Program; and
- improved delivery of employment and training services — The Government will introduce competition in the provision of case management services through the creation of independent Contracted Case Managers. A new statutory authority, the Employment Services Regulatory Authority (ESRA) will promote and protect fair and open competition between the government and non-government agencies. This will give job seekers a choice of sources of personalised labour market assistance. The Government will provide its Case Management services through a newly established body, Employment Assistance Australia (EAA), which will operate in cooperation with the Commonwealth Employment Service (CES).

Boosting the skill level or the labour force is also a fundamental priority of *Working Nation*. By the end of 1995–96 the Government aims to establish an additional 50,000 entry level training places encompassing apprenticeships, traineeships and places in institutions and suitable labour worker programs.

Working Nation also introduced new income support measures, administered by the

Department of Social Security, to encourage unemployed people to take a more active role in the labour market. New income test arrangements for JobSearch and Newstart allowances will mean that, as recipients accept increasing amounts of part-time work, they will be better off financially, thereby encouraging their job readiness. Partners or unemployed people who do not have dependent children and who are less than 40 years of age will be expected to look for work and receive separate income support under the JobSearch and Newstart allowances.

Industry based vocational education and 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.

Support for 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 (\$500) and completion (\$2,500) of an apprenticeship.
- Disabled Apprentice Wage Subsidy is available to employers who indenture a

person with a disability as an apprentice. The subsidy may be provided for the duration of the apprenticeship and extra help may be granted to allow necessary workplace modifications and tutorial assistance.

- Living Away from Home Allowance.
- Fares Assistance.

Support for 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.

The Commonwealth provides financial support to assist with the development and operation of traineeships through financial incentives for employers and trainees.

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.

Skills enhancement

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.

Workplace English Literacy Program

In 1991 the Commonwealth announced the establishment of the Workplace English Language and Literacy (WELL) Program. WELL is managed by the Department of Employment, Education and Training in consultation with 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.

Australian Vocational Certificate Training System (AVCTS)

Funding assistance has been provided for prior projects to test aspects of the proposed AVCTS, including the viability of different work-based pathways and infrastructure arrangements. This includes testing program content and outcomes, innovative delivery arrangements, wage and allowance arrangements, and articulation between pathways and delivery. *Working Nation* introduced a number of new priorities for the AVCTS including an enterprise stream, a small business stream and projects directed to meet the specific needs of Aboriginal and Torres Strait Islander communities.

Pre-vocational training program

Pre-vocational training program provides young people, particularly those disadvantaged in the labour market, with the general and vocational skills which they need to make a successful transition to vocational education, training and employment.

The program provides funding to States and Territories to provide courses of up to six months accredited pre-vocational training. A pre-vocational training course is an accredited course or training program conducted by a registered training provider. It relates directly to immediate job opportunities or may be the first stage of a broader program of training leading to a qualification under the AVCTS.

Employment participation

The objective of the Employment Participation Program is to contribute to the reduction of long-term unemployment by providing cost-effective labour market programs which meet the Government's requirements to target assistance according to the needs of three broad groups of clients:

- job ready clients;
- those at “high risk” of becoming long-term unemployed; and
- the long term and very long term unemployed.

The Employment Participation Program includes the following components: Worksearch, Workskills and Workstart.

Worksearch

Worksearch provides options to assess the job readiness of jobseekers and to facilitate their return to employment as quickly as possible and includes the following elements — JobNeeds, JobFunds, JobClubs and JobPlace.

JobNeeds

JobNeeds is part of the comprehensive screening and assessment process being introduced into the CES to help identify jobseekers who are at “high risk” of becoming long term unemployed. By purchasing external services such as needs assessments and interpreter services, JobNeeds enables CES staff to communicate more effectively with their clients and determine their needs and barriers to employment and training.

JobFunds

JobFunds provides assistance to jobseekers to help overcome financial barriers that hinder them being considered for, or their acceptance of, an employment training or related opportunity. Assistance is provided for fares and relocation as well as for clothing and equipment not provided by the employer.

JobClub

A JobClub is a job hunting program in which members of the club receive support, help and encouragement from a leader and other members.

JobPlace

JobPlace is designed to assist people with significant barriers to employment to obtain and retain employment or complete courses through the use of external agencies.

Workskills

Workskills provides training and other employment assistance to address the assessed barriers to employment of at “high risk” clients so that they can become job ready and be placed in employment. It also addresses the vocational needs of job ready jobseekers after six months registration.

SkillTrain

SkillTrain is designed to improve the employment prospects of jobseekers who are long term unemployed or at “high risk” of

becoming long term unemployed by overcoming their significant barriers to employment or participation in further vocational training, through the provision of structured training assistance. The significant barriers SkillTrain addresses are English as a second language needs; literacy and numeracy needs; employment-related personal development needs; and lack of current, recognised vocational skills relevant to immediate employment opportunities in the local labour market.

Advanced English for Migrants Program (AEMP) — AEMP courses aim to raise migrant jobseekers' English proficiency to which they can enter vocational training in TAFE or other post-secondary institutions. AEMP courses are also provided for migrant jobseekers who already have vocational skills.

SkillShare — SkillShare is designed to assist long term unemployed people and jobseekers with significant or multiple barriers to employment to secure work or to proceed to further education and training. This is achieved through skills training, employment-related assistance and enterprise activities provided by community-based organisations.

Workstart

Workstart provides options designed to address the more entrenched employment barriers, mostly for the long term and very long term unemployed. The options are described below.

JobStart

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 of up to 39 weeks as an incentive to employ disadvantaged jobseekers. There is an obligation on the employer to continue to provide similar employment for at least three months after the expiration of the agreed subsidy period.

JobSkills

JobSkills provides people aged 21 years and over who have been unemployed for

12 months or more with work experience and training to broaden their employment experience and equip them with new skills to improve their long term employment prospects. Participants receive a mix of supervised work experience, structured on-the-job or off-the-job training and the opportunity to develop and practice new skills in a work environment over a 26 week period. Up to 40% of the participant's time is spent in formal training.

Landcare and Environment Action Program (LEAP)

LEAP provides 26 weeks of formal training and practical experience to unemployed people aged 15 to 20 years through projects with a conservation focus.

New Work Opportunities (NWO) Program

The NWO program was announced in May 1994 as part of *Working Nation*. The program is project based and is designed to meet the needs of local communities. NWO also includes programs which operate in specific sectors.

National Training Wages (NTW) Program

The NTW program, a major initiative of *Working Nation*, is available to all jobseekers including new entrants to the labour force (for example, school leavers) and people who are short term or long term unemployed. The NTW Program provides a framework for employers to take on employees best suited to the needs of their organisation under a simple wage structure if they are able to offer approved training. Trainees are provided with a combination of work experience and approved training to assist them to retain their jobs and gain greater long term work opportunities.

Industry Labour Adjustment Packages (LAPs)

Industry LAPs have been developed for workers retrenched from industries that have been adversely affected by tariff reductions and industry restructuring. LAPs operating in 1994–95 are:

- the Textile, Clothing and Footwear LAP for workers retrenched during the restructuring anticipated under the TCF Industry Plan (1988–2000);

- the Passenger Motor Vehicle LAP for workers retrenched during the restructuring anticipated under the Passenger Motor Vehicle Plan (1984–2000); and
- the Australian National LAP for rail workers made redundant by Australian National.

The Industry LAPs provide a range of assistance including:

- formal vocational training;
- preparatory training (English language, literacy and numeracy training as required);
- wages subsidies; and
- relocation assistance to commence a new job, search for employment or undertake formal training.

Assistance to firms implementing change

This program is designed to assist firms to expand, restructure and develop effective human resource practices and to retain, expand and increase the skills of that workforce.

Funding is provided towards the establishment of a bipartite workplace committee, the analysis and review of current production methodology, development of the human resource aspects of a business plan and the development and delivery of suitable training.

To be eligible for assistance, enterprises are required to be:

- considering or undertaking expansion; and/or
- considering or implementing new production methods or equipment; and/or
- implementing new work practices.

Enterprises must agree to maintain staff levels during the funding period. Priority is given to firms where restructuring could cause displacement of staff or a move to short time or down time.

New Enterprise Incentive Schemes (NEIS)

This scheme helps jobseekers receiving or depending on a DSS benefit/pension/allowance to become self-employed in viable new businesses through a comprehensive package of assistance. The Commonwealth contracts Managing Agents to deliver NEIS training and support nationally, with the exception of the ACT where the scheme is delivered on a joint basis with the ACT Government.

The program is designed to provide participants with the skills and support to establish and operate businesses successfully. The Commonwealth provides income support to participants, broadly equivalent to the adult single or married rate of the Job Search and NewStart Allowances, for up to 52 weeks. In addition, funds are supplied to Managing Agents to provide training, business development support and mentor support.

Case management services

The objective of the Case Management Program is to help reduce long term unemployment of job seekers with significant employment barriers and assist them to secure and retain employment. The case management services are provided by Employment Assistance Australia, funded independently and drawn from the CES, in competition with other contracted case managers.

All jobseekers are assessed for eligibility for case management services by the CES. Jobseekers eligible for case management are informed about the process, given an information kit and a list of local case managers from which to choose. The selected case manager negotiates a case management activity agreement which includes a return to work plan with the jobseeker. This is supported by access to vocational training, relevant remedial courses in literacy, numeracy or English language skills and community based work experience or subsidised employment. Unemployed people on income support are required to satisfy an activity test and certain administrative procedures in return for the assistance they

receive. Failure to meet the activity test usually means that the unemployed person has failed to accept a reasonable job offer, undertake training offered, or reach an agreement with the case manager on a case management activity agreement. Failure to comply with their reciprocal obligation means that such people lose entitlement to income support for a period.

Aboriginal Employment and Training Assistance

Aboriginal Employment and Training Assistance, or TAP — Training for Aboriginals and Torres Strait Islanders — aims to increase the skills and employment level of Aboriginal and Torres Strait Islander people by providing training and employment opportunities.

The objectives and structure of TAP reflect the Government's commitment to the objectives of the Aboriginal Employment Development Policy (AEDP).

TAP Direct Assistance is administered through the CES. It includes:

- Skills Development: which aims to increase the level of skills and development of Aboriginal and Torres

Strait Islander people by providing them with employment-based training placements. The training provided may be totally on-the-job, or combined with off-the-job training;

- Transition Assistance: which aims to help clients overcome immediate obstacles to participation in employment and training and make a successful transition to employment. Transition Assistance has two main parts — subsidised short-term work experience placements and other assistance such as mentor support, referral to specialist agencies and vocational and career guidance; and
- Formal Training: which aims to provide clients with further skills they need for ongoing employment or participation in further training, especially industry-accredited training such as traineeships and apprenticeships. Formal training can be used to provide Skills Development participants with training that is directly related to their on-the-job placement and as part of a sequence of assistance to clients.

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Social security and welfare

Commonwealth government social security services	187
Payments for the retired	187
Payments for people with disabilities and the sick	189
Disability Support Pension	189
Disability Wage Supplement	189
Carer Pension	190
Sickness Allowance	190
Mobility Allowance	191
Child Disability Allowance	191
Other payments	191
Payments for the unemployed	191
Payments for families with children	193
Basic Family Payment	193
Additional Family Payment	194
Sole Parent Pension	195
Jobs, Education and Training Program (JET)	196
Child Support Scheme	196
Double Orphan Pension	196
Provision for special circumstances	197
Special Benefit	197
Class 'B' Widow Pension	197
Bereavement Allowance	197
Drought Relief Payment	198
Farm Household Support Scheme	198
Disaster Relief Payment	198
Fringe benefits	198
Pharmaceutical Allowance	199
Bereavement payments	199
Rent Assistance	199
Other payments	200
Recent changes to social security arrangements	200
Home Child Care Allowance	200
Partner Allowance	200
Parenting Allowance	200
Widow Allowance	201
Wife Pension	201
Maternity Allowance	201
Other services of the Department of Social Security	201

Access and Equity	201
International agreements and payment of pensions abroad	202
Childcare Assistance	202
Financial Information Service	202
Community Research Project	202
Commonwealth Government assistance through Welfare organisations	203
Child care	203
Children's Service Program	203
Use of child care	204
People with a disability	205
Australian Hearing Services	206
Home and Community Care Program	207
People with a handicap	207
Caring in families	209
Principal carers	210
Caring for children	210
Residential care for aged people	212
Future directions	212
Hostel funding	213
Community based care	213
Domiciliary Nursing Care Benefit	214
Aged Care Assessment Program	214
Veterans' Affairs	214
Compensation Program	215
Compensation Sub-program	216
Income support Sub-Program	218
Housing Sub-program (Defence Service Homes Scheme)	219
Health program	220
Repatriation General Hospitals	221
Repatriation Auxiliary Hospitals (RAHs)	221
Artificial limbs and appliances	222
Vietnam Veterans Counselling Service	222
The Office of Australian War Graves	223
Household income and expenditure	223
Household income	223
Household expenditure	223
Household expenditure in 1993–94	223
Bibliography	225
Special Article—Poverty and Deprivation in Australia	226

Social security and welfare

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 1994–95 and the date on which each payment came into effect are listed below.

7.1 Social security payments

Type of payment	1993–94 (\$m)(a)	1994–95 (\$m)(a)	Date of operation
The retired			
Age Pension(b)	11 734	11 884	1 July 1909
People with disabilities & the sick			
Disability Support Pension(c)	4 338	4 525	12 November 1991
Rehabilitation Allowance(d)	2	1	1 March 1983
Sickness Allowance(e)	426	413	1 July 1945
Mobility Allowance	26	31	1 April 1983
Child Disability Allowance	160	185	15 November 1987
The unemployed			
Job Search Allowance(e)	3 654	3 389	1 July 1991
Newstart Allowance(e)	3 944	3 672	1 July 1991
Mature Age Allowance(f)	78	357	1 March 1994
Families with children			
Basic Family Payment	2 051	2 017	1 January 1993
Additional Family Payment	3 400	3 535	1 January 1993
Sole Parent Pension	2 525	2 552	1 March 1989
Double Orphan Pension	2	2	26 September 1973
Home Child Care Allowance	n.a.	618	29 September 1994
Provision for special circumstances			
Special Benefit(e)	245	224	1 July 1945
Bereavement Allowance(g)	1	1	1 March 1989
Widow Class 'B' Pension	531	481	30 June 1942
Widow Allowance	n.a.	32	1 January 1995

(a) Expenditure comprises the payment and any additional allowances paid to the client. (b) Includes Wife Pension (Age) and Carer Pension (Age). (c) Includes Wife Pension (Disability Support Pension) and Carer Pension (Disability Support Pension), and Carer Pension (Other). (d) Includes Wife Pension (Rehabilitation). (e) Includes Partner Allowance in 1994–95. (f) Includes Mature Age Partner Allowance. (g) Bereavement Allowance was called Widowed Person Allowance before 1 January 1995.

Source: *Department of Social Security*.

An outline, together with associated statistics, of each of the social security payments in effect throughout the 1994–95 financial year is given below. Details of major recent changes to social security payments are given in the section Recent Changes to Social Security Arrangements.

Payments for the retired

Age Pension is payable to men who are over 65 years of age and women who are over 60 years and six months of age and is usually subject to residence qualifications. If an age pensioner's wife is not qualified for an Age Pension herself then a Wife Pension is payable if she is an Australian resident.

Some changes to Age Pension and Wife Pension have commenced from July 1995. The Age Pension qualifying age for women is being gradually increased to 65 years of age by July 2013. Additionally, Wife Pension will be phased out as there will be no new grants of the payment from 1 July 1995. In January 1996 women being paid Wife Pension who were born after July 1955 will have their Wife Pension stopped and will need to apply for other payments in their own right.

Both Age Pension and Wife Pension are means-tested based on pensioner's income and assets.

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 payments, rent assistance and fringe benefits such as the Pensioner Concession Card. Further details of such payments and benefits are given in later sections.

Age pensioners requiring small loans may use the Government-sponsored Home Equity Loans Scheme so they may access some of the savings tied up in their homes while keeping a sizeable proportion of the equity. Repayments

do not have to be made until the pensioner permanently vacates their home.

As part of a move towards greater flexibility and customisation in the payment of social security entitlements, pensioners and some allowees will, from 1 July 1996, be able to access lump sum advances of between \$250 and \$500 of their pension or allowance. These advances will be recovered in instalments over the next 13 fortnights.

The advances may be used to assist in meeting the living or capital expenses of the recipient or of his or her family members, for example whitegoods replacement, car repairs, or household maintenance. They are expected to be particularly attractive to people who find it difficult to access other sources of credit. Advances will only be made to recipients able to repay them without financial hardship.

People of age pension age who do not get an age pension because the value of their assets is over the means test limit, but who have income under the pension income test limit, can receive a Seniors' Health Card. This allows them concessional pharmaceuticals, hearing aids, dental health and optometry services.

7.2 Age pensioners

	June		
	1993	1994	1995
Age group (years)			
60-64	202 606	210 482	211 685
65-69	396 747	431 890	447 525
70-74	308 299	322 984	319 538
>74	608 030	616 518	599 950
Males	481 196	514 217	554 571
Females	1 034 486	1 067 657	1 034 127
Persons	1 515 682	1 581 874	1 578 698
Wife pensioners (Age)	33 520	36 539	39 611
Carer pensioners (Age)	6 507	7 441	8 324
Total payments financial year ending 30 June(a) (\$'000)	10 545 924	11 734 222	11 894 065

(a) Includes allowances, Rent Assistance, and Wife Pension (Age) and Carer Pension (Age) where applicable.

Source: Department of Social Security.

Payments for people with disabilities and the sick

Disability Support Pension

Disability Support Pension is paid to a person aged 16 or over who has a physical, intellectual or psychiatric impairment of at least 20% and who is assessed as being unable to work for at least 30 hours a week 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 the age of pension age, but those already receiving it when they reach that age and who do not meet the residency requirements for age pension, can continue. It is subject to residency qualifications. It is not taxable for people under age pension 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 \$69.50 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.

7.3 Disability support pensioners

	June		
	1993	1994	1995
Age group (years)			
16-19	8 622	9 402	10 295
20-39	91 660	98 549	105 889
40-59	214 588	234 355	254 258
>59	91 702	93 928	93 988
Males	291 471	309 123	324 672
Females	115 101	127 111	139 758
Persons	406 572	436 234	464 430
Wife pensioners (DSP)	108 327	116 036	121 839
Carer pensioners (DSP)	15 045	9 450	10 633
Total payments financial year ending 30 June(a) (\$'000)	3 952 391	4 337 862	4 524 754

(a) Includes allowances, Rent Assistance, and Wife Pension (DSP) and Carer Pension (DSP) where applicable.

Source: Department of Social Security.

Disability Wage Supplement

Disability Wage Supplement is payable to persons meeting the normal qualifications for Disability Support Pension. The payment is made to participants in the Supported Wage System administered by the Department of Human Services and Health. This system

assists people with severe disabilities who are unable to work at full award wages to receive a pro rata wage based on their level of productivity. The rate of Disability Wage Supplement paid is subject to the pensions income and assets test.

Carer Pension

Carer Pension is payable to a person (the carer) providing constant care on a long-term basis to someone who has a severe disability or who is frail aged. The care recipient must be a social security pensioner or allowee or service pensioner or would be qualified for a social security or service pension but for the residence test. The carer must live in, or adjacent to, the home of the care recipient.

Carer pensioners are eligible for the Jobs, Education and Training (JET) Program and are able to participate in work, education or training for up to 10 hours per week. Carer Pension is paid at the same rate as the Age Pension and is subject to the same income and assets test arrangements. Recipients can also receive the same fringe benefits as those available to age pensioners.

From March 1996:

- Carer Pension will be extended to carers of non-pensioners provided the non-pensioner meets the minimum Basic Family Payment assets and income tests;
- Carer Pension will continue to be paid during a transitional period (14 weeks) following the admission of a care recipient to permanent institutional care;
- Carers and care receivers in the community who are forced to move because of the care needs will be treated the same as people who move into nursing homes, so that:
 - the former home of the care provider who moves in with the care recipient because of care needs, or vice versa, will be disregarded (for two years) under the assets test for assessing pension entitlements for either party; and
 - pensioners needing to leave their home to live with their carer will no longer have to wait 12 months to get Rent Assistance.

From July 1996, carers will not be required to live in the same or adjacent home of the care recipient to be eligible for Carer Pension provided the required level of care is being provided.

Sickness Allowance

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, Newstart or Youth Training Allowance, due to illness or injury. To be eligible, the person must have suffered a loss of income as a result of their temporary incapacity to work and be unable to do their own job or if unemployed 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 limited circumstances. From March 1996 Sickness Allowance will only be paid to people who have a job to return to. Unemployed people who are ill or injured will have to claim or remain on Job Search Allowance, Newstart Allowance or Youth Training Allowance.

Sickness Allowance is paid at the same rate as Job Search Allowance, Newstart Allowance and Youth Training Allowance. Sickness allowees and incapacitated Job Search, Newstart and Youth Training 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 the 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(a)

	1993	1994	1995
Age group (years)			
20 & under	3 299	3 490	3 547
21–34	16 261	16 342	16 340
35–54	20 528	18 939	21 516
55–59	3 190	3 421	3 400
>59	1 948	1 555	1 247
Males	30 878	30 422	30 317
Females	14 348	15 426	15 733
Persons	45 226	45 848	46 050
Total payments financial year ending 30 June(b) (\$'000)	370 181	426 354	413 234

(a) Representing the mid-point of the June quarter. (b) Includes additional allowances where applicable. Partner Allowance is included in 1995.

Source: Department of Social Security.

Mobility Allowance

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 to people engaged for at least eight hours a week in paid work, sheltered employment, voluntary work or vocational training or looking for work.

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 vehicle from the Department of Veterans' Affairs. The rate of Mobility Allowance at September 1995 was \$52.40 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 1995, approximately 22,300 people were receiving Mobility Allowance. Outlays in 1994–95 were \$30.5 million.

Child Disability Allowance

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 1995, Child Disability Allowance was paid for 87,123 children. Outlays in 1994–95 were \$185.1 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, rent assistance, remote area allowance and telephone allowance 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 who have been unemployed for less than 12 months and Newstart Allowance for those who have been unemployed for a year or more. 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 (CES), 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 of being registered at the CES as unemployed 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 CES on Job Search, employment and/or training activities. The activity agreement sets out an agreed course of action designed to improve the recipient's job prospects and 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.

Recipients of Job Search or Newstart Allowance may also be eligible for supplementary payments including additional payment for dependent children, guardian allowance, rent assistance or remote area allowance.

From September 1994 persons in receipt of a combination of Job Search or Newstart for 18 months qualify for assistance under the Job

Compact. The Job Compact, in simple terms, is an offer of assistance by the Government, including a job placement of 6 to 12 months (primarily in the private sector) to the long-term unemployed.

From 1 January 1995, Youth Training Allowance (YTA) replaced Job Search Allowance for under-18-year-olds as part of a wider Youth Training Initiative (YTI). 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 is paid directly to young people at three AUSTUDY basic rates of payment ('at home', 'away from home', and 'independent/homeless'). The 'at home' and 'away from home' rates are subject to parental income and assets tests. The new arrangements did not affect young people receiving Job Search Allowance on 1 January 1995.

From September 1996, Job Search and Newstart Allowance will be amalgamated under a single payment called Newstart Allowance. This will be paid under similar conditions to those which exist under current legislation.

7.5 Job Search and Newstart Allowance(a)

	June		
	1993	1994	1995
Job Search Allowance			
Age group (years)			
20 & under	124 116	113 578	86 261
21-34	196 590	180 886	180 135
35-54	114 456	104 148	102 076
55-59	16 977	16 690	14 574
> 59	14 079	13 819	10 785
Males	320 231	288 376	268 257
Females	145 987	140 745	125 574
Persons	466 218	429 121	393 831

For footnotes see end of table.

...continued

7.5 Job Search and Newstart Allowance(a) — continued

	June		
	1993	1994	1995
Newstart Allowance			
Age group (years)			
20 & under	51 571	49 164	42 545
21–34	190 784	187 233	164 836
35–54	134 900	200 112	139 316
55–59	22 408	28 601	29 194
>59	23 685	6 332	3 937
Males	325 427	311 881	279 936
Females	97 921	107 596	99 892
Persons	423 348	419 477	379 828
Total payments financial year ending 30 June(b) (\$'000)	7 491 410	7 597 818	7 061 006

(a) Representing the mid-point of the June quarter. (b) Includes additional allowances where applicable. Partner Allowance is included in 1995.

Source: Department of Social Security.

Mature Age Allowance (MAA), was introduced in March 1994 as an interim measure to assist older long-term unemployed people aged 60 and over but below Age Pension age, who face particular disadvantage obtaining work in a tight labour market. The payment was introduced with a sunset clause of 30 June 1996 after which there were to be no new entrants. In the 1995–96 Budget, the Government decided to extend MAA permanently and to modify the payment to make it more appropriate to the circumstances of older people disadvantaged in the labour market. Under the new arrangements, MAA recipients will continue to be paid at pension rates and have access to the Pensioner Concession card. However, new grants of MAA from 1 July 1996 will be paid under the allowance income and assets tests rather than the pensions tests which currently apply. From 1 July 1996, the eligibility requirement for 12 months CES registration will be removed and all new entrants to MAA will be required to establish that they have no recent workforce experience. The requirement for 12 months prior receipt of income support will be reduced to 9 months for Job Search Allowance and Newstart Allowance recipients and removed for those transferring from non-activity tested payments such as Carer Pension. These changes will ensure ongoing income support free of activity testing for older men and women facing labour market disadvantage.

7.6 Mature Age Allowance clients

State/Territory	June	
	1994	1995
New South Wales	9 420	13 244
Victoria	7 192	10 664
Queensland	4 179	6 543
South Australia	2 980	3 796
Western Australia	1 948	2 983
Tasmania	1 068	1 482
Northern Territory	100	147
Australian Capital Territory	101	167
Total	27 528	39 026
Total payments financial year ending 30 June(a) (\$'000)	77 555	356 551

(a) Includes expenditure for Mature Age Partner Allowance.

Source: Department of Social Security.

Payments for families with children**Basic Family Payment**

Basic Family Payment 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 18 years who are not in receipt of a pension, benefit or allowance in their own right or a prescribed education scheme payment. From July 1996, all payments to students aged 16 and over will be consolidated in the AUSTUDY payment system and paid by the Department of Employment, Education and Training. An additional allowance, also

subject to income and assets tests, is payable in respect of multiple (three or more) births until the children turn 6 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. From 1 January 1996 Family Payment will be made available to the primary carer of the children irrespective of the gender of the carer.

Approved charitable, religious or government institutions are paid Family Payment 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 1995 there were 1,804,118 families receiving Basic Family Payment. Expenditure on Basic Family Payment for 1994-95 was \$2,017 million (table 7.7).

7.7 Family payment, June 1995

State/ Territory	No. of children per client							Total	No. of children	Total payments during year (\$'000)(a)
	1	2	3	4	5	6	7+			
NSW	223 018	225 749	100 096	28 871	6 160	1 662	602	586 158	1 134 757	684 287
Vic.	164 953	174 391	75 515	19 918	3 915	1 040	447	440 179	848 657	495 167
Qld	131 265	133 020	58 789	17 159	3 732	1 038	481	345 484	670 345	410 456
SA	57 577	61 704	23 078	5 762	1 055	261	115	149 552	280 751	165 326
WA	64 499	71 081	30 858	8 731	1 836	526	198	177 729	347 753	202 241
Tas.	20 113	20 955	8 958	2 565	524	120	54	53 289	102 816	59 326
NT	8 487	7 407	3 623	1 354	412	145	89	21 517	43 123	(b)
ACT	9 838	10 709	4 672	1 321	260	68	21	26 889	52 388	(c)
Other(d)	1 680	1 090	397	114	24	11	5	3 321	5 726	—
Total	681 430	706 106	305 986	85 795	17 918	4 871	2 012	1 804 118	3 486 316	2 016 804

(a) Comprises only expenditure for the basic component of Family Payment. (b) Expenditure for the Northern Territory is included in Queensland. (c) Expenditure for the Australian Capital Territory is included in New South Wales. (d) Includes clients paid whilst overseas and some clients whose postcode could not be determined.

Source: Department of Social Security.

Additional Family Payment

Additional Family Payment is paid in addition to Basic Family Payment in respect of dependent children under 16 years or dependent full-time students aged 16 to 18 years who are not in receipt of a pension, benefit or allowance in their own right or a prescribed education scheme 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 working 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.

From 1 January 1996, Basic Family Payment and Additional Family Payment will be amalgamated into one Family Payment. The amounts received by most families will remain the same but the change will simplify the arrangements for families. The income test is also being changed from 1 January 1996 to make it easier for families to have their Family Payment rate reassessed and possibly increased.

Levels of payment are age-related and adjusted annually. Rent Assistance is also available to recipients of Additional Family

Payment if they pay rent above a minimum amount other than to a public housing authority. Sole parents who receive Additional Family Payment also receive Guardian Allowance because they care for children on their own.

The number of families in receipt of Additional Family Payment at June 1995 was 836,590. The amount paid during 1994–95 was \$3,530 million.

Sole Parent Pension

Sole Parent Pension may be paid to a person who cares for a child under 16 years or a child attracting Child Disability Allowance, and who is:

- a natural or adopted child; or
- in the person's legal custody; or
- was maintained by the person before separation; 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 legal or de facto partner in the matrimonial home because of the 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 1995 there were 324,941 recipients of Sole Parent Pension. Total expenditure for 1994–95 was \$2,552 million (table 7.8).

7.8 Sole parent pensioners

	June		
	1993	1994	1995
Age group (years)			
Under 20	9 903	9 957	10 205
20–29	100 462	103 653	105 676
30–39	12 588	132 517	137 141
40–49	55 141	59 702	63 830
50–59	6 849	7 386	7 864
>59	208	222	225
Males	17 529	18 897	19 913
Females	280 915	294 540	305 028
Persons	298 444	313 437	324 941
Total payments financial year ending 30 June (a) (\$'000)	2 869 473	2 524 616	2 552 272

(a) Until January 1993 total expenditure included additional payments for children, Guardian Allowance and Rent Assistance. Since then, expenditure on these additional payments have been included with Family Payment expenditures.

Source: Department of Social Security.

Jobs, Education and Training Program (JET)

The JET for sole parents is jointly administered by the Departments of Social Security (DSS); Employment, Education and Training; and Human Services and Health. It aims to improve the financial circumstances of certain DSS customers by aiding their entry or re-entry into the workforce. JET provides an integrated program of assistance in the form of individual counselling and support, and access to training, education, assistance with job search and child care. Participation in the JET program is voluntary.

The JET Program is open to all Sole Parent, Widow 'B' and Carer pensioners, Widow allowees, and recipients of Special Benefit who would be eligible for Sole Parent Pension but for residency requirements. Three groups of sole parent pensioners are especially encouraged to take advantage of JET assistance: teenage sole parent pensioners; those who have been on Sole Parent Pension for more than 12 months 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.

Pilot projects have been undertaken in various locations to improve access to, and participation in, JET by Aboriginal and Torres Strait Islander customers, customers of a non-English speaking background and those with a long-term dependency on income support.

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 7.9 for statistics on the JET Program.

7.9 JET program

	1992-93	1993-94	1994-95
New clients entering JET program(a)	49 535	52 719	47 962
JET clients registered with the CES	30 721	38 349	34 738
JET clients undertaking education	11 574	14 537	13 976
Jobs taken up by JET clients	13 100	17 563	19 475

(a) New clients include Sole Parent Pensioners, Widow Class B Pensioners, Widow Allowees, Carer Pensioners and certain sole parent Special Beneficiaries.

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 (DSS).

Alternatively, custodians can collect child support privately, providing, where the custodian receives Additional Family Payment from the DSS, 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 1995, there was a total of 1,314 recipients of Double Orphan Pension paid in respect of 1,701 children. Total expenditure on Double Orphan Pension for 1994–95 was \$1.6 million.

Provision for special circumstances

Special Benefit

Special Benefit 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 is discretionary, but cannot exceed the applicable Job Search or Newstart Allowance rate. Payment of Special Benefit is subject to an income test, an assets test and available funds test. The assets test is identical to that applying to Job Search or Newstart Allowance customers, but both the income test and the available funds test are specific to Special Benefit.

See table 7.10 for statistics on payment of Special Benefit.

7.10 Special Benefit clients(a)

	June		
	1993	1994	1995
Age group (years)			
20 & under	4 262	3 728	2 661
21–34	5 475	4 749	3 862
35–54	3 925	2 992	2 513
55–59	867	543	434
>59	13 973	16 522	10 970
Males	12 831	11 770	10 244
Females	15 672	13 772	10 216
Persons	28 503	25 542	20 440
Total payments financial year ending 30 June(b) (\$'000)	280 474	245 430	224 416

(a) Representing the mid-point of the June quarter. (b) Includes additional allowances where applicable. Partner Allowance is included in 1995.

Source: Department of Social Security.

Class 'B' Widow Pension

Gradual phasing out of the Widow Pension Class 'B' began from July 1987. From that date, no new grants were made except to widowed, divorced or deserted women who were aged 50 years or more at 1 July 1987 or who were aged 45 years or more at that date and received Sole Parent Pension (or one of its forerunners).

At June 1995 there were 54,936 recipients of Class 'B' Widow Pension. Expenditure on this pension for the year to June 1995 was \$481 million (see table 7.11).

Bereavement Allowance

Bereavement Allowance (known as Widowed Person Allowance before 1 January 1995) 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 partner's death, was either legally married (and not separated) or living in a de facto relationship with that person.

There is no age restriction on the payment of Bereavement 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 from the date of the partner's death, although

payment can be extended if a woman is pregnant at the time of her partner's death. Otherwise, the allowance is paid under the same conditions as other pensions.

At June 1995 there were 47 recipients of Bereavement Allowance. Total expenditure for 1994-95 was \$1.1 million.

7.11 Widow 'B' Pensioners and Bereavement Allowees, 30 June

	1993	1994	1995
Widow 'B' Pensioners			
Age group (years)			
Under 50	141	158	158
50-59	43 020	36 959	30 001
>59	21 472	22 799	24 777
Total	64 633	59 916	54 936
Bereavement Allowees(a)	83	96	47
Total payments financial year ending 30 June (\$'000)	535 583	532 429	482 302

(a) Prior to January 1995 Bereavement Allowance was known as Widowed Person Allowance.

Source: Department of Social Security.

Drought Relief Payment

Drought Relief Payment provides assistance with day-to-day living expenses to farmers and their families who are affected by exceptional drought and is administered by the Department of Social Security on behalf of the Department of Primary Industries and Energy. Drought Relief Payment provides income support equivalent to the Job Search Allowance rate, together with a payment for partners and Family Payment (where applicable) and access to a Health Care Card. It is subject to the Job Search Allowance income and assets tests; however, the assets essential to running of the farm business are exempt.

Farm Household Support Scheme

The Farm Household Support Scheme is aimed at providing assistance in meeting day-to-day living expenses for those farmers unable to access further commercial finance. Farm Household Support is a loan at commercial interest rates. It is administered by the Department of Social Security on behalf of the Department of Primary Industries and Energy. The scheme benefits those who have decided to leave farming but require support while they arrange the sale of

the property. It also benefits farmers who believe they have a future in the industry but are unable to obtain further commercial financial support.

Disaster Relief Payment

Disaster Relief Payment can be made to people who suffer a significant interruption to their source of livelihood or serious damage to their principal place of residence, as a result of a declared major disaster. The Minister of Social Security is responsible for declaring major disasters for Disaster Relief Payment purposes. The amount of payment is equivalent to one fortnight's pension, plus family payments and rent assistance if applicable. The payment is tax-free and is not income or assets-tested. To date, it has only been used once, during the NSW bushfires of January 1994. At that time, the rates paid were three times the legislated amount.

Fringe benefits

The Commonwealth Government provides eligible Department of Social Security (DSS) clients with a range of fringe benefits. Eligibility for the various concessions is linked to four cards: the Pensioner Concession Card

(PCC), the Health Benefits Card (HBC), the Health Care Card (HCC) and the Commonwealth Seniors Health Card (CSHC).

The Pensioner Concession Card is issued to all DSS pensioners, Department of Veterans Affairs service pensioners and to long-term recipients of Job Search, Newstart, Widow and Sickness Allowance and Special Benefit recipients over the age of 60.

The PCC provides access to a variety of concessions such as: concessional pharmaceuticals; concessional hearing aids; telephone allowance; rail concessions on travel between State capitals; free re-direction of mail for 1 month after changing postal address; free postage for communication material for blind pensioners; rebates on property and water rates, and energy costs; public transport concessions; and motor vehicle registration and third party insurance concessions. Concessions on other State, local government and private services, such as health or education services, may be available.

The Health Benefits Card is issued to recipients of Sickness Allowance who do not qualify for a PCC. It provides access to concessional pharmaceuticals; concessional hearing aids; rail concessions, as well as a limited range of State, local government and private concessions.

The Health Care Card is issued to Job Search, Newstart and Widow Allowance recipients, Special Benefit recipients (except those older, long-term recipients who qualify for a PCC), maximum Additional Family Payment recipients, Child Disability Allowance recipients, and Mobility Allowance recipients. Low-income earners are also eligible, subject to an income test. The Health Care Card provides access to concessional pharmaceuticals and a limited range of State, local government and private concessions.

The Senior's Health Card gives non-pensioners of Age Pension age access to major health concessions provided by the Commonwealth Government. The Card is available to Australian residents living in Australia who have reached the age of pension age and have income less than the pension income test cut-out limit. The concessions available include concessional pharmaceuticals, free supply of hearing aids

and free basic dental treatment up to a limit of \$400 per person per year.

Pharmaceutical Allowance

Pharmaceutical Allowance is paid to: all pensioners in Australia; recipients of Job Search and Newstart, Widow, Partner and Parenting Allowance, who are over 60 years of age and receiving income support continuously for at least six months; and recipients of Sickness Allowance. The allowance is paid to compensate the above groups for expenditure on pharmaceuticals purchased under the Pharmaceutical Benefits Scheme (PBS). The allowance is paid fortnightly, but pensioners in special circumstances may apply for limited amounts in advance.

Bereavement payments

Bereavement payments are made to pensioners and long-term recipients of an allowance (such as Newstart Allowance) on the death of a partner. Bereavement assistance is usually paid as a lump sum. The lump sum generally ensures the person receives the same amount as they received as a couple, during the 14 weeks after the partners' death.

Carer pensioners remain entitled to the pension for 14 weeks after the death of the person cared for. In some cases a lump sum is also payable, even if the deceased was not the carer's partner.

Sole parent pensioners also remain entitled to the pension for up to 14 weeks in the event of the death of their sole qualifying child.

A short-term pension known as Bereavement Allowance may be paid to a person for up to 14 weeks (or longer to pregnant women) on the death of their partner, even if neither partner received social security payments at the time of death. Bereavement Allowance is subject to the usual income and assets tests for pensions.

Rent Assistance

Rent Assistance is paid to social security recipients, including low-income families in the workforce, who rent privately. Rent Assistance is not paid to public housing tenants. People who pay more than the minimum amount of rent receive rent

assistance at a rate of 75 cents for each dollar of rent paid, up to the maximum amount. The minimum amount of rent that must be paid, and the maximum rate of rent assistance, varies according to a person's family circumstance, such as marital status and number of dependent children. These amounts are indexed in March and September each year in line with cost of living increases.

Eligible families receive Rent Assistance as part of the Family Payment. Social Security recipients without children are paid Rent Assistance as part of their pension or allowance.

Other payments

Remote Area Allowance is paid to social security recipients in specified remote areas; Tax Zone A and Special Tax Zone B. Remote Area Allowance is not taxable. However, the amount paid reduces the tax zone rebate the person might otherwise receive, on a dollar for dollar basis.

Telephone Allowance is paid to telephone subscribers and their partners in Australia as a quarterly payment to help with the cost of having a telephone service. The payment is indexed in September each year in line with cost of living increases.

Recent changes to social security arrangements

The following provides a brief description of major recent changes to social security arrangements not already described. Further and more detailed information about these and other changes can be obtained in the Annual Report of the Department of Social Security.

Home Child Care Allowance

Home Child Care Allowance (HCCA) was available from 29 September 1994 to eligible couple families where one partner remained substantially out of the workforce to care for dependent children. HCCA was paid as an alternative to the Dependent Spouse Rebate (DSR) for couples with dependent children administered through the taxation system. Cash payments were made directly to the partner providing most of the care of the children. These payments were made at a higher maximum rate than the DSR. Those partners with children whose income was

below \$10.85 a fortnight received the maximum amount of \$60.00 per fortnight (as at 29 September 1994). Those with incomes of up to \$250.85 per fortnight received a part payment. Partners of Job Search, Newstart, Sickness allowees and Special Benefit recipients were generally not eligible for HCCA because of the income they received from the new Partner Allowance.

At June 1995 there were 557,649 recipients of the Home Child Care Allowance. The amount paid during 1994-95 was \$617.6 million. From 1 July 1995, HCCA has been incorporated into Parenting Allowance.

Partner Allowance

Partner Allowance was available from 29 September 1994 to the partners of Job Search, Newstart, Sickness Allowance and Special Benefit recipients. Previously, allowees with a partner received a married rate of allowance which included an amount for the support of a dependent spouse. This married rate of payment was abolished and Partner Allowance (at half the married rate) was paid directly to the dependent partner.

From 1 July 1995, Partner Allowance is payable to partners of persons in receipt of Job Search, Newstart or Sickness Allowance, Special Benefit, Rehabilitation Allowance, Age Pension, Disability Support Pension, Disability Wage Supplement or the Mature Age Allowance. From this time the payment has been limited to persons born on or before 1 July 1955, who have no dependent children and who have no recent workforce experience. Partners who do not qualify for Partner Allowance need to qualify for another payment such as Parenting or Job Search Allowance.

Parenting Allowance

Parenting Allowance was introduced from 1 July 1995. It incorporates HCCA and replaces Partner Allowance for those partners of allowees with dependent children under 16 years. This allowance is also 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 is the same as the half married rate of allowance (\$280.20 per fortnight as at 28 September 1995) and subject to income and assets tests. A non-taxable payment of

\$62.80 a fortnight is payable irrespective of assets and the main earner's income: only the parenting allowance's own income can reduce this base payment.

The Partner and Parenting Allowances are part of the restructuring of income support for couples announced by the Government in *Working Nation* (4 May 1994). In the past, the social security system has assumed that unemployed couples consist of one main jobseeker (usually the husband) and a dependent partner. The dependent partner has not been required to seek work or qualify for a payment in their own right. The White Paper measures, which include liberalising the allowance income test and abolishing the joint income test, provide increased financial incentives for each member of an unemployed couple to maximise their work force capacity.

Widow Allowance

Widow Allowance was introduced from 1 January 1995 in recognition of the labour market disadvantages of older women who have spent long periods out of the workforce caring for their family, and who lose the support of their partner later in life. To qualify, a woman must have become widowed, divorced or separated after turning 50 years of age, and have no recent workforce experience.

Widow Allowance is paid at the same rate and under the same income and assets tests as Job Search and Newstart Allowances but is not activity tested.

Wife Pension

Wife Pension will no longer be granted from 1 July 1995. Existing wife pensioners at 1 July 1995 will continue to receive Wife Pension, with the exception of wife pensioners who were under 40 years of age at 1 July 1995 where Wife Pension will cease from 1 January 1996. This group, and all future pensioner spouses, will need to apply for another income support payment (for example, Parenting or Partner Allowance, Job Search or Newstart Allowance, Sickness Allowance, Carer Pension, Disability Support Pension or Widow Allowance).

Maternity Allowance

Maternity Allowance will be introduced from 1 February 1996. This payment will assist families with the costs associated with a new baby (including forgone income). Maternity Allowance will be paid as a lump sum amount for each new child to families who meet the Family Payment residence income and assets tests. It will be equal to six times the weekly maximum rate of Parenting Allowance (\$840.60 as at 1 February 1996).

Other services of the Department of Social Security

Access and Equity

The Department of Social Security aims to ensure that all Australians, including people from non-English speaking backgrounds and Aboriginal and Torres Strait Islander peoples, have equal access to income security programs and services. Improved access and equity outcomes are achieved through mainstream services and a comprehensive range of specialist services designed to facilitate access for people disadvantaged by remoteness and barriers of language and culture.

Services for clients from migrant communities include the Migrant Liaison Officers (MLO) program; the Multilingual Telephone Interpreter Service; interpreters and translators and multilingual publications. Services for Departmental clients from Aboriginal and Torres Strait Islander communities include the Aboriginal and Torres Strait Islander Liaison Officers (AILO) program; the Support Network for Aboriginal Parents (SNAP) program; the Community Agent Program; remote visiting teams and the Aboriginal and Torres Strait Islander Interpreter Service. The numbers of MLOs, AILOs, SNAP Officers and community agents have been increased in 1995–96 as a result of Budget initiatives.

The Department also provides a professional social work service throughout its regional office network to assist the disadvantaged in improving their social and economic circumstances.

International agreements and payment of pensions abroad

Under Australia's social security law, pensions for old age, severe disability and widowhood can usually be paid abroad permanently. Pensions for some other contingencies can be paid outside Australia for periods of up to 12 months.

As at June 1995, Australia was paying more than 40,000 pensions to residents and former residents who were absent from Australia for more than 12 months. Other countries' social security systems were making more than 200,000 similar payments to Australian pensioners.

Australia has social security agreements with Austria, Canada, Cyprus, Ireland, Italy, Malta, New Zealand, Portugal, Spain, The Netherlands, and the United Kingdom. The agreements form part of Australia's social security law. They enhance people's access to social security benefits from the agreement partners and guarantee the payment of those benefits when people move between countries. Australia negotiates social security agreements based on a principle of shared responsibility so that countries in which individuals may have lived and worked contribute towards social security payments for those individuals.

Negotiations to extend Australia's agreement network are under way with Chile, Denmark, Norway, Finland, Germany, Greece, Switzerland and Turkey.

Childcare Assistance

The Department of Social Security has acted as an agent for the Department of Human Services and Health in assessing eligibility and level of entitlement for Childcare Assistance since 1989. Childcare Assistance is a targeted payment for low to middle income families using approved, formal, child care. On application and reassessment, DSS assesses entitlement and calculates a percentage assessment. This assessment is used for child care services to reduce a family's child care fees. The Department of Human Services and Health provides Childcare Assistance subsidies direct to services as reimbursement for a family's fee reduction.

Financial Information Service

The Financial Information Service (FIS) was introduced in November 1989 and has been progressively extended since that date. At 30 June, 1995 there were 136 FIS officers deployed nationally. Over 1995-96, an additional 73 FIS officers will be located in regional offices with an emphasis on providing more retirement planning information to the rural community. The service plays an important role in the strategy of promoting greater self reliance among retirees. It provides information on approaches to investment and different types of investments. It explains how different investment products are treated under income and assets tests and assists clients with basic taxation questions. Although the principal focus of the Financial Information Service has been on assisting pensioners, information is also made available to the Department's other clients, to persons close to retirement age or considering their retirement strategies, to those being retrenched and to non-pensioner retirees. The service does not make recommendations on how people should invest.

During 1995-96, the Government will also be piloting one-stop outlets to assess whether aged people and retirees find it useful to be able to visit the one office to get information on social security, veterans affairs, tax and superannuation matters. Other measures to be implemented will provide better information and more personalised services to clients with the aim of assisting them to maximise the use of their resources in retirement.

Community Research Project

DSS is currently undertaking a major research activity entitled the Department of Social Security Community Research Project (CRP). The CRP is one of a number of projects being undertaken in the context of the Department's ongoing social policy research agenda.

The aim of the CRP is to examine the potential of new and innovative community based services to enhance the living standards of people on low incomes.

The CRP is being undertaken during the period June 1995 to December 1996 and comprises three key research elements:

- a Community Information Network, which will test the usefulness of computer information networks as mechanisms for the provision of information, and as a communication and collaboration tool, for people on low incomes;
- Action Research Projects, which will test the ability of new and innovative, local, community-based activities and services, to improve the living standards of people on low incomes; and
- traditional research and analysis, including the preparation of a series of discussion papers, the conduct of a national workshop, analyses of existing Australian living standards data and DSS client consultations, which are designed to better inform the Department's understanding of methods by which living standards can be enhanced.

It is anticipated that the CRP will provide additional insights into three particular areas of relevance to social security policy development:

- the understanding of dimensions which make up and contribute to living standards;
- the identification of possible service provision models; and
- the relationship between the welfare state and concepts such as community, social inclusion and citizenship.

Commonwealth Government assistance through Welfare organisations

Child care

Children's Service Program

The objective 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 269,000 in June 1995. These comprise 44,600 community Long Day Care places, 99,000 (including employer and non-profit centres) private Long Day Care places, 54,000 Family Day Care places, 4,700 Occasional Care places, 1,600 Multifunctional Centre and Multifunctional Aboriginal Children's Service places, and 64,100 Outside School Hours Care places.

In 1994–95, an estimated 28,000 additional places were funded, of which 23,000 were long day care. By the year 2001, an estimated 354,000 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. Childcare 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.

As at June 1995 an estimated 240,000 low and middle-income families using long day care services received assistance with their child care costs through the Childcare Assistance system. It is estimated that 40% of these users receive maximum Childcare Assistance.

On 1 July 1994, a 30% Childcare Cash Rebate was introduced for work-related child care expenses up to a current ceiling of \$112.50 a week for one child and \$225 a week for two or more children. As at 30 June 1995 there were over 252,000 families and 38,000 carers registered for the Commonwealth Childcare Cash Rebate; 210,000 families have now claimed the Childcare Cash Rebate.

The Federal Government is encouraging employers to become more involved in the provision of child care for their employees. It provides a number of incentives and assistance to help employers meet some of the child care needs of employees.

Tax concessions are available to employers, such as deductions for business expenses associated with providing child care and Fringe Benefit Tax exemptions under certain conditions.

Childcare Assistance (formerly Fee Relief) is available for employer-sponsored child care places in eligible centres and Family Day Care.

Three independent Work and Child Care Advisory Services, one each in New South Wales, Queensland and Victoria, assist employers to assess the child care needs of their employees and to recommend child care solutions. This service was made available to employers in all States and Territories from 1 October 1995.

Implementation of the Child Care Growth Strategy has contributed to an increased level of child care provision. Growth is well on track to meet the Governments target of 354,000 places by 2001.

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 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.

The Quality Improvement and Accreditation System for the Commonwealth-funded long day child care centres administered by the National Childcare Accreditation Council, commenced on 1 January 1994. The system involves self assessment by a centre of its standard of care in relation to principles set by Government, external review to validate the self assessment and moderation of the results to ensure national consistency. A major feature of the system is the encouragement of ongoing quality improvement. Participation in the system is required for centres to be eligible to receive Childcare Assistance for the parents using their centres.

The Government addresses the obligations created by its social justice agenda and access

and equity principles through funding of Special Services and Supplementary Services (SUPS) Programs. The SUPS program was set up to assist all Commonwealth-funded children's services to include children with additional needs and provide culturally and developmentally appropriate care. The priority groups for the program are children of non-English speaking backgrounds, children with a disability, and children from an Aboriginal or Torres Strait Islander background. In the 1995-96 Budget the Government approved an additional \$17.2 million over 4 years to link the program with the growth in child care places, and to improve the administrative arrangements pertaining to the SUPS program.

Special services funding supports alternatives to mainstream services for special needs groups in areas where these are inappropriate or non-existent. Many of these services are targeted to children from an Aboriginal or Torres Strait Islander background and children living in rural and remote areas.

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 National Child Protection Council was established by the Commonwealth Government in 1991 to provide a national focus for the prevention of child abuse and neglect. The role of the Council is to focus the attention of governments and the community on the need to reduce the incidence of child abuse and neglect.

The Council has developed the National Prevention Strategy for Child Abuse and Neglect, a coordinated plan of action to create an environment which supports families and communities to meet their responsibilities to care for and protect children. The Strategy is a joint initiative between the Commonwealth, State and Territory Governments.

Use of child care

In Australia, 49% of children under 12 years used some form of child care. Formal child care arrangements now account for 40% of child care use, up from 33% in 1987.

7.12 Children attending child care services, 30 June 1995

Type of formal care	No.
Long day care Community based	77 700
Private centres	133 500
Employer & other non-profit centres	16 100
Family day care	88 700
Occasional care centres(a)	14 000
Multifunctional services	1 070
Multifunctional Aboriginal children's services	1 750
Outside school hours care(b)	63 900
Total(c)	396 720

(a) Excludes neighbourhood models. (b) Includes year-round care. (c) Totals are indicative only as children who attend more than one service type are counted in each.

Source: Estimated to June 1995 based on 1993 Department of Human Services and Health, Census of Child Care Services.

7.13 Children under 12 years of age — child care arrangements

Child care arrangements	June 1987		June 1990		June 1993	
	'000	%	'000	%	'000	%
Formal care only	264.0	9.1	278.0	9.3	338.7	11.0
Informal care only	915.1	31.7	1 018.1	33.9	908.7	29.4
Formal & informal care	191.3	6.6	252.5	8.4	257.5	8.3
Total	1 370.3	47.4	1 548.5	51.6	1 504.9	48.8
Neither formal nor informal care	1 517.6	52.5	1 455.2	48.4	1 581.0	51.2
Total children	2 887.9	100.0	3 003.7	100.0	3 085.9	100.0
Total formal care(a)	455.2	15.7	530.4	17.6	596.2	19.3
Total informal care(b)	1 106.4	38.3	1 270.5	42.3	1 166.2	37.8

(a) Comprises the categories of Formal care only and Formal and informal care. (b) Comprises the categories of Informal care only and Formal and informal care.

Source: Child Care, Australia, June 1993 (4402.0).

People with a disability

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 1993 the Commonwealth, States and Territories were each involved in providing accommodation and support services and employment services for people with a disability. This situation led to the overlap of services in some areas and 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. Both levels of governments fund advocacy services and support research and development activities. All States and Territories implemented the CSDA and passed legislation complementary to the DSA in 1993.

The aim of the Disability Services Program (DSP) is to help people with a disability achieve economic power and financial independence through employment which pays an award wage or a productivity wage based on an award.

In 1994–95 the DSP funded 851 community-based agencies to provide a range of employment services to people with a significant disability whose needs cannot be met solely through the Government's mainstream labour market programs. It is estimated that 30,000 people have received assistance from DSP employment programs this year.

DSP-funded employment support takes account of the differing circumstances, needs, aspirations and abilities of each person with a disability. Specialist job placement agencies and supported employment services provide individualised on-the-job training and support until the person is able to continue in the job independently.

The Supported Wage System (SWS) came into operation from 1 July 1994. It was developed in recognition that a program of employment assistance was required for people whose disability impacted on their productivity levels such that their opportunities to access employment in the open workforce were severely curtailed. The SWS provides the means by which an employer can pay a worker with a disability a pro-rata of the full award wage, commensurate with their productivity levels compared with co-worker benchmarks. It is expected that some 3,000 people with a disability will have been assisted in obtaining and retaining employment through the SWS by July 1997.

The Commonwealth Disability Strategy is a framework for all Commonwealth agencies to fulfil their obligations under the *Disability Discrimination Act 1992* and sets out a ten-year plan of action to ensure that the needs of people with a disability are taken into account in planning, service delivery and employment within Commonwealth Government departments and agencies.

The Department of Human Services and Health administers the Commonwealth Rehabilitation Service (CRS) under Part III of the DSA. CRS provides vocational and social

rehabilitation services for working-age people with disabilities. The major criterion for acceptance into a CRS program is the expectation that rehabilitation will substantially increase the person's capacity to obtain or retain paid employment.

Non-vocational programs can sometimes be provided, but only if an individual's personal circumstances and disability prevent a viable vocational goal.

Services are provided through a national network of 170 regional offices.

Programs are individually tailored to address client needs, but may include career counselling and planning, information about disability and how to manage its effects, improvement of job seeking skills, identifying suitable work, training in specific skills, modification of workplace or car where appropriate, assistance in job seeking and job placement, and linking to community support groups.

In 1994/95, CRS assisted 41,500 clients through the provision of rehabilitation programs. Of these, 14,000 were provided with services under cost recovery arrangements in relation to compensation cover for injuries. CRS also provides assessment services to employers and other agencies and occupational health and safety consultancies to industry on a cost recovery basis.

Expenditure on rehabilitation services in 1994–95 was \$132 million.

Australian Hearing Services

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.

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.

Home and Community Care Program

Home and Community Care Program (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 Islander people, those with dementia or the carers of the frail aged and younger people with disabilities.

7.14 Home and Community Care (HACC) expenditure(a) (\$ million)

Year	Commonwealth	States/ Territories(b)	Total
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
1993-94	371.0	240.8	611.8
1994-95	399.0	258.8	657.8

(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.

Some community care services are aimed at specific categories of people. The Commonwealth Respite for Carers Program funds respite services to support carers of frail, elderly people and younger people with disabilities. Expenditure in 1994-95 was \$13.2 million. Community Aged Care Packages provide personal care services to people in the community who would otherwise require entrance to hostels. Expenditure in 1994-95 was \$17.7 million. In addition to the range of mainstream services provided in 1994-95, the HACC Program provided funding for specific projects for special needs groups such as Aboriginal and Torres Strait Islander people (\$11.4 million), people from non-English speaking backgrounds (\$12.6 million), carers (\$7.6 million), and people with dementia (\$11.1 million).

People with a handicap

In 1993, it was estimated that 2,500,200, or 14% of the Australian population had a handicap (a limitation on their ability to perform certain tasks associated with daily living).

Living in households with either relatives or unrelated people was still the most common living arrangement for people with a handicap in 1993. Over half of those people with a handicap who lived in households with others, reported a need for assistance, and almost all of them received informal care from relatives

or friends. Of those people with a handicap who lived alone in 1993, 66% reported a need for help of some kind and 59% received help. Slightly more people received help from the informal network than used formal services (45% compared to 41%), while 26% used both.

7.15 People with a handicap — living arrangements

	Reported			Age standardised(a)		
	1981	1988(b)	1993	1981	1988(b)	1993(c)
Living in households (%)						
With relatives	72.3	73.8	72.7	71.0	72.9	72.0
With unrelated person(s)	3.1	2.1	2.9	3.1	2.0	2.9
Alone	15.9	16.6	18.7	16.3	17.0	18.9
Total in households	91.2	92.5	94.3	90.4	91.9	93.8
Living in establishments	8.8	7.5	5.7	9.6	8.1	6.2
All persons with a handicap	100.0	100.0	100.0	100.0	100.0	100.0
Number ('000)	1 264.7	2 120.6	2 500.2	2 263.1	2 263.1	2 263.1
Handicap rate (per 1 000 pop.)	86.0	130.0	142.0	93.0	r 133.0	r 128.0

(a) Reported data for 1981 and 1988 has been age standardised to the 1993 population of people with a handicap in order to control for the effect of changes in population age structure. (b) Data have been adjusted on a pro rata basis to include those persons who were living in special dwellings (published as 'other'). (c) Data have been adjusted to control for the effect of definitional changes between 1988 and 1993.

Source: Unpublished data. Survey of Handicapped Persons (1981), Disabled and Aged Persons (1988), Survey of Disability, Ageing and Carers (1993).

A comparison of living arrangements of people with a handicap in 1981, 1988 and 1993, shows that the rate of handicap, standardised for changes to age and collection methodology, has been almost constant since 1988. There has, however, been a 35% decrease in the use of residential care by people with a handicap.

In the twelve years from 1981 to 1993, there was a slight increase in the proportion of people with a handicap who lived in households with others (74% in 1981

compared with 75% in 1993). Over the same period, the proportion of people with a handicap who were living alone, rose from 16% to 19%. This represents a 16% increase in the number of people living alone and accounts for much of the decline in use of residential care. In light of these changes, the existence of, and access to, formal home-based services will continue to be of major importance to people with a handicap.

Caring in families

The family is the basic unit for mutual support and caring in Australian society. It is the single institution most responsible for the emotional, physical and financial needs of its members. Care within families is usually of a continuing although changing nature, and is available to each individual in the event of need. This article examines the contribution which families make in the provision of child care and care for those family members with a disability or handicap.

In this article, disability is defined as the presence of one or more of a selected group of limitations, restrictions or impairments which had lasted, or were likely to last, for a period of six months or more. A handicap is identified as a limitation in performing certain tasks associated with daily living; such as self-care, mobility, verbal communication, schooling, and employment.

A central theme underlying the role of caring is need: need for help with self-care, mobility and communication; need for adequate sleep and leisure, social interaction and access to income; need for support for carers. The family plays a fundamental role in providing assistance and support to those who require it, particularly people with disabilities, and children.

The ageing Australian population and the gradual shift away from large-scale residential care has placed more emphasis on the family as the primary provider of care

for those with disabilities and handicaps. In 1993, 18% of Australians had a disability. Most of these people, 14% of the total population, had a handicap. Of those with a handicap, only 6% lived in establishments. Establishments are defined as hospitals, homes for the aged, nursing homes, hostels, and retirement villages which have a support component. Of those who lived in households, almost three-quarters (77%) of people with a handicap lived in families, 4% lived in a non-family household and 20% lived alone.

Among those with a handicap who lived in households and received care, almost all received some informal care from a family member (92%) or friend (19%). In 1993, more than two-thirds (69%) of those living in families compared with a little under a third (31%) of those living alone received informal assistance exclusively. Few relied only on formal assistance from a community organisation or health professional. This is more so for people living in a family and less so for people living alone, although a greater proportion of those living alone received informal help (75%) than formal help (69%). Some of these people (44%) received both informal help from family and friends and help from formal services. This highlights the significance of the assistance received from family members in the overall care of people with handicaps. It also reflects the complementary relationship which exists between informal care-givers and formal services.

7.16 Persons with a handicap who were living in households — type of assistance received, 1993

	Living arrangements			Total
	In a family	Not in a family(a)	Alone	
All persons with a handicap in households ('000)				
Received assistance	1 016.7	39.8	277.6	1 334.1
Did not receive assistance	800.9	32.7	189.5	1 023.1
Total	1 817.6	72.5	467.1	2 357.2
Received assistance (%)				
Informal assistance only	68.6	50.6	30.9	60.2
Formal assistance only	3.2	*18.1	24.8	8.1
Both informal & formal assistance	28.2	31.3	44.3	31.7
Total who received assistance	100.0	100.0	100.0	100.0

(a) Comprises unrelated individuals living together, or with families.

Source: Unpublished data from ABS Survey of Disability, Ageing and Carers, 1993.

Principal carers

The amount and nature of care given by carers varies according to the type of activity with which they help. The greatest amount of informal assistance for the activities of self care, mobility and verbal communication comes from principal carers. The role of principal carers is crucial in providing the personal and often demanding form of help needed by those with profound or severe handicaps. The 1993 ABS Survey of Disability, Ageing and Carers identifies the family as central in the provision of principal care.

In 1993, there were over half a million (541,200) principal carers for people with severe or profound handicaps, two-thirds of who were women (67%). Ninety-five per cent of principal carers were providing care to another family member, with over half caring for people aged 60 years and over.

The largest group of principal carers were providing care to a partner (42% of all principal carers). Nearly two-thirds of men and a third of women who were principal carers were involved in partner care. A high proportion of partners receiving and providing care were aged 60 years and over. In 1993, although over half of the recipients of principal care were aged 60 years and over, 42% of all male principal carers and 23% of all female principal carers were also in this age bracket.

Twenty-eight per cent of principal carers were providing care to a parent. This care was more often provided by a daughter (73%) than by a son (27%).

Over 89,000 principal carers were caring for a child aged 5 years and over with a disability. The majority (93%) of principal carers of children were mothers.

7.17 Principal carers — relationship of recipient of care to carer, 1993

Recipient of care	Carers			
	Males (%)	Females (%)	Persons (%)	Total ('000)
Partner	60.7	33.4	42.3	229.1
Child	*3.8	22.7	16.5	89.3
Parent	22.9	30.3	27.9	150.9
Other	12.5	13.7	13.3	71.9
All principal carers	100.0	100.0	100.0	100.0
Number ('000)r	177.2	364.0	541.2	541.2

Source: Unpublished data from the ABS Survey of Disability, Ageing and Carers, 1993.

Caring for children

Children receive a great deal of care from their family, with the amount and type of care changing as the child grows. Parents represent the primary source of care for their children, especially when the children are young. In 1993, there were 3.1 million children under aged 12 years. Of these children, 51% received care exclusively from a parent or parents. However, the past decade has seen the steady decline in the use of exclusive parental care, reflecting changing patterns in workforce participation, education and training

requirements of parents, and increased recognition of the benefits of good quality care for children.

While parents are seen as the major providers of care for children aged 11 and under, they are not the sole providers. Corresponding with the fall in parental care over the past decade is the increased use of both formal and informal child care. Between 1984 and 1993, the proportion of children aged 11 and under receiving some kind of formal care rose from 12% to 19%.

This included exclusive formal care and the use of both formal and informal care.

Formal child care is defined as care that is regulated and occurs away from the child's home, such as Long Day Care and Family Day Care. In 1993, 596,200 children used formal care.

Informal child care is defined as non-regulated care either in the child's home or elsewhere. It includes care given by family members (other than parental care), friends or neighbours, and paid baby-sitters. Between 1984 and 1993, the use of informal care arrangements also increased, from 30% of children under 12 years in 1984 to 38% in 1993. This included exclusive informal care and the use of both formal and informal care. In 1993, almost 1.2 million children used informal care arrangements.

Family members, particularly grandparents, play a fundamental role in the informal care of children aged 11 and under. In three-quarters of both couple and one parent families using informal care arrangements, a family member was the main provider of informal care. Overall, grandparents accounted for more than half of all the main carers. Grandmothers were the main providers of informal child care in 44% of couple families and 34% of one parent families who used informal care. Other relatives were the main providers of informal care in 18% of families while neighbours/ friends were also an important source of child care (22%) in both family types.

In almost 12% of one parent families the non-resident parent (usually the father) was the main provider of informal child care.

7.18 Families which received informal child care — by main provider of informal child care, 1992

Main provider of informal child care	Couple family	One parent family
(%)		
Non-usually resident spouse	*0.5	11.6
Grandparents		
Grandmothers	44.1	*34.2
Grandfathers	*2.1	*2.4
Total grandparents	46.2	(a)36.6
Parents	9.5	6.4
Other relatives	17.8	19.1
Total family carers	74.0	73.7
Neighbour/friend	21.3	22.5
Other	*4.7	*3.8
Total families using informal care	100.0	100.0
	('000)	
Families using informal care	967.1	190.5

(a) Includes paternal and maternal grandparents in lone father families.

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

7.19 Trends in the use of formal and informal child care

Type of care used	1984	1987	1990	1993
(%)				
Formal care only	8.7	9.1	9.3	11.0
Informal care only	26.1	31.7	33.9	29.4
Formal & informal care	3.7	6.6	8.4	8.3
Neither formal nor informal care	61.5	52.6	48.4	51.2
Total	100.0	100.0	100.0	100.0
	('000)			
Total children	2 897.4	2 887.9	3 003.7	3 085.9

Source: Unpublished data from the ABS National Child Care Survey, 1993.

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 and supported accommodation 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.

7.20 Commonwealth expenditure on nursing hostels, 1994–95 (\$ million)

	NSW	Vic.	Qld	SA	WA	Tas.	ACT	NT	Aust.
Nursing homes for aged (recurrent)	701.5	469.8	247.0	170.7	138.8	57.4	14.0	5.5	1 804.7
Hostels (recurrent)	114.4	88.7	75.3	39.6	32.0	9.2	2.8	1.1	363.1
Nursing homes & hostels (capital)	31.0	26.4	17.9	13.7	12.5	3.2	1.7	0.7	107.1

Source: Commonwealth Department of Human Services and Health.

7.21 Approved nursing homes, hostels and beds at 1 July 1995

	NSW	Vic.	Qld	SA	WA	Tas.	ACT	NT	Aust.
Approved nursing homes & beds for aged									
Nursing homes	489	430	203	157	110	56	6	7	1 458
Beds	29 392	17 001	12 385	6 938	6 130	2 133	519	192	74 690
Approved hostels & beds									
Hostels	451	350	259	153	165	46	16	7	1 447
Places	19 321	14 695	11 988	6 196	5 380	1 451	743	128	59 902

Source: Commonwealth Department of Human Services and Health.

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 90 resident places per 1,000 persons aged 70 years and over across all States and Territories, comprising 40 nursing home and 50 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 10 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.

Pilot projects are currently in operation to determine whether people who need the level of care that nursing homes provide could receive this care in their own homes or in hostels, in line with the policy to support people in their own homes where possible.

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 1994, the rate of subsidy for personal and respite care ranged from \$22.55 to \$34.85 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 \$3.45 more than for non-financially disadvantaged residents, at all levels of care, for new permanent residents from November 1995.

Community based care

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. Almost 2,400 places were available in 1994–95 for this initiative with provision for substantial growth in later years.

The Commonwealth has been developing ways to link housing more effectively to aged care, particularly for financially disadvantaged people in insecure housing who are at risk of premature entry to residential care. The aim is to ensure that they are able to get equitable access to the improved range of community based care services developed in recent years.

The Assistance with Care and Housing for the Aged (ACHA) Program was established in the 1993–94 Budget to trial different approaches to more effectively link housing to care. Forty-six projects are now operating across Australia. They employ support workers to assist in direct service delivery or by linking clients to appropriate mainstream housing and care services.

An evaluation will assess the Program's effectiveness and identify the most successful service models. Initial feedback indicates that clients are receiving better access to appropriate housing and are being assisted to access mainstream health and care services.

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

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. The basic criteria for payment of the benefit are that the person being cared for must be assessed as requiring the level of care available in a nursing home, 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 by 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.

Aged Care Assessment Program

The Aged Care Assessment Program (ACAP) is a joint Commonwealth-State program introduced in 1986. The aim of ACAP is to ensure that frail aged people have access to available residential care and community care services appropriate to their needs, through the operation of multidisciplinary Aged Care Assessment Teams (ACATs).

Throughout Australia a network of 121 ACATs operates according to Commonwealth guidelines. In addition, each State has an evaluation unit which monitors and evaluates the performance of the program. The Commonwealth provides grant funding to State health authorities which manage the program on a day-to-day basis and which also contribute resources to the operation of ACATs and evaluation units. The Commonwealth Government contributed \$32 million to this program in 1992-93, \$34 million in 1993-94 and \$35 million in 1994-95.

ACATs operate on a regional basis and their structure is influenced by the requirements of the community in which they function. All people over the age of 70 now have access to a regional ACAT. The Teams' responsibilities include holistic assessment of clients, determination of eligibility for nursing home and hostel entry, determination of eligibility for Community Aged Care Packages, acting as an interface between aged care services and the health care system and the provision of advice to older people about aged care services in general.

The Commonwealth funds pilot projects under the Aged Care Assessment Program in areas such as transition care for people recovering from illness and accident, respite care and the provision of psychogeriatric services. A number of ACATs either hold Commonwealth budgets to deliver these pilot projects or work closely with the project managers to provide these services to their clients.

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;
- 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

state office in the capital city of each State and Territory, under the control of the Deputy Commissioner. There are 20 Veterans' Advice Network offices 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, granted under the Defence Service Homes Act, 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.

7.22 Veterans' Affairs — total expenditure(a) (\$'000)

Class	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Pensions & allowances	3 406 254	3 688 330	3 796 623	3 862 309	3 918 205	4 025 486
Other services & benefits	174 908	151 169	101 580	70 158	57 389	78 918
Medical treatment	600 207	662 581	716 499	766 576	1 004 732	1 212 807
Departmental running costs	199 713	191 852	195 649	196 406	215 467	214 108
RGH operating costs	456 757	499 253	507 398	484 562	360 184	210 154
AWM running costs	14 185	16 313	15 069	15 059	13 534	13 816
Capital expenditure	18 878	14 690	8 851	20 591	30 179	29 070
Total expenditure	4 870 902	5 224 188	5 341 669	5 415 661	5 599 690	5 784 359

(a) 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.

Compensation Program

The principal objective of the Compensation Program is to compensate veterans and their dependants for the effects of war or defence service. Compensation is administered under

four sub-programs — the Compensation Sub-program, the Income Support Sub-program, the Housing Sub-program and the Veterans' Review Board.

Compensation Sub-program

The main benefits provided under this sub-program are the disability pension and the war/defence widow's/widower's pension and ancillary benefits.

The disability pension is a compensatory payment for incapacity due to eligible war, defence or peacekeeping service. General rate disability pensions range from 10% up to and including 100%, 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% 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 8 hours for the special rate.

An Extreme Disablement Adjustment, equal to 150% 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.

From 1 January 1993, war widow's/widower's pension also became available to the widows/widowers of former prisoners of war.

Orphan's pension is payable to the children of these veterans.

7.23 Number of Disability and War Widows' Pensions

Recipient	30 June		Variation (%)
	1994	1995	
Veterans	156 286	157 298	+0.65
Wives & widows	84 626	79 656	-5.90
Children	6 406	6 181	-3.50
War Widows	85 207	88 980	+4.40
Orphans	502	474	-5.60
Other dependants	946	—	—
Total	333 973	332 589	-0.41

Source: Department of Veterans' Affairs.

7.24 Disability pensioners, 30 June 1995

	World War I	World War II(a)	Korea, Malaya & FESR(b)	Special Overseas Service	Peacetime forces	Miscellaneous	Total
General rate — from 10–100%	92	99 097	3 902	9 605	20 605	270	133 571
Intermediate rate	—	682	32	133	101	2	950
Special rate (TPI or equivalent)	16	13 727	934	2 813	1 427	18	18 935
Extreme disablement adjustment	6	3 748	44	8	17	19	3 842
Total	114	117 254	4 912	12 559	22 150	309	157 298

(a) Includes Interim Forces. (b) Far East Strategic Reserve.

Source: Department of Veterans' Affairs.

7.25 Disability and War Widows Pensions

Year	No. 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	
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
1995	157 298	85 837	90 039	333 174	1 590 136

(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.

7.26 Specific need allowances

Benefit	Number of recipients at 30 June		
	1993	1994	1995
Attendant allowance	998	1 003	1 002
Section 27 (items 1–6)	60	56	55
Section 27 (items 7–15)	1 203	1 196	1 171
Clothing allowance	2 052	1 950	1 847
Recreation transport allowance	3 018	3 013	2 941
Decoration allowance	1 353	1 343	1 321
Vehicle assistance scheme	60	64	64

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 7.27 and 7.28). A similar scheme applies to eligible children of Australian mariners.

7.27 Veterans' Children Education Scheme — expenditure (\$'000)

Year	Cost of education of beneficiaries						
	NSW(a)	Vic.	Qld	SA(b)	WA	Tas.	Aust.
1989–90	1 492.2	975.3	971.6	293.6	361.9	268.8	4 363.4
1990–91	1 470.3	975.6	1 015.4	459.6	290.4	308.7	4 520.0
1991–92	1 475.8	1 068.2	1 201.6	542.5	289.6	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
1994–95	1 905.7	1 163.9	1 601.4	371.7	791.8	491.8	6 326.3

(a) Includes Australian Capital Territory. (b) Includes Northern Territory.

Source: Department of Veterans' Affairs.

7.28 Veterans' Children Education Scheme — number receiving benefits at 30 June 1995

Type of training	NSW(a)	Vic.	Qld	SA(b)	WA	Tas.	Aust.
At school							
Primary(c)	209	95	232	51	138	75	800
Secondary	444	251	365	83	215	147	1 505
Total at school	653	346	597	134	353	222	2 305
Tertiary professional	119	99	110	25	77	34	464
Technical	43	—	39	12	—	4	98
Total	815	445	746	171	430	260	2 867

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Not in receipt of an education allowance.

Source: Department of Veterans' Affairs.

Income support Sub-Program

The main form of income support 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 paid 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 10 years residency. Service pension is also available to Australian, other Commonwealth and allied mariners of World War II.

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 1995, and the annual expenditure.

7.29 Service pensions, 30 June 1995

Class	World War I	World War II	Korea, Malaya & FESR(a)	Special Overseas Service	British Commonwealth	Allied Forces	Other	Total
Veterans								
Old age	169	151 495	6 418	1 744	25 321	4 037	2 684	191 868
Permanently incapacitated	—	—	1 325	4 803	240	212	1	6 581
Tuberculosis(b)	1	279	6	1	3	—	—	290
Total	170	151 774	7 749	6 548	25 564	4 249	2 685	198 739
Wife's & widows	372	112 789	5 481	4 688	20 244	3 484	1 916	148 974
Total	542	264 563	13 680	11 236	45 808	7 733	4 601	347 713

(a) Far East Strategic Reserve. (b) Eligibility on these grounds ceased on 2 November 1978.

Source: Department of Veterans' Affairs.

7.30 Service pensions — number and expenditure

Pensions in force at 30 June				
Year	Veterans	Wives & widows	Total	Annual expenditure(a) (\$'000)
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
1995	198 793	148 974	347 713	2 426 579

(a) Includes associated allowances.

Source: Department of Veterans' Affairs.

Housing 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 home owners' 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 all eligible persons, irrespective of whether they have or have had a DSH loan. 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% 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. Since 1 July 1995 a DSH loan is available to obtain granny flat accommodation on another person's property.

7.31 Defence Service Homes Scheme

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Subsidised loans						
Loans granted	9 123	9 316	9 043	9 158	7 639	7 171
Interest subsidy (\$m)	165.3	139.7	89.3	54.3	37.5	45.1
Loan accounts at 30 June	129 580	130 000	119 500	133 741	107 124	101 887
Building insurance						
Homes insured at 30 June	173 639	169 294	163 316	157 510	147 853	140 508

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% 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 Government announced its response to these changing needs in the Aged Care Policy Statement for the Veteran Community, titled *As time goes by:*

Continuing the Commitment, that was released in June 1995. The policy, developed in the context of the broader Government policies and aged care framework in Australia, adopts a holistic approach to healthy ageing with a focus on preventative care and recognises the important inter-relationships between physical and mental health, social well being, financial, residential care and housing considerations. Examples of how the Department is addressing the commitment include:

- Health promotion initiatives — The Department has recognised that health promotion can play a significant part in improving the quality of life of members of the veteran community and help in maintaining their independence. Some initiatives involve links with ex-service organisations and with community organisations such as the Heart Foundation, Diabetes Australia, the Alzheimer's Association and the Australian Sports Commission.
- Community care — Departmental initiatives have included a major focus on dementia care with an array of activities focused on improving dementia outcomes

in line with the National Strategy on Dementia Care through to the Improving Social Networks Program which seeks to address veteran isolation issues through research and demonstration projects.

- Joint venture schemes — Grants are provided to ex-service organisations for a range of projects which help veterans to continue to live independent lives in their own homes and to support those who are at risk of needing substantial Commonwealth assistance.
- Day clubs — Day clubs, established and sponsored by ex-service organisations and run by volunteers, provide regular diversional therapy and socialisation for frail aged veterans and war widows, and simultaneously, respite for their carers.
- Research and development — Health and medical research grants are provided in areas pertinent to the health and well being of the veteran community. Also, research aimed at providing quality information to support policy analysis is conducted.

Younger veterans, from post-World War II conflicts, have identified needs which are additional to those of their older counterparts. These needs have been addressed by recent initiatives which include integrated outpatient, inpatient and support services for the treatment and rehabilitation of veterans with post-traumatic stress disorder.

By the end of 1994–95, the last three Repatriation General Hospitals (RGHs) had been divested and the ANZAC Hostel closed. With the transfer of the RGHs to the States, or their sale to the private sector, all acute hospital care is now 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. During 1994–95 the paid bed days for entitled persons in public hospitals was 691,895 and for private hospitals, 502,116.

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 20,721 LMOs in the scheme as at 18 October 1995. During 1994–95 LMO consultations totalled 3,244,285.

Entitled persons may also be provided with dental treatment through the Local Dental

Officer (LDO) Scheme which comprised 6,868 LDOs as at 18 October 1995. During 1994–95, 565,905 dental services were undertaken.

Optometrical services, including the provision of spectacles, the services of allied health professionals, as well as 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.

7.32 Repatriation General Hospitals — in-bed patients treated, 1994–95

	Vic.	Qld	SA	Australia(a)
Admissions	11 295	7 703	7 218	26 242
Separations	11 437	7 864	7 451	26 600
Daily average occupied beds (adjusted to annual equivalents)	398	325	193	503

(a) Heidelberg integrated on 1 January 1995, Greenslopes privatised on 6 January 1995 and Daw Park integrated on 9 March 1995.

Source: Department of Veterans' Affairs.

Repatriation General Hospitals

The Repatriation General Hospitals (RGHs) were 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).

In 1988, the Government directed the Department to withdraw from the direct provision of hospital services by 1 July 1995 and that these services be sourced from other providers. On 1 July 1992, RGH Hobart was transferred to the Tasmanian State government, and on 1 July 1993 RGH Concord was transferred to NSW. On 24 February 1994 RGH Hollywood was sold privately to Ramsay Hospital Holdings Pty Ltd and operated as Hollywood Private Hospital.

In 1994–95, the remaining Repatriation General Hospitals were divested. RGH Heidelberg was transferred to the Victorian State health system on 1 January 1995, RGH Greenslopes, Brisbane, was sold privately to Ramsay Hospital Holdings Pty Ltd and began operating as a private hospital on 6 January 1995. With the transfer of RGH Daw

Park to the South Australian State health system on 9 March 1995, the Government's program of divestment of its repatriation general hospitals was complete.

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.

Repatriation Auxiliary Hospitals (RAHs)

The RAHs provide slow-stream rehabilitation of patients, maintenance care of patients awaiting nursing home admissions and respite care for a limited number of patients. Lady Davidson Hospital (LDH) NSW, is the last Repatriation Auxiliary Hospital. Community patients are admitted to Lady Davidson.

Repatriation Auxiliary Hospital Macleod (Victoria) was decommissioned in January 1993. Repatriation Auxiliary Hospital Kenmore was decommissioned on 29 April 1994.

The following table gives details of in-patients (including community patients) treated at LDH. The figures shown refer to treatment episodes, e.g., a person who is admitted to hospital twice during a year is counted twice.

7.33 Repatriation Auxiliary Hospitals — in-patients treated, 1994–95

	NSW
Admissions	1 916
Separations	1 924
Daily average occupied beds	127

Source: Department of Veterans' Affairs.

Anzac Hostel provided minimal nursing supervision in a residential setting to eligible persons. The daily average occupied beds figure for 1994–95 was 13. Anzac Hostel closed on 30 June 1995.

Artificial limbs and appliances

Entitled veterans and war widows receive free artificial limbs, appliances and surgical footwear, through the Department's Health Care and Services Program.

In line with its objective of withdrawing from the direct provision of services and sourcing those services from other providers, the Department is negotiating the transfer of the Artificial Limb Scheme (ALS) and the Repatriation Artificial Limb and Appliance Centres (RALACs) to the State health authorities, or closing RALACs where no agreement can be reached.

The ALSs were transferred to Victoria and Queensland, and the Melbourne and Brisbane RALACs closed, on 1 December 1994. In South Australia the RALAC and the ALS were transferred when RGH Daw Park was integrated with the State Health system on 9 March 1995. In Tasmania, the RALAC and ALS were transferred to the State on 1 November 1995.

In 1995–96, negotiations between DVA and NSW and WA State Health departments continued on the future of the RALACs and the transfer of the ALSs in those states.

The following table gives details of production by all centres and commercial firms as a result of orders placed by the Department.

7.34 Repatriation artificial limb and appliance production, 1994–95

	Entitled veterans	Community patients	Total
Artificial arms	6	58	64
Artificial legs	249	842	1 091
Appliances	286	133	419
Artificial limb repairs	953	3 324	4 277
Appliance repairs	334	82	416
Custom footwear	1 526	49	1 575
Depth footwear	1 527	4	1 531
Footwear repairs	3 450	47	3 497

Source: Department of Veterans' Affairs.

Vietnam Veterans Counselling Service

The Vietnam Veterans Counselling Service (VVCS) has centres in Adelaide, Brisbane, Canberra, Darwin, Hobart, Launceston, Lismore, Melbourne, Perth, Southport, Sydney, Townsville and Wodonga. Lismore and Southport are new centres, opened in 1995. The service provides counselling to veterans and their families, as well as working

with the ex-service community to promote understanding and acceptance of veterans' problems.

The VVCS is staffed by psychologists and social workers who have specialised knowledge about military service, particularly in Vietnam, and its impact on veterans and

their families, especially the impact of post-traumatic stress.

Access to counselling services for rural veterans and their families was greatly improved with the establishment of the Country Outreach Program (COP) in 1988, followed soon after by a toll-free 1800 telephone link to all VVCS centres. Recent service enhancement initiatives under the Younger Veterans' Program (YVP) include in most centres the recruitment of a COP coordinator, and the creation of programs aimed at promoting better health for veterans.

The following table shows usage of the VVCS.

7.35 Vietnam Veterans Counselling Service

Activity	1992-93	1993-94	1994-95
Counselling consultations			
Face to face	34 252	38 492	33 996
Group sessions	259	308	356
Country Outreach	11 664	16 861	20 398

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.

The Office maintains 19,520 war graves in 76 war cemeteries and 900 civil cemeteries. It also maintains 185,710 postwar commemorations. In 1994-95 it commemorated 6,369 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 income

Surveys of household income have been conducted by the ABS at approximately four-yearly intervals since 1969. The latest survey was conducted from July 1994 to June 1995. Information was collected on income from the following sources: employee income; own business income; government pensions and allowances; superannuation; interest; rent and dividends; and other regular sources.

The latest income survey for which results are available was conducted in respect of 1989-90. Recent editions of the year book have included tables and other material describing the results of that survey. Results from the 1994-95 survey will be available early in 1996.

Household expenditure

The 1993-94 Household Expenditure Survey was the fifth major survey of its kind undertaken by the Bureau. It was conducted continuously over the twelve month period July 1993 to June 1994. Household expenditure surveys are designed to find out how the levels and patterns of expenditure of private households vary according to income level and other characteristics such as household size, composition, location and principal source of income. An important use of household expenditure information is in reviewing the weighting pattern of the Consumer Price Index (CPI), which is used universally as a measure of change in the cost of living.

Household expenditure in 1993-94

Results from the latest survey shows that, in 1993-94, average weekly household expenditure on commodities and services in Australia was \$602. Almost a half of this was accounted for by food, transport and housing.

Average weekly household expenditure on food and non-alcoholic drinks was \$111 (18.4% of the total), on transport \$94 (16% of the total) and on housing \$85 (14%). Expenditure on recreation was \$79 per week and this category showed the highest increase since the previous survey in 1988–89.

Household expenditure varied considerably across geographic regions. For example, the highest average weekly expenditure for a State was for New South Wales at \$624 and the lowest for Tasmania at \$535. For the capital cities, Canberra and Darwin had the highest level of expenditure, with \$749 and \$685 respectively, followed by Sydney at \$669 and Melbourne at \$634. Households in Canberra and Darwin had the highest average weekly

household incomes at \$1037 and \$864 respectively. The lowest were for households in Hobart (\$687) and Perth (\$708).

The level of household income is one of the main factors affecting the level of household expenditure. However, household income is itself related to social and demographic characteristics of the household. In particular, larger households typically have a greater number of income earners and thus higher levels of income and expenditure. Differences in household income are also related to characteristics such as the age of the household members, the source of income, for example employee income or government pensions, and the geographic location.

7.36 Household expenditure and characteristics, 1993–94

	NSW	Vic.	Qld	SA	WA	Tas.	Darwin	Canberra	Aust.
Average weekly household expenditure (\$)									
Current housing costs (selected dwelling)	95.40	83.11	81.44	70.43	78.02	62.92	116.20	112.29	85.38
Fuel & power	15.47	21.25	12.14	15.92	16.76	22.46	16.86	20.54	16.77
Food & non-alcoholic beverages	118.16	111.10	103.32	99.09	108.03	102.10	127.07	126.81	111.00
Alcoholic beverages	17.85	16.52	17.92	16.45	18.19	15.42	25.94	18.65	17.46
Tobacco	9.38	8.67	8.91	9.42	9.82	10.10	14.97	8.53	9.19
Clothing & footwear	35.29	37.61	28.83	29.11	31.56	29.81	24.61	44.11	33.71
Household furnishings & equipment	42.28	34.55	37.05	37.42	48.03	34.54	40.14	46.57	39.56
Household services & operation	32.82	30.49	31.90	27.05	32.02	29.68	41.64	39.47	31.58
Medical care & health expenses	28.59	26.41	25.93	28.43	25.97	24.45	24.82	28.41	27.14
Transport	94.17	93.62	95.45	83.88	92.10	76.72	93.18	127.73	93.58
Recreation	78.27	80.65	75.17	76.38	78.28	77.98	98.24	102.33	79.34
Personal care	11.35	11.27	11.72	11.30	11.24	9.51	10.06	14.16	11.37
Miscellaneous commodities & services	44.73	46.51	46.70	46.46	46.28	39.65	51.73	59.78	46.02
Total commodity & service expenditure	623.76	601.76	576.49	551.33	596.31	535.34	685.47	749.37	602.11
Selected other payments									
Income tax	149.43	130.52	128.29	123.89	125.57	103.40	168.22	243.71	136.99
Mortgage repayments — principal (selected dwelling)	23.56	20.72	16.80	14.00	23.38	13.47	31.54	32.73	20.78
Other capital housing costs	30.89	31.52	14.31	36.78	45.93	29.45	50.58	-5.80	29.46
Superannuation & life insurance	24.29	19.85	22.35	16.62	20.07	22.80	34.76	51.01	22.32
Household characteristics									
Average weekly household income (\$)	754.01	711.82	703.65	680.73	680.95	620.50	864.44	1037.39	723.26
Proportion (%) of total income being									
Employee income	74.4	73.2	69.1	71.5	71.2	67.1	84.5	78.6	72.7
Own business	7.0	5.3	11.2	7.2	8.5	7.5	4.3	7.2	7.5
Government pensions & allowances	12.6	13.8	12.7	14.6	13.5	16.9	8.1	6.3	13.0
Other	6.0	7.6	7.1	6.7	6.8	8.5	3.1	7.9	6.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average number of persons in household	2.66	2.63	2.62	2.45	2.68	2.51	2.80	2.76	2.63
Average number of employed persons in household	1.2	1.2	1.3	1.1	1.3	1.1	1.4	1.4	1.2

Source: 1993–94 Household Expenditure Survey.

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Poverty and deprivation in Australia

(This article has been contributed by Dr Peter Saunders, Director, Social Policy Research Centre, University of New South Wales.)

Introduction

As 1996 has been designated International Year for the Eradication of Poverty, it provides an opportunity to review evidence on the extent of poverty in Australia and to reflect on the meaning and measurement of poverty.

The measurement of poverty cannot be undertaken independently of national customs, values and standards of living. This means that in a relatively affluent country like Australia, the meaning of poverty is quite different from the absolute deprivation or subsistence poverty which exists in many developing countries. The World Bank has defined poverty as an inability to attain a minimal standard of living (World Bank, 1990, p.26). This is a general definition which can be applied to different national situations according to the specific meaning given to the concept of a standard of living and how the minimal level is determined.

Interest in the issue of poverty has grown in recent years, both internationally and within Australia. In the international context, the increasingly integrated world economy has highlighted the global nature of poverty and focused attention on its consequences. The United Nations Development Programme (UNDP) has emphasised this point, noting that: 'Poverty is the greatest threat to political stability, social cohesion and the environmental health of the planet' (UNDP 1994, p.20).

Reflecting these concerns, the reduction and elimination of widespread poverty was one of the major themes of the UN-sponsored World Summit for Social Development which took place in Copenhagen in March 1995. The eradication of poverty throughout

the world formed the basis of one of the Commitments contained in the Summit Declaration, which recommended that each country set a target date for eradicating absolute poverty. The Summit also recommended that the General Assembly of the United Nations endorse its proposal that 1997 should represent the commencement of a UN decade for the eradication of poverty.

Within Australia, as in many other industrial countries, poverty has re-emerged as a policy issue in response to the high levels of unemployment and increasing levels of inequality which have been experienced over the 1980s (ABS, 1994; Saunders, 1994). These concerns have reinforced a longer-term interest in the study of poverty in a country where poverty alleviation has been a major goal of wage and social security policies. These concerns were highlighted during the 1987 federal election campaign when Prime Minister Hawke made his pledge that by 1990 no child will need to live in poverty.

Assessing the governments success in achieving that goal has rekindled interest in the extent of poverty among Australian families. Research on the topic has revealed that fundamental differences exist concerning the definition of poverty and how it should be measured. Some academic writers (e.g. Travers and Richardson, 1993) have questioned the usefulness of using a single income-based poverty line to estimate the extent of poverty, a view which has been endorsed by the current Minister for Social Security (Baldwin, 1995).

These debates raise many issues in poverty research which cannot all be dealt with in the space of a single article. Some of them will be mentioned, but the poverty estimates which are presented below have been derived from one particular framework. Because of this, it is important to emphasise that estimates of poverty are estimates, and like all other estimates, are only as reliable as the methods used to derive them.

Poverty and inequality

In its 1990 World Development Report, the World Bank used a poverty line for each country set at the equivalent (in 1985) of US\$370 per person per year. On this basis — equivalent in Australia to around \$10 per person per week — there is virtually no poverty in Australia. However, the World Bank's focus was on absolute or subsistence poverty — not having enough income to be able to secure minimum levels of food, clothing and shelter.

In rich countries like Australia, poverty is conceived in relative rather than absolute terms. This implies that poverty is defined not in terms of a lack of sufficient resources to meet basic needs, but rather as lacking the resources required to be able to participate in the lifestyle and consumption patterns enjoyed by other Australians. To be relatively poor is thus to be forced to live on the margins of society, to be excluded from the normal spheres of consumption and activity which together define social participation and national identity.

The acceptance of poverty as a relative concept means that poverty and inequality are related. Relative poverty can only exist where there is inequality, but this does not mean that poverty and inequality are the same. Not all forms of inequality will imply relative poverty, only those in which some individuals or groups fall well below the average. The eradication of relative poverty will require some reduction in inequality, but how much and at what cost will depend upon the nature and severity of the poverty problem.

Direct and indirect measures

Most poverty research focuses on whether disposable income (income measured after the receipt of cash benefits from government and after the payment of personal income taxes to government) is sufficient to meet needs. This is justified on the grounds that income is a good measure of living standards in market economies like Australia. However, income is an indirect measure of poverty because it measures the resources on which living standards depend, but does not directly measure the living standards actually experienced.

Where people have access to resources other than income (e.g. financial assets or housing wealth) income may be an imperfect indicator of actual living standards. In Australia, where home ownership is high by international standards, this can have an important bearing on the measurement of poverty, particularly among groups like the aged where home ownership is most prevalent.

These problems might be circumvented by estimating poverty on the basis of consumption expenditure rather than income — as has been done by Eurostat, the Statistical Office of the European Communities, to compare relative poverty among EC countries. However, the use of expenditure data is not without its own problems. The most notable of these is that it is generally expenditure on consumption rather than consumption as such which is measured. Furthermore, it may be possible to sustain a standard of living during periods of low income by running down past savings or incurring debts, but this situation will not be sustainable. Low consumption expenditure may thus conceal rather than reveal the existence of poverty.

A better way of overcoming these difficulties is to try and identify poverty directly rather than indirectly. This approach, based on the Level of Living Surveys pioneered by researchers in

Sweden, has been applied in Australia by Travers and Richardson (1993) as well as in the Australian Living Standards Study undertaken by the Australian Institute of Family Studies (McDonald and Brownlee, 1994). It involves observing the many dimensions of living conditions, including consumption of private goods, housing, health, education, employment and participation in social and political aspects of community life.

Given the multi-dimensional nature of actual living standards, it is difficult to derive a single poverty measure using the direct approach. The focus in this approach tends to be on quantifying inequality in particular aspects of living conditions and exploring what these imply for policies in specific areas. It is, however, also possible to derive cumulative measures of disadvantage in several dimensions which are indicative of the existence of poverty.

Relative deprivation

The concept of relative deprivation is associated with the work of British social researcher Peter Townsend (Townsend, 1979). It builds on direct observation of various dimensions of the lifestyles actually experienced by people and defines relative deprivation as a situation where people lack the resources to have the living conditions and amenities and participate in activities which are widely encouraged and approved in the society in which they live. It is claimed that below a certain level of income the index of deprivation begins to increase substantially and that this income threshold can be thought of as a poverty line. However, it is the level of deprivation itself, rather than the income threshold attached to it, on which attention is focused.

The concept of relative deprivation leaves unresolved the question of how the customary or approved living conditions and activities are identified. One approach is to leave such judgements to the experts. Another, which attempts to integrate the concepts of poverty and relative deprivation involves identifying a list of necessities which are regarded as such by a majority of the population and then defining poverty as those who experience an enforced lack of several of these socially perceived

necessities. These approaches to the measurement of poverty are under-developed in Australia, where relatively little is known about how people conceive of poverty and what they think constitutes being poor.

The role of values

None of the conceptual approaches to poverty described above avoid the need for values to enter into the way poverty is defined. These values need to be made explicit and their validity needs to be debated and endorsed if poverty research is to promote action to alleviate poverty. The fact that the measurement of poverty is not value-free does not mean that poverty research cannot embody scientific principles associated with data quality and methodological technique (Saunders, 1995). What it does imply is that estimates of poverty will always be challenged — and should always be challenged. This should be kept in mind when assessing the estimates of poverty presented below.

Indices of poverty

Most of the poverty measures discussed later estimate the percentage of income units whose incomes fall below a poverty line expressed in monetary terms. This measure is referred to as the headcount index of poverty, for obvious reasons. The headcount ratio can be expressed as the percentage of income or family units below the poverty line, or as the percentage of individuals living in poor units or families.

One limitation of the headcount poverty measure is that it takes no account of the severity of poverty — how far below the poverty line the poor actually are. Poverty is an all-or-nothing state. Furthermore, changes in income which cause people to move from just below to just above the poverty line may cause the headcount poverty ratio to decline markedly, but reflect only minor changes in living standards. In addition, government policies which raise the incomes of the poor without pushing them above the poverty line will have no effect on the headcount poverty ratio.

To counter these criticisms, a range of more complex indices of poverty has been developed. These reflect both the severity of poverty as well as the numbers below the poverty line. The most well-known of these measures is the poverty gap, which estimates the total gap between actual income and the poverty line for all those who are in poverty. The poverty gap thus measures the total cost of raising all of the poor to the poverty line but no further. It indicates the severity of the poverty problem and the (minimum) cost of addressing it.

But even the poverty gap can be criticised because it assigns an equal weight to all income shortfalls below the poverty line. If, instead, it is thought desirable to assign more weight to those who are in deepest poverty, then even more sophisticated (and complex) poverty measures are required. The problem here is that such increased sophistication may produce a poverty measure which is less transparent and understandable in the community.

Needs and equivalence scales

Thus far, the discussion has proceeded as if there is a single poverty line. In fact, the poverty line varies according to needs which in turn depend upon the characteristics of each income unit, the most obvious being the number of income unit members. The income unit itself is defined to approximate a basic economic unit comprised of related individuals who are living together. There are four basic types of income unit; single people; married couples (*de jure* or *de facto*) without children; couples with children; and sole parents.

For each income unit type, the poverty line most commonly used in Australia varies according to the age, gender and workforce status of each individual member, and according to the total number of individuals living in the income units household. These variations are embodied in the equivalence scale on which the measurement of poverty is based. The scale reflects the relative needs of different family types and is designed to allow the standards of living of different families to be compared on a single scale.

The equivalence scale expresses the needs of each income unit relative to those of a benchmark type — a single person unit, for example. The benchmark or reference unit is assigned an equivalence value of 1.0 and the equivalence scale then assigns values to other units relative to this. Thus, a married couple may have an equivalence value of 1.7, implying that the needs of a couple are 70% higher than the needs of a single person. In this case, the value is less than 2 because of the existence of cost economies in household living arrangements.

The above example implies that a couple needs 70% more income than a single person in order to attain the same standard of living. This in turn implies that the poverty line for the couple should also exceed that of a single person by 70%. This highlights the fact that poverty is concerned not with low income as such, but with incomes that are low relative to needs. It also points to the important role of the equivalence scale itself in determining both the overall extent of poverty and its composition among different income unit types.

Another key assumption concerns the fact that, within income units, there is assumed to be equal sharing of resources. This means that the standard of living, and hence the poverty status, of each individual unit member are the same. Relatively little is known about the extent of income pooling within Australian families. Given its importance, the assumption of equal sharing, like other assumptions, needs to be tested.

The Henderson poverty line

The first systematic attempt to estimate the extent of poverty was undertaken in the mid-1960s by a group of researchers at the Institute for Applied Economic and Social Research (IAESR) at Melbourne University (Henderson, Harcourt and Harper, 1970). The research team, led by IAESR Director Professor Ronald F. Henderson, estimated poverty in Melbourne using a poverty line for a reference two-adult, two-child family set at an income equal to the value of the

basic wage plus child endowment payments (later called family allowances).

This poverty benchmark was chosen because of its relevance to Australian concepts of minimum income, but also because as a proportion of average earnings and average incomes it was similar to poverty lines used in other countries. It was regarded by the research team as an austere measure, likely to produce lower-bound estimates of poverty. The equivalence scale used to derive poverty lines for other family types was, in the absence of any reliable Australian estimates of relative needs, derived from a survey of household budgets and costs undertaken in New York in the 1950s. This aspect of the poverty line has been criticised, although the cost relativities implied by the New York scale were regarded at the time by the IAESR researchers as quite plausible for Melbourne.

The poverty line described above was subsequently used by the Commission of Inquiry into Poverty to produce the first authoritative national estimates of poverty in Australia using data from an ABS income survey undertaken in August 1973 (Commission of Inquiry into Poverty, 1975). Following a recommendation in the IAESR study, the poverty line was updated to 1973 in line with the movement in average weekly earnings. The updated line became known as the Henderson poverty line (HPL) after Professor Henderson, the Chairman of the Poverty Inquiry.

Updated estimates of the HPL have been published regularly since 1979 by the IAESR and reported by welfare organisations such as the Australian Council of Social Service (ACOSS). Updating the poverty line by

average earnings was replaced by the use of household disposable income per capita in 1981, the latter measure being more comprehensive in scope but also preferable because it incorporates changes in personal tax payments.

Updates of the HPL have been used to estimate poverty as more recent ABS household income data have become available, and also as a benchmark against which to assess the adequacy of government benefits. In light of the significance of both exercises, it is no surprise that the poverty line estimates have been subject to extensive criticism. To date, however, no viable alternative has been proposed and the HPL continues to be widely used to measure poverty.

Table S2.1 presents the poverty lines for income units in the workforce in the March quarter 1995. The methods and assumptions used to derive them are described in detail in Johnson (1987). The dollar value of the poverty line for each income unit type is shown, as well as the relativities for different income unit types — the equivalence scale. In dollar terms, the poverty line for a single person was \$215 a week, for a couple it was \$288 a week, increasing thereafter by around 20% for each child. The poverty line for a sole parent with one child was about 4% below that of a childless couple with the same workforce status. (Poverty lines for those not in the workforce were around \$41 below those shown in table S2.1 for each income unit type). Housing costs vary with family size, but range from around \$70 a week for a single person up to \$106 a week for a couple with four children.

S2.1 Poverty lines for Australia, March quarter 1995(a)

Income unit type	Including housing		Other than housing	
	\$ per week	Relativities (Couple = 100)	\$ per week	Relativities (Couple = 100)
Couple	288.4	100.0	210.9	0.7
Couple, 1 child	346.6	120.2	262.2	0.9
Couple, 2 children	404.9	140.4	313.4	1.1
Couple, 3 children	463.2	160.6	364.7	1.3
Couple, 4 children	521.4	180.8	415.4	1.4
Single person	215.6	0.8	145.1	0.5
Single parent, 1 child	276.8	1.0	199.3	0.7
Single parent, 2 children	335.0	1.2	250.5	0.9
Single parent, 3 children	393.2	1.4	301.8	1.1
Single parent, 4 children	451.5	1.6	353.0	1.2

(a) The estimates assume that the head of the income unit is in the workforce and are based on an estimate of seasonally adjusted household disposable income per head per week for the March quarter 1995 of \$313.29.

Source: *Institute of Applied Economic and Social Research, 1995, Table 1.*

Poverty in 1990

Estimates of poverty in 1989–90 using the HPL framework have been derived by the Australian Institute of Health and Welfare (AIHW, 1993) and Saunders (1994). The former estimates are shown in table S2.2. They reveal that over 840,000 income units had incomes below the poverty line, leading to an overall poverty rate of 13.8%. Poverty was most prevalent among sole parent income units, whose incidence of poverty was more than three times the national rate.

Poverty after housing costs is estimated by comparing disposable income net of actual housing expenditures with the after-housing costs poverty line (see table S2.1). On this basis, poverty is lower overall and markedly lower for the aged, many of whom have relatively low housing costs. Offsetting this

is the tendency for after-housing poverty to be higher amongst younger groups, particularly single people and two-parent families. This partly reflects the modest allowance for housing costs in the HPL (table S2.1).

Table S2.2 indicates that income unit type and housing status both affect the risk of poverty. In general, the risk of poverty is much less in income units with two adult members than in those containing only a single adult. Research indicates that the risk of poverty is also influenced by labour force status, age, the gender of the head of household and whether or not the household head is a recent migrant to Australia (Paul and Podder, 1992).

S2.2 Income units in poverty, before and after housing costs, by income unit type, 1989-90(a)

Income unit	Total number ('000)	Poverty rate before housing costs (%)	Poverty rate after housing costs (%)
Single person			
aged 15-24	258.1	16.0	24.6
aged 25-64	1 125.8	17.2	15.4
aged 65 & over	714.5	19.2	5.8
Couples (no children)			
head aged under 65	1 266.0	6.5	6.9
head aged over 65	565.4	6.0	4.2
Two parent families	1 795.9	10.5	13.8
One parent families	358.8	46.1	43.8
All income units	6 084.5	13.8	13.0
Number of income units in poverty ('000)	—	842.1	794.2

(a) Excludes residents of non-private dwellings, self-employed income units and independent children of the household head. Figures refer to weighted population estimates.

Source: Australian Institute of Health and Welfare, 1993, Table 3.1.

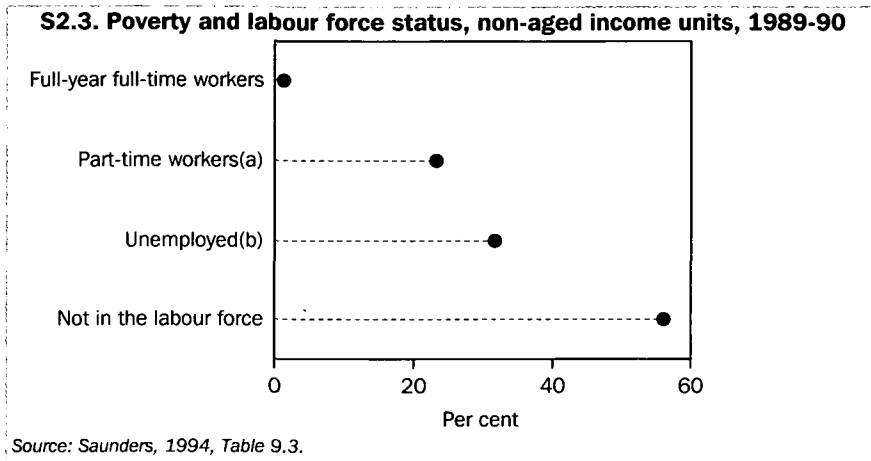
Poverty and labour force status

The Poverty Inquiry identified the workforce status of the income unit head as the dominant factor which determined the poverty status of the income unit as a whole. That basic relationship remains in force today, although with two-earner couples now outnumbering single-earner couples, the labour force status of any single individual is less important in determining whether the unit as a whole is poor. Furthermore, the widening of earnings inequality and the growth in part-time and casual employment has made employment less of a guarantee against poverty than was the case in the past.

Quantifying the relationship between labour force status and poverty is complicated by the fact that poverty is determined on the basis of annual income while labour force status can vary over the course of the year. Where this occurs, the classification of labour force status is to some extent

arbitrary. In constructing graph S2.3, the unemployed have been defined (following the Poverty Inquiry) as those income units where the head is unemployed for eight weeks or more during the course of the year. As a consequence, the residual category of those in the labour force comprises part-time workers, part-year workers and those who have been unemployed for less than eight weeks.

Despite this, graph S2.3 indicates that labour force attachment reduces the risk of poverty, while access to full-time employment virtually removes it entirely. To the extent that the opportunity to achieve the benefits associated with employment are greater amongst couples than income units with only a single adult, the differences in graph S2.3 partly explain the patterns of poverty by income unit type shown in table S2.2.



Poverty among immigrants

The extent of poverty among all immigrants has been estimated systematically by Johnson (1991). His results, using data from the ABS household income surveys conducted in 1982 and 1986 are summarised in table S2.4. The value of these comparisons is affected by two factors: first, the limited degree of detail on place of birth available on a consistent basis for both years; second, the numbers in some birthplace categories are quite small.

Despite these limitations, table S2.4 indicates that although poverty among immigrants is somewhat higher than amongst those income units where the head is Australian-born, this is not a consistent pattern across all immigrant groups. In some cases (particularly for immigrants from the UK and Ireland) poverty is actually lower than amongst those born in Australia.

Without further analysis, it is not possible to attribute the differences shown in table S2.4 to birthplace alone, as there may be other differences which can explain the results. The immigrant groups differ in regard to such factors as length of residence, age, English-speaking ability and educational qualifications and these may account for the observed differences. However, research shows that when age and educational qualifications are held constant, poverty in 1981-82 was higher among immigrants from non-English-speaking backgrounds, as well as among those immigrants who arrived in Australia most recently (Johnson, 1991).

S2.4 Poverty by place of birth in 1981-82 and 1985-86

Place of birth of head of Income Unit	Poverty rate in 1981-82	Poverty rate in 1985-86
Australia	10.2	11.7
UK & Ireland	8.1	7.3
Italy	16.9	15.8
Other Europe	11.5	12.6
Asia	16.9	29.1
Americas	11.4	30.7
Africa	12.9	10.7
Oceania	11.3	24.9
All immigrants	11.4	14.6
All income units	10.5	12.5

Source: Johnson, 1991, Table 3.5.

Poverty among Indigenous Australians

It is now well established that the overall socioeconomic status of Aboriginal and Torres Strait Islander people is well below that of other Australians. Not surprisingly, that difference extends to a comparison of the poverty status of Indigenous and non-Indigenous Australians. What is more surprising is the lack of reliable data on which to substantiate such a claim — at least as it applies to poverty assessed on the basis of inadequate income.

The Poverty Inquiry was unable to document the poverty status of Aboriginal people on a national basis because of the

deficiencies of the data collected (by white interviewers) on the incomes of Aboriginal households (*Commission of Inquiry into Poverty, 1975, p.260*). The Inquiry was, however, able to produce estimates of Aboriginal poverty in Brisbane and Adelaide in 1973. The estimated poverty rates for Aboriginals in these two cities (before housing costs) were 47% and 22%, respectively — well above the national poverty rate, the poverty rate in all metropolitan areas, and the poverty rates in Queensland and South Australia, respectively.

S2.5 Poverty, severe poverty and near poverty among Aboriginal and non-Aboriginal income units with children, 1986

Income unit	Severe poverty (Income below 80% of the poverty line)		Poverty (Income below 100% of the poverty line)		Near poverty (Income below 120% of the poverty line)	
	Aboriginal people	Non-Aboriginal people	Aboriginal people	Non-Aboriginal people	Aboriginal people	Non-Aboriginal people
Couples with						
1 child	6.8	2.4	12.2	3.6	33.8	13.6
2 children	5.2	1.9	27.3	8.0	44.2	12.8
3 children	19.6	2.4	50.0	14.2	67.4	33.8
4 or more children	30.8	16.7	48.7	25.1	71.8	47.6
Sole parents with						
1 child	34.3	14.2	46.3	25.8	77.6	58.1
2 children	15.9	13.5	77.3	51.0	95.5	73.5
3 or more children	34.6	40.8	92.3	82.1	96.2	86.2
All families with children	18.5	5.8	43.2	15.0	63.5	28.2
Percentage of children	20.4	7.0	49.9	18.0	67.9	31.5

Source: Ross and Whiteford, 1992, Table 5.

In a recent study, Ross and Whiteford (1992) used information collected in the 1986 Census of Population and Housing and in the Income Distribution Survey conducted in the same year to derive estimates of poverty amongst Aboriginal families with children. Table S2.5 compares their estimates of poverty among Aboriginal and non-Aboriginal families.

The overall poverty rate among Aboriginal families is almost three times that among non-Aboriginal families. Half of all Aboriginal children were living in poverty in 1986, more than two-thirds were in near poverty and a fifth were in severe poverty.

In all cases, these figures are well above those estimated for children in non-Aboriginal families. The general pattern of poverty among Aboriginal and non-Aboriginal families is similar, with the risk of poverty for both groups increasing with the number of children and being substantially higher for sole parent units than for couple units. There is also a tendency for the differential between the two groups to narrow as the number of children increases. A major factor identified as underlying these differences is the increased prevalence of joblessness among Aboriginal families.

Trends over time

One advantage of using the HPL framework to estimate poverty is that consistent estimates of the trend in poverty over time can be derived. Table S2.6 brings together the results from the studies by Gallagher (1985) and Saunders (1994) which present poverty estimates for each of the years since 1972–73 in which the ABS has undertaken an income survey. The main features of the trends are shown in graph S2.7. Although the two studies apply the same broad methodology, there are some differences which cause each to produce slightly different estimates for the one year (1981–82) which is included in both studies.

Table S2.6 shows that the overall poverty rate was broadly constant at around 10% in the decade up to 1981–82. Over this period, poverty declined markedly among single people but increased among couples, with

and without children. After 1981–82, the overall poverty rate rose steadily, reaching 16.7% by 1989–90 according to Saunders (1994). This period also saw a substantial reversal of the earlier decline in poverty among single people, whose poverty rate almost doubled from 10.7% to 20.4%.

One of the factors underlying the increase in poverty after 1981–82 is the fact that the poverty line itself increased in real terms by 1.2% a year between then and 1989–90 — corresponding to a total real increase of just over 10%. However, this is to be expected of a relative poverty line in a period when real community incomes are rising. The real annual increase in the poverty line in the 1980s is actually lower than between 1972–73 and 1979–80, when the poverty line was adjusted in line with average weekly earnings.

S2.6 Estimates of income units in poverty, 1972–73 to 1989–90(a)

Income unit type	1972–73		1973–74		1978–79		1981–82		1985–86		1989–90	
	No. ('000)	%	No. ('000)	%	No. ('000)	%	No. ('000)	%	No. ('000)	%	No. ('000)	%
Single person	230.1	18.3	319.5	18.3	208.5	10.7	296.0	12.2	418.7	17.0	563.5	20.4
Sole parent with												
1 child	n.a.	n.a.	25.8	26.7	27.8	26.4	44.5	31.7	56.8	44.1	95.0	52.9
2 or more children	n.a.	n.a.	38.9	49.1	48.5	46.3	66.6	60.5	72.7	66.4	95.5	64.8
All sole parents	54.1	33.8	64.7	36.8	76.3	36.3	111.1	43.5	129.4	53.7	190.5	58.0
Couples with												
0 children	14.0	1.9	53.5	4.1	66.8	5.1	46.6	4.1	49.7	3.8	98.0	6.4
1 child	26.7	2.9	23.3	4.1	24.1	5.1	21.0	5.0	19.0	4.5	38.7	8.6
2 children	26.7	2.9	25.6	3.9	40.4	6.5	33.0	5.7	37.5	6.6	48.1	8.4
3 or more children	30.7	7.2	74.0	12.6	47.1	11.5	42.8	16.8	60.2	20.3	54.0	19.9
All couples with children	57.4	5.2	122.9	9.2	111.6	8.2	96.8	7.2	116.6	9.0	140.9	10.5
All income units	399.4	10.2	560.6	11.1	463.1	9.3	550.2	10.7	714.5	13.4	992.9	16.7

(a) Estimates exclude all self-employed income units.

Source: For 1972–73 to 1978–79; Gallagher, 1985, Table 1. For 1981–82 to 1989–90; Saunders, 1994, Table 9.2.

International comparisons

Comparing poverty rates across different countries is a difficult exercise. In the first place, it requires the availability of data which conform to a common definitional and measurement framework with regard to key concepts such as income and the family unit. Second, a method for establishing a poverty line is required which permits meaningful cross-national comparisons to be made whilst at the same time recognising

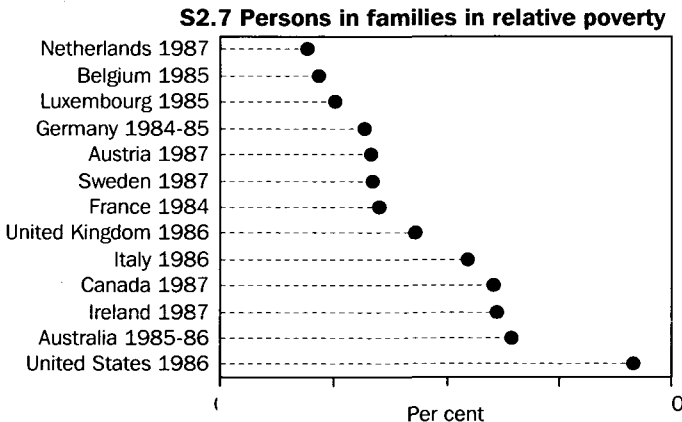
that the poverty line should reflect national conditions and circumstances.

Considerable progress in overcoming the first obstacle (data comparability) has been made since the advent in 1983 of the Luxembourg Income Study (LIS), an international project with the goal of rendering household income survey data comparable across countries by ensuring that they conform to a common definitional

framework. To overcome the second obstacle, a value judgement is required which can receive broad support, both within and across countries.

To this end, researchers have adopted a poverty line for each country which is set at a fixed percentage of median equivalent family income. The measure has the advantage that it reflects differences in the standard of living in each country (as incorporated in the level of median income) whilst at the same time aiding comparisons between countries by fixing the poverty threshold at the same relative level in each country. The exact percentage of median income adopted as the poverty threshold can be varied in order to assess the sensitivity of results. Because this poverty line bears no relation to national poverty benchmarks, it is perhaps more accurately described as a low income, rather than a poverty, threshold.

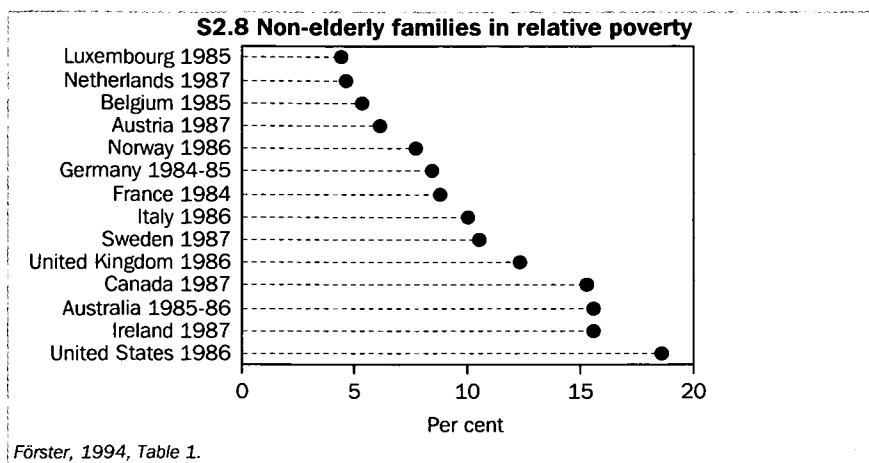
Graphs S2.7 and S2.8 summarise what the existing research using the LIS database indicates about the extent of poverty across a range of countries (including Australia) belonging to the Organisation for Economic Cooperation and Development (OECD). Graph S2.7 shows the percentage of persons in each country who are living in families with incomes below a poverty line set at 50% of median income. The estimated poverty rate varies from around 4% in Belgium and the Netherlands to almost 19% in the United States, with an average value across all thirteen countries of just below 9%. Australia's poverty rate, at 12.9%, is second highest after the United States, similar in magnitude to that existing in Canada, Ireland and Italy.



Förster, 1993, Table 1.

Graph S2.8 compares the poverty rate among non-elderly families only, defined as those headed by a person aged less than 60 (Forster, 1994, table S2.1). Again, the cross-country variation in poverty is considerable, ranging from around 5% in Belgium, Luxembourg and the Netherlands to over 15% in Australia, Canada and Ireland, with the United States again having the

highest poverty rate (18.7%). The average rate for all countries shown is 10.3%. The fact that this is slightly above the average rate shown in graph S2.7 reflects the use of a different unit of analysis in the two figures and the differential poverty rates amongst non-elderly and elderly families in each country.



Finally, it is worth noting that Australia's poverty ranking as shown in graphs S2.7 and S2.8 does not change markedly if the low-income benchmark is changed from 50% of median income to either 40% or 60%.

Deprivation

As explained earlier, in order to estimate the extent of deprivation it is necessary to investigate peoples lifestyles and living conditions directly and quantify those dimensions in which they are experiencing deprivation. Studies of Australian living standards conducted by Travers and Richardson (1993) and the Australian Institute of Family Studies (McDonald and Brownlee, 1994), though not addressing the issue of deprivation directly, have produced results which are of relevance. This new research complements earlier qualitative studies (e.g. Trethewey, 1989) of the lives and experiences of those on low incomes which document what poverty and deprivation mean in everyday terms.

The work of Travers and Richardson, based on a national survey of Australian living standards conducted in 1987, reveals that comprehensive measures of full income (defined to include estimates of the value of leisure and ownership of assets) are only weakly correlated with the extent of various forms of social participation. Furthermore, the correlations between equivalent money income and other non-monetary dimensions of full income are also rather low, which suggests that inequalities in the different

spheres of material well-being tend to offset each other. These findings imply that those who are defined as poor according to the level of their money incomes will not necessarily be experiencing the lowest levels of deprivation, nor are they always excluded from participating in normal social activities.

The Australian Living Standards Survey undertaken by a research team at AIFS has investigated living standards across fourteen spheres of life for families with children. In addition to economic resources, the aspects considered include health, employment, housing, transport, leisure and recreation, access to local and community services, safety and security, social and political participation and family functioning. Analysis of data on almost 1800 households living in four Melbourne localities reveals that thresholds of living standards exist which mark the lowest fifth of households (ranked in terms of equivalent household income) distinct from the top 30% of households, with the 50% of households in the middle forming a third grouping.

A number of indicators of relative deprivation for those at the bottom are discovered in the data, including a lack of assets, the incidence of financial difficulties, housing problems, below-average health and the perception that children in low-income households are worse off than other children (McDonald and Brownlee, 1994, Figures 1 to 9).

S2.9 Indicators of housing stress by income unit type, 1990 (%)

Indicator	Income unit type				
	Single person	Couple (no children)	Two parent family	One parent family	All income units
High expenditure on housing(a)	7.4	3.8	5.3	21.2	6.6
No internal bathroom	0.3	0.5	0.3	0.3	0.4
No internal toilet	0.7	0.4	0.3	0.2	0.5
No internal bathroom or toilet	0.4	0.1	0.1	0.2	0.2

(a) High expenditure is defined as equivalent to 30% or more of disposable income. These figures relate only to those income units in the lowest 40% of the distribution of equivalent income (defined using the Henderson equivalence scale).

Source: Australian Institute of Health and Welfare, 1993, Tables 3.2 and 3.3.

Further information on high housing costs and inadequate housing conditions as indicators of deprivation has been presented by the Australian Institute of Health and Welfare (AIHW). The measures indicate that high housing costs are a problem for many low-income Australians, particularly for sole parent families (table S2.10). In relation to inadequate housing conditions, however, there are few Australians without an internal bathroom and toilet and where these do not exist, there is no consistent pattern of differences across income unit types.

Saunders (1994) utilises data from the 1988-89 Household Expenditure Survey to derive several indicators of deprivation in relation to inadequate housing conditions, lack of assets such as a car, lack of a telephone and no insurance protection of such assets. These indicators present a more pessimistic picture than that shown in table S2.9, although what is most significant about the results is that they again reveal clear differences across family types, with deprivation most prevalent amongst single aged people, larger two-parent families and sole parent families generally. These results,

combined with those in tables S2.2 and S2.6, suggest that deprivation and poverty seem quite closely related in Australia.

Concluding comments

The International Year for the Eradication of Poverty provides an opportunity not only to review the research on poverty, but also to promote policies which can eradicate poverty and abolish deprivation. While there is little evidence from the available statistics that absolute poverty is widespread in Australia, groups such as the homeless and Indigenous Australians who tend not to appear in the conventional statistics are poor even on a subsistence basis. In addition, relative poverty is a reality for many more Australians, including many families with children. High levels of unemployment, particularly long-term unemployment, and a continuation of the increase in inequality will only exacerbate the number of Australians at risk of poverty.

Addressing areas of absolute and relative disadvantage will require government action in many different spheres and at many different levels. Government income transfers are essential to provide a comprehensive and adequate social safety net. Improved access to market incomes is also important for overcoming the marginalisation and social exclusion which often accompany enforced joblessness. The provision of adequate housing and community services which contribute directly to living standards is also important,

as is the development of an environment in which individuals can achieve their own aspirations for material well-being and personal fulfilment.

Poverty in rich countries like Australia can be eradicated. We have the resources. We need to agree that the eradication of poverty is a worthwhile objective and, having agreed, to pursue that goal with a sense of purpose and commitment.

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Health

Introduction	243
Health status	243
Healthy lifestyles and risk factors	243
Overweight and obesity	243
Physical activity	243
Use of tobacco and alcohol	244
Use of illicit drugs	244
Use of medication	245
Dental health	245
Disability	246
Congenital malformations	247
Communicable diseases	248
HIV and AIDS	249
Causes of death	250
Injury	253
Suicide	254
Health care delivery	255
Medicare	255
Public hospitals	255
Use of hospitals	255
Same-day surgery	256
Private hospitals	256
Comparison of public and private hospitals	256
Health work force	257
Health Programs	258
National Health Advancement Program	258
Aboriginal health	258
Programs for the aged and people with disabilities	258
Homeless youth	258
Mental health	258
Diet and nutrition	259
Drugs	259
Dental health	259
Organ and tissue donation	260
Family planning	260
Survivors of torture and trauma	260

Women's health	260
National Women's Health Program	260
Cancer screening programs	260
Alternative Birthing Services Program	261
Health care financing	261
Total health expenditure	261
Medicare financing	262
Commonwealth Government funding of hospitals	262
Household expenditure on medical care and health	262
Pharmaceutical Benefits Scheme	262
Health-related organisations	264
International	264
World Health Organization	264
The International Agency for Research on Cancer	264
Australian Government	264
Health and Community Services	
Ministerial Council	264
Department of Human Services and Health	265
Australian Institute of Health and Welfare	265
National Health and Medical Research Council	266
The Private Health Insurance Administration Council	266
Australian Quarantine and Inspection Service (AQIS)	266
National Food Authority	267
National Occupational Health and Safety Commission	268
Therapeutic Goods Administration	268
Australian Radiation Laboratory	268
Cancer registries	269
Communicable Diseases Network — Australia New Zealand	269
Australian non-government	269
National Heart Foundation of Australia	269
Australian Red Cross	269
Bibliography	270

Health

Introduction

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 two Ministers to the Portfolio of Human Services and Health (and a Parliamentary Secretary to the Minister for Human Services and Health). The Minister for Human Services and 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 Minister primarily has responsibility for Family Services. 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.

This chapter uses data from the most up-to-date sources available at the time of writing. For data from the 1989–90 National Health Survey, please refer to the Health Chapter of *Year Book Australia 1995*. Data from the 1995 National Health Survey will be available late in 1996.

Health status

Healthy lifestyles and risk factors

Overweight and obesity

Overweight and obesity are risk factors for many health conditions, including coronary heart disease, stroke, cancer, high blood pressure, diabetes and respiratory and musculoskeletal problems.

8.1 Persons aged 18 years and over who were overweight or obese (%)

	1989–90	1994–95
Sex		
Males	44.4	49.7
Females	30.9	33.5
Age		
18–34 years	27.1	32.1
35–54 years	43.9	46.9
55 years & over	45.0	49.2

Source: AIHW Australian Health Indicators No. 4, June 1995.

Physical activity

Regular physical activity is important in the prevention of many health conditions, including coronary heart disease, hypertension, diabetes, osteoporosis and obesity. It also provides health benefits associated with improved self esteem.

In 1994–95, 64% of Australians aged 18 years and over reported that they exercised

regularly. An estimated 36% or 4.5 million people reported that they did not currently exercise for sport or recreation. Among men, participation was fairly constant at 60% across all age groups. However, the proportion of women who exercised decreased with age from 71% of under-35-year-olds to 57% of those aged 55 years and over.

Over the last five years, there has been a statistically significant increase in the percentage of adult Australians who walk for exercise. In 1989–90, 41.1% of men and 49.2% of women walked for exercise. By 1994–95, 52.0% of men and 57.7% of women walked for exercise.

8.2 Percentage of adults who engage in any exercise for sport or recreation

	1989–90	1994–95
Sex		
Males	64.5	63.2
Females	64.0	65.9
Age		
18–34 years	70.9	67.7
35–54 years	60.9	65.4
55 years & over	59.1	58.9

Source: AIHW Australian Health Indicators No.4, June 1995.

Use of tobacco and alcohol

Tobacco smoking is a risk factor for heart disease, stroke, lung cancer and chronic lung disease.

In 1994–95, approximately 3.2 million adult Australians were smokers, compared with 3.5 million in 1989–90. In 1994–95, a higher proportion of men (27.3%) were smokers than women (22.7%). Young adults (aged 18–34 years) (31.2%) were twice as likely to be smokers as were adults aged 55 years and over (15.5%).

8.3 Percentage of adults who currently smoke

	1989–90	1994–95
Sex		
Males	31.6	27.3
Females	25.1	22.7
Age		
18–34 years	35.3	31.2
35–54 years	28.9	25.4
55 years & over	17.9	15.5

Source: AIHW Australian Health Indicators No.4, June 1995.

High levels of alcohol consumption have been linked to an increased risk of heart disease, stroke, brain and liver damage, and some cancers. Alcohol intoxication is also a leading cause of road traffic accidents.

In 1994–95, 8% of adult Australians drank alcohol at levels considered by the National Health and Medical Research Council to be dangerous to their health. This percentage has decreased since 1989–90, when 11% of adults drank at dangerous levels. In 1994–95, men were nearly twice as likely to drink alcohol at risk levels (9.7%) as women (5.5%). The age group most likely to drink at risk levels was the 18–34 years age group (8.9%).

8.4 Percentage of adults who drink at risk levels

	1989–90	1994–95
Sex		
Males	14.6	9.7
Females	7.5	5.5
Age		
18–34 years	13.0	8.9
35–54 years	11.7	7.9
55 years & over	7.7	5.3

Source: AIHW Australian Health Indicators No.4, June 1995.

Use of illicit drugs

The 1993 National Drug Strategy Household Survey found that, of persons aged 14 years and over, respondents were most likely to have ever tried marijuana/hash (34%) and tranquillisers (34%). Thirteen per cent of respondents had used marijuana/hash in the twelve months prior to the Survey, and 11% had used tranquillisers. In the twelve months before the Survey, 2% of respondents had used amphetamines, and each of the following drugs had been used by 1% of respondents: cocaine/crack, hallucinogens, inhalants, ecstasy/designer drugs and injected drugs.

The 1993 National Drug Strategy Household Survey asked respondents what drugs they thought of when people spoke about a drug problem. Heroin and marijuana were each mentioned by 30% of respondents. Fifteen per cent mentioned alcohol, 10% mentioned cocaine and 3% mentioned tobacco.

Use of medication

The Drug Utilization Sub-Committee (DUSC), which maintains a database that estimates community prescription drug use in Australia, reports that 163 million prescriptions were dispensed in 1994. Of the ten most commonly

used prescription drugs in the community, three were antibiotics and two were pain relievers. Other commonly prescribed types of medication were for the treatment of asthma, hypertension (high blood pressure) and insomnia.

8.5 Most commonly used drugs, 1994

Drug	Description	No. of prescriptions
Amoxycillin	Antibiotic	5 864 731
Salbutamol	Used in treatment of asthma	4 397 913
Paracetamol(a)	Pain relief	4 136 079
Codeine with paracetamol(a)	Pain relief	3 654 776
Amoxycillin with clavulanic acid	Antibiotic	3 415 962
Enalapril	Used in treatment of hypertension (high blood pressure)	3 126 504
Temazepam	Sedative commonly used in treatment of insomnia	3 031 695
Ranitidine	Used in treatment of duodenal & gastric ulcers	2 968 141
Betamethasone	Corticosteroid used for its anti-inflammatory, anti-rheumatic & anti-allergenic effects	2 790 929
Doxycycline	Antibiotic	2 755 977

(a) This drug is available without a prescription, therefore the number of prescriptions for this drug understates actual community use.

Source: Department of Human Services and Health, Drug Utilization Sub-Committee database, 1994.

Dental health

According to the 1994 National Dental Telephone Interview Survey, an estimated 9.3 million people aged 5 years and over had a dental consultation in the twelve months prior to survey interview. The most common types of treatment or service received were teeth cleaned and scaled (64.6%) and teeth filled (40.6%).

Males (42.7%) were more likely to have had teeth filled than females (38.6%). The type of treatment or service provided varied with age. Those aged 5 to 24 years were less likely to have teeth filled than older age groups (table 8.6).

8.6 Persons aged 5 years and over who had a dental consultation(a), 1994 (%)

Treatment/service	Age group (years)							Persons		
	5-14	15-24	25-44	45-64	65-74	>74	Males	Females	%	'000
Tooth/teeth extracted	11.1	14.5	12.5	12.4	10.9	9.5	12.9	11.8	12.3	1 142.1
Tooth/teeth filled	30.3	26.0	50.6	48.3	46.2	37.8	42.7	38.6	40.6	3 770.0
Teeth cleaned & scaled	47.2	68.7	73.0	68.5	65.3	53.9	64.8	64.5	64.6	5 998.5
Other treatment	20.7	24.3	23.3	28.7	25.3	27.8	22.4	25.8	24.2	2 247.1
Total who had a dental consultation(b)	79.2	58.8	51.7	52.1	46.4	35.8	54.1	58.1	56.1	9 285.6

(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: 1994 National Dental Telephone Interview Survey, 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. For example, for those aged 55–64 years, the prevalence of edentulism has decreased from 40.2% in 1979 to 20.6% in 1994.

8.7 Prevalence of tooth loss (%)

Year	Age group (years)						
	15–24	25–34	35–44	45–54	55–64	65–74	>74
Edentulous (%) (a)							
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
1994	0.1	0.5	4.0	10.9	20.6	32.5	52.2
Mean number of missing teeth (b)							
1995	1.8	2.6	4.3	7.1	9.7	12.5	15.4

(a) Percentage of persons edentulous (i.e. having no natural teeth). (b) Mean number of missing teeth in dentate persons.

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.

In 1994, approximately 3.9 million people (29.7%) aged 18 years and over had dentures or false teeth. Some 10.7% had full sets in both jaws.

teeth and the likelihood of having dentures or false teeth increased markedly with age, with 84.9% of those aged 75 years and over having false teeth (table 8.8).

Females (33.1%) were more likely than males (26.1%) to report having dentures or false

8.8 Persons aged 15 years and over who had dentures or false teeth, 1994 (%)

	Age group (years)							Persons			
	18–24	25–34	35–44	45–54	55–64	65–74	>74	Males	Females	%	'000
Has dentures or false teeth											
Full sets in both jaws	—	0.2	3.9	10.9	20.4	30.5	51.4	7.5	13.7	10.7	1 417.2
Other(a)	1.2	4.6	14.9	29.5	37.4	41.9	33.5	18.6	19.4	19.0	2 516.6
Total with dentures or false teeth	1.2	4.8	18.8	40.4	57.8	72.4	84.9	26.1	33.1	29.7	3 933.8
Does not have dentures or false teeth											
	98.8	95.2	81.2	59.6	42.2	27.6	15.1	73.9	66.9	70.3	9 311.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	13 245.1

(a) Includes those who have a full set in upper or lower jaw, and those who have partial sets in either or both jaws.

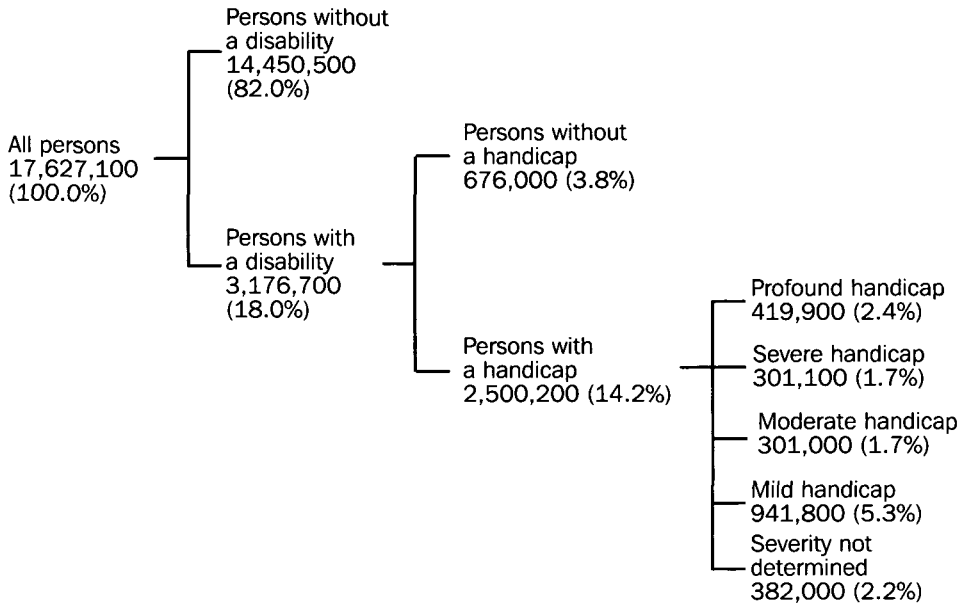
Source: 1994 National Dental Telephone Interview Survey, Australian Institute of Health and Welfare, Dental Statistics and Research Unit.

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% of the Australian population who had a disability and, of these,

2,500,200 or 78.7% 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 8.9.

8.9 Number of persons with a disability and/or handicap, 1993



It was estimated that 44.2% of the 2,762,900 persons aged 60 years and over had a disability, showing the high correlation of age to disability.

The survey also found that there were 577,500 persons aged 15 years and over (4.2% of the Australian population aged 15 years and over) 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's 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 8.10). The most common specific malformations were congenital dislocation of the hip, ventricular septal defect, hypospadias, Down's syndrome, and cleft lip and palate.

8.10 Major congenital malformations by anatomical system(a)

Anatomical system	No.		Rate per 10 000 births	
	1991	1992	1991	1992
Nervous system	403	384	15.6	14.5
Eye	104	79	4.0	3.0
Ear, face & 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

For footnotes see end of table.

...continued

8.10 Major congenital malformations by anatomical system(a) — continued

Anatomical system	No.		Rate per 10 000 births	
	1991	1992	1991	1992
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 & unspecified	120	117	4.6	4.4
All fetuses & infants	4 588	4 500	177.3	169.4

(a) Infants may be included in more than one anatomical system category.

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 8.11).

8.11 Notifiable diseases, cases notified

Disease	1989	1990	1991	1992	1993
Arbovirus infection					
Arbovirus infection n.e.c.	2 809	2 008	199	303	578
Dengue(b)	(c)	(c)	46	366	690
Ross River infection(b)	(c)	(c)	3 532	5 630	5 425
Botulism	(c)	(c)	(c)	—	—
Brucellosis	20	46	28	29	20
Campylobacteriosis	4 279	5 683	8 672	9 135	8 102
Chancroid	3	13	—	5	1
Cholera	—	1	—	3	6
Chlamydial infection(a)	504	5	4 044	6 293	6 493
Diphtheria	1	7	8	14	1
Donovanosis	99	91	72	78	67
Gonococcal infection	3 153	1 919	2 530	2 908	2 805
Haemophilus influenzae type b infection	(c)	(c)	549	501	397
Hepatitis A	460	530	2 195	2 109	2 002
Hepatitis B	3 017	2 970	3 652	5 219	2 254
Hepatitis C	(c)	(c)	4 116	8 812	7 573
Hepatitis(a)	43	707	338	70	72
HIV infection(d)	(c)	(c)	53	n.a.	470
Hydatid infection	15	16	44	38	32
Legionellosis	104	90	110	185	178
Leprosy	34	31	13	16	15
Leptospirosis	99	121	169	159	178
Listeriosis	(c)	(c)	44	38	53

For footnotes see end of table.

...continued

8.11 Notifiable diseases, cases notified — continued

Disease	1989	1990	1991	1992	1993
Lymphogranuloma venereum	—	—	—	3	1
Malaria	770	882	790	712	684
Measles	169	880	1 380	1 425	4 536
Meningococcal infections	204	295	285	292	378
Mumps	(c)	(c)	(c)	23	28
Ornithosis	25	23	136	94	98
Pertussis	614	862	337	739	3 990
Poliomyelitis	—	—	—	—	—
Q fever	353	431	595	543	889
Rabies	—	—	—	—	—
Rubella(e)	—	2	620	3 810	3 812
Salmonellosis(a)	4 492	4 564	5 440	4 614	4 727
Shigellosis	779	610	902	694	706
Syphilis	2 099	1 643	2 053	2 695	2 293
Tetanus	11	6	7	14	10
Tuberculosis	1 351	684	590	970	1 073
Typhoid	57	70	88	50	72
Viral haemorrhagic fever	—	—	—	—	—
Yellow fever	—	—	—	—	—
Yersiniosis(a)	241	433	515	567	459

(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 8.12 and 8.13. (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 18,769 HIV diagnoses had been reported to 31 December 1994. Of these, 5,732 cases had been diagnosed as having

AIDS and 4,040 of those had died (table 8.12). Of all persons who were diagnosed as having HIV, 12,055 reported the source of exposure to the virus. Of these, 80.8% reported male homosexual/bisexual contact as the exposure category (table 8.13). In the 12-month period from January to December 1994, there were 973 reports of HIV diagnosis, 784 reports of AIDS and 646 deaths from AIDS.

8.12 Diagnoses of HIV infection and AIDS, and deaths from AIDS to 31 December 1994

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
HIV diagnoses									
Males	9 621	3 173	1 463	528	696	69	78	152	15 780
Females	520	154	85	43	58	4	4	13	881
Sex not reported	2 045	43	—	—	—	—	—	—	2 088
Persons(a)	12 194	3 377	1 552	571	755	73	82	165	18 769
AIDS diagnoses									
Males	3 254	1 155	520	235	228	31	23	64	5 510
Females	113	37	23	14	12	2	—	3	204
Persons(a)	3 377	1 198	545	249	240	33	23	67	5 732

For footnotes see end of table.

...continued

8.12 Diagnoses of HIV infection and AIDS, and deaths from AIDS to 31 December 1994 — *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
AIDS deaths									
Males	2 263	879	357	148	164	21	17	46	3 895
Females	74	19	17	10	7	2	—	2	131
Persons(a)	2 343	904	376	158	171	23	17	48	4 040

(a) Includes persons whose sex was reported as transsexual.

Source: Communicable Diseases Intelligence, Department of Human Services and Health.

8.13 Diagnoses of HIV infection to 31 December 1994

	Males	Females	Persons(a)	%
Male homosexual/bisexual contact	9 741	n.a.	9 741	80.8
Male homosexual/bisexual contact & ID use	357	n.a.	357	3.0
ID use				
Heterosexual	108	53	164	1.4
Not further specified	340	95	454	3.8
Total	448	148	618	5.1
Heterosexual contact				
Sex with ID user	13	23	36	0.3
Sex with bisexual male	n.a.	21	21	0.2
From specified country	36	20	56	0.5
Sex with person from specified country	44	24	68	0.6
Sex with person with medically acquired HIV	4	5	9	0.1
Sex with HIV-infected person, exposure not specified	25	21	46	0.4
Not further specified	405	219	627	5.2
Total	527	333	863	7.1
Haemophilia/coagulation disorder	191	2	193	1.6
Receipt of blood transfusion, blood components or tissue	104	65	169	1.4
Health care setting(b)	1	8	9	0.1
Total adults/adolescents(a)	11 369	556	11 950	99.1
Children under 13 years at diagnosis of HIV				
Mother with/at risk for HIV infection	20	16	36	0.3
Haemophilia/coagulation disorder	51	—	51	0.4
Receipt of blood transfusion, blood components or tissue	12	5	18	0.2
Total children(a)	83	21	105	0.9
Total(a)	11 452	577	12 055	100.0
Other/undetermined(c)	4 338	306	6 727	—

(a) Total column includes cases for which sex was not reported. (b) The category 'Health care setting' includes 4 cases of occupationally acquired HIV infection and 4 cases of transmission in surgical rooms. (c) The 'Other/undetermined' category includes 6 710 adults/adolescents and 26 children. Twenty people whose sex was reported as transsexual are included in the 'Other/undetermined' category. The 'Other/undetermined' category was excluded from the calculation of the percentage of cases attributed to each exposure category.

Source: Communicable Diseases Intelligence, Department of Human Services and Health.

Causes of death

Information relating to crude death rates and life expectancy is contained in *Chapter 5, 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 Organisation.

The major causes of the 126,683 deaths in the community in 1994 remained diseases of the circulatory system (accounting for 43.3%), neoplasms (27.0%), diseases of the respiratory system (7.9%) and accidents, poisonings and violence (5.7%). In 1994, less than 1% of all deaths were due to infectious and parasitic diseases (table 8.14).

8.14 Causes of death, 1994

Cause of death	Age group (years)										Total(a)
	<1	1-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	>84	
No.											
Infectious & parasitic diseases	17	20	20	63	72	62	75	177	339	197	1 042
Neoplasms	15	164	134	339	1 125	2 731	5 738	10 785	9 409	3 762	34 203
Endocrine, nutritional & metabolic diseases & immunity disorders	22	32	28	180	268	293	436	942	1 171	739	4 111
Diseases of the nervous system & sense organs	35	87	59	71	104	118	176	515	1 014	765	2 944
Diseases of the circulatory system	12	33	61	186	554	1 567	3 873	11 412	20 294	16 891	54 886
Diseases of the respiratory system	25	32	37	65	77	223	832	2 677	3 498	2 491	9 958
Diseases of the digestive system	3	4	7	34	145	301	487	800	1 140	937	3 858
Congenital anomalies	454	82	37	33	28	22	30	40	16	12	754
All other diseases(b)	687	24	108	200	178	134	280	878	2 195	2 508	7 193
Signs, symptoms & ill-defined conditions	213	22	13	23	23	19	22	28	66	117	547
Accidents, poisonings & violence	29	305	1 312	1 233	1 088	816	550	614	683	554	7 187
All causes	1 512	805	1 816	2 427	3 662	6 286	12 499	28 868	39 825	28 973	126 683
Rate(c)											
Infectious & parasitic diseases	7	1	1	2	3	3	5	14	51	110	6
Neoplasms	6	5	5	12	42	127	386	850	1 428	2 091	192
Endocrine, nutritional & metabolic diseases & immunity disorders	9	1	1	6	10	14	29	74	178	411	23
Diseases of the nervous system & sense organs	14	2	2	3	4	6	12	41	154	425	17
Diseases of the circulatory system	5	1	2	7	21	73	260	899	3 081	9 389	308
Diseases of the respiratory system	10	1	1	2	3	10	56	211	531	1 385	56
Diseases of the digestive system	1	—	—	1	5	14	33	63	173	521	22
Congenital anomalies	176	2	1	1	1	1	2	3	2	7	4
All other diseases(b)	266	1	4	7	7	6	19	69	333	1 394	40
Signs, symptoms & ill-defined conditions	83	1	—	1	1	1	1	2	10	65	3
Accidents, poisonings & violence	11	9	48	44	40	38	37	48	104	308	40
All causes	586	22	66	86	136	293	840	2 275	6 046	16 106	710

For footnotes see end of table.

...continued

8.14 Causes of death, 1994 — continued

Cause of death	Age group (years)										Total(a)
	<1	1-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	>84	
	%(d)										
Infectious & parasitic diseases	1.1	2.5	1.1	2.6	2.0	1.0	0.6	0.6	0.9	0.7	0.8
Neoplasms	1.0	20.4	7.4	14.0	30.7	43.4	45.9	37.4	23.6	13.0	27.0
Endocrine, nutritional & metabolic diseases & immunity disorders	1.5	4.0	1.5	7.4	7.3	4.7	3.5	3.3	2.9	2.6	3.2
Diseases of the nervous system & sense organs	2.3	10.8	3.2	2.9	2.8	1.9	1.4	1.8	2.5	2.6	2.3
Diseases of the circulatory system	0.8	4.1	3.4	7.7	15.1	24.9	31.0	39.5	51.0	58.3	43.3
Diseases of the respiratory system	1.7	4.0	2.0	2.7	2.1	3.5	6.7	9.3	8.8	8.6	7.9
Diseases of the digestive system	0.2	0.5	0.4	1.4	4.0	4.8	3.9	2.8	2.9	3.2	3.0
Congenital anomalies	30.0	10.2	2.0	1.4	0.8	0.3	0.2	0.1	—	—	0.6
All other diseases(b)	45.4	3.0	5.9	8.2	4.9	2.1	2.2	3.0	5.5	8.7	5.7
Signs, symptoms & ill-defined conditions	14.1	2.7	0.7	0.9	0.6	0.3	0.2	0.1	0.2	0.4	0.4
Accidents, poisonings & violence	1.9	37.9	72.2	50.8	29.7	13.0	4.4	2.1	1.7	1.9	5.7
All causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Total includes 10 deaths where age is not known. (b) Includes 695 deaths from conditions originating in the perinatal period, 2 111 deaths from diseases of the genitourinary system, and 2 985 deaths due to mental disorders. (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: Unpublished ABS Causes of Death data, 1994.

The relative importance of groups of causes of death varies with age. The majority of infant deaths (66.7% in 1994) 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 (30.7%) join external causes (29.7%) 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.

In 1994 the perinatal death rate for Australia was 8.0 per 1,000 total births, a slight decrease from the rate of 8.2 in 1993. The three main causes of death in the foetus or infant were hypoxia, birth asphyxia and other respiratory conditions (33.2%), other conditions originating in the perinatal period (28.8%), and congenital anomalies (22.9%). In 39.7% of all perinatal deaths no contributing maternal condition was reported. The most common contributing maternal condition was complications of the placenta, cord and membranes, which was reported for 33.1% of all perinatal deaths.

8.15 Causes of perinatal deaths, 1994

Cause of death	Number of deaths			Rate		
	Foetal	Neonatal	Perinatal	Foetal(a)	Neonatal(b)	Perinatal(a)
Conditions in foetus/infant						
Slow foetal growth, foetal malnutrition & immaturity	113.0	104.0	217.0	0.4	0.4	0.8
Birth trauma	1.0	55.0	56.0	—	0.2	0.2
Hypoxia, birth asphyxia & other respiratory conditions	433.0	223.0	656.0	1.7	0.9	2.5
Foetal and neonatal haemorrhage	28.0	39.0	67.0	0.1	0.2	0.3
Haemolytic disease of foetus or newborn	7.0	1.0	8.0	—	—	—
Other conditions originating in the perinatal period	474.0	96.0	570.0	1.8	0.4	2.2
Congenital anomalies	142.0	310.0	452.0	0.6	1.2	1.7
All other causes	9.0	41.0	50.0	—	0.2	0.2
Conditions in mother						
Maternal conditions which may be unrelated to present pregnancy	145.0	74.0	219.0	0.6	0.3	0.9
Maternal complications of pregnancy	108.0	248.0	356.0	0.4	1.0	1.4
Complications of placenta, cord & membranes	516.0	138.0	654.0	2.0	0.6	2.5
Other complications of labour & delivery	38.0	25.0	63.0	0.2	0.1	0.2
No maternal condition reported	400.0	384.0	784.0	1.5	1.5	3.0
All causes						
1994	1 207.0	869.0	2 076.0	4.7	3.4	8.0
1993	1 245.0	886.0	2 131.0	4.8	3.4	8.2
1992	1 493.0	1 015.0	2 508.0	5.6	3.8	9.4
1991	1 478.0	1 012.0	2 490.0	5.7	3.9	9.6
1990	1 590.0	1 122.0	2 712.0	6.0	4.3	10.3
1989	1 451.0	1 058.0	2 509.0	5.8	4.2	10.0

(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: Unpublished ABS Causes of Death data, 1994.

Injury

At 7,187, the number of external causes of deaths registered in 1994 was 4% lower than the number in 1992 and approximately 20% lower than the highest number on record (8,942 in 1971). Injury deaths accounted for 5.7% of all deaths, and occurred at a crude rate of 40.3 deaths per 100,000 mid-year population, the lowest on record. Allowing for changes in the age and sex distribution of the Australian population, the rate for 1994 was 37.2 deaths per 100,000 mid-year population.

The major external causes of death for males and females are shown in table 8.16. Suicides and motor vehicle traffic accidents were the leading external causes, accounting for 31% and 27%, respectively of all deaths due to external causes. Despite a slight decline in the number of deaths registrations attributed to

suicide in 1994, the proportion of all injury deaths due to suicide remained at about 31%. For the third year in succession, the number of registered deaths due to motor vehicle traffic accidents (1,959) was lower than the number of suicides (2,258). There are notable differences in the burden of injury deaths between the sexes. The overall crude death rate for males (57.3 per 100,000) is more than double the female rate (23.5 per 100,000). Suicide deaths account for a significantly greater proportion of all injury deaths in males and occur at a rate that is four times the rate for females (table 8.17). In contrast, while accidental fall deaths occur at about similar rates in both sexes; they are the second leading external cause of death in females (26% of deaths) but only account for 9% of injury deaths in males.

8.16 External causes of death, 1994

Cause of death	No.	%	Crude death rate(a)
Males			
Suicide	1 830	36.0	20.6
Motor vehicle traffic accidents	1 369	26.9	15.4
Accidental falls	458	9.0	5.2
Homicide	211	4.1	2.4
Drowning & submersion	208	4.1	2.3
Poisoning by drugs/medications	183	3.6	2.1
Other	828	16.3	9.3
All external causes	5 087	100.0	57.3
Females			
Suicide	428	20.4	4.8
Motor vehicle traffic accidents	590	28.1	6.6
Accidental falls	545	26.0	6.1
Homicide	121	5.8	1.4
Drowning & submersion	41	2.0	0.5
Poisoning by drugs/medications	102	4.9	1.1
Other	273	13.0	3.0
All external causes	2 100	100.0	23.5
Persons			
Suicide	2 258	31.4	12.7
Motor vehicle traffic accidents	1 959	27.3	11.0
Accidental falls	1 003	14.0	5.6
Homicide	332	4.6	1.9
Drowning & submersion	249	3.5	1.4
Poisoning by drugs/medications	285	4.0	1.6
Other	1 101	15.3	6.2
All external causes	7 187	100.0	40.3

(a) Deaths per 100 000 mid-year population.

Source: Derived from ABS Causes of Death data 1994.

Suicide

Between 1982 and 1994, there were 26,711 deaths from suicide in Australia. Since 1991, the number of persons dying from suicide has been greater than those killed in motor vehicle traffic accidents. This is due more to the rapid decline in the number of persons dying in motor vehicle accidents than to an increase in the number of suicides. The standardised suicide rate has increased slightly since 1982 from 12.2 deaths per 100,000 of the mid-year population to 12.6 deaths per 100,000 of the mid-year population in 1994. During the thirteen year period, there was some fluctuation in the standardised death rate for suicide, but the peak occurred in 1987 when there were 13.9 deaths per 100,000 of the mid-year population. In 1994, the standardised death rate from suicide for males was 20.5 deaths per 100,000 of the male mid-year population, while for females the standardise rate was 4.7 suicide deaths per 100,000 of the female mid-year population.

The age-specific death rate is the number of deaths per 100,000 of mid-year population for particular age groups. The highest age-specific death rates for suicide have traditionally been in the 75 years and over age group. However, one factor causing concern among social researchers has been the increase in the rate of suicides among persons in the 15–24 years age group. The age-specific death rate for this age group has increased from 11.4 suicide deaths per 100,000 of the mid-year population in 1982 to 15.8 deaths per 100,000 of the mid-year population in 1994. The age-specific death rate for males aged 15 to 24 years old has increased by almost 39% between 1982 and 1994, from 19.3 to 26.8 suicides per 100,000 of the mid-year population respectively.

8.17 Age-specific suicide death rates(a), 1994

	Age group (years)									Total
	10-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	>85	
Males	0.5	26.8	29.3	26.3	24.7	23.1	23.6	29.7	41.4	20.6
Females	0.5	4.3	6.0	7.3	6.5	6.4	4.8	7.1	7.1	4.8
Total	0.5	15.8	17.7	16.8	15.8	14.8	13.6	16.1	17.2	12.7

(a) Suicide deaths per 100 000 mid-year population of same age and sex.

Source: *Unpublished ABS Causes of Death data, 1994.*

The predominance of males amongst suicides as a cause of death is indicated by the fact that in 1994 there were 428 male suicides to every 100 female suicides. This continues the upward trend in the disparity in the sex ratio of male to female suicides. The most notable difference in this ratio again occurred in the 15-24 years age group where there were 610 male suicide deaths for every 100 female deaths from this cause.

Since 1982, Queensland and Tasmania have consistently recorded standardised suicide rates higher than the national rate. This trend continued in 1994 when these two States recorded standardised suicide rates of 14.2 and 15.0 suicide deaths per 100,000 of mid-year population respectively.

Marital status also appears to have an impact on the rate of suicide, with persons who have been widowed having a higher rate of suicide than any of the other marital status categories. This is followed by persons who are divorced, then never married. Married persons have the lowest rate of suicide of the four marital status categories.

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% of the schedule fee for services. For private in-patients in hospitals, 75% of the schedule fee for services is payable.

Public hospitals

In 1991-92 there were 713 public acute care and Department of Veterans Affairs hospitals, 45 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 3.3 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 4% a year, from 4.1 to 3.3 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 6% per year. Between 1985-86 and 1987-88, the annual rate of decrease was almost 20%. This rapid reduction in beds resulted from moves to deinstitutionalise patients requiring acute or long-term psychiatric care. Since 1987-88, the reduction in bed supply has continued at 2% per 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 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 increased from 20% in 1987–88 to 28% in 1991–92. In 1991–92, 43% of admissions to private hospitals were same-day patients.

Private hospitals

Information on facilities, patients, staffing and finances was collected from the 329 private acute and psychiatric hospitals and 111 free-standing day hospital facilities which were in operation throughout Australia during 1993–94. Some of the findings were as follows:

- The average number of beds available for in-patient overnight accommodation increased by 2.4%, to 21,521, between 1991–92 and 1993–94.
- There were 1,432,900 in-patient separations from private hospitals during 1993–94, of which 87.3% were from private acute and psychiatric hospitals and 12.7% from free-standing day hospital facilities.

- Occupied-bed days for private acute and psychiatric hospitals totalled 5.2 million. The average length of stay per in-patient separation was 4.1 days.
- The number of full-time equivalent staff engaged at all private hospitals was 34,411 of whom 59.3% were nursing staff.
- Total operating expenditure for private acute and psychiatric hospitals during 1993–94 amounted to \$2,226 million of which 60.3% was expended on salaries and wages (including on-costs). Revenue received during the year was \$2,492 million, nearly all (95.1%) of which was received as payments from or in respect of patients.
- Total operating expenditure for free-standing day hospital facilities during 1993–94 amounted to \$61.1 million and revenue received during the year was \$76.5 million.

Comparison of public and private hospitals

There were 1,079 acute hospitals and free-standing day hospital facilities with 76,976 available beds in Australia in 1991–92. Almost 75% of the beds were in public hospitals.

Total throughput in acute hospitals in 1991–92 was 4.27 million separations, or 20.8 million bed days. The public sector accounted for 71% of the separations and 78% of the bed days.

8.18 Public and private acute hospitals and free-standing day hospital facilities, 1991–92

	Public	Private(a)	Total
Bed supply			
Number of facilities	713	366	1 079
Number of beds/chairs	57 053	19 923	76 976
Activity			
Total separations	3 024 870	1 244 590	4 269 460
Total occupied bed days	16 121 711	4 670 725	20 792 436
Average length of stay (days)	5.3	3.8	4.9
Average length of stay (days) excluding free-standing day hospital facilities	5.3	4.1	5.0
Average length of stay (days) excluding all same-day separations	7.0	5.4	6.6
Average occupancy rate (%)	77.2	64.1	73.8
Average occupancy rate (%) excluding free-standing day hospital facilities	77.2	64.2	73.9
Total non-inpatient services	30 676 201	802 618	31 478 819

(a) Includes free-standing day hospital facilities.

Source: *Hospitals, Australia, 1991–92 (4391.0)*.**Health work force**

According to labour force estimates, in 1994–95 there were approximately 255,400 people employed in health occupations in Australia, comprising just over 3% of the total number of employed people. The largest component of the medical workforce was registered nurses (152,900 people), of which 92.7% were women.

There were approximately 29,700 general medical practitioners in 1994–95 and 13,500 specialist medical practitioners. 70.9% of general medical practitioners and 75.5% of specialist medical practitioners were male.

8.19 Persons employed in health occupations(a), 1994–95

	Males	Females	Persons
General medical practitioners	21 100	8 600	29 700
Specialist medical practitioners	10 200	3 300	13 500
Dental practitioners	8 000	*1 600	9 600
Pharmacists	7 700	5 300	12 900
Occupational therapists	*500	5 600	6 100
Optometrists	*1 200	*600	*1 800
Physiotherapists	*1 400	6 400	7 800
Speech pathologists	*200	*2 300	*2 500
Chiropractors & osteopaths	2 400	*200	*2 700
Podiatrists	*500	*1 100	*1 500
Radiographers	*1700	4 200	6 000
Other health diagnosis & treatment practitioners	2 500	6 000	8 600
Registered nurses	11 200	141 700	152 900
Total employed in health occupations	68 600	186 900	255 400
Total employed	4 612 400	3 445 500	8 057 900

(a) Figures are averages of estimates over four quarters rounded to the nearest hundred.

Source: *Labour Force Estimates, August 1994 to May 1995*.

Health Programs

National Health Advancement Program

The 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 national health goals and targets, including planning and development of a coordinated national injury control strategy.

The continuing development and evaluation of national health goals and targets is part of a larger review of the health system, which aims to assist in setting directions for the organisation and funding of health services and for improving health in Australia. The current set of goals and targets identifies areas for improvement in preventable mortality and morbidity, healthy lifestyles and risk factors, health literacy and health skills, environmental health and the administration of the health care system. Areas chosen for initial focus are cardiovascular disease, cancer, injury and mental health.

Aboriginal health

A National Survey of Aboriginal and Torres Strait Islander people was conducted by the ABS in 1994. Results from the Survey, including health-related subjects, are presented in the special article *Profile of Australia's Indigenous People* in Chapter 5, *Demography*.

Programs for the aged and people with disabilities

Details on these programs are contained in Chapter 7, *Social Security and Welfare*.

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 \$269 million over six years to 30 June 1998 is being provided to assist in implementing the National Mental Health Strategy to accelerate the process of reform in the mental health sector. Of this, approximately \$189 million is available directly to the States and Territories. About \$68 million will be allocated to national initiatives and \$5 million will be used to support mental health medical research.

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 further the goal of the National Food and Nutrition Policy '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. The Program aims at improving the knowledge and skills that enable 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; to encourage 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; develop a new national food selection guide; develop an ethnic aged nutrition resource for nursing homes and hostels; develop a 'choose your meal' exhibit at the National Science and Technology Centre; and 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 1992, the death rates per 100,000 population attributable to tobacco and alcohol continued to decline.

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.

In the first full year (calendar year 1994) of the Program an additional 300,000 eligible people received dental care.

In the first four years of the Program it is expected that in excess of 1.5 million people will access dental treatment due to Commonwealth funding.

\$670,000 of national funding was allocated to set up five trial projects to test new ways of improving access to dental care in remote Australia, particularly to Aboriginal and Torres Strait Islander communities. Mobile dental teams will be set up in some States to reduce excessive waiting for rural communities.

A Charter of Clients' Rights and Responsibilities under the Program has been developed for distribution by public dental clinics and was launched on 8 August 1995.

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 (ACCORD), a committee established by the Australian Health Ministers' Advisory Council to develop and implement strategies to overcome the low donation rates in Australia — currently about 10 donations per million of population.

ACCORD 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 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 1994–95 was \$14.3 million.

Survivors of torture and trauma

The Program of Assistance for the Survivors of Torture and Trauma is designed to help people who have been subject to the kinds of debilitating trauma that can arise from living with war, terrorism, political and civil unrest, famine, widespread disease and economic collapse. Some of these people will have survived systematic torture, both mental and

physical. The vast majority of these survivors will be from a non-English speaking background.

From 1994–95 to 1997–98, the Commonwealth Government will spend \$5.2 million under this new program to help refugees and migrants who have survived torture and trauma before coming to Australia. The Program is funding a service in each State and Territory except the Northern Territory, where a service is expected to begin in 1995–96. The funds will be used to provide free initial counselling and advocacy to survivors and help in accessing mainstream health and health-related services.

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 announced the establishment of the National Program for the Early Detection of Breast Cancer to reduce mortality and morbidity from breast cancer. A network of dedicated and accredited screening and assessment services has been established across the country to provide access to the target group of women aged between 50 and 69 years. All States and Territories are participating in the Program.

Commonwealth expenditure from 1990–1994 was \$53.7 million, and funding for 1994–95 is \$43.6 million. Cost-sharing agreements for the new five-year period from 1994–95 have been accepted by all States, during which time \$236.5 million in Commonwealth funds have been committed.

In 1995, the Commonwealth Government committed \$42 million over four years to the National Cervical Screening Program. This builds on the Organised Approach to Preventing Cancer of the Cervix begun in 1992.

The Program aims to further reduce morbidity and mortality from cervical cancer by encouraging women to have regular biennial Pap smears and by improving the reliability and accessibility of screening services. More than half the women at risk are now being screened regularly but 340 still die each year from cervical cancer.

All States and Territories are contributing to the Program to support continuation and strengthening of reform measures. Six State-based cytology registries have now been established to remind women when their Pap smears are due and provide a safety net for follow-up of women with abnormal Pap smears.

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.

Health care financing

Total health expenditure

Total health expenditure (both public and private sectors) in 1993–94 was \$36,400 million or \$2,049 per person. Health expenditure per person increased at an average annual rate of 2.8% in real terms between 1982–83 and 1993–94. Health expenditure as a proportion of gross domestic product (GDP) was estimated to be 8.5% in 1993–94.

The average annual growth rate in real health expenditure for the period after the introduction of Medicare from 1984–85 to 1993–94 was 4.0%.

Health expenditure by Australian Governments in 1993–94 was \$24,800 million or \$1,398 per person.

8.20 Total health expenditure(a) and rate of growth

Year	Expenditure (\$m)		Rate of growth (%)	
	Current prices	Constant 1989–90 prices(a)	Current prices	Constant 1989–90 prices(a)
1982–83	13 239	20 673	..	..
1983–84	14 958	21 960	13.0	6.2
1984–85	16 546	22 862	10.6	4.1
1985–86	18 586	24 180	12.3	5.8
1986–87	21 115	25 341	13.6	4.8
1987–88	23 328	26 287	10.5	3.7
1988–89	26 127	27 719	12.0	5.4
1989–90	28 795	28 795	10.2	3.9
1990–91	31 224	29 435	8.4	2.2
1991–92	33 172	30 340	6.2	3.1
1992–93	34 848	31 461	5.1	3.7
1993–94(b)	36 369	32 573	4.4	3.5

(a) Health expenditure for 1982–83 to 1993–94 is 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.

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% to 1.25% of taxable income on 1 December 1986, increased to 1.4% on 1 July 1993 and again increased to 1.5% on 1 July 1995.

From 1 July 1994 no levy was payable by single people earning less than \$12,689 per annum or by sole parents and married couples with combined incomes of less than \$22,975 per annum with a further \$2,258 per annum allowed for each dependent child.

Commonwealth Government funding of hospitals

In 1993–94, hospital funding grants by the Commonwealth Government to the States and Territories totalled \$5,246 million. Other expenditure included \$33 million for the expansion of post-acute and palliative care, \$13 million for the expansion of day-only treatment, \$52 million for the treatment of AIDS patients in public hospitals and \$7.5 million for the continued development of cost-based case-mix systems.

Household expenditure on medical care and health

The 1993–94 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.

Household expenditure on medical care and health expenses varies according to the life cycle stage of a household (table 8.21). 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 lone persons under 35 years, for whom household size and income is relatively low, expenditure is the lowest (\$10.58 per week). As the cycle progresses and household size and income peak at the stage when the household consists of a couple with dependent and non-dependent children, health expenditure

is also high (\$42.92 per week). By the time a household comprises of one person only, aged 65 and over, expenditure has decreased to \$12.80 per week.

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 necessary medicines 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 \$16.80 for any prescription listed on the Pharmaceutical Benefits Schedule (PBS).

There is a safety net whereby high users of medicines receive financial protection.

The expenditure threshold for the safety net varies according to the patient's circumstances, but for most families it is \$600 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 \$600 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 a special concession card, 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 his/her self and/or his/her dependants they can get further PBS medicines free for the rest of the year.

In 1994–95 the total cost of the Scheme was \$2,342 million. This includes \$444.9 million from the patient contribution of prescriptions processed for payment. 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.

Retirees who do not get a Social Security or Veterans' Affairs pension, but whose income is below the pension cut-off point, qualify for cheaper prescription medicines if they are eligible to hold a Commonwealth Seniors Health Card.

8.21 Household expenditure on medical care and health expenses, 1993-94

	Married couple with dependent children only					Married couple with		Married couple only, reference person aged 55-64	Married couple only, reference person aged >65	Single person only, aged >65
	Single person only, aged <35	Married couple only, reference person aged <35	Eldest child aged <5	Eldest child aged 5-14	Eldest child aged 15-20	Dependent & nondependent children only	Nondependent children only			
Average weekly household income (\$)	439.8	854.3	647.9	764.4	874.5	1 100.1	1 004.8	533.8	356.9	171.7
Average number of persons in household	1.0	2.0	3.5	4.3	4.3	4.7	3.4	2.0	2.0	1.0
Average weekly household expenditure(a)(b) (\$)										
Accident & health insurance										
Hospital, medical & dental insurance	3.1	8.8	10.4	10.9	13.1	14.1	14.7	11.5	7.9	3.1
Ambulance insurance (separate insurance)	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.1
Sickness & personal accident insurance(c)	0.9	1.3	0.9	1.1	0.9	1.0	1.0	0.6	0.1	0.0
Total	4.1	10.3	11.5	12.2	14.2	15.3	16.1	12.3	8.1	3.3
Practitioners fees										
General practitioner doctor's fees(c)	0.4	0.8	1.4	1.1	1.3	1.3	0.9	0.8	0.5	0.1
Specialist doctor's fees(c)	0.5	2.0	1.8	1.7	1.9	1.9	1.9	1.2	1.4	0.6
Dental charges(c)	0.8	2.2	2.4	4.6	5.4	4.7	4.0	2.3	1.4	0.8
Optician's fees (including spectacles)(c)	0.3	0.7	0.6	0.8	1.7	2.6	2.0	2.0	1.7	0.7
Practitioner's fees, n.e.c.(c)	0.4	0.7	0.9	0.9	1.1	1.0	1.1	0.5	0.5	0.6
Total	2.4	6.4	7.1	9.0	11.3	11.4	9.8	6.8	5.5	2.7
Medicines, pharmaceutical products, therapeutic appliances & equipment	1.7	3.1	5.8	4.6	5.9	6.2	5.9	5.0	4.5	4.2
Other health charges(d)	n.p.	0.6	0.8	0.5	1.4	0.9	0.7	0.4	0.6	1.6
Total medical care & health expenses	9.3	20.4	25.0	26.3	32.9	33.8	32.4	24.5	18.6	11.7

(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. (c) At least one of the estimates in this row has a relative standard error greater than 25%. (d) All of the estimates in this row have a relative standard error greater than 25%.

Source: Unpublished data from the 1993-94 Household Expenditure Survey.

The steady decline in the proportion of the population covered by private health insurance for hospital cover has continued from 44.5% in June 1990 to 35.0% in June 1995 (see table 8.22).

In response to this decline, the Commonwealth Government introduced reforms to the health insurance system in order to enable the industry to provide products offering better value for money. The reforms, which came into effect on 29 May 1995, will provide health funds the opportunity, through contracting

arrangements with doctors and hospitals, to offer insurance products that eliminate or make known out-of-pocket costs and therefore provide members with financial certainty.

Health funds also offer ancillary cover which provides benefits towards the cost of a range of services not covered under Medicare. This may include ancillary private dental services, optical, chiropractic, podiatry, home nursing and other services. In June 1995, nearly 6 million people had ancillary cover.

8.22 Persons with private insurance for hospital cover (%)

	June 1990	June 1992	June 1994	June 1995
With private insurance for hospital cover	44.5	41.0	37.2	35.0
Without private insurance for hospital cover	55.5	59.0	62.8	65.0
Total	100.0	100.0	100.0	100.0

Source: Private Health Insurance Administration Council, Coverage of Basic Hospital tables, June 1995.

Health-related organisations

International

World Health Organization

The World Health Organization (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 assessed contribution to WHO's core budget for 1995 was \$7.8 million.

The International Agency for Research on Cancer

The International Agency for Research on Cancer (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 1994 was \$1.1 million.

Australian Government

Health and Community Services Ministerial Council

The Health and Community Services Ministerial Council incorporates the Australian Health Ministers' Conference (AHMC), Australian Health Ministers' Advisory Council (AHMAC), Community Services Ministers' Conference (CSMC) and the Standing Committee of the Community Services and Income Security Administrators (SCCSISA).

The Health and Community Services Ministerial Council was formed in 1993 by a decision of the Council of Australian Governments (COAG), thus bringing together the Australian Health Ministers' Conference and the Community Services Ministers' Conference.

The Australian Health Ministers' Conference and its advisory body, the Australian Health Ministers' Advisory Council (AHMAC), provide a mechanism through which the Commonwealth, State and Territory and New Zealand Governments can discuss matters of mutual interest concerning health policy, services and programs. The AHMC comprises the Commonwealth, State, Territory and New

Zealand Ministers responsible for Health. Neither the Conference nor the Council has statutory powers and decisions are reached by consensus.

In 1995, Health Ministers considered a wide range of issues including Aboriginal health, the health workforce, hospital and health funding, national health goals and targets, organ donation and transplantation, health policy for young people, mental health, HIV/AIDS and Hepatitis C.

Similarly, the Community Services Ministers' Conference (CSMC) and its advisory body, the Standing Committee of Community Services and Income Security Administrators (SCCSISA) provide a mechanism through which the Commonwealth, State and Territory, New Zealand and Papua New Guinea Governments can discuss matters of mutual interest concerning community services and welfare policy and programs. The CSMC comprises the Commonwealth, State, Territory, New Zealand and Papua New Guinea Ministers responsible for community services and welfare. Neither the Conference nor the Council has statutory powers and decisions are reached by consensus.

In 1995, Community Services Ministers discussed a wide range of issues including child care, education and training, homeless youth protocols, crisis accommodation, child protection and mutual recognition.

Meeting jointly as the Health and Community Services Ministerial Council, Ministers considered disability services, home and community care, mental health, acquired brain injury, Aboriginal deaths in custody, industry training, aged care and female genital mutilation.

Department of Human Services and Health

The Department of Human Services and Health is 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;
- improving the health of Aboriginal and Torres Strait Islander people by improving access to culturally appropriate, needs-based and cost-effective health care; 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 information on the health status of Australians, health and welfare services and housing assistance, and by undertaking and supporting related research and analysis.

The AIHW works closely with other agencies which collect data, produce statistics and undertake research and analysis in the health, welfare and housing assistance fields.

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 Community Services and Income Security 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 (Sydney); the AIHW Dental Statistics and Research Unit (Adelaide); and the AIHW National Reference

Centre for Classification in Health (Brisbane). In addition, the AIHW jointly funds with the ABS the Aboriginal and Torres Strait Islander Health and Welfare Information Unit within the ABS National Centre for Aboriginal and Torres Strait Islander Statistics, Darwin.

National Health and Medical Research Council

The National Health and Medical Research Council (NHMRC) is a statutory authority, within the Commonwealth Human Services and Health portfolio, which provides advice to the Commonwealth, State and Territory governments and the community on matters relating to individual and public health and health ethics issues. It also advises the Minister for Human Services and Health on funding for medical and public health research.

The NHMRC statement of strategic intent is that the NHMRC will work with others for the health of all Australians, by promoting informed debate on ethics and policy, providing knowledge-based advice, fostering a high-quality and internationally recognised research base, and applying research rigour to health issues.

The Council members are drawn from State and Territory health departments, professional and scientific organisations, unions, universities, business, consumer groups and the Aboriginal and Torres Strait Islander Commission. It operates via a comprehensive network of expert committees and working parties, thus drawing on a broad spectrum of expertise from the health area and the community.

The Private Health Insurance Administration Council

The Private Health Insurance Administration Council (PHIAC) 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 follows:

- 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;
- 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;
- to obtain from registered organisations, for the purposes of modelling, evaluation and research, information referred to in the Hospital Casemix Protocol; and
- to collect and disseminate information about private health insurance, for the purpose of enabling people to make informed choices about private health insurance.

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 1995, 35.0% of the Australian population held private health insurance hospital cover.

Australian Quarantine and Inspection Service (AQIS)

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 1994–95, AQIS provided inspection for over \$3,000 million worth of export meat to over eighty destinations. Inspection services are also provided by AQIS on behalf of Governments in New South Wales, the Northern Territory and the Australian Capital Territory for meat produced for domestic consumption.

A range of non-prescribed goods is 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 in some States are contracted to State Departments of Agriculture on the Commonwealth's behalf, and include both monitoring and surveillance elements. In 1994–95, inspections based on risk management principles were undertaken of 6,000 ships, 31,000 aircraft, 6.3 million crew and passengers, one million cargo containers and 1.8 million airfreight consignments.

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 1993*. In 1994–95, a total of 35,078 shipments were subject to AQIS clearance, of which 13,296 were released after initial inspection. A closer inspection was conducted on 21,782 shipments, of which 707 failed to meet relevant standards. 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.

AQIS has significant international involvement in the development of international food safety standards and related aspects of hygiene and manufacturing practice.

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 is currently reviewing food standards to ensure consistency between the Food Standards Code and the standards-setting objectives of the Authority. The review will seek to ensure flexibility in the Code and to accommodate innovation. It also provides a mechanism for the proposed development of joint food standards with New Zealand.

The Authority runs the Imported Food Inspection Program jointly with AQIS and provides national coordination of food recalls. It also publishes the biennial Australian Market Basket Survey.

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, 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 1992–93 involving a fatality, a permanent disability or a temporary disability resulting in five days or more off work, based on information supplied by Commonwealth, State and Territory agencies which administer workers' compensation systems, contained the following main findings:

- Of all the cases included on the database, 76% involved males and 24% females.
- The incidence rate for males for all industries was 35 cases per 1,000 wage and salary earners; for females, 14 per 1,000 wage and salary earners; and for persons, 25 per 1,000 wage and salary earners.
- The frequency rate for males for all industries was 21 cases per million hours worked; for females, 11 per million hours worked; and for persons, 17 per million hours worked.
- Around one in 39 workers sustained a work-related injury or disease in 1992–93, compared with one in 40 in 1991–92.
- The average duration was nearly 10 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% of non-farm GDP, and 2.4% 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 1994–95, tests were performed on 1,309 selected products for human use to check compliance with official standards. A total of 211 of these products failed to comply. Investigations were also conducted on reported drug (121) and device (477) problems. These investigations resulted in the recall of 6 drug products and 22 device products. A total of 32 drug recalls and 108 device recalls in 1994–95 included voluntary recalls by suppliers.

Australian Radiation Laboratory

The Australian Radiation Laboratory develops 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 working standard of absorbed dose;
- 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 ionizing and non-ionizing 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 60,000 new cases of cancer are diagnosed and 30,000 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 all 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 new prevention and treatment programs.

The only effective method of obtaining cancer incidence data is through universal registration of cancer cases. Cancer incidence data are available from cancer registries which operate in each State and Territory. 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 State and Territory registries on an ongoing basis and produces national statistics on the incidence of cancer.

Communicable Diseases Network — Australia New Zealand

The Communicable Diseases Network — Australia New Zealand was established in 1990 to enhance national capacity for communicable disease surveillance and control. The Network operates on a cooperative basis with the involvement of health authorities from the Commonwealth, States, Territories and New Zealand, and representatives from other government agencies including the Australian Defence Forces and the Department of Primary Industries and Energy, and non-government organisations which contribute to communicable disease control in Australia. The Network coordinates national surveillance of communicable diseases through the

National Notifiable Diseases Surveillance System, the National Mycobacterial Surveillance System, the Hib Case Reporting Scheme, the Serious Adverse Events Following Immunisation Surveillance Scheme and the National Acute Hepatitis C Surveillance System. It also facilitates and coordinates communicable disease control activities where a national response is required.

Australian non-government

National Heart Foundation of Australia

The National Heart Foundation of Australia 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 1994 was \$24.3 million of which \$17.5 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 1994, expenditure on research, education and community service totalled \$15.0 million.

Australian Red Cross

The Australian Red Cross runs the Blood Transfusion Service in Australia, based on donations from voluntary non-remunerated donors. The service is funded by the Commonwealth Government and State Governments (approximately 98%) and Red Cross (approximately 2%). The cost of providing the service in 1993–94 was \$93.1 million.

Plasma products are manufactured by the Commonwealth Serum Laboratories from plasma from Red Cross blood donors, and distributed by Red Cross.

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Education

Commonwealth and State government responsibilities in education	273
Preschool education	273
Primary and secondary education	273
School attendance	273
School organisation and operation	274
Special programs	274
Curriculum development	274
Primary schooling	275
Secondary schooling	275
Number of schools, students and teaching staff	276
Other schooling arrangements	278
Apparent retention rates	279
Funding of schools	279
Tertiary education	280
Higher education	280
Vocational education and training	286
Education characteristics of the population	289
Participation in education	289
Education attendance and the labour force	289
Educational attainment	291
Adult education	292
Government assistance to students	292
AUSTUDY	292
ABSTUDY	293
AUSTUDY/ABSTUDY supplement	293
Assistance for isolated children	293
Administration of education at the national level	294
Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA)	294
Australian Council for Educational Research (ACER)	295
National Centre for Vocational Education Research (NCVER)	295
Australian Qualifications Framework Advisory Board (AQFAB)	295
Standards and Curriculum Council	295
Other organisations	295

New developments in education	295
Australian Vocational Training System	295
Expenditure on education	296
New developments in education	295
Australian Vocational Training System	295
Expenditure on education	296
Bibliography	300

Education

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 (TAFE). The Commonwealth also plays a significant role in education policy, programs and funding. The total government expenditure on education in 1993–94 was \$22,125 million (see later section), which represented 5.2% 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 Aboriginal and Torres Strait Islander people 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 and Torres Strait Islander people 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

School attendance is compulsory throughout Australia between the ages of 6 and 15 years (16 years in Tasmania).

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 1994 85.3% of students remained at school until Year 11 and 74.6% 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.

Special programs

Specialist services and programs provided in schools include educational or vocational counselling by a permanent or visiting teacher; English as a Second Language programs by specialist teachers, especially in schools with significant numbers of children

from non-English speaking backgrounds (see further information in *Chapter 11, Culture and recreation*); special programs designed to assist Aboriginal and Torres Strait Islander school children (including the widespread use of Aboriginal and Torres Strait Islander teachers' aides and bilingual education programs in communities where the children's first language is an Aboriginal or Torres Strait Islander language); a variety of programs for gifted and talented children; and remedial assistance for children with learning difficulties.

Curriculum development

Curriculum development in Australia is the responsibility of the State and Territory governments. The Federal government plays an important role in promoting equity and an education that reflects its social justice policies, and encouraging national collaboration on school curriculum matters. Since 1988, the Federal, State and Territory Ministers for Education have been working together on school curriculum issues.

As part of the agreed National Goals for schooling, the Ministerial Council for Education, Employment, Training and Youth Affairs approved eight 'key learning areas': English, mathematics, science, technology, studies of society and the environment, the arts, health, and languages other than English. Between 1989 and 1993 the Commonwealth and States embarked on the development of curriculum statements and profiles in each of the key learning areas.

There has been widescale adoption of the national curriculum statements and profiles, or variations of them. Almost all States and Territories are using the statements and profiles as a basis for their curriculum development at both primary and secondary levels, but are incorporating variations which reflect local policies and priorities.

The statements provide a framework for curriculum development in each area of learning. The curriculum profiles are designed to assist in the improvement of teaching and learning in schools by working on the principle that good assessment focuses on what is valued and provide a framework for reporting on a student's progress and achievements in each of the learning areas. They outline what students should learn in each learning area and to what level of

complexity. Interwoven through them are a number of cross-curricula perspectives as well as principles of inclusivity, ensuring that the profiles use gender inclusive language and that the knowledge, skills and understanding identified are inclusive of the knowledge, experience and interests of women and of Aboriginal and Torres Strait Islander people.

Primary schooling

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 occasionally practised.

Secondary schooling

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 involve the eight key learning areas. 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,

commerce studies, driver education, 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.

Post-compulsory schooling in Australia is undergoing considerable change, with an increasing emphasis on vocational programs being incorporated into the senior secondary curriculum. Under the Australian Vocational Training System, students at school may obtain vocational education and training sector certificates as part of their senior study and undertake some parts of their programs in the workplace.

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 9,679 schools operating in Australia in 1994, 7,159 (74%) were government schools operated by the State Directors-General of Education (or equivalent) and 2,520 (26%) were non-government schools (see table 9.1).

In July 1994, the number of full-time students attending primary and secondary schools totalled 3,099,380, comprising 2,214,938 (71.5%) in government schools and 884,442 (28.5%) in non-government schools.

The number of full-time students attending government schools in 1994 decreased by 13,118 (0.6%) from the 2,228,056 attending in 1993. The number of full-time students attending non-government schools increased by 1.6% (14,123) from the 870,319 attending in 1993 (see table 9.2).

9.1 Schools, students and teaching staff, July 1994

	Non-government schools					All schools
	Government schools	Anglican	Catholic	Other	Total(a)	
Number of schools	7 159	121	1 699	700	2 520	9 679
Number of students						
Males	1 133 490	45 550	303 340	96 861	445 751	1 579 241
Females	1 081 448	40 663	299 051	98 977	438 691	1 520 139
Persons	2 214 938	86 213	602 391	195 838	884 442	3 099 380
FTE of teaching staff(b)						
Males	53 926	2 978	11 810	5 690	20 477	74 394
Females	89 463	3 766	23 996	8 726	36 488	125 951
Persons	143 379	6 744	35 806	14 416	56 965	200 345

(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

	1989	1990	1991	1992	1993	1994
Government schools						
Males	1 123 993	1 123 008	1 137 101	1 145 848	1 141 627	1 133 490
Females	1 070 362	1 070 339	1 080 125	1 088 235	1 086 429	1 081 448
Persons	2 194 355	2 193 347	2 217 226	2 234 083	2 228 056	2 214 938
Non-government schools						
Males	420 188	425 504	431 414	435 871	439 003	445 751
Females	416 844	422 806	426 497	429 012	431 316	438 691
Persons	837 032	848 310	857 911	864 883	870 319	884 442
All schools						
Males	1 544 181	1 548 512	1 568 515	1 581 719	1 580 630	1 579 241
Females	1 487 206	1 493 145	1 506 622	1 517 247	1 517 745	1 520 139
Persons	3 031 387	3 041 657	3 075 137	3 098 966	3 098 375	3 099 380

Source: *Schools, Australia (4221.0)*.

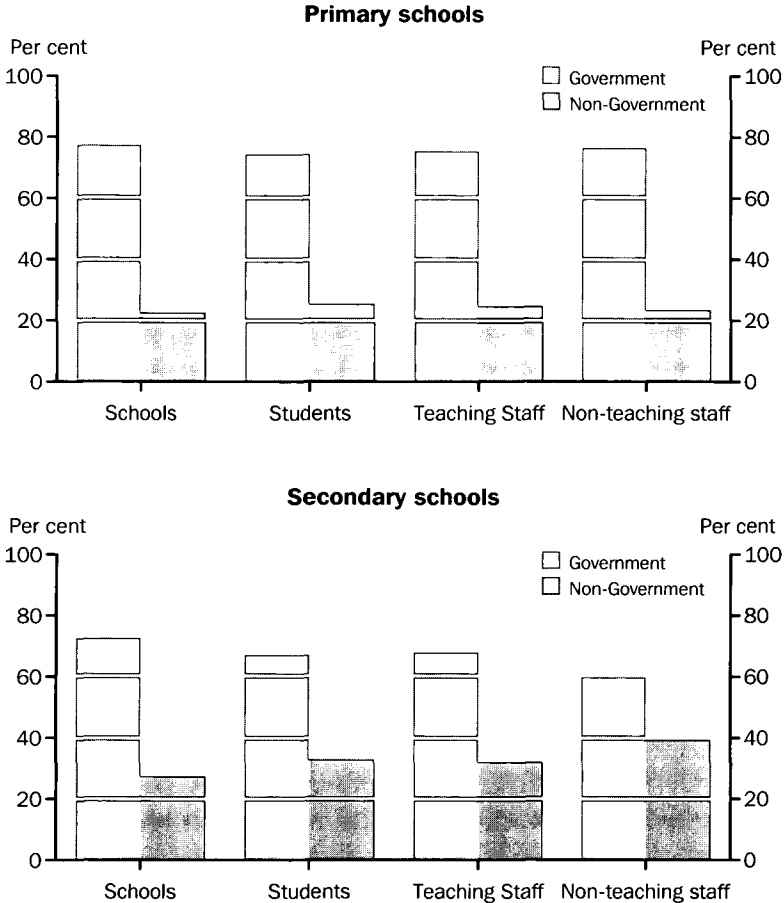
9.3 Number of students(a), July 1994

Level/year of education	Non-government schools					All schools		
	Government schools	Anglican	Catholic	Other	Total	Males	Females	Persons
Primary								
Pre-Year 1(b)	136 884	2 303	37 828	9 148	49 279	95 421	90 742	186 163
Year 1	192 268	3 032	48 707	12 089	63 828	131 506	124 590	256 096
Year 2	188 671	2 986	48 520	12 084	63 590	129 424	122 837	252 261
Year 3	189 976	3 424	48 283	12 049	63 756	129 679	124 053	253 732
Year 4	189 794	3 740	48 816	12 333	64 889	129 868	124 815	254 683
Year 5	187 957	4 580	48 653	12 906	66 139	130 043	124 053	254 096
Year 6	188 191	5 264	49 290	13 437	67 991	131 398	124 784	256 182
Year 7 (Qld, SA, WA, NT)	73 145	2 232	14 758	5 616	22 606	49 239	46 512	95 751
Ungraded	13 885	15	651	2 225	2 891	10 476	6 300	16 776
Total primary	1 360 771	27 576	345 506	91 887	464 969	937 054	888 686	1 825 740
Secondary								
Year 7 (NSW, Vic., Tas., ACT)	104 094	5 988	34 164	11 444	51 596	79 495	76 195	155 690
Year 8	166 857	10 524	49 855	19 744	80 123	126 671	120 309	246 980
Year 9	161 407	10 585	48 173	18 388	77 146	122 096	116 457	238 553
Year 10	156 034	10 815	46 564	18 657	76 036	117 601	114 469	232 070
Year 11	134 992	10 611	40 578	17 630	68 819	100 528	103 283	203 811
Year 12	116 379	10 086	36 832	16 566	63 484	85 973	93 890	179 863
Ungraded	14 404	28	719	1 522	2 269	9 823	6 850	16 673
Total secondary	854 167	58 637	256 885	103 951	419 473	642 187	631 453	1 273 640
Total	2 214 938	86 213	602 391	195 838	884 442	1 579 241	1 520 139	3 099 380

(a) As from 1990 students attending special schools have not been separately identified 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(b)



(a) Full-time teaching staff plus full-time equivalent of part-time teaching staff. (b) Combined primary/secondary and special schools are not included; however, the associated students and staff are included.

Source: Schools, Australia, (4221.0).

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 other 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 and Torres Strait Islander 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 and Torres Strait Islander 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

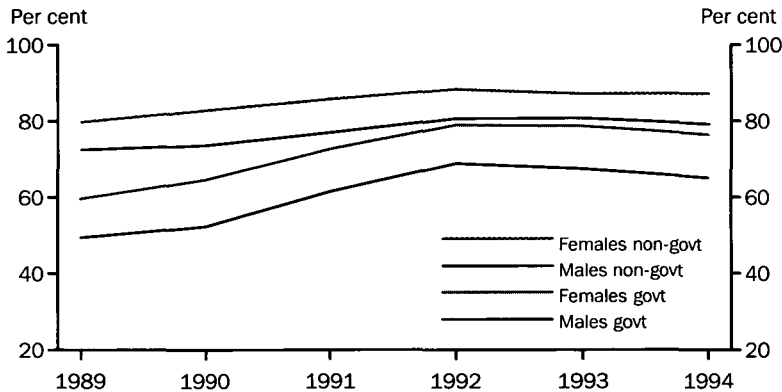
assistance by special staff. In all States and particularly in New South Wales, Queensland and Victoria, parents have formed voluntary organisations to establish additional schools catering for their children's special needs. The Commonwealth government provides funds to State and non-government authorities 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 Aboriginal and Torres Strait Islander people, have residential hostels close by.

Apparent retention rates

Apparent retention rates are an important measure of performance of education systems and related government policies. 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.

9.5 Apparent retention rates to Year 12



Source: *Schools, Australia (4221.0)*.

The apparent retention rate of secondary school students to Year 12 fell from 76.6% in 1993 to 74.6% in 1994. As in previous years, the retention rate for female students (79.9%) was higher than the corresponding rate for males (69.6%). The rate varied between States and Territories, ranging from 42.9% in the Northern Territory to 93.3% in the Australian Capital Territory. The apparent retention rates decreased between 1993 and 1994 in all States and Territories.

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% of schools' running costs. The Commonwealth contribution represents about 10%. The Commonwealth is the major source of public funding for non-government schools, providing about 65%, while the States provide about 35%.

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 (see *Government assistance to students* later in 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 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, Western Australia.

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 1994 were Arts, humanities and social sciences (22.7%); Business administration, economics (20.9%); and Science (14.7%). These fields, along with Education and Health, 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 1994, expenditure on higher education totalled approximately \$4,968 million, and in 1995, \$5,065 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 1995, the annual course contribution, which is indexed annually, was \$2,409.

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 advanced diploma level. These two levels are part of the new Australian Qualifications Framework, the phasing in of which commenced on 1 January 1995, to be completed by the end of 1999. All institutions in the Unified National System 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 and

certificates are offered in some disciplines. In 1994, over 75% of higher education students were enrolled in bachelor courses, with a further 20% 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. Students can also enrol in higher education courses through the Open Learning Agency of Australia Pty Ltd. In 1994 there were 5,080 unit enrolments in OLAA programs.

In 1994, 59% of students were enrolled in full-time study, 29% in part-time study and 12% 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 coursework 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.

9.6 Higher education students — level of course and field of study, 1994

Level of course	Agriculture, animal husbandry	Architecture, building	Arts, humanities & social sciences	Business admini- stration, economics	Education	Engineering & surveying	Health	Law, legal studies	Science	Veterinary sciences	Total
Higher doctorate	—	—	21	—	152	1	81	1	13	—	269
Ph.D.	742	262	4 594	1 166	1 504	2 218	2 207	235	5 537	207	18 672
Master's by research	425	310	3 761	946	1 426	1 542	1 062	245	2 281	75	12 073
Master's by coursework	212	755	6 397	11 992	6 928	2 123	4 193	1 729	2 810	59	37 198
Postgraduate qualification/preliminary	17	68	257	284	220	72	309	106	318	2	1 653
Graduate (post) diploma — new area	362	405	4 990	6 469	8 376	771	2 899	717	3 461	4	28 454
Graduate (post) diploma — extension area	71	411	1 556	2 308	4 005	592	2 687	838	1 137	4	13 609
Graduate certificate	43	50	349	2 042	1 246	161	438	187	328	—	4 844
Bachelor's graduate entry	—	350	699	—	3 469	4	249	494	—	—	5 265
Bachelor's honours	86	82	4 377	942	361	854	484	239	3 340	19	10 784
Bachelor's pass	5 575	10 144	101 545	94 559	41 335	37 299	55 154	15 810	64 120	1 320	426 861
Diploma	1 324	—	545	21	1 628	11	301	—	302	—	4 132
Associate diploma	2 499	161	2 753	1 393	1 034	1 456	686	377	1 924	—	12 283
Other award course	—	—	28	159	1	9	52	258	105	—	612
Enabling courses	70	—	1 063	34	592	34	83	—	460	—	2 336
Non-award courses	—	—	—	—	—	—	—	—	—	—	6 351
Total courses	11 426	12 998	132 935	122 315	72 277	47 147	70 885	21 236	86 136	1 690	585 396

Source: Department of Employment, Education and Training 'Selected Higher Education Student Statistics, 1994'.

9.7 Higher education courses completed — level of course and field of study, 1994

Level of course	Agriculture, animal husbandry	Architecture, building	Arts, humanities & social sciences	Business administration, economics	Education	Engineering & surveying	Health	Law, legal studies	Science	Veterinary sciences	Total
Higher doctorate	1	—	1	—	—	2	31	1	9	—	45
Ph.D.	117	12	426	68	92	226	214	10	614	24	1 803
Master's by research	75	40	357	70	172	211	119	25	273	9	1 351
Master's by coursework	94	196	1 640	3 065	1 755	628	750	278	612	24	9 042
Postgraduate qualification/preliminary	5	15	33	46	50	3	62	61	59	—	334
Graduate (post) diploma — new area	145	119	1 847	1 891	5 070	282	938	186	1 126	8	11 612
Graduate (post) diploma — extension area	47	149	769	888	1 871	179	914	853	495	5	6 170
Graduate certificate	12	17	181	736	885	72	186	151	116	—	2 356
Bachelor's postgraduate	—	138	205	—	1 498	—	190	37	—	—	2 068
Bachelor's honours	102	70	2 627	627	99	397	219	215	2 340	75	6 771
Bachelor's pass	997	1 760	18 221	19 322	11 363	4 460	13 421	2 765	10 799	267	83 375
Diploma	64	—	242	17	2 197	20	1 373	—	60	—	3 973
Associate diploma	815	60	686	593	264	429	302	78	496	—	3 723
Other award course	—	—	9	42	—	—	—	186	—	—	237
Total persons	2 474	2 576	27 244	27 365	25 316	6 909	18 719	4 846	16 999	412	132 860

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1994'.

9.8 Higher education students(a) — level of course and sex

Heading	1989	1990	1991	1992	1993	1994
Males						
Higher doctorate	119	155	140	168	176	157
Ph.D.	5 816	5 485	6 065	7 012	8 500	9 979
Master's by research	3 861	4 222	4 781	5 998	6 784	6 756
Master's by course-work	9 564	11 532	14 096	16 322	18 527	19 970
Post-graduate qualifying	2 053	1 998	1 694	1 561	1 440	800
Graduate (post) diploma	1 411	15 527	17 710	18 157	17 841	17 749
Graduate certificate	267	219	664	1 088	1 614	2 413
Bachelor's post-graduate	1 226	1 220	1 227	1 185	1 151	1 380
Bachelor's honours	2 676	3 044	3 807	4 481	4 941	4 980
Bachelor's pass	150 450	163 365	177 803	185 696	190 438	193 159
Total under-graduate bachelor's	153 126	166 409	181 610	190 177	195 379	198 139
Diploma	8 341	8 045	7 329	3 745	2 128	1 908
Associate diploma	11 199	11 713	10 484	9 873	8 732	6 864
Other	1 933	2 315	2 929	3 779	4 235	4 395
Total(a)	211 285	229 420	249 676	260 553	267 986	271 979
Females						
Higher doctorate	38	50	37	104	112	112
Ph.D.	11 448	2 783	3 233	3 948	5 123	6 112
Master's by research	2 465	2 810	3 362	4 393	5 182	5 317
Master's by course-work	6 417	8 250	10 889	12 953	10 507	17 228
Post-graduate qualifying	2 596	2 524	2 305	2 249	2 014	853
Graduate (post) diploma	16 061	18 304	21 329	21 702	22 601	24 314
Graduate certificate	231	221	737	1 089	1 707	2 431
Bachelor's post-graduate	2 718	2 432	2 972	2 863	3 346	3 885
Bachelor's honours	2 760	3 193	3 949	4 794	5 433	5 804
Bachelor's pass	149 820	170 996	195 031	218 350	229 392	233 702
Total under-graduate bachelor's	152 580	174 189	198 980	223 144	234 825	239 506
Diploma	33 057	32 140	29 173	13 696	5 616	2 224
Associate diploma	8 954	8 729	7 976	7 522	6 860	5 419
Other	1 891	2 773	3 154	3 974	4 199	4 904
Total(a)	229 791	255 655	284 862	298 812	307 631	313 417
Persons						
Higher doctorate	157	205	177	272	288	269
Ph.D.	7 224	8 268	9 298	10 960	13 623	18 672
Master's by research	6 326	7 032	8 143	10 391	11 966	12 073
Master's by course-work	15 981	19 782	24 985	29 275	33 584	37 198
Post-graduate qualifying	4 649	4 522	3 999	3 810	3 454	1 653
Graduate (post) diploma	30 172	33 831	39 039	39 859	40 442	42 063
Graduate certificate	498	440	1 401	2 177	3 321	4 844
Bachelor's post-graduate	3 944	3 652	4 199	4 048	4 497	5 265
Bachelor's honours	5 436	6 237	7 756	9 275	10 374	10 784
Bachelor's pass	300 270	334 361	372 834	404 046	419 830	426 861
Total under-graduate bachelor's	305 706	340 598	380 590	413 321	430 204	437 645
Diploma	41 398	40 185	36 502	17 441	7 744	4 132
Associate diploma	20 153	20 442	18 460	17 395	15 592	12 283
Other	3 824	5 088	6 083	7 753	8 434	9 299
Total(a)	441 076	485 075	534 538	559 365	575 617	585 396

(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 Student Statistics, 1994'.

The proportion of higher education students who are female has risen slightly from 52% in 1989 to 54% in 1994, as the following table shows. This table also illustrates that higher

education students are predominantly in the younger age groups (60% are 24 years of age or under).

9.9 Higher education students — age and sex

	1989	1990	1991	1992	1993	1994
19 & under						
Males	66 531	71 254	74 820	71 186	68 660	69 757
Females	81 892	90 589	96 617	93 427	90 794	91 958
Persons	148 423	161 843	171 437	164 613	159 454	161 715
20–24						
Males	65 482	71 902	80 304	87 542	92 101	92 415
Females	61 182	69 273	79 967	89 877	97 397	98 810
Persons	126 664	141 175	160 271	177 419	189 498	191 225
25–29						
Males	28 630	30 153	32 334	34 152	35 397	36 239
Females	25 321	27 447	30 693	32 557	33 671	35 051
Persons	53 951	57 600	63 027	66 709	69 068	71 290
30 & over						
Males	50 642	56 111	62 218	67 673	71 828	73 568
Females	61 396	68 346	77 585	82 951	85 769	87 598
Persons	112 038	124 457	139 803	150 624	157 597	161 166
Total						
Males	211 285	229 420	249 676	260 553	267 986	271 979
Females	229 791	255 655	284 862	298 812	307 631	313 417
Persons	441 076	485 075	534 538	559 365	575 617	585 396

Source: Department of Employment, Education and Training 'Selected Higher Education Student Statistics, 1994'.

9.10 Higher education students — type of enrolment and sex

	1989	1990	1991	1992	1993	1994
Internal						
Full-time						
Males	129 437	140 247	153 210	158 175	160 357	161 374
Females	142 664	159 264	175 197	181 029	183 222	183 615
Persons	272 101	299 511	328 407	339 204	343 579	344 989
Part-time						
Males	59 668	65 279	71 652	75 867	79 548	80 212
Females	60 898	67 573	77 557	83 449	88 534	91 213
Persons	120 566	132 852	149 209	159 316	168 082	171 425
External						
Males	22 180	23 894	24 814	26 511	28 081	30 393
Females	26 229	28 818	32 108	34 334	35 875	38 589
Persons	48 409	52 712	56 922	60 845	63 956	68 982
Total						
Males	211 285	229 420	249 676	260 553	267 986	271 979
Females	229 791	255 655	284 862	298 812	307 631	313 417
Persons	441 076	485 075	534 538	559 365	575 617	585 396

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1994'.

9.11 Higher education course completions — level of course and sex

	1988	1989	1990	1991	1992	1993
Higher degree						
Research						
Males	1 455	1 458	1 465	1 706	1 775	2 040
Females	634	651	723	852	937	1 159
Persons	2 089	2 109	2 188	2 558	2 712	3 199
Coursework						
Males	1 944	1 969	2 499	3 271	4 278	5 176
Females	1 042	1 207	1 538	2 190	3 007	3 866
Persons	2 986	3 176	4 037	5 461	7 285	9 042
Other degree						
Postgraduate degree						
Males	6 707	6 648	6 517	7 854	8 547	9 148
Females	8 980	9 380	9 289	11 272	12 023	13 392
Persons	15 687	16 028	15 806	19 126	20 570	22 540
Bachelor degree						
Males	24 895	25 554	27 029	30 015	33 876	37 158
Females	26 317	28 539	31 153	37 355	45 971	52 988
Persons	51 212	54 093	58 182	67 370	79 847	90 146
Other non-degree						
Males	4 705	4 711	4 114	3 809	3 277	3 258
Females	10 180	10 365	10 072	9 237	6 892	4 675
Persons	14 885	15 076	14 186	13 046	10 169	7 933
Total						
Males	39 706	40 340	41 624	46 655	51 753	56 780
Females	47 153	50 142	52 775	60 906	68 830	76 080
Persons	86 859	90 482	94 399	107 561	120 583	132 860

Source: Department of Employment, Education and Training 'Selected Higher Education Statistics, 1994'.

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 by adult and community education authorities and 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 1994, recurrent funding of the TAFE system was about \$2,600 million, of which the States provided 69%, the Commonwealth 19%, while the remaining 12% came from fees and other sources. Capital funding was \$348 million, of which the Commonwealth provided 65% and the States 35%.

The Commonwealth 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 commenced 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 \$1,550 million growth funding for vocational education and training over the four years

from 1993 to 1997, while the States are committed to maintaining their effort over the same period.

ANTA has developed a National Strategy for Vocational Education and Training, which was agreed to by Commonwealth, State and Territory Ministers in November 1994. The National Strategy sets the direction for vocational education and training in Australia and supports the initiatives of the Commonwealth Government's White Paper on Employment and Growth, *Working Nation*.

9.12 Technical and Further Education teaching staff — duty hours, 1993

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Full-time staff									
Teaching hours	3 201.8	3 348.5	1 615.5	1 227.5	833.0	288.6	178.5	193.1	10 886.5
Non-teaching hours	4 049.3	4 018.5	1 443.0	285.1	1 693.4	301.1	246.5	381.5	12 418.3
Total duty hours	7 251.0	7 366.9	3 058.6	1 512.6	2 526.4	589.7	425.0	574.6	23 304.8
Number of staff	6 211	4 991	3 142	2 053	2 119	504	314	442	19 776
Part-time staff									
Teaching hours	3 328.2	2 102.2	623.5	509.2	450.9	264.3	92.1	152.1	7 522.6
Non-teaching hours	241.4	240.4	16.5	1.2	3.7	42.4	0.9	—	546.5
Total duty hours	3 569.6	2 342.7	640.0	510.4	454.6	306.7	93.0	152.1	8 069.1
All teaching staff									
Teaching hours	6 530.0	5 450.7	2 239.0	1 736.7	1 283.9	553.0	270.6	345.2	18 409.1
Non-teaching hours	4 290.7	4 258.9	1 459.5	286.3	1 697.1	343.4	247.3	381.5	12 964.7
Total duty hours	10 820.7	9 709.6	3 698.5	2 023.0	2 981.0	896.4	518.0	726.7	31 373.9

Source: Department of Employment, Education and Training 'Selected Vocational Education and Training Statistics, 1993'.

9.13 Technical and Further Education students (streams 2100–4500), 1993

Age group	Males			Females			Persons		
	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time	Total
Under 16	784	6 610	7 394	567	6 634	7 201	1 351	13 244	14 595
16	3 410	16 825	20 235	2 269	15 510	17 779	5 679	32 335	38 014
17	6 422	21 937	28 359	5 116	16 647	21 763	11 538	38 584	50 122
18	13 927	31 174	45 101	14 140	19 695	33 835	28 067	50 869	78 936
19	11 570	33 180	44 750	11 289	19 959	31 248	22 859	53 139	75 998
20	7 057	28 871	35 928	6 736	17 296	24 032	13 793	46 167	59 960
21	4 244	23 731	27 975	3 928	15 381	19 309	8 172	39 112	47 284
22	3 003	19 419	22 422	2 789	14 490	17 279	5 792	33 909	39 701
23	2 196	16 128	18 324	2 208	12 427	14 635	4 404	28 555	32 959
24	1 821	14 804	16 625	1 708	11 472	13 180	3 529	26 276	29 805
25–29	6 050	65 070	71 120	6 091	49 313	55 404	12 141	114 383	126 524
30–39	7 487	113 201	120 688	9 579	97 146	106 725	17 066	210 347	227 413
40–49	3 108	65 172	68 280	5 199	66 847	72 046	8 307	132 019	140 326
50–59	938	23 702	24 640	1 139	22 895	24 034	2 077	46 597	48 674
60–64	105	4 359	4 464	118	5 039	5 157	223	9 398	9 621
>64	49	3 570	3 619	67	5 482	5 549	116	9 052	9 168
Not stated	733	33 863	34 596	629	32 210	32 839	1 362	66 073	67 435
Bulk enrolments(a)	—	2 755	2 755	—	4 252	4 252	—	24 864	24 864
Total	72 904	524 371	597 275	73 572	432 695	506 267	146 476	974 923	1 121 399

(a) The total bulk enrolments exceeds the sum of the sexes because sex was not stated for 17 857 students.

Source: Department of Employment, Education and Training 'Selected Vocational Educational Education and Training Statistics, 1993'.

9.14 Technical and Further Education students — stream and field of study, 1993

Stream	Land & marine resources, animal husbandry	Architecture, building	Art, humanities & social sciences	Business administration, economics	Education	Engineering, surveying	Health, community services	Law, legal studies	Science	Veterinary science, animal care	Services, hospitality, transport -ation	TAFE multi-field education	Net(a)
Recreation, leisure	8 540	12 905	146 629	34 000	848	7 305	61 445	946	11 600	376	25 401	359 767	660 826
Basic employment skills	19 664	938	25 649	15 617	4 397	3 751	8 605	43	2 236	54	5 117	144 390	227 058
Education preparation	147	631	3 423	3 369	223	779	1 476	—	1 551	—	2 178	72 520	85 446
Operatives — initial	16 894	16 836	19 446	75 263	3 138	26 415	20 854	749	30 852	314	40 730	9 514	251 201
Recognised trades — part exempt	271	2 826	26	65	—	8 443	—	—	—	—	1 687	9 070	22 256
Recognised trades — exempt	5 272	24 958	502	16	—	52 498	415	—	—	—	17 507	—	101 081
Other skills — part exempt	4 278	1 931	1 432	33 675	116	10 832	4 914	—	573	49	7 809	7 909	71 646
Other skills — complete	10 938	760	10 771	38 179	107	14 603	4 893	1 175	3 208	564	13 032	3 102	100 058
Trade technician /supervisory	6 341	9 156	9 218	44 458	—	22 420	6 107	127	8 494	215	12 721	558	118 569
Para-professional technician	466	1 743	607	10 064	—	1 949	1 404	204	4 782	—	162	—	21 100
Para-professional higher technician	2 406	7 237	10 543	61 692	3 198	21 866	10 351	3 201	8 252	250	5 570	87	132 780
Professional	18	196	3 485	735	—	130	193	—	—	—	927	—	5 684
Operatives — post initial	1 948	1 354	3 117	4 171	467	4 750	735	—	728	—	1 739	6 514	25 329
Trades/other skills — post initial	6 081	9 818	3 862	23 611	6 466	25 190	1 594	94	2 598	—	13 197	1 793	92 605
Trade technician /supervisory — post initial	2 801	145	408	1 386	640	5 348	511	—	868	—	434	—	12 459
Para-professional technician — post initial	—	23	86	940	5	190	14	—	106	—	18	—	1 382
Para-professional higher technician — post initial	—	80	300	389	269	1 785	203	—	333	—	623	13	3 963
Total net(a) excluding Recreation, leisure	74 410	75 305	90 140	293 747	18 854	183 392	60 248	5 502	63 003	1 418	115 823	242 371	1 121 399
Total net(a) all streams	82 950	88 210	236 769	327 747	19 702	190 697	121 693	6 447	74 603	1 794	141 224	602 138	1 782 225

(a) Net totals are less than the sums of the individual items because some students enrol in more than one field of study in the same study stream, but are only counted once in the total.

Source: Department of Employment, Education and Training 'Selected Vocational Education and Training Statistics, 1993'.

Education characteristics of the population

Participation in education

A large proportion of persons in the age group 15–24 participate in education well beyond the compulsory school age of 15 (16 in Tasmania). Table 9.15 shows that, in September 1994, 69% of 17 year olds were

still at school, while a further 9% had moved on to tertiary education. Overall, the education participation rate of 15–24 year olds in September 1994 was 49%.

9.15 Education participation rates of persons aged 15 to 24, September 1994 (%)

Type of Institution	Age (years)										Total
	15	16	17	18	19	20	21	22	23	24	
Attending											
School	95.4	83.4	69.3	24.5	3.3	*1.0	*0.4	*0.5	*0.2	*0.1	25.9
Tertiary											
Higher Education	—	—	2.2	16.6	25.9	25.2	21.0	13.5	12.1	9.9	12.9
TAFE	*0.3	3.8	6.4	18.0	16.5	14.3	8.8	6.2	5.6	4.4	8.4
Total tertiary(a)	*0.4	4.6	8.9	37.7	44.1	41.2	31.3	21.9	19.5	16.6	22.8
Not attending	4.2	12.1	21.9	37.7	52.7	57.8	68.3	77.6	80.2	83.3	51.3
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 (6272.0.40.001)*.

Education attendance and the labour force

An ABS survey in May 1994 revealed that an estimated 2,166,900 persons aged 15–64 years had attended an educational institution in the previous year. At the time of the survey only 72% (1,550,200) were still attending. Among this group were 82,400 persons who had changed from full-time to part-time study and 49,900 of these were employed full-time.

Of the 616,700 persons who had ceased education since the previous year, 465,900 were employed, 94,600 were unemployed and the remaining 56,200 were not in the labour force.

Many persons were involved in both study and work. The 1,550,200 persons continuing at an educational institution in May 1994 included 737,300 (48%) employed (324,600

of these in full-time employment) and 109,000 who were looking for work. There were also 17,800 persons who reported combining full-time study and full-time employment.

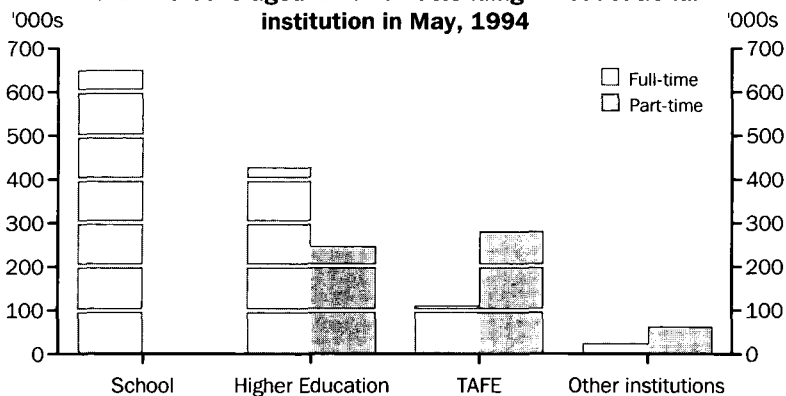
Graph 9.17 gives an indication of the spread of full-time and part-time study across the various types of education. Part-time education in schools is confined to less than 1% of school students, whereas its vocational education counterpart, Technical and Further Education, shows 72% of TAFE students studying part-time. At higher education institutions, 37% of students were studying part-time.

9.16 Persons aged 15 to 64 who attended a tertiary institution in 1993 — type of attendance and labour force status in May 1994 ('000)

Type of attendance in 1994	Employed			Unemployed	Labour force		Total	Unemployment rate (%)
	Full-time	Part-time	Total		In	Not in		
Attended full-time in 1993								
Attending in 1994								
Full-time	12.1	137.0	149.2	24.7	173.9	180.1	354.0	14.2
Part-time	22.0	10.1	32.1	9.0	41.1	*2.7	43.8	22.0
Total	34.1	147.2	181.3	33.8	215.0	182.8	397.8	15.7
Not attending in 1994	87.4	37.6	125.0	29.2	154.2	16.3	170.5	18.9
Total	121.5	184.8	306.3	62.9	369.2	199.4	568.6	17.0
Attended part-time in 1993								
Attending in 1994								
Full-time	*2.0	*4.4	6.3	*2.0	8.3	9.2	17.5	*23.7
Part-time	256.3	44.8	301.1	11.8	312.9	20.2	333.0	3.8
Total	258.3	49.1	307.4	13.8	321.2	29.4	350.6	4.3
Not attending in 1994	218.3	47.2	265.5	18.5	284.0	24.1	308.1	6.5
Total	476.5	96.3	572.9	32.3	605.1	53.5	658.7	5.3
Total attended in 1993								
Attending in 1994								
Full-time	14.1	141.4	155.5	26.7	182.2	189.3	371.6	14.7
Part-time	278.2	54.9	333.2	20.8	354.0	22.9	376.9	5.9
Total	292.4	196.3	488.7	47.5	536.2	212.2	748.4	8.9
Not attending in 1994	305.7	84.8	390.5	47.7	438.1	40.4	478.5	10.9
Grand total	598.0	281.1	879.1	95.2	974.4	252.9	1 227.2	9.8

Source: Transition from Education to Work, Australia (6227.0).

9.17 Persons aged 15 to 64 attending an educational institution in May, 1994



Source: Transition from Education to Work, Australia (6272.0).

Educational attainment

In May 1994, 4,548,200 (39%) persons aged 15–64 had completed a recognised post-school qualification. A further 6,525,900 (56%) of the population had no recognised post-school qualifications. Of these, 703,200 (11%) were attending a tertiary institution in May 1994. Those persons still at school numbered 651,500 (6%).

Of those with post-school qualifications, the most commonly reported qualification was skilled vocational (for example, trade qualifications, etc.) with 1,349,800. Bachelor degrees were reported by 956,400 persons, associate diplomas by 637,400 and 346,400 reported undergraduate diplomas. The smallest category was those with a higher degree, reported by 155,500 persons.

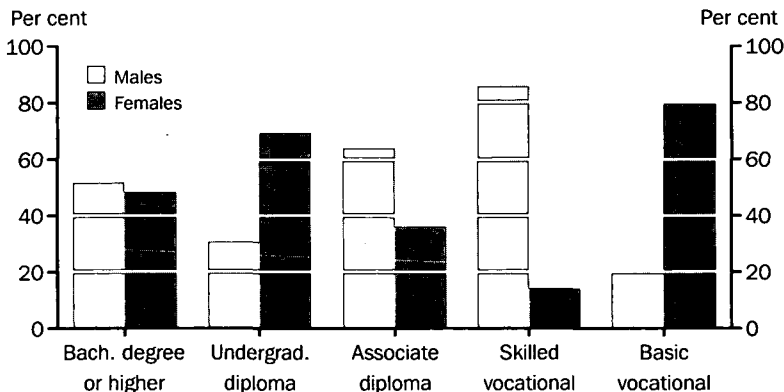
9.18 Persons aged 15 to 64 — age and educational attainment, May 1994 ('000)

Educational attainment	Age group (years)					Total
	15–24	25–34	35–44	45–54	55–64	
With post-school qualifications						
Higher degree	*1.1	33.3	62.5	42.6	16.0	155.5
Postgraduate diploma	11.5	57.5	95.0	53.0	16.6	233.6
Bachelor degree	126.9	319.1	277.9	162.4	70.1	956.4
Undergraduate diploma	25.9	82.0	116.8	76.7	45.1	346.4
Associate diploma	82.1	165.0	187.0	135.4	67.9	637.4
Skilled vocational	159.0	382.8	326.4	287.7	193.8	1 349.8
Basic vocational	176.5	248.1	218.2	143.6	79.1	865.5
Total	582.9	1 289.2	1 284.9	901.9	489.3	4 548.2
Without post-school qualifications(a)						
Completed highest level of school						
Attending tertiary in May 1994	464.0	54.8	23.9	6.1	*1.7	550.3
Not attending tertiary in May 1994	365.9	415.4	335.2	236.4	183.6	1 536.4
Total	829.8	470.2	359.0	242.4	185.2	2 086.8
Did not complete highest level of school						
Attending tertiary in May 1994	84.4	32.9	23.3	10.5	*1.8	152.9
Not attending tertiary in May 1994	559.4	982.6	991.2	957.6	785.1	4 276.0
Total	643.8	1 015.5	1 014.5	968.1	786.9	4 428.9
Total	1 475.8	1 488.2	1 374.4	1 213.0	974.6	6 525.9
Still at school	639.9	—	—	—	—	651.5
Total	2 698.6	2 781.9	2 663.5	2 116.5	1 465.1	11 725.6

(a) Includes persons who never attended school.

Source: *Transition from Education to Work, Australia* (6227.0).

9.19 Distribution of post-school qualifications, May 1994



Source: *Transition from Education to Work, Australia* (6227.0).

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 and includes: commercial and private industry, church and cultural groups, professional and semi-professional bodies, 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, State and Commonwealth departments, 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 \$1,602 million on student assistance in 1994.

9.20 Student assistance schemes, 1994

Scheme	Number of students	Assistance (\$'000)
AUSTUDY Tertiary	252 571	898 170
AUSTUDY Secondary	225 686	565 589
ABSTUDY (Schooling)	26 283	44 801
ABSTUDY (Tertiary)	17 988	69 181
Assistance for Isolated children	13 035	24 321
Total	535 563	1 602 062

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 years and over. 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.

The principle aim of AUSTUDY is to provide an equal opportunity for all Australians to access education. This is achieved through the provision of financial assistance to students who would not otherwise be able to continue their education.

Maximum allowance rates for married students with dependent children and for single students aged 16–20 years 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 478,257 in 1994.

From 1 January 1996, AUSTUDY will no longer be paid to permanent residents who choose not to become permanent citizens. AUSTUDY will not be paid after 1 year of becoming eligible to receive Australian citizenship.

ABSTUDY

ABSTUDY represents a major component of the Government's commitment under the National Aboriginal and Torres Strait Islander Education Policy to encourage Australian Aboriginal and Torres Strait Islander people 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 Aboriginal and Torres Strait Islander people 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 students' 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 1994, ABSTUDY assisted approximately 44,271 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, secondary, and, in limited cases, tertiary 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.

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);
- Correspondence Allowance (\$10 per week for primary students; \$20 per week for secondary students); and

- Pensioner Education Supplement (PES) of \$30 a week paid for students on Disability Support or Sole Parent Pension and undertaking study at below secondary level. This supplement is paid up to their 21st birthday.

Apart from the PES, these allowances are normally only available to eligible students under 19 years of age at 1 January in the year of study.

In addition, the maximum annual boarding allowance available is \$3,304 for primary students and \$3,666 for secondary students and eligible tertiary students up to the age of 16 years, depending on the family's income and assets.

A school-hostel directed Boarding Allowance is also available for secondary students under 16 years whose families get the full AIC boarding allowance and Additional Family Payment from the Department of Social Security.

Families can also continue to receive Department of Social Security Family Payments for eligible students. This option is not available under AUSTUDY.

In 1994, AIC assisted 13,035 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 six Councils:

- *The Australian International Education Foundation Council* provides advice on general matters related to international education and training, including the general development of policies and programs, and the delivery of international education and training programs.
- *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 matters related to employment, vocational education and training and skills formation.
- *The Higher Education Council* advises on the general development of higher education in Australia and on priorities and arrangements for the funding of higher education institutions.
- *The Schools Council* advises on policies and programs relating to schools, and on 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, Aboriginal and Torres Strait Islander people, and in language policy and multicultural education.

A number of bodies at the national level have an important coordinating, planning or funding role.

Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA)

MCEETYA, a Commonwealth/State Council, was established in December 1993. 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.

Australian Council for Educational Research (ACER)

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.

National Centre for Vocational Education Research (NCVER)

The 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.

Australian Qualifications Framework Advisory Board (AQFAB)

AQFAB was established in 1995 by the Ministerial Council on Education, Employment, Training and Youth Affairs. It replaces the Register of Australian Tertiary Education (RATE) Advisory Committee. AQFAB is responsible for facilitating implementation of the new Australian

Qualifications Framework which was introduced on 1 January 1995. It will maintain national registers of all bodies empowered to accredit post-compulsory education and training courses and those with authority to issue qualifications in all sectors of post-compulsory education and training.

Standards and Curriculum Council

On 25 May 1995, Ministers for vocational education and training agreed to the Australian National Training Authority's proposal to develop a national structure which will bring into effect more efficient methods for the development of standards and curriculum. This national structure, called the Standards and Curriculum Council, will be responsible for the development and management of competency standards, curriculum assessment and the Australian Qualifications Framework as it relates to vocational education and training. The functions of the National Training Board and the Australian Committee for Training Curriculum will be subsumed by the Standards and Curriculum Council.

Other organisations

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

Australian Vocational Training System

An increasing focus on vocational education and training has seen the phased implementation of the Australian Vocational Training System (AVTS) commence in 1995. The AVTS provides a broad range of articulated pathways combining schools, TAFEs, private providers, business and industry. The AVTS is based on nationally endorsed industry and enterprise competency

standards and leads to qualifications under the Australian Qualifications Framework.

The key competencies identified by the Mayer Committee in 1992 play an important role in the convergence of general and vocational education. The key competencies have been extensively trialled in schools across all curriculum areas and in vocational education and training settings, in the context of education and training reform.

The key competencies are related to the concept of "enterprise skills". The report of the Karpin Committee, titled *Enterprising Nation*, highlighted the need for a more enterprising culture in the Australian community, supported by initiatives in schools, vocational education and training, and higher education. Commonwealth, State and Territory Ministers have agreed on a set of interrelated curriculum, professional development and community awareness programs for enterprise education in schools, to take place over the next three years.

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 9.21 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 1993-94 and preceding years.

9.21 Government and private expenditure on education

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
	\$ million					
Government						
General government final consumption expenditure	11 347	11 993	13 123	14 095	14 741	15 483
Gross fixed capital expenditure	1 072	1 301	1 361	1 239	1 440	1 170
Increase in stocks	2	3	-3	-4	4	4
<i>Government final expenditure(1)</i>	12 421	13 297	14 482	15 330	16 184	16 657
Personal benefit payments(2)	1 371	1 515	1 749	2 031	2 190	2 224
Grants & advances to persons & non-profit institutions(a)	1 775	1 995	2 141	2 389	2 406	2 625
Advances to persons for Higher Education Contribution Scheme	226	435	479	577	604	602
Other(3)	-31	-8	30	111	93	17
<i>Total government outlays on education</i>	15 761	17 234	18 880	20 438	21 479	22 125
Private						
Private final consumption expenditure	2 353	3 945	4 436	5 035	5 307	5 548
Gross fixed capital expenditure	371	338	385	338	351	412
<i>Private final expenditure(4)</i>	3 624	4 283	4 821	5 373	5 658	5 960
<i>Total final expenditure on education(1)+(4)</i>	16 045	17 580	19 303	20 703	21 842	22 617
Total outlays on education(1)+(2)+(3)+(4)	17 385	19 087	21 081	22 845	24 126	24 858
Gross Domestic Product	339 927	371 051	379 069	386 958	404 007	428 589

For footnotes see end of table.

...continued

9.21 Government and private expenditure on education — *continued*

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
% of Gross Domestic Product						
Total government outlays	4.6	4.6	5.0	5.3	5.3	5.2
Final expenditure on education						
General government final consumption expenditure	3.3	3.2	3.5	3.6	3.6	3.6
Private final consumption expenditure	1.0	1.1	1.2	1.3	1.3	1.3
Government gross fixed capital expenditure	0.3	0.4	0.4	0.3	0.4	0.3
Private gross fixed capital expenditure	0.1	0.1	0.1	0.1	0.1	0.1
Total	4.7	4.7	5.1	5.4	5.4	5.3
Total outlays on education	5.1	5.1	5.6	5.9	6.0	5.8

(a) Excludes Commonwealth advances for Higher Education Contribution Scheme purposes.

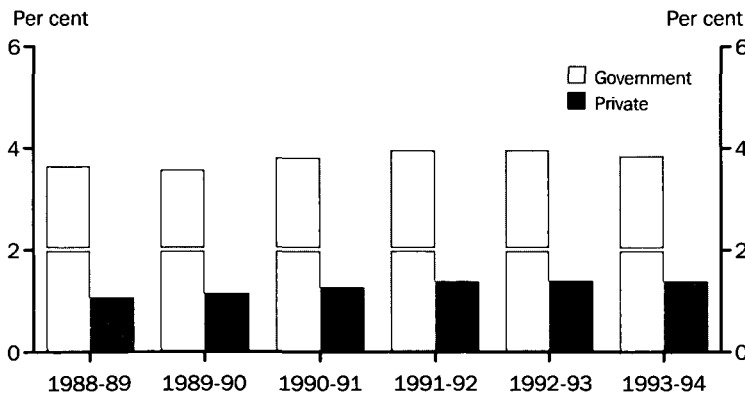
Source: *Expenditure on Education, Australia (5510.0)*; *Australian National Accounts: National Income and Expenditure, and Product, 1993-1994 (5204.0)*.

Total final expenditure on education, comprising the measures final consumption expenditure and gross fixed capital expenditure (by governments and the private sector) rose 3.5% from \$21,842 million in 1992-93 to \$22,617 million in 1993-94, but fell slightly as a percentage of Gross Domestic Product (GDP) from 5.4% to 5.3%.

Government final expenditure rose 2.9% from \$16,184 million in 1992-93 to \$16,657 million in 1993-94, but fell slightly from 4.0% to 3.9% of GDP.

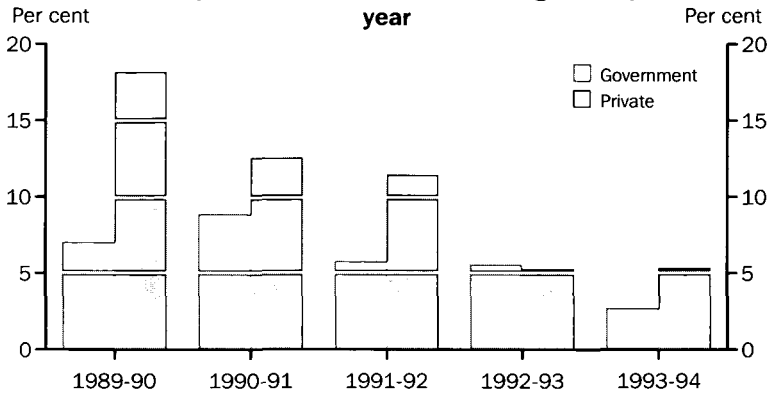
Private final expenditure rose 5.3% from \$5,658 million in 1992-93 to \$5,960 million in 1993-94 and remained constant at 1.3% of GDP. Significantly higher growth in expenditure on education by the private sector is in part due to higher government grants paid to non-government schools (up 9.2%). The increase is higher than expected due to changed arrangements for the payment of these grants in Victoria. Private final expenditure on education not financed by government rose 3.2%. See also graphs 9.22 and 9.23.

9.22 Final expenditure on education (as a % of GDP)



Source: *Expenditure on Education, Australia (5510.0)*.

9.23 Final expenditure on education - change from previous



Total outlays on education, which comprise, in addition to final expenditure as defined previously, government benefit payments for education related services, rose 3.0% from \$24,126 million to \$24,858 million between 1992-93 and 1993-94, but fell from 6.0% to 5.8% of GDP.

Total government outlays on education (which includes payments to the private sector) rose 3.0% from \$21,479 million to \$22,125 million between 1992-93 and 1993-94. The main growth in outlays was in

the Commonwealth sector (up 6.7%) reflecting increased grants to the States and Territories (mainly for tertiary education). Outlays by State and local governments from their own resources rose 0.2%, reflecting lower growth in expenditure on primary and secondary education and a fall in expenditure on pre-school and special education.

Table 9.24 shows the components of government outlays on education by economic transaction and government purpose in 1993-94.

9.24 Government outlays on education, 1993–94 (\$ million)

	General government final consumption expenditure	Personal benefit payments	Expenditure on new fixed assets	Expenditure on secondhand fixed assets (net)	Other(a)	Intergovernmental grants(b)	Own source outlays(c)
Primary & secondary education							
Commonwealth	13	645	—	—	14	(d)2962	3 633
State & local	8 388	59	581	-35	(d)2425	—	12 083
Total	8 400	704	581	-35	2 432	-2 962	8 456
Tertiary education							
University education(e)							
Commonwealth	291	740	43	-1	608	3 297	4 977
State & local	3 395	3	282	-1	5	-3 297	487
Total	3 686	743	325	-3	612	—	5 363
Technical & further education							
Commonwealth	19	238	—	—	1	617	875
State & local	1 953	3	261	-5	44	-617	1 640
Total	1 972	242	261	-5	45	—	2 514
Tertiary education n.e.c.							
Commonwealth	—	17	—	—	—	—	17
State & local	4	—	1	—	—	—	5
Total	4	17	1	—	—	—	22
Total tertiary education							
Commonwealth	310	995	43	-1	608	3 914	5 869
State & local	5 352	6	544	-6	50	-3 914	2 032
Total	5 662	1 002	587	-7	656	—	7 900
Preschool & other special education							
Commonwealth	77	6	—	—	—	63	146
State & local	914	—	40	—	96	-63	986
Total	990	6	40	—	96	—	1 132
Transportation of students							
Commonwealth	—	—	—	—	—	—	—
State & local	179	525	—	—	9	—	699
Total	179	525	—	—	9	—	699
Education n.e.c.							
Commonwealth	179	—	—	—	48	1	228
State & local	73	—	5	-1	6	-1	82
Total	252	—	5	-1	53	—	310
Total government outlays							
Commonwealth	578	1 593	43	-1	670	6 940	9 877
State & local	14 905	597	1 170	-41	2 586	-6 940	12 256
Total	15 483	2 189	1 213	-43	3 247	—	22 125

(a) Mainly current grants to non-government schools and subsidies for teacher housing and advances to persons under the HECS scheme. (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. 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. (d) Commonwealth funding of non-government schools is made via inter-government grants which are onpassed through State/Territory governments. (e) Colleges of Advanced Education are now included with universities.

Source: *Expenditure on Education, Australia (5510.0)*.

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Law and order

Law in Australia	303
Nature and composition	303
Commonwealth and State responsibilities	303
Administration and expenditure	303
Law reform	304
Australian Law Reform Commission (ALRC)	304
Federal courts	304
High Court of Australia	304
Federal Court of Australia	305
Industrial Relations Court of Australia	306
Family law and Family Court of Australia	306
Child Support Agency	307
State and Territory courts	307
Appeals	307
Special courts and tribunals	307
Courts of Marine Inquiry	307
Administrative review activities	308
Administrative Appeals Tribunal	308
Administrative Decisions (Judicial Review) Act	308
Commonwealth and Defence Force Ombudsman	308
Human Rights and Equal Opportunity Commission	309
Freedom of Information Act	310
Other Commonwealth bodies	310
Commonwealth Royal Commissions	310
National Crime Authority (NCA)	311
Consumer affairs	311
Australian Security Intelligence Organisation (ASIO)	312
Legal aid	313
The police	313
Australian Federal Police (AFP)	313
Crime statistics	314
Crimes recorded by police	314
Crime victims	315
Drug offences	317

Corrective services	317
Prisoners' offences and sentences	318
Criminological research	319
Australian Institute of Criminology	319
Bankruptcy and copyright	319
Bankruptcy	319
Copyright	321
Bibliography	322

Law and order

Law in Australia

Nature and composition

The laws of a country represent the common body of rules, whether proceeding from legislation, executive action, court judgements 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 1993–94, \$4,842 million (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 (\$ million)

	1991–92	1992–93	1993–94
Police services(a)	2 685	2 794	2 840
Law courts & legal services(b)	1 257	1 159	1 134
Prisons & corrective services(c)	900	844	829
Total	4 842	4 797	4 803

(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 and 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 have 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) in all of the States except 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).

Australian Law Reform Commission (ALRC)

The 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.

Reports completed by the Commission in 1994 and 1995 have included:

- *Compliance with the Trade Practices Act 1974, 1994* (ALRC 68);
- *Equality before the law, 1994* (ALRC 69);
- *Child care for kids, 1994* (ALRC 70);
- *Aged care legislation for the Commonwealth, 1995* (ALRC 72);
- *Complex contact cases and the Family Court, 1995* (ALRC 73);
- *Designs, 1995* (ALRC 74); and
- *Costs shifting — who pays for litigation, 1995* (ALRC 75);

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 judgement, 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 jurisdiction 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 *Chapter 5, 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.

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

The *Administrative Decisions (Judicial Review) Act 1977* provides for judicial review by the Federal Court of Australia of administrative action taken under Commonwealth legislation. Where an order of review is sought by an aggrieved person, 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 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 Act (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	1993-94
Commonwealth Ombudsman (includes Freedom of Information)				
Written complaints				
No. of written complaints	596	4 338	4 149	3 366
Per 100 000 of population	18.3	24.9	24.5	19.1
Oral complaints				
No. of oral complaints	9 086	11 664	10 318	10 291
Per 100 000 of population	52.9	67.0	61.0	58.3
Defence Force Ombudsman				
Written	298	305	308	299
Oral	663	513	405	397
Australian Federal Police				
	675	693	583	596

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	1993-94
Written complaints				
Outside Ombudsman's jurisdiction	554	625	671	419
Discretion exercised	702	938	871	1 271
Withdrawn or lapsed	188	168	181	189
Substantially in favour of complainant	718	892	900	912
Partly in favour of complainant	444	578	659	667
Not substantiated	920	997	1 028	927
Total	3 526	4 198	4 310	4 385
Oral complaints				
Discretion exercised	3	3 652	3 635	4 437
Written complaint advised, withdrawn, etc.	1 775	2 544	2 067	1 742
Substantially in favour of complainant	1 600	1 854	1 699	1 503
Partly in favour of complainant	1 411	1 822	1 879	1 838
Not substantiated	1 697	1 792	1 443	1 408
Total	9 749	11 664	10 723	10 928

Source: Commonwealth Ombudsman.

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*, the *Racial Discrimination Act 1975*, the *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 (NCA)

The 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. 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 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 reclaimed are contained in its Annual Report.

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)

ASIO 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 the principal law enforcement agency through which the Commonwealth pursues its law enforcement interests. The AFP is unique in Australian law enforcement in that its functions relate to both community policing and to investigations of offences against the Commonwealth law which involve law enforcement both in Australia and overseas.

The AFP's main office is located in Canberra. It has regional commands in every Australian State and Territory, including a community policing structure which serves the ACT under an arrangement with the ACT Government. The AFP has liaison posts in 15 cities in 13 countries and a representative attached to Interpol in Lyons. Recently, services have also been supplied for the Commonwealth Territories in Christmas and Norfolk Islands and Jervis Bay. Training services have been supplied to Vanuatu.

The AFP is a Commonwealth statutory authority brought into existence by the *Australian Federal Police Act 1979*, which was proclaimed on 19 October 1979. Section 13(2) of that Act empowers the Minister to direct the general policy to be pursued in relation to the performance of the functions

of the AFP after receiving advice from the Commissioner of the AFP and the Secretary of the Department responsible for administration of the AFP Act.

Since its establishment there have been five Ministerial Directions issued in which the Government has included the general policy it wishes the AFP to pursue in performing its functions.

The operational priorities contained in the 1992–1995 Corporate Plan and relevant to the 1991 Ministerial Direction 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.

Crime statistics

Two 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. The main features of these statistics are described below.

Crimes recorded by police

Within the scope of the national collection, the most frequently reported offence category in Australia in 1994 was that of unlawful entry with intent (UEWI). More than 380,000 UEWIs were reported, representing a rate of 2,130.5 per 100,000 population. Motor vehicle theft was the next most common type of offence, with 119,760 stolen motor vehicles reported to police, a rate of 671.2 per 100,000 population.

Among the violent crimes within the national collection, the most common types of crime reported to Australian police in 1994 were sexual assault and robbery. There were 13,277 sexual assault victims, which represents a rate of 74.4 per 100,000 population. Robbery comprised 5,060 reports for armed robbery, representing a rate of 28.4 per 100,000 population, and 8,923 reports for unarmed robbery, a rate of 50.0 per 100,000 population.

10.4 Crimes recorded by police, 1994

Offence category	NSW(a)	Vic.	Qld(b)	SA	WA	Tas.	NT	ACT	Aust.
	No.								
Homicide									
Murder	107	56	42	26	39	5	10	3	288
Attempted murder	62	56	140	36	28	6	4	2	334
Manslaughter	10	5	6	—	11	—	—	—	32
Driving causing death	114	15	17	15	32	—	3	—	196
Sexual assault	4 608	3 388	2 009	1 481	1 372	140	180	99	13 277
Kidnapping/abduction	226	99	86	69	41	17	9	1	548
Robbery									
Armed robbery	2 218	788	863	467	584	62	14	64	5 060
Unarmed robbery	5 130	849	1 072	1 048	634	85	39	66	8 923
Blackmail/extortion	9	85	34	16	21	1	1	1	168
Unlawful entry with intent	120 008	72 260	73 399	35 822	55 911	13 243	4 512	4 997	380 152
Motor vehicle theft	45 477	27 701	16 528	9 350	16 625	1 706	767	1 606	119 760

For footnotes see end of table.

...continued

10.4 Crimes recorded by police, 1994 — continued

Offence category	NSW(a)	Vic.	Qld(b)	SA	WA	Tas.	NT	ACT	Aust.
Rate per 100 000 population									
Homicide									
Murder	1.8	1.3	1.3	1.8	2.3	1.1	5.8	1.0	1.6
Attempted murder	1.0	1.3	4.4	2.5	1.7	1.3	2.3	0.7	1.9
Manslaughter	0.2	0.1	0.2	—	0.7	—	—	—	0.2
Driving causing death	1.9	0.3	0.5	1.0	1.9	—	1.8	—	1.1
Sexual assault	76.2	75.7	62.8	100.8	80.6	29.6	105.2	32.9	74.4
Kidnapping/abduction	3.7	2.2	2.7	4.7	2.4	3.6	5.3	0.3	3.1
Robbery									
Armed robbery	36.7	17.6	27.0	31.8	34.3	13.1	8.2	21.3	28.4
Unarmed robbery	84.8	19.0	33.5	71.3	37.3	18.0	22.8	21.9	50.0
Blackmail/extortion	0.2	1.9	1.1	1.1	1.2	0.2	0.6	0.3	0.9
Unlawful entry with intent	1 983.1	1 614.4	2 295.9	2 437.2	3 285.2	2 803.3	2 637.1	1 660.7	2 130.5
Motor vehicle theft	751.5	618.9	517.0	636.1	976.9	361.1	448.3	533.7	671.2

(a) NSW introduced a new incident based reporting system in 1994. (b) Queensland introduced a new statistical system in December 1994.

Source: *National Crime Statistics, 1994 (4510.0)*.

The majority of violent offences against the person in the national collection occurred in residential locations (57.6% of murders; 55.7% of attempted murders; 62.0% of sexual assaults). In contrast, over one-third of armed robberies were carried out in retail establishments, whilst almost one-half of unarmed robberies occurred on streets/footpaths. The most common types of premises involved in reported unlawful entries with intent were residential (63.3% of UEWIs), followed by retail establishments (12.9% of UEWIs).

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% of households in Australia were victims of at least one break and enter or attempted break and enter offence. An estimated 1.2% of persons in Australia aged 15 years and over were victims of at least one robbery; 2.5% of persons in Australia aged 15 years and over were victims of at least one assault; and 0.6% of females aged 18 years and over were victims of at least one sexual assault (table 10.5).

10.5 Victims of crime(a) in the 12 months to April 1993

Type of offence	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	No. ('000)								
Households									
Break & enter	79.1	51.7	57.1	28.1	45.6	6.8	3.4	5.2	277.0
Attempted break & enter	55.3	41.8	34.8	21.3	30.0	3.5	2.4	5.1	194.2
Break & enter or attempted break & 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	*0.3	*0.9	109.6
<i>Total household victims(b)</i>	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	*2.0	*0.9	*0.1	*0.9	38.9
<i>Total personal victims(b)</i>	173.2	108.8	92.1	42.7	43.9	12.8	4.7	11.0	489.2
Victimisation rate (%) (d)									
Households									
Break & enter	3.7	3.3	5.2	5.0	7.5	4.0	7.4	5.0	4.4
Attempted break & enter	2.6	2.6	3.2	3.8	4.9	2.0	5.4	4.9	3.1
Break & enter or attempted break & 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	*0.7	*0.8	1.7
<i>Total household victims(b)</i>	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	*0.3	*0.5	*0.2	*0.9	0.6
<i>Total personal victims(b)</i>	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.

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 10.6 provides a general comparison of certain types of offence during the two periods.

10.6 Victims of crime(a) in the last 12 months, 1983 and 1993

Type of offence	No. ('000)		Victimisation rate (%) (b)	
	1983	1993	1983	1993
Households				
Break & enter/attempted break & 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 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.

10.7 Selected drug seizures by Commonwealth agencies(a)

Type of drug	1991-92	1992-93	1993-94	1994-95
Cannabis	1 818	2 291	1 329	1 614
Cannabis resin	797	450	393	426
Amphetamines	76	117	153	93
Heroin	256	187	186	198
Cocaine	78	81	55	65
Opium	12	15	n.a.	n.a.
LSD	45	46	32	27
Other	54	52	87	48
Total	3 136	3 239	2 235	2 471

(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). The Annual Prison Census will be conducted by the ABS from 1995 onwards.

10.8 Number of prisoners by most serious offence/charge(a), 30 June 1993

Offence/charge(a)	Age group (years)								Total(c)
	<20(b)	20-24	25-29	30-34	35-39	40-44	45-49	>49	
Homicide	29	269	305	270	233	146	98	142	1 492
Assault	144	555	403	283	156	90	57	48	1 736
Sex offences	34	234	309	302	316	261	180	257	1 893
Other offences against the person	16	43	50	35	29	11	4	5	193
Robbery	133	642	510	342	212	104	39	27	2 009
Extortion	2	9	11	12	6	2	1	3	46
Break & enter	268	808	543	367	155	57	17	16	2 231
Fraud & misappropriation	9	82	120	135	93	83	74	95	691
Receiving	14	75	70	53	34	19	13	10	288
Other theft	135	407	258	152	87	34	22	13	1 108
Property damage	20	66	45	32	19	10	6	10	208
Environmental	—	1	2	1	—	—	—	—	4
Government security	—	—	3	3	2	1	2	5	16
Justice procedures	52	255	202	130	76	29	39	28	811
Unlawful possession of weapon	2	7	12	11	17	8	4	7	68
Other offences against good order	6	20	12	15	10	2	3	6	74
Possession, use of drugs	4	21	37	48	32	24	12	9	187
Deal/traffic drugs	14	124	197	286	264	182	117	114	1 298
Manufacture/grow drugs	1	31	28	46	42	20	18	33	219
Driving offences	24	143	179	136	87	52	21	21	663
Licence, registration	9	60	55	47	33	15	9	7	235
Other traffic offences	2	1	3	2	—	—	—	1	9
Other offences	18	36	38	57	81	63	37	41	371
Offences in custody	—	—	—	1	—	—	—	—	1
Unknown	—	1	4	2	1	—	2	—	10
Total persons(c)	936	3 890	3 396	2 768	1 985	1 213	775	898	15 861

(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 17 years in Victoria, Queensland, Tasmania and Northern Territory, and 18 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. (c) The total number of prisoners shown in this table is greater than the total prisoners shown in the previous and following tables. Data in this table include 1 883 remandees not convicted, awaiting sentence or deportation.

Source: Australian Institute of Criminology.

10.9 Number of sentenced prisoners by type of sentence imposed(a), 30 June 1993(b)

Type of sentence	No. of prisoners
Life	601
Governor's pleasure	69
Indefinite(c)	8 718
Fixed term	3 045
Fine default only	310
Periodic detention	1 240
Total	13 983

(a) Type of sentence is determined by the cumulative effect of all sentences imposed. (b) This table includes unsentenced prisoners subject to deportation orders, and excludes all remandees. (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.

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.

Key research objectives for the Institute are to advise on exemplary methods for the prevention and control of crime; to contribute to the efficiency and effectiveness of the criminal justice system; to monitor crime trends; to assess the contexts and causes of crime; to address issues relating to access to justice; to enhance the usefulness of crime and criminal justice data; to translate research findings into recommendations for achievable social policy; and to communicate effectively the value of research products.

The Institute has four Research Programs. The Violent and Property Crime Program focuses on the causes, prevention and control of crimes against persons and property; the Sophisticated Crime Program focuses on the causes, prevention and control of white collar crime, organised crime, and other complex criminal activity, including emerging criminal threats; the Criminal Justice System Program focuses on the operation and impact of the criminal justice system; and the Data Support and Management Program analyses and interprets crime and criminal justice statistics.

Bankruptcy and copyright

Bankruptcy

Bankruptcy is a statutory regime for the release of debtors from debts and the repayment of creditors out of the proceeds of realisation of the debtor's property. The Bankruptcy Act 1966 is the current Commonwealth law dealing with the insolvency of individuals and partnerships.

The Act provides for both voluntary and involuntary bankruptcy, and for insolvency administrations outside bankruptcy under Part X. The alternative administrations are the deed of assignment, the deed of arrangement and the composition. The Act also provides, in Part XI, for the administration of deceased estates in bankruptcy. It is a feature of bankruptcy and the alternative administrations that property or money belonging to the debtor, or given to the debtor for the purpose, is vested in a trustee for rateable distribution to creditors.

The Act establishes the Official Trustee in Bankruptcy, the functions of which are to administer bankrupt estates and bankrupt deceased estates. The Official Receivers in Bankruptcy, who are officers of the Attorney-General's Department, and staff of

their offices perform the functions of the Official Trustee. The Official Trustee is trustee of about 90% of bankrupt estates, and most bankrupt deceased estates.

The Act also provides for registration of appropriately qualified persons, usually accountants, as trustees. Registered trustees administer some bankruptcies, but are responsible mainly for the administration of deeds and compositions under Part X of the Act. Registered trustees are registered by order of the Federal Court.

The Federal Court of Australia exercises jurisdiction in bankruptcy Australian wide. Officers of the Federal Court hold office as Registrars in Bankruptcy. Registrars in Bankruptcy issue bankruptcy notices, and the Act requires various documents, such as petitions, statements of affairs, authorities to trustees, resolutions of meetings of creditors and trustees accounts of receipts and payments to be filed with Registrars in Bankruptcy. These documents are available for public inspection at Federal Court registries. Registrars in Bankruptcy are responsible administratively to the Registrar of the Federal Court of Australia.

Bankruptcies increased in the late 1980s peaking in 1991-92 (16,780). In 1992-93, bankruptcies were down 12% on 1991-92 to 14,852, but were still 14% higher than in

1990-91 (13,091) and 74% higher than in 1989-90 (8,552). In 1993-94 the number of bankruptcies fell to 14,166 (table 10.10).

10.10 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.
1993-94	14 166	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 10.11 and 10.12, mainly because proceedings involving two or more partners are treated as one administration whereas in tables 10.11 and 10.12 details are counted for each of the partners.

Source: Commonwealth Attorney-General's Department — Insolvency and Trustee Service, Australia.

In 1993-94, economic conditions (29.5%) were by far the main cause of business bankruptcies, followed by other (21.5%), lack of business ability (19.5%) and lack of sufficient funds (7.5%). For non-business bankruptcies, 28% were attributed to unemployment.

10.11 Causes of business bankruptcy

Cause	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Lack of sufficient capital	491	562	534	533	558	324
Lack of business ability	489	721	963	1 025	680	847
Failure to keep proper books	26	12	34	27	44	46
Economic conditions(a)	240	524	1 233	1 730	1 709	1 281
Seasonal conditions	30	52	57	60	56	30
Excessive interest	95	172	267	295	254	173
Inability to collect debts	76	107	120	145	116	245
Excessive drawings(b)	129	78	102	118	140	117
Gambling	15	18	26	16	27	23
Personal reasons	121	267	279	244	284	318
Other	465	435	588	1 194	928	931
Total	2 177	2 948	4 203	5 387	4 796	4 335

(a) Including competition and price cutting, and changes in the character of business location (for example, by-pass roads).

(b) Excessive drawings including failure to provide for taxation, either personal or wage tax deductions.

Source: Commonwealth Attorney-General's Department — Insolvency and Trustee Service, Australia.

10.12 Causes of non-business bankruptcy

Cause	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Excessive use of credit	2 560	2 098	3 203	3 845	2 445	1 946
Liabilities on guarantees	273	279	551	721	761	921
Unemployment	699	1 225	2 269	3 145	3 236	2 727
Gambling	63	133	90	86	79	81
Ill health	259	409	426	498	337	396
Adverse litigation	205	218	238	347	442	529
Domestic discord	245	362	623	418	547	634
Other	935	822	1 488	2 433	2 134	2 459
Total	5 239	5 546	8 888	11 493	9 981	9 693

Source: Commonwealth Attorney-General's Department — *Insolvency and Trustee Service, Australia*.

10.13 Insolvencies(a)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Deeds of assignment						
Number	228	197	185	170	125	84
Assets (\$m)	11.6	8.3	7.9	7.9	6.4	3.1
Liabilities (\$m)	40.7	28.1	54.6	16.9	64.3	19.1
Deeds of arrangement						
Number	263	156	279	343	301	250
Assets (\$m)	5.4	2.3	8.7	5.8	15.1	3.9
Liabilities (\$m)	30.0	5.4	60.1	115.5	319.9	140.2
Compositions						
Number	304	208	341	440	366	339
Assets (\$m)	3.0	1.9	2.9	2.8	2.3	3.6
Liabilities (\$m)	43.9	34.0	57.0	99.1	179.2	78.3
Total						
Number	795	561	805	953	792	673
Assets (\$m)	20.0	12.5	19.5	16.4	23.8	10.6
Liabilities (\$m)	114.6	67.5	171.8	231.5	563.4	237.6

(a) Under Part X of the Bankruptcy Act.

Source: Commonwealth Attorney-General's Department — *Insolvency and Trustee Service, Australia*.

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* which is tabled in Parliament and is available for purchase by members of the public.

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.

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Culture and recreation

Introduction	325
Cultural and natural heritage	325
National Estate	325
Natural environment	326
National parks	326
Usage of national parks	327
Museums and art museums	327
Museum and art museum attendances	327
Botanical gardens, zoological and marine parks	328
Botanical gardens	328
Botanical gardens attendances	328
Zoological and marine parks	329
Libraries and archives	329
Libraries	329
National bookstock	330
Library attendances	330
Book reading and borrowing	331
Archives	332
Music and performing arts	332
Music and performing arts organisations	333
Important national organisations	334
Attendances at performances	335
Performances in hotels, clubs, etc.	337
Film and video	337
Cinema attendances	338
Video hiring and watching	338
Radio and television	339
Training in the arts	340
Employment and participation in cultural activities	340
Employment in cultural occupations	340
Involvement in culture/leisure activities	341
Time spent on cultural activities	342

Government funding for culture	342
Sport and recreation	343
Involvement in sport	344
Sport and recreation participation	345
People who do not play sport	346
Government funding for recreation and sport	346
Socio-cultural activities	347
Religion	347
Languages	348
Bibliography	350

Culture and recreation

Introduction

Cultural and recreational 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, leisure, sports and recreation, language and religious practice, adult education, active attachment to custom and place, and activities around conservation and enjoyment of the natural environment.

This chapter reviews a range of cultural and recreational activities which Australians undertake and provides a statistical summary (where available) for those activities.

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, and streetscapes, etc.

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

The term 'the National Estate' was coined by William Clough Ellis, a British architect in the 1940s. It was introduced into Australia when the Federal Government undertook to 'preserve and enhance the quality of the National Estate' by setting up a Commission of Inquiry into the National Estate, headed by Hon. Mr Justice R.M. Hope. Following the recommendations of this enquiry, the Australian Heritage Commission Act was passed in 1975 with the support of all political parties.

'The National Estate' is defined in the enabling legislation 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 and Torres Strait Islander significance, such as rock engravings, galleries of rock art, fish traps, carved trees, meeting places, ceremonial sites and reminders of early European settlement such as mission stations.

The Australian Heritage Commission has a statutory obligation to identify the National Estate and has established the Register of the National Estate to place on public record Aboriginal, Historic and Natural places to ensure that they are appropriately managed and conserved. The Register also contains places listed interrimly, places removed from lists, places yet to be considered and places which have been reported but for which there

is insufficient information for assessment. At 30 June 1994 there were more than 18,000 records on the Register of the National Estate of which 10,773 had been formally recognised as Aboriginal, Historic and Natural places.

In any one year, some places are lost to the National Estate because of natural events such as bushfires and floods. Some are lost because there are no legal constraints on the way private, State and local governments manage places on the Register, e.g., redevelopment of an historic building. During 1993-94 the number of places in the Register of the National Estate increased by a net 52 to 10,773. This compared with a net increase of 201 in 1992-93. Details by State and type, and comparisons between 1992-93 and 1993-94 are shown in table 11.1.

11.1 Number and type of places on the Register of the National Estate

State/Territory	Aboriginal places		Historic places		Natural places		Total	
	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94
New South Wales	204	204	2 651	2 655	392	392	3 247	3 251
Victoria	100	100	2 098	2 108	188	191	2 386	2 399
Queensland	129	129	560	564	251	252	940	945
Western Australia	72	73	831	836	212	215	1 115	1 124
South Australia	132	133	720	721	359	358	1 211	1 212
Tasmania	62	64	1 129	1 144	223	225	1 414	1 433
Northern Territory	80	80	97	97	53	53	230	230
Australian Capital Territory(a)	10	10	110	112	27	26	147	148
External Territories	—	—	15	15	16	16	31	31
Total	789	793	8 211	8 252	1 721	1 728	10 721	10 773

(a) Includes Jervis Bay.

Source: Australian Heritage Commission.

More comprehensive statistics on the types of places on the National Estate can be found in the annual reports of the Australian Heritage Commission.

Natural environment

The natural environment comprises areas used for outdoor recreation (except sport) such as national and State parks or reserves, other natural areas on the National Estate or equivalent State or Territory government registers, tourist caves, and picnic and recreation (not sporting) grounds. Management of the natural environment ensures the preservation of local flora and fauna, controls and excludes the development of the area for fishing, forestry, mining or agriculture and, where appropriate, facilitates access by the general public.

National parks

National parks are established by both Commonwealth and State/Territory legislatures. There is no coordinating legislation, although all governments participate in national forums and cooperate in joint programs, such as the National Reserves System, to achieve a common purpose. The *National Parks and Wildlife Conservation Act 1975* is Commonwealth-enabling legislation which provides for the establishment of parks and reserves on land owned or leased by the Commonwealth, in Commonwealth waters and on Aboriginal land leased to the Commonwealth.

Usage of national parks

In the 12 months prior to May 1992, 63% of Australians over 18 years of age 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% 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. Couples with dependent child(ren) were the most frequent visitors to a heritage area or park in the previous 12 months, at 72%.

11.2 Visited heritage area, national or State park in the last 12 months, 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	7848.9
No	1 542.7	1 233.6	792.1	375.1	374.0	111.6	23.7	72.1	4524.8
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	1 889.9	329.1	93.6	206	12470.1
	%								
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	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 — People's Views and Practices (4602.0)*.

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.

There is no centralised system of administration and/or organisation of museums and art museums in Australia. In many cases, State museums and art museums were established many years before their national counterparts. As a result, a number of notable national collections are housed in museums operated by or through State

governments, rather than being housed in the national institutions. The main national museums and art museums are the National Museum of Australia, the Australian National Maritime Museum, the Australian War Memorial museum, the National Science and Technology Centre (Questacon) and the National Gallery of Australia. In 1993, it was estimated that there were over 1,700 museums and art museums operating in Australia.

Museum and art museum attendances

A survey of attendances at cultural venues was carried out by the ABS in March, 1995. It revealed that 3.9 million people aged 15 years and over visited a museum at least once in the previous 12 months, while 3.1 million had visited an art museum in same period. Some of the other results are shown in table 11.3.

11.3 Attendance at museums and art museums, 1995 ('000)

	Museums	Art museums
Sex		
Male	1 866.9	1 317.5
Female	2 038.6	1 816.6
Total	3 905.6	3 134.1
Age		
15–24 years	766.8	628.1
25–34 years	828.7	597.5
35–44 years	938.7	643.3
45–54 years	645.6	590.5
55–64 years	383.6	349.5
65 years & over	342.2	325.2
Birthplace		
Australian born	2 950.6	2 351.4
Overseas born	955.0	782.8
Employment status		
Employed	2 604.4	2 059.8
Unemployed	223.8	167.5
Not in labour force	1 077.4	906.9

Source: ABS Survey of Attendance at Selected Cultural Venues, March 1995 (4114.0).

Botanical gardens, zoological and marine parks

Botanical gardens

Botanical gardens are scientific and cultural institutions established to collect, study, exchange and display plants for research and for the education and enjoyment of the public. Some botanical gardens may include arboreta, herbaria (scientific collections of dried preserved plant specimens used for the accurate classification and identification of plants and plant material and for taxonomic studies) and annexes (a botanical garden used for cultivation and display).

There are significant botanical gardens in each capital city, with the Australian National Botanic Gardens occupying a 90 hectare site on the lower slopes of Black Mountain in Canberra and 80 hectares at Jervis Bay. It

contains the original national collection and Australia's most comprehensive display of living native plants. Officially opened in 1970, in September 1991, it was proclaimed a reserve under the *National Parks and Wildlife Conservation Act 1975*, which provided legal protection for the collections. The Australian National Botanic Gardens maintains 85,000 plants representing more than 6,000 taxa — constituting about one-third of the vascular plants recorded for Australia.

In July 1993, the Australian National Botanic Gardens was the first botanic gardens and herbarium to make its information on Australian plant species, etc. available through a World Wide Web server on the Internet. The Jervis Bay Botanical Gardens has been placed on the Interim List of the Register of the National Estate in recognition of its importance as a research and teaching-based botanic garden established to display and interpret Australian flora especially that of the New South Wales South Coast.

There is no centralised system of administration and/or organisation of botanic gardens in Australia. However, the Council of Heads of Australian Botanic Gardens, which comprises the heads of the principal Commonwealth, State and Territory botanic gardens meets annually to discuss significant issues of gardens management.

The other national consultative body in this field is the Council of Heads of Australian Herbaria which comprises the heads of the major Australian herbaria, with observers representing smaller and regional herbaria. It meets annually to discuss collections management and curation, and significant issues of botanical activity in Australia.

Botanical gardens attendances

The Survey of Attendance at Selected Cultural Venues showed that over 5.4 million persons aged 15 years and over attended a botanical garden at least once in the 12 months ended 31 March 1995.

11.4 Attendance at botanical gardens by persons aged 15 years and over, 1995

Attendees	No. (‘000)
Sex	
Male	2 459
Female	2 951
Total	5 411
Age	
15–24 years	—
25–34 years	1 123
35–44 years	1 167
45–54 years	1 125
55–64 years	861
65 years & over	539
Birthplace	
Australian born	3 868
Overseas born	1 542
Employment status	
Employed	3 453
Unemployed	316
Not in labour force	1 642

Source: Attendance at Selected Cultural Venues, March 1995 (4114.0).

Zoological and marine parks

Zoological parks and marine parks (i.e. animal, fauna, bird life, reptile parks; aquaria; aviaries; butterfly houses; dolphinariums) are primarily engaged in the breeding, preservation, study and display of native and/or exotic fauna in captivity, enclosures or natural environments, so as to be accessible to the general public on payment of an entrance fee. The term *marine parks* does not include declared ‘marine parks’ such as the Great Barrier Marine Park, which have been created for conservation purposes only, and are treated for statistical purposes as part of the natural environment.

Melbourne was the location of the first successful zoo in Australia — Melbourne Zoo being founded in 1857. Australia now has zoos and wildlife sanctuaries all over the country. As well as the four traditional zoos in Sydney, Melbourne, Adelaide and Perth, there are numerous wildlife parks and sanctuaries, some associated with urban zoos and other that are privately owned. Some of the better known zoological parks and sanctuaries are Healesville Sanctuary (60 km from Melbourne), the Western Plains Zoo (Dubbo), Werribee Zoological Park (Melbourne suburbs), The Territory Wildlife Park (Darwin),

Monarto Zoological Park (70 km from Adelaide) and Lone Pine Koala Sanctuary (Brisbane). The best known Marine Park in Australia is Seaworld at Surfers Paradise, Queensland.

The 1995 Survey of Attendances at Cultural Venues showed that over 3.1 million people aged 15 years and over visited a Zoo (as distinct from an animal or marine park) during the 12 months ended March 1995. Some of the other results from the survey are shown in table 11.5.

11.5 Attendance at zoos by persons aged 15 years and over, 1995

Attendees	No. (‘000)
Sex	
Male	1 392.5
Female	1 731.4
Total	3 123.9
Age	
15–24 years	719.5
25–34 years	864.1
35–44 years	706.6
45–54 years	396.1
55–64 years	237.2
65 years & over	200.4
Birthplace	
Australian born	2 249.3
Overseas born	874.6
Employment status	
Employed	2 062.0
Unemployed	192.1
Not in labour force	869.7

Source: ABS Survey of Attendance at Selected Cultural Venues, March 1995 (4114.0).

Libraries and archives

Libraries

The ABS used the National Culture–Leisure Industry Statistical Framework, which divides libraries into five types: the National and State Libraries, Public Libraries, Special Libraries, Libraries in Higher Education Establishments and School Libraries. All libraries in Australia can be classified into one of these categories.

National and State libraries are institutions housing collections which include books, newspapers, manuscripts, musical scores, maps, plans, film and video, optical data,

photographs, prints, sound recordings, computer data and software and other recorded material. They are responsible for the acquisition and conservation of copies of all significant publications published in the country or State and for functioning as a deposit library.

Public libraries are institutions funded by State and local government which are primarily involved in the provision of free library services to the population of a community or region. Their services include the collection, organisation and loan of library materials, provision of inter-library loans, reference information and, in most cases, extension services, to the general public. They also provide special services to various sections of the community, including children, multicultural communities, the disabled and the elderly.

Special libraries serve the information needs of all levels of government, commercial and professional enterprises, professional associations and other organised groups. They engage in activities primarily tailored to meet the needs of their parent organisation/institution including the collection, organisation and loan of library materials and of reference, information. They also provide referral, current awareness and research services to their specific clientele, dealing with specialised materials (e.g. maps, film, videos, photographs), serving professional (e.g. law, accountancy, medicine, architecture) and special organisations or groups (e.g. the blind), and utilisation of information resources world-wide. Special libraries are generally not open to the public.

Libraries in higher education establishments are dedicated to the collection and provision of access to library materials and library and information services. They operate primarily for the benefit of the staff and student body of tertiary or post-secondary parent organisations to which they are attached.

School libraries consist primarily of school library resource centres in primary and secondary schools. They contain collections of library material for the provision of library and information services for students and staff of the school and to the school community. Other services provided include the teaching of skills necessary to access the school library resources.

There is no legislation providing for a national centralised system of administration and/or organisation of libraries in Australia. However, the National Library of Australia exercises a prime responsibility of offering national leadership and coordination. As a result of a national colloquium of librarians in March 1993, the National Library accepted the responsibility of carrying forward and coordinating operational aspects of the Distributed National Collection concept at a national level.

The National Library is responsible for developing and maintaining the collection of printed material published in Australia, acquired under the provisions of the *Copyright Act 1968*, and as the national bibliographic centre compiles and publishes the Australian National Bibliography. The Library is the Australian National Centre for the International Serials Data System which assigns International Standard Serial Numbers (ISSN) to Australian Serials and is the Australian Agency for International Standard Book Numbers (ISBN).

National bookstock

As part of the operation of the National Public Lending Right Scheme, surveys of bookstocks of national, State and Territory and public libraries are conducted. Results of surveys for 1987-93 are shown in table 11.6.

11.6 National, State and public library bookstock (million)

Year	Bookstock
1988-89	26.8
1989-90	27.4
1990-91	27.9
1991-92	28.4
1992-93	29.1
1993-94	29.1

Source: Public Lending Right Committee.

Library attendances

The 1995 Survey of Attendances at Selected Cultural Venues provides data for persons aged 15 years of age and over who attended a national, State or local library at least once over the 12 month survey period. Table 11.7 shows that more than 5.4 million persons attended one of these libraries at least once during the 12 months ended March 1995.

11.7 Attendance at libraries(a), 1995

	No. ('000)
Sex	
Male	2 231.2
Female	3 171.9
Total	5 403.1
Age	
15-24 years	1 219.2
25-34 years	1 044.9
35-44 years	1 216.7
45-54 years	806.8
55-64 years	469.5
65 years & over	646.0
Birthplace	
Australian born	3 982.8
Overseas born	1 420.3
Employment status	
Employed	3 167.8
Unemployed	378.7
Not in labour force	1 856.6

(a) National, State or local library only.

Source: ABS Survey of Attendance at Selected Cultural Venues, March 1995 (4114.0).

Book reading and borrowing

A household survey conducted in November 1994 revealed that one person in three had borrowed books in the previous month. In the week before the interview, 14.9% of people aged 15 years and over had borrowed books. Table 11.8 shows that, of those people who had borrowed books in the last week, 87.1% had read books in that week. Almost a quarter of the people who said that they never borrow books had actually read books in the previous week.

11.8 Persons aged 15 years and over — book reading and borrowing, 1994

	Read books in the last week		Didn't read a book in the last week		Total	
	'000	%	'000	%	'000	%
When last borrowed a book						
In the last 7 days	1 750.8	87.1	258.8	12.9	2 009.5	100.0
In the last month (but not last week)	1 955.6	75.9	619.6	24.1	2 575.1	100.0
In the last 6 months (but not last month)	989.2	47.4	1 096.8	52.6	2 086.1	100.0
Over 6 months ago	721.8	38.0	1 175.7	62.0	1 897.4	100.0
Never	524.4	24.2	1 641.3	75.8	2 165.7	100.0
Can't remember/don't know	583.3	22.5	2 010.4	77.5	2 593.8	100.0
Can't read	..	..	130.8	100.0	130.8	100.0
Total	6 525.1	48.5	6 933.3	51.5	13 458.4	100.0

Source: Population Survey Monitor, November 1994, unpublished data.

The survey also revealed that of the books that could be identified, adult fiction was the most common type of book bought or borrowed, accounting for almost 44% of all the books

bought and borrowed in the week before the interview. Nearly 30% of the books bought or borrowed were Australian in origin (either written or published in Australia).

11.9 Books bought or borrowed last week(a): type of book by origin of book, 1994

Type of book	Origin of books				Total books bought or borrowed	
	Australian		Non-Australian			
	'000	%	'000	%	'000	%
Adult fiction	300.0	12.9	2 023.2	87.1	2 323.2	100.0
Poetry & plays	*20.7	*22.9	*69.7	*77.1	*90.4	100.0
Children's books	209.3	41.5	294.6	58.5	503.9	100.0
Biographies & autobiographies	185.4	50.3	183.2	49.7	368.5	100.0
History	*144.4	*44.8	178.1	55.2	322.5	100.0
Self help	264.0	50.4	260.2	49.6	524.1	100.0
Text book	257.5	39.5	394.9	60.5	652.4	100.0
Other non-fiction	177.0	32.5	367.2	67.5	544.2	100.0
Total books	1 558.3	29.2	3 770.9	70.8	5 329.2	100.0

(a) If a person bought/borrowed more than five books, only those books which were in the first five mentioned are included in this table.

Source: Population Survey Monitor, November 1994.

Archives

Archives are institutions whose primary function is the permanent preservation of unique records, selected because of their administrative, financial, legal or other information value. These records 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.

Australian Archives is the Commonwealth organisation, established by the *Archives Act 1983*, responsible for the broad management of the range of Commonwealth records. The Archive 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.

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.

Music and performing arts

The first inhabitants of Australia used music and dance for ceremony rather than entertainment. Throughout the country, the music of Aboriginal people was song. As far as can be ascertained, there was no traditional Aboriginal music for instruments alone, although song is almost invariably accompanied by a kind of percussive sound, usually made by some kind of wood struck together by the singers themselves. The great majority of Aboriginal songs also function as dance music. The Aboriginal people never performed to an audience in a European sense.

Although it is not formally recorded, the first European concert music heard in Australia was probably played by a Royal Marine band at the assembly on 7 February 1788, when the commission was read out appointing Phillip as Governor and Commander-in-Chief of the British colony of New South Wales.

Theatrical performance began in Australia on 4 June 1789, when Governor Phillip and a party of officers went to a convict hut to see George Farquar's play *The Recruiting Officer* performed by a party of convicts, but it was not until 9 June 1796 that the first opera was performed in a theatre — *The Poor Soldier*.

Today, Australia stands beside other nations as a cosmopolitan culture unique to ourselves. It contains elements of an indigenous past, European migration from settlement through to the present day, and more recently interaction with and migration from our Asian and Pacific neighbours. Our involvement in music and the performing arts has been a significant influence in the development of this culture.

Music covers all areas of the industry: composition; live performances ranging from the latest pop styles to classical instrumental,

vocal and orchestral forms; recording and publishing; studio and concert performances; and the marketing of sheet music.

The performing arts concentrate on opera and musical comedy, theatre in its various forms and the various styles of dance but also includes artists working as acrobats, clowns, magicians, comedians, revue artists, poetry readers, and other performance artists.

Music and performing arts organisations

An 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, and 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.

11.10 Music and performing arts organisations, 1991

	Opera & music theatre				Symphony orchestra, chamber & choral	Dance	Total all activities
	Theatre	Major musicals	Other				
Number of organisations							
Government subsidised	129	(a)	25	122	35	311	
Other	68	(a)	16	50	14	148	
Total	197	(a)	41	172	49	459	
Location of organisation							
New South Wales	64	(a)	14	59	13	150	
Victoria	48	(a)	6	42	13	109	
Queensland	22	(a)	7	29	10	68	
South Australia	23	(a)	5	15	2	45	
Western Australia	16	(a)	4	10	6	36	
Tasmania	10	(a)	n.a.	6	n.a.	19	
Northern Territory	3	(a)	n.a.	3	n.a.	7	
Australian Capital Territory	11	(a)	4	8	2	25	
Number of performances	24 613	2 084	941	2 736	3 739	34 113	
Number of attendances ('000)	3 453	2 126	585	1 220	1 108	8 492	
Total revenue (\$'000)	67 911	91 346	48 748	57 490	31 751	297 246	
Total expenses (\$'000)	67 910	68 457	50 119	57 512	31 694	275 691	

(a) Nature of major musical organisation data is not compatible with other data in table.

Source: *Music and Performing Arts, Australia, 1991 (4116.0)*.

Important national organisations

Three important national organisations in the music and performing arts area are The Australian Ballet, The Australian Opera and Musica Viva. There is no national symphony orchestra by name, although there have been six symphony orchestras run by the Australian Broadcasting Corporation and located in the States. The *Creative Nation* policy launched in late 1994 indicated that the Sydney Symphony Orchestra would become the 'flagship' symphony orchestra and have its

own separate organisation although no change of name was indicated.

The Australian Ballet was established in 1961 as the nation's classical ballet company. The company usually performs in most Australian capital cities every year and tours overseas occasionally. The Australian Ballet has an international reputation as one of the top ballet companies in the world.

11.11 The Australian Ballet — performances and employment

	1989	1990	1991	1992	1993	1994
Performances						
Theatres in Australia						
New South Wales	87	84	82	80	79	82
Victoria	60	61	62	60	61	60
Queensland	0	10	12	—	9	11
South Australia	12	7	10	10	9	10
Western Australia	7	—	—	9	—	—
Australian Capital Territory	6	—	6	—	10	—
Other venues in Australia						
Open air	1	1	—	—	1	1
ABC-TV simulcasts	1	2	—	—	1	1
Overseas	14	22	—	27	18	14
Total performances	188	187	172	186	188	179
Employment						
Dancers	60	60	60	64	65	65
Staff						
Artistic	8	7	8	8	8	9
Music	4	5	4	4	4	5
Production & theatre	29	27	29	30	27	29
Marketing & publicity	15	11	11	13	15	19
Administration & finance	20	21	20	21	21	20
Total employment	136	131	132	140	140	147

Source: Australian Ballet Foundation, Annual Reports.

The Australian Opera is the largest performing arts organisation in Australia. It receives more than \$30 million at the box office and

\$8.5 million in government grants to present 233 performances to an audience in excess of 302,000.

11.12 The Australian Opera — performances, attendances, and sources of income(a)

	1991	1992	1993	1994
Salaries & wages paid (\$m)	18.4	20.8	22.2	23.9
Performances	218	213	233	233
Attendances	292 486	285 376	286 376	302 852
Box office, donations & other income (\$m)	21.3	22.7	30.3	30.7
Government grants (\$m)	8.1	8.2	9.0	8.5

(a) Excludes operations of Australian Opera and Ballet Orchestra which became a subsidiary in 1993.

Source: The Australian Opera, Annual Reports, 1991-1994.

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 with members drawn from all over Australia, a State committee

structure and branch offices in capital cities. During 1994, it presented concerts to 373,524 patrons in Australia and an additional 71,380 overseas.

11.13 Musica viva audiences(a)

	1991	1992	1993	1994
New South Wales	261 342	231 793	245 191	256 715
Victoria	32 154	29 301	39 941	40 220
Queensland	12 895	5 991	9 824	8 681
South Australia	10 652	8 246	8 755	9 853
Western Australia	25 046	23 322	37 693	38 203
Tasmania	3 180	8 784	9 720	9 586
Australian Capital Territory	11 326	8 815	11 421	10 266
Australia	356 595	316 252	362 545	373 524
Overseas	87 200	93 850	27 300	71 380
Total	443 795	410 102	389 845	444 904

(a) Includes audiences at regional touring concerts, education concerts, subscription concerts and special events.

Source: Musica Viva.

ABC Concerts, one of the operations areas of the Australian Broadcasting Commission, manages a network of six State symphony orchestras making it the largest orchestral organisation in the world. The diverse activities of the orchestras reach into Australian life in many ways: through live concert presentations in major venues, free

open-air performances, regional touring, opera and ballet support, compact disc and audio cassette recordings and broadcasts on national radio and television. During 1993-94, ABC Symphony Orchestras gave a total of 676 concerts of all types (paid, schools and free) to an audience of 937,324 — an average of 1,386 per performance.

11.14 ABC symphony orchestras — number of performances and total attendances

Type of performance	1992-93		1993-94	
	Number of concerts	Total attendances	Number of concerts	Total attendances
Paid orchestral concerts	422	577 371	485	589 214
School concerts	186	72 548	169	87 554
Free concerts	33	355 715	22	260 556
Total	641	1 005 634	676	937 324

Source: Australian Broadcasting Corporation Annual Report, 1993-94.

Attendances at performances

Attendance at music performances is a significant aspect of the cultural life of Australians. Table 11.15 shows attendances at popular and classical music concerts in the 12 months to March 1995. Popular music

performances were the best attended with 3.8 million people aged 15 years and over attending at least one popular music concert, while 1.1 million attended at least one classical music concert.

11.15 Attendances at music performances, 1995 ('000)

Attendees	Popular music concert	Classical music concert
Sex		
Male	1 861.1	437.4
Female	1 929.7	1 424.6
Total	3 790.7	2 634.4
Age		
15-24 years	1 215.8	669.0
25-34 years	969.7	706.5
35-44 years	732.1	589.6
45-54 years	496.8	349.0
55-64 years	216.7	168.5
65 years & over	160.6	151.8
Birthplace		
Australian born	2 939.8	2 074.1
Overseas born	851.0	560.3
Employment status		
Employed	2 768.1	1 872.0
Unemployed	247.1	150.4
Not in labour force	775.6	612.0

Source: ABS Survey of Attendance at Selected Cultural Venues, March 1995 (4114.0).

The current Australian penchant for musicals is reflected in attendance numbers at the performing arts; 2.7 million people aged 15 years and over attended at least one

performance of musical theatre. Least attended were dance performances where 1.4 million attended at least one performance in the previous 12 months.

11.16 Attendances at the performing arts, 1995 ('000)

Attendees	Theatre			Other performing arts
	Dance performance	Musical	Other	
Sex				
Male	515.4	1 021.0	906.3	1 209.7
Female	892.0	1 701.1	1 430.0	1 424.6
Total	1 407.5	2 722.1	2 336.3	2 634.4
Age				
15-24 years	310.3	531.2	547.2	669.0
25-34 years	278.4	501.0	506.8	706.5
35-44 years	318.9	530.1	479.5	589.6
45-54 years	253.7	544.0	400.7	349.0
55-64 years	121.4	302.7	216.4	168.5
65 years & over	124.8	313.1	185.8	151.8
Birthplace				
Australian born	1 029.5	2 092.2	1 775.5	2 074.1
Overseas born	377.9	629.9	560.8	560.3
Employment status				
Employed	956.2	1 853.1	1 631.9	1 872.0
Unemployed	84.3	102.0	122.2	150.4
Not in labour force	366.9	767.0	582.2	612.0

Source: ABS Survey of Attendance at Selected Cultural Venues, March 1995 (4114.0).

Performances in hotels, clubs, etc.

In respect of the 1991–92 financial year, the ABS conducted a series of surveys on tourism-related industries, including hospitality industries and amusement and theme parks. These surveys provide detailed statistics about these industries generally but they also provide further data about performances by musicians and

performing artists other than musicians in the live entertainment area. Table 11.17 shows that there were 374,599 performances by musicians and a further 35,361 performances by performers other than musicians and that they were paid a total of \$194.7 million for their work.

11.17 Performances and payments for live entertainment, 1991–92

Type of business June 1992	Number of performances given			Payments made (\$'000)	
	Businesses offering live entertainment	Musicians	Other performing artists	To musicians	To other performing artists
Accommodation	328	45 108	935	13 057	4 314
Pubs, bars & taverns	1 988	151 336	12 829	79 927	3 567
Cafes & restaurants	1 036	53 999	5 819	13 484	1 448
Licensed clubs	1 868	108 202	7 514	64 055	8 399
Casinos	8	5 782	1 469	2 913	3 231
Amusement & theme parks	26	10 173	6 795	1 432	6 795
Total	5 254	374 599	35 361	174 867	19 838

Source: *Amusement and Theme Parks, Australia, 1991–92 (8675.0)* and *Hospitality Industries, Australia, 1991–92 (8674.0)*.

Film and video

Thomas Edison patented the first motion-picture camera, the Kinetograph, in 1891. Despite Australia's distance barrier, the marvellous invention of motion pictures saw films being screened in early September 1896 with a public film season as part of a variety bill opening in mid-September. In late September 1896, Marius Sestier opened the first picture show in Pitt Street, Sydney. Soon afterwards he started filming movies in Sydney; in November 1896, he filmed the Melbourne Cup horse race.

Video was a much later invention, being produced for the first time by the American Ampex firm in 1956. The first videocassette recorder was not produced until 1969 by the Sony company in Japan. However, videotape was used in commercial applications in television studios in Australia much earlier than that.

Today, Australia has a well-developed audiovisual production industry with an annual turnover in excess of \$1,000 million. The industry is composed, for the most part, of small, specialised companies. They produce programs ranging from feature films to sports coverage, documentaries and television commercials. A relatively small number of companies engage exclusively in film and television drama production; the majority

specialise in the production of commissioned programs such as commercials and corporate communications.

The major market for Australian audiovisual producers is the domestic television broadcast industry, with between 70% and 80% of all production being made primarily for this market. Export markets are important mainly for feature films and television dramas, some high budget documentaries and some commercials whose production costs generally exceed the revenues which they can achieve in domestic markets.

In addition, commercial and national television stations produce a large volume of programming, including news and current affairs, information and 'talk' programming, sports coverage, arts, light entertainment and children's programs with an estimated value in excess of \$550 million.

The Commonwealth government provides assistance and encouragement through measures such as the investment program of the Australian Film Finance Corporation and the Australian content regulations of the Australian Broadcasting Authority to enable the production of high cost dramas and documentaries to be undertaken.

11.18 Australian film industry — number and value of Australian titles(a)

Type of film	1989-90		1990-91		1991-92		1992-93		1993-94	
	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)	No.	Value (\$m)
Features	40	211	26	133	34	135	24	91	31	210
Mini-series	15	60	15	65	6	26	14	79	4	33
Series & serials	13	86	16	101	26	69	14	69	16	100
Telemovies	10	23	3	2	5	6	10	26	14	24
Total	78	380	60	301	71	237	62	266	65	367

(a) Includes co-productions, foreign titles shot in Australia and Australian titles shot overseas.
Source: Australian Film Commission.

Table 11.19 shows that the number of people employed in the motion picture industry (as recorded by the Population Census) increased by 16% in the ten year period 1981-91.

11.19 Number of people employed in the Australian film industry, 1981-1991

Industry	1981	1986	1991
Motion picture production	3 097	4 799	5 737
Motion picture hiring	744	675	3 097
Motion picture theatres	4 519	3 182	575
Total	8 360	8 656	9 691

Source: Census 1981, 1986, 1991.

Cinema attendances

The March 1995 Survey of Attendance at Selected Cultural Venues provided the first ABS figures for cinema attendances in Australia for persons aged 15 years and over. Over 8.7 million persons aged 15 and over attended a hardtop cinema, drive in or other public screening of a film at least once in the 12 months ending 31 March 1995.

11.20 Attendance at cinemas by persons aged 15 years and over, 1995

Attendees	No. ('000)
Sex	
Male	4 075
Female	4 658
Total	8 734
Age	
15-24 years	2 351
25-34 years	2 051
35-44 years	1 829
45-54 years	1 255
55-64 years	627
65 years & over	620

...continued

11.20 Attendance at cinemas by persons aged 15 years and over, 1995 — continued

Attendees	No. ('000)
Birthplace	
Australian born	6 720
Overseas born	2 014
Employment status	
Employed	5 954
Unemployed	522
Not in labour force	2 258

Source: ABS Survey of Attendance at Selected Cultural Venues, March 1995 (4114.0).

Video hiring and watching

The Retail and Services Census 1992 collected data on all shopfront locations classified as video hire outlets. A total of 3,181 video hire outlets was found to be operating in Australia employing 13,032 persons, mostly on a part-time basis. They achieved a turnover level of \$608 million.

11.21 Video hire outlets, 1991-92

	No.
Number of locations	3 181
Number of locations per 100 000 head of population	18
Persons employed at 30 June 1992	
Males	5 298
Females	7 734
Total	13 032
Wages & salaries paid (\$m)	89
Turnover (\$m)	608

Source: Australia's Culture No. 5: Video Hire, Cultural Ministers Council Statistical Advisory Group.

In a survey in February 1994, the ABS asked some questions about video watching. Just under 60% of households with children viewed a video in the two weeks prior to the survey while 39.5% of adults reported that they had viewed a video in that period. The survey also found that almost 5.1 million households (79.3% of all households in Australia) had a video recorder and that just under 58% had hired at least one video in the previous month.

Radio and television

The Australian Broadcasting Authority (ABA) is the independent federal statutory authority responsible for the regulation of the broadcasting industry including licensing, programming, ownership and control regulation and planning the broadcasting spectrum (both radio and television).

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'. 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% 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.

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.

For more information on radio and television broadcasting see *Chapter 20, Transport and communication*.

Australian commercial radio revenue increased by 3.5% to \$455.6 million in 1992–93 compared with the increase of 1.9% to \$440.4 million in 1991–92. Expenditure increased by 3.8% to \$415.0 million in 1992–93, reversing the 10.7% decrease to

\$399.8 million in 1991–92. The industry's broadcasting profit increased by 0.2% to \$40.7 million in 1992–93 compared with the \$40.6 million profit in 1991–92.

Broadcasting revenue for Australian commercial television stations increased by 9.5% to \$2,035.8 million in the year to 30 June, 1993. This compares with a 9.4% increase to \$1,858.8 million in the previous year. Expenditure increased by 14.0% to 1,923.2 million, reversing a 12.9% decrease to \$1,687.3 million in 1991–92. Despite the high increase in expenditure, the industry made a broadcasting profit of \$112.6 million compared with the \$171.4 million profit in 1991–92. This is only the second time since 1987–88 that commercial television made a broadcasting profit.

The number of people employed in radio and television stations as recorded by the Population Census shows a similar pattern for each — a rise between 1981 and 1986 and then a fall between 1986 and 1991. However, the end result (see table 11.21 below) shows the total number of persons employed in television stations in 1991 was less than that recorded in 1981.

11.22 Number of people employed in radio and television stations, 1981–1991

Industry	1981	1986	1991
Radio stations	5 510	6 524	5 634
Television stations	10 703	11 946	9 283

Source: Census 1981, 1986, 1991.

The Time Use Survey, 1992, provides an insight into how Australians spend their time listening to the radio and watching television. While people spend on average more than one and half hours a day listening to radio, during almost all of that time they are doing a more important (main) activity whereas for nearly 60% of the time people watch television, it is their main activity.

11.23 Average time spent listening to radio and watching television stations, 1992

Activity	Minutes per day	
	As a main activity	As part of all activities
Radio stations	4	101
Television stations	103	172

Source: Time Use Survey, 1992.

Training in the arts

Training in the arts in Australia covers a broad range of resources. Formal training is available through courses in TAFEs, universities and private institutions. A number of on-the-job training programs are also 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 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.

A number of national specialised education institutions have been established to provide training in cultural fields. For example, the Australian Film, Television and Radio School is the national training centre for the film and broadcasting industries. The National Institute of Dramatic Art (NIDA) is the national training school for 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 Australian Ballet School provides full-time training to the highest standard for young Australian dancers seeking a career in the classical dance profession.

Employment and participation in cultural activities

This section contains a selection of ABS statistical data which ranges over the whole spectrum of cultural industries and activities. More comprehensive data can be found in the publications listed in the Bibliography.

Employment in cultural occupations

According to 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% from the figure recorded in the 1986 Population Census — a 6.6% increase in the figures for males compared with a 24.1% 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 1986 to 1991. Architects and landscape architects recorded a fall of 4% despite a 26.9% 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% (males fell by 9.8% and females by 3.5%).

11.24 Number of persons in selected cultural occupations

Occupation group	1986			1991		
	Males	Females	Total	Males	Females	Total
Architects & landscape architects	8 456	968	9 424	7 786	1 228	9 014
Painters, sculptors & related professionals	1 262	854	2 116	1 528	1 379	2 907
Photographers	4 164	1 052	5 216	3 937	1 308	5 245
Designers & illustrators	6 923	6 483	13 406	9 194	8 099	17 293
Journalists	6 166	3 740	9 906	5 974	4 343	10 317
Authors & related professionals	970	936	1 906	1 395	1 454	2 849
Film, television & stage directors	2 444	823	3 267	2 782	1 018	3 800
Dancers & choreographers	216	463	679	270	553	823
Musicians, composers & related professionals	4 648	1 492	6 140	5 169	1 820	6 989
Actors & related professionals	1 295	830	2 125	1 312	939	2 251
Announcers	1 616	404	2 020	1 739	430	2 169
Performing arts support workers	4 898	1 486	6 384	4 325	1 434	5 759
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: Census 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% of the Australian population aged 15 years or more were involved in selected culture and leisure activities. Of those persons, 34.7% received some payment.

11.25 Persons involved in paid and unpaid culture and leisure activities in the 12 months to March 1993

	Paid involvement only ('000)	Unpaid involvement only ('000)	Paid & 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

...continued

11.25 Persons involved in paid and unpaid culture and leisure activities in the 12 months to March 1993 — *continued*

	Paid involvement only ('000)	Unpaid involvement only ('000)	Paid & unpaid involvement ('000)	Total persons involved ('000)	Persons with no involvement ('000)	Total persons ('000)	Participation rate (%)
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).

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 11.26 shows the average time spent per day by persons on selected cultural activities.

11.26 Average time spent on 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 & 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 & parlour games	3.1

...continued

11.26 Average time spent on main cultural activities, 1992 — *continued*

Activity	Average time spent per day in minutes
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 & 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.

Government funding for culture

Culture in Australia receives 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 for cultural funding of the Commonwealth and State/Territory governments for 1993–94 was \$2,256 million with the largest funding category being for radio and television broadcasting (\$780 million). Table 11.27 below shows the government outlays on culture for 1993–94.

While the largest amount of cultural funding for the Commonwealth government went to radio and television broadcasting (\$780.0 million), State government funding goes predominantly to national parks and

wildlife services (\$383.7 million). According to the latest figures available for local government funding (1992–93) as shown in table 11.28, its funding goes predominantly to library and archives (\$271.8 million).

11.27 Cultural funding by Commonwealth and State/Territory governments, 1993–94 (\$ million)

	Level of government		Total
	Commonwealth	States/Territories	
Public halls & civic centres	—	0.7	0.7
National parks & wildlife services	92.9	383.7	476.5
Zoological & botanical gardens	5.3	51.8	57.1
Libraries & archives	73.8	194.6	268.5
Literature & publishing	9.8	2.8	12.6
Museums	47.4	98.7	146.2
Art galleries	19.6	52.9	72.5
Visual arts/crafts & photography	14.1	9.1	23.2
Performing arts venues & arts centres	—	74.5	74.5
Music (excluding opera)	12.8	9.6	22.4
Other performing arts	32.8	36.1	68.8
Cultural heritage	30.5	31.9	62.4
Radio & television broadcasting	780.0	0.3	780.3
Film & video production	81.5	18.0	99.4
Administration of culture	22.6	20.5	43.1
Community cultural activities	29.0	9.7	38.6
Other culture n.e.c.	8.5	1.1	9.6
Total	1 260.5	995.8	2 256.3

Source: Unpublished ABS statistics.

11.28 Cultural funding by local governments, 1992–93 (\$ million)

	Level of funding
Public halls & civic centres	88.2
National parks & wildlife services	—
Zoological & botanical gardens	—
Libraries & archives	271.8
Literature & publishing	1.5
Museums	5.3
Art galleries	12.1
Visual arts/crafts & photography	2.3
Performing arts venues & arts centres	33.2
Music (excluding opera)	3.0
Other performing arts	6.4
Cultural heritage	25.1
Radio & television broadcasting	0.3
Film & video production	0.1
Administration of culture	5.6
Aboriginal & Torres Strait Islander cultural activities	0.3
Community cultural activities	2.6
Other culture n.e.c.	5.2
Total	463.0

Source: Cultural Funding in Australia 1992–93 published by Australia Council, Redfern Sydney.

Sport and recreation

A large proportion of Australians, regardless of social position, income and age, participate in some form of sporting activity. The impact of sport extends over a wide range of associated activities in community and commercial fields. Sport is a large industry in Australia encompassing not only participants but also employment within the sporting infrastructure; manufacture of apparel, equipment and other goods (e.g. trophies); tourism and support industries (e.g. printing, media). 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.

As with most aspects of culture and recreation, the Federal government has no overriding responsibility for sport and recreation. After spending many years after Federation having little to do with the promotion of recreation activities and sporting development and participation, the

Government now extensively funds building of facilities and the training and development of athletes for international competition.

The Sport and Recreation Ministers Council (SRMC) provides the major mechanism for liaison between the Commonwealth government, and State/Territory governments on matters concerned with sport and recreation in Australia. The Council is a forum for consultation and cooperation between the respective Governments, and its membership comprises the ministers with prime responsibility for sport and recreation.

The Australian Sports Commission is responsible for planning and coordinating Federal government sports funding. Incorporating the Australian Institute of Sport (AIS), the Commission conducts elite sports programs and provides leadership and long-term direction for community sports. The Elite Sports Program involves 21 sports — athletes with disabilities, 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 in which athletes are not all located in one centre but in various places across Australia. In June 1995 there were 566 scholarship holders in the scholarship sports program. This number is expected to reach almost 2,000 in the build-up to the Sydney 2000 Olympics.

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, squad and team

trainings and development programs. The knowledge and expertise of the sports science and medicine department in particular is in heavy demand, along with specialised advice from AIS coaches.

The Sports Commission's National Information Centre in Canberra 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.

Involvement in sport

In March 1993, an ABS survey of persons 15 years of age and over was conducted throughout Australia to obtain information about 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 one third of the Australian population aged 15 years and over were involved in sport, as players (3.1 million), non-players (0.5 million) or both players and non-players (0.9 million). More men than women were involved as players and as non-players.

Overall, 35% of males played sport compared to 23% of females, and at all ages a greater proportion of males than females played sport. Younger men and women were more likely to play sport than older men and women. 56% of men aged 15 to 24 played sport compared to 39% of women in the same age group. In the 25 to 34 age group 43% of men played sport, compared to 28% of women. 20% of men and 12% of women aged 65 and over played sport. In table 11.29 'all players' includes those players who have some non-playing involvement.

11.29 Persons involved in sport, March 1993

Age group (years)	Males		Females	
	All players	Non-players	All players	Non-players
15-24	55.5	1.3	39.4	1.9
25-34	42.5	3.1	28.1	4.2
35-44	32.3	8.1	20.7	9.1
45-54	25.0	6.8	14.8	4.6
55-64	21.1	3.5	14.5	1.1
65+	20.3	1.1	12.2	0.4
Total	35.3	4.1	23.1	3.8

Source: *Involvement in Sport, Australia, March 1993* (6285.0).

For those involved in sport solely as non-players, the 35 to 44 years age group had the highest participation rate (8% for males, 9% for females). Their most common activities were as administrators or committee members.

Only 213,300 persons received some payment for their involvement, less than 5% of the total number who are involved in sport

(4.5 million). 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. Note that in table 11.30 persons with several types of involvement were counted against type of involvement.

11.30 Paid and unpaid involvements in sport, March 1993

Type of involvement	Involvements ('000)			Participation rate (%)
	Paid	Unpaid	Total	
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

Participation in organised and social sporting activities is measured by a quarterly household survey, the Population Survey Monitor conducted by the ABS. This survey showed that in 1993-94 the most popular sport was golf, with 384,600 people participating in organised golf (3% of the population), and a further 128,000 participating in social golf (1% of the population).

The most popular organised sporting activities for men aged 15 and over were golf, outdoor cricket, basketball and Australian rules football. For women aged 15 and over,

netball, tennis, aerobics and golf were the most popular organised sporting activities. The most popular sports among those aged 55 and over were golf and lawn bowls.

In addition to organised sports, many people are involved in social sport and other recreational activities. In 1993-94 the most popular social sports were tennis and golf, followed by squash and lawn bowls. In February and May 1995 two of the most popular recreational activities were cycling (614,000 in February, 586,000 in May), and fishing (598,000 in February and 636,000 in May).

**11.31 Persons aged 15 years and over
who participated in organised sport,
1993-94
(^{'000})**

Sport	Males	Females
Aerobics	..	98.8
Australian rules football	151.4	..
Basketball	153.4	77.7
Cricket (indoor)	91.6	..
Cricket (outdoor)	193.9	..
Golf	303.9	80.7
Lawn bowls	115.3	75.2
Netball	..	287.1
Soccer (outdoor)	147.2	..
Squash	78.5	46.3
Swimming	..	60.9
Ten pin bowling	..	64.0
Tennis	137.1	162.1
Touch football	106.2	39.2

Source: Population Survey Monitor, 1993-94.

People who do not play sport

When people did not play sport, respondents in the survey were asked why not. The most common reason for not participating in sport, given by 39% of men and 43% of women was injury or illness. Men were more likely than women not to participate in sport because of a sports injury (19% compared to 13%) while women were more likely than men not to participate because of an illness. 27% of men and 20% of women said they had no time or were too busy to participate in sport.

**11.32 Main reasons for not
participating in sport, persons aged 18
years and over,
1993-94
(%)**

Reasons	Males	Females
Illness or injury	39.4	43.3
Sport injury	18.6	12.9
Illness	10.6	19.7
Other health problems	7.0	9.5
Work injury	3.2	1.2
No time/too busy	26.7	19.8
Weather problems	7.5	4.1
Transport	1.1	—
No child care	0.5	2.6
Expense/cost	0.5	0.9
Other	24.5	29.3
Total	100.0	100.0

Source: Population Survey Monitor 1993-94.

**Government funding for
recreation and sport**

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 Development. This Office is developing three key reports: a statistical framework which will define the scope of the sport and recreation industry; an occupation structure which will define the occupations within the sport and recreation industry; and a detailed report containing all available statistical data relevant to the industry. The Office has been responsible for funding a quarterly ABS household survey which collects information on participation in sport and recreation activities. A survey of businesses involved within the sport and recreation industry is being conducted in respect of 1994-95 to measure the economic value of the sport and recreation industry.

The Commonwealth Government provided \$90.9 million in 1994-95 for the Australian Sports Commission's programs and administration. This figure included the first instalment of \$20 million under the Olympic Athlete Program, which will see additional funding of \$135 million allocated to athlete preparation for the 2000 Sydney Olympics and Paralympics. The Sports Commission allocated these funds across the following programs: sports development and participation, elite athletes, facilities, sports science and medicine, the National Sport Information Centre, the Australian Coaching Council, sport research and corporate services. Sport funding for 1994-95 was distributed between 110 national sporting organisations, of which 16 received over \$1 million.

All State Governments have agencies with special responsibilities for sport and recreation. Local governments 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 1993-94 was \$1,946 million compared with \$2,067 million in 1992-93 and \$1,928 million in 1991-92.

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.

Religious practice and language are examples of cultural activity embedded in community life.

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. Table 11.33 provides a summary of the major religious affiliations at each census since 1911. At the 1991 Census, 74% of the population stated a Christian religion compared with 95.9% in 1911.

11.33 Major religious affiliations

Census year	Religious affiliation (%)								Total ('000)
	Christian				Non-Christian	No religion	Religion not stated	Other(a)	
	Anglican	Catholic	Other	Total					
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	11.0	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% 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% of the population, have grown from 1.4% in 1981. The number claiming such

allegiances have increased by 24,500 (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 Vietnam (20,740).

Table 11.34 shows the breakdown of religious groupings by the number and percentage of affiliates within each at the 1981 and 1991 Censuses, and the growth which occurred during that 10 year period.

11.34 Religious affiliation, 1981–1991

Census year	1981		1991		Growth (%)
	No. ('000)	Proportion (%)	No. ('000)	Proportion (%)	
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					
Buddhism	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 and 1981.

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 peoples, 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%. Altogether over 2.4 million people, most of whom were born overseas, spoke a non-English language at home.

11.35 Persons(a) who spoke a language other than English at home, 1991

Language spoken at home	Overseas born				Australian born			
	Males ('000)	Females ('000)	Persons ('000)	Persons (%)	Males ('000)	Females ('000)	Persons ('000)	Persons (%)
Aboriginal language	0.1	0.1	0.2	—	20.2	20.5	40.7	5.8
Arabic/Lebanese	50.5	46.0	96.5	5.5	25.2	24.4	49.6	7.1
Chinese(b)	114.2	114.3	228.5	13.1	10.9	9.5	20.4	2.9
Dutch	19.5	22.2	41.7	2.4	2.6	3.1	5.7	0.8
French	17.6	18.5	36.1	2.1	4.3	5.0	9.4	1.3
German	45.5	47.4	92.9	5.3	10.4	10.9	21.4	3.1
Greek	76.4	75.0	151.4	8.7	62.3	60.5	122.8	17.5
Hungarian	11.7	12.5	24.2	1.4	2.3	2.4	4.7	0.7
Italian	123.5	116.6	240.1	13.8	83.2	84.9	168.1	24.0
Macedonian	20.9	19.8	40.7	2.3	10.4	10.1	20.5	2.9
Maltese	18.8	18.3	37.1	2.1	7.5	7.2	14.8	2.1
Polish	26.0	29.0	55.0	3.2	4.8	4.9	9.6	1.4
Russian	8.6	10.8	19.4	1.1	2.1	2.1	4.2	0.6
Serbian/Croatian	31.1	29.2	60.2	3.5	14.2	13.7	27.9	4.0
Other Yugoslavian	14.4	13.7	28.1	1.6	4.7	4.7	9.3	1.3
Spanish	35.8	37.3	73.1	4.2	6.5	6.4	12.8	1.8
Turkish	14.7	13.7	28.3	1.6	4.8	4.7	9.6	1.4
Vietnamese	49.4	43.8	93.2	5.3	4.1	4.0	8.1	1.2
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 n.e.i.'. (c) Includes language not stated responses.

Source: Census 1991.

Within the group who spoke a language other than English at home, proficiency in English varied according to age and birthplace. Almost 91% of 5 to 24 year olds spoke English well or very well, compared with 60% 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% of this group spoke English well or very well, compared with 81% overall.

11.36 Proficiency in English of persons who spoke a language other than English at home, 1991

Proficiency in English	Age group (years)				Total
	5-24	25-44	45-64	>64	
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 who speak a language other than English(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 who speak a language other than English(a) ('000)	420 435	176 122	30 498	11 991	639 046

(a) Includes persons who stated that they speak a language other than English at home, but did not state how well they speak English.

Source: Census 1991.

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Overview of Australian industry

Introduction	353
Employment within industries	353
Industry contribution to Gross Domestic Product	354
Industry structure: classification, numbers and sizes of business units	356
Business operations and performance	358
Labour productivity	361
Industry concentration	361
Industry contribution to capital expenditure	362
Bibliography	362

Overview of Australian industry

Introduction

This chapter presents statistics on the structure and performance of the main broad industry sectors of the Australian economy and their relative contributions to overall economic activity in terms of employment, production and investment.

Tables 12.1 to 12.3 dissect the whole economy's employment and production by industry. The remaining tables provide more detailed indicators of economic activity by industry but are limited in scope to private employing and public trading businesses (i.e. non-employing businesses and general government organisations are excluded from tables 12.4 to 12.13).

The 1993 edition of the *Australian and New Zealand Standard Industrial Classification (ANZSIC) (1292.0)* has been used to classify the statistics presented in this chapter. They are presented at broad levels of classification, generally equating to ANZSIC division level. However, the label Private Community Services has been adopted in some cases to emphasise the fact that general government units have been excluded from the Economic Activity Survey (EAS), an important source of data for this overview.

While the statistics presented in this chapter provide the basis for comparisons of business performance across industries, care should be taken when comparing data in industry-specific chapters with the data in this chapter. Any differences in the frequency, scope, statistical unit and methodologies of the various collections used to compile the statistics should be taken into account when making such comparisons.

Employment within industries

The following table shows trend estimates of the number of persons employed, classified by industry, as reported in the Labour Force Survey. Smoothing seasonally adjusted series of estimates produces measures of trend, as shown here, by reducing the impact of the irregular component of the series. Trend series are used to analyse the underlying behaviour of the series over time. This smoothing technique enables estimates to be produced which include the latest quarter, but recent quarters are subject to revision as more data become available.

In general, the goods-producing industries such as Agriculture, Mining and Manufacturing and the utilities of Electricity, Gas and Water have experienced declining employment, in proportional terms. Employment in the service-providing industries has been increasing; particularly in Property and business services, Retail trade, Health and community services and Accommodation, cafes and restaurants.

Over the last five years, the Retail industry has taken the position as major employer from Manufacturing and continued to increase its lead as the industry employing most persons.

Broader discussion of employment changes over time is included as part of *Chapter 6, Labour*.

12.1 Employment within industries — annual trend average(a)

	1984-85(b)	1990-91	1991-92	1992-93	1993-94	1994-95
Employment ('000)						
Agriculture, forestry & fishing	405.5	436.1	409.4	406.3	407.5	404.9
Mining	94.0	95.7	89.2	86.7	89.4	86.0
Manufacturing	1 125.6	1 130.5	1 074.0	1 073.1	1 084.0	1 113.8
Electricity, gas & water	135.6	103.5	105.8	97.9	92.6	86.5
Construction	470.1	571.4	520.7	534.3	559.7	589.8
Wholesale trade	411.6	504.7	483.8	479.8	501.2	495.9
Retail trade	893.5	1 109.9	1 098.6	1 112.9	1 127.4	1 186.2
Accommodation, cafes & restaurants	224.5	322.6	342.1	335.8	348.6	376.5
Transport & storage	354.6	387.5	378.3	361.2	366.4	381.9
Communication	147.3	146.0	135.7	119.2	129.1	147.5
Finance & insurance	268.9	355.1	334.3	316.9	317.1	312.8
Property & business services	441.7	636.1	648.4	645.2	672.9	749.3
Government administration & defence	323.2	361.6	347.9	367.0	366.1	357.0
Education	443.4	526.0	531.1	548.0	552.2	555.3
Health & community services	518.6	647.9	662.9	654.9	672.3	719.7
Cultural & recreational services	118.6	150.9	164.6	154.7	168.1	189.6
Personal & other services	222.6	279.6	299.3	302.7	300.9	304.9
All industries	6 599.4	7 765.0	7 625.8	7 596.5	7 755.3	8 057.3
Proportion of all industries (%)						
Agriculture, forestry & fishing	6.1	5.6	5.4	5.3	5.3	5.0
Mining	1.4	1.2	1.2	1.1	1.2	1.1
Manufacturing	17.1	14.6	14.1	14.1	14.0	13.8
Electricity, gas & water	2.1	1.3	1.4	1.3	1.2	1.1
Construction	7.1	7.4	6.8	7.0	7.2	7.3
Wholesale trade	6.2	6.5	6.3	6.3	6.5	6.2
Retail trade	13.5	14.3	14.4	14.6	14.5	14.7
Accommodation, cafes & restaurants	3.4	4.2	4.5	4.4	4.5	4.7
Transport & storage	5.4	5.0	5.0	4.8	4.7	4.7
Communication	2.2	1.9	1.8	1.6	1.7	1.8
Finance & insurance	4.1	4.6	4.4	4.2	4.1	3.9
Property & business services	6.7	8.2	8.5	8.5	8.7	9.3
Government administration & defence	4.9	4.7	4.6	4.8	4.7	4.4
Education	6.7	6.8	7.0	7.2	7.1	6.9
Health & community services	7.9	8.3	8.7	8.6	8.7	8.9
Cultural & recreational services	1.8	1.9	2.2	2.0	2.2	2.4
Personal & other services	3.4	3.6	3.9	4.0	3.9	3.8

(a) Averages calculated on quarterly estimates. (b) Average for 1984-85 calculated on estimates from November 1984 to May 1985 since August 1984 data are not available.

Source: *The Labour Force Australia* (6203.0).

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 (GDP), as presented in the National Accounts. This is shown in percentage terms in table 12.2 below. Table 12.3 shows the gross product of each industry in value terms for a series of years. While the proportions in

table 12.2 are best calculated using data valued in current prices, trends in value aggregates, as in table 12.3, are best assessed in constant price terms, presently at average 1989-90 prices.

12.2 Industry gross product as a proportion of GDP, at current prices (%)

	1982-83	1983-84	1990-91	1991-92	1992-93	1993-94
Agriculture, forestry & fishing	3.6	4.9	3.3	3.0	3.2	3.1
Mining	6.4	6.6	4.8	4.2	4.2	3.8
Manufacturing	17.8	17.6	14.6	14.1	14.1	14.4
Electricity, gas & water	3.7	3.8	3.3	3.5	3.4	3.3
Construction	6.9	6.6	6.9	6.4	6.1	6.2
Wholesale trade	8.4	8.8	10.2	10.3	10.2	10.8
Retail trade	7.0	6.7	7.2	7.3	7.4	7.4
Accommodation, cafes & restaurants	1.7	1.6	2.0	2.0	2.0	1.9
Transport & storage	5.6	5.7	5.2	5.3	5.3	5.2
Communication	2.1	2.2	2.5	2.8	2.7	2.5
Finance & insurance	4.6	4.7	6.0	6.6	6.9	7.1
Property & business services	6.0	6.1	8.0	7.9	7.8	8.0
Government administration & defence	4.5	4.2	3.8	4.1	4.0	3.9
Education	5.2	4.8	4.7	4.9	5.1	5.0
Health & community services	5.5	5.1	5.5	5.7	5.7	5.5
Cultural & recreational services	1.9	1.9	2.0	2.1	2.0	2.1
Personal & other services	1.8	1.7	1.8	1.9	1.9	1.9
Ownership of dwellings	8.6	8.3	9.9	10.1	10.0	9.8
Import duties	1.2	1.2	0.9	0.9	0.8	0.8
Less Imputed bank service charge	2.5	2.6	2.5	3.0	3.1	2.7
All industries (GDP(I))	100.0	100.0	100.0	100.0	100.0	100.0

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

12.3 Gross product at average 1989-90 prices (\$ million)

Industry division	1982-83	1983-84	1991-92	1992-93	1993-94
Agriculture, forestry & fishing	9 835	14 093	15 097	15 897	16 347
Mining	9 781	10 617	16 800	16 999	17 295
Manufacturing	46 141	46 843	53 956	56 191	60 533
Electricity, gas & water	9 009	9 386	12 651	12 935	13 114
Construction	20 009	20 061	22 786	23 462	24 867
Wholesale trade	29 203	30 395	33 851	34 011	36 446
Retail trade	22 171	22 999	27 720	28 189	28 727
Accommodation, cafes & restaurants	5 190	5 274	6 929	6 797	7 085
Transport & storage	13 779	14 474	20 373	20 592	21 930
Communication	4 873	5 162	9 587	10 871	11 949
Finance & insurance	12 868	13 369	17 747	16 717	16 488
Property & business services	19 309	19 428	29 523	31 619	31 480
Government administration & defence	10 036	10 869	14 724	15 020	15 095
Education	12 406	12 901	17 066	18 384	18 999
Health & community services	13 600	14 202	20 453	20 786	21 253
Cultural & recreational services	5 426	5 770	7 362	7 687	8 265
Personal & other services	4 851	4 904	6 273	6 372	6 285
Ownership of dwellings	27 990	28 574	36 641	37 749	38 925
Import duties	2 398	2 560	3 904	4 268	4 534
Less Imputed bank service charge	6 443	7 052	8 202	8 070	7 546
All industries (GDP(P))	271 179	284 701	365 241	376 476	392 071

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

These tables indicate that the contribution to GDP from goods-producing industries (broadly, the first five industries in the table) has generally remained stable over the last three years while at a lower level than ten years earlier.

Manufacturing continues to be the most important industry, followed by Wholesale trade. In 1993-94 Manufacturing contributed 14.4% to GDP while Wholesale trade contributed 10.8%.

Mining has declined since the mid-1980s, when its share of activity was 6.6% of GDP, to 3.8% in 1993-94.

Finance and insurance, and Property and business services, have each grown steadily in share of GDP over this period.

GDP at average 1989-90 prices has increased by 44.6% over the period 1982-83 to 1993-94, with an increase of 4.1% between 1992-93 and 1993-94.

Industry structure: classification, 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 enterprise or any other legally recognised organisation which provides goods or services. 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.

Throughout this chapter the term 'business' refers 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.

The table below provides an overview of the structure of Australian public trading and private employing businesses in 1993-94 in terms of the number of operating businesses and the number of persons employed.

12.4 Businesses and employment, 1993-94

Industry division	Small & medium businesses		Large businesses		All businesses	
	No. of operating businesses	Employment ('000)	No. of operating businesses	Employment ('000)	No. of operating businesses	Employment ('000)
Agriculture, forestry & fishing(a)	113 874	347	..	..	113 874	347
Mining	1 845	16	99	59	1 944	75
Manufacturing	37 175	436	686	484	37 861	920
Electricity, gas & water supply	579	11	46	70	624	81
Construction	60 414	220	66	42	60 480	262
Wholesale trade	37 736	307	173	106	37 909	413
Retail trade	90 680	481	185	354	90 865	835
Accommodation, cafes & restaurants	25 486	275	158	104	25 643	379
Transport & storage	21 637	126	110	156	21 747	282
Communication services	737	6	5	108	742	114
Finance & insurance	19 167	76	320	217	19 487	293
Property & business services	93 877	418	210	118	94 087	536
Private community services(b)	45 956	334	276	179	46 232	513
Cultural & recreational services	13 097	79	59	36	13 155	115
Personal & other services	23 227	112	39	24	23 265	136
All industries	585 487	3 244	2 432	2 057	587 915	5 301

(a) As separate details not available for Large businesses, all businesses are classified as Small and medium businesses.

(b) Includes Education, Health services and Community services.

Source: *Business Operations and Industry Performance (8140.0)*.

For the purpose of these statistics, large businesses are defined as management units which employ 200 or more persons or have assets worth more than \$200 million.

Conversely, small and medium businesses are those management units which do not have assets worth more than \$200 million, and employ fewer than 200 persons.

Tables 12.4 to 12.7 show that, in 1993–94, small and medium businesses accounted for 99.6% of the total number of public trading and private employing businesses but only

accounted for 61% of the employment, 52% of the sales, 39% of the profits and 49% of the gross product of these businesses.

12.5 Sales of goods and services by industry and size, 1993–94

Industry division	Small & medium businesses		Large businesses		All employing businesses	
	\$m	%	\$m	%	\$m	%
Agriculture, forestry & fishing(a)	23 884	n.a.	..	..	23 884	..
Mining	6 468	20	26 302	80	32 770	100
Manufacturing	59 146	33	117 523	67	176 669	100
Electricity, gas & water supply	2 514	9	24 641	91	27 155	100
Construction	34 589	75	11 506	25	46 095	100
Wholesale trade	102 815	63	60 579	37	163 394	100
Retail trade	77 417	62	47 998	38	125 415	100
Accommodation, cafes & restaurants	15 926	74	5 615	26	21 541	100
Transport & storage	15 141	39	23 280	61	38 421	100
Communication services	684	4	16 399	96	17 083	100
Finance & insurance	6 058	35	11 150	65	17 208	100
Property & business services	27 716	73	10 160	27	37 876	100
Private community services(b)	12 270	75	4 018	25	16 288	100
Cultural & recreational services	4 690	50	4 645	50	9 335	100
Personal & other services	6 560	77	1 972	23	8 532	100
All industries	395 878	52	365 788	48	761 665	100

(a) As separate details are not available for Large businesses, all businesses are classified as Small and medium businesses.

(b) Includes Education, Health Services and Community Services.

Source: *Business Operations and Industry Performance (8140.0)*.

12.6 Operating profit before tax by industry and size, 1993–94

Industry division	Small & medium businesses		Large businesses		All employing businesses	
	\$m	%	\$m	%	\$m	%
Agriculture, forestry & fishing(a)	4 660	n.a.	..	..	4 660	..
Mining	1 087	20	4 440	80	5 527	100
Manufacturing	4 823	34	9 191	66	14 014	100
Electricity, gas & water	449	12	3 157	88	3 606	100
Construction	1 702	74	601	26	2 303	100
Wholesale trade	2 707	64	1 493	36	4 200	100
Retail trade	2 765	77	829	23	3 594	100
Accommodation, cafes & restaurants	804	114	-97	-14	707	100
Transport & storage	894	35	1 635	65	2 529	100
Communication	41	2	2 436	98	2 477	100
Finance & insurance	2 209	10	19 880	90	22 089	100
Property & business services	3 924	72	1 522	28	5 446	100
Private community services(b)	2 432	77	746	23	3 177	100
Cultural & recreational services	556	40	848	60	1 404	100
Personal & other services	537	79	145	21	682	100
All industries	29 590	39	46 825	61	76 415	100

(a) As separate details are not available for Large businesses, all businesses are classified as Small and medium businesses.

(b) Includes Education, Health Services and Community Services.

Source: *Business Operations and Industry Performance (8140.0)*.

Both the Economic Activity Survey (EAS) and the Australian national accounts measure overall economic activity, although the EAS is substantially narrower in scope and coverage. Differences also occur in the industry dissection of the two sets of statistics because

they rely on different units frameworks. A Technical Note, further discussing this topic, is included as Appendix 1 to *Business Operations and Industry Performance, Australia (8140.0)*.

12.7 Industry gross product by industry and size, 1993-94

Industry division	Small & medium businesses		Large businesses		All employing businesses	
	\$m	%	\$m	%	\$m	%
Agriculture, forestry & fishing(a)	10 117	n.a.	..	..	10 117	..
Mining	2 943	17	13 971	83	16 914	100
Manufacturing	20 155	37	34 923	63	55 078	100
Electricity, gas & water	1 111	8	13 361	92	14 472	100
Construction	8 420	74	2 905	26	11 325	100
Wholesale trade	13 752	67	6 847	33	20 599	100
Retail trade	12 229	62	7 373	38	19 602	100
Accommodation, cafes & restaurants	5 631	73	2 125	27	7 756	100
Transport & storage	5 301	33	10 670	67	15 971	100
Communication	328	3	10 764	97	11 092	100
Finance & insurance(b)	1 711	..	-2 637	..	-926	..
Property & business services	13 855	73	5 059	27	18 914	100
Private community services(c)	8 682	71	3 538	29	12 220	100
Cultural & recreational services	2 148	46	2 502	54	4 650	100
Personal & other services	2 137	70	899	30	3 036	100
All industries	108 520	49	112 300	51	220 820	100

(a) As separate details are not available for Large businesses, all businesses are classified as Small and medium businesses.

(b) Industry Gross Product for Finance and insurance is negative because it does not take account of implicit charges for financial services included in interest. (c) Includes Education, Health services and Community services.

Source: *Business Operations and Industry Performance* (8140.0).

Business operations and performance

Tables 12.8 and 12.9 present measures of business operations (in terms of income, expenditure and balance sheet information) by industry. The statistics relate only to public trading and private employing businesses. Table 12.10 shows a selection of performance ratios suitable for comparing performance across industries. All the data items listed are defined in *Business Operations and Industry Performance, Australia* (8140.0).

These tables also show the relative importance (based on financial measures) of various industries. The Finance and insurance industry accounted for nearly 29% of the operating profits and almost 34% of the net worth of all industries included. Based upon this measure, the next most important industry, Manufacturing, accounted for 18% of operating profits and 10% of net worth. Agriculture, forestry and fishing accounted for 6% of operating profits but 16% of net worth.

However, the relative performance of industries, like the relative performance of businesses, is best analysed by reference to a combination of performance ratios and level

estimates. Various ratios commonly used in financial analysis are included in table 12.10. These show, for example, that in 1993-94:

- industries which converted the highest proportion of their sales into profit (as represented by the profit margin) were Finance and insurance; Agriculture, forestry and fishing; and Mining;
- businesses in Private community services reported, on average, the highest return on assets;
- the industry which had the highest return on net worth was Construction; and
- industries which had the highest ability to service their debt charges from profits (as represented by the interest coverage ratio) were Private community services and Manufacturing.

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12.8 Financial transactions, 1993-94
(\$ million)

Industry	Less		Plus				Less		Earnings before interest & tax	Less	Operating profit before tax
	Sales of goods & services	Cost of sales	Trading profit	Interest income	Other operating income	Labour costs	Depreciation	Other operating expenses		Interest expenses	
Agriculture, forestry & fishing	23 884	14 271	9 613	239	775	2 714	1 532	349	6 032	1 372	4 660
Mining	32 770	16 466	16 304	439	830	4 738	3 753	2 282	6 800	1 273	5 527
Manufacturing	176 669	122 786	53 883	563	1 961	32 133	5 264	2 647	16 363	2 349	14 014
Electricity, gas & water	27 155	14 214	12 941	176	726	3 785	3 042	197	6 819	3 213	3 606
Construction	46 095	35 498	10 597	153	910	7 679	787	319	2 875	572	2 303
Wholesale trade	163 394	143 018	20 376	609	1 202	13 384	1 799	859	6 145	1 945	4 200
Retail trade	125 415	105 893	19 522	307	924	14 185	1 202	507	4 859	1 265	3 594
Accommodation, cafes & restaurants	21 541	14 001	7 540	219	849	5 920	817	251	1 620	913	707
Transport & storage	38 421	25 268	13 153	247	2 788	9 494	2 416	437	3 841	1 312	2 529
Communication	17 083	6 180	10 903	94	165	5 423	2 334	169	3 236	759	2 477
Finance & insurance	17 208	18 179	-971	44 984	16 980	11 422	1 414	1 879	46 278	24 189	22 089
Property & business services	37 876	19 188	18 688	2 737	3 041	13 222	1 281	698	9 265	3 819	5 446
Private community services(a)	16 288	8 318	7 970	234	8 019	11 612	744	261	3 606	429	3 177
Cultural & recreational services	9 335	4 996	4 339	66	598	2 263	557	482	1 701	297	1 404
Personal & other services	8 532	5 744	2 788	161	1 387	2 906	435	123	872	190	682
All Industries	781 666	554 020	207 646	51 228	41 155	140 880	27 377	11 460	120 312	43 897	76 415

(a) Includes Education, Health services and Community services.

Source: *Business Operations and Industry Performance (8140.0)*.

12.9 Industry balance sheet, 1993-94 (\$ million)

Industry	Assets			Liabilities			Net worth
	Current	Non-current	Total	Current	Non-current	Total	
Agriculture, forestry & fishing	21 353	98 448	119 801	7 917	10 060	17 977	101 824
Mining	13 814	51 683	65 497	12 379	20 066	32 445	33 052
Manufacturing	59 376	88 031	147 407	51 831	33 937	85 768	61 639
Electricity, gas & water	6 751	88 074	94 825	10 236	31 448	41 684	53 141
Construction	12 565	11 260	23 825	12 834	6 261	19 095	4 730
Wholesale trade	55 287	26 741	82 028	44 152	13 728	57 880	24 148
Retail trade	19 456	17 892	37 348	17 707	8 321	26 028	11 320
Accommodation, cafes & restaurants	5 352	20 895	26 247	7 650	7 828	15 478	10 769
Transport & storage	9 642	42 259	51 901	11 763	18 462	30 225	21 676
Communication	5 263	20 996	26 259	5 764	7 395	13 159	13 100
Finance & insurance	..	..	840 438	..	..	630 739	209 699
Property & business services	39 852	71 980	111 832	35 966	29 029	64 995	46 837
Private community services(a)	6 632	20 559	27 191	6 273	6 111	12 384	14 807
Cultural & recreational services	2 962	10 432	13 394	2 788	4 378	7 166	6 228
Personal & other services	3 274	8 249	11 523	2 510	2 626	5 136	6 387
All industries	..	..	1 679 516	..	..	1 060 159	619 357

(a) Includes Education, Health services and Community services.

Source: *Business Operations and Industry Performance (8140.0)*.

12.10 Industry performance ratios(a), 1993-94

Industry	Profit margin (%)	Return on assets (%)	Return on net worth (%)	Long term debt to equity (times)	Current ratio (times)	Interest coverage (times)
Agriculture, forestry & fishing	18.7	3.9	4.6	0.1	2.7	4.4
Mining	16.2	8.4	16.7	0.6	1.1	5.3
Manufacturing	7.8	9.5	22.7	0.6	1.1	7.0
Electricity, gas & water	12.9	3.8	6.8	0.6	0.7	2.1
Construction	4.9	9.7	48.7	1.3	1.0	5.0
Wholesale trade	2.5	5.1	17.4	0.6	1.3	3.2
Retail trade	2.8	9.6	31.7	0.7	1.1	3.8
Accommodation, cafes & restaurants	3.1	2.7	6.6	0.7	0.7	1.8
Transport & storage	6.1	4.9	11.7	0.9	0.8	2.9
Communication	14.3	9.4	18.9	0.6	0.9	4.3
Finance & insurance	27.9	2.6	10.5	..	..	1.9
Property & business services	12.5	4.9	11.6	0.6	1.1	2.4
Private community services(b)	12.9	11.7	21.5	0.4	1.1	8.4
Cultural & recreational services	14.0	10.5	22.5	0.7	1.1	5.7
Personal & other services	6.8	5.9	10.7	0.4	1.3	4.6
All industries	8.9	4.5	12.3	..	..	2.7

(a) Performance ratio derivations: Profit margin = operating profit before tax * 100 / (sales of goods and services + interest income + Other operating income); Return on assets = operating profit before tax * 100 / total assets; Return on net worth = operating profit before tax * 100 / net worth; Long term debt to equity = non-current liabilities / net worth; Current ratio = current assets / current liabilities; Interest coverage = earnings before interest & tax / interest expenses. (b) Includes Education, Health services and Community services.

Source: *Business Operations and Industry Performance (8140.0)*.

Labour productivity

Changes in the number of hours worked 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 hours worked over time. However, structural reform or increased use of technology within an industry may 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.

12.11 Indexes of gross product at average 1989–90 prices per hour worked, by industry(a)
(Reference base year 1989–90 = 100.0)

Industry division	1984–85	1989–90	1990–91	1991–92	1992–93	1993–94
Agriculture, forestry & fishing	97.8	100.0	106.7	106.9	113.4	116.8
Mining	92.8	100.0	112.8	122.1	127.4	120.6
Manufacturing	88.6	100.0	103.5	110.3	113.9	119.6
Electricity, gas & water	66.7	100.0	108.5	107.8	120.3	126.1
Construction	106.9	100.0	101.2	102.2	99.8	100.1
Wholesale trade	102.4	100.0	90.7	93.0	93.4	93.4
Retail trade	108.8	100.0	99.5	104.6	105.7	107.5
Accommodation, cafes & restaurants	102.9	100.0	94.3	90.9	92.3	91.4
Transport & storage	92.1	100.0	100.3	106.7	111.5	115.0
Communication	67.7	100.0	103.4	119.4	151.5	148.8
Cultural & recreational services	119.3	100.0	107.8	100.9	112.6	109.4
All selected industries	97.1	100.0	100.2	102.3	104.9	106.8

(a) Estimates of gross product per hours worked are not presented for six industries: Finance and insurance; Property and business services; Government administration and defence; Education; Health and community services; and Personal and other services, because the estimates of gross product at average 1989–90 prices are derived using a methodology which uses input data as indicators of output

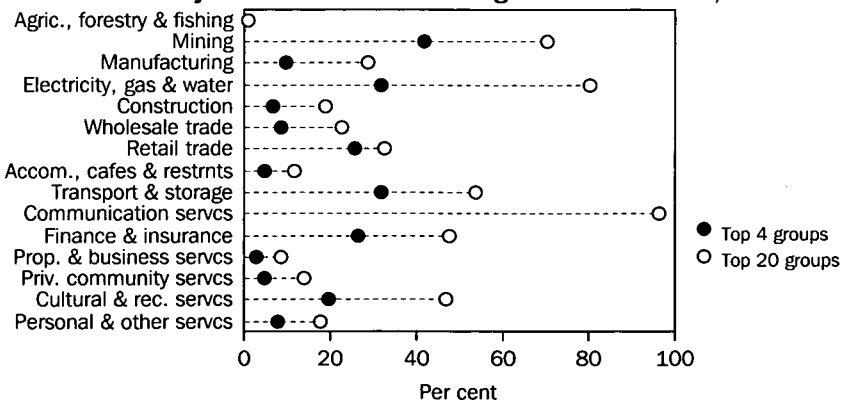
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

Industry concentration

Industry concentration ratios show the proportion of economic activity concentrated among the largest enterprise groups operating in each industry. For example, the

following graph shows the market share, in terms of sales of goods and services, attributable to the top 4 and top 20 enterprise groups operating in each industry.

12.12 Industry concentration - sales of goods and services, 1993-94



Source: Business Operations and Industry Performance (8140.0).

These percentages have not changed significantly over the past four years. Industries which have become slightly more concentrated include Mining, Transport and storage, and Personal and other services. Industries which have become slightly less concentrated include Construction and Communication.

Industry contribution to capital expenditure

The following table shows estimates of the level of private expenditure on capital assets (non-dwelling structures and equipment) by industry, providing a general indication of trends in productive capacity.

12.13 Private gross fixed capital expenditure at average 1989-90 prices (\$ million)

Industry division	1983-84	1990-91	1991-92	1992-93	1993-94
Agriculture, forestry & fishing	4 049	2 036	2 215	2 436	2 303
Mining	3 642	5 421	5 056	6 281	6 427
Manufacturing	5 841	6 982	6 609	7 005	6 992
Electricity, gas & water	88	134	91	471	726
Construction	1 530	1 813	1 474	1 511	2 090
Wholesale trade	2 114	2 395	1 847	1 915	2 115
Retail trade	2 093	2 648	2 761	2 835	2 776
Accommodation, cafes & restaurants	1 101	2 453	1 613	1 122	1 244
Transport & storage; Communication	2 258	2 240	1 720	2 554	2 870
Finance & insurance	1 619	2 907	3 619	2 615	2 675
Property & business services	2 262	6 517	4 480	4 180	4 871
Education	254	378	339	356	414
Health & community services	603	890	984	1 189	1 255
Cultural & recreational services	387	695	703	490	617
Personal & other services	149	415	418	367	428
Ownership of dwellings	14 944	16 519	16 268	18 364	20 548
Total (excluding real estate transfer expenses)	42 934	54 443	50 197	53 691	58 351
Real estate transfer expenses	5 022	5 353	5 881	5 932	6 566
Total	47 956	59 796	56 078	59 623	64 917

Source: Australian National Accounts: Capital Stock (5221.0).

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Tourism

Introduction	365
Tourism	365
Economic importance	365
International travel	366
International visitor expenditure	373
Domestic travel	373
Tourist accommodation	374
Tourism viewed as an industry	376
Inbound tourism	377
Overseas tourism marketing expenditure	377
Australian Tourist Commission	377
Bibliography	378

Tourism

Introduction

Tourism encompasses most 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.

Tourism

Economic importance

Just as tourism is a dominant force in the global economy, it is also one of Australia's largest and most dynamic sectors of commerce. 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 expenditure by tourists directly and indirectly contributed 6.6% to Gross Domestic Product in 1993–94 and accounted for some 500,000 jobs (6.6% of total employment).

In 1993–94 total expenditure derived from tourism was around \$43,600 million, of which \$33 million was attributed to domestic tourism. Foreign exchange earnings from international tourism to Australia were estimated to be about \$10,600 million. This amounted to about 12% of Australia's total current account credits.

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% 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% 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 but there was slight increase to 211.4 million in 1993–94.

The number of international visitors to Australia increased at a rate of 25% per annum from 1984 to 1988. However, 1989 saw a 7.5% 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% to 2.2 million in 1990 and thereafter increased to new record levels of 2.4 million in 1991, 2.6 million in 1992, 3.0 million in 1993 and 3.4 million in 1994, with annual growth rates of 7.0, 9.8, 15.1 and 12.2% 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 as long-term or short-term on the basis of 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*.

Statistics of short-term arrivals and departures are given below. Statistics of permanent and long-term movement are shown in *Chapter 5, Demography*.

Short-term movement comprises 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 respectively.

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, 1981-1994

	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	2 996 200	2 931 000	2 267 100	2 215 200
1994	3 361 700	3 314 200	2 354 300	2 302 500

Source: *Overseas Arrivals and Departures, Australia, 1994 (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 presented 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, 1994

	Overseas visitors		Australian residents	
	Arriving	Departing	Departing	Returning
January	250 500	327 400	149 900	275 000
February	304 300	279 100	150 300	159 600
March	307 400	302 200	192 000	158 200
April	255 100	276 400	185 100	170 700
May	214 900	250 400	184 500	157 800
June	230 900	217 400	228 800	167 700
July	282 500	239 400	219 000	240 800
August	265 400	298 000	180 000	190 400
September	254 000	236 400	241 500	214 800
October	301 600	272 200	184 300	254 200
November	311 000	311 500	174 600	173 100
December	384 000	303 900	264 500	140 300
Total(a)	3 361 700	3 314 200	2 354 300	2 302 500

(a) Differences between the sums of components and totals are due to rounding.

Source: *Overseas Arrivals and Departures, Australia, 1994 (3401.0)*.

In 1994, the majority of Australian residents departing for short-term visits abroad intended to stay for under three weeks (52%). Residents intending to stay abroad for under two months accounted for 80% of Australian residents departing for short-term visits (table 13.3). Of short-term visitors to Australia, 61% intended to stay under two weeks; 90% intended to stay under two months (table 13.4).

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. Tables 13.6 and 13.7 provide statistics on short-term travellers classified by country.

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.

13.3 Short-term travellers — departures of Australian residents, 1994

Intended length of stay	Main purpose of journey						Total(a)
	Visiting friends or relatives	Holiday	Convention/conference	Business	Employment	Other & not stated	
Under 1 week	22 900	75 300	14 100	118 300	3 300	11 900	245 800
1 week & under 2 weeks	62 000	345 900	28 200	113 800	3 200	24 500	577 600
2 weeks & under 3 weeks	73 000	225 100	12 300	63 700	3 300	15 900	393 400
3 weeks & under 1 month	64 100	113 500	5 900	27 000	4 000	9 000	223 600
1 month & under 2 months	163 300	202 300	4 800	39 900	6 100	17 700	434 000
2 months & under 3 months	75 100	79 500	1 100	16 600	4 500	8 800	185 600
3 months & under 6 months	66 400	60 200	300	16 400	10 100	11 700	165 200
6 months & under 12 months	34 400	41 900	100	12 500	21 100	19 000	129 100
Total(a)	561 200	1 143 700	66 900	408 300	55 700	118 600	2 354 300

(a) Differences between the sums of components and totals are due to rounding.

Source: *Overseas Arrivals and Departures, Australia, 1994 (3404.0)*.

13.4 Short-term travellers — arrivals of overseas visitors, 1994

Intended length of stay	Main purpose of journey						Total(a)
	Visiting friends or relatives	Holiday	Convention/conference	Business	Employment	Other & not stated	
Under 1 week	50 800	691 600	19 600	141 300	3 600	93 800	1 000 600
1 week & under 2 weeks	103 900	777 600	30 500	100 600	4 500	34 200	1 051 300
2 weeks & under 3 weeks	102 100	247 000	10 300	37 600	1 000	10 600	408 700
3 weeks & under 1 month	78 600	120 000	2 200	9 300	400	5 200	215 400
1 month & under 2 months	149 900	153 500	1 700	15 400	2 300	12 600	335 400
2 months & under 3 months	47 000	39 500	300	6 400	1 400	7 900	102 500
3 months & under 6 months	49 000	43 100	200	6 100	3 100	17 800	119 300
6 months & under 12 months	23 700	37 100	100	5 300	10 700	48 700	125 600
Not stated	—	—	—	—	—	3 000	3 000
Total(a)	605 000	2 109 000	64 900	321 900	27 000	150 500	3 361 700

(a) Differences between the sums of components and totals are due to rounding.

Source: *Overseas Arrivals and Departures, Australia, 1994 (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, 1994 (%)

	Country of residence							Total
	USA & Canada	Japan	Other Asia	New Zealand	UK & Ireland	Other Europe	Other countries	
New South Wales	29	38	41	42	39	28	49	37
Victoria	20	7	22	8	11	16	17	16
Queensland	28	40	14	33	23	27	19	24
South Australia	7	2	3	3	5	7	4	4
Western Australia	7	6	14	9	15	10	5	11
Tasmania	3	1	1	1	1	2	2	2
Northern Territory	5	5	1	2	4	8	2	4
Australian Capital Territory	1	1	5	2	1	2	3	2
Australia	100	100	100	100	100	100	100	100

Source: *Bureau of Tourism Research, International Visitor Survey, 1994*.

13.6 Short-term travellers — arrivals of overseas visitors, 1994

Country of residence	Intended length of stay				Total(a)(b)
	Under 1 week	1 week & under 1 month	1 month & under 3 months	3 months & under 12 months	
Oceania & Antarctica					
Fiji	5 700	6 700	4 300	2 600	19 500
New Caledonia	5 700	12 400	1 600	400	20 200
New Zealand	160 200	266 200	37 900	15 900	480 400
Papua New Guinea	16 500	16 800	5 300	3 400	41 900
Other	7 300	9 600	3 900	3 400	24 300
Total(b)	195 400	311 800	53 100	25 700	586 200
Europe					
The former USSR & former Yugoslav Republics	1 200	5 300	2 600	2 800	12 000
France	6 800	15 600	8 600	3 600	34 500
Germany	15 300	49 700	47 400	10 200	122 700
Greece	900	1 600	2 500	2 000	7 000
Ireland	800	5 000	5 300	3 900	15 200
Italy	3 800	17 200	11 300	4 300	36 700
Netherlands	2 700	10 900	12 700	4 700	30 900
Switzerland	4 400	11 700	13 600	6 600	36 400
United Kingdom	31 700	145 800	110 500	46 900	335 300
Other	9 800	40 400	25 600	14 700	90 600
Total(b)	77 500	303 200	240 000	99 700	721 200
South-east Asia					
Indonesia	37 600	50 300	8 300	9 400	105 700
Malaysia	31 200	46 400	9 200	8 100	95 100
Philippines	5 200	9 000	3 600	3 700	21 700
Singapore	58 500	112 800	9 600	6 700	187 600
Thailand	36 800	22 300	3 700	3 900	66 800
Other	1 700	5 400	1 600	2 300	10 900
Total(b)	171 000	246 200	35 900	34 100	487 800
North-east Asia					
Hong Kong	19 200	71 900	10 500	7 800	109 500
Japan	343 600	348 800	11 500	17 000	721 100
Other	119 300	136 100	12 400	17 500	285 800
Total(b)	482 100	556 800	34 400	42 300	1 116 400
Southern Asia					
India	1 800	5 200	2 200	2 800	12 100
Other	700	3 300	1 800	1 800	7 600
Total(b)	2 500	8 500	4 000	4 600	19 600
The Americas					
Canada	5 700	26 600	14 200	7 700	54 300
USA(c)	52 800	184 200	36 100	16 300	289 700
Other	2 900	8 800	3 100	2 800	17 600
Total(b)	61 400	219 700	53 400	26 900	361 600
Africa (excl. North Africa)					
South Africa	5 800	13 600	7 500	3 300	30 300
Other	2 000	5 300	3 600	1 500	12 300
Total(b)	7 800	18 900	11 100	4 800	42 600
Middle East & North Africa					
	2 400	9 100	5 800	6 500	23 900
Total(d)	1 000 600	1 675 400	437 900	244 800	3 361 700

(a) Includes not stated. (b) Differences between sums of components and totals are due to rounding. (c) Includes America undefined. (d) Includes other and not stated.

Source: Overseas Arrivals and Departures, Australia, 1994 (3401.0).

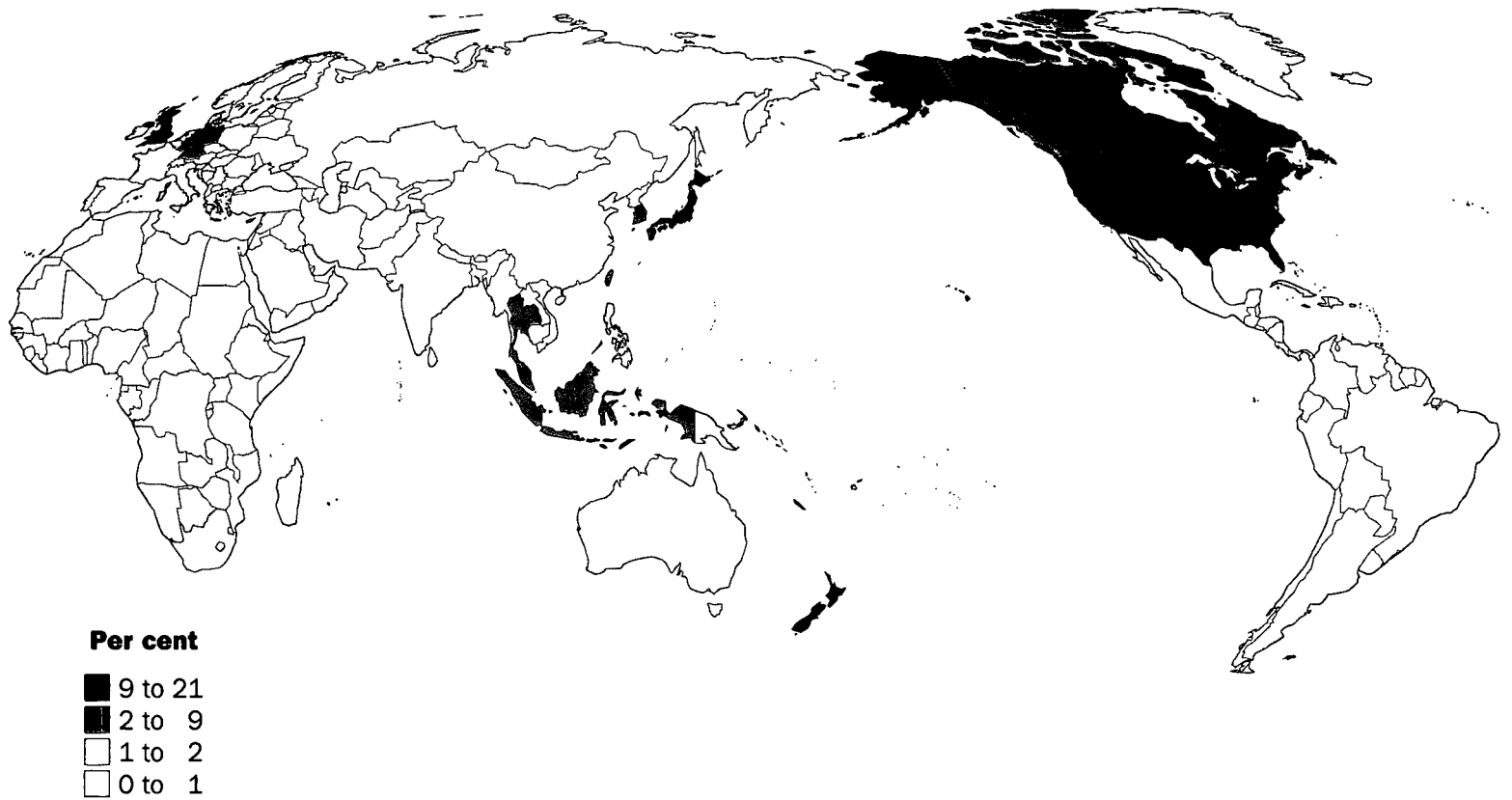
13.7 Short-term travellers — departures of Australian residents, 1994

Country of intended stay	Intended length of stay			Total(a)(b)
	Under 1 month	1 month & under 3 months	3 months & under 12 months	
Oceania & Antarctica				
Fiji	74 100	6 100	2 800	82 900
New Caledonia	14 000	400	300	14 700
New Zealand	315 900	28 600	8 800	353 300
Papua New Guinea	23 400	6 600	5 000	35 000
Other	57 500	5 400	2 600	65 600
Total(b)	484 800	47 200	19 500	551 500
Europe				
The former USSR & former Yugoslav Republics	2 900	10 900	7 500	21 300
France	10 400	13 300	4 200	27 900
Germany	11 600	14 800	5 900	32 300
Greece	4 000	14 700	15 200	33 800
Ireland	3 000	8 400	2 100	13 600
Italy	10 600	22 600	11 900	45 100
Netherlands	4 000	7 600	2 800	14 300
Switzerland	4 500	4 400	1 500	10 400
United Kingdom	67 500	134 400	52 600	254 500
Other	13 900	29 000	16 600	59 500
Total(b)	132 300	260 100	120 300	512 700
South-east Asia				
Indonesia	189 000	17 700	7 500	214 200
Malaysia	56 100	19 300	9 100	84 500
Philippines	27 300	15 900	4 100	47 300
Singapore	75 100	9 900	6 700	91 700
Thailand	58 500	8 600	4 800	71 800
Other	13 600	21 400	7 400	42 400
Total(b)	419 500	92 800	39 500	551 800
North-east Asia				
Hong Kong	78 200	29 300	23 000	130 400
Japan	30 500	5 500	6 600	42 600
Other	43 400	25 700	11 900	81 100
Total(b)	152 000	60 500	41 600	254 100
Southern Asia				
India	9 500	12 600	4 900	27 000
Other	7 400	9 100	3 000	19 600
Total(b)	17 000	21 700	7 900	46 600
The Americas				
Canada	16 400	16 500	6 500	39 500
USA(c)	184 800	78 200	25 200	288 300
Other	6 000	8 200	6 200	20 400
Total(b)	207 300	102 900	37 900	348 100
Africa (excl. North Africa)				
South Africa	6 600	6 400	2 700	15 700
Other	5 900	5 800	3 100	14 700
Total(b)	12 500	12 200	5 700	30 400
Middle East & North Africa				
	9 700	21 000	21 000	51 700
Total(d)	1 440 400	619 600	294 300	2 354 300

(a) Includes not stated. (b) Differences between sums of components and totals are due to rounding. (c) Includes America undefined. (d) Includes other and not stated.

Source: Overseas Arrivals and Departures, 1994 (3404.0).

13.8 Country of residence of overseas visitors to Australia, 1994



13.9 Overseas destination of Australian travellers, 1994



Per cent

- More than 9
- 2 to 9
- 1 to 2
- Less than 1

International visitor expenditure

Estimates of 1994 expenditure in Australia by country of residence are shown in table 13.10. Japanese tourists had the highest average expenditure per day at \$197 in 1994 but had the shortest average length of stay at eight days, whereas visitors from the United

Kingdom and Ireland had the lowest expenditure per day at \$43 but had the longest average length of stay of 45 days. The average length of stay of all international visitors was 24 days while the average daily expenditure in Australia was \$79.

13.10 International visitors(a), 1994

	Country of residence							All countries
	USA & Canada	Japan	Other Asia	New Zealand	UK & Ireland	Other Europe	Other countries	
Average total expenditure (\$)(b)	1 939	1 645	2 191	1 027	1 952	2 600	1 934	1 886
Average stay (days)	25	8	24	17	45	38	28	24
Average expenditure per day (\$)(b)	77	197	90	60	43	69	68	79
Total nights in Australia (million)	8	6	20	8	15	13	5	74

(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*, 1994.

Domestic travel

In 1993–94, the main purposes of domestic trips were pleasure or holiday (39%), visiting friends or relatives (29%), and business (18%). The main mode of transport used was private vehicle (78%). The mean length of a trip by domestic tourists was 4.4 nights in 1993–94 (table 13.11).

Table 13.12 shows that the main destination of domestic travellers was New South Wales, followed by Queensland. Domestic travel in Australia is dominated by intrastate travel which accounted for 74% of all domestic trips undertaken in 1993–94.

13.11 Summary of person trips and nights away(a), 1993–94

State/Territory of origin	Estimated population as at 30 June 1994 ('000)	Person trips ('000)	Average trips per person	Total nights away ('000)	Nights away per person trip
New South Wales	4 761	14 280	3	61 926	4
Victoria	3 536	11 235	3	47 767	4
Queensland	2 489	10 199	4	43 703	4
South Australia	1 168	3 803	3	17 298	5
Western Australia	1 318	5 250	4	25 568	5
Tasmania	366	1 618	4	6 268	4
Northern Territory	124	383	3	3 018	8
Australian Capital Territory	234	1 345	6	5 826	4
Total(b)	13 997	48 113	3	211 373	4

(a) For persons aged 15 years and over. (b) Total includes 'not stated'.

Source: Bureau of Tourism Research, *Domestic Tourism Monitor, Summary*, 1993–94.

13.12 Nights spent in State of main destination by purpose of trip, 1993-94 ('000 nights)

	Main purpose of trip				Total(a)
	All business	Pleasure/holiday	Visiting friends/relatives	Other	
New South Wales	8 902	27 842	19 034	8 180	63 959
Victoria	4 144	16 639	11 132	5 636	37 551
Queensland	6 973	27 169	14 114	6 474	54 729
South Australia	2 034	6 946	4 259	2 588	15 827
Western Australia	4 518	10 303	5 504	3 859	24 185
Tasmania	722	3 463	1 723	1 095	7 005
Northern Territory	1 130	2 084	660	291	4 166
Australian Capital Territory	709	956	1 671	615	3 952
Total(a)	29 133	95 402	58 097	28 742	211 373

(a) Differences between the sums of components and totals are due to rounding.

Source: Bureau of Tourism Research, *Domestic Tourism Monitor, Summary, 1993-94*.

In 1993-94, the most frequently used accommodation by domestic travellers was the home of friends or relatives (46% of visitor nights), followed by hotels or motels with bathroom facilities in the guest's room (17%)

and caravan parks or camping grounds (12%). The following table classifies the types of accommodation used for all visitor nights by the main purpose of the trip.

13.13 Accommodation used by main purpose of trip, 1993-94 ('000 nights)

All accommodation used	Main purpose of trip				Total(a)
	All business	Pleasure/holiday	Visiting friends/relatives	Other	
Hotel/motel with facilities	10 969	17 636	3 051	4 304	35 960
Hotel/motel without facilities	1 634	1 470	393	604	4 101
Friends'/relatives' house	6 376	28 617	49 807	12 047	96 847
Caravan/tent/cabin/camping	1 395	19 445	1 504	3 163	25 508
Rented house/flat	1 842	9 978	877	1 774	14 472
Own holiday home/flat	569	6 717	788	977	9 051
Guest house/private hotel	672	1 413	165	542	2 791
Farm	619	1 006	722	495	2 843
Boat/cabin cruiser	—	366	7	24	397
Hostel	407	756	108	1 100	2 371
Other/not stated	4 647	7 997	673	3 715	17 033
Total(a)	29 133	95 402	58 097	28 742	211 373

(a) Differences between the sums of components and totals are due to rounding.

Source: Bureau of Tourism Research, *Domestic Tourism Monitor, 1993-94*.

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 1994, 34% (56,645 guest rooms)

of Australia's tourist accommodation capacity in hotels, motels and guest houses with facilities was in New South Wales, with 45% (25,245 guest rooms) of the State's capacity concentrated in the Sydney Statistical Division. Queensland had 24% (40,760 guest rooms), and Victoria had 18% (29,892 guest rooms) of Australia's accommodation capacity.

During 1994, the supply of hotel, motel and guest house accommodation in Australia grew more slowly than demand. The number of guest rooms available increased by 0.1% in the year to 31 December 1994, while room nights occupied increased by 6.4% over the same period. The comparative rates for 1993 were less than 0.1% for rooms available and 7.6% for room nights occupied.

In the three months to 31 December 1994, the average length of stay in licensed hotels with facilities was 2.3 days, for motels etc. 1.9 days, for visitor hostels 2.7 days but for holiday flats, units and houses it was 5.1 days.

Table 13.14 provides further details of tourist accommodation.

13.14 Tourist accommodation, 1994(a)

	Units	March quarter	June quarter	Sept. quarter	Dec. quarter
Licensed hotels with facilities(b)					
Establishments	no.	1 131	1 139	1 132	1 135
Guest rooms	no.	66 386	66 443	66 524	66 898
Bed spaces	no.	175 508	176 344	177 606	179 221
Room occupancy rates	%	61.1	57.7	63.0	65.8
Bed occupancy rates	%	38.9	35.7	39.9	40.8
Gross takings from accommodation	\$'000	385 605	362 964	409 128	450 458
Motels, etc.(b)					
Establishments	no.	3 684	3 700	3 674	3 684
Guest rooms	no.	99 876	100 227	99 883	100 065
Bed spaces	no.	302 063	303 246	301 775	303 251
Room occupancy rates	%	52.4	51.6	55.3	54.4
Bed occupancy rates	%	32.5	30.8	33.5	32.7
Gross takings from accommodation	\$'000	318 309	311 549	350 767	346 451
Total hotels & motels etc.(b)					
Establishments	no.	4 815	4 839	4 806	4 819
Guest rooms	no.	166 262	166 670	166 407	166 963
Bed spaces	no.	477 571	479 590	479 381	482 472
Room occupancy rates	%	55.9	54.1	58.4	59.0
Bed occupancy rates	%	34.8	32.6	35.9	35.8
Gross takings from accommodation	\$'000	703 914	674 513	759 895	796 910
Caravan parks(c)					
Establishments	no.	2 701	2 702	2 721	2 716
Powered sites	no.	204 045	204 124	204 010	204 327
Unpowered sites	no.	68 289	67 787	68 212	67 846
Cabins, flats etc.	no.	15 244	15 608	15 921	16 246
Total capacity	no.	287 578	287 519	288 143	288 419
Site occupancy rates(d)	%	45.2	43.1	44.0	42.7
Gross takings from accommodation	\$'000	117 097	100 865	109 837	113 981
Holiday flats, units & houses(b)					
Flats, units etc.					
One bedroom	no.	7 848	7 758	7 972	8 141
Multiple bedroom	no.	27 562	27 554	28 284	29 393
Total flats, units etc.	no.	35 410	35 312	36 256	37 534
Bed spaces	no.	154 325	153 381	156 912	163 586
Unit occupancy rates	%	56.1	45.1	57.1	52.6
Gross takings from accommodation	\$'000	116 167	84 752	116 042	120 412
Visitor hostels(e)					
Establishments	no.	426	417	422	433
Bed spaces	no.	25 748	25 061	25 634	26 063
Bed occupancy rates	%	45.3	40.6	43.6	45.1
Gross takings from accommodation	\$'000	12 560	11 031	12 425	13 590

(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) 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. (e) 'Backpacker' accommodation.

Source: Tourist Accommodation, Australia (8635.0).

Tourism viewed as an industry

Reference is often made to a Tourism industry. However, tourism is best seen statistically as a 'demand' side activity, defined in terms of the activities of a particular type of consumer. It involves the purchase or consumption by visitors of any commodity. It is therefore not confined to particular commodities or to particular economic activities on the 'supply' side. It could include for example, purchases of services from transport and tour operators, accommodation establishments, theme parks and attractions, entertainment and arts venues, museums and historical sites, cafes and restaurants, casinos, travel agents and retailers. Because of this, it is not an industry in the traditional sense of an industry comprising businesses mainly undertaking a similar economic activity.

However it is possible to identify from the Australian and New Zealand Standard Industrial Classification a number of tourism related industries. In 1991-92 the ABS conducted surveys of a limited number of tourism related industries, specifically:

- Accommodation
- Pubs bars and taverns
- Cafes and restaurants
- Licensed clubs
- Casinos
- Motor vehicle hire

The main results from those surveys are summarised in the table below:

13.15 Tourism-related industries — summary of operations, 1991-92

Businesses (\$m)	Businesses (No.)	Employment (Persons)	Income from sales of goods & services (\$m)	Operating profit before tax (\$m)
Accommodation	4 314	74 136	3 820	-319
Pubs, bars & taverns	4 347	73 526	5 834	98
Cafes & restaurants	8 741	120 752	4 608	148
Licensed clubs	3 811	60 424	3 729	178
Casinos	8	9 218	788	99
Motor vehicle hire	222	3 016	458	-7

Source: *Hospitality Industries, Australia, 1991-92 (8674.0)* and *Motor Vehicle Hire Industry, Australia, 1991-92 (8652.0)*.

The ABS previously conducted a survey of these industries (with the exception of casinos) in respect of 1986-87. In the period from 1986-87 to 1992-93, employment in these industries increased 21%, which represented an annual average rate of growth of 4%.

In addition to the above industry surveys the ABS also undertook a survey of amusement and theme parks in respect of 1991-92. Broadly speaking, an amusement park is a centre which typically offers rides, games and shows for entertainment. A theme park is similar to an amusement park but provides a range of entertainments and/or displays organised around a specific theme. Amusement and theme parks were included

in the survey if they met the following criteria:

- the park was primarily a tourist attraction and operated on a commercial basis;
- its turnover was at least \$150,000 in 1991-92; and
- the park was permanently based at a fixed site which included attractions operating at one site on a seasonal basis.
- On the basis of the above, 72 amusement and theme parks were included in the survey and results from the survey are presented in table 13.16.

13.16 Amusement and theme parks — summary of operations

	Businesses (No.)	Employment (Persons)	Gross income (\$'000)	Visitors ('000 persons)
New South Wales	25	1 624	66 955	3 313
Victoria	18	588	19 215	1 948
Queensland	17	2 181	139 713	4 588
Other States & Territories	12	221	10 554	1 182
Total	72	4 614	236 437	11 031

Source: *Amusement and Theme Parks (8675.0)*.

The four largest amusement and theme parks accounted for 60% of income, 45% of

employment and attracted 3,478,000 visitors in 1991–92.

Inbound tourism

During 1993–94, 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 1993–94, passengers from Japan accounted for 48.3% of a total of 1.4 million passengers involved and 53.4% of the total value of gross invoices of \$1,048 million (that is, all amounts received for ground content received in Australia). Passengers from Asia (including Japan) represented 77.3% of total passengers and accounted for 75.5% of the total value of gross invoices.

The Americas accounted for 7.0% of passengers and 10.5% of the total value of gross invoices, Europe (including the United Kingdom and Ireland) for 13.3% of passengers and 12.9% of gross invoices, and New Zealand and the South Pacific for 2.2% of passengers and 0.9% of the total value of gross invoices.

The survey also showed that inbound tour operators employed 2,350 persons full-time and 340 persons part-time in Australia. In addition, they employed 240 persons full-time overseas.

Overseas tourism marketing expenditure

An ABS Survey of Overseas Tourism Marketing Expenditure for 1992–93 revealed that 27.5% of the total expenditure of \$190 million was directed towards the Japanese market, 26.7% towards the United Kingdom and Europe,

23.7% towards the United States of America and Canada, and 13.9% towards Asia (excluding Japan).

Of this overseas tourism marketing expenditure, the majority (77.5%) was by independent operators, while 10.8% was in cooperation with the Australian Tourism Commission and 11.6% was in cooperation with other organisations.

Of the total overseas tourism marketing expenditure, 16.9% was by accommodation operators, 15.7% by inbound tour operators, 10.1% by State tourism authorities, and 4.8% by coach operators.

Australian Tourist Commission

The Australian Tourist 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 trade shows and 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.

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Environment

Introduction	381
Environmental indicators	381
National activities	383
Australian and New Zealand Environment and Conservation Council	383
Commonwealth Environment Protection Agency (CEPA)	383
Protection of freshwater resources	384
The National Landcare Program (NLP)	384
The National Water Quality Management Strategy	384
The Australian Guidelines for Drinking Water Quality	384
Monitoring river health	385
The National Drought Policy	385
Research activities	385
One Billion Trees	386
Concerns and views on the environment	386
Energy and water use by households	388
Costs of environment protection	391
International cooperation	391
United Nations Conference on Environment and Development, Rio de Janeiro, 1992	391
International treaties and conventions	392
General environmental	392
Coastal/marine resources	392
Toxic and hazardous wastes	392
Biological diversity	393
Air quality	393
Bibliography	393

Environment

Introduction

This chapter presents information about Australia's environment. This is a large topic and there are many initiatives worthy of presentation. With the passage of time, more and more data are 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 *Year Book Australia 1994*, chapter 14 and *Australia's Environment: Issues and Facts* (4140.0), chapter 2.

Water resources — see *Year Book Australia 1994*, chapter 18.

Environmental law — see *Year Book Australia 1994*, chapter 14, for details on various legislation in the Commonwealth and State jurisdictions that relate to the environment.

World Heritage Areas — details of Australian properties on the World Heritage List are provided in *Year Book Australia 1994*, chapter 14.

Management of wastes, particularly on local council activities, landfill sites and waste

minimisation, see *Year Book Australia 1994*, chapter 14 and *Australia's Environment: Issues and Facts* (4140.0).

Visits to National Parks, State Parks and World Heritage Areas — see *Year Book Australia 1995*, chapter 14.

Recycling by households — see *Year Book Australia 1995*, chapter 14.

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 working 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	World
Carbon dioxide (CO ₂) emissions from energy use (million tonnes)							
1980	221	439	4 913	184	75	601	18 792
1990	272	437	5 038	183	56	598	21 562
1992	288	457	5 188	190	57	610	n.a.
Greenhouse gas emissions 1990							
Methane ('000 tonnes)	5 000	3 700	37 000	833	457	4 371	18 792
CDFCs ('000 tonnes)	8	14	130	9	2	n.a.	21 562
CO ₂ (million tonnes)	287	461	5 067	200	60	n.a.	n.a.
Estimated renewable fresh water resources, long-term annual average (billion m ³)	343	2 740	2 460	11	167	71	274 900

...continued

14.1 OECD environmental data — continued

Indicator	Australia	Canada	USA	Netherlands	Sweden	UK	World
Total water abstraction (million m ³)							
1980	n.a.	37 864	525 000	14 794	4 106	13 912	600
1990	n.a.	46 878	468 000	n.a.	2 932	14 237	22 300
Population served by waste water treatment plants (%)							
1980	n.a.	64	70	73	82	82	n.a.
1990	n.a.	70	n.a.	93	95	87	n.a.
Major protected areas 1990							
'000 km ²	457	701	983	4	18	46	6 515
% of land areas	5.9	7.0	10.5	9.5	3.9	18.9	4.9
Wooded area							
1980 ('000 km ²)	1 059.0	4 364.0	2 968.0	3.3	279.0	21.0	41 003.0
1990 ('000 km ²)	1 060.0	4 533.0	2 946.0	3.3	280.0	24.0	40 276.0
1990 (% of land area)	13.8	49.2	32.1	9.9	68.1	10.0	30.8
Waste generation ('000 tonnes)							
Municipal waste 1990	n.a.	16 000	177 500	7 430	3 200	20 000	n.a.
Hazardous waste 1990	n.a.	6 080	180 000	1 040	500	2 540	n.a.
Total energy supply (index 1985 = 100)							
1980 (per unit of GDP)	108	108	109	106	99	107	n.a.
1991 (per unit of GDP)	107	97	97	97	97	94	n.a.
1981 (per capita)	101	100	103	102	90	96	n.a.
1991 (per capita)	112	102	103	109	100	106	n.a.
Tonnes of oil equivalent (TOE) 1985							
per \$US'000	0.4	0.5	0.4	0.4	0.4	0.3	n.a.
per capita	4.7	7.7	7.4	4.3	5.7	3.6	n.a.
Motor vehicles in use (millions)							
1981	7.6	13.4	158.3	4.9	3.1	17.5	427.2
1991	10.0	16.8	192.3	6.2	4.0	23.4	608.0
Public R&D expenditure for environment protection							
1985 (\$US million)	24.9	45.9	258.0	52.4	20.7	99.6	n.a.
1991 (\$US million)	50.7	41.3	361.2	69.0	48.9	112.5	n.a.
As % of total R&D 1991	3.5	1.6	0.7	4.1	3.1	1.7	n.a.
Population (million)							
1981	14.9	24.4	230.1	14.3	8.3	56.4	4 513.5
1991	17.3	27.0	252.7	15.1	8.6	57.6	n.a.
Population density (persons/km ²)							
1981	1.9	2.4	24.6	381.7	18.5	230.2	33.7
1991	2.2	2.7	27.0	403.7	19.2	235.4	n.a.
GDP @ 1985 prices & purchasing power parities (index 1985 = 100)							
1981	88.5	89.9	90.4	94.5	91.4	89.4	n.a.
1991	114.8	112.7	111.9	117.4	108.8	114.3	n.a.

Source: OECD, *Environmental Data Compendium*, 1993.

National activities

Australian and New Zealand Environment and Conservation Council

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.
- 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 the national lead abatement strategy, and 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.

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 *Year Book Australia 1994*), and with ANZECC to provide a uniform, coordinated approach to protecting Australia's environment. The current projects of CEPA are:

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 United Nations Conference on Environment and Development (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, country towns water management programs, 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

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. The guidelines 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.) and/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

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 are now several 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 already 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.

One Billion Trees

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, provides funds 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 conducts 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.

Concerns and views on the environment

Concern about environmental quality is another measure of the perception of the quality of life. Tables 14.2 to 14.4 show the extent and nature of the concerns and views of Australians about the environment in June 1994. The problems registering the highest level of concern were air pollution, ocean pollution and the destruction of trees and ecosystems.

14.2 Concern about environmental problems, June 1994

Concern about environmental problems	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	'000								
Yes	3 011.5	2 180.5	1 547.5	784.9	837.3	209.6	64.6	155.1	8 791.0
No	1 210.5	989.6	656.0	275.0	323.6	126.4	22.6	52.0	3 655.7
Don't know	127.7	72.8	54.1	15.9	33.8	5.7	2.2	2.0	314.2
Total persons(a)	4 349.8	3 242.9	2 257.6	1 075.8	1 194.7	341.7	89.4	209.0	12 760.9
	%								
Yes	69.2	67.2	68.5	73.0	70.1	61.3	72.2	74.2	68.9
No	27.8	30.5	29.1	25.6	27.1	37.0	25.3	24.9	28.6
Don't know	2.9	2.2	2.4	1.5	2.8	1.7	2.5	0.9	2.5

(a) Aged 18 years and over.

Source: *Environmental Issues: People's Views and Practices (4602.0)*.

14.3 Specific environmental problems concerning persons(a), June 1994

Environmental problem	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	'000								
Air pollution	1 716.7	1 106.7	658.2	334.4	352.3	92.3	29.9	57.8	4 348.3
Ocean pollution	1 388.2	740.0	581.0	311.5	230.6	89.8	22.4	43.3	3 406.8
Destruction of trees/ecosystems	1 136.9	727.2	661.3	264.4	314.6	73.9	30.7	55.8	3 264.7
Freshwater pollution	1 312.5	707.1	508.3	317.0	251.7	83.9	24.2	52.1	3 256.8
Ozone layer	688.4	607.5	352.2	222.6	211.6	44.6	18.2	39.1	2 184.1
Garbage disposal	698.6	518.2	330.8	203.4	160.7	42.5	11.9	35.0	2 001.1
Extinction of species	686.2	363.5	337.4	116.3	123.8	33.9	18.1	24.3	1 703.5
Toxic chemical waste	521.8	394.3	299.1	129.4	113.7	34.9	8.0	12.4	1 513.6
Land degradation	449.7	283.3	222.8	112.5	93.9	28.3	12.2	22.5	1 225.1
Other pollution	473.4	224.9	219.7	114.7	71.6	27.1	9.1	24.8	1 165.3
Greenhouse effect	409.4	314.6	156.0	115.9	73.3	21.2	7.4	20.7	1 118.5
Resource conservation	376.1	272.2	212.2	78.1	79.9	31.8	11.5	17.9	1 079.9
Overpopulation	412.8	206.2	196.4	59.1	75.9	21.2	10.1	15.3	997.0
Use of pesticides	356.0	206.3	178.9	58.0	55.6	18.5	8.5	8.3	890.1
Nuclear tests/weapons	341.2	229.5	144.9	54.7	51.0	20.1	7.1	5.5	854.1
Use of uranium	161.5	125.0	85.7	34.5	35.8	10.0	5.3	4.0	461.9
Sand mining	107.3	41.0	73.9	13.9	10.9	3.0	1.4	1.4	253.0
Other	238.7	155.5	157.8	59.1	78.2	13.8	2.7	19.0	724.9
No concerns or don't know	1 338.3	1 062.4	710.1	290.9	357.4	132.1	24.8	53.9	3 969.9
Total persons(a)	4 349.8	3 242.9	2 257.6	1 075.8	1 194.7	341.7	89.4	209.0	12 760.9
	%								
Air pollution	39.5	34.1	29.2	31.1	29.5	27.0	33.4	27.7	34.1
Ocean pollution	31.9	22.8	25.7	29.0	19.3	26.3	25.0	20.7	26.7
Destruction of trees/ecosystems	26.1	22.4	29.3	24.6	26.3	21.6	34.3	26.7	25.6
Freshwater pollution	30.2	21.8	22.5	29.5	21.1	24.6	27.0	24.9	25.5
Ozone layer	15.8	18.7	15.6	20.7	17.7	13.1	20.4	18.7	17.1
Garbage disposal	16.1	16.0	14.7	18.9	13.5	12.4	13.4	16.7	15.7
Extinction of species	15.8	11.2	14.9	10.8	10.4	9.9	20.3	11.6	13.3
Toxic chemical waste	12.0	12.2	13.3	12.0	9.5	10.2	8.9	5.9	11.9
Land degradation	10.3	8.7	9.9	10.5	7.9	8.3	13.6	10.8	9.6
Other pollution	10.9	6.9	9.7	10.7	6.0	7.9	10.2	11.8	9.1
Greenhouse effect	9.4	9.7	6.9	10.8	6.1	6.2	8.3	9.9	8.8
Resource conservation	8.6	8.4	9.4	7.3	6.7	9.3	12.9	8.5	8.5
Overpopulation	9.5	6.4	8.7	5.5	6.4	6.2	11.3	7.3	7.8
Use of pesticides	8.2	6.4	7.9	5.4	4.7	5.4	9.5	4.0	7.0
Nuclear tests/weapons	7.8	7.1	6.4	5.1	4.3	5.9	8.0	2.6	6.7
Use of uranium	3.7	3.9	3.8	3.2	3.0	2.9	5.9	1.9	3.6
Sand mining	2.5	1.3	3.3	1.3	0.9	0.9	1.6	0.7	2.0
Other	5.5	4.8	7.0	5.5	6.5	4.1	3.0	9.1	5.7
No concerns or don't know	30.8	32.8	31.5	27.0	29.9	38.7	27.8	25.8	31.1

(a) Aged 18 years and over. 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)*.

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 14.4 shows that in June 1994, a majority of people (71%) 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.

14.4 Attitude to environmental protection and economic growth, June 1994

Priority	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	'000								
Environment protection is more important than economic growth	776.3	535.2	428.2	200.8	237.7	44.2	18.0	46.5	2 286.8
Environment protection & economic growth are equally important	3 012.4	2 316.3	1 609.9	793.1	865.1	259.1	65.3	144.5	9 065.7
Environment protection is less important than economic growth	338.4	245.6	147.4	57.9	53.7	26.2	4.9	14.1	888.3
No opinion	222.7	145.8	72.1	24.0	38.2	12.2	1.2	3.9	520.1
Total persons(a)	4 349.8	3 242.9	2 257.6	1 075.8	1 194.7	341.7	89.4	209.0	12 760.9
	%								
Environment protection is more important than economic growth	17.8	16.5	19.0	18.7	19.9	12.9	20.1	22.2	17.9
Environment protection & economic growth are equally important	69.3	71.4	71.3	73.7	72.4	75.8	73.1	69.1	71.0
Environment protection is less important than economic growth	7.8	7.6	6.5	5.4	4.5	7.7	5.5	6.8	7.0
No opinion	5.1	4.5	3.2	2.2	3.2	3.6	1.3	1.9	4.1

(a) Aged 18 years and over.

Source: *Environmental Issues: People's Views and Practices (4602.0)*.**Energy and water use by households**

In June 1994, an ABS survey found that gas and electricity were of almost equal importance as sources of energy for space

heating, while electricity was clearly the main hot water energy source.

14.5 Energy source for space heating by households(a), June 1994

Energy source	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	'000								
Gas									
Bottled	101.4	43.0	21.4	20.5	18.6	9.0	2.2	1.2	217.4
Mains	318.9	1 097.5	12.7	167.9	177.1	0.3	0.3	46.6	1 821.3
Unknown	4.4	—	—	0.7	0.4	—	—	—	5.6
Total gas	424.7	1 140.5	34.1	189.1	196.1	9.3	2.5	47.8	2 044.3
Electric	998.4	200.2	303.8	204.5	104.5	51.7	4.1	39.2	1 906.4
Wood	369.2	225.5	115.5	107.6	192.7	108.8	0.6	10.6	1 130.4
Oil	74.9	20.9	42.7	24.0	23.5	8.6	0.7	4.7	200.0
Solar	1.5	—	0.5	0.8	0.7	0.2	0.2	—	3.8
Other/varies	36.0	9.6	22.8	7.7	12.3	0.9	0.4	0.9	90.6
No heating	252.9	9.7	623.4	33.7	80.8	0.4	37.8	0.4	1 039.1
Total dwellings	2 157.7	1 606.4	1 142.7	567.3	610.6	179.9	46.2	103.6	6 414.5

For footnotes see end of table.

...continued

14.5 Energy source for space heating by households(a), June 1994 — continued

Energy source	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%								
Gas									
Bottled	4.7	2.7	1.9	3.6	3.0	5.0	4.7	1.2	3.4
Mains	14.8	68.3	1.1	29.6	29.0	0.2	0.7	45.0	28.4
Unknown	0.2	—	—	0.1	0.1	—	—	—	0.1
Total gas	19.7	71.0	3.0	33.3	32.1	5.2	5.4	46.2	31.9
Electric	46.3	12.5	26.6	36.0	17.1	28.8	8.8	37.8	29.7
Wood	17.1	14.0	10.1	19.0	31.6	60.5	1.2	10.2	17.6
Oil	3.5	1.3	3.7	4.2	3.9	4.8	1.5	4.5	3.1
Solar	0.1	—	—	0.1	0.1	0.1	0.4	—	0.1
Other/varies	1.7	0.6	2.0	1.4	2.0	0.5	0.9	0.9	1.4
No heating	11.7	0.6	54.6	5.9	13.2	0.2	81.8	0.4	16.2

(a) Totals do not equal the sum of energy sources in each column as more than one combination may be specified.

Source: *Environmental Issues: People's Views and Practices, June 1994 (4602.0)*.

14.6 Energy source for hot water by households(a), June 1994

Energy source	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	'000								
Gas									
Bottled	21.4	30.2	66.7	15.3	42.6	1.2	0.9	—	178.2
Mains	406.8	949.5	84.8	261.0	248.1	0.5	0.2	20.8	1 971.7
Unknown	—	0.6	2.2	0.7	0.3	—	—	—	3.9
Total gas	428.2	980.3	153.7	277.0	291.0	1.7	1.1	20.8	2 153.8
Electricity	1 676.6	610.3	936.7	277.2	223.3	172.6	20.8	81.9	3 999.3
Solar energy	74.6	12.6	55.2	18.8	125.1	1.0	26.6	3.2	317.1
Other	41.7	30.4	21.9	3.5	35.5	6.7	2.0	0.2	141.9
Total dwellings	2 157.7	1 606.4	1 142.7	567.3	610.6	179.9	46.2	103.6	6 414.5
	%								
Gas									
Bottled	1.0	1.9	5.8	2.7	7.0	0.7	1.9	—	2.8
Mains	18.9	59.1	7.4	46.0	40.6	0.3	0.4	20.1	30.7
Unknown	—	—	0.2	0.1	0.1	—	—	—	0.1
Total gas	19.9	61.0	13.4	48.8	47.7	1.0	2.3	20.1	33.6
Electricity	77.7	38.0	82.0	48.9	36.6	95.9	44.9	79.1	62.3
Solar energy	3.5	0.8	4.8	3.3	20.5	0.6	57.5	3.1	4.9
Other	1.9	1.9	1.9	0.6	5.8	3.7	4.3	0.2	2.2

(a) Totals do not equal the sum of energy sources in each column as more than one combination may be specified.

Source: *Environmental Issues: People's Views and Practices, June 1994 (4602.0)*.

The main source of water for households is mains/town water, with 93% of households, followed by water from rainwater tanks with 15%. Of those households connected to the mains/town supply 64% are satisfied with the quality of the water supply for drinking

purposes. Residents of South Australia were the least satisfied with their mains water quality (47%) while the Northern Territory and the Australian Capital Territory were the most satisfied.

14.7 Sources of water by households(a), June 1994

Source of water	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
'000									
Mains/town	2 036.9	1 501.2	1 014.1	541.2	571.8	154.9	44.1	103.6	5 967.7
Rainwater tank	196.0	203.1	202.2	272.2	68.5	32.2	1.2	1.0	976.4
Spring	12.6	7.3	6.2	13.9	3.9	7.4	0.2	—	51.5
Bore	48.1	31.7	86.2	25.1	127.9	3.5	3.5	—	326.0
Bottled	54.5	21.1	24.5	52.6	21.5	1.1	0.8	1.3	177.4
Other	59.8	35.7	38.6	7.2	17.0	8.4	—	0.3	167.1
Total households	2 157.7	1 606.4	1 142.7	567.3	610.6	179.9	46.2	103.6	6 414.5
%									
Mains/town	94.4	93.4	88.7	95.4	93.6	86.1	95.4	100.0	93.0
Rainwater tank	9.1	12.6	17.7	48.0	11.2	17.9	2.6	0.9	15.2
Spring	0.6	0.5	0.5	2.4	0.6	4.1	0.4	—	0.8
Bore	2.2	2.0	7.5	4.4	20.9	2.0	7.5	—	5.1
Bottled	2.5	1.3	2.1	9.3	3.5	0.6	1.8	1.3	2.8
Other	2.8	2.2	3.4	1.3	2.8	4.7	—	0.3	2.6

(a) Totals do not equal the sum of water sources in each column as more than one combination may be specified.

Source: *Environmental Issues: People's Views and Practices, June 1994 (4602.0)*.

14.8 Quality of tap water for drinking by households, June 1994

Perception of quality	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
'000									
Satisfied	1 252.1	1 040.2	657.3	254.4	342.5	115.8	38.9	88.7	3 789.9
Not satisfied	698.8	422.2	322.2	275.3	204.1	34.6	4.6	12.9	1 974.8
Depends	82.5	38.1	34.1	11.5	24.5	4.4	0.6	2.0	197.7
Total households	2 036.9	1 501.2	1 014.1	541.2	571.8	154.9	44.4	103.6	5 967.7
%									
Satisfied	61.5	69.3	64.8	47.0	59.9	74.8	88.1	85.6	63.5
Not satisfied	34.3	28.1	31.8	50.9	35.7	22.4	10.5	12.5	33.1
Depends	4.1	2.5	3.4	2.1	4.3	2.8	1.4	1.9	3.3

Source: *Environmental Issues: People's Views and Practices, June 1994 (4602.0)*.

Of the water conservation steps within households that were surveyed by the ABS in June 1994, the most prominent was turning off and repairing dripping taps (24% of households). Thirty-nine percent of

households had a dual flush toilet, while 22% had a reduced flow shower head. Around 54% of households reported taking no water conservation steps within their households.

14.9 Methods of conserving water by households, June 1994

Method	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
'000									
Dual flush toilet	658.9	816.3	360.3	273.6	284.6	55.8	19.2	34.4	2 503.1
Reduced flow shower head	421.2	341.0	256.6	147.8	159.4	37.1	6.7	29.6	1 399.5
Recycle/reuse water	286.5	144.0	188.3	74.9	119.3	21.5	3.6	12.7	850.8
Full loads when washing	351.6	255.7	172.9	59.8	134.9	33.2	8.8	17.4	1 034.3
Shorter showers	360.9	214.2	174.3	70.8	133.8	30.1	6.3	16.5	1 006.8
Turn off/repair dripping taps	545.6	339.5	339.4	74.5	126.7	42.3	11.3	30.5	1 509.9
Brick in cistern	49.7	18.1	16.2	9.3	13.6	3.3	—	2.6	112.7
Other	191.4	91.8	122.2	40.9	65.9	9.1	2.4	15.6	539.3
Suds saver used	362.5	170.2	143.6	127.9	91.3	24.9	5.8	16.3	942.4
No water conservation methods	1 177.4	969.1	539.9	355.1	265.1	100.3	28.5	47.0	3 482.3

...continued

14.9 Methods of conserving water by households, June 1994 — continued

Method	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%								
Dual flush toilet	30.5	50.8	31.5	48.2	46.6	31.0	41.6	33.2	39.0
Reduced flow shower head	19.5	21.2	22.5	26.1	26.1	20.6	14.6	28.6	21.8
Recycle/reuse water	13.3	9.0	16.5	13.2	19.5	11.9	7.7	12.3	13.3
Full loads when washing	16.3	15.9	15.1	10.5	22.1	18.5	19.0	16.8	16.1
Shorter showers	16.7	13.3	15.3	12.5	21.9	16.7	13.5	15.9	15.7
Turn off/repair dripping taps	25.3	21.1	29.7	13.1	20.8	23.5	24.5	29.5	23.5
Brick in toilet cistern	2.3	1.1	1.4	1.6	2.2	1.8	—	2.5	1.8
Other	8.9	5.7	10.7	7.2	10.8	5.1	5.2	15.0	8.4
Suds saver used	16.8	10.6	12.6	22.5	15.0	13.8	12.6	15.7	14.7
No water conservation methods	54.6	60.3	47.2	62.6	43.4	55.8	61.6	45.3	54.3

Source: *Environmental Issues: People's Views and Practices, June 1994 (4602.0)*.

Costs of environment protection

Businesses, governments and households spend some of their resources on protection of the environment. For 1991–92, the ABS collected some information about expenditure by businesses in the mining, manufacturing, agriculture, retail and wholesale, and household sectors, as well as

data for the public sector, 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 14.10 provides a summary of some of the information obtained.

14.10 Expenditure on environment protection by sector, (\$ million)

Industry/sector	Pollution abatement costs	Other costs	Total costs
Public sector	1 766.7	1 086.0	2 852.7
Agriculture	n.a.	n.a.	285.4
Mining	151.7	n.a.	98.3
Manufacturing	1 005.2	n.a.	1 005.2
Retail/Wholesale	27.2	n.a.	27.2
Household	118.7	709.8	828.5
Total	—	—	5 152.7

Source: *Cost of Environment Protection, Australia, Selected Industries, 1991–92 (4603.0)*.

International cooperation

United Nations Conference on Environment and Development, Rio de Janeiro, 1992

One of the largest conferences on the 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.

The Berlin Mandate adopted at the Conference of the Parties in March 1995 provides a new process, which will consider all greenhouse gases, for strengthening developed countries' commitments towards climate change after the year 2000. It set a 1997 deadline for adopting the results of this process. It will also consider setting quantified objectives for limiting and reducing emissions

within specified time-frames, such as the years 2005, 2010, and 2020. It does not introduce any new commitments for developing countries, although it does reaffirm the existing ones and will advance their implementation.

International treaties and conventions

The main international treaties and conventions relating to the environment to which Australia is a party are listed below.

General environmental

- Antarctic Treaty (signed by Australia 23 June 1961)
- Convention for the Protection of the World Cultural and Natural Heritage (17 December 1975)
- Convention on the Conservation of Nature in the South Pacific (28 March 1990)
- United Nations Framework Convention on Climate Change (9 May 1992)

Coastal/marine resources

- International Convention for the Regulation of Whaling (10 November 1948)
- UN Convention on the Law of the Sea (10 December 1982)
- Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific (24 November 1989)
- International Convention on Oil Pollution Preparedness, Response and Co-operation (30 November 1990)

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)
- 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)
- Convention on Biological Diversity (18 June 1993)

Air quality

- Vienna Convention for the Protection of the Ozone Layer (17 August 1989)
- Montreal Protocol on Substances that Deplete the Ozone Layer (22 September 1990)

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Agriculture

Introduction	397
Characteristics of Australian farms	397
Employment in agriculture	399
Gross value of agricultural commodities produced	399
Financial statistics of farm businesses	400
Turnover	401
Gross indebtedness	402
Land used for agriculture	403
Crops	404
Cereal grains	405
Wheat	405
Oats	406
Barley	409
Grain sorghum	411
Maize	411
Rice	412
Vegetables	413
Fruit	413
Grapes	414
Selected other crops	416
Oilseeds	416
Cotton	416
Sugar	417
Fodder crops	417
Livestock	418
Cattle	418
Sheep	422
Pigs	423
Poultry	423
Meat production and slaughterings	423
Wool	425
Wool production	425
Wool receivals	426
Wool marketing arrangements	426

Dairying	426
Dairy production	427
Dairy domestic market	427
Beekeeping	427
Apparent consumption of foodstuffs	428
Agricultural improvements	429
Irrigation	429
Fertilisers	430
Bibliography	431

Agriculture

Introduction

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 1982–83 to 1985–86, the Census included establishments with agricultural activity which had an estimated value of agricultural operations (EVAO) of \$25,000 or more. From 1986–87 to 1990–91, the EVAO cut-off value was \$20,000. The cut-off was raised to \$22,500 for the 1991–92 Census. For the 1993–94 Census the cut-off was lowered to \$5,000 to ensure all important agricultural activity, including for minor commodities, was covered.

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. Care should be exercised when comparing the 1993–94 results with the previous years.

Unless indicated otherwise, Australian totals include data for all States and both Territories.

Financial statistics are collected in the Agricultural Finance Survey (AFS), conducted annually since 1986–87. Unlike the Agricultural Census, the EVAO cut-off for the AFS for 1993–94 has been retained at \$22,500.

Characteristics of Australian farms

The gross product of agriculture, forestry, fishing and hunting in 1993–94 was \$13,429 million, 3.1% of GDP. Agriculture constituted the major proportion of this total, as indicated by the fact that 381,000 of the 405,900 people employed in the above group of industries were employed in Agriculture and Services to agriculture. As at August 1993, 5% 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 1994.

It should be noted that, prior to 1991–92, agricultural establishments 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 *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (1292.0), 1993–94 census units have been classified on an ANZSIC basis. Care should be taken when making comparisons between years where these different classifications have been used.

15.1 Establishments with agricultural activity, year ending 31 March 1994

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Agriculture									
Plant nurseries	681	291	790	123	147	39	16	4	2 091
Cut flower & flower seed growing	245	185	192	111	137	60	5	—	935
Vegetable growing	755	1 083	1 383	606	563	623	9	2	5 024
Grape growing	709	1 729	92	1 468	238	47	3	—	4 286
Apple & pear growing	233	466	125	158	229	164	—	3	1 378
Stone fruit growing	446	240	115	368	172	17	—	—	1 358
Kiwi fruit growing	26	13	3	—	8	—	—	—	50
Fruit growing n.e.c.	1 900	396	2 271	797	360	38	53	1	5 816
Grain growing	2 854	3 019	1 685	3 195	3 154	14	3	—	13 924
Grain—sheep/beef cattle farming	6 669	2 689	1 887	3 253	3 479	84	4	—	18 065
Sheep—beef cattle farming	5 380	3 343	1 209	1 162	625	532	—	31	12 282
Sheep farming	5 617	4 773	739	1 838	1 905	653	—	27	15 552
Beef cattle farming	10 543	8 307	13 115	1 145	1 990	1 156	207	19	36 482
Dairy cattle farming	2 128	8 057	1 919	881	528	805	—	1	14 319
Poultry farming (meat)	329	151	102	72	65	12	—	1	732
Poultry farming (eggs)	151	123	129	55	84	18	5	1	566
Pig farming	425	275	461	219	158	54	1	—	1 593
Horse farming	638	420	535	149	158	59	1	2	1 962
Deer farming	119	130	70	55	47	40	—	—	461
Livestock farming n.e.c.	876	450	481	169	113	42	2	1	2 134
Sugar cane growing	458	—	4 651	—	—	—	—	—	5 109
Cotton growing	425	—	378	—	—	—	—	—	803
Crop & plant growing n.e.c.	254	321	562	100	46	52	4	—	1 339
Total Agriculture	41 861	36 461	32 930	15 949	14 225	4 509	313	93	146 261
Services to agriculture; hunting & trapping	33	36	28	20	12	11	—	—	140
Forestry & logging	7	—	6	1	2	12	—	—	28
Commercial fishing	1	—	2	4	5	6	—	—	18
Total agriculture, forestry & fishing industry	41 902	36 497	32 930	15 949	4 538	313	93	93	146 447
Mining	5	3	3	4	2	2	—	—	19
Manufacturing	48	36	16	34	24	6	2	—	166
Electricity, gas & water supply	—	2	—	—	—	—	—	—	2
Construction	43	51	33	16	15	20	—	—	178
Wholesale trade	32	33	17	9	12	8	—	—	111
Retail trade	15	22	41	7	10	12	—	—	107
Accommodation, cafes & restaurants	13	6	5	2	5	2	—	—	33
Transport & storage	48	74	33	34	16	28	—	—	233
Communication services	—	—	—	—	—	—	—	—	—
Finance & insurance	2	1	2	2	—	1	—	—	8
Property & business services	39	7	44	15	21	8	—	1	135
Government administration & defence	9	—	—	—	—	—	—	—	9
Education	17	1	9	1	15	3	—	—	46
Health & community services	5	2	9	1	1	1	—	—	19
Cultural & recreational services	10	18	6	2	1	3	—	—	40
Personal & other services	3	2	9	1	5	1	—	—	21
Unclassified(a)	626	575	1 111	268	203	30	1	1	2 814
Total all industries	42 817	37 330	34 268	16 345	14 555	4 663	316	95	150 389

(a) Establishments which could not be classified to an industry because they undertook no agricultural activity during the year ended 31 March 1994.

Source: AgStats, 1993–94 (7117.0).

Employment in agriculture

15.2 Employed persons(a) in Agriculture and Services to agriculture — annual averages ('000)

August	Married males	All males	Married females	All females	Persons
1990	196.3	283.8	101.0	119.0	402.6
1991	182.7	266.6	97.6	116.7	383.6
1992	174.2	259.0	92.4	114.5	373.1
1993	188.3	268.8	98.2	116.3	385.1
1994	186.9	262.6	96.3	115.6	378.0
1995	182.6	256.7	99.2	120.4	377.1

(a) The estimates of employed persons include persons who worked without pay for at least 1 hour per week in a family business or on a farm (that is, unpaid family helpers). Persons who worked in another industry and in agriculture are classified to the industry of predominant activity.

Source: *The Labour Force, Australia* (6203.0).

Gross value of agricultural commodities produced

The gross value of agricultural commodities produced is the value of recorded production

at the wholesale prices realised in the market place.

15.3 Gross value of agricultural commodities produced (\$ million)

Commodity	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95p
Crops						
Barley for grain	708.8	568.3	680.9	792.7	844.9	564.3
Oats for grain	178.0	147.3	178.3	205.5	147.9	161.6
Wheat for grain	2 775.1	1 988.1	2 097.2	2 669.6	2 866.8	1 926.9
Other cereal grains	360.7	304.9	473.3	340.1	360.9	549.6
Sugar cane cut for crushing	874.0	748.0	602.7	797.7	944.6	1 103.4
Fruit & nuts	1 022.1	1 059.6	1 304.1	1 380.3	1 766.8	1 999.9
Grapes	392.2	362.0	433.0	377.6	450.0	570.2
Vegetables	1 328.2	1 284.9	1 242.4	1 226.6	1 443.6	1 517.1
All other crops(a)	2 237.2	2 611.5	2 853.8	2 804.4	3 503.7	2 964.0
Total crops	9 876.3	9 074.6	9 865.7	10 594.5	11 528.8	10 786.7
Livestock slaughterings & other disposals(b)						
Cattle & calves(c)	3 860.5	3 869.4	3 801.9	3 839.2	4 352.8	3 960.0
Sheep & lambs	585.4	364.2	460.6	663.0	793.5	738.4
Pigs	656.0	691.0	658.6	649.5	660.5	609.2
Poultry	777.9	788.3	778.0	833.5	929.3	927.2
Total livestock slaughterings & other disposals(d)	5 893.3	5 721.0	5 738.1	6 023.5	6 772.1	6 271.4
Livestock products						
Wool	5 718.1	4 180.9	2 979.5	2 568.5	2 449.1	3 263.9
Milk	1 749.0	1 824.8	1 960.0	3 314.4	2 448.0	2 574.2
Eggs	311.8	321.1	278.1	289.4	233.9	240.8
Total livestock products(e)(f)	7 806.7	6 354.3	5 244.0	5 205.3	5 166.7	6 109.6
Total value of agricultural commodities produced(g)	23 585.1	21 158.5	20 861.3	21 836.4	23 479.3	23 179.5

(a) Includes pastures and grasses. Excludes crops for green feed or silage. (b) Includes net exports of livestock. (c) Includes dairy cattle slaughtered. (d) Includes goat slaughterings and Tasmanian pigs and poultry. (e) Includes honey and beeswax. (f) Excludes Northern Territory milk and eggs. (g) Includes pigs, poultry, milk and eggs in the Northern Territory.

Source: *Value of Agricultural Commodities Produced, Australia* (7503.0), *Value of Principal Agricultural Commodities Produced, Australia*.

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(a) at constant prices of agricultural commodities produced

Commodity	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Crops						
Barley for grain	818	1 000	1 016	1 120	1 335	1 649
Oats for grain	1 138	1 000	933	1 030	1 181	1 004
Wheat for grain	989	1 000	1 056	729	1 019	1 139
Other cereal grains	1 082	1 000	859	1 379	857	1 166
Sugar cane(b)	987	1 000	940	831	1 089	1 165
Fruit & nuts	1 001	1 000	959	1 003	1 171	1 213
Grapes	1 100	1 000	1 027	1 185	983	1 127
Vegetables	995	1 000	1 042	1 050	1 042	1 159
All other crops(c)	1 013	1 000	1 050	1 245	1 244	1 215
Total crops	994	1 000	1 019	1 000	1 114	1 204
Livestock slaughterings & other disposals						
Cattle & calves(d)	890	1 000	1 049	1 068	1 089	1 088
Sheep & lambs	965	1 000	908	932	945	956
Pigs	972	1 000	984	1 059	1 035	1 085
Poultry	957	1 000	1 011	1 076	1 099	1 191
Total livestock slaughterings(e)	915	1 000	1 028	1 055	1 070	1 088
Livestock products						
Wool	869	1 000	969	804	782	755
Milk	1 005	1 000	1 022	1 075	1 171	1 291
Eggs	1 011	1 000	1 018	913	956	892
Total livestock products(f)	906	1 000	982	869	876	882
Total agricultural commodities produced	945	1 000	1 008	970	1 024	1 068

(a) Indexes of values at constant prices (weighted by average unit values for 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).

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 (\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Sales from crops	7 795.2	7 196.7	7 718.3	8 594.6	9 369.5
Sales from livestock	5 519.1	4 864.5	4 905.3	5 431.1	6 103.0
Sales from livestock products	7 157.9	5 853.6	4 753.6	4 770.9	4 637.3
Turnover	21 823.5	19 190.6	18 576.0	20 068.2	21 564.7
Purchases & selected expenses	11 447.8	10 892.5	10 726.3	11 392.6	12 441.1
Value added(a)	10 237.4	7 347.7	8 039.5	9 099.5	10 568.9
Adjusted value added(a)	8 924.4	6 023.1	6 729.1	7 753.3	9 149.0
Gross operating surplus(a)	6 897.0	4 133.6	4 876.5	5 832.7	7 072.7
Interest paid	2 227.5	2 066.0	1 820.4	1 499.2	1 302.0
Cash operating surplus(b)	5 330.6	3 412.8	3 095.0	4 083.2	4 441.8
Total net capital expenditure	1 906.3	1 216.6	1 420.8	1 660.2	1 945.0
Gross indebtedness	14 518.0	14 140.6	14 819.2	15 390.5	15 921.7

(a) Includes an estimate for the increase (or decrease) in the value of livestock. (b) Excludes an estimate for the value of the increase (or decrease) in the value of livestock.

Source: Agricultural Industries, Financial Statistics, Australia (7507.0).

15.6 Estimates of selected financial aggregates of farm businesses 1993–94 (\$ million)

	NSW	Vic.	Qld	SA	WA	Tas.	Aust.(a)
Sales from crops	2 423.4	1 510.0	2 441.4	1 056.8	1 738.0	197.7	9 369.5
Sales from livestock	1 888.1	1 123.6	1 736.9	457.7	577.1	175.5	6 103.0
Sales from livestock products	1 311.6	1 549.7	451.5	405.5	725.6	176.6	4 637.3
Turnover	6 059.0	4 449.8	5 049.8	2 047.2	3 180.9	596.7	21 564.7
Purchases & selected expenses	3 486.6	2 505.6	2 946.7	1 138.9	1 885.7	352.3	12 441.1
Value added(b)	3 312.2	2 234.1	2 069.5	861.6	1 706.6	247.2	10 568.9
Adjusted value added(b)	2 875.1	1 948.0	1 757.0	725.7	1 514.1	210.5	9 149.0
Gross operating surplus(b)	2 279.2	1 502.3	1 248.9	543.8	1 279.2	132.3	7 072.7
Interest paid	386.8	247.6	324.4	116.9	178.7	36.9	1 302.0
Cash operating surplus(c)	1 170.1	970.9	996.4	494.1	720.3	96.0	4 441.8
Total net capital expenditure	475.0	401.1	487.5	156.6	360.7	54.7	1 945.0
Gross indebtedness	4 407.4	2 659.7	4 201.1	1 591.8	2 459.3	480.5	15 921.7

(a) Includes Northern Territory and the Australian Capital Territory. (b) Includes an estimate for the value of the increase (or decrease) in livestock. (c) Excludes an estimate for the value of the increase (or decrease) in livestock.

Source: *Agricultural Industries, Financial Statistics, Australia (7507.0)*.

Turnover

Turnover is a good guide to the level of farm business activity. In aggregate, farm business turnover for 1993–94 of \$21.6 billion was 8% higher than during 1992–93. The average turnover per farm business increased by \$11,300 during 1993–94. The increase was largely driven by a 9% increase in the sales of crops and a 12% increase in the sales of livestock.

In 1993–94, 16,800 or 15.6% of Australian farm businesses had turnover of more than \$300,000 at an average of \$693,900 dollars per farm. These farms contributed 54% of the total turnover of all Australian farms. Their average cash operating surplus was \$144,200.

At the other end of the scale, 21,400 farms (20%) had turnover of less than \$50,000. These farm businesses contributed only 2.9% of the total turnover, at an average of \$29,300. These farms had an average cash operating loss of \$1,200 per farm.

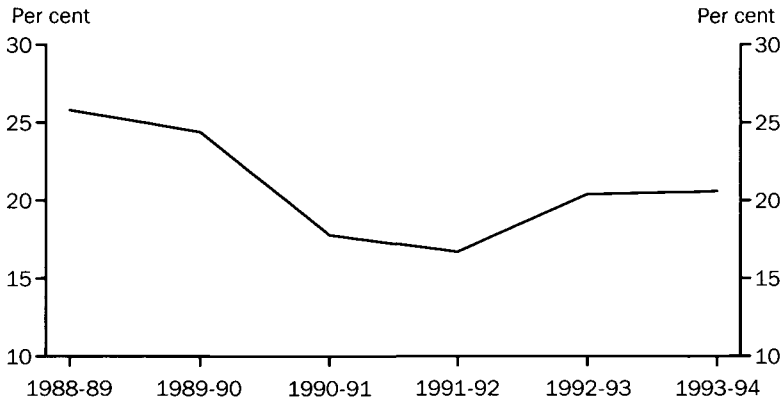
In 1993–94, the farm business profit margin (the ratio of cash operating surplus to turnover) was 20.6%, little changed from 1992–93, but significantly higher than the profit margin for the previous two years. The profit margin of Australian farm businesses has still not recovered to the profitability levels achieved between 1986 and 1990.

15.7 Farm businesses by size of turnover

Size of turnover	Number of farm businesses ('000)				Total turnover (\$m)			
	1990–91	1991–92	1992–93	1993–94	1990–91	1991–92	1992–93	1993–94
Less than \$50 000	26.6	26.3	23.7	21.4	818.4	758.7	712.8	626.4
\$50 000 to \$99 999	26.5	29.7	25.5	23.9	2 111.8	2 095.9	1 918.6	1 622.3
\$100 000 to \$149 999	19.6	18.5	18.3	19.4	2 520.6	2 267.3	2 281.1	2 313.5
\$150 000 to \$199 999	11.1	11.2	10.5	12.4	1 975.1	1 965.6	1 823.7	2 159.4
\$200 000 to \$249 999	7.3	6.8	8.0	8.5	1 679.2	1 536.0	1 789.0	1 808.2
\$250 000 to \$299 999	3.8	5.1	4.8	5.1	1 095.1	1 417.8	1 299.2	1 384.6
\$300 000 & over	13.3	12.0	15.2	16.8	8 990.3	8 534.8	10 193.9	11 650.3
Total	108.3	109.6	106.1	107.5	19 190.6	18 576.0	20 068.2	21 564.7

Source: *Agricultural Industries, Financial Statistics, Australia (7507.0)*.

15.8 Profit margins: Australian farm businesses



Source: Australian Industries, Financial Statistics, Australia (7507.0).

Gross indebtedness

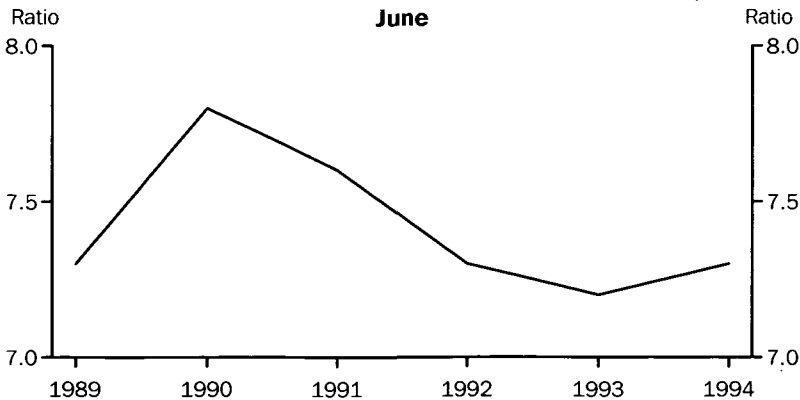
Australian farm businesses owed a total of \$15.9 billion at 30 June 1994, a 3.5% increase on 1992-93. The aggregate debt had risen from \$11.5 billion in 1986-87 when the current series of surveys began. The average gross indebtedness was \$148,100 per farm business. Twenty per cent of farm businesses owed more than \$200,000. These farms owed 77% of the aggregate debt. Twenty-four per cent of farm businesses were debt free at the end of June 1994. The total interest bill for Australian farm business was 13% less than in 1992-93. The average interest payment per farm business was \$12,100 in 1993-94, and was \$7,300 below the high recorded in 1989-90.

15.9 Farm business — aggregate gross indebtedness

30 June	Aggregate gross indebtedness (\$m)	Average gross indebtedness per farm business (\$)
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	15 390.5	145 100
1994	15 921.7	148 100

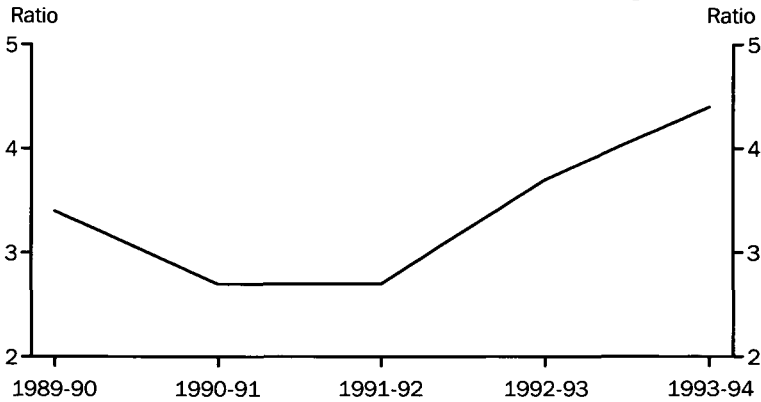
Source: Australian Industries, Financial Statistics, Australia (7507.0).

15.10 Debt to asset ratio: Australian farm businesses, 30 June



Source: Australian Industries Financial Statistics Australia (7507.0).

15.11 Australian farm businesses - interest coverage ratio



Source: Australian Industries, Financial Statistics, Australia (7507.0).

Land used for agriculture

The total area of agricultural establishments in 1993-94 constituted 61.1% of the Australian land area, the remainder being urban areas, State forests, mining leases and National parks etc., with a very large proportion of

unoccupied land (mainly desert) (table 15.12).

The area cropped represents 3.8% of the area of agricultural establishments.

15.12 Land utilisation in Australia (million hectares)

30 June	Area of			Total	
	Crops(a)	Sown pastures & grasses	Balance(b)	Area of establishments	% of Australian land area (768 284 000 hectares)
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
1993-94	18.0	29.5	421.6	469.1	61.1

(a) Excludes pastures and grasses harvested for hay and seed which have been included in 'sown pastures and grasses'. (b) Includes areas of arid or rugged land held under grazing licences but not always used for grazing, and also variable amounts of fallow land.

Source: AgStats, 1993-94 (7117.0).

15.13 Area of establishments with agricultural activity (million hectares)

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
1994	61.2	13.0	152.6	57.3	114.4	2.0	68.6	469.1

Source: AgStats, 1993-94 (7117.0).

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)

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
1959-60	2 888	1 949	1 184	1 780	2 628	130	1	3	10 564
1969-70	4 999	2 212	2 208	2 290	3 912	98	6	2	15 728
1979-80	5 243	2 243	2 334	2 771	5 281	79	2	1	17 954
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
1993-94	4 209	2 317	2 394	2 940	6 100	78	5	—	18 043

(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, seed and pasture cut for hay and harvested for seed or green feed are excluded. From 1970-71 to 1980-81 the 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)*; *AgStats, 1993-94 (7117.0)*.

15.15 Selected crops — area, production and gross value

Crop	1991-92			1992-93			1993-94		
	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	2 744	4 530	681	2 947	5 397	793	3 424	6 668	845
Grain sorghum	569	1 447	201	427	548	86	499	1 084	173
Maize	52	269	46	45	199	41	44	204	41
Oats	1 160	1 690	178	1 149	1 937	206	947	1 647	148
Rice	114	957	183	106	858	164	125	1 042	262
Wheat	7 183	10 557	2 097	8 275	14 739	2 670	8 383	16 479	2 867
Lupins for grain	939	1 047	395	1 032	1 195	442	1 150	1 480	270
Crops for hay									
Oats	327	(a)1 155	n.a.	247	981	96	233	931	108
Wheat	30	64	n.a.	21	60	6	17	65	6
Sugar cane cut for crushing	408	20 640	603	410	27 958	798	338	31 312	945
Tobacco	5	11	71	4	11	70	3	8	51
Cotton	312	1 278	879	287	1 000	706	293	788	652
Peanuts (in shell)	21	39	41	23	32	33	22	45	34
Soybean	30	63	22	30	49	18	41	81	36
Canola	151	170	n.a.	107	178	57	177	305	108
Sunflower	79	84	28	60	50	16	113	105	40

For footnotes see end of table.

...continued

15.15 Selected crops — area, production and gross value — *continued*

Crop	1991–92			1992–93			1993–94		
	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)
Orchard fruit									
Oranges	n.a.	(b)470	203	n.a.	616	212	n.a.	582	230
Apples	n.a.	316	269	n.a.	328	263	n.a.	307	238
Pears	n.a.	180	122	n.a.	168	99	n.a.	161	108
Peaches	n.a.	62	49	n.a.	63	50	n.a.	59	53
Other fruit									
Bananas	10	177	270	11	214	300	9	219	203
Pineapples	6	133	39	6	142	42	4	157	45
Grapes	61	987	433	63	792	378	67	921	450
Vegetables	117	n.a.	1 242	118	2 189	1 227	125	n.a.	1 444
Potatoes	(c)40	(c)1 150	349	39	1 129	317	40	1 185	338
Total all crops (excluding pastures & grasses)	16 404	n.a.	9 267	17 297	n.a.	9 267	18 043	n.a.	10 960

(a) Includes all cereals not collected separately. (b) Excludes Queensland. (c) Includes potatoes for seed.

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993–94 (7117.0)*; *Value of Agricultural Commodities Produced, Australia (7503.0)*; *Viticulture, Australia (7310.0)*.

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

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, along the western side of the continent (see map 15.18).

The 1994–95 preliminary estimate of wheat production showed a 45% fall compared with the 1993–94 season. New South Wales suffered the biggest fall, down 85% while Queensland was down 60% and Victoria down 56%.

15.16 Wheat — area, production and receipts

Year	Area(a)		Production(a)		Australian Wheat Board ('000 tonnes)
	For grain ('000 ha)	All purposes ('000 ha)	Grain ('000 tonnes)	Gross value (\$m)	
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	2 113.0	6 769
1992–93	8 275	(b)8 296	14 739	2 685.0	12 173
1993–94	8 383	(b)8 400	16 479	2 866.8	13 811
1994–95p	8 386	(b)8 432	9 046	1 926.9	6 114

(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)*; *AgStats, 1993–94 (7117.0)*; *Principal Agricultural Commodities, Australia (Preliminary), 1994–95 (7111.0)*.

15.17 Wheat for grain — area and production

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
Area ('000 hectares)							
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
1993-94	1 978	780	556	1 216	3 852	2	8 383
1994-95p	1 492	854	596	1 469	3 974	1	8 386
Production ('000 tonnes)							
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	2 022	735	2 421	5 979	5	14 739
1993-94	5 086	222	555	2 121	6 689	5	16 479
1994-95p	764	898	222	1 507	5 652	3	9 046

Source: AgStats, 1993-94 (7117.0).

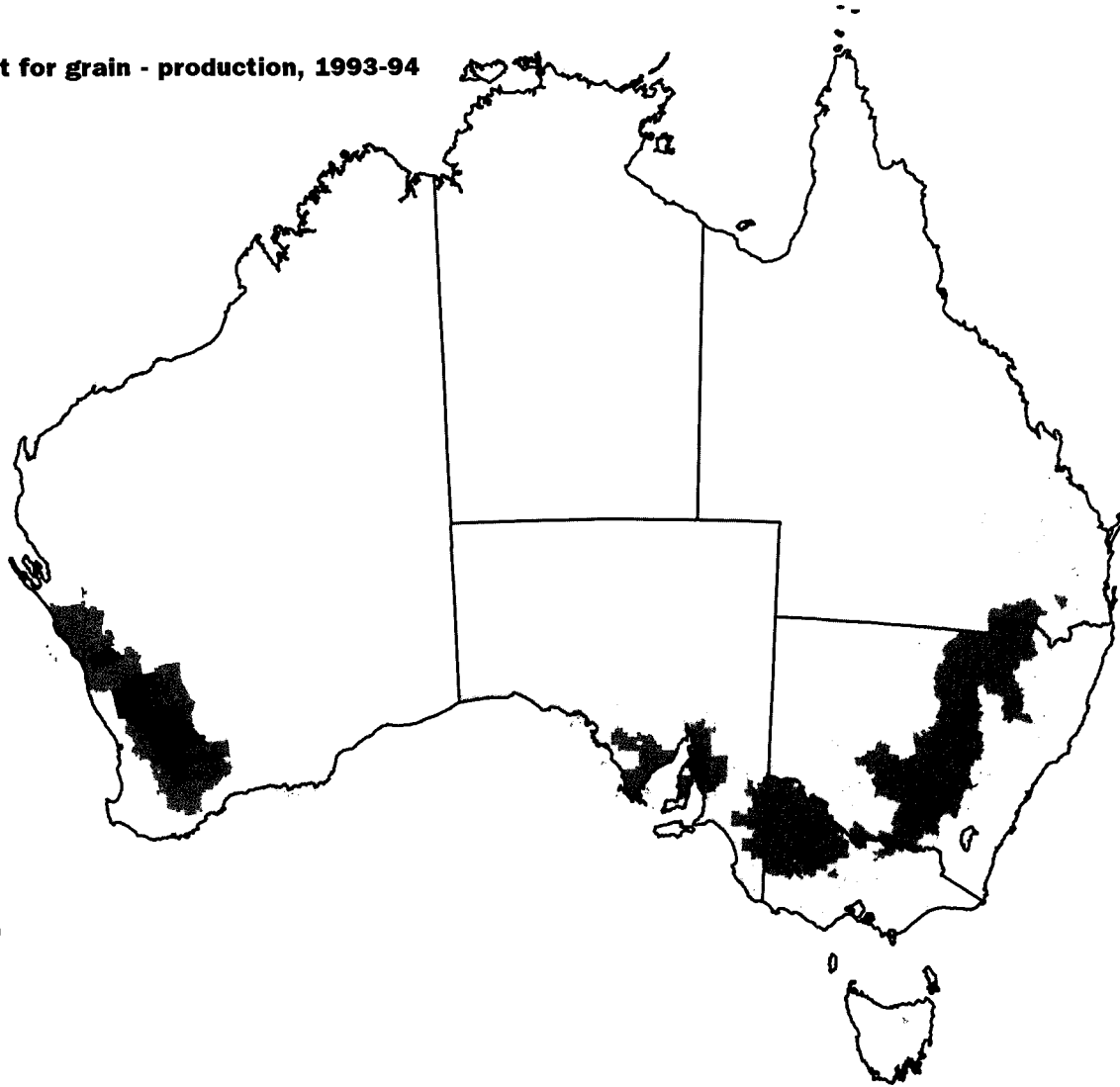
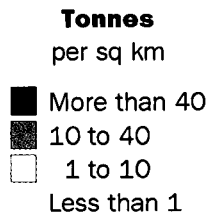
Oats

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.

Map 15.19 shows the production of oats in Australia in 1993-94.

The 1994-95 preliminary estimate of oats for grain production fell by 46% when compared with the 1993-94 harvest. In 1994-95, New South Wales production fell 73% while Victoria fell 48%.

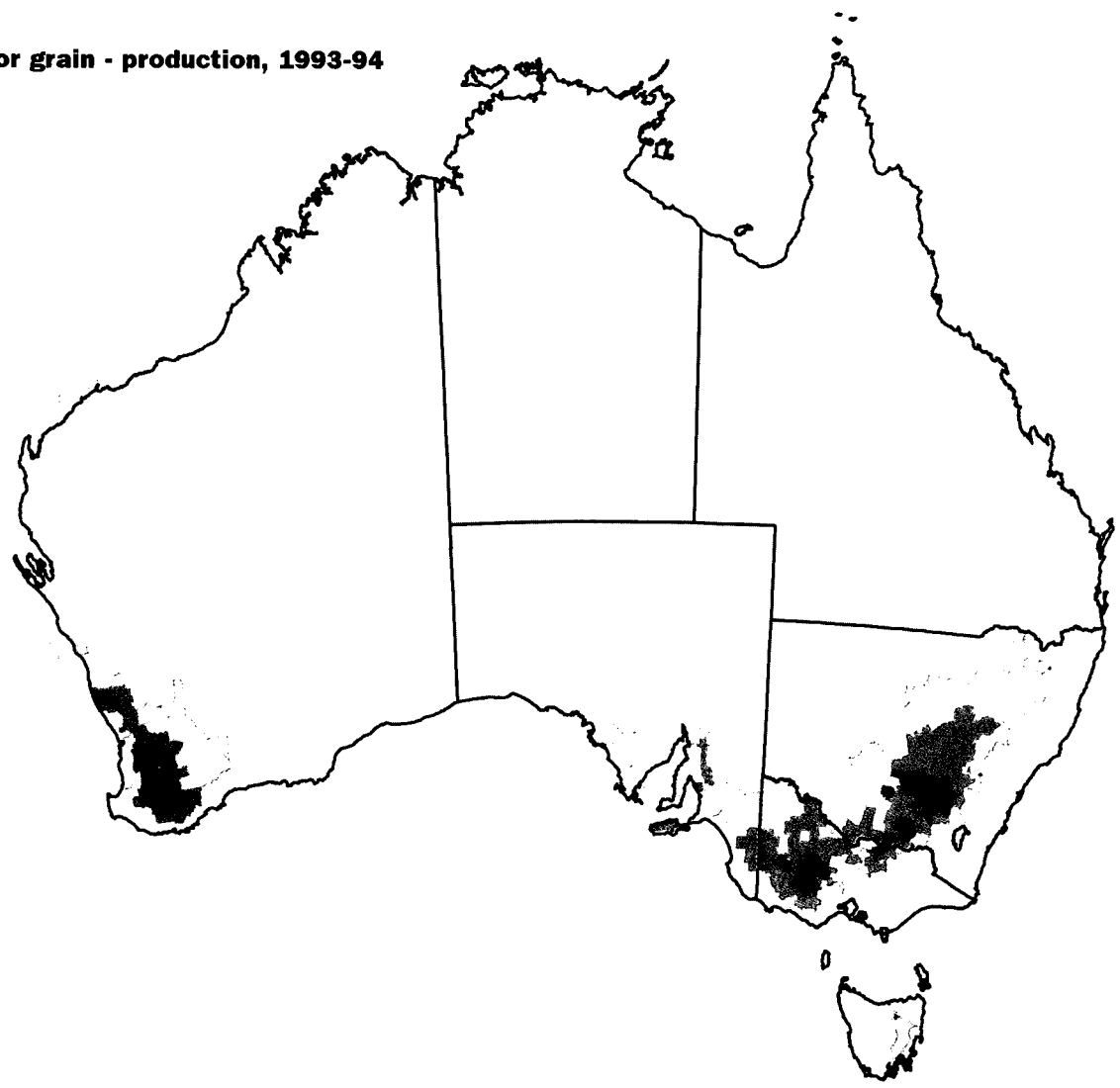
15.18 Wheat for grain - production, 1993-94



15.19 Oats for grain - production, 1993-94

Tonnes
per sq km

- More than 5
- 2 to 5
- 1 to 2
- Less than 1



15.20 Oats for grain — area and production

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
Area ('000 hectares)							
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
1993-94	369	186	16	101	268	7	947
1994-95p	405	150	12	99	261	10	938
Production ('000 tonnes)							
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
1993-94	618	362	8	135	511	13	1 647
1994-95p	167	187	4	92	435	12	897

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993-94 (7117.0)*; *Principal Agricultural Commodities, Australia (Preliminary) 1994-95 (7111.0)*.

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. Map 15.22 shows the production of barley in Australia in 1993-94.

Preliminary production estimates for barley in 1994-95 showed a fall of 58% to 2,791,000 tonnes. New South Wales suffered the biggest fall, down 82% to 241,000 tonnes. Other major falls were in Victoria, down 72% and Queensland, down 80%, while the largest producer, South Australia, saw production halved compared with the 1993-94 harvest.

15.21 Barley for grain — area and production

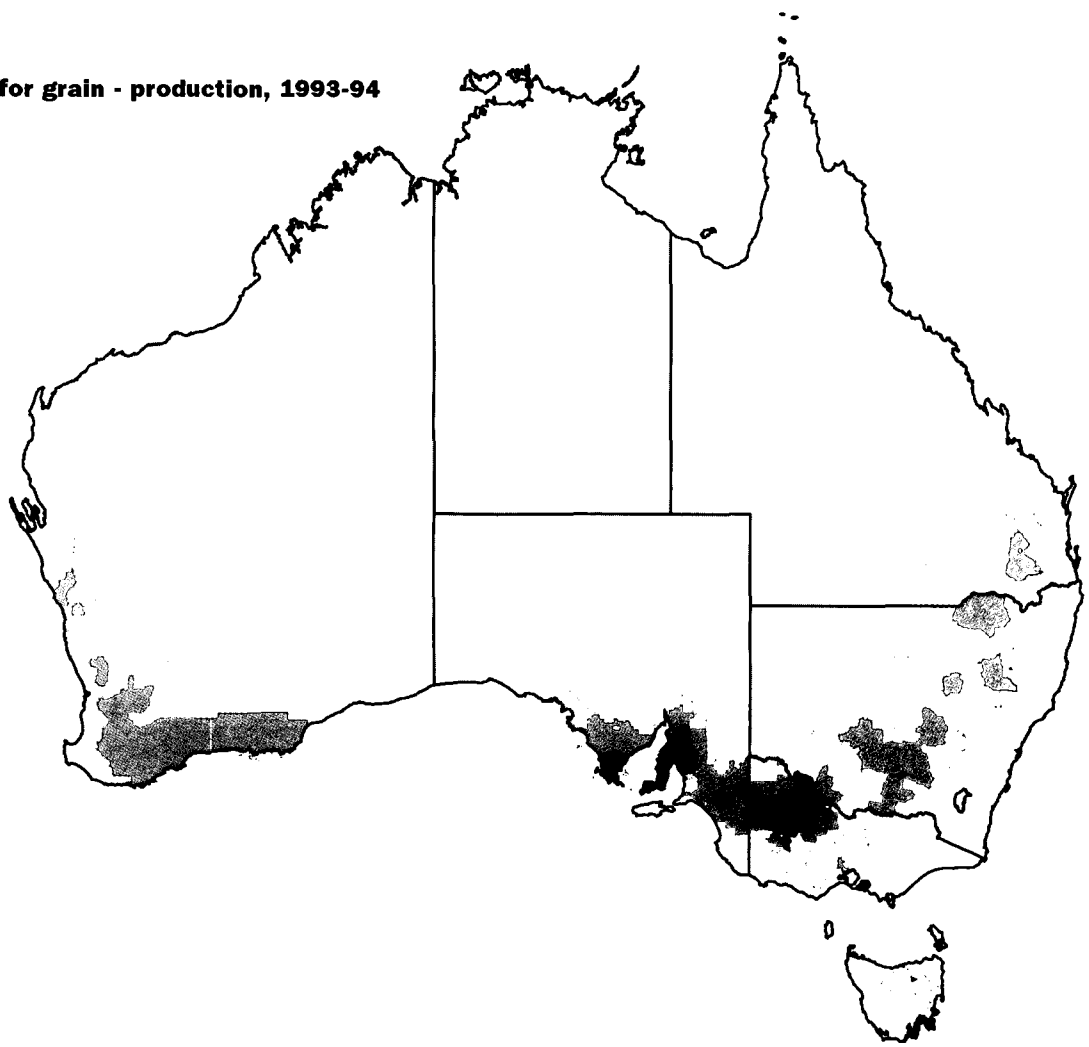
Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
Area ('000 hectares)							
1989-90	413	389	179	900	421	8	2 310
1990-91	463	463	177	945	498	10	2 556
1991-92	517	534	128	999	554	11	2 744
1992-93	560	551	189	1 023	611	12	2 947
1993-94	623	639	232	1 115	799	15	3 424
1994-95p	421	486	80	911	590	14	2 502
Production ('000 tonnes)							
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
1993-94	1 357	1 386	261	2 242	1 381	41	6 668
1994-95p	241	385	53	1 139	945	28	2 791

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993-94 (7117.0)*; *Principal Agricultural Commodities, Australia (Preliminary), 1994-95 (7111.0)*.

15.22 Barley for grain - production, 1993-94

Tonnes
per sq km

- More than 20
- ▨ 5 to 20
- 1 to 5
- Less than 1



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 nearly doubled in 1993–94 with Queensland contributing 79% of the Australian harvest.

15.23 Grain sorghum for grain — area and production

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.(a)
Area ('000 hectares)							
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
1993–94	99	—	399	(b)	—	—	499
Production ('000 tonnes)							
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
1993–94	228	—	852	(b)	—	(b)	1 084

(a) Includes the Northern Territory. (b) Not collected.

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993–94 (7117.0)*.

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.

While maize production remained steady in 1993–94, yield rose 5% to 4.6 tonnes per hectare.

15.24 Maize for grain — area and production

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
Area ('000 hectares)							
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	(a)	2	(a)	45
1993-94	14	—	28	(a)	2	(a)	44
Production ('000 tonnes)							
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	(a)	13	(a)	199
1993-94	100	2	87	(a)	15	(a)	204

(a) Not collected.

Source: *Summary of Crops, Australia* (7330.0); *AgStats 1993-94* (7117.0).**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% 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.

Despite conditions which adversely affected most other crops, preliminary estimates for 1994-95 show a 7% increase in the rice harvest.

15.25 Rice for grain — area and production

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
Area ('000 hectares)							
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
1993-94	125	(a)	(a)	(a)	(a)	(a)	125
1994-95p	127	(a)	(a)	(a)	(a)	(a)	127
Production ('000 tonnes)							
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
1993-94	1 042	(a)	—	(a)	(a)	(a)	1 042
1994-95p	1 117	(a)	—	(a)	(a)	(a)	1 117

(a) Not collected.

Source: *Summary of Crops, Australia* (7330.0); *AgStats, 1993-94* (7117.0).

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, then 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 1993–94 potatoes were the largest vegetable crop in weight terms. Tomatoes and onions were second and third respectively.

15.26 Selected vegetables for human consumption — area under production

Year	French & runner beans	Cabbages	Carrots	Cauliflowers	Onions	Green peas	Potatoes	Tomatoes	Other	Total vegetables
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
1993–94	6.5	2.3	5.4	3.7	5.6	10.5	40.3	8.9	41.6	125.3

(a) Excludes potatoes for seed.

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993–94 (7117.0)*.

15.27 Production of selected vegetables for human consumption

Year	French & runner beans	Cabbages	Carrots	Cauliflowers	Onions	Green peas		Potatoes	Tomatoes
						Processing (shelled weight)	Sold in pod (pod weight)		
Production ('000 tonnes)									
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	169.5	80.2	167.9	35.5	0.8	1 129.2	290.8
1993–94	31.0	70.4	194.8	75.2	213.2	43.3	1.1	1 184.7	327.0

(a) Excludes potatoes for seed.

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993–94 (7117.0)*.

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 apples, marginally ahead of bananas. In 1993–94 the value of the banana crop decreased by 32%.

15.28 Selected fruit statistics

Year	Orchard fruit ('000 trees)				Area of tropical & other fruits (ha)			Total area of fruit (ha)
	Apples	Oranges	Pears(a)	Peaches	Bananas	Pineapples	Other fruit	
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	10 520	5 854	2 850	123 066
1993-94	7 777	8 062	2 133	2 502	10 687	5 870	2 632	132 419

(a) Includes Nashi.

Source: Summary of Crops, Australia (7330.0); AgStats, 1993-94 (7117.0).

15.29 Selected fruit production

Year	Apples	Apricots	Bananas	Cherries	Oranges	Peaches	Pears(a)	Pineapples	Plums & prunes
	Production ('000 tonnes)								
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
1993-94	306.9	21.2	219.2	6.4	582.1	59.4	161.1	157.4	26.1
Gross value of production (\$ million)									
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	232.6	235.2	19.7	164.6	44.0	90.1	37.3	26.3
1991-92	269.4	33.5	270.0	20.2	202.8	49.0	132.4	39.0	29.9
1992-93	263.4	30.6	299.8	19.2	212.1	49.7	117.8	41.8	37.5
1993-94	237.6	27.1	203.3	27.0	230.0	53.2	107.9	45.2	37.2

(a) Includes Nashi.

Source: Summary of Crops, Australia (7330.0); AgStats, 1993-94 (7117.0); Value of Commodities Produced, Australia (7503.0).

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).

15.30 Viticultural statistics — area, production and value

Year	Area		Production grapes used for (a)			Total(b) Gross value (\$m)
	Bearing ('000 ha)	Total ('000 ha)	Winemaking ('000 tonnes fresh weight)	Drying ('000 tonnes fresh weight)	Quantity ('000 tonnes fresh weight)	
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	433.0
1992-93	r58	63	545	197	r793	377.6
1993-94	61	67	662	213	921	450.1
1994-95	62	73	575	147	767	570.2

(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)*.

15.31 Viticulture — area and production, 1995 season

Variety	Area of vines at harvest (hectares)			Production of grapes used for (tonnes fresh weight)(a)			Total
	Bearing	Not yet bearing	All vines	Winemaking(a)	Drying	Other	
Red grapes							
Cabernet Sauvignon	6 271	1 620	7 891	53 090	—	7	53 097
Currant (incl. Carina)	1 183	122	1 304	1 158	11 761	6	12 927
Grenache	1 938	44	1 982	20 408	—	48	20 456
Mataro	594	26	620	7 832	—	31	7 862
Pinot Noir	1 422	187	1 610	13 546	—	2	13 548
Shiraz	6 424	2 326	8 751	65 403	—	10	65 413
Other red grapes	4 666	642	5 307	32 009	748	13 726	46 482
Total red grapes	22 498	4 967	27 465	193 446	12 509	13 830	219 785
White grapes							
Chardonnay	6 503	3 341	9 844	57 123	—	8	57 131
Doradillo	623	2	625	11 867	—	12	11 879
Muscat Gordo Blanco	3 359	146	3 505	60 445	3 711	46	64 202
Palomino & Pedro Ximenes	648	5	653	8 657	—	10	8 667
Rhine Riesling	3 534	67	3 601	32 976	—	—	32 976
Semillon	2 986	559	3 545	31 313	—	—	31 313
Sultana	14 814	597	15 411	93 813	127 703	21 257	242 773
Waltham Cross	625	21	646	3 123	3 100	1 845	8 068
Other white grapes	6 701	703	7 404	82 231	381	7 511	90 123
Total white grapes	39 793	5 441	45 234	38 548	134 895	30 689	547 132
Total grapes	62 291	10 408	72 699	574 994	147 404	44 519	766 917

(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.

15.32 Oilseeds — area and production

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
Area ('000 hectares)							
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
1993-94	178	66	88	25	37	—	394
Production ('000 tonnes)							
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
1993-94	301	83	82	31	48	—	545

Source: *Summary of Crops, Australia (7330.0)*; *AgStats, 1993-94 (7117.0)*.

Cotton

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 in 1993-94 fell for the second consecutive year. Yield also declined from 3.5 tonnes per hectare to 2.7 tonnes per hectare, a loss of 23%.

15.33 Cotton — area, production and exports

Year	Seed cotton(a)			Raw cotton export			
	Area (‘000 ha)	Quantity (‘000 tonnes)	Gross value (\$m)	Cottonseed(b) (‘000 tonnes)	Lint(b) (‘000 tonnes)	Quantity (‘000 tonnes)	Value f.o.b. (\$m)
1988–89	194	769	537	449	286	286	461
1989–90	240	792	640	493	305	291	539
1990–91	279	1 129	898	686	433	319	689
1991–92	312	1 278	879	724	502	r463	r945
1992–93	287	1 000	706	528	373	r399	r753
1993–94	293	788	652	466	329	364	732

(a) Before ginning. (b) Estimated by the Australian Bureau of Agricultural and Resource Economics, and Australian Bureau of Statistics Trade Section.

Source: *Summary of Crops, Australia (7330.0)*; *Value of Agricultural Commodities Produced, Australia (7503.0)*; AgStats 1993–94.

Sugar

Sugar cane is grown commercially in Australia along the east coast over a distance of some 2,100 km 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 95% of production occurs in Queensland, with some 75% 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.

15.34 Sugar cane — area, production and yield

Year	New South Wales					Queensland				
	Sugar cane cut for crushing			Raw sugar(a)		Sugar cane cut for crushing			Raw sugar(a)	
	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)
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
1993–94	15	1 674	62.1	218	14.5	323	29 638	91.8	4 082	12.6
1994–95p	16	1 754	109.6	242	15.1	349	31 680	90.8	4 821	13.8

(a) In terms of 94 net titre.

Source: *Summary of Crops, Australia (7330.0)*; AgStats, 1993–94 (7117.0); ABARE: *Australia Commodities Forecasts and Issues*, 95.

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 and 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.

15.35 Fodder crops — area and production

Year	Hay(a)				
	Area (^{'000} ha)	Quantity (^{'000} tonnes)	Production		Silage made (^{'000} tonnes)
			Gross value (\$m)	Green feed or silage(b)	
1988-89	323	1 080	106.8	1 152	825
1989-90	297	964	104.0	1 053	723
1990-91	(c)336	(c)1 068	(c)112.3	(d)787	(d)574
1991-92	(c)450	(c)1 480	(c)r159.0	(d)759	(d)687
1992-93	(c)324	(c)1 220	(c)116.9	(d)712	(d)883
1993-94	301	1 165	136.3	707	1 142

(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); AgStats, 1993-94 (7117.0).

Livestock

The numbers of each of the principal categories of livestock in Australia at ten-yearly intervals from 1861 to 1991, and yearly from then on, are shown below.

15.36 Livestock (^{'000})

31 March	Cattle	Sheep & lambs	Pigs
1861	3 958	20 135	351
1871	4 276	41 594	543
1881	7 527	62 184	816
1891	10 300	97 881	891
1901	8 640	70 603	950
1911	11 745	98 066	1 026
1921	13 500	81 796	674
1931	11 721	110 568	1 072
1941	13 256	122 694	1 797
1951	15 229	115 596	1 134
1961	17 332	152 579	1 615
1971	24 373	177 792	2 590
1981	25 168	134 407	2 430
1991	(a)23 662	163 238	2 531
1992	(a)23 880	148 203	r2 570
1993	(a)24 059	138 099	2 646
1994	(a)25 758	132 569	2 775
1995	(a)26 187	120 651	2 750

(a) Excluding house cows and heifers.

Source: *Livestock and Livestock Products, Australia* (7215.0), *Principal Agricultural Commodities, Australia* (Preliminary) 1994-95 (7111.0).

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. In many areas, cattle are raised for both dairy and beef purposes. 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 (see map 15.39).

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 gradually each year, despite drought conditions which have prevailed in many parts of Queensland and in north-western New South Wales.

15.37 Cattle by age, sex and purpose (‘000)

	31 March					
	1990	1991	1992	1993	1994	1995p
Milk cattle						
Bulls used or intended for service	33	31	31	31	36	(a)
Cows, heifers & heifer calves	2 461	2 399	2 401	2 472	2 642	(a)
House cows & heifers	28	(a)	(a)	(a)	(a)	(a)
Total	2 523	2 430	2 432	2 504	2 678	2 789
Meat cattle						
Bulls used or intended for service	582	538	521	526	557	586
Cows & heifers (1 year & over)	10 577	10 687	10 748	11 171	12 076	11 481
Calves under 1 year	5 107	5 208	5 128	5 064	5 388	5 791
Other cattle (1 year & over)	4 401	4 799	5 050	4 795	5 058	5 540
Total	20 668	21 232	21 447	21 555	23 080	23 398
Total all cattle	23 191	23 662	23 880	24 062	25 758	26 187

(a) Not collected.

Source: *Livestock and Livestock Products, Australia (7215.0)*; *Principal Agricultural Commodities, Australia (Preliminary), 1994–95 (7111.0)*.

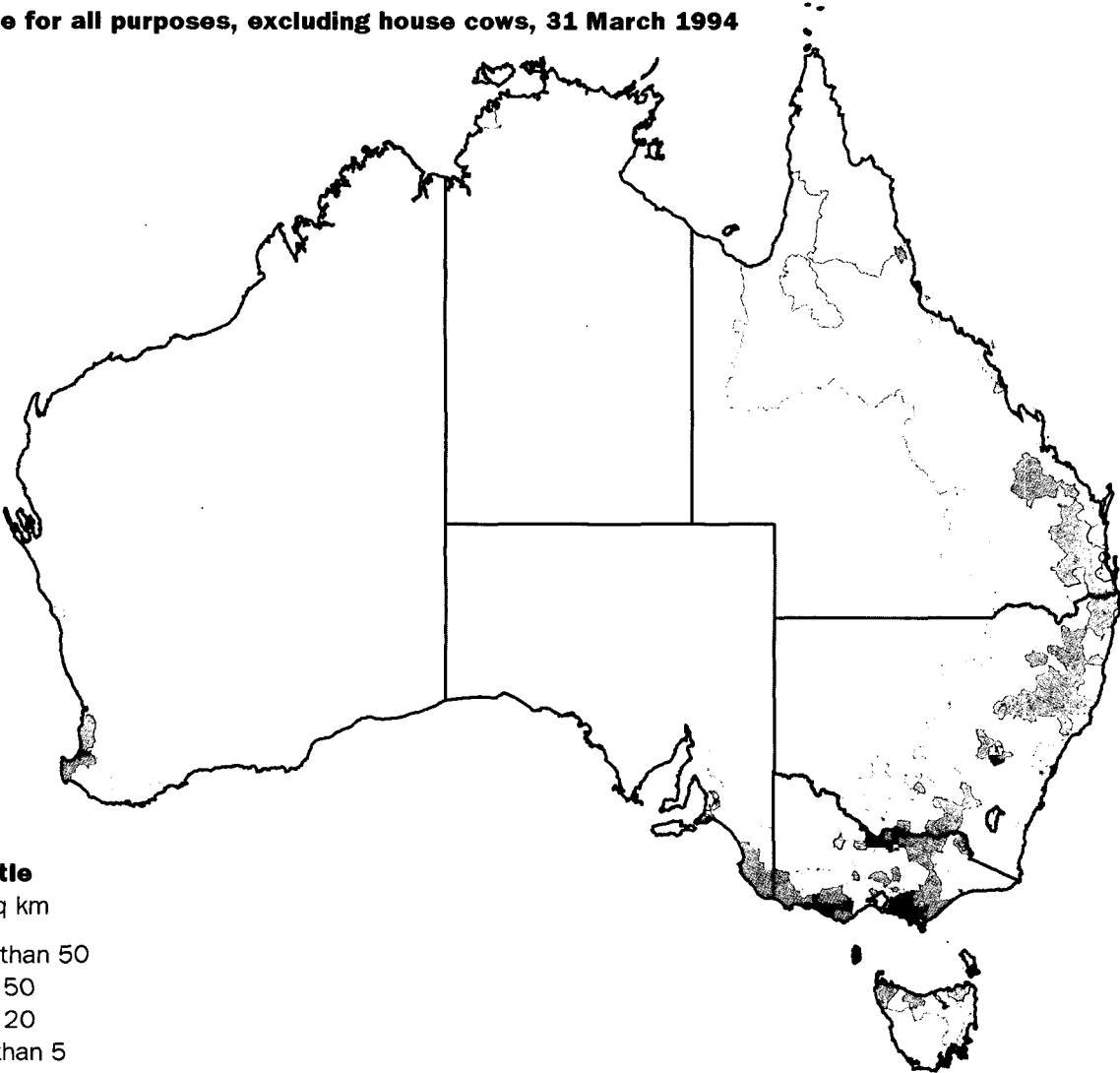
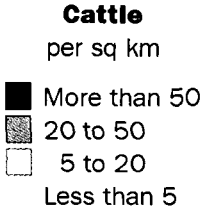
15.38 Cattle (‘000)

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	Aust.(a)
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
1994	6 515	4 189	9 942	1 202	1 806	679	1 435	(b)25 758
1995p	6 409	4 294	10 164	1 248	1 841	700	1 525	(b)26 187

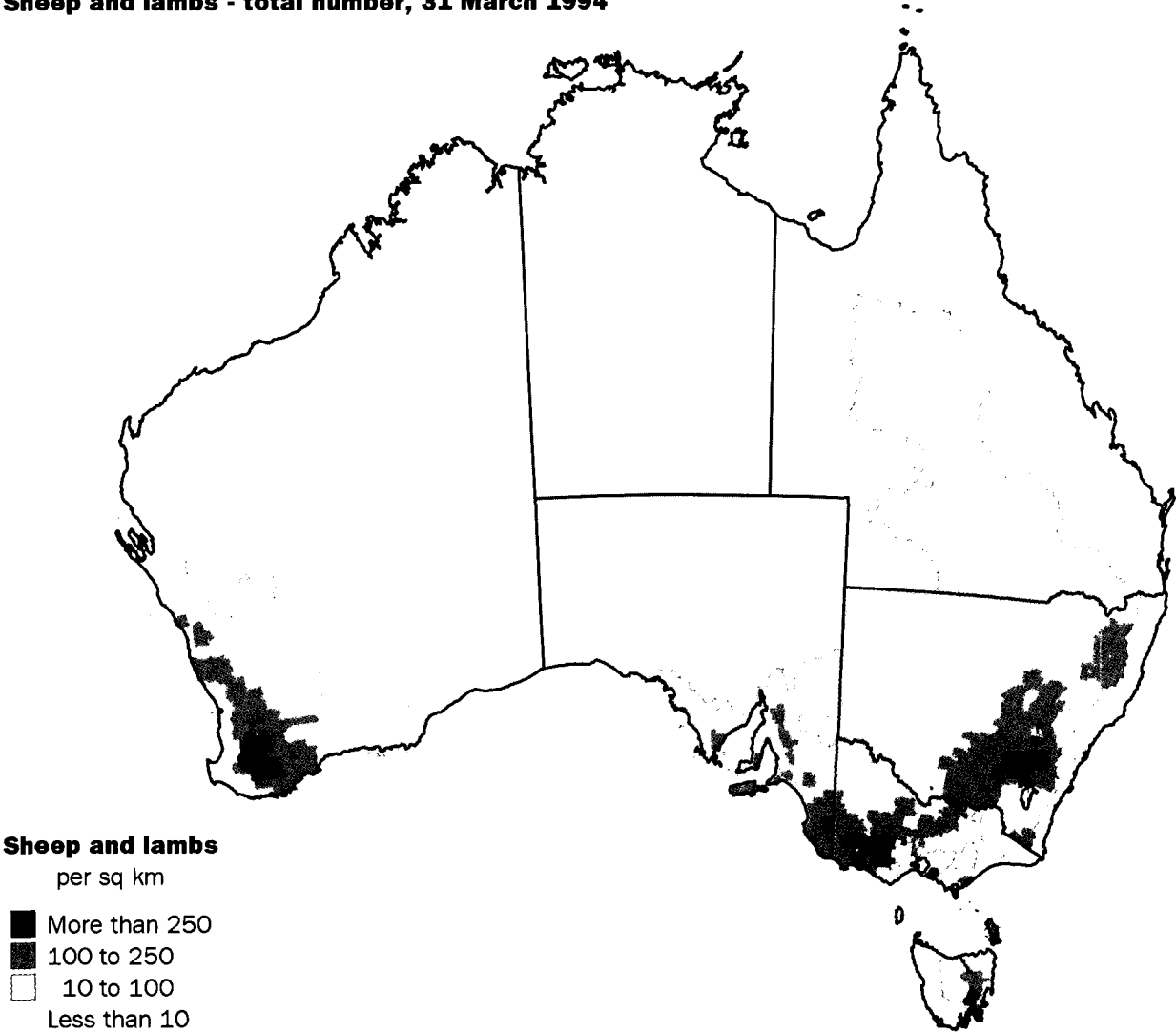
(a) Includes the Australian Capital Territory. (b) Excluding house cows and heifers.

Source: *Livestock and Livestock Products, Australia (7215.0)*; *Principal Agricultural Commodities, Australia (Preliminary), 1994–95 (7111.0)*.

15.39 Cattle for all purposes, excluding house cows, 31 March 1994



15.40 Sheep and lambs - total number, 31 March 1994



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 have declined each year since then. Map 15.40 shows the distribution of sheep and lambs in Australia at 31 March 1994.

15.41 Sheep and lambs (millions)

31 March	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
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
1994	46.5	23.4	11.5	14.7	31.9	4.3	132.6
1995p	39.8	21.0	112.2	13.4	30.4	4.0	120.7

Source: *Livestock and Livestock Products, Australia (7215.0)*; *Selected Agricultural Commodities, Australia (7112.0)*; *Principal Agricultural Commodities, Australia (Preliminary), 1994-95 (7111.0)*.

15.42 Sheep and lambs by age, sex and purpose (millions)

	31 March					
	1990	1991	1992	1993	1994	1995p
Sheep (1 year & over)						
Rams	1.8	1.7	1.6	1.4	1.4	(a)
Breeding ewes	74.8	67.0	65.5	61.4	60.8	(a)
Other ewes	6.0	9.7	7.9	6.6	5.9	(a)
Wethers	47.7	48.7	45.5	40.3	34.8	(a)
All sheep	130.3	127.1	120.5	109.7	102.9	93.9
Lambs & hoggets (under 1 year)	40.1	36.1	27.8	28.4	29.7	26.7
Total sheep & lambs	170.3	163.2	148.2	138.1	132.6	120.7

(a) Not separately collected.

Source: *Livestock and Livestock Products, Australia (7215.0)*; *Principal Agricultural Commodities, Australia (Preliminary), 1994-95 (7111.0)*.

Pigs

15.43 Pigs (^{'000})

31 March	NSW	Vic.	Qld	SA	WA	Tas.	Aust.(a)
1990	865	428	600	437	272	42	2 648
1991	821	403	596	400	271	38	2 531
1992	799	431	560	420	318	40	2 570
1993	818	425	617	435	305	44	2 646
1994	834	460	682	440	312	46	2 775
1995p	850	456	609	416	386	30	2 750

(a) Includes the Northern Territory and the Australian Capital Territory.

Source: *Livestock and Livestock Products, Australia (7215.0)*.

Poultry

15.44 Poultry (^{'000})

31 March	Chickens			Other poultry			Total all poultry
	Hens & pullets for egg production	Meat strain chickens (broilers)	Total chickens(a)	Ducks	Turkeys	Other poultry	
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	r56 583
1992(a)	r10 735	r44 318	r59320	n.p.	n.p.	(c)r2 262	r61 582
1993(a)	r12 565	r51 157	r68087	n.p.	n.p.	(c)r1 864	r69 951
1994(b)	12 788	50 402	68 950	n.p.	n.p.	1 658	70 608

(a) Includes breeding stock. (b) Excludes Tasmania. (c) Includes ducks, drakes and turkeys.

Source: *Livestock and Livestock Products, Australia (7215.0)*; *AgStats, 1993-94 (7117.0)*.

Meat production and slaughterings

Tables 15.45 and 15.46 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.

15.45 Production of meat(a) (^{'000 tonnes})

Year	Carcass weight						Dressed weight(b)(c)	
	Beef	Veal	Mutton	Lamb	Pig meat	Total meat	Total all chickens	Poultry(d)
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	r421	457
1992-93	1 787	39	370	273	328	2 798	r441	474
1993-94	1 786	39	377	265	344	2 811	475	506
1994-95p	1 746	38	331	260	349	2 724	468	500

(a) Excludes offal. (b) Excludes the Northern Territory and the Australian Capital Territory. (c) Dressed weight of whole birds, pieces and gblets. (d) Includes other fowls, turkeys, ducks and drakes. (e) Excludes Tasmania.

Source: *Livestock Products, Australia (7215.0)*.

15.46 Livestock and poultry slaughtered for human consumption (million head)

Year	Cattle	Calves	Sheep	Lambs	Pigs	Chickens(b)	Other fowls(a) & turkeys	Ducks & drakes
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
1993-94	7.3	1.0	17.6	15.0	5.2	329.5	8.0	2.5
1994-95p	7.2	1.1	16.5	14.9	5.1	333.3	8.0	2.3

(a) Comprises hens, roosters, etc. (b) Comprises broilers, fryers and roasters. (c) Excludes Tasmania.

Source: *Livestock Products, Australia (7215.0)*.

15.47 Gross value of livestock slaughtering and other disposals(a) (\$ million)

Year	Cattle & calves	Sheep & lambs	Pigs	Poultry	Total(b)
1989-90	3 860.5	585.4	656.0	777.9	5 893.3
1990-91	3 869.4	364.2	691.0	788.3	5 721.0
1991-92	3 801.9	460.6	658.6	778.0	5 738.1
1992-93	3 839.2	663.0	649.5	833.5	6 023.5
1993-94	4 352.7	793.6	660.5	929.3	6 772.1
1994-95p	3 960.0	738.4	609.2	927.2	6 271.4

(a) Includes adjustment for net exports of live animals. (b) Includes goats and buffalo.

Source: *Value of Agricultural Commodities Produced, Australia (7503.0)*.

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 1994-95 decreased by 8% to 591,000 tonnes.

In 1994-95 exports of beef to Japan increased 4% to 332,179 tonnes. Liberalisation of the Japanese market occurred in 1991. This involved the removal of import quotas in exchange for a percentage of customs value. Korea also bought more Australian beef in 1994-95, raising its take by 18% to 68,983 tonnes while Taiwan purchased 34,986 tonnes, an increase of 5%. However, exports of beef to Canada fell 68% to 38,133 tonnes. The USA accepted 260,512 tonnes, 16% less than 1993-94 while we exported 7,403 tonnes to the UK, a reduction of 67%.

15.48 Exports of fresh, chilled or frozen meat(a) ('000 tonnes)

Year	Beef(b)(c)		Veal(b)		Mutton(b)		Lamb		Pork
	Bone-in	Bone-out	Bone-in	Bone-out	Bone-in	Bone-out	Bone-in	Bone-out	
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	81.0	739.9	2.1	5.4	80.2	77.4	46.7	5.5	7.0
1993-94	62.7	742.4	1.3	5.8	97.8	71.0	52.7	5.2	5.9
1994-95p	59.8	716.5	2.0	6.9	103.2	65.3	47.7	4.6	6.3

(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: *Merchandise Import and Exports, 1993-94 (5410.0)*.

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% 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 349,124 tonnes in 1994–95. In addition, there has been an increase in the slaughter weights of pigs reflecting the demands of the fresh pork trade.

15.49 Live sheep and cattle exports(a)

Year	Live sheep exports				Live cattle exports			
	No. ('000)	Gross weight ('000 tonnes)	Gross value (\$'000)	Unit value(b) (\$)	No. ('000)	Gross weight ('000 tonnes)	Gross value (\$'000)	Unit value(b) (\$)
1989–90	4 166.5	240.7	102 122	23.40	89.9	28.9	45 295	483.20
1990–91	3 140.5	162.0	45 612	14.40	94.9	31.3	50 407	542.30
1991–92	4 395.6	258.0	87 717	20.00	107.4	33.2	54 930	511.40
1992–93	5 097.1	270.5	121 933	23.92	148.6	50.4	69 847	470.20
1993–94	5 429.8	287.4	148 907	27.42	234.7	79.9	115 020	489.97
1994–95p	5 533.6	283.6	179 086	32.36	385.7	136.5	201 948	523.52

(a) Excludes live sheep and cattle for breeding. (b) Obtained by dividing the gross value by the number of sheep, or cattle.
Source: *Foreign Trade, Australia: Merchandise Imports and Exports, 1993–94 (5410.0)*.

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. Following a gradual upward trend of clean yields to 66.0% of the Australian clip in 1992–93, clean yields fell in 1993–94 and 1994–95 to 65.7% and 64.6% respectively.

The gross value of wool produced in 1994–95 was 44.7% lower than in 1988–89, the peak year in the wool boom of the 1980s.

15.50 Shearing, wool production and value

Year	Wool production					
	Sheep & lambs shorn (million)	Average fleece weight (kg)	Shorn wool ('000 tonnes)	Total wool		
				Other wool(a) ('000 tonnes)	Quantity ('000 tonnes)	Gross value(b) (\$m)
1989–90	215.1	4.79	1 030.9	71.1	1 102.0	5 718.0
1990–91	212.9	4.65	989.2	76.9	1 066.1	4 181.0
1991–92	181.2	4.42	801.2	73.7	875.0	2 980.0
1992–93	179.0	4.55	815.1	54.3	869.4	2 569.0
1993–94	148.7	4.49	775.8	52.6	828.3	2 449.0
1994–95p	155.3	4.37	677.9	48.5	726.4	3 263.9

(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: *Value of Agricultural Commodities Produced, Australia (7503.0); Livestock and Livestock Products, Australia (7215.0)*.

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.

15.51 Taxable wool receivals

Year	Receivals ('000 tonnes)			Dealers as % of total receivals (%)
	Brokers	Dealers	Brokers & dealers	
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
1992-93	703.2	140.8	844.1	16.8
1993-94	635.5	149.1	784.6	19.0
1994-95p	566.1	109.5	675.6	16.2

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 the end of 1990-91 was 4,623,938 bales.

In 1994-95, the Australian Wool Research and Promotion Organisation (AWRAP) was integrated at an operational level with the International Wool Secretariat (IWS) to form a strong Customer-oriented international marketing and research organisation focused on building a global demand for wool. Whilst AWRAP and IWS remain separate legal entities with separate boards, with ARAP conducting statutory and certain other functions, all operational activities are now conducted under the name of IWS.

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. Most wool is sold forward from the stockpile by private treaty, supplemented by auction

sales for spot or deferred delivery. From 1 January 1995, Wool International is required to sell the stockpile at a rate of 187,000 bales per quarter. Wool International receives wool tax equivalent to 4.5% of proceeds from wool sales for debt repayment associated with the stockpile. Wool tax paid over the period 1993-94 to 1996-97 will form the basis for an entitlement to the residual assets, following the liquidation of the stockpile and repayment of debt.

The stockpile at the end of 1995 stood at 2,650,479 bales.

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 1994-95 was \$2,574 million or approximately 11% of the gross value of rural production. The gross value of this industry at an ex-factory level is approximately \$6,000 million per annum. The industry is also one of Australia's leading rural industries in terms of the proportion of downstream employment and processing it generates. Employment at manufacturing, processing and farm establishments is about 50,000 people.

Dairy production

Australian milk production in 1994–95 was 8,206 million litres, an increase of 1.6% 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 4,377 litres in 1994–95 was around a third higher than the levels of the early 1980s, but 3% less than 1993–94.

15.52 Milk cattle ('000)

31 March	Bulls used or intended for service	Cows & heifers used or intended for production of milk or cream for sale		
		Cows (in milk & dry)	Heifers	House cows & heifers(a)
1990	33	1 653	808	28
1991	31	1 637	762	(b)
1992	31	1 652	749	(b)
1993	31	1 697	776	(b)
1994	36	1 786	856	(b)
1995p	(c)	1 875	(c)	(b)

(a) One year and over, kept for the establishment's own milk supply. (b) Not collected. (c) Not collected separately.

Source: AgStats, 1993–94 (7117.0).

15.53 Production, utilisation and gross value of whole milk

Year	Whole milk intake by factories			
	Market milk sales by factories (million litres)	Milk used in the manufacture of dairy products (million litres)	Total intake (million litres)	Gross value (\$m)
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
1993–94	1 811	6 266	8 077	2 448.0
1994–95p	1 832	6 374	8 206	2 574.2

Source: Australian Dairy Corporation; Value of Principal Agricultural Commodities Produced, Australia, 1994–95 Preliminary (7501.0).

Dairy 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.

In 1994–95, Australians consumed 173,823 tonnes of cheese, 5% more than the previous year. On a per capita basis, this is 9.8 kg per person, 21% more than we were consuming in 1984–85.

Beekeeping

The beekeeping industry consists of approximately 300–400 full-time apiarists, who account for approximately 70% 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 are also significant.

15.54 Beekeeping

Year	Honey produced						Beeswax produced	
	Number of beehives			Quantity ('000 tonnes)	Average production per productive hive (kg)	Gross value (b)(\$'000)	Quantity (tonnes)	Gross value(b) (\$'000)
	Number of apiarists	Productive(a) ('000)	Total ('000)					
1988-89	836	307	405	23	74	29 586	530	1 967
1989-90	819	298	405	21	71	26 113	412	1 546
1990-91	726	290	384	21	71	26 078	381	1 389
1991-92	651	264	366	19	72	25 008	390	1 455
1992-93	686	278	362	23	81	31 499	422	1 560
1993-94	1 659	381	534	26	68	32 923	620	2 800

(a) Beehives from which honey was taken. (b) Includes pollen.

Source: AgStats 1993-94 (7117.0).

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 15.55 shows the changes in trends in the consumption of various foodstuffs over the past fifty years.

15.55 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	1992-93	1993-94p
Meat (carcass equivalent weight)								
Beef	n.a.	n.a.	n.a.	n.a.	n.a.	39.5	34.9	36.4
Veal	n.a.	n.a.	n.a.	n.a.	n.a.	1.5	1.6	1.6
Beef & veal	63.6	49.5	56.2	40.0	64.8	41.1	36.5	38.0
Lamb	6.8	11.4	13.3	20.5	14.4	14.9	12.5	11.5
Mutton	27.2	20.5	23.1	18.8	3.6	6.8	7.4	9.0
Pigmeat(a)	3.9	3.2	4.6	6.7	13.3	18.1	18.4	19.3
Total meat	101.5	84.6	97.2	85.9	96.1	80.8	74.8	77.9
Offal & meat, n.e.i.	3.8	4.0	5.2	5.1	5.9	2.5	2.2	2.3
Total meat & meat products (carcass equivalent weight)	118.5	103.0	112.4	98.8	102.0	83.3	77.0	80.1
Canned meat (canned weight)	1.0	1.2	1.9	2.2	1.6	n.a.	n.a.	n.a.
Bacon & ham (cured carcass weight)	4.6	5.3	3.2	3.6	6.0	6.9	7.1	n.a.

For footnotes see end of table.

...continued

15.55 Apparent per capita consumption of foodstuffs — continued
(kg — unless otherwise indicated)

Commodity	Average 3 years ended							
	1938-39	1948-49	1958-59	1968-69	1978-79	1988-89	1992-93	1993-94p
Poultry								
Poultry (dressed weight)	n.a.	n.a.	n.a.	8.3	17.1	24.2	26.6	27.9
Milk & milk products								
Market milk (fluid whole litres)	106.4	138.7	128.7	128.2	100.5	101.0	101.1	101.9
Cheese (natural equivalent weight)	2.0	2.5	2.6	3.5	5.3	9.0	9.0	9.3
Oils & fats								
Butter	14.9	11.2	12.3	9.8	5.1	2.9	2.6	2.6
Table margarine	0.4	0.4	n.a.	1.5	5.4	6.8	6.2	6.0
Other margarine	1.8	2.4	2.2	3.4	3.1	2.2	1.8	1.9
Total margarine	2.2	2.8	n.a.	4.9	8.5	9.0	8.0	7.9
Beverages								
Tea	3.1	2.9	2.7	2.3	1.7	1.2	1.0	1.0
Coffee(b)	0.3	0.5	0.6	1.2	1.6	2.0	2.2	2.3
Aerated & carbonated waters (litres)	n.a.	n.a.	n.a.	47.3	67.4	79.9	97.1	104.6
Beer (litres)	53.2	76.8	99.7	113.5	133.2	115.4	97.5	99.0
Wine (litres)	2.7	5.9	5.0	8.2	14.7	19.1	18.2	18.5
Spirits (litres alcohol)	0.5	0.8	0.7	0.9	1.2	1.3	1.2	1.3

(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 2.4 million hectares in 1993-94) forms 13.3% of the total area under crops.

15.56 Area of crops and pastures irrigated ('000) hectares)

	Australia							1994				
	1992	1993	1994	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	
Pastures	1 081	1 184	1 362	635	556	70	53	14	33	1	—	
Cereals	275	311	364	284	23	45	7	1	2	—	—	
Vegetables for human consumption	93	89	96	17	20	27	9	6	16	—	—	
All fruits	120	125	144	33	35	23	40	7	3	—	—	
All other crops	356	245	275	176	13	73	4	3	6	—	—	
Sugar cane	146	154	168	(a)	(a)	168	(a)	(a)	(a)	(a)	(a)	
Total	2 069	2 107	2 408	1 145	646	409	112	32	61	3	—	

(a) Not classified.

Source: *Agriculture, Australia, Preliminary (7113.0)*.

Fertilisers

Most Australian soils are deficient in phosphorous. Because of this and the significant but less widespread deficiency of sulphur in many soils, phosphate fertilisers, particularly single strength 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 generally evident in Australian soils and the use of nitrogenous fertilisers is increasing. Potassium deficiency is confined mainly to soils in the higher rainfall areas which are intensively cropped or used for irrigated pastures.

15.57 Artificial fertilisers — area and usage

Year	Area fertilised ('000 ha)	Superphosphate used ('000 tonnes)	Nitrogenous fertilisers used ('000 tonnes)	Other fertilisers ('000 tonnes)
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
1993-94	20 529	(a)	(a)	(b)3 000

(a) Not collected. (b) Includes all fertiliser categories.

Source: *Summary of Crops, Australia (7330.0)*.

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Forestry and fishing

Forestry	435
Forest estate	435
Native forest	435
Plantations	436
Tropical forests	436
Wood and wood products	437
Government administration	438
Commonwealth government initiatives	439
National Forest Policy Statement (NFPS)	439
Plantation initiatives under the NFPS	439
Regional Forest Agreements	440
Wood and Paper Industries Strategy	440
National Forest Policy Advisory Forum (NFPAF)	440
National Forests Inventory	440
Tropical timber	440
Pulp mill guidelines	441
Forest and Wood Products Research and Development Corporation	441
Commonwealth Scientific and Industrial Research Organisation (CSIRO)	441
Fishing	442
Fisheries resources	442
Production, processing and exports and imports of fisheries products	442
Value of fisheries production	442
Processing of fish, crustaceans and molluscs	444
Exports and imports	445
Fisheries legislation and territorial arrangements	446
<i>Fisheries Management Act 1991</i> and the Australian Fishing Zone	446
Australian Fisheries Management Authority	447
Other legislation	447
Fisheries research	447
Recreational fishing	448
Bibliography	449

Forestry and fishing

Forestry

Forests are an important sustainable natural resource providing a wide range of indispensable products and benefits to the community.

Forest vegetation cover protects the soil from water and wind erosion, reduces flooding and siltation of water bodies and maintains water quality. Forests provide habitats for a wide variety of native animals and plants. They also act as a sink to absorb greenhouse gases.

The forests and wood products industries based on native and plantation forests contribute substantially to Australia's economy, especially to employment in regional areas. Forests are also 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, but careful management will ensure that forests provide multiple benefits in the long term for the Australian community.

Forest estate

Native forest

Native forest is defined in this chapter as land dominated by trees with an existing or potential mature height of twenty metres or more, including native stands of cypress pine in commercial use regardless of height. Based on this definition, the total area of native forest was estimated at 41 million hectares at 30 June 1993 (about 5% of Australia's land area).

16.1 Native forest areas, by forest type and ownership, at 30 June 1993

	NSW	Vic.	Qld	SA	WA(a)	Tas.(b)	NT	ACT	Total
Classified by Forest Type Group									
Rainforest	260	16	1 237	—	6	565	203	—	2 287
Eucalypt productivity(c)									
Class I	1 171	544	205	—	186	468	—	—	2 574
Class II	3 658	4 328	1 290	—	2 160	1 901	—	—	13 337
Class III	7 937	538	3 300	—	—	—	—	51	11 826
Tropical eucalypt & paperbark	—	—	4 078	—	—	—	2 450	—	6 528
Cypress pine	1 696	7	1 686	—	—	—	778	—	4 167
Total	14 722	5 433	11 796	—	2 352	2 934	3 431	51	40 719
Classified by ownership									
Public ownership(d)									
Category 1	3 257	3 132	3 071	—	1 358	1 306	—	—	12 124
Category 2	3 699	—	6 412	—	2	85	511	—	10 709
Category 3	2 574	1 641	(e)821	—	502	685	339	51	6 613
Total public ownership	9 530	4 773	10 304	—	1 862	2 076	850	51	29 446
Private ownership	5 192	660	1 492	—	490	858	2 581	—	11 273
Total	14 722	5 433	11 796	—	2 352	2 934	3 431	51	40 719

(a) Data previously published for Western Australia's forest were stated as gross forest areas: the areas have now been converted to net areas. All other States and Territories are gross areas. (b) Remapping of the Antarctic beech forests (*Nothofagus cunninghamii*) has resulted in a shift of area figures for the different Tasmanian forest types. (c) 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. (d) Category 1: Forest land managed for multiple use including wood production. Category 2: 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. Category 3: 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: National Forest Inventory, and State and Territory forest agencies.

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 overstorey 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.

Of the 41 million hectares of native forest, 29.4 million hectares (72%) are publicly owned and 11.3 million hectares (28%) are private land. Of the publicly owned forests, 6.6 million hectares (16%) are in National Parks or in World Heritage areas, 12.1 million hectares (30%) are managed by State forest authorities for various uses, including wood production, and 10.7 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 — 959,000 hectares of softwood

(mostly radiata pine) and 146,000 hectares of hardwood. Plantations are expanding at approximately 23,000 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). The Government has continued to support and stimulate commercial plantation development on cleared agricultural land through the Farm Forestry Program and the Community Rainforest Reforestation Program. The National Forest Policy Statement issued in December 1995 on Plantations and Farm Forestry continues the commitment to the ecologically sustainable development of Australia's forest and land resources.

16.2 Plantation areas classified by species, 31 March 1993

Species group	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
<i>Coniferous</i>									
Pinus radiata	250 060	212 103	3 381	104 128	60 670	76 130	—	14 136	720 608
Pinus elliotii	4 785	3	70 029	—	210	—	—	—	75 027
Pinus pinaster	71	1 218	—	2 479	27 080	5	—	—	30 853
Pinus caribaea	60	3	52 747	—	10	—	2 602	—	55 422
Araucaria species	1 647	—	45 479	—	—	—	—	—	47 126
Other	9 407	2 017	16 995	341	660	297	—	408	30 125
Total	266 030	215 344	188 631	106 948	88 630	76 432	2 602	14 544	959 161
<i>Broadleaved</i>									
Eucalyptus species	27 565	18 074	1 402	1 622	39 160	52 083	—	—	139 906
Populus species	982	151	—	—	—	3	—	—	1 136
Other	107	126	217	—	—	2 835	1 590	—	4 875
Total	28 654	18 351	1 619	1 622	39 160	54 921	1 590	—	145 917
Total	294 684	233 695	190 250	108 570	127 790	131 353	4 192	14 544	1 105 078

Source: State and Territory forest services.

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.

Wood and wood products

Australia's wood and wood products industries are important components of Australia's primary and secondary industries. They are particularly important in providing economic development and employment in many regions of rural Australia. The industries include the hardwood and softwood sawmilling, plywood and panels manufacturing, woodchip export and the pulp and paper industries. Over 59,000 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 1% to gross domestic product.

In 1992–93, turnover in the value added wood and paper products industry was \$5.3 billion. In 1993–94, exports of forest products totalled \$802 million, of which 53% were woodchips and 25% paper and paperboard products. In the same year, imports were \$2,642 million, of which 48% was paper and 41% sawnwood. This indicates a trade deficit in forest products of \$1,840 million. Australia produces 76% of its sawn timber needs, of which native forests provide approximately 48%, 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 industries comprise mills of various sizes which process wood 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 of a larger scale and more highly integrated with other wood processing facilities. Australia's production of sawn timber increased by 10.7% in 1993–94 to 3,443,000 cubic metres, of which 45% was hardwood and 55% was softwood.

Other value added timber products include plywood, wood-based panels and reconstituted wood products. Australian wood based panels include particleboard, medium density fibreboard and hardboard made from softwood or hardwood pulp logs, sawmill residues or thinnings. Australia has 20 panelboard mills, 11 producing particleboard, 6 producing medium density fibreboard, 2 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 majority 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 sawmill residues and 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% 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, 1992–93

Species group	Establishments at 30 June (No.)	Employment at 30 June(a) ('000)	Wages & salaries(b) (\$m)	Turnover (\$m)
Log sawmilling	530	10	254.0	1 271.0
Veneers & manufactured boards of wood	80	5	148.8	959.3
Hardwood wood chips	23	1	24.4	312.6

(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)

Commodity	Quantity	1990-91	1991-92	1992-93	1993-94
Sawn Australian grown timber	'000 cu m	2 774	2 941	3 100	3 431
Woodchips					
Hardwood	'000 tonnes	4 841	4 454	4 536	4 612
Softwood	'000 tonnes	619	1 026	999	955
Particle board(b)	'000 cu m	625	643	660	752
Wood pulp					
Mechanical	'000 cu m	459 078	459 477	436 026	425 261
Other	'000 cu m	562 760	559 687	560 467	570 901
Paper & paperboard					
Newsprint	tonnes	394 990	403 728	433 476	410 931
Tissue & sanitary papers	tonnes	133 800	n.p.	n.p.	n.p.
Graphic	tonnes	n.p.	231 541	(c)1 392 661	n.p.
Other paper & paperboard	tonnes	963 574	n.p.	(c)	n.p.

(a) Excludes production of small single establishment management units 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) Particle boards and similar boards of wood or other ligneous material. Excludes laminated. (c) Data for Graphic and Other paper & paperboard have been combined for 1992-93.

Source: *Manufacturing Production, Australia: Building Materials and Fittings (8361.0) and Manufacturing Production, Australia: Wood and Wood Products (8369.0)*. Australian Bureau of Agricultural and Resource Economics.

Government administration

Land and forests 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 the Environment Portfolio 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 and in the development of the National Forest Inventory.

The MCFFA consists of State, Territory and Commonwealth, and New Zealand Ministers responsible for forests. The Commonwealth Minister for Resources is the chairman of the Council. MCFFA, the successor of the Australian Forestry Council formed in 1964, 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 resources 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

National Forest Policy Statement (NFPS)

The NFPS was signed by the Commonwealth and all mainland State and Territory Governments, at the Council of Australian Governments' meeting in Perth in December 1992. In 1995 Tasmania also became a signatory.

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 eleven broad national goals in the following 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 all values including biological diversity, heritage and Aboriginal and other cultural values.
- Wood production and industry development — to develop internationally competitive and ecologically sustainable wood production and wood products industries.
- 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.
- 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.
- 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 meet other environmental and economic objectives, in particular the rehabilitation of cleared agricultural land and to improve water quality.
- 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.
- 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 fulfills its obligations under relevant international agreements.

Plantation initiatives under the NFPS

In 1993 under the NFPS the Commonwealth established two plantation initiatives: 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 for 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. As part of the 1995 budget, the Government agreed to provide an additional \$2 million under the FFP to help continue the industry's transition to regrowth forests and plantations.

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 National Forest Policy Statement identified the following National plantation goals:

- 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 or aesthetic objectives.

Regional Forest Agreements

The National Forest Policy Statement outlines a process for the development of Regional Forest Agreements, which are a mechanism by which the Commonwealth and a State Government can reach agreement on the management of forests in a region. A central objective is to remove uncertainty and duplication in government decision making by producing a durable agreement on forest management. An agreement should protect environment and heritage values and provide industry with secure access to resources.

Wood and Paper Industries Strategy

The Commonwealth has outlined new plantation initiatives in the Wood and Paper Industries Strategy released in December 1995. The Wood and Paper Industries Strategy is intended to build upon the Regional Forest Agreement process, and provide for restructuring of the wood and paper industries and facilitate a positive environment for investment in downstream processing based on resources from

sustainably managed native forests and plantations. The strategy will address specific measures to enhance the development of a vibrant value adding forests products industry by removing impediments and disincentives to investment.

National Forest Policy Advisory Forum (NFFAF)

The NFFAF was established as part of the NFPS and met for the first time on 10 May 1995. It comprises representatives from conservation, industry, unions and scientific bodies, and provides co-ordinated input to the Commonwealth on forest and related conservation issues. Issues it has considered to date include advice to Ministers on the Commonwealth's criteria for a national forest conservation reserve system and the Wood and Paper Industries Strategy Discussion paper.

National Forests 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, in late 1988, the Commonwealth Government initiated a National Forest Inventory (NFI).

A comprehensive information base 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 timber

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.

The Agreement under which the ITTO was established, the International Tropical Timber Agreement 1983, is to be replaced by a successor Agreement, which was successfully negotiated in early 1994. The new Agreement was ratified by Australia in December 1995.

Pulp mill guidelines

In December 1989 the Commonwealth 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 concluded agreements with Tasmania, Western Australia and Victoria.

To ensure that the Commonwealth guidelines remain current with international developments in pulping and bleaching technologies, the Government also announced in December 1989 the establishment of a National Pulp Mills Research Program (NPMRP). The NPMRP is a cooperative venture involving the Commonwealth Government and State Governments, community interest groups, industry and the CSIRO. The Program's principal objectives are the 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 released a set of guidelines based on recent international research under the Pulp and Paper Research Program and recent international developments in the wood pulping industry.

Forest and Wood Products Research and Development Corporation

A Forest and Wood Products Research and Development Corporation was 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 is jointly funded by 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. Several Divisions undertake forest research from the Tropical Research Centre at Atherton.

The research undertaken is closely aligned to major forest resources and industries: softwood plantations, hardwood plantations, native forests, wood technology, biodeterioration, wood composites, and pulp and paper. Prominent disciplines are tree physiology, nutrition, genetics, chemistry, wood science and engineering. An example of a current major project is a study at Wagga Wagga of design and management of plantations irrigated with sewage effluent, a practice which is being used increasingly by inland towns and cities. The use of former agricultural land for forestry is also increasing; another study aims to assess the role of trees and where appropriate expand their use in land management and industry in the Murray-Darling Basin.

Sustained high value production has long been a major goal of forest managers and research workers. Australia has endorsed the criteria and indicators for the management of native forests agreed through the UN backed Montreal process. The National Forest Policy Statement provides the framework for cooperative research which will address national aspects of this question.

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% 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 1992-93, Australians consumed 3.4 kg of edible weight fresh and frozen fish per person, sourced from Australian waters, and 1.9 kg of imported fish. The consumption per person of crustaceans and molluscs (such as prawns, lobsters, crabs and oysters) was 1.4 kg. A further 3.0 kg 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 \$303 million in 1993-94.

Developmental work is taking place in a number of areas including barramundi, freshwater crayfish (yabbies and marron), prawns, mussels and algae. 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 1993–94 is estimated to have been \$1,607 million, a 7% rise in value over the previous year, mainly as a result of higher export returns for Australian seafood. The increase in value was achieved despite lower volume of production in many fisheries, with the fish catch down 8% and the prawn catch down 17% on 1992–93.

16.5 Gross value of fisheries production (\$ million)

	Value
1976–77	206
1977–78	233
1978–79	279
1979–80	326
1980–81	330
1981–82	344
1982–83	423
1983–84	449
1984–85	522
1985–86	635
1986–87	702
1987–88	828
1988–89	1 022
1989–90	1 092
1990–91	1 223
1991–92	1 376
1992–93	1 501
1993–94p	1 607

Source: Australian Bureau of Agricultural and Resource Economics and the Australian Fisheries Service.

16.6 Gross value of selected major fisheries categories (\$ million)(a)

	1991–92	1992–93	1993–94p
Prawns	244	282	278
Rock lobster	369	348	422
Tuna	76	119	116
Other fin fish	301	325	325
Abalone	95	122	177
Scallops	83	96	68
Oysters	45	47	49
Pearls	126	120	124
Other(a)	37	42	48
Total	1 376	1 501	1 607

(a) Other fisheries production not elsewhere included.
Source: Australian Bureau of Agricultural and Resource Economics.

In 1993–94 the value of pearl oysters at \$124 million remained the most important single aquaculture industry with the potential to continue to increase in value. Aquaculture industries to significantly increase in value between 1992–93 and 1993–94 included salmon, increasing by 20% to \$ 58.8 million; tuna, increasing by 137% to \$24.2 million and prawns increasing by 43% to \$21.1 million.

16.7 Gross value of aquaculture production(a) (\$ million)

	1991–92	1992–93	1993–94p
Fish			
Salmon	39.6	49.0	58.8
Tuna	1.8	10.2	24.2
Trout	14.2	11.9	13.7
Other(b)	4.8	4.8	6.3
Total	60.4	75.9	103.1
Crustaceans			
Prawn	10.7	14.8	21.1
Other(c)	2.5	2.8	4.7
Total	13.3	17.6	25.8
Molluscs			
Pearl oyster	126.0	119.6	124.0
Edible oysters	44.8	47.2	48.6
Other(d)	2.1	1.3	1.4
Total	173.0	168.1	174.0
Total	246.7	261.5	302.9

(a) Excludes aquarium fish, hatcheries production, crocodiles, microalgae, and aquarium worms. (b) Includes eels and other native fish. (c) Includes crabs and brine shrimp. (d) Includes mussels, scallops and giant clams.

Source: Australian Bureau of Agricultural and Resource Economics.

16.8 Australian fisheries production by category(a) (tonnes)

	1991–92	1992–93	1993–94p
Fish			
Tuna	13 183	10 261	7 209
Other	139 792	132 962	123 863
Total	152 975	143 223	131 071
Crustaceans			
Prawns	24 546	24 440	20 251
Rock lobster	18 473	18 390	16 979
Other	4 103	5 531	6 908
Total	47 122	48 361	44 138
Molluscs			
Abalone	5 029	4 659	4 723
Scallops	29 802	33 363	21 820
Oysters	8 902	9 710	2 879
Other	4 603	4 888	4 631
Total	48 335	52 620	34 053
Total	248 432	244 204	209 263

(a) Includes an estimated value for aquaculture production but excludes production from inland commercial fisheries.

Source: Australian Bureau of Agricultural and Resource Economics.

**16.9 Commonwealth fisheries
production by fishery and category
(tonnes)**

	1991-92	1992-93	1993-94p
Northern prawn			
Prawn			
Tiger	4 142	2 891	2 689
Banana	2 508	4 058	2 269
Endeavour	1 054	813	794
King	78	49	36
Total	7 781	7 811	5 789
Torres Strait			
Prawn			
Tiger	764	586	334
Endeavour	989	988	659
King	58	44	27
Other	6	5	3
Total	1 816	1 622	1 023
Tropical rock lobster	147	174	185
Spanish mackerel	100	102	102
Total	2 064	1 898	1 310
South East			
Trawl			
Orange roughy	18 160	12 023	10 125
Morwong	893	848	786
Tiger flathead	2 207	1 549	1 492
Gemfish	383	717	408
Blue grenadier	3 526	3 039	3 111
Ocean perch	196	262	287
School whiting	1 001	900	1 183
Ling	649	805	961
Redfish	1 406	839	627
Mirror dory	241	260	302
Blue warehou	1 352	968	872
Other	7 244	7 333	5 738
Total	37 258	29 543	25 892
Non-trawl	2 574	1 551	1 440
Great Australian Bight			
Orange roughy	627	432	668
King flathead	621	504	448
Gemfish	32	5	15
Bight redfish	274	128	107
Jackass morwong	50	40	40
Boarfish	63	24	28
Leatherjacket	131	44	38
Angel shark	81	64	47
Knifejaw	33	15	10
Squid	46	20	23
Other	178	284	173
Total	2 136	1 560	1 597

For footnotes see end of table.

...continued

**16.9 Commonwealth fisheries
production by fishery and category —
continued
(tonnes)**

	1991-92	1992-93	1993-94p
Southern shark			
School & gummy	4 469	5 253	4 623
Other shark	837	858	812
Total	5 306	6 111	5 434
East coast tuna			
Yellowfin	702	752	524
Albacore	203	156	123
Bigeye	37	23	10
Billfish	94	52	16
Skipjack	208	397	327
Total	1 244	1 381	999
East coast purse seine			
Yellowfin	—	6	—
Skipjack	6 633	3 855	1 308
Total	6 633	3 861	1 308
Southern bluefin tuna			
Domestic	2 262	1 774	2 141
Joint venture	2 073	2 511	2 394
Other	800	650	270
Total	5 135	4 935	4 805
Other fisheries(a)			
	292	329	234
Total production	70 422	58 979	48 808

(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 States and Territories.

A significant proportion of Australian fisheries production (edible and non-edible) is exported. In 1993–94 the value of exports was \$1,241 million, which amounted to

approximately 77% 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 1993–94 exports to Japan and Taiwan accounted for about 60% of the value of all exports. In 1993–94 the most valuable exports included rock lobster (\$468 million), prawns (\$197 million) and abalone (\$187 million).

16.10 Destination of exports of Australian fisheries products

Country	1991–92		1992–93		1993–94p	
	\$m	%	\$m	%	\$m	%
Japan	452	46.1	491	45.0	523	42.1
USA	170	17.3	151	13.9	109	8.8
Taiwan	141	14.4	160	14.7	208	16.8
Hong Kong	111	11.3	162	14.9	215	17.3
Spain	21	2.1	13	1.2	6	0.5
Singapore	23	2.3	28	2.6	32	2.6
France	10	1.0	22	2.0	19	1.5
Thailand	6	0.6	7	0.6	9	0.7
Saudi Arabia	6	0.6	2	0.2	1	0.1
Other	40	4.1	54	5.0	119	9.6
Total	980	100.0	1 090	100.0	1 241	100.0

Source: ABS Foreign Trade Statistics.

In the same period, Australia imported \$522 million of seafood, 22% of which came from Thailand and 18% from New Zealand. The most valuable categories of seafood imported included prawns from Thailand

(\$64 million), canned fish from Thailand (\$38 million) and from the United States (\$26 million), and frozen fish fillets from New Zealand (\$36 million).

16.11 Source of Australian imports of fisheries products

Country	1991–92		1992–93		1993–94p	
	\$m	%	\$m	%	\$m	%
Thailand	92	18.1	104	19.7	131	22.4
New Zealand	84	16.5	94	17.8	104	17.7
Canada	36	7.1	36	6.8	25	4.3
Malaysia	33	6.5	36	6.8	39	6.7
USA	26	5.1	29	5.5	31	5.3
Peru	9	1.8	10	1.9	26	4.4
Japan	32	6.3	24	4.6	22	3.8
Chile	20	3.9	16	3.0	15	2.6
Singapore	12	2.4	12	2.3	14	2.4
Korea, Republic of	14	2.8	14	2.7	10	1.7
Indonesia	13	2.6	8	1.5	7	1.2
Other	138	27.1	144	27.3	162	27.6
Total	509	100.0	527	100.0	586	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.

Fisheries Management Act 1991 and the Australian Fishing Zone

The Commonwealth Fisheries Management Act 1991 applies to commercial fishing for swimming and sedentary species in the Australian Fishing Zone (AFZ), excluding any waters that have been declared excepted waters. The AFZ is the area of waters generally between 3 and 200 nautical miles seaward of the territorial sea baseline of Australia and its external territories, excluding waters falling within the exclusive economic zone of another country and covers a total of 8.9 million sq km. The establishment of the AFZ in 1979 brought portions of oceanic tuna stocks, and demersal and pelagic fish stocks previously exploited by foreign fishing vessels under Australian control.

Fishery management plans are central to the Act and are to contain all essential rules applying to the management of a fishery. A management plan normally operates through a system of statutory fishing rights, which allows long-term access to the fishery. The Act also provides for limited term fishing permits, which are primarily designed for the management of fish resources that are not yet under a management plan. Individual transferable quotas (ITQ) are used 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 resources.

Australia has an international obligation under the United Nations Convention on the Law of the Sea 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. To facilitate the process, the Act allows Australia to make bilateral agreements or joint venture arrangements with the government or commercial interests of another country under which foreign fishing licences will be granted to boats from that country.

In 1995, Japan was the only country maintaining a licensed foreign fishing presence in the AFZ. Japanese vessels fished certain areas of the AFZ under two separate arrangements: an annually renewable bilateral access agreement between the Japanese Government and the Australian Government, and a joint venture between the Australian and Japanese tuna industries. Up to 250 foreign fishing licences were available under the bilateral access arrangement. The main species caught by Japanese vessels in the AFZ are yellowfin, southern bluefin, bigeye and albacore tunas.

Australia, Japan and New Zealand are parties to the Convention for the Conservation of Southern Bluefin Tuna (CCSBT), which came into force in 1994. As part of its conservation management responsibilities for the global southern bluefin tuna industry, the CCSBT Commission annually determines a total allowable catch for the fishery and allocates this between the three CCSBT parties in the form of national quotas.

In 1995, Australia had maritime delimitation agreements with Papua New Guinea, the Solomon Islands and France. In addition, a maritime delimitation agreement was being negotiated with Indonesia (a Provisional Fisheries Surveillance and Enforcement Line having been agreed in 1981). Australia has yet to enter into a maritime delimitation agreement with New Zealand.

The Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America forms the Schedule to the Act. The effect of this is that US tuna boats are given treaty licences in accordance with the provisions of the Treaty.

Whales are a protected species in the Australian Fishing Zone.

Australian Fisheries Management Authority

The *Fisheries Administration Act 1991* establishes the Australian Fisheries Management Authority (AFMA) and proscribes its objectives. These are:

- implementing efficient and cost-effective fisheries management on behalf of the Commonwealth;
- ensuring that the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development, in particular the need to have regard to the impact of fishing activities on non-target species and the marine environment;
- maximising economic efficiency in the exploitation of fisheries resources;
- ensuring accountability to the fishing industry and to the Australian community in AFMA's management of fisheries resources; and
- achieving government targets in relation to the recovery of the cost of AFMA.

The Act specifies AFMA's functions, which include a duty to engage in appropriate consultation and to devise and implement management plans, adjustment programs and exploratory/feasibility fishing programs. AFMA is also to establish priorities for management-related research and arrange for such research to be undertaken. AFMA's management responsibilities include arrangements with States and Territories. Under the Fisheries Management Act, AFMA is given additional functions in areas such as keeping a register of statutory fishing rights, surveillance and enforcement.

Other legislation

The *Fishing Levy Act 1991*, *Foreign Fishing Licences Levy Act 1991* and *Fisheries Agreements (Payments) Act 1991* enable the imposition of management levies and access fees payable by Australian and foreign fishermen, foreign governments and foreign commercial interests. The *Statutory Fishing Rights Charge Act 1991* enables a charge to be levied on the grant of new fishing rights.

The *Torres Strait Fisheries Act 1984* gives effect in Australian law to the fisheries

elements of the Torres Strait Treaty. The Act applies in the area of Australian jurisdiction in the Torres Strait Protected Zone and areas outside but near that zone that have been proclaimed in respect of particular fisheries which Australia and Papua New Guinea have agreed to manage jointly under the treaty or which are referred to in the treaty.

Fisheries 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. 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 Research and Development Corporation (FRDC) was established in July 1991 by Regulations under the *Primary Industries and Energy Research and Development Act 1989*. Its objectives include:

- increasing the economic, environmental or social benefits to members of the Australian fishing and aquaculture industry and to the community generally by improving the production, processing, storage, transport or marketing of fish and fish products; and
- achieving the sustainable use and the sustainable management of fisheries resources.

FRDC investigates and evaluates the requirements for research and development in relation to the fishing industry; coordinates and funds such research and development activities; and facilitates the dissemination, adoption and commercialisation of results.

FRDC is funded by an annual unmatched grant equal to 0.5% of GVP (the average gross value of fisheries production over the three immediately preceding financial years) and research levies collected from the fishing industry which the Government matches to a maximum of 0.25% of GVP. In 1994–95,

revenue to FRDC totalled some \$12.4 million, of which the Government contributed approximately \$9.2 million.

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, which conducts research into handling, storage, processing and transportation of fish at its laboratory in Hobart, Tasmania;
- The Australian Fisheries Service, 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 and Territory 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 kg 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 tonnes (16.8%) in Western Australia.

16.12 Recreational fishing catch, 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 (7.110.0).

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Mining and energy

The mining industry	453
Introduction	453
Main features	453
Mineral production	454
Exports	455
Imports	456
Selected commodity review	456
Gold	456
Iron ore	456
Bauxite and alumina	456
Mineral sands	456
Diamonds	457
Uranium	457
Coal	457
Crude oil and condensate	458
Liquefied petroleum gas	458
Natural gas	459
Oil and gas resources	459
Mineral processing and treatment	460
Mineral geology	460
Mineral exploration	461
Mineral exploration expenditure	461
Drilling methods used in Australia	461
Petroleum exploration expenditure	462
Overseas exploration	462
Administrative and financial arrangements	463
Mineral rights	463
Mining and exploration for other than petroleum — legislation	463
Onshore	463
Offshore	464
Petroleum mining and exploration — legislation	464
Onshore	464
Offshore	464
Mineral royalties	464
Crude oil marketing and pricing arrangements	465
Pricing of liquefied petroleum gas	465

Pricing and export approval system for liquefied natural gas (LNG)	465
Secondary tax arrangements in the petroleum industry	465
Incentives to encourage petroleum exploration and development	466
Administrative arrangements	466
Energy Research and Development Corporation (ERDC)	467
International Energy Agency (IEA)	467
Research	467
Australian Geological Survey Organisation (AGSO)	467
Commonwealth Scientific and Industrial Research Organisation (CSIRO)	468
Australian Mineral Industries Research Association Limited	468
Energy	468
Energy resources	469
Solar	469
Wind	470
Wave	470
Geothermal	470
Municipal waste	470
Biomass	470
Electricity and gas supply	471
Administrative changes in the electricity and gas industries	471
Electricity and gas supply	471
Snowy Mountains Hydro-Electric Scheme	472
New South Wales	472
Victoria	473
Queensland	474
South Australia	474
Western Australia	475
Tasmania	476
Northern Territory	476
Australian Capital Territory	477
Bibliography	478

Mining and energy

The mining industry

Introduction

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 industry contributed \$16,450 million or 4% of Australia's Gross Domestic Product (GDP) in 1993–94.

Main features

Table 17.1 provides a summary of the operations of the mining industry in 1993–94. Turnover in the mining industry remained relatively unchanged at \$29,000.1 million (up less than 1%) whilst employment in the industry dropped by 3% to 56,440 people.

The industries which recorded a rise in turnover were coal, up \$679.2 million to \$9,897.5 million; and gold ore, up \$275.6 million to \$4,237.3 million. Other industries to increase turnover were copper ore, up \$73.2 million to \$966.5 million; mineral sands, up \$19.2 million to \$521.7 million and bauxite, up \$17.0 million to \$795.2 million.

Industries that declined in turnover were: oil and gas, down \$722.6 million to \$7,758.5 million; other metal ores, down \$144.2 million to \$680.3 million; iron ore, down \$52.3 million to \$3,208.3 million; and silver-lead-zinc, down \$14.4 million to \$934.9 million.

Table 17.2 contains a summary of the operations of the mining industry in 1993–94, by State and Territory.

17.1 Mining — summary of operations by industry (\$ million)

	Establishments (No.)	Employment(a) (No.)	Wages & salaries(b) (\$m)	Turnover(c) (\$m)	Stocks		Purchases & selected expenses (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Open (\$m)	Close (\$m)			
Coal mining(d)	153	26 356	1 924	9 897	796	690	4 300	5 491	863
Oil & gas extraction	101	4 444	325	7 758	216	201	631	7 113	1 381
Metal ore mining									
Iron ore mining	18	6 336	400	3 208	346	338	1 023	2 177	492
Bauxite mining	9	1 749	86	795	45	49	276	524	56
Copper ore mining	15	2 674	154	967	181	153	342	596	120
Gold ore mining	168	8 003	363	4 237	513	542	2 158	2 109	646
Mineral sand mining	16	1 770	76	522	164	153	265	246	35
Silver-lead-zinc ore mining	17	2 975	173	935	159	153	585	344	68
Other(e)	18	2 133	115	680	201	249	422	307	359
Total metal ore mining	261	25 640	1 366	11 344	1 608	1 637	5 071	6 302	1 776
Total mining 1993–94(d)	515	56 440	3 615	29 000	2 620	2 529	10 002	18 907	4 020
Total mining 1992–93	494	57 987	3 487	28 870	2 613	2 603	9 590	19 270	4 004

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Includes transfer out to other establishments of the same management unit where appropriate. (d) Brown coal mining operations of the former State Electricity Commission of Victoria are now included in the mining sector. (e) Includes ANZSIC classes 1316 and 1319.

Source: *Australian Mining Industry (8414.0)*.

17.2 Mining — summary of operations by State/Territory (\$ million)

	Establish- ments (No.)	Employ- ment(a) (No.)	Wages & salaries(b) (\$m)	Turnover(c) (\$m)	Stocks		Purchases & selected expenses (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Open (\$m)	Close (\$m)			
NSW	105	15 514	1 101	4 863	440	386	2 156	2 653	628
Vic.(d)	28	2 200	138	4 066	47	44	328	3 735	463
Qld	126	14 794	979	6 797	764	691	3 032	3 692	561
SA	16	2 160	109	1 065	86	69	208	840	87
WA	201	18 911	1 112	10 692	1 010	1 053	3 738	6 996	2 165
Tas.	9	1 398	85	344	50	61	188	165	35
NT	30	1 463	90	1 174	223	226	352	825	81
Aust.(d)	515	56 440	3 615	29 000	2 620	2 529	10 002	18 907	4 020

(a) Includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Includes transfer out to other establishments of the same management unit where appropriate. (d) Brown coal mining operations of the former State Electricity Commission of Victoria are now included in the mining sector.

Source: *Australian Mining Industry (8414.0)*.

Mineral production

Australian production in the metallic minerals, coal, oil and gas sectors for 1993–94 was valued at \$25,702 million, a decrease of 4% over the previous year (table 17.3).

Metallic mineral production dominated with \$10,861 million or 42% of the total, while coal was 29% of the total and oil and gas 29%.

By value, the two largest components of metallic mineral production were gold and iron ore which accounted for \$4,080 million and \$3,018 million, respectively, for a combined share of 65%.

Western Australia accounted for both the largest share of metallic mineral production with \$7,402 million (68%), and the largest share of total mineral production with \$10,231 million (40% of the total).

The decrease in the value of mineral production in 1993–94 was due to the oil and gas industry which fell to \$7,423 million from \$8,216 million in 1992–93. This represented a fall of \$793 million or 10%, primarily due to decreased prices.

17.3 Mineral production, selected minerals, Australia

	Units	1989–90	1990–91	1991–92	1992–93	1993–94
Metallic minerals						
Bauxite	kilotonnes	39 983	41 831	34 788	40 946	43 306
Copper concentrate(a)	kilotonnes	939	1 004	915	1 254	1 322
Copper precipitate(b)	tonnes	—	4 384	6 203	8 174	16 192
Gold bullion (dore)(c)	kilograms	256 725	264 993	259 656	275 331	274 687
Iron ore(d)	kilotonnes	110 119	111 475	114 781	115 703	123 631
Lead concentrate	kilotonnes	762	870	858	856	873
Manganese ore(e)	kilotonnes	1 261	724	375	597	815
Mineral sands(f)	kilotonnes	2 285	1 878	1 954	2 118	2 252
Uranium concentrate (U3O8)(a)	tonnes	3 077	2 913	2 901	1 342	1 457
Zinc concentrate(g)	kilotonnes	1 603	1 810	1 927	2 011	1 890
Total value of metallic minerals(h)	\$ million	10 838	10 910	10 957	10 920	10 861
Coal						
Black coal	kilotonnes	160 459	166 505	176 570	177 970	177 874
Brown coal	kilotonnes	45 959	48 169	50 731	47 912	49 684
Total value of coal(i)	\$ million	6 472	6 754	7 216	(j)7 585	(j)7 418

For footnotes see end of table.

...continued

17.3 Mineral production, selected minerals, Australia — continued

	Units	1989-90	1990-91	1991-92	1992-93	1993-94
Oil & gas						
Crude oil (k)	megalitres	31 700	29 189	31 984	30 592	29 583
Natural gas (l)	gigalitres	15 354	15 589	16 289	16 631	15 959
Ethane	gigalitres	186	175	182	187	202
Propane (m)	megalitres	2 067	2 013	2 064	2 078	2 115
Butane (m)	megalitres	1 570	1 504	1 574	1 651	1 622
Liquefied natural gas	kilotonnes	2 015	3 577	4 250	4 922	5 732
Total value of oil & gas	\$ million	5 983	8 629	7 812	8 216	7 423
Total value of metallic minerals, coal, oil & gas	\$ million	23 294	26 293	25 985	26 721	25 702

(a) Excludes South Australia. (b) Includes copper concentrate in other forms. (c) Includes alluvial gold. (d) Includes iron ore pellets. (e) Metallurgical grade. (f) Includes ilmenite, beneficiated ilmenite, leucoxene, monazite, rutile and zircon. (g) Includes zinc-lead concentrate. (h) Includes Tasmanian coal production. (i) Excludes Tasmania. (j) Excludes briquettes. (k) Stabilised. Includes condensate. (l) Includes field and plant usage. (m) Excludes refinery production.

Source: *Australian Mining Industry (8414.0)*.

The value of metallic minerals decreased marginally, falling less than 1%, while the value of coal production fell 2% primarily due to decreased prices. The total value of the coal industry (excluding Tasmania) was \$7,418 million in 1993-94. New South Wales and Queensland are the major coal producing States with 46% and 45% of the market, respectively.

In 1993, Australia remained the world's largest producer of bauxite (41% of total world production); diamonds (39%); lead (19%); and the mineral sands concentrate zircon (41%).

Exports

Australia is the world's largest exporter of black coal, alumina, diamonds, lead, zinc, ilmenite, rutile and zircon; and the second largest exporter of iron ore, aluminium and gold.

Exports of mining products fell in value by 8% in 1993-94 to \$14,603 million or 23% of total merchandise exports. This followed a rise of 8% in 1992-93.

The percentage contributions of the major mineral products to total exports have remained fairly stable over the period 1990-91 to 1993-94. Black coal remains the largest single export item and the main mineral exported, with a value of \$7,189 million in 1993-94, 11% of total exports. Other major exports were iron ore (\$2,777 million, 4% of total exports), crude oil (\$1,350 million, 2%), zinc ores

(\$429 million, 1%) and uranium (\$195 million, less than 1%).

Exports of mining products together with basic manufactures of mineral origin remained relatively unchanged in 1993-94 following growth of 6% in 1992-93. However, as a proportion of total exports they declined from 39% in 1992-93 to 36% in 1993-94.

A significant increase in refined gold export earnings offset the decline in export value from other mineral resources. The value of refined gold exports rose an estimated \$1,115 million (26%) to \$5,417 million because of increased export volumes and higher prices.

Other substantial value increases in 1993-94 included iron, steel and ferroalloys, up \$253 million (22%) to \$1,402 million; aluminium up \$89 million (5%) to \$1,814 million; and uranium, up \$70 million (57%) to \$193 million. Aluminium exports rose over the year because of increased production from an expansion of the Tomago smelter in New South Wales.

The small overall increase in export earnings was largely attributable to falls in the value of crude oil and other refinery feedstock, down \$381 million (21%) to \$1,469 million; coking coal, down \$220 million (5%) to \$4,326 million; steaming coal, down \$143 million (5%) to \$2,480 million; and zinc, down \$225 million (22%) to \$795 million. The lower value of coal exports reflects reduced contract prices, together with a decline in production and lower export demand in early 1994.

Imports

In 1993–94, mining sector imports were \$2,573 million, a rise of 1% on the 1992–93 total of \$2,551 million.

With the inclusion of basic manufactures of mineral origin, mineral resources imports were valued at \$5,725 million in 1993–94, a fall of \$507 million (8%) on 1992–93. The dominant contributors to the fall were crude oil and other refinery feedstock, down \$406 million (13%) to \$2,837 million; and refined petroleum products, down \$78 million (12%) to \$556 million.

Selected commodity review

Gold

Gold production (content of all minerals) in Australia during 1993–94 was 255,757 kg. Western Australia accounted for most production with 76%, followed by Queensland with 12%, Northern Territory (7%), New South Wales (3%) and Victoria (1%).

Gold is Australia's second biggest export earning commodity, having overtaken wool in 1990–91. In 1993–94 it accounted for 8% of total exports at a value of \$5,295 million. The main markets were Japan (\$1,433 million), Singapore (\$1,197 million) and Republic of Korea (\$670 million).

The gold mining industry employed 8,000 people in 1993–94, 14% 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 10% of estimated world gold production, with South Africa being the world's biggest gold producer.

Iron ore

Iron ore production in 1993–94 was 123.6 million tonnes of which 93% or 114.4 million tonnes was exported. Iron ore mining employs over 6,300 people.

Almost 97% of production takes place in Western Australia's Pilbara region. Iron ore is also mined in South Australia and Tasmania.

Iron ore accounted for \$2,777 million or 4% of total exports in 1993–94. Japan is

Australia's largest market, taking nearly half of its exports (47% in dollar terms). Other important markets are Republic of Korea (16%), China (16%), Taiwan (6%) and United Kingdom (3%).

Bauxite and alumina

Australia is the world's largest bauxite and alumina producer and the fourth largest aluminium producer.

Bauxite mining employed 1,750 people nationally (June 1994), 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 is processed to alumina for sale or for conversion to aluminium. Alumina production reached 12.8 million tonnes in 1993–94 while refined aluminium production was 1.4 million tonnes.

In 1993–94, alumina ranked fifth by value among major commodity exports with 3% of total exports, 9.9 million tonnes valued at \$2,246 million; aluminium ranked seventh with 3% of exports, 1.2 million tonnes valued at \$2,153 million.

Japan was the major market for aluminium, taking 36%; Northeast and Southeast Asia together (which includes Japan) accounted for over 93% of exports.

Mineral sands

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 zircon (41%) in 1993.

As a result of overall increases in the quantity of production of mineral sands, the value of production increased by 4% to \$470.9 million in 1993–94. For the same period, exports were valued at \$302.4 million, a rise of 28% from the 1992–93 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% 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

Diamonds were first extracted in 1982 in Western Australia.

Australia is now the world's largest producer of diamonds (gem and industrial) with 39% of world production in 1993. 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 1993–94, 31.7 mega carats of diamonds (sorted and unsorted) were exported with a value of \$562 million.

Uranium

Australia has about 39% 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 1993, totalled 631,000 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 km 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.

The Olympic Dam deposits were discovered in 1975 and mining commenced in 1988.

Production of uranium (contained in uranium oxide) for 1993–94 was 2,334 tonnes, with 1,240 tonnes from Ranger and 1,094 tonnes from Olympic Dam.

Uranium oxide exports in 1993–94 were 3,992 tonnes valued at \$193 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 1993 Australia produced 10% of the world's uranium (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 resources of black coal, currently estimated at 76 gigatonnes (Gt), about 54 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 1993-94 was 178 million tonnes. Two States dominated black coal production, New South Wales (84.0 million tonnes) and Queensland (85.7 million tonnes). The coal industry was the single largest employer in the mining sector in 1993-94 employing 26,356 people.

More than half of New South Wales coal production is from underground mines whereas over 88% of Queensland coal production is from open-cut mines.

Black coal produced in South Australia and Western Australia, is used for electricity generation, while coal mined in Tasmania is used for industrial purposes such as steam generation.

Black coal is Australia's biggest export earning commodity accounting for 11% of the total value of exports in 1993-94 or \$7,189 million, down from \$7,542 million (and down from 12% of total exports) in 1992-93. By far the biggest market for Australian coal was Japan which bought 61.5 million tonnes for \$3,391 million, 47% of total sales. Republic of Korea bought 16.6 million tonnes for \$934 million (13%) and Taiwan 8.3 million tonnes for \$433 million (6%).

Two-thirds of black coal production, consisting of steaming coal and hard and soft coking coal, is exported.

Australia's Economic Demonstrated Resources (EDR) of brown coal were estimated to be around 41 Gt at December 1994. 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 of crude oil and condensate in 1993-94 at 29,583 megalitres (ML) (510 thousand barrels per day) was slightly lower than production in 1992-93 of 30,592 ML. In 1993-94, the Bonaparte Basin produced 1,969 ML of crude oil, nearly 7% of the total indigenous oil production.

Production of crude oil from the Gippsland Basin accounts for 58% of total indigenous crude oil production. The North West Shelf was the major producer of condensate during 1993-94 with 60% of indigenous production sourced in that region.

Export volumes of crude oil and condensate decreased by 2% to 9,855 ML in 1993-94 compared with 1992-93. The main markets were Japan, Indonesia and Singapore. Imports of crude oil and condensate increased by 5% to 20,338 ML.

Liquefied petroleum gas

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 domestic fuel.

Identified economically recoverable resources of LPG at December 1993 of 131,000 ML were concentrated in Bass Strait, the North West Shelf and the Cooper Basin.

Production of naturally occurring LPG in Australia in 1993-94 was 3,737 ML. The major

contributors to this total were the Bass Strait fields (2,667 ML or 71% of total production) and the Cooper Basin (834 ML or 22% of total production). About 35% of domestic LPG production is exported (1,290 ML in 1993–94), mainly to Japan. Domestic consumption of 3,721 ML in 1993–94 was met by 1,618 ML of product derived from processing industries, with supply shortfalls being met by naturally occurring product and imports.

Natural gas

During 1993–94, 24,855 million cubic metres of natural gas (including liquefied natural gas (LNG)) was produced for domestic consumption and export representing an increase of 3.8% from the 1992–93 production level. In 1993–94, 8,896 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 \$993 million and represented 36% 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.

Oil and gas resources

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 giga litres (GL) (2,400 million barrels) of crude oil in Australia. This compares with demonstrated economically recoverable resources of 244 GL (1,533 million barrels) and demonstrated sub-economically recoverable resources of 38 GL (244 million barrels) as at December 1992.

17.4 Oil and gas resources(a), December 1992

Basin	Crude oil (GL)	Gas condensate (GL)	LPG (GL)	Sales of gas (TL)
Demonstrated economic resources(b)				
Gippsland (Vic.)	111	21	39	216
Carnarvon (WA)	96	102	84	672
Cooper/Eromanga (SA/Qld)	12	6	11	74
Amadeus & Bonaparte (WA/NT)	21	4	1	34
Perth (WA)	4	—	—	4
Bower/Surat (Qld)	—	—	—	5
Canning (WA)	—	—	—	—
Otway (Vic.)	—	—	—	1
Total	244	133	135	1 006
Demonstrated sub-economic resources(c)				
Gippsland (Vic.)	30	3	—	34
Bonaparte (WA/NT)	2	5	12	155
Carnarvon (WA)	4	4	2	385
Cooper/Eromanga (SA/Qld)	—	4	6	40
Browse (WA)	—	32	61	497
Perth (WA)	—	—	—	—
Amadeus (NT)	—	—	—	7
Bower/Surat/Adavale (Qld)	—	—	—	2
Bass (Tas.)	2	6	8	10
Otway (Vic.)	—	—	—	—
Total	38	54	89	1 130

(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 17.5 shows the production of the main manufactured products of mineral origin during recent years.

17.5 Production(a) of principal manufactured products of mineral origin

	Units	1991-92	1992-93	1993-94
Metals(b)				
Non-ferrous				
Alumina	'000 tonnes	11 824	12 221	12 761
Refined aluminium	'000 tonnes	1 234	1 301	1 384
Refined copper	'000 tonnes	276	312	330
Lead bullion (for export)(c)	'000 tonnes	202	238	208
Refined lead	'000 tonnes	r215	r225	220
Refined zinc	'000 tonnes	325	r332	315
Refined tin	tonnes	248	258	186
Ferrous				
Pig iron	'000 tonnes	6 394	6 445	7 209
Precious				
Refined gold(d)	kg	281 835	288 188	307 336
Refined silver	tonnes	382	355	379
Fuels				
Petroleum products				
Diesel-automotive oil	megalitres	10 279	10 603	11 063
Industrial & marine fuel	megalitres	111	87	95
Fuel oil	megalitres	2 571	r2 498	2 263
Petrol	megalitres	r17 074	r17 728	17 724
Building materials				
Clay bricks	millions	1 632	1 722	1 814
Portland cement	'000 tonnes	5 731	6 225	6 733
Chemicals				
Sulphuric acid	'000 tonnes	816	868	833
Superphosphate(e)	'000 tonnes	1 337	1 440	1 344

(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) Double and triple superphosphate expressed in terms of single phosphate, that is 9% 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 River (Northern Territory); the copper-uranium-gold deposit at Olympic Dam (South Australia); the 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% of the world's economically recoverable resources of bauxite, iron ore, mineral sands, uranium, industrial diamonds and tantalum. We have over 10% of the world's economically recoverable brown coal, lead, manganese, cadmium and zinc and over 5% 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 17.6 shows expenditure on private mineral exploration other than for petroleum in Australia during the last six years.

17.6 Private mineral exploration expenditure (other than for petroleum) (\$ million)

State	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
New South Wales	55.1	60.6	63.3	60.9	73.6	79.2
Victoria	21.0	12.7	12.6	12.2	20.7	31.2
Queensland	128.4	124.1	109.9	117.9	140.2	176
South Australia	13.2	15.5	19.7	21.3	24.7	20.9
Western Australia	315.4	324.8	332.8	348.1	453.7	495.5
Tasmania	11.8	9.9	7.9	7.8	10.2	14.9
Northern Territory	62.6	53.9	57.8	63.5	69.5	75.8
Australia	607.5	601.7	604.0	631.8	792.6	893.3

Source: *Actual and Expected Private Mineral Exploration, Australia (8412.0)*.

Drilling methods used in Australia

In 1994, the ABS collected additional information on exploration drilling for minerals in Australia.

Private sector companies spent \$284 million on direct drilling costs exploring for minerals in Australia in 1993-94. This represents 36%

of the total Australian mineral exploration expenditure of \$793 million.

Tables 17.7 and 17.8 show drilling methods totals for all areas (including production leases and other areas) by State/Territory.

17.7 Total metres drilled ('000 metres)

Drilling method	NSW	Vic.	Qld	SA	WA	Tas.	NT	Total
Diamond	138.3	n.p.	196.9	n.p.	809.0	42.0	n.p.	1 310.8
Reverse circulation	130.8	52.6	299.3	n.p.	2 715.1	n.p.	196.2	3 435.8
Percussion	45.5	n.p.	169.0	n.p.	n.p.	—	n.p.	344.9
Rotary air blast	n.p.	n.p.	335.8	n.p.	3 755.4	—	n.p.	4 422.3
Other	n.p.	n.p.	14.4	n.p.	n.p.	n.p.	n.p.	568.3
Total	406.6	101.7	1 015.3	124.0	7 764.8	55.5	614.2	10 082.2

Source: *Actual and Expected Private Mineral Exploration, Australia (8412.0)*.

17.8 Total drilling expenditure, 1993-94 (\$ million)

Drilling method	NSW	Vic.	Qld	SA	WA	Tas.	NT	Total
Diamond	14.8	n.p.	22.0	n.p.	78.6	4.5	7.9	131.9
Reverse circulation	n.p.	1.2	9.3	n.p.	69.6	n.p.	n.p.	91.3
Percussion	1.4	n.p.	n.p.	0.4	n.p.	—	n.p.	11.3
Rotary air blast	n.p.	n.p.	3.8	0.5	33.0	—	1.7	40.0
Other	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	0.6	9.0
Total	21.3	4.2	40.8	3.6	192.1	4.9	16.6	283.6

Source: Actual and Expected Private Mineral Exploration, Australia (8412.0).

Petroleum exploration expenditure

Petroleum exploration expenditure for all States and Territories for 1993-94 was \$506.7 million, a decrease of 17% compared to 1992-93. Expenditure on production leases rose by 1% but this was more than offset by the drop in expenditure on all other areas of 20%.

Table 17.9 shows expenditure on private petroleum exploration in Australia during the last six years.

17.9 Private petroleum exploration expenditure (\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Onshore	143.2	217.1	135.3	115.2	144.5	163.8
Offshore	439.4	365.4	338.8	496.7	362.2	519.8
Total	582.6	582.6	473.9	611.9	506.7	683.6

Source: Actual and Expected Private Mineral Exploration, Australia (8412.0).

Overseas exploration

A survey was conducted during 1994 to collect details of overseas exploration expenditure by Australian resident companies. During 1993-94, \$255.5 million was spent on mineral and petroleum exploration outside Australia.

Petroleum exploration was the largest component of total overseas exploration expenditure (65% in 1993-94).

Table 17.10 shows overseas exploration expenditure for 1993-94.

17.10 Overseas exploration expenditure of Australian resident companies(a), 1993–94 (\$ million)

	North America(b)	Latin America(c)	Papua New Guinea	Indonesia	Other Asia	Africa	Other	Total
Petroleum	n.p.	n.p.	23.9	n.p.	26.2	n.p.	n.p.	166.2
Copper, lead, zinc, silver, nickel & cobalt	n.p.	n.p.	n.p.	3.8	4.0	..	1.7	14.0
Gold	4.3	8.2	6.1	18.0	10.0	2.2	5.3	54.2
Iron ore	..	..	..	..	..	..	..	..
Mineral sands	4.3	n.p.	..	n.p.	n.p.	n.p.	n.p.	5.7
Tin, tungsten, scheelite & wolfram	..	..	..	..	..	..	..	..
Uranium	..	..	..	..	..	..	..	..
Coal	..	..	n.p.	..	n.p.	..	..	0.3
Construction materials	..	..	..	..	n.p.	..	..	n.p.
Bauxite	..	..	..	..	..	..	..	..
Diamonds	n.p.	n.p.	..	1.5	2.1	0.1	3.0	12.3
Other	n.p.	..	..	..	n.p.	..	..	1.2
Unknown(d)	..	..	..	..	n.p.	..	n.p.	n.p.
Total	47.5	42.0	31.7	29.9	45.0	7.1	52.3	255.5

(a) Excludes overseas subsidiaries of Australian resident companies. (b) Includes Canada. (c) Comprises Mexico, South America, Central America and the Caribbean. (d) Preliminary exploration where the commodity is not yet known.

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 and Territory has its own Mining Act 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 is granted subject to conditions such as minimum exploration expenditure each year, methods of prospecting and the requirement for progressive relinquishment of area held. 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.

On 3 June 1992 the High Court of Australia brought down its decision in *Mabo and Others v the State of Queensland*. This decision, and the subsequent *Native Title Act 1993* which came into force on 1 January 1994, will have a profound significance on Indigenous people and the various industry groups with vested interests in land. Any land that has been subject to tenure such as freehold, will be free from the Act, as the tenure will be deemed to have extinguished native title. Procedures for carrying out the Act have been designed to be fair, just, economical and prompt, and to safeguard against vexatious and frivolous claims. Exploration will have minimal effect on native title as it has been excluded from the Act. In terms of mining, there is no provision in the Act for the activity to be

vetoed by native title holders. However, the Act does give native title holders the right to negotiate under certain circumstances.

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 landward of three nautical miles from the baseline of the 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 those areas of sea covered by Commonwealth legislation/powers.

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 shared between the Commonwealth and the States; in the case of petroleum, under the *Petroleum (Submerged Lands) Act 1967*.

The offshore legislation provides for:

- 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 develop.

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% 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.

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 17.11.

- exploration permits, providing exclusive exploration rights over a specific area;

17.11 Mineral royalty receipts by governments(a) (\$'000)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
New South Wales(b)	99 387	128 966	155 006	141 819	150 380	158 008
Victoria(c)	60 043	60 146	53 359	62 600	57 527	48 564
Queensland(b)	178 301	208 820	227 566	263 406	303 194	301 731
South Australia	34 914	44 004	80 570	71 767	71 344	61 114
Western Australia(d)	168 479	244 330	284 842	308 257	310 582	285 200
Tasmania	3 800	6 394	5 350	4 729	5 795	3 938
Northern Territory	9 514	24 079	28 350	28 265	14 942	28 715
Commonwealth Government	182 670	273 077	361 791	102 459	178 436	100 327
Total	737 108	989 816	1 196 834	983 302	992 200	987 597

(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

As from January 1991 the pricing of LPG became subject to market forces alone. The Prices Surveillance Authority (PSA) ceased to have responsibility for determining the maximum wholesale price of LPG in each capital city, although it maintains a close monitoring role.

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.

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 Petroleum Resource Rent Tax (PRRT) 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 and 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 area. Proceeds are shared by the Commonwealth with 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

Australia remains underexplored and its full petroleum potential is yet to be determined. Through both macro-economic policies and micro-economic reform, the Commonwealth government has introduced measures to

encourage investment to ensure that Australia's potential is realised.

Key government initiatives specific to the petroleum industry include:

- the offshore exploration strategy, which includes a twice yearly program of releasing exploration areas on which companies can bid;
- the Petroleum Resource Rent Tax (PRRT) reforms (see *Secondary tax arrangements in the petroleum industry* above);
- development of a national gas strategy, which aims to free up domestic gas markets;
- deregulation of the crude oil and LPG markets, which removed controls on prices and restrictions on sale of these commodities within and outside Australia;
- accelerated depreciation and investment allowance arrangements under company tax.

In the 1995 Budget the Commonwealth government set the rate of company tax in Australia at 36%. This rate of taxation is significantly lower than the 49% rate that applied in 1988.

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.

Energy Research and Development Corporation (ERDC)

The ERDC manages the Commonwealth's direct investment in energy innovation and research. Since establishment the Corporation has committed approximately \$48 million to investments in innovative projects which have a total cost of approximately \$161 million.

The ERDC invests in energy projects from the conceptual stage through to commercialisation. It focuses investments on traditional energy supply, alternative and renewable energy sources and systems, and sustainable energy use. Research priorities reflect industry needs, the Commonwealth's key energy objectives and the *National Greenhouse Response Strategy*.

The investment objectives of the ERDC are to continue to diversify energy supply options while increasing the efficiency of energy supply and use, and ensuring the development of competitive Australian industries. At the same time it aims to reduce the impact of energy projects on the environment as well as consumers' energy costs. Investment projects are selected to meet these objectives.

As ERDC's priorities are needs driven, it works closely with industry, focusing on industry needs, identifying the potentially most viable areas and, where appropriate, funding them. It has refined its project design, selection and management processes to emphasise outputs, commercial platforms, management, relevance and coherent effort.

International Energy Agency (IEA)

The IEA (of which Australia is one of the 23 members) was founded in 1974 to safeguard members' collective energy security through cooperation and, if necessary, sharing of energy supplies between members.

While energy security remains a major objective, the IEA is giving increasing attention to helping members achieve global energy and environmental objectives, preserving open trade in energy, and fostering greater competition in domestic energy markets. The IEA also fosters international collaboration in energy research and development.

Research

Research into exploration, mining, ore-dressing and metallurgy is conducted by government bodies, universities, private enterprise, and by the combined efforts of all these. A summary of the main organisations and their functions follows.

Australian Geological Survey Organisation (AGSO)

The Australian Geological Survey Organisation (AGSO), formerly called the Bureau of Mineral Resources, Geology and Geophysics (BMR), is Australia's national 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. It also aims to improve the management of Australia's natural resources consistent with the principles of ecologically sustainable development while at the same time developing effective strategies to mitigate the effects of 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 support the development of management principles and land use strategies. AGSO also contributes to Commonwealth Government involvement in international geoscientific activities and development assistance programs, and actively pursues commercial geoscientific projects in collaboration with Australian industry and other organisations as appropriate.

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.

This will be achieved by the provision of high-quality research, development and service capabilities to support existing and emerging industries as well as providing for the next generation of technology, products and processes. At the same time the Institute will continue to bring about safe and ecologically sustainable development for all Australians through research and advice on environmental issues related to IMEC's client industries. In addition, by working closely with industry, government and other organisations the Institute will help transform research outcomes into new or improved business opportunities including, where appropriate, the championing of individual projects.

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.

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).

Information on petroleum resources is available in table 17.4.

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% of normal household space heating needs.

Australia has a well established domestic solar water heater industry. At June 1994, domestic solar water heaters were installed on some 300,000 or 5% of Australian houses. In Western Australia one in four households has a solar water heater, while in the Northern Territory the figure is 58%. 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% 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.

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 near 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% 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% of Australia's total energy consumption.

Electricity and gas supply

Administrative changes in the electricity and gas industries

Reform of the electricity supply industry, which began within utilities in the late 1980s, continued to accelerate in 1993–94 and 1994–95.

In every State and in the Australian Capital Territory organisations were subject to substantial change, but there were significant differences in emphasis and action in all jurisdictions.

The most radical change occurred in Victoria with the State Electricity Commission and the Melbourne municipal distribution organisations being turned into five distribution businesses and seven generation companies, and the subsequent privatisation of these assets.

Inter-government agreement was pursued on construction of a transmission system (Eastlink) between Queensland and New South Wales and on corporatisation of the Snowy Mountains Hydro-Electric Authority.

Substantial activity continued on the structure of the proposed competitive electricity market for the eastern and southern seaboard, while in Western Australia the integrated electricity and gas supply utility was preparing to split in two and competition in electricity generation began to emerge through development projects involving independent power producers.

Overall, the new electricity market will be strongly influenced by the emergence of a national competition regulation system flowing from the Hilmer inquiry which will lead to national oversight of utility market conduct for the first time. At the same time, in Victoria and New South Wales, the activities of the electricity suppliers came strongly under the influence of government price regulators.

COAG (The Council of Australian Governments) agreed in February 1994 to an initiative to implement free and fair trade in natural gas by 1 July 1996. Reform of the gas sector is part of the wider competition policy reforms being pursued by COAG in other sectors of the economy.

The potential for major advances in the gas industry through competitive policies being developed under the gas reform initiative is strong. Moreover, the economic and environmental benefits of increased competition in the gas sector, and between gas and other fuels, will be substantial for Australia. Furthermore, emissions of greenhouse gases will be reduced with increased efficiency in energy use and greater fuel substitution, especially for coal in electricity generation. The new arrangements for the industry will need to include pro-competitive policy measures for third party access to gas transmission facilities and a transition strategy for effective implementation of a national framework for free and fair trade in gas after 1 July 1996.

Electricity and gas supply

At 30 June 1994, the total installed public electric generating capacity in Australia was 37.3 million kilowatts. Total electricity generation in 1993–94 was 156,564 million KWh.

Of total public electrical energy produced during 1993–94, hydro-electric sources provided approximately 11%, and the balance was supplied by fossil fuels with approximately 81% 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.

Natural gas consumption in 1993–94 was 733 petajoules, an increase of 3.8% on 1992–93, and contributed 17.6% of Australia's energy consumption.

Natural gas exports in the form of LNG (Liquefied Natural Gas) began in 1989 and for the year 1993–94 were equal to 311 petajoules.

17.12 Electricity and gas establishments — summary of operations, 1993–94

Items					Electricity		Gas
	NSW	Vic.	Qld	Other(a)	Aust.	Aust.	
Income & expenditure							
Turnover (\$m)(b)	7 720.9	5 946.0	3 717.6	3 296.1	20 680.6	3 132.9	
Plus closing stocks (\$m)	433.0	49.1	89.6	169.7	741.5	58.6	
Less opening stocks (\$m)	447.9	64.7	105.0	201.4	819.1	64.2	
Less purchases, transfers in & selected expenses (\$m)	4 121.7	3 442.5	1 858.1	1 225.9	10 648.2	1 492.6	
Value added (\$m)	3 584.3	2 487.8	1 844.0	2 038.7	9 954.8	1 634.7	
Fixed capital expenditure less disposals (\$m)	558.5	618.7	526.5	374.6	2 078.3	240.5	
Employment details							
Establishments at 30 June (no.)	28	21	17	13	79	(c)29	
Employment at 30 June(d) (no.)	18 350	7 570	8 500	9 760	44 180	7 690	
Wages & salaries(e) (\$m)	700.3	481.6	324.3	503.4	2 009.6	315.0	

(a) South Australia, Western Australia, Tasmania, Northern Territory and Australian Capital Territory. (b) Includes transfers out to other establishments of the same management unit where appropriate. (c) The number of gas establishments operating at 30 June 1994 for the States/Territories were NSW — 15; Vic. — 3; Qld — 5; SA — 2; WA — 1; Tas. — 1; NT — 1; ACT — 1. (d) Includes working proprietors. (e) 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

Energy activities in NSW include coal production, electricity generation and distribution, gas distribution, petroleum refining and distribution, and renewable energy technology, research, development and production.

NSW has significant resources of high quality black coal which is used for electricity generation, steel making and industrial process heat generation. It is the State's main export earner.

The total primary energy consumption of oil, gas, coal, bagasse and wood in 1993–94 was 3,285 petajoules (PJ), including exports (mainly coal) of 1,749 PJ. The final end use of energy by industrial, commercial, transport and domestic sectors in 1993–94 was 939 PJ, excluding the conversion and distribution losses of 691 PJ.

Coal fired thermal power stations generate 94% of the State's electricity, the balance by the Snowy Mountains Hydro Electric Scheme together with smaller hydro and gas turbine power stations.

Electricity is generated primarily by the State owned utility, Pacific Power (the trading name of the Electricity Commission of NSW), transmitted around the State by the Electricity Transmission Authority, and distributed to consumers by twenty-five regional electricity

distributors. Electricity is also sold directly by Pacific Power to a few large customers under contract, and is sold interstate. A national competitive electricity market is to commence in July 1996. In preparation for the market, the structure of the NSW generation and distribution sectors is under review.

At June 1994, Pacific Power operated seven coal fired power stations with a total capacity of 11,520 MW, six hydro-electric stations with a total capacity of 335 MW and four oil fired gas turbine power stations with a total capacity of 295 MW. In addition, NSW is entitled to a two thirds share from the Snowy scheme with a generating capacity of 3,740 MW. There are also several private generators (such as BHP) with a total installed capacity of about 300 MW and these include hydro as well as thermal power stations based on coal, bagasse, coal seam methane, oil and landfill gas.

The total electricity generated in NSW from all sources (except private generators) in 1993–94 was 55,689 gigawatt hours (GWh) including 3,329 GWh from the Snowy scheme. The maximum demand for electricity from the Pacific Power system in 1993–94 was 9,890 MW. The total electricity consumption in 1993–94 was 48,409 GWh, of which 32% was consumed by the residential sector while the rest was used by the industrial and commercial sectors.

NSW has no known economically recoverable natural gas or petroleum resources but has large resources of coal seam methane which may be economically recoverable.

All of NSW's natural gas supply comes from interstate and is transported to NSW via the 1,351 km Moomba–Sydney pipeline. Distribution within NSW is mostly undertaken by private operators. The total amount of reticulated gas sales in NSW in 1993–94 was 91,474 terajoules, of which 75% is used by the industry and the rest is shared by the residential and industrial sectors.

NSW imports crude oil and refined petroleum products from interstate and overseas. Domestic refineries process the crude, and petroleum products are distributed by private industry. The total sales of petroleum products in 1993–94 was 10.465 megalitres, with the transport sector accounting for 83%.

Victoria

During 1993–94 the State Electricity Commission (SEC) of Victoria was restructured, resulting in the establishment of Generation Victoria. This restructure was part of the ongoing reform of electricity supply in the state, intended to facilitate the introduction of competition into the electricity generation sector.

Generation Victoria operates three major brown coal mines producing a total of approximately 50 million tonnes annually, three major base load coal-fired power stations with a total capacity of 5,050 MW, two gas-fired power stations with an intermediate/peaking capacity of some 1,000 MW, and Victorian Hydro with a capacity of 470 MW.

Generation Victoria is a state owned enterprise but will shortly be competing in an open industry against a variety of private and interstate generators. The organisation is the second largest generator of electricity in Australia.

In 1993–94 approximately 30,000 GWh brown coal generation was undertaken, resulting in an increase in the amount of coal mined to 48.3 million tonnes (46.8 million tonnes in 1992/93). During the same period the Lurgi Plant began producing pulverised dried coal for Loy Yang B Power Station.

Victorian Hydro increased generation by about 10% above the long term averages (1,117 GWh), despite the late return to service of Dartmouth Power Station following reconstruction. This was largely due to heavy spring rainfall in 1993.

Major overhauls at Newport Power Station and Jeeralang gas turbine station limited power production to 2,230 GWh (2,835 GWh in 1992–93). Hazelwood Power Station generated 4,664 GWh, 50% of its average generation level over the previous two years.

The Gas and Fuel Corporation of Victoria combines the resources of government with those of private enterprise to supply gas, which is reticulated to approximately 1.27 million domestic, industrial and commercial customers through some 24,089 kilometres of pipelines.

In addition to the Greater Melbourne area, gas is also supplied to 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 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 1993–94 provided power to 1,174,558 domestic and 181,103 commercial and industrial consumers, increases of 4.5 and 3.1%, respectively over the previous year.

Electricity generation in Queensland is based primarily on the State's plentiful resources of black coal. In 1993–94, Stanwell, Callide B, Tarong, Gladstone Swanbank A and Swanbank B steam plants consumed 12,041 kilotonnes of coal and 12,992 tonnes of oil. This generated 27,696.3 GWh of energy or 87% of electricity generated in Queensland. The hydro-electric plants at Kareeya, Barron Gorge and Wivenhoe generated 540.1 GWh of energy in 1993–94.

Coal-fired power stations provide the bulk of Queensland's electrical energy needs, augmented as necessary by pumped-storage and conventional hydro-electric stations for peaking capacity.

Up to 1991–92 the main gas producing region in Queensland were the Roma–Surat and Denison Trough areas but in recent years production from the Cooper Basin in South West Queensland has far outstripped that from the original fields and now contributes over 75% of the State's natural gas production. It has been estimated that the annual demand for natural gas in Queensland will at least double in the next few years to 80 petajoules in line with the overall rate of commercial and industrial growth. Areas of growth not only include Brisbane and the coastal strip but also the mineral rich North West.

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% 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. The total number of Electricity Trust customers at 30 June 1994 was about 687,500.

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.

In October 1993, Boral Ltd acquired the SAGASCO Holdings group of companies.

Natural gas is reticulated through most of the Adelaide metropolitan areas, as well as Port Pirie (since 1976), Angaston (1983), Peterborough (1987), Whyalla (1988), Mount Gambier (1991), Murray Bridge (1994) as well as being available for major industries in the Riverland (1994). Mount Gambier is supplied from the Katnook gas field located 80 km north of the city. Liquefied petroleum gas is reticulated to consumers in Roxby Downs.

Western Australia

On 1 January 1995, State Electricity Commission of Western Australia (SECWA) was divided into separate electricity and gas corporations, trading as Western Power and Alinta Gas and a regulatory agency called the Office of Energy. This initiative was aimed at maximising the scope for efficiency improvements in the electricity and gas generation, transmission and distribution industries in Western Australia. The potential for private firms to compete in the energy sector has been increased substantially.

As corporatised government businesses, each will operate similar to private companies with Boards of Directors and managerial autonomy. However, the State Government will continue as the sole shareholder but with less direct involvement.

Most of the electricity production in the State will now be generated by Western Power, 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.

Western Power will continue the operation of the two power grid systems, one for the Pilbara and the other for the south-west, which supply the electricity needs of 98% 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. Two coal fired stations are located at Muja (1,040 MW capacity) and Bunbury (120 MW), and the third at Kwinana (880 MW) is 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% 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 Western Power stand-by diesel generating facility at Port Hedland, from Hamersly Iron Proprietary Limited's power station at Dampier and from a Western Power gas turbine generating unit also located in Dampier.

Outside the electricity grid systems, Western Power will operate 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 1994, SECWA had 700,353 customer accounts for electricity throughout Western Australia.

Alinta Gas operations comprise the purchase, transmission, distribution and sale of natural, tempered liquefied petroleum and synthetic natural gases to commercial, industrial and domestic customers.

Much of Australia's natural gas reserves are located in Western Australia. The availability of gas from the North West Shelf has changed Western Australia's energy consumption patterns significantly. Natural gas now supplies more than 60% of Western Australia's total energy requirements.

The North West Shelf will continue to provide most of the natural gas to Alinta Gas 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, Alinta Gas will also reticulate 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 1994, there were 319,644 customer accounts for natural gas, 3,014 customer accounts for TLP gas and 3,890 for SNG gas. This represents an increase in customers of 7.8% since June 1993.

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. The wind farm consists of nine 225 kW units and is capable of supplying up to 30% of Esperance's power needs. During its first year of operation it was estimated that over half a million dollars worth of fuel oil was saved. During its first year of operation the wind farm produced 4.6 million kW hours of electricity which resulted in a 3,600 tonnes reduction in carbon dioxide emissions normally associated with diesel fuel generated power. A wind power generator is also being used to augment the electricity supply on Rottnest Island.

Work has started on the Ord river hydroelectric scheme which will consist of two 15 MW power stations to convert water energy from Lake Argyle into electricity. The scheme will supply power to the townships of Kununurra and Wyndham, the Argyle Diamond Mine and future downstream processing facilities.

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 km 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 (HEC). The total installed generator capacity on mainland Tasmania at 30 June 1995 was 2,602 MW, consisting of 27 hydro power stations and an oil-fired thermal station of 240 MW located at Bell Bay. In addition two diesel generator power stations supply electricity to King and Flinders Islands.

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 Hydro-Electric Commission purchased approximately five GWh of electricity from three private suppliers in 1994-95.

During the 1994-95 financial year approximately 8,680 GWh was generated by the HEC in mainland Tasmania, a decrease from the previous year. Total sales amounted to 8,044 GWh of which 4,866 GWh was sold to the major industrial sector.

Total water storage at 1 July 1995 were 57.7% of full supply energy, a rise of 4.0% in the 12 month period. The total yield to storage during 1994-95 was 92% of the long term average. Bell Bay thermal station did not supply energy during this financial year.

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 the provision of electric power supply, water supply and sewerage services throughout the Northern Territory, servicing not only large urban areas such as Darwin and Alice Springs, but also many small remote communities and Aboriginal outstations. In addition, the Authority has responsibility for water resources and natural gas development.

The Aboriginal Essential Services Branch (AES) operates and maintains power services to 66 remote communities across the Territory. PAWA also maintains minor water supply systems on more than 450 Aboriginal outstations.

Total energy generated in the Northern Territory in 1993-94 was 1,209 GWh. Total sales comprised 779 GWh to businesses, of which 298 GWh was government sales, and 313 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.

PAWA has entered into a 20 year agreement with McArthur River Mining to supply electricity for the new lead, zinc and silver mine in the Gulf region. This includes provision, operation and maintenance of a power station at the mine, and supply of gas via a pipeline to be operated and maintained by the Authority.

Australian Capital Territory

Electricity is distributed within the Territory by the ACTEW Corporation Ltd (ACT Electricity and Water Authority prior to 1 July 1995). During 1993–94 the total bulk

electricity purchased was 2,318 GWh, comprising 1,648 GWh provided by Pacific Power, and 670 GWh reserved from the Snowy Mountains Hydro-Electric Authority. The system's maximum demand was 547 MW. ACTEW supplied 121,679 customers at June 1994.

Natural gas from the Moomba fields in South Australia is piped to Canberra via a 70 km spur which branches from the main Moomba-Sydney pipeline at Dalton.

During 1993–94, AGL Canberra Ltd reticulated 4,377 terajoules of natural gas to 1,274 commercial and industrial establishments and about 44,500 homes.

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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.

Manufacturing, wholesale, retail and service industries

Manufacturing	481
Manufacturing trends	481
Structure of the manufacturing industry	482
Turnover	482
Employment	483
Labour costs	484
Industrial disputes	485
Trade union membership	485
Capital expenditure	486
Stocks	487
Company profits	487
Principal manufactured commodities	488
Concentration of enterprises in the manufacturing industry	489
Manufacturing technology	489
Research and experimental development	489
Commonwealth government authorities	490
Innovation in Australian manufacturing	491
How much innovation occurs?	491
How innovative are individual businesses?	492
Are Australian businesses more or less innovative than their overseas counterparts?	493
Wholesale trade	495
Retail trade	495
Service industries	498
Bibliography	499

Manufacturing, wholesale, retail and service industries

Manufacturing

Manufacturing, as specified in Division C of the Australian and New Zealand Standard Industrial Classification (ANZSIC), 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% in 1972-73, manufacturing industry (\$59,771 million) accounted for 14.7% of all industry gross product in 1992-93.

Employment in the manufacturing sector has also fallen markedly over the last 20 years. In June 1973 more than 1.3 million persons were employed in manufacturing. This represented 23.9% of employment in the total of all industries. In June 1993 manufacturing employment at 882,500 persons was only 14.6% of employment in the total of all industries.

Manufacturing trends

Movements in the real level of manufacturing activity described below are based on the quarterly index of industrial production. The estimates relate to movements in manufacturing activity measured by means of constant price movements in Gross Domestic Product at factor cost.

For the year 1994-95, production was 8.4% higher than for 1993-94 which in turn was 7.7% higher than the previous year.

Over the ten year period from 1984-85 to 1994-95, the index of manufacturing production increased by 33% overall. Successive annual growth occurred from 1984-85 to 1988-89 then followed three years of steady decline which were followed by three years of growth.

Most subdivisions of the manufacturing industry demonstrated fairly similar patterns over the ten year period to those demonstrated by total manufacturing. An exception was the Textiles, clothing, footwear and leather manufacturing industry, which remained stable from 1985-86 to 1988-89 and then began a steady decline. The subdivisions which have substantially higher activity levels in 1994-95 than in 1985-86 are non-metallic mineral products manufacturing (up 54%), Machinery and equipment manufacturing (up 45%), and Other manufacturing (up 44%).

18.1 Indexes of manufacturing industry gross product at average 1989-90 prices (Reference base year 1989-90 = 100.0)

Industry subdivision	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Food, beverages & tobacco mfg	100.0	102.2	102.5	109.3	114.0	120.8
Textiles, clothing, footwear & leather mfg	100.0	97.5	92.1	90.6	84.2	80.5
Wood & paper product mfg	100.0	97.4	98.7	94.6	96.9	104.5
Printing, publishing & recorded media	100.0	97.0	92.0	95.1	107.6	119.0
Petroleum, coal, chemical & associated product mfg	100.0	103.7	101.8	100.7	109.7	116.3
Non-metallic mineral product mfg	100.0	89.9	87.6	96.5	110.0	129.7
Metal product mfg	100.0	99.3	98.5	97.5	103.0	109.3
Machinery & equipment mfg	100.0	96.8	91.5	100.9	113.1	125.2
Other manufacturing	100.0	84.9	81.9	86.8	97.4	114.7
Total manufacturing	100.0	98.1	95.7	99.7	107.4	116.4

Source: Quarterly Indexes of Industrial Production, Australia (8125.0).

Structure of the manufacturing industry

There were 38,285 manufacturing establishments operating in Australia at 30 June 1993, employing 882,500 persons. During 1992-93, manufacturing establishments paid \$27,311 million in wages and salaries and recorded \$170,100 million in turnover (table 18.2).

The industries with the most persons employed at 30 June 1993 were Machinery and equipment manufacturing (188,400), Food, beverages and tobacco manufacturing

(159,300) and Metal product manufacturing (143,100). Non-metallic mineral products manufacturing (38,400) was the smallest employer, accounting for only 4.4% of manufacturing employment.

Food, beverages and tobacco was the largest contributor to total manufacturing turnover, accounting for 22%, followed by Metal products manufacturing and Machinery and equipment manufacturing (each at approximately 18%).

18.2 Summary of operations of the manufacturing industry, 1992-93

Industry subdivision	Establishments operating at 30 June (No.)	Employment at 30 June(a) ('000)	Wages & salaries(b) (\$m)	Turnover (\$m)	Persons employed per establishment (No.)	Turnover per employed (\$'000)
Food, beverages & tobacco mfg	3 327	159 282	4 762	36 999	48	232
Textiles, clothing, footwear & leather mfg	3 623	75 223	1 856	8 849	21	118
Wood & paper product mfg	3 372	57 772	1 741	9 909	17	172
Printing, publishing & recorded media	4 299	84 965	2 720	11 539	20	136
Petroleum, coal, chemical & associated product mfg	2 639	87 428	3 116	27 550	33	315
Non-metallic mineral product mfg	1 586	38 394	1 282	8 362	24	218
Metal product mfg	6 807	143 146	4 738	31 310	21	219
Machinery & equipment mfg	7 483	188 379	5 987	30 781	25	163
Other manufacturing	5 149	47 910	1 110	4 800	9	100
Total manufacturing	38 285	882 497	27 311	170 100	23	193

(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 business; 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 done 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 1992–93. New South Wales contributed between 30% and 40% of the turnover in most industries, with Machinery and equipment manufacturing (28% of Australian total) and Printing, publishing and recorded media (46% of Australian total) being the only exceptions. Victoria dominated in Textiles, clothing, footwear and leather manufacturing (49%) and Machinery and equipment manufacturing

(43%) but contributed only 22% of Australian turnover for Metal product manufacturing. Although Queensland accounted for only 14% of manufacturing turnover, it contributed 20% of Australian turnover in each of the Food, beverages and tobacco manufacturing and non-metallic mineral products manufacturing. Similarly, South Australia which accounted for 9% of total manufacturing turnover for Australia, contributed 17% of Australian turnover for Machinery and equipment manufacturing.

18.3 Turnover by manufacturing industry, 1992–93 (\$ million)

Industry subdivision	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Food, beverages & tobacco mfg	11 556	10 999	7 522	2 931	2 593	1 215	108	75	36 999
Textiles, clothing, footwear & leather mfg	2 672	4 361	555	805	261	183	n.p.	n.p.	8 849
Wood & paper product mfg	3 110	2 779	1 489	903	629	942	13	43	9 909
Printing, publishing & recorded media	5 254	3 595	1 122	632	590	123	29	195	11 539
Petroleum, coal, chemical & associated product mfg	10 721	9 616	2 869	1 396	2 722	214	9	2	27 550
Non-metallic mineral product mfg	2 948	2 036	1 676	519	876	189	43	75	8 362
Metal product mfg	11 994	7 044	4 849	2 340	3 872	832	n.p.	n.p.	31 310
Machinery & equipment mfg	8 704	13 112	2 284	5 093	1 333	179	27	51	30 781
Other manufacturing	1 626	1 427	840	363	439	53	5	47	4 800
Total manufacturing	58 584	54 969	23 206	14 982	13 315	3 930	600	514	170 100

Source: *Manufacturing Industry, Australia* (8221.0).

Employment

New South Wales (34%) and Victoria (32%) dominate manufacturing in Australia, comprising two-thirds of employment as at 30 June 1993. In all industries, New South Wales and Victoria are the two largest employing States. However, different industries predominate, in terms of employment, in different States (table 18.4).

New South Wales manufacturing establishments employ 41% of persons employed in Printing, publishing and recorded media and 39% of those in the Metal product manufacturing industry. Some 49% of all persons employed by Textiles, clothing

footwear and leather manufacturers are located in Victoria.

Queensland establishments employ 21% of persons in Food, beverages and tobacco manufacturing and 20% of those in non-metallic mineral product manufacturing. South Australia employs 14% of those in the Machinery and equipment manufacturing industry.

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 *Chapter 6, Labour*.

18.4 Employment in manufacturing industry, June 1993 ('000)

Industry subdivision	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Food, beverages & tobacco mfg	49.0	43.5	33.2	15.3	11.4	5.8	0.6	0.6	159.3
Textiles, clothing, footwear & leather mfg	22.3	36.6	5.9	5.5	3.0	1.8	0.1	0.1	75.2
Wood & paper product mfg	17.8	14.9	10.1	5.8	4.3	4.4	0.1	0.4	57.8
Printing, publishing & recorded media	34.7	26.3	10.1	5.2	5.2	1.5	0.3	1.6	85.0
Petroleum, coal, chemical & associated product mfg	33.0	33.8	8.0	6.7	5.1	0.8	—	—	87.4
Non-metallic mineral product mfg	12.6	9.6	7.8	2.7	4.6	0.8	0.1	0.2	38.4
Metal product mfg	56.0	34.0	22.0	11.8	13.9	4.0	1.1	0.1	143.1
Machinery & equipment mfg	58.4	71.1	19.4	27.2	9.8	1.9	0.3	0.5	188.4
Other manufacturing	14.2	14.4	9.6	3.9	4.8	0.7	0.1	0.4	47.9
Total manufacturing	297.9	284.0	126.0	84.1	62.1	21.7	2.7	3.9	882.5

Source: *Manufacturing Industry, Australia* (8221.0).

Labour costs

Major labour costs in the manufacturing industry increased by 6.5% between 1991–92 and 1993–94. In both years, earnings comprised

around 88% of total labour costs for the manufacturing industry which is comparable with the proportion for all industries.

18.5 Major labour costs of manufacturing industry

Type of labour cost	1991–92 (\$m)	1993–94 (\$m)	1993–94	
			Manufacturing (%)	All industries (%)
Earnings	26 907	28 468	87.7	88.4
Other labour costs				
Payroll tax	1 367	1 441	4.4	3.5
Superannuation	1 142	1 432	4.4	5.6
Workers' compensation	893	948	2.9	1.8
Fringe benefits tax	183	184	0.6	0.7
Total other labour costs	3 585	4 005	12.3	11.6
Total major labour costs	30 492	32 473	100.0	100.0

Source: *Labour Costs, Australia* (6348.0).

Average total labour costs per employee in 1993–94 of \$36,570 represented an increase of 4.0% over 1991–92 costs. For 1993–94, the average total labour costs in the

manufacturing industry were substantially higher than the average of \$32,755 per employee for all industries.

18.6 Average labour cost per employee in manufacturing industry (\$)

Type of labour cost	1991–92	1993–94	
		Manufacturing	All industries
Earnings	31 036	32 058	28 957
Other labour costs			
Payroll tax	1 576	1 623	1 131
Superannuation	1 318	1 613	1 829
Workers' compensation	1 030	1 068	598
Fringe benefits tax	211	208	240
Total other labour costs	4 135	4 512	3 798
Total major labour costs	35 171	36 570	32 755

Source: *Labour Costs, Australia* (6348.0).

Industrial disputes

One hundred and sixty four industrial disputes occurred in the manufacturing industry during 1994. These disputes involved over 50,200 employees and resulted in the loss of more than 123,200 working days (table 18.7). Compared to experience in 1993, this represented a small decrease in the number of disputes (down 3.5%), but a substantial fall in both employees involved (down 71%) and working days lost (down 48%).

Manufacturing industry represented 29% of all disputes during 1994. Manufacturing industry employees involved in disputes represented 19% of all employees involved in disputes during 1994, substantially less than the 36% recorded in 1993. Manufacturing industry disputes were responsible for 25% of working days lost during 1994, also substantially less than 1993 (37%).

18.7 Manufacturing industry — industrial disputes which occurred during 1993 and 1994

	Total manufacturing	All industries
Total industrial disputes in progress		
1993 (no.)	170	610
1994 (no.)	164	558
Employees involved (directly & indirectly)		
1993 ('000)	175.4	489.6
1994 ('000)	50.2	264.5
Working days lost		
1993 ('000)	238.1	635.8
1994 ('000)	123.2	501.0

Source: *Industrial Disputes, Australia* (6322.0).

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 in this industry. The number of manufacturing employees with union membership fell a further 123,800 persons (23%) between 1986 and 1994, resulting in an overall fall of approximately 213,400 persons (34%) between 1982 and 1994. 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 18.8).

The number of trade union members in all industries decreased between 1982 and 1994. In percentage terms membership followed a downward trend similar to manufacturing.

Although 45% of permanent manufacturing employees belonged to a trade union in 1994, only 16% of casual employees were members. Permanent female employees displayed significantly 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 18.9).

18.8 Employees with trade union membership: manufacturing and all industries

	Manufacturing		All industries	
	No. ('000)	% of total employment	No. ('000)	% 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
August 1994	421.6	40.8	2 283.4	35.0

(a) The August 1990 survey included persons aged 70 years and over.

Source: *Trade Union Members, Australia* (6325.0).

18.9 Manufacturing industry — proportion of employees with trade union membership, August 1994 (%)

Employees	Manufacturing	All industries
Males		
Permanent	47.3	43.0
Casual	15.8	14.8
Total	44.3	37.9
Females		
Permanent	35.6	38.8
Casual	16.0	14.5
Total	30.7	31.3
Persons		
Permanent	44.6	41.3
Casual	15.9	14.7
Total	40.8	35.0

Source: *Trade Union Members, Australia* (6325.0).

Capital expenditure

New capital expenditure in the manufacturing industry rose by 36% between 1992–93 and 1994–95. Industries with greatest increases were Wood and paper products manufacturing (up 91%) and Printing, publishing and recorded media (up 81%). The only industry which showed a decrease in new capital expenditure over the period 1992–93 to 1994–95 was Metal products manufacturing (down 7.7%).

The level of private new capital expenditure in 1994–95 was higher than in 1993–94 for six of the nine broad industries in manufacturing and only marginally lower for the other three. Largest percentage increases were recorded for Printing publishing and recorded media (up 91%) and non-metallic mineral products manufacturing (up 71%).

18.10 Private new capital expenditure in manufacturing industry (\$ million)

Industry subdivision	1992–93	1993–94	1994–95
Food, beverages & tobacco mfg	1 438	1 973	1 967
Textiles, clothing, footwear & leather mfg	271	238	336
Wood & paper product mfg	366	592	699
Printing, publishing & recorded media	599	567	1 083
Petroleum, coal, chemical & associated product mfg	1 145	1 202	1 638
Non-metallic mineral product mfg	575	587	1 005
Metal product mfg	1 440	1 159	1 329
Machinery & equipment mfg	1 119	1 308	1 301
Other manufacturing	85	187	178
Total manufacturing	7 038	7 815	9 537

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 1995 was 4% higher than in June 1994. This followed a fall of 2% between June 1993 and June 1994. Non-metallic mineral products (up 16%) and Other manufacturing (up 12%) recorded the highest stock increases between June 1993 and June 1995. Textiles, clothing, footwear and leather (down 10%) and Metal products (down 6%) showed the largest percentage stock rundowns between June 1993 and June 1995.

Food, beverages and tobacco manufacturing and non-metallic minerals manufacturing were the only industries to show successive rises in June stocks from 1993 to 1995. Textiles, clothing, footwear and leather manufacturing was the only industry to show successive falls.

18.11 Book value of stocks owned by private manufacturing businesses at average 1989–90 prices (\$ million)

Industry subdivision	June 1993	June 1994	June 1995
Food, beverages & tobacco mfg	4 313	4 340	4 501
Textiles, clothing, footwear & leather mfg	1 568	1 448	1 416
Wood & paper product mfg	1 295	1 290	1 343
Printing, publishing & recorded media	676	660	678
Petroleum, coal, chemical & associated product mfg	3 777	3 666	3 885
Non-metallic mineral product mfg	994	1 042	1 156
Metal product mfg	3 968	3 655	3 734
Machinery & equipment mfg	4 759	4 618	4 880
Other manufacturing	482	570	540
Total manufacturing	21 832	21 289	22 133

Source: Stocks, Manufacturers' Sales and Expected Sales, Australia (5629.0).

Company profits

Profits before income tax earned by manufacturing companies increased by 19% between 1993–94 and 1994–95, following a rise of 33% from 1992–93. Growth in profits between 1993–94 and 1994–95 was strongest in Machinery and equipment (up 55%), Metal products manufacturing (up 27%) and Printing, publishing and recorded media (up 25%). The only industry to record lower

profits in 1994–95 than in 1993–94 was Other manufacturing.

Metal product manufacturing contributed 19% to total manufacturing profits in 1994–95 followed closely by Food, beverages and tobacco manufacturing (18%) and Machinery and equipment (17%).

18.12 Manufacturing companies — profit before income tax by industry (\$ million)

Industry subdivision	1992–93	1993–94	1994–95
Food, beverages & tobacco mfg	2 144	2 130	2 262
Textiles, clothing, footwear & leather mfg	219	380	487
Wood & paper product mfg	643	913	977
Printing, publishing & recorded media	666	1 134	1 415
Petroleum, coal, chemical & associated product mfg	1 350	1 633	1 782
Non-metallic mineral product mfg	816	1 047	1 130
Metal product mfg	847	1 895	2 399
Machinery & equipment mfg	1 259	1 402	2 178
Other manufacturing	40	122	60
Total manufacturing	7 983	10 655	12 690

Source: Company Profits, Australia (5651.0).

Principal manufactured commodities

Table 18.13 shows the total recorded production of selected principal manufactured commodities.

Of the 25 selected commodities, 21 had greater production in 1994-95 than in 1993-94. Largest increases were for motor vehicles for goods and materials (up 17%), non laminated particle board (up 12%) and cotton yarn (up 11%). Of the four selected commodities which had lower production in

1994-95 than in 1993-94, largest falls were recorded by domestic refrigerators (down 11%) and domestic clothes washing machines (down 6%).

Twelve commodities exhibited growth for each of the past three years while tobacco and cigarettes is the only commodity of those tabulated for which production has fallen steadily over that period.

18.13 Quantities of selected commodities produced by manufacturing establishments(a)

Commodity	Unit of quantity	1991-92	1992-93	1993-94	1994-95
Confectionery					
Chocolate based	tonnes	98 119	105 681	110 910	109 709
Other	tonnes	65 416	68 455	68 324	71 974
Beer(b)	million litres	1 862	1 805	1 752	1 788
Tobacco & cigarettes(c)	tonnes	24 538	24 001	23 273	23 083
Woven fabric(d)					
Man-made fibre	'000 sq. m	185 528	185 060	184 885	185 257
Cotton (incl. towelling)	'000 sq. m	38 907	41 410	48 971	51 153
Wool (incl. blanketing)	'000 sq. m	8 132	8 343	7 893	8 622
Yarn(d)					
Cotton	tonnes	r24 863	r27 436	33 780	37 643
Wool	tonnes	18 551	18 167	21 016	23 093
Textile floor coverings	'000 sq. m	42 259	42 106	46 910	47 258
Newsprint	'000 tonnes	404	433	411	423
Nonlaminated particle board(e)	'000 cu m	643	660	752	846
Plastics in primary forms(f)	'000 tonnes	1 002	1 023	1 140	1 240
Portland cement	'000 tonnes	5 731	6 225	6 733	7 124
Clay bricks for structural purposes	million	1 632	1 722	1 814	1 860
Ready mixed concrete	'000 cu. m	13 359	14 548	15 265	15 871
Basic iron, spiegeleisen & sponge iron(g)	'000 tonnes	6 394	6 445	7 209	7 449
Blooms & slabs of iron or steel(g)	'000 tonnes	5 205	6 218	7 627	7 807
Motor vehicles					
Cars & station wagons	'000	269	275	298	301
Vehicles for goods & materials(h)	'000	15	15	23	27
Domestic refrigerators	'000	372	393	460	408
Domestic clothes washing machines(i)	'000	296	308	326	305
Electric motors	'000	2 445	2 847	2 990	3 099
Electricity	million kWh	156 413	159 872	161 813	165 063
Gas(j)	terajoules	553 438	568 820	587 013	622 047

(a) Data in this table exclude operations by single establishment enterprises employing fewer than four persons. (b) Includes ale, stout and porter. Excludes extra light beer containing less than 1.15 per cent but more than 0.5 per cent by volume of alcohol. (c) Source: Australian Tobacco Marketing Advisory Committee, until April 1995. (d) Includes mixtures predominantly of the fibre named. (e) Includes board for subsequent conversion to other purposes. Excludes fibreboard and fibre paperboard. (f) Includes liquid, paste, powder, granules, flakes, blocks, irregular shapes, lumps and similar forms. (g) Comprises production of BHP Steel only. (h) Includes utilities, panel vans and prime movers for semi-trailers. Excludes off-highway trucks (for example, dump wagons), materials handling trucks (for example, forklift trucks) and semi-trailers. (i) Household or laundry-type, each of a dry linen capacity not exceeding 10 kg. (j) Available for issue through mains. Includes natural gas.

Source: ABS manufacturing production publications (8301.0, 8357.0 to 8363.0 and 8367.0 to 8369.0).

Concentration of enterprises in the manufacturing industry

Concentration statistics provide information on the extent to which particular enterprise groups predominate in individual industries. They are an indicator of the degree of competition existing between enterprise groups engaged in an industry.

In 1991–92, the most concentrated manufacturing 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 18.14).

18.14 Concentration of employment in manufacturing establishments(a), June 1992

Industry subdivision	Enterprise groups ranked by turnover									
	Largest 4		5–8		9–12		13–16		Remainder	
	'000	%	'000	%	'000	%	'000	%	'000	%
Food, beverages & tobacco mfg	19.4	12	16.9	10	10.8	7	10.3	6	108.6	0.65
Textiles mfg	3.9	15	1.8	7	1.9	7	1.4	6	17.2	0.66
Clothing & footwear mfg	8.1	16	1.7	3	2.6	5	0.8	2	36.6	0.73
Wood, wood products & furniture mfg	6.6	9	2.2	3	2.1	3	1.2	2	59.5	0.83
Paper, paper products, printing & publishing	22.7	23	6.9	7	4.9	5	3.7	4	62.0	0.62
Chemical, petroleum & coal products mfg	7.7	15	2.9	6	3.4	7	3.5	7	33.0	0.65
Non-metallic mineral products mfg	15.2	41	4.7	12	1.6	4	1.8	5	14.2	0.38
Basic metal products mfg	28.2	45	8.6	14	5.9	1	2.7	4	16.7	0.27
Fabricated metal products mfg	6.4	7	6.1	7	3.0	3	2.3	3	71.0	0.80
Transport equipment mfg	20.4	25	11.4	14	6.9	8	5.5	7	37.3	0.46
Other machinery & equipment mfg	9.8	9	8.5	7	4.0	3	3.2	3	88.8	0.78
Miscellaneous manufacturing	8.1	14	4.6	8	1.4	2	1.3	2	42.8	0.74
Total manufacturing	45.7	5	33.4	4	30.9	3	20.8	2	776.3	0.86

(a) Data in this table exclude operations by single establishment enterprises employing fewer than four persons. Employment at end of June. Includes working proprietors.

Source: *Manufacturing Industry, Concentration Statistics, Australia (8207.0)* and *Manufacturing Industry, Australia (8221.0)*.

Manufacturing technology

The proportion of manufacturing establishments (employing 10 or more people) using advanced manufacturing technologies increased by about one-quarter to 41% in the three-year period to December 1991. Over the same period, the proportion of manufacturing establishments using Total Quality Control/Management (TQC/TQM), increased by more than half to 24%. By 1996, a further 9% of manufacturers intended introducing advanced manufacturing technologies and 25% intended introducing TQC/TQM. In December 1991, the most widely used advanced manufacturing technology was computer aided design and/or engineering.

Tables containing relevant data appear in *Year Book Australia 1995*.

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 in the Electronic and electrical equipment and appliance industry accounted for 21% of all manufacturing research and development expenditure in 1993–94. Metal product (17%), Motor vehicle and parts and other transport equipment (16%) and Petroleum, coal, chemical and associated product (15%) were also major contributors to R&D expenditure.

Total expenditure on R&D by manufacturing business enterprises in 1993–94 remained virtually unchanged compared with 1992–93. Wood and paper product (up 132%) and Other manufacturing (up 34%) had the largest percentage increases over the period. Printing, publishing and recorded media (down 21%) and Metal product (down 13%) had the largest percentage decreases.

18.15 Expenditure on research and experimental development by manufacturing enterprises (\$ million)

Industry subdivision	1992–93	1993–94			Total
		Capital expenditure	Labour costs(a)	Other current expenditure	
Food, beverage & tobacco mfg	136.1	14.0	64.9	61.0	139.8
Textile, clothing, footwear & leather mfg	28.8	2.7	12.4	21.5	36.6
Wood & paper product mfg	44.4	n.p.	12.5	n.p.	103.0
Printing, publishing & recorded media	15.3	n.p.	6.4	n.p.	12.1
Petroleum, coal, chemical & associated product mfg	279.6	23.3	106.4	122.5	252.2
Non-metallic mineral product mfg	30.9	4.6	12.8	13.3	30.8
Metal product mfg	335.7	60.3	93.6	138.9	292.8
Motor vehicle & part & other transport equipment mfg	307.7	12.0	105.8	152.0	269.8
Photographic & scientific equipment mfg	96.5	8.2	53.4	41.0	102.6
Electronic & electrical equipment & appliance mfg	336.8	27.8	190.2	142.0	360.0
Industrial machinery & equipment mfg	65.2	5.2	35.7	31.3	72.2
Other manufacturing	10.9	1.9	7.1	5.6	14.6
Total manufacturing	1 688.0	171.1	701.1	814.3	1 686.6

(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.

Source: *Research and Experimental Development, Business Enterprises, Australia (8104.0)*.

Commonwealth government authorities

Year Book Australia 1994 contains 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, the industry related responsibilities of which are now the responsibility of the Department of Industry, Science and Technology.

Innovation in Australian manufacturing

The ABS conducted its first survey of the innovative activity of manufacturing businesses in respect of 1993–94. The results were published in *Innovation in Australian Manufacturing* (8116.0). In this article, these results are summarised and some international comparisons are made.

How much innovation occurs?

The ABS survey showed that one in every three manufacturing businesses in Australia undertook some technological innovation over the period July 1991 to June 1994.

A business was considered to be technologically innovative if during the period it introduced one or more new, or substantially changed, products or if it used new, or substantially changed, processes to manufacture its products.

There are substantial differences across industries and sizes of business in the rate at which technological innovation occurs. Forty six per cent of businesses in the Petroleum, coal, chemical and associated product manufacturing industry were technologically innovative; this industry was the one most technologically innovative, followed by the Machinery and equipment industry (42% of businesses). At the other end of the scale, only 15% of businesses in the Wood and paper product manufacturing industry were innovative. The incidence of innovative activity in all other manufacturing industries was in the 30–37% range. These results are shown in table 18.16.

18.16 Businesses undertaking technological innovation by manufacturing subdivision

Manufacturing subdivision	%
Food, beverages & tobacco mfg	35.6
Textile, clothing, footwear & leather mfg	29.9
Wood & paper product mfg	15.1
Printing, publishing & recorded media	33.5
Petroleum, coal, chemical & associated product mfg	46.4
Non-metallic mineral product mfg	36.7
Metal product	32.0
Machinery & equipment mfg	41.9
Other manufacturing	31.0
Total manufacturing	33.7

Source: *Innovation in Australian Manufacturing* (8116.0).

On a size basis, not surprisingly the largest firms were the most technologically innovative. Ninety per cent of the manufacturers employing 1,000 employees or more were considered to be innovative. The percentage fell by size of business; 50%

of firms with between 20 and 49 employees were innovative. One in four of the smallest firms, employing less than 5 employees, were innovative in the three year period. These results are shown in table 18.17.

18.17 Businesses undertaking technological innovation by employment size

No. of employees	%
Less than 5	25.0
5-9	29.6
10-19	41.3
20-49	50.7
50-99	60.9
100-199	74.8
200-499	81.2
500-999	83.7
1000 or more	90.3
Total	33.7

Source: *Innovation in Australian Manufacturing* (8116.0).

How innovative are individual businesses?

The above analysis shows that innovative activity is fairly widespread. However it does not answer the question of how much innovative activity each particular innovating business undertook. An insight can be obtained from the share of a firm's income spent on innovative activities. Table 18.18 shows the results of this analysis on both an industry and a size basis.

Interestingly, on average innovating firms spent only 3.6% of their income on their innovative activities. Across industries the proportion ranges from 2.1% to 5.9%. It does not vary greatly by size of business, except for the very smallest businesses, which spend a much greater proportion of their income on innovative activity. This clearly is a reflection of the smaller income of the smallest businesses and the smaller range of activities that they perform. It also reflects the relative newness of the smallest businesses, and the relatively greater importance of expenditure on new activities as part of the process of establishing themselves.

18.18 Innovation intensity of technologically innovative businesses

Employment size	Innovation intensity (% of sales)
Less than 5	15
5-9	6
10-19	4
20-49	5
50-99	4
100-199	4
200-499	4
500-999	2
1000 or more	3
Selected ANZSIC subdivisions	
Food, beverages & tobacco mfg	2
Textile, clothing, footwear & leather mfg	3
Wood & paper product mfg	5
Printing, publishing & recorded media	5
Petroleum, coal, chemical & associated product mfg	3
Non-metallic mineral product mfg	4
Metal product mfg	2
Machinery & equipment mfg	6
Other manufacturing	4
Total	4

Source: *Innovation in Australian Manufacturing* (8116.0).

Are Australian businesses more or less innovative than their overseas counterparts?

There is very little comparative data available, as Innovation surveys are fairly new and data from the latest round of surveys in Europe are not yet available. Data are however available for Norway and Ireland, even if on slightly different bases. Before making any international comparisons one needs to make allowances for these differences. In Norway, the innovation survey excluded manufacturing firms employing less than 5 persons. In the Irish survey the cut-off was businesses

employing less than 10 employees. Data are not available to bring these two surveys to the same basis. However, the Australian data can be manipulated to be on a consistent basis with each of them separately. The results of these analyses are shown in table 18.19 (industry) and 18.20 (size) below. The consistency can only be perfectly achieved at the total Manufacturing level, as the industry classifications are slightly different between the countries.

18.19 Proportion of manufacturing businesses which are innovative in Australia, Norway and Ireland by manufacturing subdivision(a)
(%)

Manufacturing subdivision	5 or more employees		10 or more employees	
	Australia(b)	Norway	Australia(b)	Ireland
Food, beverages & tobacco	41	37	52	..
Food	..	..	..	21
Drink & tobacco	..	..	..	35
Textile, clothing, footwear & leather	33	..	41	..
Clothing/footwear	32	..	..	..
Textiles, wearing apparel, leather	..	30	..	..
Textiles	..	..	..	36
Wood & paper products	18	..	29	..
Wood products	..	24	..	..
Paper products	..	62	..	..
Wood products, furniture	..	..	..	20
Paper products, printing	..	..	..	26
Printing, publishing & recorded media	42	..	51	(c)
Printing & publishing	..	35	..	(d)
Petroleum, coal, chemical & associated products	55	..	69	..
Chemical, rubber, plastic products	..	66	..	..
Chemicals/pharmaceuticals	..	..	..	45
Non-metallic mineral products	43	..	50	42
Mineral products	..	38	..	..
Metal products	39	36	47	..
Basic metals	..	..	..	..
Basic/fabricated metals	..	..	..	26

For footnotes see end of table.

...continued

18.19 Proportion of manufacturing businesses which are innovative in Australia, Norway and Ireland by manufacturing subdivision(a) — continued
(%)

Manufacturing subdivision	5 or more employees		10 or more employees	
	Australia(b)	Norway	Australia(b)	Ireland
Machinery & equipment	54	..	60	..
Machinery	..	52	..	38
Instruments	..	55	..	40
Electrical appliances & supplies	..	57	..	..
Electric/electronic	..	..	..	61
Transport	..	38	..	41
Other manufacturing	39	37	47	..
Furniture	..	38	..	(d)
Total	41	40	51	33

(a) Industry categories align broadly with international standards but have been presented at different levels. (b) Australian data has been recalculated using the size cutoff to allow direct comparison. (c) Included above with Paper products. (d) Included above with Wood products.

Source: Statistics Norway, *Norwegian Innovation Survey, 1993*; Forfa's, *Evaluation and Statistics Unit, Technological Innovation in Irish Manufacturing Industry, Preliminary findings from the Irish Innovation Survey, November 1994*; *Innovation in Australian Manufacturing (8116.0)*.

18.20 Proportion of manufacturing businesses which are innovative in Australia, Norway and Ireland, by employment size
(%)

No. of employees	Australia(a)	Norway	Ireland
5 or more			
5-9	34	22	..
20-49	51	37	..
50-99	61	50	..
100-199	75	62	..
200 or more	84	79	..
Total	41	40	..
10 or more			
10-49	45	..	26
50-99	61	..	32
100 or more	79	..	60
Total	51	..	33

(a) Australian data has been recalculated using the size cutoff to allow direct comparison.

Source: Statistics Norway, *Norwegian Innovation Survey, 1993*; Forfa's, *Evaluation and Statistics Unit, Technological Innovation in Irish Manufacturing Industry, Preliminary findings from the Irish Innovation Survey, November 1994*; *Innovation in Australian Manufacturing (8116.0)*.

Compared to manufacturers in Norway, Australian manufacturers have a fairly similar propensity to innovate. The results for most industries seem to be similar. There are however differences by size of business, with a much smaller proportion of small Norwegian businesses considered innovative. The apparent similarity in the totals, despite the differences by business size, reflects the different industrial structures between the two countries.

Compared to manufacturers in Ireland, Australian manufacturers seem to be significantly more innovative. This phenomenon occurs across all industries and all size of business.

From the limited amount of Innovation survey data available, it can be concluded that our manufacturing industry is reasonably innovative when compared to the manufacturing industries of Norway and Ireland. At this time no further international comparisons are possible although more data relating to other countries are expected to become available in early to mid 1996.

Wholesale trade

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. Information from these surveys is available in *Year Book Australia 1995*.

Retail trade

The Retail (and selected services) industry is a major contributor to the Australian economy. The industry accounts for in excess of \$100,000 million annually in turnover and has over 1 million employees.

The performance and characteristics of the industry are measured by statistics obtained from the monthly Retail Trade (and selected services) survey, through the Retail Census which is conducted every 5 or 6 years (the last being in respect of 1991–92) and through a number of ABS economy wide collections which incorporate the retail sector.

In current price terms, turnover for Retail and Selected services industries for the year ended June 1995 totalled \$112,200 million which was an increase of 7.5% on the previous year. This compares to an increase of 4.1% for the year before that. Each of the industry groups showed growth. Hospitality and services industries, which includes hotels, licensed clubs and cafes and restaurants, recorded the strongest growth of 11.4%. Other industry groups to show strong growth during 1994–95 were the Recreational good retailing group, up 9.9% and the Food retailing group, up 8.1%. The weakest growth occurred in the Clothing and soft good retailing group which grew by just 2.3%.

In terms of contribution to the \$7,800 million growth between 1993–94 and 1994–95, the Food retailing group accounted for \$3,300 million (42%) with the other major contributor being the Hospitality and services industries group which accounted for \$2,000 million (26%).

18.21 Retail turnover by industry group at current prices (\$ million)

	1992–93	1993–94	1994–95
Food retailing	39 385	40 671	43 963
Department stores	10 649	10 798	11 209
Clothing & soft good retailing	7 892	7 779	7 957
Household good retailing	11 304	11 978	12 588
Recreational good retailing	5 394	5 731	6 299
Other retailing	8 958	9 724	10 457
Hospitality & services	16 761	17 744	19 772
Total	100 342	104 424	112 245

Source: *Retail Industry, Australia, 1991–92* (8622.0).

Retail and Selected services industries turnover in constant price terms, that is, after the removal of the effect of price changes, grew by a strong 5.3% for 1994–95 compared to growth of 1.1% for 1993–94. The strongest growth in 1994–95 was recorded in the Hospitality and services industries group,

which increased by 8.1%, Recreational good retailing, up 7.4%, Other retailing, up 6.5%, and Food retailing, up 5.3%. The Clothing and soft good retailing group recorded the weakest growth with turnover increasing by 1.7% in 1994–95.

**18.22 Retail turnover by industry group at constant
(average 1989-90) prices
(\$ million)**

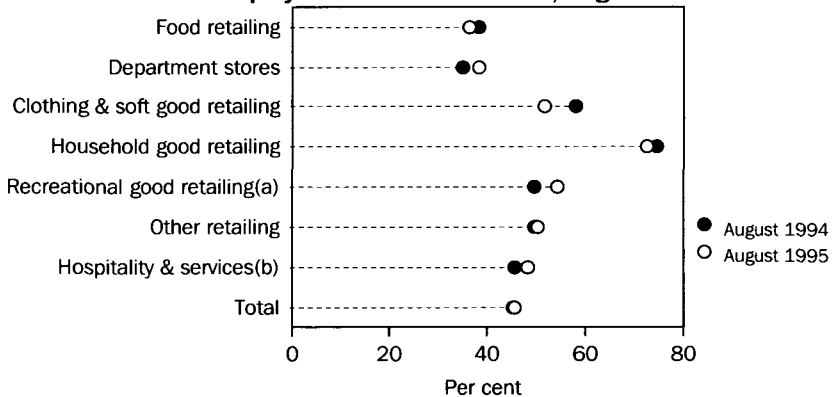
	1992-93	1993-94	1994-95
Food retailing	35 775	35 615	37 511
Department stores	9 944	10 024	10 331
Clothing & soft good retailing	7 426	7 345	7 471
Household good retailing	11 270	11 731	12 162
Recreational good retailing	5 034	4 819	5 175
Other retailing	7 808	8 522	9 074
Hospitality & services	15 142	15 382	16 624
Total	92 399	93 438	98 349

Source: Retail Industry: Commodity Sales, Australia, 1991-92 (8624.0).

At August 1995 there were 1,017,000 employees in retail and selected service industries (excluding hairdressers and video hire outlets) compared to 975,000 employees at August 1994. Full-time employees increased by 21,000 (4.5%) while part-time employees also increased by 21,000 (3.9%) during the year ended August 1995.

The composition of employees varies across the different types of retail stores. Household good retailing stores have mainly full-time employees whereas Department stores and Food retailing stores are mainly staffed by part-time employees.

18.23 Full-time employees in retail industries, August 1994 and 1995



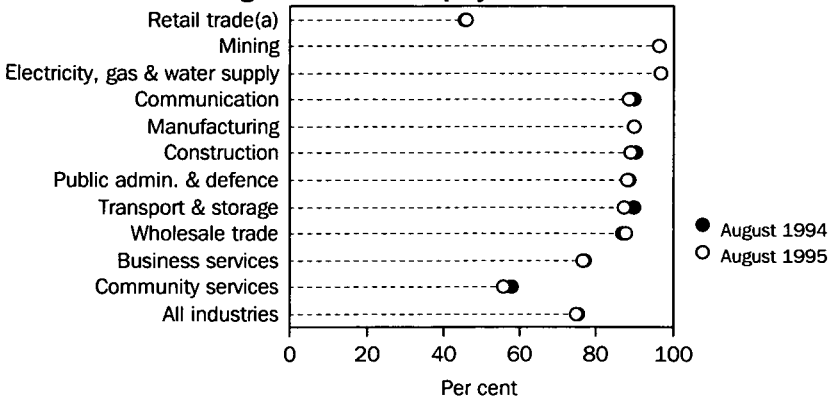
(a) Includes Marine equipment retailing. (b) Excludes Hairdressers and Video hire outlets

Source: Labour Force, Australia (6203.0).

Compared to other industries, retail and selected service industries (excluding hairdressers and video hire outlets) have a significantly lower percentage of full-time

employees. For most other industries full-time employees account for 80% or more of their total employees. For retail trade the percentage is around 46%.

18.24 Percentage of full-time employees for selected industries



(a) Includes Hospitality and services, excluding hairdressers and video hire outlets. Excludes Motor vehicle retailing and services.

Source: *Labour Force, Australia* (6203.0).

Company profits for the retail trade industry (including motor vehicle retailing and services) amounted to \$1,800 million in

1994-95, more than double the profits reported in 1990-91 and 1991-92.

18.25 Total retail trade(a), company profits before tax



(a) Includes Motor vehicle retailing and services. Excludes Hospitality and services.

Source: *Company Profits, Australia* (5651.0).

The retail trade industry (including motor vehicle retailing and services) had capital expenditure, in current price terms, of \$2,000 million in both 1993-94 and 1994-95. Capital expenditure for both these years was higher than the \$1,700 million recorded for 1992-93.

Stocks held by retailers (including motor vehicle retailers and services), in current price terms, amounted to \$15,100 million as at 30 June 1995. This was 10.4% higher than the value of stocks held at 30 June 1994, which, in turn, was 4.8% lower than at the same time in 1993. In constant price terms the value of stocks rose by 7.8% in 1994-95, compared to a fall of 6.2% in 1993-94.

Service industries

The service industries have become increasingly significant in Australia and now account for over 60% of Australia's employment. As a result, the ABS, since 1986-87, has been increasing its collection activity from the service industries sector, and in 1991-92 introduced an annual program of collections. However, due to the diversity and large number of service industries, the program only covers a number of the service industries each year, and, as a result, it will take a number of years before all industries in the sector are surveyed.

In 1991-92, surveys were conducted of the hospitality industries (comprising accommodation; pubs, bars and taverns; cafes and restaurants; licensed clubs; and casinos) and the motor vehicle hire industry. For

1992-93, surveys were undertaken of real estate agents and a range of business services, specifically computer services, legal and accounting services, advertising services, market research services, business management services, architectural services surveying services and consultant engineering services.

For 1993-94, surveys of motion picture, radio and television services were undertaken, while in 1994-95, surveys are being conducted of private medical practice industry and the sport recreation and gambling industries.

The following table provides a summary of key results from the 1992-93 service industries collections.

18.26 Selected service industries, summary of operations, 1992-93

	No. of businesses at 30 June 1993	Employment at 30 June 1993	Sales of goods & services (\$m)	Profit before income tax (\$m)	Operating profit margin (%)
Real estate agents	7 265	51 922	2 798.7	216.0	7.7
Architectural services	4 409	16 204	945.2	92.3	9.8
Surveying services	1 175	6 964	481.2	47.6	9.9
Consulting engineering services	5 454	28 208	2 325.2	155.7	6.7
Data processing services	262	2 049	142.7	15.5	10.8
Information storage & retrieval services	67	636	102.6	10.8	10.5
Computer maintenance services	242	4 778	1 082.1	92.5	8.5
Computer consultancy services	4 323	22 599	2 601.4	246.2	9.5
Legal services	8 850	63 108	5 105.2	1 665.5	32.6
Accounting services	8 699	60 000	4 051.2	828.6	20.5
Advertising services	858	9 083	842.1	117.5	13.9
Market research services	174	8 064	251.7	28.6	9.7
Business management services	686	4 933	506.6	42.6	8.4

Source: *Computing Services Industry, Australia, 1992-93* (8669.0); *Selected Technical Services, Australia, 1992-93* (8676.0); *Real Estate Agents Industry, Australia, 1992-93* (8663.0); *Legal and Accounting Service, Australia, 1992-93* (8678.0); *Selected Business Services, Australia, 1992-93* (8677.0).

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Prices

Introduction	503
Consumer Price Index	503
Index population	503
Conceptual basis	504
Periodic reviews of the CPI	504
Weighting pattern	505
Price collection	505
Price movements by city	506
Price movements by broad commodity group	506
Long-term price series	507
International comparisons	508
Producer Price Indexes	509
Long-term price series	509
Price Index of Materials used in House Building	510
Price Index of Materials Used in Building Other than House Building	511
Price Indexes of Materials Used in Manufacturing Industries	512
Price Indexes of Articles Produced by Manufacturing Industry	512
Foreign trade price indexes	513
Import Price Index	514
Export Price Index	515
Bibliography	517

Prices

Introduction

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 description of the Consumer Price Index (CPI) commonly adopted by users is in terms of its perceived uses — hence the frequent references to the CPI as a measure of inflation, a measure of changes in purchasing power, or a measure of changes in the cost of living. None is strictly correct. In objective statistical terms the most appropriate general description is: a measure of changes, over time, in retail prices of a constant basket of goods and services. As such, the 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% since the base year, then the index would read 135.0. Similarly, if the price had fallen by 5% 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.

The CPI is the latest of a number of retail price indexes which have been constructed for various purposes by the Australian Bureau of Statistics. The history of retail price indexes in Australia is published in *Year Book Australia 1995* (1301.0).

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% (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 1995) 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 — weighted average of capital cities, weighting pattern at June 1992

Groups & subgroups	% contribution to the All Groups CPI
Food	
Dairy products	1.463
Cereal products	2.097
Meat & seafoods	3.001
Fresh fruit & vegetables	1.417
Processed fruit & vegetables	0.829
Soft drinks, ice cream & confectionery	2.890
Meals out & take away foods	4.959
Other food	1.668
Total	18.324
Clothing	
Men's & boys' clothing	1.686
Women's & girls clothing	2.545
Fabrics & knitting wool	0.746
Footwear	1.063
Dry cleaning & shoe repairs	0.224
Total	6.264
Housing	
Rents	4.865
Home ownership	11.035
Total	15.900
Household equipment & operation	
Fuel & light	2.339
Furniture & floor coverings	4.344
Appliances	1.538
Household textiles	0.754
Household utensils & tools	1.212
Household supplies & services	3.970
Postal & telephone services	1.715
Consumer credit charges	2.498
Total	18.370
Transportation	
Private motoring	14.755
Urban transport fares	1.212
Total	15.967

...continued

19.1 Consumer Price Index — weighted average of capital cities, weighting pattern at June 1992 — continued

Groups & subgroups	% contribution to the All Groups CPI
Tobacco & alcohol	
Alcoholic drinks	5.061
Cigarettes & tobacco	2.414
Total	7.475
Health & personal care	
Health services	3.961
Personal care products	2.097
Hairdressing services	0.792
Total	6.850
Recreation & education	
Books, newspapers & magazines	1.146
Recreational goods	2.564
Holiday travel & accommodation	2.349
Recreational services	2.852
Education & child care	1.939
Total	10.850
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

Table 19.2 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(a)
(Reference base year 1989-90 = 100.0)**

Year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra	Darwin	Weighted average of eight capital cities
Index no.									
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
1994-95	113.0	114.1	114.7	116.9	112.3	115.2	115.1	114.7	113.9
% change from previous year									
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
1994-95	3.5	2.7	3.7	3.1	3.5	3.1	3.3	2.9	3.2

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities.

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 1994-95 of 116.9 compared with the corresponding index for Sydney of 113.0 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 (16.9% compared with 13.0%).

Price movements by broad commodity group

Table 19.3 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 capital cities (Reference base year 1989–90 = 100.0)

	Food	Clothing	Housing	Household equipment & operation	Transportation	Tobacco & alcohol	Health & Personal care	Recreation & education	All groups
Index no.									
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
1994–95	112.1	106.7	100.0	109.2	117.5	141.0	135.5	114.6	113.9
% change from previous year									
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
1994–95	2.5	—	6.2	1.3	3.3	5.5	5.0	2.4	3.2

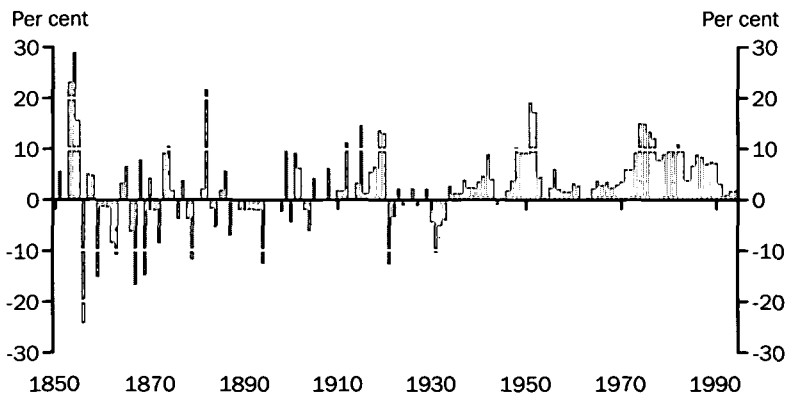
Source: Consumer Price Index (6401.0).

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 Retail Price Index - % change from previous year



Source: Australian Bureau of Statistics.

**19.5 Retail price index numbers(a)
(Reference base year 1945 = 100)**

Year	Index no.	Year	Index no.	Year	Index no.
1850	53	1900	43	1950	140
1851	56	1901	47	1951	167
1852	56	1902	50	1952	196
1853	69	1903	49	1953	205
1854	89	1904	46	1954	206
1855	103	1905	48	1955	211
1856	78	1906	48	1956	224
1857	82	1907	48	1957	229
1858	86	1908	51	1958	233
1859	73	1909	51	1959	237
1860	72	1910	52	1960	245
1861	71	1911	53	1961	252
1862	65	1912	59	1962	251
1863	58	1913	59	1963	252
1864	60	1914	61	1964	258
1865	64	1915	70	1965	268
1866	60	1916	71	1966	276
1867	50	1917	75	1967	286
1868	54	1918	80	1968	293
1869	46	1919	91	1969	302
1870	48	1920	103	1970	313
1871	47	1921	90	1971	332
1872	43	1922	87	1972	352
1873	47	1923	89	1973	385
1874	52	1924	88	1974	443
1875	53	1925	88	1975	510
1876	51	1926	90	1976	579
1877	53	1927	89	1977	650
1878	51	1928	89	1978	702
1879	45	1929	91	1979	766
1880	45	1930	87	1980	844
1881	46	1931	78	1981	926
1882	56	1932	74	1982	1 028
1883	55	1933	71	1983	1 132
1884	52	1934	73	1984	1 177
1885	53	1935	74	1985	1 257
1886	56	1936	75	1986	1 370
1887	52	1937	78	1987	1 487
1888	52	1938	80	1988	1 594
1889	51	1939	82	1989	1 714
1890	51	1940	85	1990	1 839
1891	50	1941	89	1991	1 898
1892	49	1942	97	1992	1 917
1893	48	1943	101	1993	1 952
1894	42	1944	100	1994	1 989
1895	42	1945	100	..	..
1896	42	1946	102	..	..
1897	42	1947	106	..	..
1898	41	1948	117	..	..
1899	45	1949	128	..	..

(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.

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.'

Table 19.6 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(a)

	United States of America	Japan	Germany(b)	Canada	United Kingdom	Hong Kong	Republic of Korea	Taiwan	Australia	New Zealand(c)
	Index no.									
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	107.9	113.9	112.0	122.0	140.1	130.4	114.2	113.5	109.4
1994–95	118.0	107.8	116.4	113.4	124.8	151.4	138.0	119.1	116.5	110.5
	% change since previous year									
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	1.0	3.1	1.1	2.9	7.1	5.6	2.5	2.3	0.6
1994–95	2.8	-0.1	2.2	1.3	2.3	8.1	5.8	4.3	2.6	1.0

(a) All groups excluding housing. (b) The statistics for Germany refer to Western Germany (Federal Republic of Germany before the unification of Germany). (c) 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

Long-term price series

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 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.

Table 19.7 contains the linked wholesale price indexes from 1861 to 1867–68 and the producer price index for manufacturing from 1968–69 onwards.

19.7 Producer and wholesale price indexes (Reference base year 1968–69 = 100.0)

	Producer Price Indexes
Melbourne Wholesale Price Index (All Groups)	
1861	24.2
1871	19.3
1881	17.6
1891	14.9
1901	15.3
1911	15.7
1921	30.0
1925–26	29.7
Wholesale Price (Basic Materials & Foodstuffs) Index (All Groups)	
1930–31	25.4
1935–36	23.9
1940–41	29.3
1945–46	36.5
1950–51	62.7
1955–56	85.9
1960–61	92.5
1961–62	86.4
1962–63	87.4
1963–64	90.0
1964–65	91.3
1965–66	95.4
1966–67	98.4
1967–68	99.7

...continued

19.7 Producer and wholesale price indexes — *continued*
(Reference base year 1968–69 = 100.0)

	Producer Price Indexes
Price Index of Articles Produced by Manufacturing Industry	
1968–69	100.0
1969–70	103.9
1970–71	108.5
1971–72	113.9
1972–73	120.7
1973–74	134.6
1974–75	158.1
1975–76	177.8
1976–77	196.9
1977–78	213.8
1978–79	237.4
1979–80	274.9
1980–81	305.2
1981–82	328.9
1982–83	360.2
1983–84	382.8
1984–85	404.8
1985–86	430.3
1986–87	458.5
1987–88	492.1
1988–89	526.0
1989–90	559.9
1990–91	584.6
1991–92	586.7
1992–93	600.9
1993–94	607.3
1994–95	620.9

Source: Labour Report; Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0).

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.

19.8 Price Index of Materials Used in House Building
(Reference base year 1985–86 = 100.0)

Year	Weighted average of six State capital cities						
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	
1989–90	135.8	139.1	133.5	134.1	129.7	140.8	128.0
1990–91	142.1	145.7	138.1	141.9	136.2	148.7	134.2
1991–92	142.4	146.1	137.3	144.7	135.5	149.3	138.3
1992–93	145.2	148.5	141.1	147.8	137.8	150.5	140.7
1993–94	152.1	154.8	149.6	152.2	151.8	153.5	144.3
1994–95	156.7	160.0	154.7	155.4	154.1	158.7	150.2

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.

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 - six capital cities(a) (Reference base year 1989-90 = 100.0)

Year	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart
1989-90	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
1991-92	105.7	107.1	103.4	107.4	105.4	105.2	107.1
1992-93	106.0	106.5	104.4	108.9	105.1	105.7	108.2
1993-94	107.5	107.0	106.7	110.1	107.9	107.1	110.1
1994-95	110.4	110.3	108.9	112.9	110.9	110.1	112.2

(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, Six Capital Cities (6407.0).

19.10 Price Index of Materials Used in Building Other than House Building (Reference base year 1989-90 = 100.0)

Material	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Structural timber	100.0	102.6	100.3	107.1	127.1	128.3
Clay bricks	100.0	103.5	105.0	106.2	107.8	111.0
Ready mixed concrete	100.0	109.4	106.0	103.5	106.7	112.4
Steel decking cladding & sheet products	100.0	105.2	106.6	108.4	107.5	108.9
Structural steel	100.0	102.0	100.7	101.2	104.3	105.3
Reinforcing steel bar fabric & mesh	100.0	106.4	105.8	109.2	112.7	111.5
Aluminium windows	100.0	101.8	99.5	99.1	99.7	105.4
Conductors (mains cable & circuitry)	100.0	114.3	113.6	109.2	99.2	114.2
Lamps & light fittings	100.0	99.9	100.8	101.0	102.7	104.2
Non-ferrous pipes & fittings	100.0	102.0	100.8	104.6	102.4	118.1
Builders' hardware	100.0	104.9	109.8	112.6	115.3	116.6
Paint & other coatings	100.0	108.5	116.7	118.2	119.9	123.3

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) (Reference base year 1984–85 = 100.0)

	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95
Imported materials						
Agricultural	85.5	83.5	85.0	89.6	92.7	128.1
Mining	66.1	79.7	70.2	72.5	63.1	65.4
Manufactured	139.5	140.3	141.3	150.2	154.4	158.5
Total imported materials	121.1	124.7	123.3	130.6	131.7	136.5
Home produced materials						
Agricultural, forestry & fishing	134.0	126.9	128.7	135.2	141.9	146.8
Mining	103.5	119.1	108.7	113.6	100.4	102.2
Electricity	123.6	128.9	133.0	133.2	132.8	130.7
Total home produced materials	117.9	123.3	119.3	124.6	120.9	123.7
All materials	119.0	123.8	120.7	126.6	124.6	128.1

(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)

Industry	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95
All Manufacturing Industry Index	106.5	111.2	111.6	114.3	115.5	118.1
Food, beverages & tobacco	106.9	109.5	112.3	116.2	120.5	123.0
Textiles	103.2	103.4	102.9	101.8	102.2	105.6
Clothing & footwear	107.3	112.0	114.9	116.1	117.1	118.3
Wood, wood products & furniture	107.6	112.7	114.2	116.5	122.5	126.1
Paper, paper products & printing	104.3	111.0	117.3	119.9	122.0	125.2
Chemicals & chemical products	104.4	109.3	109.9	111.1	110.3	113.6
Petroleum products	118.4	150.1	134.3	143.9	127.2	120.9
Non-metallic mineral products	108.7	117.2	119.3	119.3	120.8	124.2
Basic metal products	105.6	106.2	99.9	100.6	99.8	107.2
Fabricated metal products	107.9	113.7	114.3	114.7	114.8	116.2
Transport equipment	105.6	109.9	112.7	116.0	119.1	120.7
Other machinery & equipment	104.2	107.0	107.0	109.3	109.9	111.2
Miscellaneous manufacturing products	103.7	106.4	107.8	109.6	112.4	116.1

(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 with a reference base of 1989–90 = 100.0 was released.

The first import price index produced by the ABS covered the period from September quarter

1981 to June 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, table 19.13 draws on the available foreign trade indexes.

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.

19.13 Foreign trade price indexes
(Reference base year 1968–69 = 100)

Year	Export Price Index (All Groups)	Import Price Index (All Groups)
1901	15	..
1911	17	..
1921–22	25	..
1931–32	18	22
1936–37	29	21
1941–42	27	35
1946–47	53	51
1951–52	123	92
1956–57	115	91
1960–61	93	95
1961–62	94	94
1962–63	99	94
1963–64	112	96
1964–65	103	97
1965–66	105	99
1966–67	103	100
1967–68	98	99
1968–69	100	100
1969–70	101	103
1970–71	99	108
1971–72	102	114
1972–73	131	113
1973–74	157	131
1974–75	177	189
1975–76	193	214
1976–76	216	246
1977–78	227	278
1978–79	256	307
1979–80	309	403
1980–81	328	450
1981–82	332	458
1982–83	360	506
1983–84	369	524
1984–85	396	580
1985–86	417	659
1986–87	430	731
1987–88	469	742
1988–89	501	694
1989–90	527	729
1990–91	501	752
1991–92	472	749
1992–93	493	817
1993–94	484	843
1994–95	501	837

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).

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 June 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 Australian and New Zealand Standard Industrial Classification (ANZSIC); and
- the United Nations Classification by Broad Economic Categories.

**19.14 Import Price Index — index numbers based on the Standard International Trade Classification (SITC)
(Reference base year 1989–90 = 100.0)**

SITC section	1992–93	1993–94	1994–95
Food & live animals chiefly for food	104.7	106.8	116.6
Beverages & tobacco	121.8	111.5	106.6
Crude materials, inedible, except fuels	101.1	116.3	121.9
Mineral fuels, lubricants & other related materials	100.1	93.5	90.1
Animal & vegetable oils, fats & waxes	126.6	120.9	140.4
Chemicals & related products n.e.s.	106.2	103.3	108.8
Manufactured goods classified chiefly by material	109.3	112.1	110.4
Machinery & transport equipment	116.8	123.1	121.1
Miscellaneous manufactured articles	114.9	117.0	113.4
Commodities & transactions n.e.c.	98.7	110.4	104.4
All groups	112.1	115.6	114.8

Source: *Import Price Index, Australia* (6414.0).

**19.15 Import Price Index — industry of origin index numbers based on the Australian Standard Industrial Classification (ASIC)
(Reference base year 1989–90 = 100.0)**

ASIC Division	1991–92	1992–93	1993–94	1994–95
Agriculture, forestry & fishing	99.7	102.6	107.3	141.7
Mining	105.5	113.7	97.8	102.5
Manufacturing	102.6	111.7	115.5	113.8

Source: *Import Price Index, Australia* (6414.0).

**19.16 Import Price Index — index numbers for Broad Economic Categories (BEC) and End Use Classes
(Reference base year 1989–90 = 100.0)**

Categories/classes	1992–93	1993–94	1994–95
Broad Economic Categories			
Food & beverages	108.0	107.8	119.5
Industrial supplies n.e.s.	104.1	105.0	106.6
Fuels & lubricants	103.2	95.4	93.0
Capital goods & parts & accessories thereof	110.9	114.0	110.0
Transport equipment & parts & accessories thereof	124.6	135.9	136.8
Consumer goods n.e.s.	114.6	117.7	114.0
End Use Classes			
Capital goods	117.0	122.8	119.8
Intermediate goods	105.1	106.6	107.6
Consumption goods	116.9	121.1	119.2

Source: *Import Price Index, Australia* (6414.0).

Export Price Index

The Export Price 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 Harmonised 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.

**19.17 Export Price Index: index numbers based on the Australian Harmonized Export Commodity Classification (AHECC)
(Reference base year 1989-90 = 100.0)**

	1990-91	1991-92	1992-93	1993-94	1994-95
All groups	95.0	89.6	93.5	91.8	94.7
AHECC sections					
Live animals, animal products	96.1	97.6	105.1	110.3	105.9
Vegetable products	77.9	83.1	94.3	88.6	82.7
Prepared foodstuffs	91.8	87.9	94.9	102.3	104.6
Mineral products	108.3	103.1	108.2	100.9	95.1
Products of chemical or allied industries	100.2	89.6	90.1	87.5	84.4
Wool & cotton fibres	77.8	66.6	60.9	59.0	80.8
Gold, diamonds & coin	96.6	91.8	99.6	110.4	104.0
Base metals & articles of base metals	92.6	79.7	81.0	76.3	96.8
Machinery & mechanical appliances	97.8	94.8	98.2	97.5	97.2
Motor vehicles, aircraft & vessels	100.0	100.4	105.0	109.3	108.2

Source: *Export Price Index, Australia* (6405.0).

**19.18 Export Price Index — index numbers based on Australian Standard Industrial Classification (ASIC)
(Reference base year 1989-90 = 100.0)**

Year	ASIC Divisions		
	Agriculture	Mining	Manufacturing
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
1994-95	83.4	94.2	98.6

Source: *Export Price Index, Australia* (6405.0).

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Construction and housing

Introduction	521
Construction	521
Trends in the construction industry	521
Residential building	523
New houses	524
New other residential building	524
Conversions, etc.	525
Value of residential building	526
Non-residential building	526
Building activity at constant prices	527
Engineering construction	527
Price Indexes of Materials Used in Building	528
Price Index of Materials Used in House Building	528
Price Index of Materials Used in Building Other than House Building	528
Labour costs	528
Industrial disputes	529
Trade union membership	530
Housing	531
Type of dwellings	531
Standard of housing and facilities	531
Number and type of problems	531
Number of bedrooms	532
Household energy use and conservation	533
A profile of Australia's rental tenants	534
Who are rental tenants?	534
Life cycle (age and sex) analysis	534
State and Territory distributions	535
Employment characteristics	535
Birthplace	535
Household type	535
What type of dwellings are rented and from whom?	536
Size of rental dwellings	536
Furnished or unfurnished?	536
Whether tenants have a lease	536
Rental history	537
Home ownership and renting	537

Accessibility and affordability	539
Recent home buyers	539
Home buyers	541
Housing costs	541
House price index	543
Housing finance	544
Government initiatives	546
Australian Urban Export Strategy	546
Urban and regional development	546
Urban design agenda	546
National Youth Housing Strategy	546
Australian Institute of Health and Welfare	546
Commonwealth–State Housing Agreement	547
Services for homeless young people	548
Bibliography	549

Construction and housing

Introduction

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.). Construction activity is undertaken by both the private and public sector in Australia. The private sector is engaged in all three categories of construction, whereas the public sector plays a key role in initiating and undertaking engineering construction activity. The public sector has a minor role in residential and other building activity.

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 1994–95 the construction industry contributed approximately 6% to the gross product of all industries, as measured by production based Gross Domestic Product at average 1989–90 prices. It employed 590,000 people either as employees, or as self employed contractors, which was 7% of employment of all industries.

The ABS conducts construction industry surveys about every five years to provide measures of the structure of the construction industry as a whole. 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. 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. Detailed statistics for 1988–89 are contained in *Year Book Australia 1994*.

The annual Economic Activity Survey provides broad industry aggregate data on structure and performance. Results for 1993–94 and the previous three years are published in *Business Operations and Performance, Australia, 1993–94* (8140.0).

The ABS also conducts regular monthly and quarterly collections to provide more up-to-date measures of activity in the construction industry. This section presents some recent and detailed statistics obtained from these ongoing statistical collections.

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 1994–95 financial year, estimated construction activity at average 1989–90 prices (original terms) was \$39,309 million. This was 5% above the 1993–94 estimate of \$37,301 million. Activity rose in all construction categories. Residential building recorded a 4% rise from \$16,674 million in 1993–94 to \$17,368 million in 1994–95. Non-residential building rose by 11% from \$9,112 million in 1993–94 to \$10,139 million in 1994–95 and engineering construction rose by 2% from \$11,516 million to \$11,802 million.

20.1 Construction activity at average 1989-90 prices (\$ million)

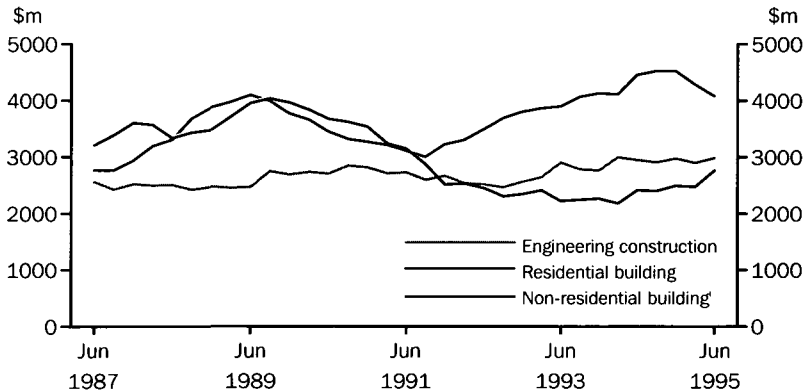
Year	Residential building	Non-residential building	Engineering construction	Total construction
1989-90	14 807	15 548	10 926	41 280
1990-91	12 835	13 588	11 128	37 551
1991-92	12 916	10 386	10 341	33 643
1992-93	15 156	9 285	10 633	35 074
1993-94	16 674	9 112	11 516	37 301
1994-95	17 368	10 139	11 802	39 309

Source: *Construction Activity at Constant Prices, Australia (8782.0.40.001)*.

The area of construction with the largest contribution to total activity in 1994-95 was residential building with 44% of the total, while engineering construction and non-residential building accounted for 30%

and 26%, respectively. By contrast, in 1993-94 residential building accounted for 45% of total construction with engineering construction and non-residential building accounting for 31% and 24% respectively.

20.2 Construction activity at average 1989-90 prices



Source: *Construction Activity at Constant Prices, Australia (8782.0.40.001)*.

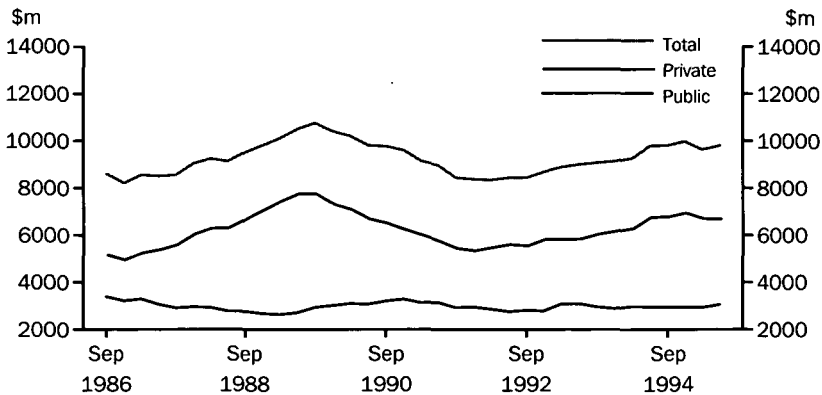
Of the \$39,309 million of construction expenditure in 1994-95, \$27,392 million (70%) was work done for the private sector. Of this, \$16,779 million (61%) was on residential building, \$7,063 million (26%) on non-residential building and the remaining \$3,550 million (13%) on engineering construction.

Public sector construction expenditure displayed a different pattern, with \$8,252 million (69%) out of a total expenditure of \$11,917 million being spent

on engineering construction. Non-residential building (\$3,077 million) accounted for 26% of total expenditure, with the remaining \$589 million (5%) being spent on residential building.

Construction activity for the public sector has remained relatively constant (graph 20.3) 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.

20.3 Construction activity at average 1989-90 prices



Source: *Construction Activity at 1989-90 Prices, Australia* (8782.0.40.001).

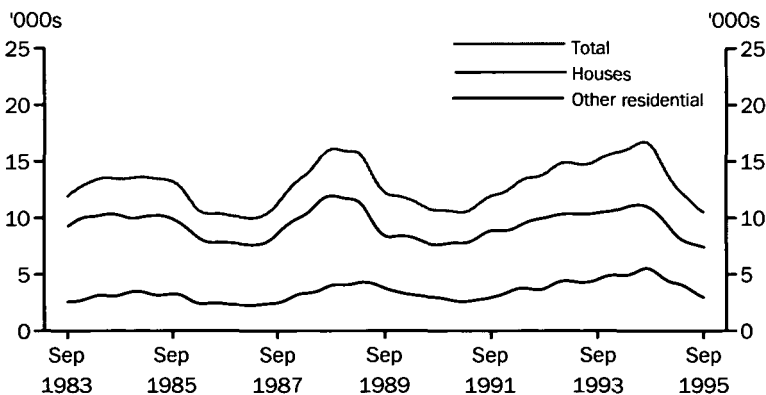
Up to this point, this chapter has provided an overview of the construction industry as a whole. The industry has three broad areas of activity — residential building, non-residential building and engineering construction. These sectors are examined in more detail below.

Residential building

Residential building involves the construction of dwelling units, which are separated into new houses, new other residential building (flats, apartments, villa units, townhouses, duplexes, etc.) and dwellings created as part of alterations and additions to existing buildings (including conversions to dwelling units) and as part of the construction of non-residential building.

As can be seen from graph 20.4, after a period of decline throughout 1989 and 1990, total dwelling unit approvals grew steadily during 1991 and 1992. After levelling out for a short period from February to May 1993, total dwelling unit approvals again grew steadily before peaking in July 1994. At that point, the level of dwelling unit approvals was 4% above that of the last peak in the trend series in October 1988. Since July 1994, however, the trend for total dwelling unit approvals has declined continuously and to September 1995, was 36% below the July 1994 peak. Approvals for separate houses, which account for nearly 70% of all dwelling units approved, followed a similar pattern.

20.4 Number of dwelling units approved, trend estimates



Source: *Building Approvals, Australia* (8731.0).

New houses

Graph 20.5 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, 1988–89 and 1993–94. Throughout 1992–93 and 1993–94, new house construction was in a growth phase,

with the number of commencements peaking in the June quarter 1994. New house commencements have since fallen in each quarter of 1994–95. House completions generally follow a similar pattern to commencements.

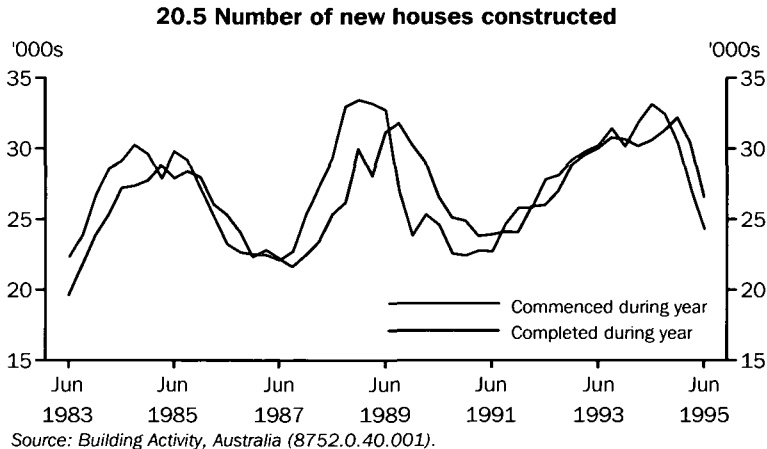


Table 20.6 shows that the number of new houses approved in 1994–95 was 115,019, a decrease of 12% over the 1993–94 figure of 130,483. Private sector approvals dominated, contributing 98% to the total number of new houses approved.

The estimated number of new houses commenced in 1994–95 was 114,562, a decrease of 9% over the 1993–94 estimate (126,513).

New house completions (120,725) decreased by 1% over the 1993–94 estimate of 122,243.

New 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 townhouses, flats, home units and similar other residential building projects.

Table 20.6 shows that in 1994–95, 52,225 new other residential dwelling units were approved, a decrease of 4% from the 1993–94 figure of 54,222. Of the 52,225 new other residential dwelling units approved, 47,355 (91%) were owned by the private sector. In 1994–95 public sector owned new other residential building approvals (4,870) were slightly lower than in 1993–94 (4,941). Of the 52,225 new other residential dwelling units approved in 1994–95, 57% were semi-detached, row or terrace houses, townhouses, etc., while 43% were flats, units or apartments, etc.

It is apparent that there has been an increase in new other residential building activity in recent years, in both real terms and as a percentage of total housing activity. The number of new other residential dwelling unit approvals, expressed as a proportion of total dwelling unit approvals, has risen from 26% in 1991–92, to 27% in 1992–93, 29% in 1993–94 and 31% in 1994–95.

The number of new other residential dwelling units commenced in Australia during 1994–95 was 51,745, slightly higher than the 1993–94 figure of 51,409.

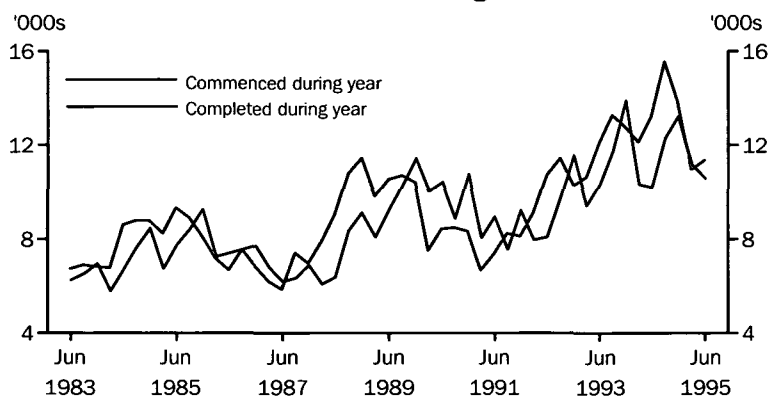
New other residential dwelling unit completions in 1994–95 totalled 47,228, a rise of 2% over the 1993–94 figure of 46,125.

20.6 Residential building, 1994–95

	New houses	New other residential building	Conversions, etc.
Private sector			
Approved	112 468	47 355	3 791
Commenced	111 951	46 891	3 287
Completed	117 711	42 542	2 725
Public sector			
Approved	2 551	4 870	49
Commenced	2 611	4 854	61
Completed	3 014	4 686	62
Total			
Approved	115 019	52 225	3 840
Commenced	114 562	51 745	3 348
Completed	120 725	47 228	2 787

Source: *Building Approvals, Australia (8731.0)* and *Building Activity, Australia (8752.40.001.0)*.

20.7 New other residential dwelling units constructed



Source: *Building Activity, Australia (8752.0.40.001)*.

Conversions, etc.

Apart from the construction of new residential buildings, dwellings can be created as part of alterations and additions to existing buildings (including conversions to dwelling units) and as part of the construction of non-residential building.

Table 20.6 shows that in 1994–95, 3,840 such dwelling units were approved, a 7% decrease from the 1993–94 figure of 4,139.

The number of dwelling units commenced in Australia during 1994–95 as part of alterations and additions to existing buildings (including conversions to dwelling units) and as part of the construction of non-residential building was 3,348, 14% fewer than the 3,899 commenced in 1993–94. Of these dwellings commenced in 1994–95, 1,879 (56%) were in New South Wales and 1,037 (31%) were in Victoria.

Dwelling unit completions as part of alterations and additions to existing buildings (including conversions to dwelling units) and as part of the construction of non-residential building in 1994–95 totalled 2,787, an increase of 17% over the 1993–94 figure of 2,382.

Value of residential building

Approvals for total new residential building were valued at \$15,471 million in 1994–95, slightly below the 1993–94 figure of \$15,685 million. New house approvals were valued at \$10,943 million, 6% below the

1993–94 figure of \$11,669 million. The value of new house approvals in 1994–95 represented 71% of the total value of new residential building approvals, compared with 74% in 1993–94. Approvals for alterations and additions to residential building totalled \$2,433 million in 1994–95, a 6% rise over the 1993–94 figure (\$2,289 million).

The value of work done on new residential buildings in 1994–95 was \$15,920 million, making up 56% of the total value of building work done. The value of work done on alterations and additions to residential building was \$2,597 million.

20.8 Value of residential building, 1994–95 (\$ million)

	Approved	Work done
New residential buildings		
New houses	10 943	11 557
New other residential buildings	4 528	4 364
Total new residential building	15 471	15 920
Alterations & additions to residential buildings(a)	2 433	2 597

(a) Valued at \$10 000 or more.

Source: *Building Approvals, Australia (8731.0) and Building Activity, Australia (8752.0.40.001)*.

Non-residential building

The value of non-residential building approved in Australia in 1994–95 was \$9,615 million, a 9% increase over the 1993–94 figure of \$8,786 million. Rises were recorded in all categories except Hotels, motels and other short term accommodation buildings, which fell by \$11 million (2%), Other business premises which fell by \$126 million (10%), Religious buildings which fell by \$3 million (4%) and Health buildings which fell by \$338 million (35%). In

percentage terms, the largest rise was in the approval of Entertainment and recreational buildings, which increased from \$741 million to \$1,167 million, a rise of 57%. Other significant rises were in Shops, up \$404 million to \$1,803 million (29%), Factories, up \$153 million to \$870 million (21%) and Miscellaneous which rose by \$114 million to \$621 million (22%).

20.9 Value of non-residential building (\$ million)

Class of building	1993–94		1994–95	
	Approved	Work done	Approved	Work done
Hotels, etc.	622	291	611	479
Shops	1 399	1 421	1 803	1 916
Factories	717	752	870	874
Offices	1 341	1 713	1 472	1 654
Other business premises	1 284	934	1 158	1 247
Educational	1 124	1 133	1 203	1 128
Religious	76	79	73	75
Health	974	957	636	861
Entertainment & recreational	741	780	1 167	892
Miscellaneous	508	499	621	548
Total non-residential building(a)	8 786	8 558	9 615	9 673

(a) Valued at \$50 000 or more.

Source: *Building Approvals, Australia (8731.0) and Building Activity, Australia (8752.0.40.001)*.

The total value of work done on non-residential building in 1994–95 was \$9,673 million, an increase of 13% over the 1993–94 figure of \$8,558 million. This follows a 2% fall from 1992–93 to 1993–94. Increases in the value of work done in 1994–95, in the categories of Hotels, etc. (65%), Shops (35%), Factories (16%), Other business premises (34%), Entertainment and Recreation (14%) and Miscellaneous (10%) more than offset falls in the value of work done in the categories of Offices (3%), Religious (5%) and Health (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 20.10 below. Constant price estimates measure changes in value after the direct effects of price changes have been eliminated.

20.10 Value of building work done at average 1989–90 prices (\$ million)

	New residential building			Alterations & additions to residential buildings	Non-residential building	Total building
	Houses	Other residential buildings	Total			
1989–90	9 665	3 020	12 685	2 121	15 548	30 355
1990–91	8 213	2 582	10 795	2 040	13 588	26 423
1991–92	8 530	2 445	10 975	1 941	10 386	23 302
1992–93	9 822	3 273	13 095	2 061	9 285	24 441
1993–94	10 650	3 844	14 494	2 180	9 112	25 785
1994–95	10 536	4 473	15 009	2 359	10 139	27 507

Source: *Building Activity, Australia (8752.0.40.001)*.

At average 1989–90 prices, the value of building work done increased by \$1,722 million (7%) to \$27,507 million in 1994–95, following a rise of 5% in 1993–94.

The bulk of this rise occurred in non-residential building, which increased by 11% from \$9,112 million in 1993–94 to \$10,139 million in 1994–95. The value of work done on new houses fell 1%, the value of work done on new other residential buildings rose by 16% and the value of work done on alterations and additions to residential buildings rose by 8%.

Engineering construction

This section contains estimates of engineering construction activity in Australia for 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 1994–95 was \$13,002 million, a \$524 million (4%) rise on the 1993–94 estimate of \$12,478 million

(table 20.11). Engineering construction work done for the public sector increased by \$342 million (4%) to \$9,095 million and work done for the private sector rose by \$182 million (5%) to \$3,907 million.

Overall, significant expenditure occurred in the categories of Roads, highways and subdivisions (32% of the total value), Telecommunications (17%), Heavy industry (13%) and Electricity generation, transmission and distribution (11%).

In terms of work done for the public sector, engineering construction activity centred around the categories of Roads, highways and subdivisions, which accounted for 33% of total activity (down from 35% in 1993–94), Telecommunications which was 24% (up from 19% in 1993–94) and Electricity generation, transmission and distribution which was 14% (down from 15% in 1993–94).

In terms of work done for the private sector, major construction activity was undertaken in the categories of Heavy industry (42% of total expenditure, down from 43% in 1993–94) and Roads, highways and subdivisions (28%, down from 31% in 1993–94).

20.11 Value of engineering construction work done (\$ million)

	1993-94			1994-95		
	For the private sector	For the public sector	Total	For the private sector	For the public sector	Total
Roads, highways & subdivisions	1 145	3 103	4 248	1 106	2 998	4 104
Bridges	10	329	339	6	268	274
Railways	39	694	732	29	932	961
Harbours	69	131	200	26	81	107
Water storage & supply	145	598	741	267	455	722
Sewerage & drainage	109	532	641	73	535	608
Electricity generation, transmission & distribution	152	1 341	1 493	175	1 286	1 461
Pipelines	140	120	260	171	129	300
Recreation	223	155	377	325	138	463
Telecommunications	83	1 630	1 713	73	2 202	2 275
Heavy industry	1 604	106	1 710	1 644	62	1 706
Other	7	14	22	12	9	21
Total	3 725	8 753	12 478	3 907	9 095	13 002

Source: *Engineering Construction Activity, Australia (8762.0.40.001)*.

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 19.8 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 3.0% (4.6 index points) from 1993-94 to 1994-95. This follows a 4.8% (6.9 index points) increase in the previous financial year.

Hobart (up 4.1 %) and Sydney, Melbourne and Perth (all up 3.4%) recorded the largest increases. All capital cities recorded increases with the smallest occurring in Adelaide (up 1.5%).

Price Index of Materials Used in Building Other than House Building

The All groups index (weighted average of six State capital cities) increased by 2.7% (or 2.9 index points) from 1993-94 to 1994-95. This follows a 1.4% (1.5 index points) increase between 1992-93 and 1993-94 (table 19.9).

The large increases in the index occurred in Sydney (up 3.1%) and Adelaide and Perth (both up 2.8%). All capital cities recorded increases with the smallest occurring in Hobart (up 1.9%).

Labour costs

Average labour costs per employee in the construction industry increased by 4.8% between 1991-92 and 1993-94 to \$35,357. Labour costs per employee continued to be higher than the all industries average of \$32,755, primarily due to higher earnings, superannuation and workers' compensation costs (table 20.12).

The percentage distribution of labour costs remained fairly constant between 1991-92 and 1993-94 with earnings accounting for 87.6% of total labour costs. Superannuation accounted for 5.6%, payroll tax 3.1% and workers' compensation 3.1% (table 20.13).

20.12 Average labour costs per employee, construction industry (\$)

	1991-92		1993-94	
	Construction	All industries	Construction	All industries
Earnings	29 516	27 404	30 990	28 958
Other labour costs				
Superannuation	2 012	1 521	1 977	1 829
Payroll tax	930	1 079	1 106	1 131
Workers' compensation	1 086	582	1 090	598
Fringe benefits tax	206	219	195	240
Total other labour costs	4 233	3 401	4 368	3 797
Total labour costs	33 749	30 805	35 357	32 755

Source: *Labour Costs, Australia* (6348.0).

20.13 Labour costs as a percentage of total labour costs, construction industry, 1993-94

	% of total labour costs	
	Construction	All industries
Earnings	87.6	88.4
Other labour costs		
Superannuation	5.6	5.6
Payroll tax	3.1	3.5
Workers' compensation	3.1	1.8
Fringe benefits tax	0.6	0.7
Total other labour costs	12.4	11.6
Total labour costs	100.0	100.0

Source: *Labour Costs, Australia* (6348.0).

Industrial disputes

Of the 558 industrial disputes during 1994, 24 or 4% affected the construction industry. As was noted earlier, employment in the construction industry makes up 7% of all

employment. These 24 disputes involved (either directly or indirectly) 11,300 construction industry employees and resulted in the loss of 20,200 working days.

20.14 Construction industry — industrial disputes which occurred during 1994

	Construction	All industries
Total industrial disputes (No.)	24	558
Employees involved (directly & indirectly) ('000)	11.3	264.5
Working days lost ('000)	20.2	501.1

Source: *Industrial Disputes, Australia* (6321.0) and the standard data service *Industrial Disputes, Australia* (6322.0.40.001).

Table 20.15 shows that, Australia wide, the construction industry recorded an average of 59 working days lost per thousand employees, 22% lower than the Australian all industries average of 76 working days lost per thousand employees. Western Australia was the most strike affected State with 154 working days lost per thousand construction

industry employees. This figure is 161% higher than the Australian average for the construction industry of 59 working days lost per thousand employees, and 267% higher than the Western Australian all industries average of 42 working days lost per thousand employees.

20.15 Construction industry — working days lost due to industrial disputes, 1994(a)
(per thousand employees)

	Construction	All industries
NSW	1	99
Vic.	29	52
Qld	139	115
SA	19	35
WA	154	42
Tas.	—	29
NT	—	103
ACT	—	8
Aust.	59	76

(a) The basis for the calculation of working days lost per thousand employees was changed in January 1995 to use estimates of employees taken from the ABS Labour Force Survey only.

Source: *Industrial Disputes, Australia (6321.0)* and the standard data service, *Industrial Disputes, Australia, 1994 (6322.0.40.001)*.

Trade union membership

The proportion of construction industry employees who are trade union members has been falling steadily since 1986.

In 1986, 48% of construction industry employees were trade union members. This figure fell to 47% in 1988, 45% in 1990, 42% in 1992 and 34% in 1994.

This fall in trade union membership was not restricted to the construction industry. In all industries the estimated average trade union

membership has also been falling steadily from 46% in 1986 to 42% (1988), 41% (1990), 40% (1992) and 35% (1994).

As might be expected, in the construction industry in 1994, permanently employed males were most likely to belong to trade unions with 45% of this category belonging to a union. Females employed in the construction industry were less likely to belong to trade unions with only 14% of permanently employed and less than half of 1% of casually employed females being trade union members (table 20.16).

20.16 Construction industry — employees who were trade union members, August 1994
(%)

	Construction	All industries
Males		
Permanent	44.6	43.0
Casual	20.2	14.8
Total	37.4	37.9
Females		
Permanent	14.2	38.8
Casual	—	14.5
Total	9.3	31.3
Persons		
Permanent	41.3	41.3
Casual	17.5	14.7
Total	34.1	35.0

Source: *Trade Union Members, Australia (6325.0.40.001)*.

20.17 Construction industry employees who were trade union members

Year	Construction	All industries
August 1988		
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
August 1994		
No. of members ('000)	113.4	2 283.4
Proportion of employees who are in trade unions (%)	34.1	35.0
Total number of employees ('000)	332.2	6 525.8

Source: *Trade Union Members, Australia (6325.0.40.001)*.

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 1994 Australian Housing Survey 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.

Type of dwellings

The separate house is the most popular type of dwelling in Australia today making up 79% of all dwellings. Tasmania has the highest proportion of separate houses (85%) and the Northern Territory the lowest (63%). All other States and the Australian Capital Territory are in the range of 76 to 82%.

Flats or apartments are the next most common type of dwellings. Twelve per cent of dwellings in Australia are of this design. South Australia (6%) and Western Australia (7%) have relatively low percentages of flats or apartments. The Northern Territory with 25% has the highest proportion of flats or apartments.

Semi-detached, row or terrace houses and town houses comprise 8% of dwellings in Australia. South Australia and Western Australia are the only States which have more semi-detached type housing than flats or apartments, while the Australian Capital Territory has equal proportions of each type (9%). In South Australia there are over twice the number of semi-detached dwellings (16%) as there are flats or apartments (6%).

20.18 Number of dwellings by State/Territory, 1994
(*000)

	Separate house	Semi-detached/row or terrace house/townhouse	Flat/unit/apartment	Other	Total
New South Wales	1 705.3	183.4	343.9	*4.6	2 237.2
Victoria	1 344.8	98.8	212.7	*1.3	1 657.6
Queensland	985.0	54.9	150.7	*3.4	1 194.1
South Australia	457.0	93.0	35.4	*2.5	587.9
Western Australia	521.3	71.1	45.2	*3.1	640.7
Tasmania	155.3	9.7	17.7	*0.5	183.3
Northern Territory	42.0	6.4	16.6	*1.4	66.5
Australian Capital Territory	89.9	10.4	10.3	—	110.6
Australia	5 300.7	527.9	832.5	16.8	6 677.9

Source: 1994 Australian Housing Survey.

Standard of housing and facilities

The following topics contain information on certain physical features and facilities of dwellings and provide some indication of the standard of housing in Australia.

Number and type of problems

In general, Australia's housing stock is in good condition, with 51% of dwellings having one or no problems. Over a quarter (27%) of all dwellings in Australia reported having no problems with the dwelling, just under a quarter reported one problem, and a further 18% reported two problems. Only 12% of dwellings reported having five or more problems.

Owners were most likely to report having no problems. Over a third of owners (34%) had no problem with their dwelling, whereas only about a fifth of other tenure types reported no problems.

The most commonly reported problem across all dwellings was infestation by pests (other than white ants). Nearly a third of dwellings (30%) reported having a problem with pests.

Electrical problems (26% of dwellings), problems with windows and draughts (each 21%) and mould or mildew (18%) were the next most common problems reported.

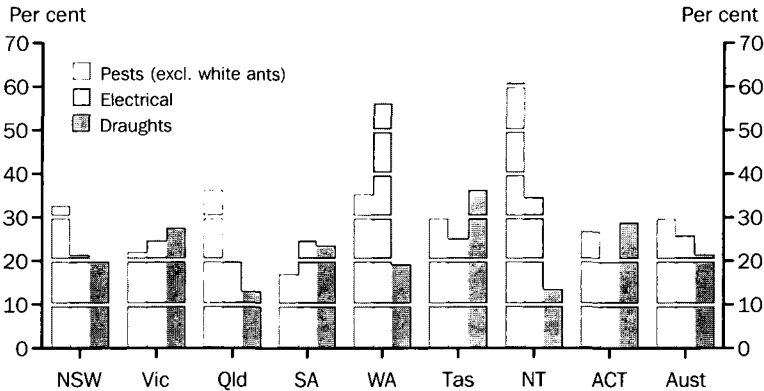
The most commonly reported problems varied between States and Territories. The

highest proportion of the incidence of infestation by pests (other than white ants) was in the Northern Territory at 61%, significantly higher than all other States and Territories. This was followed by Queensland and Western Australia at 36% and 35% respectively.

Dwellings in Western Australia reported the highest incidence of electrical problems (56%). Nearly half of all households in Western Australia reported power failures which lasted for three hours or more.

Tasmania reported proportionally more draughts at 36%, followed by the Australian Capital Territory at 29% and Victoria at 28%.

20.19 Most common dwelling problems



Source: 1994 Australian Housing Survey.

Number of bedrooms

The most readily available indicator of dwelling size is the number of bedrooms.

Over half of all dwellings in Australia have three bedrooms (53%). Sixty-one per cent of separate houses have three bedrooms, while two bedroom dwellings are more common in semi-detached homes and flats and apartments (52% and 64% respectively).

Over a third of three bedroom dwellings only had two persons living in them (36%), a further 23% of three bedroom dwellings had three persons, and 19% had four persons. Sixteen per cent of three bedroom dwellings had only one person living in them.

20.20 Number of dwellings by dwelling structure and number of bedrooms, 1994 ('000)

No. of bedrooms	Separate house	Semi-detached/row or terrace house/townhouse	Flat/unit/apartment	Other	Total
Bedsitter	*3.6	*1.7	15.0	5.7	26
One bedroom	65	53.7	193.0	6.4	318
2 bedrooms	757	274.9	533.0	*3.9	1 569
3 bedrooms	3 241	184.4	87.0	*0.8	3 513
4 or more bedrooms	1 234	13.3	4.4	—	1 252
Total	5 301	527.9	832.5	16.8	6 678

Source: 1994 Australian Housing Survey.

Information on the incidence of other types of rooms such as bathrooms, toilets, laundries and lounge/dining/family rooms is available from the 1994 Australian Housing Survey.

Household energy use and conservation

Ninety per cent of households have some type of room heating. The most common type of fuel used is electricity, with 37% of households using this source for heating their dwelling. Mains gas (29%), followed by wood/coal (17%), are the next most common.

Electricity is by far the most common fuel used to heat water (61%), followed by mains

gas (31%). It is most commonly used in flats, units and apartments where 70% of households in these dwellings use electricity for heating water. In separate houses, the use of electricity (at 59%) is slightly lower than the overall average and the use of mains gas is about the same proportion (30%). A greater percentage of semi-detached row or terrace houses and townhouses use mains gas (39%) than the overall average, with slightly less than the average using electricity (58%). Solar energy is only prevalent in separate houses (6%), with very small proportions using this energy in other dwelling types (less than 1%).

20.21 Type of dwelling by type and purpose of fuel and location of insulation, 1994 ('000)

Fuel/insulation	Separate house	Semi-detached/row or terrace house/townhouse	Flat/unit/apartment	Other	Total
Main source of fuel used to heat dwelling					
No heating	451.0	63.3	153.8	4.5	672.7
Electricity	1 659.7	281.4	507.8	8.9	2 457.8
Mains gas	1 635.7	144.1	137.3	—	1 917.0
Wood/coal	1 094.3	18.9	8.9	—	1 122.1
Oil	178.3	5.0	6.7	—	190.0
Bottled gas	193.2	7.3	8.7	*3.1	212.2
Other	88.5	8.0	9.3	*0.3	106.1
Main energy source used to heat water					
Electricity	3 143.5	308.5	583.8	9.1	4 044.8
Mains gas	1 612.7	205.8	236.7	*0.7	2 055.9
Solar	294.9	8.1	*3.4	*0.5	306.9
Other	249.6	5.5	8.6	6.5	270.3
Whether dwelling has insulation					
Wall only	169.3	6.0	9.2	*2.2	186.7
Roof only	2 150.8	158.2	99.8	*1.2	2 410.1
Both	922.3	35.0	21.6	4.4	983.2
None	1 455.2	144.6	297.3	7.3	1 904.3
Unknown	603.1	184.1	404.7	*1.7	1 193.6
Total	5 300.7	527.9	832.5	16.8	6 677.9

Source: 1994 Australian Housing Survey.

A profile of Australia's rental tenants

The Australian residential property market is complex and dynamic. Household groupings form, change, then disband. Many, perhaps most of those groupings go through various housing tenure arrangements, often involving changes in the type of dwelling and the physical characteristics. Economic conditions also change and bring with them different incentives for investment opportunities, particularly into the residential property market. An analysis of the whole issue of matching demand with supply or generating demand through supply requires a comprehensive set of data which not only establishes benchmarks and levels, but also looks at the rationale behind particular behaviour patterns. Any moves to change policies or economic conditions to help match the demand and supply require a detailed understanding of how the market works.

Analysts and policy-makers are interested in measuring both the stocks (the numbers and characteristics of different households in various tenure arrangements) and the flows, or changes over time in these variables. Three recent surveys conducted by the Australian Bureau of Statistics (ABS) provide some valuable insights into the Australian household residential market.

In July 1993, the Monthly Population Survey (of approximately 30,000 households) included questions on rental investors, that is, people who currently own residential property for rent in Australia, or had sold such a property in the previous 5 years, or intended investing in such a property in the following 2 years.

In April 1994, the Monthly Population Survey collected data on rental tenants, including renters, boarders, lodgers and those who live rent-free.

Between August and October 1994, there was a full housing survey conducted in 16,000 dwellings, covering details of

household members, physical aspects of the dwelling, physical condition, housing costs, income, education and labour force status of persons in the household.

The publications providing the results from these three surveys are listed in the bibliography at the end of this chapter. A summary of selected findings from the April 1994 Rental Tenants' Survey is presented below.

Who are rental tenants?

In assessing the characteristics of rental tenants, it is most informative to see how different (or similar) they are to the rest of the population, notably owners and purchasers of the dwellings in which they live.

Life cycle (age and sex) analysis

The survey showed that 61% of Australia's adult population either owned or were purchasing their home, while 25% (3,400,100 persons) were renters or boarders. The remaining 14% of people lived rent-free or had some other form of tenure.

Generally, there were consistent proportions of males and females in each of the occupancy types.

Renters/boarders tend to be concentrated in the younger age ranges. More than half of all renters were aged between 20–34 years and the median age group for renters was 30–34 years. In contrast, 47% of all owners and purchasers were aged between 30–49 years with the median age group being 45–49 years. Nearly 20% of all owners and purchasers were aged 65 or more compared with only 7% of renters/boarders. Those in the rent-free category also tended to be younger, with 75% aged 15–24 years. A significant proportion of these would be children living in the family home.

State and Territory distributions

The majority of people in all States and Territories, with the exception of the Northern Territory, were owners/purchasers. Overall, owners/purchasers accounted for 61% of the Australian population. This proportion varied from a high of 65% in Tasmania to a low of 44% for persons resident in the Northern Territory.

The Northern Territory was the only State or Territory with a greater proportion of renters/boarders than owners/purchasers (45% renters/boarders, 44% owners/purchasers).

The State with the next highest proportion of renters/boarders was Queensland (29%). The lowest proportions of renters/boarders occurred in Victoria and Tasmania (each 22%).

Employment characteristics

The majority of persons in all occupancy types, with the exception of those living rent-free, were employed full-time.

Unemployed persons were less likely to be owners/purchasers and more likely to be renters/boarders. Unemployed persons accounted for only 3% of owners/purchasers but made up 12% of renters/boarders. Nearly half (47%) of all unemployed persons in April 1994 were renting or boarding, almost double the proportion of all persons (25%) who rent or board.

Proportionally fewer renters/boarders were not in the labour force than was the case for persons in other occupancy types. Only 30% of renters/boarders were not in the labour force, compared with 38% of owners/purchasers and 39% of those living rent-free.

In general, owners were older and more likely to be retired (and hence not in the labour force) than renters.

Similarly, those living rent-free were more likely to be younger and perhaps attending an educational institution and hence less likely to be employed full-time.

Birthplace

Persons born outside Australia were more likely to own or be purchasing their dwelling than those born in Australia. Sixty-six per cent of the 3,574,200 persons born overseas, owned or were purchasing their home compared with 59% of Australian born. The propensity to rent or board was far more consistent between

Australian born and overseas born. Sixteen per cent of Australian born persons lived in rent-free accommodation, well above the 8% of the overseas born population.

Persons born in Europe had a propensity for home ownership of 76%, dominated by the sizeable population who were born in the United Kingdom and Ireland, of whom 71% owned or were purchasing their own home. Persons born in Italy (91%) and Greece (85%) had particularly high home ownership rates and hence very low proportions who rented.

In general, persons born in Asia had lower rates of home ownership and higher rates of renting than Australian born or the average for all overseas born persons. This is likely to be influenced by the fact that, in general, Asian born persons arrived in Australia much more recently than persons born in Europe.

People who have arrived in Australia more recently were less likely to own or be purchasing their own home. Sixty-five per cent of those who arrived in Australia since 1991 were renting in April 1994, compared with only 15% of those who arrived in Australia before 1971.

Household type

Owners and purchasers accounted for 73% of the 6,468,800 households in Australia. Renters made up 25%, rent-free 1% and other types of occupancy less than 1%. These proportions are slightly different from those presented earlier for persons. The main difference is the very low proportion of rent-free and boarder households. Most of the persons boarding or living rent-free do so as part of a wider

household as opposed to being a household in their own right.

Renters accounted for a far greater percentage of one parent, one person and other households than they did for couple households. Renters accounted for 46% of one parent households, 35% of one person households and 46% of other households, but only 16% of all couple households.

What type of dwellings are rented and from whom?

Over 90% of all owner and purchaser households lived in a separate house. However, the propensity for renting households to live in separate houses was much lower at just over 50%.

There were greater numbers of renting households than owner/purchaser households inhabiting semi-detached, row or terrace houses, or townhouses. Renting households accounted for 53% of all households in semi-detached, row or terrace houses, or townhouses. Renting households also occupied a greater number of flats, units or apartments. They accounted for 72% of all households occupying some type of flat, unit or apartment.

Data showing type of landlord is presented for income units who rent, board or live rent-free since the decisions about owning and renting, type of landlord and amount of rent to be paid are usually made at the income or financing unit within a family or household. Thus the data includes a sizeable number of income units (26%) who live rent-free and another group (21%) who rent from a person living in the same household. These two groups were predominantly young people, were employed part-time or were not in the labour force (most likely attending an educational institution) and were in the lowest income quintile.

However, there were over 7% of those living rent-free who were aged 65 years and over. Twenty-four per cent of income units who

rent, board or live rent-free rented from a real estate agent, 11% rented from a State or Territory housing authority and 16% rented from a private landlord who did not live in the same household as the tenant.

Two thirds of income units containing a couple (either with or without dependent children) rented privately, either through a real estate agent or through a private landlord. Contrasting that was the fact that 30% of one parent units rented from a public housing authority.

Size of rental dwellings

The traditional measure of the size of a dwelling is the number of bedrooms.

Forty per cent of all rented dwellings had three bedrooms, 37% had two bedrooms (of which more than half were flats, units or apartments) and 14% had only one bedroom (including bedsitters).

Furnished or unfurnished?

The great majority (84%) of rental dwellings were unfurnished. There was not a large difference between the proportions of partly furnished (7%) and fully furnished dwellings (5%). The most likely type of dwelling to be fully furnished was a flat, unit or apartment.

Whether tenants have a lease

Just on two thirds of renting households at April 1994 did not have a lease. Nearly all (96%) of those renting from a public housing authority stated that they did not have a lease. However, public housing tenants generally enter into a tenancy agreement which assures secure tenure. Seventy-one per cent of those renting privately stated they did not have a lease. For those renting through a real estate agent, the picture was reversed with 61% stating that they had a lease in April 1994.

Rental history

The survey included an assessment of rental tenant's rental history, in particular, the age when people first started renting, the number of years in rented accommodation and the frequency of moving house. For the purpose of this analysis, about 1.2 million non-dependant children living at home have been excluded. Exclusion of this group has a major impact on the numbers who live rent-free and those who rent from a relative in the same household.

Given that exclusion, 40% of all renters have lived in rental accommodation for more than ten years, while 10% had been in rental accommodation for less than one year. The median duration for rental tenancy was six years.

The distribution of long term renters by landlord type was quite diverse. Over three quarters (76%) of all tenants of State and Territory Housing Authorities had been in rental accommodation for more than ten years. Nearly 60% of those renting from their employer had been rental tenants for more than ten years (presumably mostly in similar arrangements to their current tenancy). For tenants renting from a real estate agent or privately from someone not in their own household, the proportions of long term tenants were 32% and 40% respectively.

Over a quarter (29%) of all households in Australia reported having no form of insulation in their dwelling. Flats and apartments are more likely to have no insulation than semi-detached or separate houses. Thirty-six per cent reported having insulation in their roof only — for separate houses, the proportion is 41%, while for semi-detached, row or terrace houses and townhouses it is 30%. A very small proportion of dwellings (3%) have insulation in the wall only, mainly occurring in separate houses. Only 15% of all dwellings have insulation in both the wall and roof.

Home ownership and renting

Seventy per cent of the 6,677,900 dwellings in Australia were either owned or being purchased by their occupiers, according to the 1994 Australian Housing Survey. The most prevalent type of tenancy was ownership (42%). Buying and renting were equal second with 28% of households in each of these situations. Only 6% of households were renting from the government, with 21% of dwellings being leased from 'other' landlords which included real estate agents, private landlords and employers.

20.22 Dwelling structure by tenure type, 1994
(*000)

Tenure type	Separate house	Semi-detached/row or terrace house/ townhouse	Flat/ unit/apartment	Other	Total
Owner	2 501.8	137.7	143.0	11.3	2 793.9
Purchaser	1 719.9	89.2	79.9	*1.3	1 890.3
Renter	975.5	290.4	576.7	*2.6	1 845.1
Rent free	80.2	7.3	18.4	*1.6	107.4
Other	23.2	*3.4	14.5	—	41.2
Total	5 300.7	527.9	832.5	16.8	6 677.9

Source: 1994 Australian Housing Survey.

Almost 34% of households who owned their own home were couples with no children. Another 30% of owners were couple households with dependent children. Lone

parent households accounted for 6% of owners and lone person households made up 24%.

Most separate houses were either owned outright (47%) or were being purchased (32%) by the residents. However, semi-detached homes, flats, units and apartments were more often rented.

A large proportion of purchasers were couple households with dependent children (54%). Only 28% of couple households who were purchasing did not have dependent children.

Eighty-one per cent of two-parent households owned or were buying their dwelling, with only 17% renting. In the case of lone parent families, the figure was 49% who were renting and also 49% who either owned or were purchasing their home.

20.23 Tenure by type of household, 1994 ('000)

Type of household	Owner	Purchaser	Renter	Rent-free	Other	Total
Couple only	942.9	401.3	296.8	20.9	*3.3	1 665.2
Couple with dependants	848.1	1 021.5	401.3	29.3	5.4	2 305.5
Lone parent	165.2	115.9	281.7	8.4	*3.1	574.2
Lone person	670.9	219.7	511.0	41.7	19.7	1 463.0
Other	166.8	131.9	354.3	7.3	9.6	670.0
Total	2 793.9	1 890.3	1 845.1	107.4	41.2	6 677.9

Source: 1994 Australian Housing Survey.

The pattern of different types of tenure varies across States and Territories.

Victoria had the highest level of home ownership with 74% of dwellings either being purchased or owned outright. The lowest level of home ownership, at 44%, was recorded in the Northern Territory. Only 14% of homes are owned outright in the Northern Territory, well below the national average of 42%.

There was a high percentage of purchasers in the Australian Capital Territory (36%)

compared to the Australian average (28%). All other States had proportions between 25 and 32%.

In the Northern Territory, over 50% of dwellings were rented, with 21% being leased from the Government. This is over three times the figure for Australia and nearly six times the Victorian equivalent. The Australian Capital Territory also had a high percentage of renters at 35%, with 13% of dwellings in the Australian Capital Territory being rented from the Government.

20.24 Tenure by State/Territory, 1994 ('000)

State/Territory	Owner	Purchaser	Renter			Rent-free	Other	Total
			Public	Private	Total(a)			
NSW	984.6	577.7	157.0	425.2	630.6	32.0	12.3	2 237.2
Vic.	733.6	498.6	61.0	307.4	392.1	24.0	9.2	1 657.6
Qld	469.1	335.2	49.0	270.1	359.4	21.4	8.9	1 194.1
SA	241.8	167.4	65.6	83.3	163.3	11.4	*4.0	587.9
WA	241.4	205.3	40.3	120.7	178.8	10.7	4.6	640.7
Tas.	82.8	46.5	13.3	31.0	47.6	4.9	*1.4	183.3
NT	9.5	19.5	14.2	11.9	34.9	*2.4	*0.1	66.5
ACT	31.1	40.1	14.2	21.9	38.3	*0.6	*0.5	110.6
Aust.	2 793.9	1 890.3	414.8	1 271.4	1 845.1	107.4	41.2	6 677.9

(a) Total renters includes a small number of 'other' landlord types (total 158 900).

Source: 1994 Australian Housing Survey.

Accessibility and affordability

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. It is estimated that there were 6.7 million households and 8.8 million income units in 1994.

Recent home buyers

Of the 894,500 households who purchased a dwelling between January 1992 and August 1994, 37% were buying for the first time.

Almost three quarters of these first home buyers (74%) bought an established home.

Three quarters of first home buyers paid under \$135,000 for their home. The proportion was higher for those in this category who purchased a new home (80%).

Just over one tenth of recent first home buyers (11%) did not take out a home loan for the purchase of their dwelling. Most took out one home loan (84%) and a small proportion had two home loans (4%).

20.25 Recent home buyers(a) — type of home buyer by State/Territory and purchase price, 1994 ('000)

Purchase price	Recent first home buyers	Recent changeover buyers	Total
New South Wales			
\$1 - \$84 000	15.4	10.1	25.5
\$84 001 - \$110 000	25.5	12.3	37.8
\$110 001 - \$135 000	16.4	20.1	36.4
\$135 001 - \$180 000	23.0	38.4	61.5
More than \$180 000	22.1	57.8	79.9
Total	103.1	142.3	245.4
Victoria			
\$1 - \$84 000	19.2	17.4	36.7
\$84 001 - \$110 000	28.4	22.8	51.2
\$110 001 - \$135 000	18.1	21.2	39.3
\$135 001 - \$180 000	*7.7	23.5	31.2
More than \$180 000	*4.5	29.6	34.1
Total	78.5	116.9	195.4

For footnotes see end of table.

...continued

**20.25 Recent home buyers(a) — type of home buyer by
State/Territory and purchase price, 1994 — continued
('000)**

Purchase price	Recent first home buyers	Recent changeover buyers	Total
Queensland			
\$1 – \$84 000	13.6	18.8	32.4
\$84 001 – \$110 000	24.5	33.5	58.0
\$110 001 – \$135 000	14.5	25.9	40.4
\$135 001 – \$180 000	10.1	32.4	42.5
More than \$180 000	*1.4	21.4	22.8
Total	64.1	135.2	199.3
South Australia			
\$1 – \$84 000	15.8	11.3	27.1
\$84 001 – \$110 000	7.0	9.7	16.7
\$110 001 – \$135 000	*2.8	10.6	13.3
\$135 001 – \$180 000	*2.5	8.9	11.4
More than \$180 000	*0.3	6.6	6.9
Total	28.3	48.8	77.1
Western Australia			
\$1 – \$84 000	18.4	24.0	42.4
\$84 001 – \$110 000	11.0	15.9	26.9
\$110 001 – \$135 000	4.8	12.3	17.1
\$135 001 – \$180 000	*3.5	17.9	21.4
More than \$180 000	*2.4	16.4	18.8
Total	40.4	86.9	127.3
Tasmania			
\$1 – \$84 000	6.1	3.9	10.0
\$84 001 – \$110 000	*1.2	4.8	6.0
\$110 001 – \$135 000	*0.7	3.5	4.2
\$135 001 – \$180 000	*0.4	2.2	2.7
More than \$180 000	—	*1.5	*1.5
Total	8.4	16.4	24.9
Northern Territory			
\$1 – \$84 000	*1.9	—	*1.9
\$84 001 – \$110 000	*1.8	*0.9	*2.8
\$110 001 – \$135 000	*0.6	*0.9	*1.5
\$135 001 – \$180 000	*0.2	*1.2	*1.4
More than \$180 000	*0.1	*1.3	*1.4
Total	*4.7	*4.3	9.0
Australian Capital Territory			
\$1 – \$84 000	*0.2	*0.5	*0.7
\$84 001 – \$110 000	*0.5	*0.5	*1.0
\$110 001 – \$135 000	2.8	*1.5	4.3
\$135 001 – \$180 000	2.7	3.3	5.9
More than \$180 000	*0.4	3.6	4.0
Total	6.6	9.6	16.2
Australia			
\$1 – \$84 000	90.7	86.0	176.7
\$84 001 – \$110 000	100.0	100.5	200.4
\$110 001 – \$135 000	60.6	95.9	156.6
\$135 001 – \$180 000	50.2	127.8	178.0
More than \$180 000	31.2	138.2	169.3
Total	334.2	560.3	894.5

(a) Households who purchased a home in the years 1992, 1993 and before August 1994.

Source: 1994 Australian Housing Survey.

Home buyers

In 1994, most home buyers were purchasing separate houses (91%). A large proportion of these were paying between \$100 and \$200 per week on their home loans (41%).

Only 4% of home buyers were paying more than \$400 per week on their home loans, and 8% paid less than \$50 per week.

There were approximately 894,500 people who bought a home in Australia during the three years from January 1992 to August 1994. First home buyers accounted for 37% of these. The remainder were changeover buyers, i.e. people who have previously owned or part-owned a home. First home buyers during 1992 to 1994 accounted for 7% of all owners and buyers in Australia in 1994.

The typical first home buyer was a couple household (with or without dependants). They were usually aged between 25 and 34 years, were well-qualified and were born in Australia. Generally they bought three bedroom separate houses. The prices paid for the houses were biased towards the lower end of the market.

Some comparisons can be drawn between certain characteristics of the total population and those of first home buyers and changeover buyers during the periods January 1992 to August 1994 and January 1988 to October 1990. Some care should be exercised when comparing the numbers of recent first home buyers and changeover buyers since the periods for which data was collected are slightly different. When comparing the 1994 Australian Housing Survey (AHS) and 1990 Income and Housing Costs and Amenities figures, it should be noted that the period considered for recent home buyers in the 1994 survey was 32 months (1992, 1993 and 1994 until August when the survey was conducted) and the 1990 survey period for recent home buyers was 34 months (1988, 1989 and 1990 until October). Comparisons using proportions do not have these problems.

From the 1994 survey there was a slightly higher proportion of couples (with and

without dependants) among first home buyers (68%) than in the general population (59%) and an even higher proportion among changeover buyers (71%). This is similar to the 1990 results with a higher proportion of couples in the first home buyer population (69%) than the general population (63%) and the highest proportion among changeover buyers (73%).

The 1994 survey found that first home buyer households were younger than the general home buyer population. Well over half the reference persons in first home buyer households were aged between 25–34 years (56%), compared with only 20% for all households in Australia. Around 22% of changeover buyers were aged from 25–34 years with the majority (33%) aged from 35–44 years. Again, this is similar to the 1990 findings, with first home buyers mostly aged 25–34 years (54%), and the same proportion, as in 1994, of the general population aged 25–34 years (20%). The situation was also the same in 1990 for changeover buyers, with 23% aged 25–34 years and 31% aged 35–44 years.

Housing costs

In 1994, nearly 40% of Australian households with stated housing costs paid less than \$49 a week in housing costs. Most of these were owner households (87%).

In mean terms, renters (\$118 per week) paid more than owners (\$38 per week), but purchasers (\$220 per week) had the highest housing costs.

In 1994, over 73% of rental dwellings in Australia were rented at below \$150 per week, with 39% rented for less than \$100 per week.

Seventy-one per cent of renter households with income below \$269 per week (in the lowest income quintile) paid less than \$100 a week in rent for a dwelling, while 60% of renter households with income over \$1,169 per week (in the highest income quintile) paid \$150 or more per week in rent.

20.26 Housing costs by tenure type, 1994(a) ('000)

Weekly housing costs	Owner	Purchaser	Renter	Total
\$1 – \$49	2 070.8	54.9	252.9	2 378.6
\$50 – \$99	308.5	173.4	439.8	921.6
\$100 – \$149	86.9	299.8	593.9	980.7
\$150 – \$199	32.7	364.3	339.8	736.9
\$200 – \$299	21.9	508.3	111.6	641.7
\$300 – \$399	7.9	177.3	21.2	206.4
\$400 – \$599	3.8	90.1	10.5	104.4
\$600 or more	0.5	37.6	3.0	41.1
Total	2 532.9	1 705.7	1 772.7	6 011.4

(a) Includes only households with stated housing costs.

Source: 1994 Australian Housing Survey.

Overall, almost three quarters (74%) of all households (with stated housing costs) paid 25% or less of their income on housing costs. Nearly all owners (93%) paid 25% or less of their income on housing costs, while only

62% of renters and 59% of purchasers paid 25% or less. Purchasers had higher incomes than renters, with 32% of purchasers but only 12% of renters falling within the highest income quintile.

20.27 Households(a) tenure type by weekly income quintiles by housing costs as a proportion of income, 1994 ('000)

Housing costs as % of income	Weekly income quintile					Total
	Lowest	2nd	3rd	4th	Highest	
	Owner					
25% or less	526.2	546.6	433.6	410.7	444.6	2 361.7
More than 25%	123.0	34.3	9.6	*2.2	*2.1	171.2
More than 30%	105.5	23.3	4.7	*1.1	*1.6	136.2
More than 40%	79.1	10.6	*2.8	*0.8	*1.2	94.5
More than 50%	64.5	7.8	*1.6	*0.8	*0.5	75.2
Total	649.2	580.9	443.2	412.9	446.7	2 532.9
	Purchaser					
25% or less	16.2	45.2	157.0	334.2	451.8	1 004.4
More than 25%	78.2	133.8	231.6	168.1	89.7	701.3
More than 30%	72.8	113.6	166.2	96.2	45.3	494.1
More than 40%	63.3	71.2	67.0	36.6	17.4	255.5
More than 50%	52.9	42.8	27.7	16.0	5.5	144.9
Total	94.3	179.0	388.5	502.3	541.5	1 705.7
	Renter					
25% or less	172.5	184.3	267.9	274.4	201.4	1 100.6
More than 25%	260.7	272.9	110.4	22.9	5.3	672.2
More than 30%	224.2	201.0	43.4	13.6	*1.9	484.1
More than 40%	187.6	96.2	6.8	*3.6	*0.6	294.8
More than 50%	142.6	35.5	*2.1	*1.2	—	181.4
Total	433.2	457.2	378.3	297.3	206.7	1 772.7
	Total					
25% or less	714.9	776.2	858.5	1 019.3	1 097.7	4 466.6
More than 25%	461.9	441.0	351.5	193.2	97.1	1 544.7
More than 30%	402.5	337.9	214.4	110.8	48.8	1 114.4
More than 40%	330.0	178.1	76.7	40.9	19.2	644.9
More than 50%	260.0	86.1	31.4	17.9	6.0	401.5
Total	1 176.8	1 217.2	1 210.0	1 212.6	1 194.9	6 011.4

(a) Households with stated housing costs.

Source: 1994 Australian Housing Survey.

House price index

The price indexes of established houses and project homes over recent years are shown in tables 20.28 and 20.29.

During 1994–95, Canberra was the only capital city in which established house prices fell, recording a decrease of 3%. In Darwin, the trend of steadily increasing house prices, 16% in 1992–93 and 17% in 1993–94, slowed slightly to an increase of 14% in 1994–95. Established house prices in Hobart increased again by 5%, continuing the trend over the last three years. This was also the case in Sydney where established house prices increased again, from 3% in 1993–94 to 5% in 1994–95. In Perth, established house prices continued to rise, increasing by 4% in 1994–95, which was less than the 6% rise in 1993–94. In 1994–95, Melbourne established

house prices rose by 3%, about the same as for 1993–94, while in Adelaide established house prices, which had dropped by 1% in 1993–94, increased by 2%. Brisbane established house prices increased by 1% in 1994–95, slightly lower than the 2% rise in 1993–94.

All capital cities, with the exception of Canberra, had increases in project home prices in 1994–95. In Canberra, the price of project homes, which had increased only slightly in 1993–94 (0.7%), fell by 3% in 1994–95. All other capital cities showed increases, ranging from 2% in Sydney, Melbourne and Brisbane, up to 6% in Darwin.

The price index of materials used in house building is contained in *Chapter 19, Prices*.

20.28 Established House Price Index
(Reference base year 1989–90 = 100.0)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
Index no.								
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
1993–94	108.8	95.2	138.0	109.1	104.7	122.5	155.7	134.4
1994–95	113.7	97.9	139.3	111.7	109.0	129.0	178.1	130.4
% change from previous year								
1992–93	0.4	-1.8	5.1	3.4	4.6	4.1	15.6	7.9
1993–94	3.3	2.3	2.3	-0.9	6.4	5.1	16.5	0.1
1994–95	4.5	2.8	0.9	2.4	4.1	5.3	14.4	-3.0

Source: House Price Indexes: Eight Capital Cities (6416.0).

20.29 Project Home Price Index
(Reference base year 1989–90 = 100.0)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
Index no.								
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
1993–94	105.8	103.9	110.1	111.4	96.2	117.7	118.6	132.7
1994–95	107.9	105.8	112.5	114.6	100.0	121.3	125.2	129.2
% change from previous year								
1992–93	0.5	-1.4	3.4	—	2.4	3.6	3.3	6.5
1993–94	2.1	3.5	1.2	5.7	3.7	3.2	6.5	0.7
1994–95	2.0	1.8	2.2	2.9	4.0	3.1	5.6	-2.6

Source: House Price Indexes: Eight Capital Cities (6416.0).

Housing finance

Table 20.30 presents statistics of secured housing finance commitments made by significant lenders to individuals for the construction or purchase of dwellings for owner occupation.

In 1994–95, a total of \$42,307 million was committed for the purchase of 451,362 dwellings. This represents a decrease from the 1993–94 high of \$47,832 million for 544,485 dwellings. The value of housing loans decreased by about 12% from 1993–94 to 1994–95, and the number of loans decreased by 17%. In 1994–95, 78% of the money was used to purchase established dwellings, 17% to finance construction of new dwellings and the remainder (5%) was used to purchase newly erected dwellings.

Banks continued to be the predominant lenders and, in 1994–95, provided \$37,326 million (88% of all loans) to 398,089 individuals (88% of all borrowers) in finance commitments. This represents a 14% decrease in lending, and a 19% decrease in the number of loans by banks during 1994–95.

The permanent building societies showed a marked decrease in the number (26%) and value (21%) of loans during 1993–94 and 1994–95. This was in sharp contrast to the increases recorded during 1992–93 to 1993–94 of 22% in the number of, and 28% in the value of, loans.

In 1994–95, the average size loan from banks was \$93,800, from permanent building societies \$89,200, and from all types of lenders, \$93,700.

20.30 Housing finance for owner occupation — number of dwelling units and value of commitments to individuals

	Type of lender			Total
	Banks	Permanent building societies	Other lenders	
Construction of dwellings				
Number of dwelling units				
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
1993–94	89 498	5 504	3 907	98 909
1994–95	72 961	4 464	3 717	81 142
Value of commitments (\$m)				
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	4 828.3
1992–93	5 637.8	402.9	409.4	6 450.1
1993–94	7 325.2	510.8	317.8	8 153.8
1994–95	6 446.5	429.2	350.8	7 226.4

...continued

20.30 Housing finance for owner occupation — number of dwelling units and value of commitments to individuals — *continued*

	Type of lender			Total
	Banks	Permanent building societies	Other lenders	
Purchase of newly erected dwellings				
Number of dwelling units				
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
1993-94	22 290	1 666	1 276	25 232
1994-95	19 879	990	1 440	22 309
Value of commitments (\$m)				
1989-90	589.8	108.0	387.5	1 085.4
1990-91	773.2	201.5	345.5	1 320.3
1991-92	949.8	310.3	376.1	1 636.2
1992-93	1 420.4	127.5	202.4	1 750.3
1993-94	2 101.1	156.7	110.6	2 368.4
1994-95	2 035.7	98.8	140.2	2 274.7
Purchase of established dwellings				
Number of dwelling units				
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
1993-94	378 975	28 992	12 377	420 344
1994-95	305 249	21 271	21 391	347 911
Value of commitments (\$m)				
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
1993-94	34 076.8	2 330.2	902.8	37 309.8
1994-95	28 844.0	1 854.8	2 107.3	32 806.1
Total				
Number of dwelling units				
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
1993-94	490 763	36 162	17 560	544 485
1994-95	398 089	26 725	26 548	451 362
Value of commitments (\$m)				
1989-90	14 059.1	1 879.0	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
1993-94	43 503.1	2 997.7	1 331.1	47 831.9
1994-95	37 326.2	2 382.7	2 598.2	42 307.1

Source: *Housing Finance for Owner Occupation, Australia (5609.0)*.

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.

Australian Urban Export Strategy

Government is working in partnership with industry to promote an internationally competitive housing and urban development sector. Activities include the development of a Best Practice Guide, a benchmarking project, management skills curriculum materials and an on-site waste management project. These activities, together with a range of regulatory reform initiatives, will contribute to improved industry efficiency and flexibility. Through the Urban Export Strategy, initiatives are in place to assist the housing and urban development industry to export knowledge and technology to neighbouring countries where the demand for housing and related products is high.

Urban and regional development

The Australian Urban and Regional Development Review was established in 1993 to investigate the best means of achieving high standards of social equity, economic efficiency and environmental quality in urban development. The priorities of the Review were to conduct research into the best ways of ensuring that urban and regional development can:

- promote further economic and employment growth;
- improve opportunities for those disadvantaged because of where they live and work;
- protect the environment;
- maintain and upgrade transport and other infrastructure for economic development;
- recognise the changing character of Australia's population and related housing, transport, infrastructure and service needs.

The Review pursued its objectives through an extensive program of policy development, consultation and research. It has issued a number of publications, including discussion

papers, workshop papers, strategy papers and research reports, which are listed in the bibliography at the end of this chapter.

The first phase of the Review concluded with the completion of the last of these studies in the first half of 1995. AURDR phase II was then initiated, with similar objectives and a new research program.

Urban design agenda

An allocation of \$0.5 million over the next six years for urban design initiatives was announced in the 1995–96 Budget as part of the Better Cities II Program. This will support the Commonwealth's response to the Prime Minister's Urban Design Task Force Report *Urban Design in Australia* which seeks to foster the debate on urban design; encourage research, education and training; and stimulate discussion on government and industry reform to achieve improved urban design outcomes. More specifically, best practice in urban design, housing and urban development will be documented and integrated residential development will be promoted.

National Youth Housing Strategy

The National Youth Housing Strategy (NYHS) is a major review announced by the Commonwealth Government in the 1993–94 Budget. It flowed from the outcomes of the National Housing Strategy which identified independent low income young people as being particularly disadvantaged in the housing market.

The NYHS is the first national review of youth housing undertaken in Australia and is examining the many issues and barriers facing independent young people on low incomes in accessing suitable and affordable housing.

Australian Institute of Health and Welfare

Under amendments to legislation in 1992, housing assistance was added to the Institute's charter. Its role is to gather, analyse and disseminate national data on health and welfare services, including housing assistance, in order to support both government and community organisations' planning and policy making. The Institute published three major reports on housing assistance in 1994. A detailed statistical description of assistance

provided nationally through the Supported Accommodation Assistance Program (SAAP) is presented in *Services for the Homeless 1990–92: A Statistical Profile*. Extensive analyses of the characteristics of SAAP service outlets, services provided and service users in Victoria, along with measurement of outcomes for service users, are contained in the report *From Services to Outcomes: The Supported Accommodation Assistance Program in Victoria 1990–93*. Finally, the provision of public housing is examined in depth in *Public Housing in Australia*. This report presents a detailed statistical profile of the program and the characteristics of public housing tenants and their dwellings, and also analyses several aspects of the effectiveness of assistance provided through public housing.

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. Details of the assistance provided under the CSHA are set out in table 20.31. The Commonwealth and State/Territory governments are renegotiating a new outcomes-based CSHA, to commence on 1 July 1996. Micro-economic reforms in the housing and urban development industries aim to improve the availability of affordable and appropriate housing choices.

20.31 Commonwealth payments to States/Territories under the CSHA, 1993–94 (\$'000)

	NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT	Aust.
Untied grants	267 791	184 467	143 489	74 095	74 407	24 640	18 182	15 731	802 802
Pensioner Rental Housing Program	18 677	10 174	9 483	4 153	3 781	1 179	523	614	48 584
Aboriginal Rental Housing Program	25 745	3 638	19 168	15 862	7 460	766	—	20 958	93 597
Mortgage & Rent Assistance Program	10 530	7 841	5 732	681	2 567	828	522	296	28 997
Crisis Accommodation Program	6 158	11 162	8 302	3 430	2 387	1 294	526	260	33 519
Community Housing Program	19 356	12 202	6 480	3 986	6 187	1 372	211	684	50 478
Total	348 257	229 484	192 654	102 207	96 789	30 079	19 964	38 543	1 057 977

Source: Department of Housing and Regional Development.

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 transitional supported accommodation and related support services to assist people who are homeless, or at imminent risk of homelessness, and in crisis, to achieve a greater independence.
- 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, Housing and Local Government; and
- Australian Capital Territory — ACT Housing.

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.

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Transport and communications

Introduction	553
Road transport	553
Length of road system	553
Registered motor vehicles	553
Registrations of new motor vehicles	555
Use of motor vehicles	556
Freight movements	557
Drivers' and riders' licences	557
Road traffic accidents	558
Rail transport	558
Government railways	558
Non-government railways	560
Water transport	561
The Australian fleet	561
Coastal shipping cargo	561
Air transport	562
International activity	562
International scheduled services	562
International non-scheduled services	563
International traffic	563
Domestic activity	564
Major airlines at 30 June 1994	564
Regional services	564
Scheduled domestic airline services	564
Other aviation matters	565
Airports	565
Air transport registrations and licences	565
Accidents and casualties	565
Government transport organisations	565
General	565
Australian Transport Council	565
Australian Road Transport Advisory Committee	565
Bureau of Transport and Communications Economics	565
Road and rail	566
AUSTROADS	566
Australian Road Research Board (ARRB)	566
National Road Transport Commission	566

Water	566
Australian National Line (ANL) Limited	566
Australian Maritime Safety Authority (AMSA)	566
Air	567
Airservices Australia	567
Civil Aviation Safety Authority	567
Federal Airports Corporation	567
International organisations	567
International agreements	567
Multiple designation and the International Air Services Commission	567
Communications	568
Radio and television broadcasting	568
National Transmission Agency (NTA)	568
Australian Broadcasting Corporation (ABC)	568
ABC international broadcasting services	569
ABC involvement in subscription television services	569
Commercial radio and television services	569
Special Broadcasting Service (SBS)	569
SBS Independent	569
Commonwealth Transmission Network	570
Australian Broadcasting Authority (ABA)	570
Radiocommunication stations	570
Telecommunications services within Australia	571
Postal communications	571
Australian Postal Corporation	571
Bibliography	573

Transport and communications

Introduction

The transport industry consists of businesses mainly engaged in passenger or freight transport by road, rail, water and air, and associated storage facilities and services. In 1994–95, the seasonally adjusted gross product of the transport industry was \$24,112 million (at average 1989–90 prices), 5.8% of the gross domestic product for all industries, and it employed 381,300 people.

Road transport

Length of road system

The most recent available information on lengths of roads open for general traffic in Australia is shown in the table below. The information is classified according to broad surface groups as defined by the respective States and Territories.

21.1 Lengths of roads open for general traffic, 30 June (kilometres)

Surface of roads	NSW(a) 1993	Vic.(b) 1993	Qld 1992	SA 1993	WA(c) 1992	Tas.(d) 1992	NT(e) 1993	ACT 1993
Bitumen or concrete	84 200	69 504	60 701	25 042	43 134	9 515	6 018	2 345
Gravel, crushed stone or other improved surface	97 600	48 931	50 039	—	45 955	12 968	6 780	80
Formed only	(f)	41 433	48 611	69 773	36 328	233	4 846	—
Cleared only	n.a.	(g)	15 078	—	17 726	1 874	2 688	—
Total	181 800	159 868	174 429	94 815	143 143	24 590	20 332	2 425

(a) Excludes Lord Howe Island, forestry controlled roads or crown roads. (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. (f) Included in gravel, crushed stone or other improved surface. (g) Included with Formed only.

Source: Derived mainly from Road and Traffic Authorities and local government sources in each State and Territory.

Registered motor vehicles

Censuses of registered motor vehicles have been conducted in respect of 31 December 1955 and 1962 and 30 September 1971, 1976, 1979, 1982, 1985, 1988 and 1991 and 30 June 1993. Information from the 31 May 1995 census will be available early in 1996. 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 Motor 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 years, 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 reduced, in contrast to the average age of other vehicles which increased.

As shown in table 21.4, the number of motor vehicles (excluding motor cycles) steadily increased every year between 1990 and 1995 except in 1991. The number of motor cycles fluctuated over this period, with fewer registered as at 30 June 1995 than at the corresponding date in 1990.

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 591 vehicles per 1,000 of population in 1995 was the highest recorded (table 21.5).

21.2 Motor Vehicle Census, 30 June 1993 (^{'000})

State/Territory	Passenger vehicles	Light commercials	Trucks			Buses	Motor cycles	Total(a)
			Rigid	Articulated	Non-freight carrying			
NSW	2 561.5	405.8	102.3	13.1	9.3	11.3	69.2	3 172.4
Vic.	2 304.8	358.8	87.3	15.3	11.5	13.2	73.8	2 864.7
Qld	1 385.8	311.9	60.9	10.0	6.0	8.9	63.6	1 847.2
SA	752.3	109.2	26.9	5.3	6.7	3.3	29.2	932.8
WA	838.2	175.9	42.3	6.0	8.8	5.5	37.7	1 114.5
Tas.	232.2	54.9	11.3	1.6	3.3	2.0	6.6	311.9
NT	54.7	20.5	2.5	1.0	0.2	1.4	3.9	84.2
ACT	150.8	17.2	3.0	0.3	0.8	1.3	4.8	178.2
Aust.	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 of registration 1993								Aust. 1993	Aust. 1991
	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
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	9 944.5	292.4
1993	8 050.0	2 089.8	10 139.8	291.7
1994	8 208.8	2 198.6	10 407.4	291.8
1995	8 391.5	2 246.7	10 638.2	297.2

(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.
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
1994	527.4	611.9	596.3	607.9	649.8	654.2	512.8	591.2	583.4
1995(b)	531.5	621.9	604.6	616.7	661.6	660.4	530.5	588.7	591.0

(a) Excludes motor cycles, tractors, plant and equipment, caravans and trailers. (b) Estimated resident population as at 30 March 1995.

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 21.7.

21.6 Registrations of new motor vehicles

Year	Trucks						Total (excludes motor cycles)	Motor cycles
	Passenger vehicles(a)	Light commercial vehicles(b)	Rigid	Articulated	Nonfreight carrying(c)	Buses		
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
1993-94	475 981	80 720	9 812	3 147	795	3 814	574 269	17 425
1994-95	528 502	88 840	11 392	4 815	867	4 493	638 909	20 505

(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, 1994-95

State/Territory	Trucks						Total (excludes motor cycles)	Motor cycles
	Passenger vehicles	Light commercial vehicles(a)	Rigid	Articulated	Non-freight carrying	Buses		
NSW	193 387	28 069	4 132	1 405	368	1 132	228 493	6 244
Vic.	127 644	17 746	2 327	1 404	102	888	150 111	5 347
Qld	92 586	21 605	2 742	1 048	190	1 019	119 190	3 954
SA	35 830	5 350	571	478	99	238	42 566	1 451
WA	52 089	10 694	1 094	265	52	755	64 949	2 355
Tas.	11 012	2 550	219	100	40	94	14 015	404
NT	5 372	1 605	169	98	10	325	7 579	399
ACT	10 582	1 221	138	17	6	42	12 006	350
Aust.	528 502	88 840	11 392	4 815	867	4 493	638 909	20 505

(a) Combination of utilities and panel vans. Includes cab chassis vehicles 3.5 tonnes gross vehicle mass or less.

Source: *Motor Vehicle Registrations, Australia (9304.0)*.

Use of motor vehicles

The Survey of Motor Vehicle Use has been undertaken periodically by the ABS since 1963 and every three years between 1976 and 1991. Results from the 1995 Survey of Motor Vehicle Use will be available mid 1996. The following are some of the main statistics from the previous survey, undertaken in 1991.

Motor vehicles in Australia are estimated to have travelled a total of 151,154 million km in the 12 months ending September 1991, a decrease of 1.8% over the corresponding period in 1988. Of the total distance travelled, 34.8% was for business purposes, 22.5% for travel to and from work and 42.7% for private purposes. Passenger vehicles accounted for 76.1% of total distance travelled in Australia; freight carrying vehicles (including light

commercial vehicles, rigid trucks and articulated trucks) 21.8%; motor cycles 1.1%; and buses 0.9% (table 21.8).

The average distance travelled annually by all vehicles was 15,000 km (15,300 km if unused vehicles are disregarded), a decrease of approximately 8.5% 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 million tonne-kilometres (table 21.10), with vehicles registered in New South Wales and Victoria accounting for about 52.1% of the total (23,213 and 22,908 million tonne-kilometres, respectively).

21.8 Total kilometres travelled, year ended 30 September 1991 (million kilometres)

Type of vehicle	Business			Total to & from work	Private	Total	Purpose
	Laden	Unladen	Total(a)				
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), year ended 30 September 1991 ('000 km)

Type of vehicle	Area of operation					
	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 ACT for ACT registered vehicles.

Source: Survey of Motor Vehicle Use, Australia (9208.0).

21.10 Total tonne-kilometres(a), year ended 30 September 1991

Type of vehicle	State of registration								Aust.
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	
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).

Freight movements

Experimental estimates from a new ABS transport survey, the Freight Movements Survey, indicate that total freight moved in Australia fell 0.7% between September and December quarters 1994 (from 178.5 million tonnes to 177.3 million tonnes). The proportion of total freight carried by rail in December quarter 1994 was 57.7%, by road 34.8% and by sea 7.4%.

The Freight Movements Survey excluded road freight moved within urban areas or over distances of less than 25 km in rural areas. It

also excluded urban rail freight which, in contrast to urban road freight is a small proportion of total rail freight. Care should therefore be taken in comparing data for road and rail freight modes. Care should also be exercised due to the experimental nature of these results. Reference should be made to the cautionary notes published in *Experimental Estimates of Freight Movements, Australia, December Quarter 1994* (9217.0).

21.11 Freight movements by mode, 1994 ('000 tonnes)

Quarter	Road	Rail	Sea	Air	Total
June	68 192	81 248	11 349	43	160 833
September	57 107	108 831	12 546	53	178 537
December	61 782	102 282	13 160	55	177 280

Source: Interstate Freight Movement, Australia (9212.0).

Drivers' and riders' licences

21.12 Drivers' and riders' licences

Type of licence	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT
30 June 1994								
Motor vehicle	3 733 159	2 873 252	n.a.	805 528	n.a.	259 879	113 950	177 575
Motor cycle	339 759	174 747	329 714	149 028	n.a.	163	18 620	169
Combined	335 719	—	1 940 853	—	—	27 271	—	21 904
Total	4 408 637	3 047 999	1 944 211	963 976	1 137 096	287 313	132 570	199 648
30 June 1995								
Motor vehicle	3 794 336	2 894 132	n.a.	818 081	n.a.	263 577	118 542	180 027
Motor cycle	346 820	179 080	336 189	150 505	n.a.	147	19 045	154
Combined	343 129	—	2 007 507	—	—	27 955	—	21 662
Total	4 484 285	3 073 212	2 007 587	974 756	1 108 390	291 679	137 587	201 843

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 fell significantly between 1989 and 1994. This decline is

reflected in all States and Territories, with the most notable falls in New South Wales, Victoria and the Australian Capital Territory.

21.13 Road traffic accidents involving fatalities

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Accidents involving fatalities									
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
1993r	518	381	357	191	190	47	40	11	1 735
1994	557	346	367	145	195	51	36	15	1 712
Persons killed									
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
1993r	581	435	396	218	209	58	43	12	1 952
1994	651	378	421	163	211	58	41	17	1 940

Source: Federal Office of Road Safety, Road Fatality Statistics.

21.14 Accidents involving casualties(a), 1994

State/Territory	Persons killed	Persons injured	Per 100,000 of population		Per 10,000 motor vehicles registered(b)	
			Persons killed	Persons injured	Persons killed	Persons injured
NSW	581	6 407	9.7	107.1	1.8	20.2
Vic.	435	5 928	9.8	132.9	1.5	20.7
Qld	396	4 027	12.9	130.7	2.1	21.8
SA	218	1 549	14.9	106.1	2.3	16.6
WA	209	2 583	12.5	154.7	1.9	23.2
Tas.	58	522	12.3	111.1	1.9	16.7
NT	43	430	25.3	252.9	5.1	51.2
ACT	12	156	4.0	50.0	0.7	8.8
Aust.	1 952	21 602	11.1	122.9	1.9	20.6

(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 1993.

Source: Federal Office of Road Safety.

Rail transport

Government railways

The seven 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;

- National Rail Corporation Ltd: and
- the Australian National Railways Commission (operating as Australian National).

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 21.15 do not represent route-kilometres exclusively within each State and Territory.

Australian National is managed as three separate businesses: AN Freight (mainland

freight); AN Tasrail (Tasmanian freight); and AN Passenger and Travel (mainland passenger services and Adelaide travel agency).

The National Rail Corporation was incorporated as a commercial operating company in September 1991 with a charter to take over all interstate rail freight business and related functions and assets from government-owned railways. Its shareholders are the Commonwealth government, and the governments of New South Wales, Victoria and Western Australia.

21.15 Government railways — route-kilometres operated

30 June	NSW	Vic.	Qld	SA(a)	WA	Australian National	Australia
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
1994	9 810	5 107	9 357	120	5 583	6 235	36 212

(a) Suburban only. Country routes were transferred to Australian National in 1978.

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.

21.16 Government railways — passenger journeys(a) (‘000)

	NSW	Vic.	Qld	SA	WA	Australian National	Australia
1992–93							
Suburban	229 814	106 015	39 404	7 540	10 315	—	393 088
Country(b)	1 540	5 309	988	—	269	200	8 306
1993–94							
Suburban	234 800	100 955	38 392	8 720	16 200	—	399 067
Country(b)	2 100	4 587	947	—	246	223	8 103

(a) Based on ticket sales making allowances for periodical tickets. (b) Inter-system traffic is included in the total for each system over which it passes.

Source: Various rail authorities, the Rail Industry Council and the Australian Bureau of Statistics.

21.17 Government railways — freight carried, net tonne-kilometres and freight earnings

Year	NSW	Vic.	Qld	WA	Australian National	Australia
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
1993-94	65 500	12 017	92 092	27 726	14 942	212 277
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
1993-94	16 200	4 214	25 175	5 447	9 159	60 195
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
1993-94	836 186	158 747	1 101 688	269 494	276 324	2 642 439

Source: Various rail authorities and the Rail Industry Council.

Non-government railways

Statistics shown in table 21.18 relate to non-government railways with a route distance exceeding two kilometres and which

operate outside industrial estates, harbour precincts, mines and quarries.

21.18 Activities of non-government railways

Year	Iron ore railways	Sugar tramways	Coal railways(a)	Other non-government railways	Total(a)
Tonnes carried (million)					
1988-89	90.5	23.6	7.4	14.1	135.6
1989-90	103.9	24.3	8.7	13.2	150.2
1990-91	113.6	22.2	7.9	14.2	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
1993-94	117.5	29.3	8.7	11.5	167.0
1994-95	121.6	31.8	7.9	12.1	173.4
Tonne-kilometres (million)					
1988-89	27 866.0	425.0	106.0	274.0	28 671.0
1989-90	31 654.0	438.0	123.0	263.0	32 478.0
1990-91	34 533.0	400.0	114.0	299.0	35 347.0
1991-92	34 362.0	334.0	123.0	259.0	35 078.0
1992-93	34 929.0	468.0	117.0	253.0	35 767.0
1993-94	36 849.0	527.0	122.0	248.0	37 747.0
1994-95	37 177.0	572.0	111.0	250.0	38 110.0

(a) Includes transfers to and from government railways.

Source: Bureau of Transport and Communications Economics, Transport Indicators Unit.

Water transport

The Australian fleet

New South Wales and Queensland between them account for 57% of ships registered in Australia. The majority of these ships are used for non-commercial purposes (table 21.19).

Of the 76 ships which comprise the major Australian trading fleet (2,000 dead weight tonnes and over), 63% operated on coastal routes (table 21.20).

21.19 Ships registered(a) in Australia, 30 June 1994

Location	Nature of registration					Total
	Recreational	Fishing	Government	Demise chartered(b)	Other(c)	
New South Wales	1 492	261	4	7	225	1 989
Victoria	520	194	—	4	118	836
Queensland	1 220	655	27	3	336	2 241
South Australia	231	278	2	—	38	549
Western Australia	501	408	1	—	120	1 030
Tasmania	191	216	4	1	52	464
Northern Territory	204	51	1	—	21	277
Total	4 359	2 063	39	15	910	7 386

(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: Department of Transport.

21.20 Summary of the Australian trading fleet of ships 150 gross tonnes or more, 30 June 1994

Ships	Number	DWT(a)	Gross tonnes
Major Australian fleet(b)			
Coastal			
Australian owned & registered	43	1 311 717	916 393
Overseas owned, Australian registered	3	84 093	49 047
Overseas owned & registered	2	9 400	5 646
Coastal fleet	48	1 405 210	971 086
Overseas			
Australian owned & registered	19	1 505 565	1 082 092
Overseas owned, Australian registered	6	551 212	327 609
Overseas owned & registered	3	32 220	25 898
Overseas fleet	28	2 088 997	1 435 599
Major Australian fleet	76	3 494 207	2 406 685
Other trading ships			
Australian owned & registered	14	5 320	8 159
Australian trading fleet	90	3 499 527	2 414 844

(a) Dead weight tonnage. (b) 2 000 DWT and over.

Source: Department of Transport.

Coastal shipping cargo

Table 21.21 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.

21.21 Coastal cargo loaded and discharged at Australian ports, 1993-94
(*000 gross weight tonnes)

Port	Loaded	Discharged
New South Wales		
Sydney	60	1 602
Botany Bay	634	3 771
Newcastle	384	4 858
Port Kembla	2 381	7 205
Other	1 151	142
Total	4 610	17 577
Victoria		
Melbourne	1 711	3 054
Geelong	1 598	777
Hastings	4 830	854
Other	35	671
Total	8 174	5 357
Queensland		
Brisbane	1 848	3 253
Gladstone	1 651	7 863
Other	8 198	1 974
Total	11 697	13 089
South Australia		
Adelaide	813	1 940
Port Stanvac	515	384
Other	4 749	1 352
Total	6 077	3 677
Western Australia		
Fremantle	1 684	1 549
Other	8 159	1 034
Total	9 843	2 583
Tasmania		
Hobart	548	1 014
Burnie	971	709
Devonport	896	550
Launceston	343	1 079
Other	1 360	51
Total	4 118	3 403
Northern Territory		
Darwin	56	223
Other	701	67
Total	757	289
Total all ports	45 274	45 976

Source: Department of Transport.

21.22 International airlines operating scheduled passenger air services to and from Australia, 30 June 1995

Carrier	Contracting State
Aeroflot Russian International Airlines	Russia
Aerolineas Argentinas	Argentina
Air Caledonie International	New Caledonia
Air China International	China
Air France	France
Air India	India
Air Mauritius	Mauritius
Air Nauru	Nauru
Air New Zealand	New Zealand
Air Niugini	Papua New Guinea
Air Pacific	Fiji
Air Vanuatu	Vanuatu
Air Zimbabwe	Zimbabwe
Alitalia	Italy
All Nippon Airways	Japan
Ansett	Australia
Australia Asia	Australia
British Airways	UK
Canadian Airlines International	Canada
Cathay Pacific Airways	Hong Kong
Continental Micronesia	Guam
Eva Air	Taiwan
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
Middle Eastern Airlines	Lebanon
Olympic Airways	Greece
Philippine Airlines	Philippines
Polynesian Airlines	Western Samoa
PT Sempati Air	Indonesia
Qantas	Australia
Royal Brunei Airlines	Brunei
Royal Tongan Airlines	Kingdom of Tonga
Singapore Airlines	Singapore
Solomon Airlines	Solomon Islands
South African Airways	South Africa
Thai Airways International	Thailand
United Airlines	USA
Vietnam Airlines	Vietnam

Source: Department of Transport.

Air transport

International activity

International scheduled services

At 30 June 1995, 46 international airlines were operating regular scheduled passenger air services to and from Australia. The carriers and contracting states are shown in the following table.

Air France and Lufthansa withdrew from Australia in late 1995, while Egypt Air and Kiwi Travel International began services after 30 June 1995.

Canadian Airlines International (CAI) 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.

Qantas, which now includes Australian Airlines, operates international and domestic flights. See the *Domestic activity* section for details of the Qantas fleet. British Airways purchased 25% of Qantas Airways Limited on 10 March 1993. The company was floated on the Australian Stock Exchange on 22 June 1995.

Ansett Australia operated its first international flight in its own right on 11 September 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 traffic to and from Australia during 1993-94 are shown in tables 21.23 and 21.24. Note that "Australia" is the area embracing Australia and Norfolk Island. 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 and Ansett flights linking Australia with overseas countries.

21.23 Scheduled international airline traffic to and from Australia(a), 1993-94

Type of traffic	Number of flights(b)(c)	Passengers	Freight tonnes	Mail tonnes
Traffic to Australia				
Qantas Airways Limited	8 852	2 171 395	72 437	2 576
Ansett Australia	227	21 561	134	—
Other airlines	18 424	3 147 061	139 084	7 672
All airlines	27 503	5 340 017	211 655	10 249
Traffic from Australia				
Qantas Airways Limited	8 851	2 140 277	90 291	5 937
Ansett Australia	227	23 332	130	—
Other airlines	18 198	3 118 350	174 145	2 258
All airlines	27 276	5 281 959	264 565	8 196

(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.

21.24 Operations of Australia's scheduled overseas airline services

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Hours flown	140 172	148 706	163 332	174 568	188 818	201 653
Kilometres flown ('000)	109 102	115 783	127 421	136 533	160 520	168 865
Passengers						
Embarkations	3 947 544	4 078 669	3 880 533	4 468 149	5 222 783	5 817 263
Passenger-kilometres ('000)	26 516 771	27 054 999	26 774 074	28 396 869	33 189 062	37 341 545
Freight						
Tonnes uplifted	130 635	146 937	155 638	172 790	197 249	218 194
Tonne-kilometres ('000)	929 458	1 072 999	1 131 729	1 140 519	1 269 456	1 430 425
Mail						
Tonnes uplifted	5 988	5 963	6 992	8 324	8 737	10 031
Tonne-kilometres ('000)	61 049	59 398	75 110	70 488	7 342	81 950

Source: Department of Transport.

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 1994

The Ansett group's fleet consisted of 87 aircraft, including two Boeing 747, five Boeing 767, 20 Boeing 737, six Boeing 727, 12 A320-200 Airbus and 19 British Aerospace 146 jet aircraft.

Qantas operated a fleet of 31 Boeing 747, 20 Boeing 767, 34 Boeing 737 and four A300 Airbus jet aircraft. Regional airlines in the Qantas Group are Eastern Australia Airlines, Southern Australia Airlines, Sunstate Airlines and Airlink. They operated 37 aircraft, the largest regional fleet in Australia.

Regional services

At 31 December 1994, 46 regional operators provided regular public transport air services to approximately 220 ports in Australia.

The aircraft 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 are in use. These include De Havilland Canada Dash 8 and SAAB 340 which are in the 34-36 seats category. During 1993-94, regional operators carried an estimated 2.7 million passengers.

Scheduled domestic airline services

Statistics on all major domestic airline services and the number of domestic airline passengers passing through airports are set out in tables 21.25 and 21.26.

21.25 Domestic airline activity

	1988-89	r1989-90	r1990-91	r1991-92	r1992-93	1993-94p(c)
Domestic airlines						
Passengers ('000)(a)	15 133.2	10 363.7	14 738.5	18 476.2	18 577.8	21 465.3
Passenger kilometres performed (millions)	13 742.8	9 962.9	14 495.9	19 059.9	18 997.0	22 886.5
Revenue passenger load factor (%)	76.3	72.1	70.8	78.4	76.7	74.5
Cargo tonnes(b)('000)	176.6	98.5	139.6	137.9	144.1	217.9
Cargo tonnes kilometres(b) (millions)	161.6	93.4	140.7	156.0	170.9	256.9
Total tonnes kilometres (millions)	1 398.4	990.0	1 445.4	1 871.4	1 880.7	2 316.7
Revenue weight load factor (%)	63.7	59.4	56.9	61.3	60.2	61.1
Hours flown ('000)	290.3	192.2	281.7	336.7	356.5	389.8
Aircraft movements ('000)	420.0	255.1	374.9	427.0	448.8	471.5
Regional airlines						
Passenger ('000)	1 330.6	1 497.9	1 798.3	2 049.0	2 336.6	2 705.0
Cargo tonnes(b)('000)	4.0	2.4	2.7	2.6	2.4	2 400.0

(a) Measurement has been changed to passengers on board and adjusted for previous years. (b) Includes freight and mail. (c) Data for this period comprises all activity by major Australian-registered airlines over flight stages within Australia, following a change in the definition of 'domestic traffic' from 1 July 1993. Data for all periods prior to 1 July 1993 comprises domestic airline activity only.

Source: Department of Transport.

21.26 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	1993-94p
Sydney	7 388 889	7 607 247	5 498 325	7 634 518	9 994 443	10 042 288	10 657 311
Melbourne	5 831 588	6 016 872	4 630 505	6 419 173	8 148 589	8 111 724	8 632 384
Brisbane	3 361 044	3 673 918	2 698 617	3 915 302	5 072 744	5 138 452	5 504 196
Adelaide	1 845 523	1 889 251	1 418 113	2 023 096	2 558 172	2 552 132	2 733 842
Perth	1 437 425	1 479 851	1 052 379	1 563 444	2 082 912	1 943 759	2 240 634
Canberra	1 104 623	1 080 207	671 904	1 058 814	1 267 366	1 260 161	1 359 901
Coolangatta	1 113 136	1 250 950	645 989	1 075 000	1 478 093	1 543 469	1 682 179
Cairns	778 114	833 569	545 493	826 738	1 184 098	1 183 902	1 358 377
Hobart	512 490	519 405	429 012	566 303	666 515	689 112	727 177
Townsville(c)	932 711	837 009	379 769	418 412	379 756	446 276	389 410
Launceston(d)	579 800	553 579	268 641	348 009	401 947	402 114	458 963
Darwin	371 470	388 804	302 213	402 549	452 621	478 715	553 179

(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.

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 almost 50% 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.

Airports

At 30 June 1994, there were almost 400 licensed airports in Australia and its Territories. Of these, 12 were international airports. The majority of licensed airports were owned and operated by local councils, State government departments and private companies. The remaining airports were owned and operated by the Federal Airports Corporation and the Department of Defence.

Air transport registrations and licences

At 14 December 1995, there were 9,633 aircraft registered in Australia.

At 30 June 1993, 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.

Accidents and casualties

21.27 Air transport — accidents and fatalities

Domestic airlines	Accidents	Fatalities
1987	299	44
1988	325	70
1989	348	83
1990	344	81
1991	323	54
1992	310	61
1993	320	67

Source: Department of Transport.

Government transport organisations

General

Australian Transport Council

The Australian Transport Council was established on 11 June 1993 and subsumed the functions of the Australian Transport Advisory Council and incorporates meetings of the Ministerial Council for Road Transport.

It 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 along with the Australian Local Government Association 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 to governments on the coordination and integration of all transport and road policy issues at a national level.

Australian Road Transport Advisory Committee

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 with the task of integrating road and rail with other forms of transport.

Bureau of Transport and Communications Economics

The Bureau of Transport and Communications Economics is a centre for applied economic research in the federal Department of Transport. 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

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 which 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.

Australian Road Research Board (ARRB)

The ARRB is a non-profit national organisation owned by the Federal Department of Transport, 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.

From 1 July 1995, the name of the Australian Road Research Board was changed to ARRB Transport Research Ltd.

National Road Transport Commission

The 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.

In respect of the above goals, the Commission has responsibility for road vehicles, their drivers, other road users and related matters.

Water

Australian National Line (ANL) Limited

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 focus on liner (container) trades, both domestic and international; domestic bulk trades; and through a 50% shareholding in National Terminals (Australia) Ltd, container terminal activities in Australia. Australasia is the geographic focus of ANL's activities.

As at 30 June 1994, ANL Ltd fleet consisted of 13 vessels. The fleet comprised four vehicle deck cargo ships totalling 42,931 deadweight tonnes (DWT), five cellular container ships totalling 144,743 DWT and four bulk carriers totalling 216,285 DWT.

Australian Maritime Safety Authority (AMSA)

The AMSA is a government business enterprise established under the *Australian Maritime Safety Authority Act 1990* on 1 January 1991. AMSA 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

Airservices Australia

Airservices Australia and the Civil Aviation Safety Authority were established by the Commonwealth parliament in July 1995, replacing the former Civil Aviation Authority, an independent government business enterprise established under the *Civil Aviation Act 1988*.

The function of Airservices Australia is to provide cost-effective services for Australia's aviation industry. These include: air traffic control; aeronautical information services; airport rescue and fire fighting; search and rescue; and navigation services. Airservices regards the safety of air navigation as its most important consideration. It is also required to act in a manner that ensures, as far as practicable, that the environment is protected from the effects of aircraft operations.

Airservices Australia has a prominent role in the implementation of the global Future Air Navigation System (FANS) which utilises satellite technology to provide a more efficient air traffic system.

Civil Aviation Safety Authority

The Civil Aviation Safety Authority is responsible for conducting safety regulation of civil air operations in Australia and the operation of Australian aircraft overseas. Its functions include standards setting, safety surveillance of the industry, enforcement of standards, entry control and licensing. Additional responsibilities include the regulatory oversight of the national airways system, air traffic services and aviation rescue and fire-fighting services provided by Airservices Australia and administration of the mandatory carriers liability insurance arrangements announced by the Commonwealth government on 12 October 1994.

Federal Airports Corporation

The Federal Airports Corporation owns, manages and develops Australia's major airports. It oversees commercial activities in those 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 183 members (as of 20 February 1994) of the International Civil Aviation Organisation (ICAO) and 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

As at 1 December 1995, Australia has air services agreements with 40 countries. Of these agreements, 39 have full treaty status and renegotiation of capacity and route rights has occurred under most as traffic between Australia and the other country has grown. Australia's agreement with Macau will be upgraded to treaty status once the draft agreement is incorporated into domestic law. Australia also has six 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

The Prime Minister announced a range of reforms to aviation policy in February 1992. These reforms included the introduction of multiple designation of Australia's international air services. Multiple designation enables Australian carriers in addition to Qantas to operate international services. At present three Australian carriers have been allocated rights to operate scheduled international air services: Qantas, Ansett and National Jet Systems. A detailed analysis of overseas practices and views of the major Australian carriers was undertaken to develop the necessary legislative and administrative framework to implement

multiple designation. The framework provides a mechanism for the allocation of international aviation capacity and route entitlements.

As a result of these reforms, the International Air Services Commission was established on 1 July 1992. Its role is to allocate the capacity negotiated under air services agreements and arrangements between Australia's international carriers. 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 Telstra, the Australian Broadcasting Corporation (ABC), the Special Broadcasting Service (SBS), the Australian Broadcasting Authority (ABA), the Department of Communications and the Arts, the Australian Telecommunications Authority (AUSTEL), and the Spectrum Management Agency (SMA).

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;
- subscription television services;
- 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)

The NTA, which is a part of 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 of the ABC and 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.

Australian Broadcasting Corporation (ABC)

The ABC is an independent statutory corporation receiving 85% of its funding from sales and other revenues.

The *Australian Broadcasting Corporation Act 1983* requires the ABC to:

- provide within Australia innovative and comprehensive radio and television services of a high order;
- 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 encourages awareness of Australia and international understanding of Australian attitudes on world affairs.

At 30 June 1995, the ABC provided:

- five radio networks across Australia on 680 transmitters which include Metropolitan Radio, Regional Radio, Radio National, ABC-FM, and the Triple-J youth radio network;
- a national television service on 596 transmitters;

- Radio Australia, an international radio service broadcast by shortwave and satellite;
- Australia Television, an international satellite television service broadcasting to South East Asia;
- a 24 hour news and parliamentary broadcast radio service to all capital cities except Darwin, and to Newcastle;
- an international network of press offices; and
- six State Symphony Orchestras.

The ABC also operates a network of retailing outlets (24 shops and 119 ABC centres) known as ABC Enterprises.

ABC international broadcasting services

The international shortwave service, 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, Mandarin, Cantonese, Tok Pisin, French, Thai and Vietnamese, are directed to the Pacific, South East and Southern 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 listeners.

The international satellite television service Australia Television is a free-to-air service transmitted to 18 countries and territories in South East Asia by the Indonesian satellite Palapa B2P. The service is delivered either direct to home or through rebroadcast arrangements with local television stations, cable networks and hotels within the satellite footprint.

ABC involvement in subscription television services

In 1992 the Government agreed to allocate a two-channel satellite pay TV licence ("Licence C") to a subsidiary of the ABC and provide a one-off grant of \$12.5 million to the ABC in 1993–94 to assist with establishing an ABC pay TV service.

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.

Special Broadcasting Service (SBS)

The SBS was established by the Commonwealth Government on 1 January 1978. Its principal function is to provide multilingual radio and television services that inform, educate and entertain all Australians and in doing so, reflect Australia's multicultural society.

SBS television broadcasts to all State capital cities and to a number of regional centres on 91 television transmitters.

SBS Radio became the world's first national multilingual radio service on 26 January 1994 with the commencement of services to Adelaide, Perth, Darwin and Brisbane. As at 30 June 1995, SBS Radio was available utilising 11 transmitters in all capital cities, except Canberra (due to commence December 1995) and Hobart (due to commence April 1996), and the regional centres of Wollongong and Newcastle.

SBS Independent

On 18 October 1994 the Prime Minister announced, as part of *Creative Nation*, the provision of \$13 million over four years to the SBS to commission high quality product from independent producers throughout Australia. The programs will be broadcast on SBS and include drama series, low-budget features and documentaries that reflect Australia's cultural diversity.

Commonwealth Transmission Network

21.28 The Commonwealth Transmission Network

Type & sector	Size of network at 30 June 1994(a)	Additions 1994-95(a)	Population served by additions	Net deletions(a)	Size of network at June 1995(a)
ABC television	437	19	29 000	-6	450
SBS television	63	18	83 000	..	81
ABC Radio National	209	14	70 000	-1	222
ABC Regional Radio	201	8	44 000	-2	207
ABC Metropolitan Radio	8	..	..	..	8
ABC Classic FM	58	3	46 000	-1	60
ABC Youth Radio	10	20	2 611 000	..	30
SBS Radio	11	..	..	..	11
Parliamentary & News Network	8	..	..	..	8
RPH	6	..	..	..	6
ABC HF Inland	3	..	..	..	3
Radio Australia	16	..	..	..	16
Total	1 030	82	2 883 000	-10	1 102
Commercial, community & self-help transmitters on NTA facilities	447	..	..	..	475

(a) Number of transmitters.

Source: Annual Report, Australian Broadcasting Authority.

Australian Broadcasting Authority (ABA)

The ABA was established on 5 October 1992 under the *Broadcasting Services Act 1992* (BSA), replacing the Australian Broadcasting Tribunal (ABT). The ABA has been given a range of powers and functions to be used to produce stable and predictable regulatory arrangements, and to deal effectively with breaches of the BSA. While the ABA subsumes many of the functions of the ABT, its role is wider than its predecessor. In particular, the ABA is responsible for planning broadcasting services in Australia, a function previously undertaken by the Department of Communications and the Arts on behalf of the Minister.

The primary functions of the ABA include:

- planning broadcasting services on an area by area basis;
- allocating, renewing, suspending and cancelling broadcasting licences;
- designing and administering price-based allocation systems for the allocation of commercial television and commercial radio licences;
- allocating commercial television and commercial radio licences;

- conducting or commissioning research into community attitudes relating to programming;
- monitoring compliance with industry codes of practice;
- monitoring and enforcing compliance with ownership and control regulations, and program standards relating to Australian content and children's programming;
- monitoring and investigating complaints concerning broadcasting services (including national broadcasting services); and
- monitoring and reporting to the Minister on the operation of the BSA.

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 the Overseas Telecommunications Corporation merged in 1991 to operate as Telstra. Telstra is a general carrier providing both domestic and international services in competition with the other licensed general carrier, Optus Communications Pty Ltd. Optus and Telstra are also licensed public mobile carriers. Vodafone Pty Ltd was also given a public mobile licence in 1992.

Postal communications

Australian Postal Corporation

The Australian Postal Corporation (trading as Australia Post) is a government business enterprise owned by the Commonwealth of Australia. It operates under the *Australian Postal Corporation Act 1989*. Australia Post is independent of Government funding, achieves a substantial profit from its activities and pays a full range of taxes and charges as well as allocating 50% of its after-tax profits as a dividend to the Government.

Australia Post offers letter and parcel delivery services within Australia and internationally. It also provides a range of related services including, electronic bulk mail handling, advertising mail, bill payment, money order and banking services, express delivery services and philatelic products and services.

Australia Post's legal obligations require it to:

- perform its functions according to sound business practice;
- provide Australian's with a universal letter service;
- carry standard letters within Australia at a uniform price;
- ensure that the letter service meets the social, industrial and commercial needs of the community; and
- perform its functions consistent with general policies of the Commonwealth Government.

21.29 Australian Postal Corporation profit and loss statement, 30 June (\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Mail services	1 779.6	1 966.6	2 099.9	2 211.2	2 321.7
Philatelic sales	41.5	41.5	41.4	38.6	45.1
Commission on agency services	79.8	89.9	91.5	99.8	115.5
Postal money order services	19.0	21.6	25.8	24.8	25.3
Other revenue	60.6	63.8	51.5	46.2	60.8
Total	1 980.5	2 183.5	2 309.8	2 420.5	2 568.4
Expenditure					
Labour & related expenditure	1 324.3	1 323.3	1 331.5	1 346.4	1 380.2
Carriage of mail by contractors	158.3	172.2	172.3	167.3	177.8
Accommodation	103.6	124.1	120.8	114.9	111.9
Stores & supplies	112.1	106.1	119.2	119.7	148.7
Depreciation	44.9	54.3	69.5	92.9	81.4
Interest	6.2	2.4	3.5	2.6	4.9
Ongoing restructuring costs(a)	..	..	..	53.5	64.2
Post Office agents & Licensees(a)	..	..	..	65.7	101.5
Other operating expenditure	161.0	254.9	317.1	211.1	213.9
Total	1 910.4	2 037.3	2 133.9	2 174.1	2 284.5
Operating profit	70.1	146.2	175.9	246.4	283.9

(a) Not separately itemised before 1992-93 but included in "Other operating expenditure" as appropriate.

Source: Australian Postal Corporation.

21.30 Australian Postal Corporation — persons engaged in providing postal services, 30 June 1993 and 1994

	30 June 1994							Aust. 1993
	HQ	NSW/ACT	Vic./Tas.	Qld	SA/NT	WA	Aust.	
Full-time staff								
Permanent	449	11 747	8 856	3 923	2 356	2 220	29 551	30 609
Temporary	2	579	488	269	67	174	1 579	1 325
Total full-time staff	451	12 326	9 344	4 192	2 423	2 394	31 130	31 934
Part-time/casual staff								
Part-time staff	1	1 506	1 195	675	342	395	4 204	3 999
Casual	..	510	124	121	122	157	1 034	1 006
Total part-time/casual	452	14 432	10 663	4 988	2 887	2 946	36 368	36 939
Agency								
Post Office agents	..	126	109	43	36	11	325	2 522
Other full-time	..	66	57	6	27	6	162	488
Other part-time	..	64	43	10	20	8	145	1 043
Total agency engagements	..	256	209	59	83	25	632	4 053
Mail contractors	..	1 444	675	1 183	277	381	3 960	3 879
Total	452	16 132	11 547	6 230	3 247	3 352	40 960	44 871

Source: Australian Postal Corporation.

21.31 Australian Postal Corporation — mail delivery network and post offices, 30 June 1993 and 1994

Number at 30 June 1994	30 June 1994						Aust. 1993
	NSW/ACT	Vic./Tas.	Qld	SA/NT	WA	Aust.	
Households receiving mail	2 293 968	1 870 178	1 261 643	643 268	664 119	6 733 176	6 563 871
Businesses receiving mail	268 325	197 022	135 935	68 697	68 789	737 768	718 969
Total delivery points	2 562 293	2 067 200	1 397 578	711 965	732 908	7 471 944	7 282 840
Australia Post Outlets	1 248	1 280	651	426	387	3 992	4 227

Source: Australian Postal Corporation.

21.32 Australian Postal Corporation — total postal articles handled (million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Posted in Aust. for delivery in Aust.	3 665.3	3 721.9	3 733.1	3 793.8	3 939.2
Posted in Aust. for delivery overseas	171.3	176.7	173.8	171.3	185.9
Posted overseas for delivery in Aust.	213.7	219.9	213	201.1	199.9
Total articles through mail network	4 050.3	4 118.5	4 119.9	4 166.2	4 325.0

Source: Australian Postal Corporation.

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Science and technology

Introduction	577
Official organisations and administration	577
Department of Industry, Science and Technology	577
Commonwealth Scientific and Industrial Research Organisation (CSIRO)	577
Australian Nuclear Science and Technology Organisation (ANSTO)	578
Australian Institute of Marine Science (AIMS)	578
Tax concession for Research and Development	579
Research and development	579
Expenditure and human resources	579
Source of funds	580
Business sector	583
General government sector	583
Higher education sector	586
Private non-profit sector	587
Home computing in Australia	590
The survey	590
Uptake of computers	590
Distribution of home computers	591
Family types	591
Household income	592
Home based business	592
Use of modems	593
The future	594
Expenditure level	594
Bibliography	595

Science and technology

Introduction

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.

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% 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*.

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; Australia Telescope; 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; Minerals; 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 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.

CSIRO has a staff of approximately 7,500 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 1994–95 was \$681.7 million.

Australian Nuclear Science and Technology Organisation (ANSTO)

ANSTO was established as a statutory authority under the *Australian Nuclear Science and Technology Organisation Act 1987* No. 3 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.

Australian Institute of Marine Science (AIMS)

AIMS is the only Australian research agency committed primarily to marine research, with emphasis on tropical marine science. The Institute is a federally funded statutory authority governed by a specialist Council appointed by the Australian Government. It was established in 1972 and has its headquarters at Cape Ferguson, 50 kms south of the coastal city of Townsville. More recently a laboratory has been established in Dampier, Western Australia.

The Institute's mission is to undertake research and development for the purpose of generating new knowledge in marine science and technology, promoting its application in industry, government and environmental management, and undertaking complementary activities to disseminate knowledge; to collaborate effectively with other researchers and research organisations; to assist in the development of national marine science policy; and to enhance the Institute's standing as a centre of excellence.

Research at AIMS is focused on problems in tropical coastal and shelf environments and the applications of marine technology. Much of it involves long-term research which is geared towards an improved understanding of marine systems, including spatial patterns and dynamic processes, and the development of a capability to predict the behaviour of complex tropical marine systems. In particular it is directed at achieving four clearly defined outcomes:

- Producing an improved understanding of the complex interactions and processes in Australia's tropical coastal and continental shelf ecosystems;
- Providing high quality scientific information and advice on the condition of Australia's tropical marine ecosystems and predicting likely changes in response to major disturbances, particularly those resulting from human activities;
- Providing a database of environmental records to enhance understanding and prediction of long-term climate change; and

- Developing a range of new marine research technologies with significant application to the needs of industry and the community.

The Institute has an established record in marine science and technology, principally associated with an understanding of marine communities of tropical Australia, Southeast Asia, and in the Pacific and Indian Oceans. The Institute has conducted long-term research into complex marine ecosystems and the impacts of human activities on the marine environment. These results are used by industry and natural resources management agencies to ensure the conservation and sustainable use of marine resources in the region.

Tax concession for Research and Development

The 150% 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% 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% 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-oriented 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% includes: 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% 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% 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, 22.2, and 22.3 provide a summary of the latest statistics available for these four sectors.

22.1 Expenditure on R&D at current prices (\$ million)

Sector	1985-86	1986-87	1987-88	1988-89	1990-91	1992-93
Business enterprises						
Private sector	852.2	1 165.1	1 388.2	1 649.1	1 878.7	2 544.0
Public sector	95.7	123.5	117.6	149.2	203.6	243.9
General government						
Commonwealth	729.0	786.5	797.0	869.6	1 025.8	1 128.2
State	315.8	368.4	394.6	482.7	638.5	615.5
Higher education	(a)707.6	881.7	983.6	1 076.8	1 332.8	1 695.2
Private non-profit	47.1	49.1	53.9	53.3	70.3	81.9
Total	(a)2 747.4	3 374.3	3 734.9	4 280.7	5 149.7	6 308.8

(a) Estimates for Colleges of Advanced Education are excluded as they were not collected for this year.

Source: *Research and Experimental Development, All-Sector Summary, Australia (8112.0)*.

22.2 Expenditure on R&D at average 1989-90 prices (\$ million)

Sector	1985-86	1986-87	1987-88	1988-89	1990-91	1992-93
Business enterprises						
Private sector	1 110.1	1 403.2	1 527.0	1 783.2	1 798.1	2 319.2
Public sector	117.9	141.0	129.4	159.6	191.1	221.5
General government						
Commonwealth	910.9	925.7	883.3	894.4	956.9	969.7
State	404.3	438.7	447.9	524.4	615.3	562.1
Higher education	(a)909.9	1 043.7	1 120.8	1 165.7	1 312.5	1 608.5
Private non-profit	60.1	60.6	63.1	58.8	67.4	72.2
Total	(a)3 513.2	4 012.9	4 171.5	4 586.1	4 941.3	5 753.2

(a) Estimates for Colleges of Advanced Education are excluded as they were not collected for this year.

Source: *Research and Experimental Development, All-Sector Summary, Australia (8112.0)*.

Source of funds

In 1992-93, 94% 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 2% (tables 22.4 and 22.5).

Fifty-eight per cent of general government sector R&D was funded by Commonwealth government organisations and 27% 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.

Ninety-one per cent of higher education funding came from the Commonwealth Government with a further 4% from the private non-profit sector. A further 2% each from State governments and business enterprises made up most of the remainder.

For the private non-profit sector, Commonwealth government organisations funded 38% of the R&D in 1992-93 (up from 31% in 1990-91) while the contribution by State Governments fell to 13% (down from 15% in 1990-91).

22.3 Human resources devoted to R&D (person years)

Sector	1985-86	1986-87	1987-88	1988-89	1990-91	1992-93
Business Enterprises						
Private sector	13 431	16 198	16 952	19 206	19 040	20 592
Public sector	1 353	1 393	1 527	1 597	1 867	2 219
General government						
Commonwealth	11 182	11 529	11 491	10 863	10 660	10 964
State	6 337	6 796	7 133	8 335	8 625	8 224
Higher education	(a)20 143	23 219	24 323	24 902	27 081	35 418
Private non-profit	812	945	1 016	1 023	1 072	1 120
Total	(a)53 258	60 080	62 442	65 926	68 345	78 538

(a) Estimates for Colleges of Advanced Education are excluded as they were not collected for this year.
Source: *Research and Experimental Development, All-Sector Summary, Australia (8112.0)*.

22.4 Expenditure on R&D — source of funds, 1990-91 (\$'000)

Sector	Source of funds					Total
	Commonwealth government	State government	Business enterprises	Private non-profit & other Australian(a)	Overseas	
Business enterprises						
Private sector	48 501	5 480	1 778 992	5 775	39 992	1 878 740
Public sector	5 611	3 319	194 491	208	—	203 629
General government						
Commonwealth	931 474	8 232	74 515	2 471	9 107	1 025 800
State	70 528	500 517	34 926	28 851	3 641	638 463
Higher education	1 190 555	29 556	29 917	73 438	9 334	1 332 799
Private non-profit	21 656	10 586	5 971	29 323	2 776	70 312
Total	2 268 325	557 691	2 118 812	140 065	64 850	5 149 743

(a) Includes funds provided via government levies.
Source: *Research and Experimental Development, All-Sector Summary, Australia (8112.0)*.

22.5 Expenditure on R&D — source of funds, 1992-93 (\$'000)

Sector	Source of funds					Total
	Commonwealth government	State government	Business enterprises	Private non-profit & other Australian(a)	Overseas	
Business enterprises						
Private sector	n.p.	n.p.	2 394 357	10 411	84 696	2 544 013
Public sector	n.p.	n.p.	229 180	7 479	—	243 913
General government						
Commonwealth	965 475	11 378	74 655	62 727	13 971	1 128 206
State	53 133	464 642	15 920	77 888	3 963	615 546
Higher education	1 544 754	34 771	41 684	63 488	10 512	1 695 209
Private non-profit	30 943	10 930	5 440	31 635	2 982	81 929
Total	2 648 093	529 735	2 761 235	253 628	116 125	6 308 817

(a) Includes funds provided via government levies.
Source: *Research and Experimental Development, All-Sector Summary, Australia (8112.0)*.

22.6 R&D by business enterprises

Industry of enterprise	Enterprises (no.)			Expenditure on R&D (\$m)			Person years of effort on R&D		
	1990-91	1991-92	1992-93	1990-91	1991-92	1992-93	1990-91	1991-92	1992-93
Mining (excl. services to mining)	44	47	60	94.6	149.5	149.6	807	1 010	1 047
Manufacturing									
Food, beverages & tobacco	100	96	120	86.7	110.1	136.2	961	993	1 116
Textiles, clothing & footwear	33	33	42	15.0	17.2	26.3	113	139	188
Wood, wood products & furniture	36	29	30	7.3	16.8	11.0	107	102	108
Paper, paper products, printing & publishing	30	27	28	35.9	54.9	43.5	254	249	245
Chemical, petroleum & coal products	241	218	235	201.7	201.9	226.3	1 956	1 828	1 801
Non-metallic mineral products	32	32	42	17.7	24.6	29.3	165	203	281
Basic metal products	60	55	53	174.8	179.5	290.9	1 291	1 235	1 329
Fabricated metal products	115	102	133	27.1	26.9	45.2	341	311	463
Transport equipment	106	99	110	171.8	223.2	307.3	1 583	1 530	1 689
Photographic, professional & scientific equipment	64	59	66	41.9	51.1	53.0	491	522	547
Appliances & electrical equipment	530	457	478	265.0	304.0	362.0	3 458	3 306	3 588
Industrial machinery & equipment	228	190	249	61.3	67.4	75.4	699	750	931
Miscellaneous manufacturing	114	100	123	35.2	50.3	60.5	395	389	452
Total manufacturing	1 689	1 497	1 709	1 141.5	1 327.7	1 666.9	11 813	11 558	12 737
Other industries									
Wholesale & retail trade	258	234	257	184.2	203.6	219.9	1 780	1 677	1 660
Finance	32	30	28	136.3	94.5	119.9	1 596	1 422	1 468
Property & business services	457	406	501	239.7	286.2	328.6	2 479	2 983	3 342
Research & scientific institutions	64	58	65	64.3	65.7	91.0	649	719	894
Other n.e.c.	141	126	146	221.7	192.5	212.1	1 783	1 699	1 663
Total other industries	952	854	997	846.3	842.5	971.5	8 287	8 499	9 027
Total all industries	2 685	2 398	2 766	2 082.4	2 319.7	2 787.9	20 907	21 066	22 811
Private sector contribution	2 633	2 353	2 724	1 878.7	2 103.4	2 544.0	19 040	18 979	20 592
Public sector contribution	52	45	42	203.6	216.4	243.9	1 867	2 088	2 219

Source: Research and Experimental Development, Business Enterprises (Inter Year Survey), Australia (8114.0).

Business sector

Business expenditure on R&D in Australia in 1992–93 (table 22.6) increased 20% over 1991–92 with a corresponding increase of 8% in human resources devoted to R&D.

Mining remained constant, Manufacturing expenditure increased 26% with a 10% increase in human resources. In the Other industries the respective increases were Property and business services 15% and 12%, Research and scientific institutions 39% and 24%, and Finance 27% and 3%. Wholesale and retail trade increased expenditure 8% although human resources decreased 1%.

Business expenditure on R&D represents 0.67% of Gross Domestic Product (GDP). After plateauing between 1988–89 and 1990–91, this ratio increased by 27% in the next two years (table 22.7).

22.7 Expenditure on R&D as a percentage of GDP — OECD countries (%)

	Business	Government
Japan	2.06	0.25
United States	1.82	0.30
Germany	1.72	0.38
France	1.44	0.52
United Kingdom	1.33	3.34
Finland	1.24	0.45
Canada	0.81	0.28
Italy	0.78	0.33
Ireland	0.69	0.14
Australia	0.67	0.43
Spain	0.47	0.18
Iceland	0.31	0.60

Source: Research and Experimental Development, Business Enterprises (Inter Year Survey), Australia (8114.0).

General government sector

Government expenditure on R&D carried out in Australia in 1992–93 was estimated to be \$1,744 million at current prices, an increase of 5% over the two years since 1990–91. At average 1989–90 prices, expenditure in 1992–93 decreased by 3% compared with 1990–91 (table 22.1).

The socio-economic objectives on which most government R&D expenditure was carried out were: Environment (\$281 million), Animal production and primary products (\$277 million), Plant production and primary products (\$247 million), Manufacturing (\$219 million) and Defence (\$201 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 (58%). Labour costs as a proportion of total R&D costs have increased slightly after decreasing for a number of years (table 22.8).

22.8 Expenditure on R&D by general government organisations, 1992-93 (\$'000)

Socio-economic objective	Type of expenditure				Total
	Land & buildings	Other capital expenditure	Labour costs	Other current expenditure	
Defence	8 134	29 133	124 203	39 838	201 309
Economic development					
Plant — production & primary products	13 620	15 445	151 567	66 859	247 490
Animal — production & primary products	14 213	15 509	163 233	84 249	277 204
Mineral resources (excl. energy)	2 619	4 971	38 670	24 392	70 652
Energy resources	1 252	2 358	23 878	24 485	51 973
Energy supply	690	1 342	10 050	6 143	18 225
Manufacturing	9 852	16 663	117 341	75 380	219 237
Construction	1 334	2 214	23 804	11 386	38 738
Transport	420	1 148	13 811	6 095	21 474
Information & communication services	1 075	3 153	19 083	9 570	32 881
Commercial services	230	247	2 952	1 774	5 204
Economic framework	611	1 566	15 537	4 897	22 611
Total economic development	45 915	64 618	579 928	315 229	1 005 689
Society					
Health	2 659	8 209	78 962	33 828	123 657
Education & training	116	656	4 992	1 141	6 906
Social development & community services	1 250	1 148	20 697	12 000	35 094
Total society	4 025	10 012	104 651	46 969	165 657
Environment					
Environmental knowledge	5 537	8 023	75 911	50 506	139 978
Environmental aspects of economic development	5 267	6 904	63 053	40 241	115 465
Environmental management & other aspects	649	1 791	15 012	8 178	25 630
Total environment	11 453	16 719	153 975	98 926	281 073
Advancement of knowledge					
Natural sciences, technologies & engineering	5 402	6 160	43 364	33 309	88 234
Social sciences & humanities	260	85	965	481	1 791
Total advancement of knowledge	5 661	6 245	44 329	33 789	90 025
Total	75 189	126 726	1 007 086	534 751	1 743 752

Source: Research and Experimental Development, General Government and Private Non-Profit Organisations, Australia (8109.0).

Government expenditure on R&D represents 0.43% 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 22.7).

22.9 Human resources devoted to R&D by general government organisations, 1992–93 (person years)

Socio-economic objective	Type of employee			Total
	Researchers	Technicians	Other supporting staff	
Defence	1 342	662	100	2 104
Economic development				
Plant — production & primary products	1 176	1 142	599	2 918
Animal — production & primary products	1 188	1 257	762	3 207
Mineral resources (excl. energy)	353	157	141	651
Energy resources	192	146	110	449
Energy supply	88	50	34	172
Manufacturing	974	617	501	2 092
Construction	180	114	98	392
Transport	125	54	62	241
Information & communication services	237	44	72	353
Commercial services	31	13	13	57
Economic framework	213	60	49	321
Total economic development	4 757	3 655	2 441	10 853
Society				
Health	1 066	815	216	2 097
Education & training	84	8	16	109
Social development & community services	225	61	95	381
Total society	1 376	884	327	2 586
Environment				
Environmental knowledge	653	445	296	1 394
Environmental aspects of economic development	529	360	246	1 136
Environmental management & other aspects	149	94	56	299
Total environment	1 332	899	598	2 829
Advancement of knowledge				
Natural sciences, technologies & engineering	429	247	120	796
Social sciences & humanities	16	3	2	21
Total advancement of knowledge	445	250	122	816
Total	9 252	6 350	3 587	19 189

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 1992 (\$1,695 million) was an increase of 27% over the two years since 1990. At average 1989–90 prices, expenditure increased by 23% over the same period (table 22.1).

Table 22.10 shows that the socio-economic objectives on which most higher education expenditure was carried out in 1992 were Advancement of knowledge—natural sciences,

technologies and engineering (\$422 million), Health (\$319 million) and Advancement of knowledge—social sciences and humanities (\$279 million). These three objectives accounted for 60% of expenditure.

Labour costs as a percentage of total expenditure fell from 71% in 1986 to 63% in 1990, but increased over the period 1990 to 1992 to 64%.

22.10 Expenditure on R&D by higher education organisations, 1992
(\$ million)

Socio-economic objective	Type of expenditure				Total
	Land & buildings	Other capital expenditure	Labour costs	Other current expenditure	
Defence	79	452	1 721	675	2 926
Economic development					
Plant — production & primary products	2 270	5 275	36 532	14 459	58 537
Animal — production & primary products	1 965	4 009	25 658	10 607	42 239
Mineral resources (excl. energy)	891	2 308	12 954	5 747	21 900
Energy resources	355	1 315	4 968	2 532	9 170
Energy supply	545	4 674	17 858	7 806	30 882
Manufacturing	2 402	13 285	42 056	17 274	75 018
Construction	1 199	5 280	22 519	9 515	38 513
Transport	188	572	2 771	1 005	4 536
Information & communication services	1 606	5 438	20 111	7 451	34 607
Commercial services	640	1 217	9 223	3 152	14 232
Economic framework	3 551	5 842	50 412	16 533	76 339
Total economic development	15 613	49 216	245 062	96 081	405 971
Society					
Health	9 331	28 783	215 397	65 464	318 975
Education & training	4 955	6 028	53 731	16 573	81 286
Social development & community services	3 045	3 928	35 385	11 373	53 731
Total society	17 331	38 739	304 513	93 409	453 992
Environment					
Environmental knowledge	4 625	8 970	51 607	19 578	84 780
Environmental aspects of economic development	1 635	3 142	23 337	7 685	35 800
Environmental management & other aspects	492	1 170	5 765	2 532	9 959
Total environment	6 752	13 282	80 710	29 795	130 539
Advancement of knowledge					
Natural sciences, technologies & engineering	18 329	56 915	261 108	85 964	422 316
Social sciences & humanities	17 644	22 351	186 488	52 983	279 466
Total advancement of knowledge	35 973	79 266	447 596	138 947	701 782
Total	75 747	180 954	1 079 602	358 907	1 695 209

Source: Research and Experimental Development, Higher Education Organisations, Australia (8111.0).

22.11 Human resources devoted to R&D by higher education organisations, 1992 (person years)

Socio-economic objective	Type of employee			Total
	Researchers	Technicians	Other supporting staff	
Defence	61	14	4	78
Economic development				
Plant — production & primary products	867	274	63	1 204
Animal — production & primary products	649	216	75	939
Mineral resources (excl. energy)	341	61	29	431
Energy resources	163	44	19	225
Energy supply	446	83	38	567
Manufacturing	1 378	314	103	1 794
Construction	683	87	38	808
Transport	94	19	11	124
Information & communication services	792	81	68	941
Commercial services	297	31	22	350
Economic framework	1 225	104	110	1 439
Total economic development	6 935	1 314	575	8 823
Society				
Health	4 204	1 411	572	6 187
Education & training	2 079	147	177	2 402
Social development & community services	1 325	119	88	1 531
Total society	7 607	1 677	837	10 120
Environment				
Environmental knowledge	1 376	250	144	1 770
Environmental aspects of economic development	625	63	43	731
Environmental management & other aspects	190	30	14	234
Total environment	2 190	343	201	2 734
Advancement of knowledge				
Natural sciences, technologies & engineering	6 104	1 274	558	7 936
Social sciences & humanities	5 018	236	471	5 726
Total advancement of knowledge	11 123	1 510	1 030	13 662
Total	27 914	4 858	2 646	35 418

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 1992–93 (\$82 million) increased 17% at current prices and 7% at average 1989–90 prices over 1990–91 (table 22.1).

Health is the leading socio-economic objective in terms of R&D expenditure, accounting for 73% or \$59 million of total R&D expenditure

in 1992–93 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 (59%) (tables 22.12 and 22.13).

22.12 Expenditure on R&D by private non-profit organisations, 1992-93
(\$'000)

Socio-economic objective	Type of expenditure				Total
	Land & buildings	Other capital expenditure	Labour costs	Other current expenditure	
Defence	—	—	—	—	—
Economic development					
Plant — production & primary products	—	17	120	64	201
Animal — production & primary products	—	141	611	190	942
Mineral resources (excl. energy)	—	10	20	33	64
Energy resources	—	1	29	13	43
Energy supply	—	3	88	94	184
Manufacturing	8	31	153	86	277
Construction	12	29	100	184	325
Transport	—	3	7	22	32
Information & communication services	—	3	7	11	21
Commercial services	—	44	948	687	1 678
Economic framework	7	142	727	368	1 244
Total economic development	27	424	2 809	1 751	5 011
Society					
Health	1 345	3 974	36 267	17 882	59 468
Education & training	—	200	3 166	2 951	6 317
Social development & community services	9	147	720	155	1 031
Total society	1 353	4 321	40 153	20 988	66 816
Environment					
Environmental knowledge	—	35	492	347	873
Environmental aspects of economic development	—	—	8	2	10
Environmental management & other aspects	—	11	198	149	358
Total environment	—	46	697	498	1 241
Advancement of knowledge					
Natural sciences, technologies & engineering	231	1 327	4 794	2 276	8 628
Social sciences & humanities	—	49	159	26	234
Total advancement of knowledge	231	1 376	4 953	2 302	8 862
Total	1 611	6 166	48 613	25 539	81 929

Source: *Research and Experimental Development, General Government and Private Non-Profit Organisations, Australia (8109.0)*.

**22.13 Human resources devoted to R&D by private non-profit organisations, 1992–93
(person years)**

Socio-economic objectives	Type of employee			Total
	Researchers	Technicians	Other supporting staff	
Defence	—	—	—	—
Economic development				
Plant — production & primary products	2	1	—	3
Animal — production & primary products	10	—	2	12
Mineral resources (excl. energy)	—	—	—	—
Energy resources	—	—	—	—
Energy supply	1	—	—	2
Manufacturing	2	—	1	3
Construction	1	—	1	2
Transport	—	—	—	—
Information & communication services	—	—	—	—
Commercial services	8	4	5	17
Economic framework	17	1	2	19
Total economic development	43	6	10	59
Society				
Health	393	273	198	865
Education & training	24	12	10	46
Social development & community services	12	1	4	17
Total society	428	286	212	927
Environment				
Environmental knowledge	13	—	2	15
Environmental aspects of economic development	—	—	—	—
Environmental management & other aspects	5	—	—	6
Total environment	18	—	2	21
Advancement of knowledge				
Natural sciences, technologies & engineering	45	50	15	110
Social sciences & humanities	2	1	1	3
Total advancement of knowledge	47	50	16	113
Total	536	343	241	1 120

Source: Research and Experimental Development, General Government and Private Non-Profit Organisations, Australia (8109.0).

Home computing in Australia

"These new services and technologies will change the way we live, work and play. Their effect on our business, our schools and universities, our hospitals, our government, and many other aspects of our daily lives, will be profound." (Prime Minister's April 1995 Statement, *A National Strategy for Information and Communications Services and Technologies*).

"The great benefit of the current 'information age' is not simply that there is a fast growing technical capacity to communicate or send information from anywhere to anywhere. Providing capacity is not sufficient to ensure that the community is better off. It does not indicate how that vast ability is best used within the limits of time, convenience and budget.... The development of publicly-available quantitative and qualitative indicators of emerging Australian demand patterns... will ensure that both winners and losers in any eventual broadband revolution can clearly and quickly be identified." (Bureau of Transport and Communications Economics 1994).

The two quotes above show the importance of Information Technology & Telecommunications (IT&T) developments to Australian industry and consumers generally. The importance of statistics to the overall process described by the Prime Minister was emphasised by the Bureau of Transport and Communications Economics (BTCE) in presenting its research into 'Communications Futures'. It indicated the need for better statistical information generally on IT&T and related issues. BTCE further indicated that the household sector, as consumers of IT, would have a significant influence in determining which IT&T goods and services predominate in the economy, affordability being one of the main issues determining the pace and direction of change.

In 1992-93 the ABS commenced work on a program of development to establish a set of official IT&T statistics for Australia. One of the outputs from this program is

Information Technology in Australia 1992-93 (8126.0). This publication reported on the characteristics of businesses which form the IT&T industries (i.e. the producers of IT goods and services including manufacturers, wholesalers and other service sector businesses).

A second output, *Household Use of Information Technology* (8128.0), is the result of a survey conducted in February 1994 and is the main focus of this article. Although the rapid uptake of technology by households will quickly render the results out of date, the data nevertheless will provide an important benchmark to which future statistics can be related.

The survey

The February 1994 household survey was conducted using the ABS's Population Survey Monitor, a flexible household survey vehicle used to conduct surveys of households for users on a fee for service basis. The survey is constrained by its relatively small sample size, returning 2,300 household observations, compared to the approximately about 30,000 in the ABS's monthly population sample. The sample permits data to be aggregated to State levels and, within States, to capital cities and remainder of State. The small number of observations indicates the need for some caution in interpreting the results.

Uptake of computers

From the February 1994 survey, it was estimated that there are about 6.4 million households in Australia. The total number of households frequently using a computer was estimated to be about 1.5 million. This represented an uptake by nearly 23% of households. Looked at from a potential demand point of view, the survey showed that there were close to 5 million households without a computer. (For the purpose of this survey, a computer was taken to include any portable or desktop computer, excluding dedicated games machines.)

Distribution of home computers

Table 22.14 below shows the estimated number of households in each State (divided between State capital cities and

remainder of State), and the number which frequently used a general purpose computer.

22.14 Number of households with computers, February 1994

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Total
State capital cities									
No. of households ('000)	1 194	1 156	492	454	512	63	25	103	3 999
No. with computers ('000)	353	322	122	104	114	14	7	37	1 071
Percentage with computers (%)	30	28	25	23	22	22	26	36	27
Remainder of State									
No. of households ('000)	985	466	625	90	83	110	30	—	2 389
No. with computers ('000)	169	62	104	8	23	19	5	—	389
Percentage with computers (%)	17	13	17	9	27	17	16	—	16
Total									
No. of households ('000)	2 179	1 622	1 117	544	594	173	56	103	6 388
No. with computers ('000)	522	384	226	112	136	33	11	37	1 460
Percentage with computers (%)	24	24	20	21	23	19	20	36	23

Source: Household Use of Information Technology (8128.0), unpublished and published data.

The figures above indicate that the incidence of computers in households was not evenly spread across States or within States. The Australian Capital Territory had the highest incidence at 35.8%. The incidence in other States was significantly lower overall, ranging from New South Wales with 23.9% down to Tasmania with 18.9%. Computers had penetrated into a far greater proportion of households in capital cities than in country areas. In total, capital cities had a 26.8% penetration rate while

country areas had a rate of only 16.3%. This difference was consistent across all States, except Western Australia where country households had a slightly higher penetration rate of 27.4%. This estimate is, however, subject to high relative standard errors and care should be used in drawing conclusions from it.

Family types

Table 22.15 analyses computer usage within households by family type.

22.15 Computer usage by family/household type, February 1994

Family/household type	No. of households ('000)	No. with computers ('000)	Percentage with computers (%)
Married, no dependants	1 494	216	14.5
Married, with dependants	2 314	883	38.1
Single, with dependants	509	104	20.4
Other families/households	2 070	258	12.4
Total	6 388	1 460	22.9

Source: Household Use of Information Technology (8128.0), unpublished and published data.

This table shows that households occupied by married couples with dependants were more likely to have a computer than other family types. 38.1% of these families used a

computer compared to 14.5% of married couples without dependants, 20.4% of households with single parent families and 12.4% of other types. On this basis, it is

reasonable to conclude that a large motivation to acquire household computing facilities arises from the presence of children.

This finding is supported by the main use given for home computers, namely education purposes (24.9%) followed closely by entertainment (22.5%). These uses might be expected to be more closely related to children's use of computers than adults' use.

Household income

Table 22.16 shows that, in general, the proportion of households with computers increased as household incomes increased. Of the 538,000 households which had an income of more than \$74,000, nearly 56% frequently used a computer. In households which had an income between \$57,001 and \$74,000, just over 38% used a computer. Most other income categories were fairly near the overall average of 22.9% except for those households which had an income of \$7,000 to \$16,000 where the percentages are very small (and are also subject to quite high standard errors).

22.16 Distribution of computers by household income

Household income	No. of households ('000)	No. of computers ('000)	Percentage with computers (%)
\$0 — \$7 000	162	29	17.6
\$7 001 — \$13 000	814	24	3.0
\$13 001 — \$16 000	533	43	8.1
\$16 001 — \$24 000	587	104	17.8
\$24 001 — \$30 000	554	105	18.9
\$30 001 — \$38 000	563	115	20.4
\$38 001 — \$46 000	559	162	29.0
\$46 001 — \$57 000	508	140	27.5
\$57 001 — \$74 000	538	205	38.1
More than \$74 000	538	301	55.9
Not stated	1 031	232	22.5
Total	6 388	1 460	22.9

Source: Household Use of Information Technology (8128.0), unpublished and published data.

Home based business

Of the 742,000 households which had a home based business, 46% had a computer. This compared with 23% for all households in Australia (table 22.16). For households without a home based business, only about 20% had a computer. A comparison of the

data in tables 22.16 and 22.17 shows that, for each household income range, a greater proportion of households with a home based business had a computer than those which did not, irrespective of the size of the household income.

22.17 Distribution of computers in households with a home based business

Household income Range	No. with home business ('000)	No. with computers ('000)	Percentage with computers (%)
\$0 — \$7 000	11	6	56.8
\$7 001 — \$13 000	13	—	—
\$13 001 — \$16 000	15	5	31.5
\$16 001 — \$24 000	29	17	56.8
\$24 001 — \$30 000	65	20	31.3
\$30 001 — \$38 000	49	23	48.0
\$38 001 — \$46 000	104	43	41.5
\$46 001 — \$57 000	58	38	65.2
\$57 001 — \$74 000	99	56	56.9
More than \$74 000	87	58	66.2
Not stated	213	78	36.6
Total	742	344	46.3

Source: Household Use of Information Technology (8128.0), unpublished and published data.

Clearly the existence of a home based business within a household was a significant motivation to acquire a home computer.

Use of modems

Modems enable access to computers and facilities outside the home (such as the Internet). Modems are an essential item of equipment for householders who decide to avail themselves of a range of services, many of which are in development presently. These will encompass a range of electronic services from information to entertainment and home shopping. There is also a trend

towards the convergence of data and voice services into a range of diverse everyday products.

At the survey date, a relatively small proportion of households with a computer had also acquired a modem. Only 17% of these households also had a modem. In total only about 4% of households had a modem.

Not surprisingly, modems were much more prevalent in households which had a home based business as can be seen from table 22.18 below.

22.18 Households with a modem

	Without home business	With home business	Total
Households with a computer ('000)	5 645	742	6 388
Households with a modem			
No. ('000)	168	80	248
Proportion (%)	3.0	10.8	3.9

Source: Household Use of Information Technology (8128.0), unpublished and published data.

Households which had a home business were three to four times more likely to have a modem. They accounted for about one third of households with a modem (i.e. 80,000 compared to 248,000). Nevertheless, only 10.8% of households which had a home business had a modem.

Of the 80,000 households which had a home based business and a modem, the main use of the computer was for 'business records' in 25% of households, 'other home

based business' in 28% of cases and for 'other reasons' in 47% of households. In all, just over half these households acquired the computing equipment for business reasons, 28% specifically for home based business use. For all households which had a computer, the main use given was 'educational purposes' (24.9%) followed by 'entertainment' (22.5%). 'Business records' was the main use given by only 12.5% of households and 'other home based business' was given by 4.8% of households.

The future

The survey sought information on the number of households expecting to spend money on computing equipment over the two year period from February 1994 to February 1996. Overall, 1.7 million households, or 26% of all households, indicated their intention to make some expenditure on computing equipment. Of these 0.8 million already had a computer and a further 0.9 million did not.

The following table focuses on households which reported they did not have a computer at the survey date but which intended to spend money on computing equipment. These households represent potential new entrants to the home computing market.

22.19 Potential new entrants to home computing

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Total
Households without computer equipment									
Total number ('000)	1 658	1 238	891	432	458	141	44	66	4 928
No. intending to spend on computer equipment ('000)	270	224	238	55	77	26	5	18	913
Proportion intending to spend on computer equipment (%)	16.3	18.1	26.8	12.6	16.9	1.9	1.1	27.7	18.5

Source: Household Use of Information Technology (8128.0), unpublished and published data.

In total, about 913,000 households without computing facilities at the survey date (February 1994) planned to spend on home computing equipment in the ensuing two years. These represent 18.5% of all households without computing facilities at the survey date (or 14.3% of all Australian households). Australian Capital Territory and Queensland appeared to be likely to have a greater take up rate than other States.

The survey suggests that there is the potential for substantial growth in the number of households with computers over the two years from February 1994. If most of these expenditure plans were to go ahead, the total number of households with home computer access would be in the order of 2 to 2.5 million by 1996.

Expenditure level

On the assumption that these expectations were realised, it is possible to make an estimate of the expenditure that was made by households in the 12 month period between February 1994 and February 1995 using the data in the above table. By taking the midpoint of each range, multiplying by the number of households, and summing across size ranges one can estimate that there would have been expenditure of

about \$1.6 or 1.7 billion. This is the equivalent of \$100 for every man, woman and child in Australia.

22.20 Planned expenditure in the 12 months from February 1994

Expenditure range	No. of households ('000)
\$1 — \$1 000	457
\$1 001 — \$3 000	382
\$3 001 — \$5 000	108
More than \$5 000	36
Don't know	60
Total	1 043

Source: Household Use of Information Technology (8128.0), unpublished and published data.

Of course, this figure does not take into account any influences which have occurred since February 1994 which may have caused households to alter expenditure plans (e.g. publicity surrounding revelations about the information superhighway, which the survey predates).

Whichever measure you use, it is impossible to come to any other conclusion than that the home computing market is large and expanding rapidly.

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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 1993–94 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 1994*, 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.

Financial institutions

Financial sector	599
Banks	600
Commonwealth legislation	600
State legislation	601
Commercial banks	601
Non-bank financial institutions	602
Commonwealth legislation	602
State legislation	602
Permanent building societies	603
Cooperative housing societies	605
Credit cooperatives	605
Authorised money market dealers	605
Money market corporations	607
Finance companies	608
General financiers	609
Life insurance	610
Superannuation funds and approved deposit funds	611
Cash management trusts	612
Public unit trusts	612
Common funds	613
Friendly societies	613
General insurance companies	614
Stock market	615
Financial activity	617
Money	617
Money supply measures	617
Interest rates	617

Foreign exchange	618
Lending by financial institutions	618
Personal finance	618
Commercial finance	619
Lease finance	620
Managed funds — the consolidated position	620
Bibliography	622

Financial institutions

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 Assets of financial institutions (\$'000 million)

	Deposit institutions			Life & superannuation funds	Other financial institutions	Consolidated total
	Reserve Bank	Banks	Other			
1989	24.2	236.1	135.9	143.5	75.7	546.0
1990	25.3	270.4	141.8	162.1	89.2	607.1
1991	29.4	299.4	135.9	174.8	94.6	639.5
1992	32.1	307.8	128.6	197.2	102.0	674.2
1993	37.4	329.9	118.2	212.1	104.5	703.5
1994	34.4	360.5	118.5	228.4	111.0	745.3
1995	37.6	381.4	131.6	238.8	129.0	803.1

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 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.'

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. The Australian government owns the majority of the shares on issue by this group of banks.

23.2 Reserve Bank of Australia — liabilities and assets (\$ million)

	June 1993	June 1994	June 1995
Liabilities			
Capital & reserve funds	533	633	634
Special reserve — IMF special drawing right	119	92	59
Deposits by banks			
Australian notes on issue	16 266	17 577	18 538
Non-callable deposits/Statutory Reserve Deposit accounts	2 923	3 271	3 545
Other	13	3	4
All other liabilities	16 558	12 037	14 070
Total	36 412	33 613	36 850
Assets			
Gold and foreign exchange(a)	19 844	19 911	19 432
Commonwealth govt. securities(b)	15 796	13 130	15 695
Loans, advances & bills discounted	94	97	90
All other assets	678	475	1 633
Total	36 412	33 613	36 850

(a) Includes currency at short call and International Monetary Fund drawing rights. (b) Includes Treasury bills and Treasury notes.

Source: Reserve Bank of Australia.

State legislation

In some States, there was also legislation for the incorporation of State government bodies which operate as banks. With the sale of the State Bank of New South Wales in December 1994, the Bank of South Australia in June 1995 and the announced sale of the Bank of Western Australia, only one bank, the Queensland Industry Development Corporation, remains under State government ownership.

Commercial banks

Commercial banking in Australia is conducted by 49 banks, including the development banks and 30 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 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 1994, banks operated 6,790 branches and 6,060 agencies. Of the total branches, 3,990 were located in metropolitan areas. Banking facilities were also available at 3,302 metropolitan agencies throughout Australia.

23.3 Banks — liabilities and assets (\$ million)

	June 1993	June 1994	June 1995
Liabilities			
Deposits repayable in Australia			
Residents	216 973	232 302	248 423
Non-residents	5 546	6 172	6 810
Total	222 519	238 477	255 233
Other borrowings			
Banks(a)	8 818	10 366	10 520
Other	16 358	15 394	15 565
Bill acceptance liabilities	49 531	49 421	52 472
All other \$A liabilities	11 192	14 092	15 890
Total resident \$A liabilities	290 308	309 885	332 326

For footnotes see end of table.

...continued

23.3 Banks — liabilities and assets — continued
(\$ million)

	June 1993	June 1994	June 1995
Liabilities — (continued)			
Total non-resident \$A liabilities	18 110	17 864	17 353
Total \$A liabilities	308 418	327 749	349 679
Foreign currency liabilities	43 381	47 947	47 096
Total liabilities(b)	351 799	375 697	397 775
Assets			
Coin, Australian notes & cash with Reserve Bank	1 356	1 452	1 643
Non-callable deposits with Reserve Bank	2 923	3 256	3 535
Public sector securities	25 484	28 179	28 545
Loans, advances & bills held	255 386	277 136	297 253
Bills receivable	48 659	48 901	26 956
Premises	5 961	5 591	411 862
All other \$A assets	25 545	28 144	26 956
Total resident \$A assets	362 214	389 497	411 862
Total non-resident \$A assets	3 097	3 162	3 787
Total \$A assets	365 311	392 659	415 649
Foreign currency assets	17 538	20 185	22 236
Total assets	382 849	412 844	437 885

(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 summary data on the assets and liabilities of each type 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 — liabilities and assets(a), 1993–94 (\$ million)

	Permanent building societies	Cooperative housing societies	Credit cooperatives	Authorised money market dealers	Money market corporations	Finance companies	General financiers	Total
Liabilities								
Share capital & reserves	844.3	205.3	1 152.7	114.2	2 321.8	3 621.8	868.6	9 128.7
Borrowings liabilities	10 950.4	1 754.1	11 190.8	6 644.9	39 211.3	24 860.4	7 661.2	102 273.1
Other liabilities	232.8	12.8	206.7	458.2	2 056.2	1 271.3	577.6	4 815.6
Total	12 027.5	1 972.2	12 550.2	7 217.3	43 589.3	29 753.5	9 107.5	116 217.4
Assets								
Amount owing on loans	9 526.0	1 928.4	9 413.0	35.7	24 232.9	24 899.9	7 113.7	77 149.6
Cash placements & deposits	729.0	36.5	359.5	262.7	6 067.4	2 113.6	191.3	9 760.0
Bills, bonds & other securities	1 447.9	..	2 184.5	6 872.1	9 740.2	1 082.7	695.8	22 023.2
Other assets	324.5	7.3	593.0	46.8	3 548.7	1 657.3	1 106.6	7 284.2
Total	12 027.5	1 972.2	12 550.2	7 217.3	43 589.3	29 753.5	9 107.4	116 217.4

(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 *Chapter 20, Construction and housing*.

**23.5 Permanent building societies — liabilities, assets,
expenditure and income(a)
(\$ million)**

	1991-92	1992-93(b)	1993-94(b)
Liabilities			
Share capital	4 445.2	205.6	198.3
Reserves	452.6	631.8	646.0
Deposits	15 273.0	10 648.6	10 412.8
Loans	1 859.8	332.1	537.6
Other liabilities	382.2	346.5	232.8
Total liabilities	22 412.8	12 164.6	12 027.5
Assets			
Amount owing on loans	17 209.9	9 567.1	9 526.0
Cash on hand	117.7	59.9	57.5
Deposits with			
Banks	985.7	605.0	509.1
Other	162.6	193.5	162.4
Bills, bonds, etc.	3 115.2	1 285.0	1 447.9
Physical assets	446.9	285.5	208.1
Other assets	374.8	168.5	116.4
Total assets	22 412.8	12 164.6	12 027.5
Expenditure			
Interest on shares & deposits	1 491.5	552.4	421.4
Interest on loans	175.6	29.2	38.7
Wages & salaries	232.3	156.0	130.8
Administrative expenses	190.8	123.3	123.3
Other expenditure	244.5	143.1	127.0
Total expenditure	2 334.7	1 004.0	841.2
Income			
Interest from loans	1 935.5	886.6	781.2
Income from investments	436.5	141.3	104.7
Other income	164.2	103.7	76.3
Total income	2 536.2	1 131.7	962.2

(a) At the balance dates of societies within the financial year shown. (b) The comparability of 1992-93 and 1993-94 data with earlier years has been affected by the change in status of two building societies which have become banks.

Source: For 1991-92, unpublished ABS data available under the title *Annual Statistics on Financial Institutions* (5661.0); for 1992-93 and 1993-94, 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 — liabilities, assets, expenditure and income(a) (\$ million)

	1991-92	1992-93	1993-94
Liabilities			
Share capital & reserves	49.1	41.8	205.3
Borrowings	2 478.5	1 989.3	1 754.1
Other liabilities	16.2	13.2	12.8
Total liabilities	2 543.8	2 044.4	1 972.2
Assets			
Loan outstanding	2 480.0	2 001.2	1 928.4
Placements & deposits	56.3	38.0	36.5
Physical assets	0.9	0.6	1.0
Other assets	6.5	4.6	6.4
Total assets	2 543.8	2 044.4	1 972.2
Expenditure			
Interest paid	288.1	199.2	164.7
Administrative expenses	31.4	30.6	26.3
Other expenditure	12.8	14.9	10.4
Total expenditure	332.3	244.8	201.4
Income			
Interest on loans	297.5	204.9	170.6
Other income	43.0	40.1	34.4
Total income	340.5	245.0	205.0

(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 — liabilities, assets, expenditure and income(a) (\$ million)

	1991-92	1992-93	1993-94
Liabilities			
Share capital	27.0	4.6	3.1
Reserves	797.0	974.3	1 149.6
Deposits	8 699.0	10 017.4	11 083.0
Loans	105.0	94.1	107.8
Other liabilities	110.0	201.5	206.7
Total liabilities	9 738.0	11 291.8	12 550.2
Assets			
Amount owing on loans(b)	7 522.0	8 455.6	9 413.0
Cash on hand	60.0	68.6	60.2
Deposits with			
Banks	263.0	198.5	235.1
Other	1 123.0	1 546.9	64.2
Bills, bonds, etc.	358.0	434.8	2 184.5
Physical assets	132.0	310.5	306.3
Other assets	280.0	276.9	286.7
Total assets	9 738.0	11 291.8	12 550.2
Expenditure			
Interest on			
Deposits	670.0	486.7	455.2
Loans	8.0	5.7	4.7
Wages & salaries	184.0	213.9	248.1
Administrative expenses	171.0	177.2	212.5
Other expenditure	228.0	169.8	182.9
Total expenditure	1 261.0	1 035.3	1 103.4
Income			
Interest from loans	1 145.0	956.1	1 013.0
Income from investments	160.0	111.0	121.6
Other income	81.0	103.3	136.3
Total income	1 386.0	1 170.4	1 271.1

(a) At the balance dates of credit cooperatives within the financial year shown. (b) Net of unearned interest and allowance for doubtful debts.

Source: For 1991-92, unpublished ABS data available under the title *Annual Statistics on Financial Institutions* (5661.0); for 1992-93 and 1993-94, 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.

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.

23.8 Authorised money market dealers — liabilities, assets, expenditure and income(a)
(\$ million)

	1991-92	1992-93	1993-94
Liabilities			
Paid up capital	66.9	61.7	67.7
Reserves	23.3	28.4	23.9
Accumulated surplus (net)	28.8	28.8	22.6
Subordinated loans	—	—	—
Borrowings from residents			
Banks	2 449.9	3 868.9	4 000.6
Other financial institutions	278.0	528.1	574.7
Government & public authorities	778.3	666.0	1 842.5
Other	303.8	285.8	222.0
Borrowings from non-residents	0.3	—	5.0
Other liabilities	27.2	152.2	458.2
Total liabilities	3 956.6	5 619.9	7 217.3
Assets			
Amount owing on loans	14.1	9.6	35.7
Cash & bank deposits	115.6	158.2	260.2
Other placements & deposits	0.4	5.9	2.5
Bills, bonds & other securities	3 801.8	5 425.2	6 872.1
Other financial assets	24.3	20.7	8.8
Other assets	0.4	0.2	38.1
Total assets	3 956.6	5 619.9	7 217.3
Expenditure			
Interest on borrowings	508.0	383.7	329.4
Wages & salaries	1.6	1.8	—
Administrative expenses	14.4	27.3	22.2
Other expenditure	4.8	3.7	2.0
Total expenditure	528.8	416.4	353.6
Income			
Interest on loans	0.6	—	—
Income from placements & other deposits	55.2	6.7	13.9
Income from holdings of			
Government & public authority securities	306.8	271.7	238.6
Other securities	170.5	127.7	6.1
Other income	12.7	28.0	103.5
Total income	545.7	434.1	362.0

(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).

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.

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.

23.9 Money market corporations — liabilities, assets, expenditure and income(a) (\$ million)

	1991-92	1992-93	1993-94
Liabilities			
Paid up capital	2 682.7	3 515.6	3 627.8
Reserves	814.6	1 683.7	1 480.7
Accumulated surplus (net)	-4 543.1	-3 492.2	-2 786.7
Subordinated loans	133.1	134.4	108.4
Borrowings from residents			
By issue of securities	2 448.3	2 401.3	3 043.8
Banks	8 536.0	7 341.7	6 433.5
Other financial institutions	3 318.4	2 662.4	2 446.2
Other	12 921.2	7 211.1	7 853.3
Borrowings from non-residents	17 884.5	20 136.4	19 326.2
Other liabilities	2 990.6	2 659.2	2 056.2
Total liabilities	47 186.3	44 253.7	43 589.3
Assets			
Amount owing on loans	25 583.1	22 942.4	22 689.1
Finance lease receivables	1 574.6	1 662.4	1 543.9
Cash & bank deposits	1 983.7	1 484.2	1 478.0
Other placements & deposits	4 259.1	3 234.6	4 589.4
Bills, bonds & other securities	9 863.3	10 597.8	9 740.2
Other financial assets	1 860.1	2 247.6	1 452.4
Other assets	2 062.5	2 084.7	2 096.3
Total assets	47 186.3	44 253.7	43 589.3
Expenditure			
Interest on borrowings	5 834.4	3 930.0	2 951.3
Wages & salaries	268.6	281.4	299.3
Administrative expenses	276.1	484.7	353.0
Other expenditure	1 421.5	1 631.5	914.2
Total expenditure	7 800.6	6 327.6	4 517.8
Income			
Interest on loans	3 391.7	2 153.7	1 832.5
Income from finance leasing	211.7	203.1	156.1
Income from placements & other deposits	1 194.0	795.3	563.6
Income from bills, bonds, etc.	1 193.7	994.7	749.8
Other income	1 306.6	1 657.1	1 554.7
Total income	7 297.7	5 803.9	4 856.8

(a) At the balance of 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).

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, installment credit to finance retail sales by others and/or other loans to individuals.

23.10 Finance companies — liabilities, assets, expenditure and income(a) (\$ million)

	1990-91	1991-92	1993-94
Liabilities			
Paid up capital	1 361.8	1 404.9	1 503.1
Reserves	1 129.2	1 999.7	2 068.9
Accumulated surplus (net)	566.7	-114.6	49.8
Subordinated loans	209.4	212.3	152.3
Borrowings from residents			
By issue of securities	17 286.6	16 062.3	13 802.2
Banks	4 901.1	2 810.0	4 491.0
Other	2 926.8	3 813.5	4 117.3
Borrowings from non-residents	3 343.4	2 455.7	2 297.7
Other liabilities	1 235.8	1 427.3	1 271.3
Total liabilities	32 960.7	30 071.0	29 753.5
Assets			
Amount owing on loans	20 392.2	18 993.2	17 739.9
Finance lease receivables	9 720.2	7 893.0	7 160.0
Cash & bank deposits	381.8	325.9	1 849.3
Other placements & deposits	477.0	475.3	264.3
Bills, bonds & other securities	1 037.3	1 226.8	1 082.7
Other financial assets	511.4	764.4	706.8
Other assets	440.8	392.5	950.5
Total assets	32 960.7	30 071.0	29 753.5
Expenditure			
Interest on borrowings	3 725.2	2 684.3	2 190.7
Wages & salaries	375.5	277.9	194.3
Administrative expenses	521.5	520.9	422.9
Other expenditure	1 396.2	1 812.8	881.9
Total expenditure	6 018.4	5 295.8	3 689.8
Income			
Interest on loans	3 802.3	2 773.7	2 332.6
Income from finance leasing	1 343.4	1 048.0	1 010.4
Income from placements & deposits	107.5	73.6	135.3
Income from bills, bonds, etc.	49.3	76.0	75.0
Other income	449.3	391.4	316.5
Total income	5 751.9	4 362.7	3 869.8

(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 installment 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 — liabilities, assets, expenditure and income(a) (\$ million)

	1991-92	1992-93	1993-94
Liabilities			
Paid up capital	516.6	549.0	600.2
Reserves	404.8	116.0	236.2
Accumulated surplus (net)	-71.5	-68.3	32.2
Subordinated loans	212.4	184.0	168.2
Borrowings from residents			
By issue of securities	1 011.2	266.3	1 778.6
Banks	2 541.9	2 330.5	2 267.6
Other financial institutions	2 936.6	2 814.5	1 114.6
Other	731.9	479.8	1 238.2
Borrowings from non-residents	1 174.6	1 511.7	1 094.1
Other liabilities	440.0	503.8	577.6
Total liabilities	9 898.5	8 687.3	9 107.5
Assets			
Amount owing on loans	4 799.6	4 389.8	4 398.0
Finance lease receivables	2 483.1	2 373.2	2 715.7
Cash & bank deposits	505.4	164.9	88.9
Other placements & deposits	164.5	154.2	102.4
Bills, bonds & other securities	689.8	634.2	695.8
Other financial assets	267.3	201.0	258.0
Other assets	988.8	770.0	848.6
Total assets	9 898.5	8 687.3	9 107.5
Expenditure			
Interest on borrowings	1 194.5	831.0	654.0
Wages & salaries	63.6	58.8	52.1
Administrative expenses	155.8	184.2	155.9
Other expenditure	405.0	329.7	328.8
Total expenditure	1 818.9	1 403.6	1 190.8
Income			
Interest on loans	724.6	667.4	390.6
Income from finance leasing	569.3	530.8	323.7
Income from placements & deposits	46.4	9.6	10.0
Income from bills, bonds, etc.	174.3	58.9	49.4
Other income	312.2	233.9	676.0
Total income	1 826.7	1 500.6	1 449.7

(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 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.

The major activity of life insurance offices 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 & endowment policies			
	Number of policies ('000)	Sum insured (\$m)	Business issued by single premiums (\$m)	Annual premiums (\$m)
Ordinary & industrial business				
New policies issued				
1992	641	40 208	1 310.0	403.0
1993	742	54 776	944.4	379.0
1994	756	57 992	1 084.9	387.2
Policies discounted or reduced(a)				
1992	923	33 388	..	528.9
1993	839	34 311	..	488.6
1994	817	33 882	..	449.2
Policies existing at end of				
1992	6 328	204 471	..	2 466.2
1993	6 231	224 936	..	2 357.5
1994	6 152	234 829	..	2 334.7
Superannuation business				
New policies issued				
1992	342	84 354	4 503.9	1 418.1
1993	441	91 895	6 241.5	1 350.2
1994	413	89 776	6 509.6	1 406.4
Policies discontinued or reduced(a)				
1992	231	51 554	..	1 494.6
1993	235	71 463	..	1 753.1
1994	313	65 891	..	1 882.9
Policies existing at end of				
1992	2 978	323 149	..	6 294.9
1993	3 184	343 581	..	5 892.0
1994	3 175	356 843	..	5 756.0

(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 two 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 *Superannuation Industry (Supervision) Act 1993* and the *Insurance and Superannuation Commissioner Act 1987*. The latter Act provides for the statutory office of the Insurance and Superannuation Commissioner.

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 *Superannuation Industry (Supervision) Act 1993* provides for compulsory superannuation contributions by

employers on behalf of their employees. Voluntary and compulsory 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 Assets of superannuation funds and approved deposit funds (\$ million)

	June qtr 1993	June qtr 1994	June qtr 1995
Assets in Australia			
Financial assets			
Cash & deposits	6 966	8 494	8 162
Loan & placements	9 992	8 419	9 244
Short-term debt securities	14 377	14 999	15 085
Long-term debt securities	39 477	40 563	42 981
Shares	45 838	54 332	56 383
Unit & other	12 593	14 379	17 510
Non-financial assets			
Land & buildings	13 525	13 595	14 612
Other	1 295	1 184	2 079
Assets overseas	26 327	29 456	31 828
Total	170 390	185 421	197 884
Superannuation funds	159 921	175 474	188 701
Approved deposit funds	10 469	9 947	9 183

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 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 1993	June 1994	June 1995
Number of trusts	19	21	20
Units in issue at end of period (\$m)	5 089.4	5 876.7	5 552.9
Weighted average net yield at end of period (% p.a.)	4.3	4.1	6.8
Assets (\$m)			
Cash & deposits with banks	1 343.9	2 510.4	1 335.8
All other deposits & loans	276.8	166.3	211.5
Bills of exchange purchased & held	2 270.0	1 808.8	2 891.0
Promissory notes purchased & held	1 166.4	1 242.2	1 132.4
Other assets	78.5	187.3	54.8
Total	5 135.6	5 914.9	5 625.5

Source: *Cash Management Trusts, Australia* (5635.0.40.001).

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

	June 1993	June 1994	June 1995
Unlisted			
Number of trusts	319	317	375
Units in issue at end of the period (\$m)	14 715.4	19 368.6	21 662.9
Assets (\$m)			
Cash & deposits	862.2	1 310.2	986.2
Shares	7 172.9	10 299.5	12 042.8
Property at the end of the quarter	1 513.2	1 506.0	1 783.6
Loan outstandings secured by mortgages on land & buildings	1 225.5	1 304.6	1 388.3
Other assets	6 170.5	7 880.6	7 741.8
Total	16 944.3	22 300.9	23 942.7

...continued

23.15 Public unit trusts — continued

	June 1993	June 1994	June 1995
Listed			
Number of trusts	38	46	46
Units in issue at end of the period (\$m)	9 326.4	12 756.1	13 362.6
Assets (\$m)			
Cash & deposits	426.5	784.8	572.1
Shares	586.9	1 195.3	1 153.1
Property at the end of the quarter	8 016.7	10 883.3	12 380.8
Loan outstandings secured by mortgages on land & buildings	168.9	479.9	437.1
Other assets	2 253.1	2 337.8	1 876.0
Total	11 452.2	15 681.1	16 419.1
Total			
Number of trusts	357	363	421
Units in issue at end of the period (\$m)	24 041.8	32 124.7	35 025.5
Assets (\$m)			
Cash & deposits	1 288.7	2 095.0	1 558.4
Shares	7 759.9	11 494.8	13 195.9
Property at the end of the quarter	9 529.9	12 389.4	14 164.4
Loan outstandings secured by mortgages on land & buildings	1 394.4	1 784.5	1 825.4
Other assets	8 423.6	10 218.2	9 618.0
Total	28 396.5	37 981.9	40 361.8

Source: Public Unit Trusts, Australia (5645.0.40.001).

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 1993	June 1994	June 1995
Assets in Australia			
Financial assets			
Cash & deposits	552	470	591
Loans & placements	950	1 089	1 126
Short-term debt securities	1 817	1 569	1 609
Long-term debt securities	119	159	171
Equities	975	1 300	1 357
Other	48	—	—
Non-financial assets			
Land & buildings	105	103	87
Other	—	—	—
Assets overseas	7	—	—
Total assets	4 573	4 884	5 102

Source: Common Funds, Assets and Liabilities, Australia (5657.0.40.001).

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% of the assets of all societies in Australia.

23.17 Friendly societies — assets (\$ million)

	June 1993	June 1994	June 1995
Financial assets			
Cash & deposits	1 636	2 805	2 428
Loans & placements	647	614	535
Short-term debt securities	3 488	2 534	3 249
Long-term debt securities	2 686	2 148	1 574
Equities	110	141	147
Other	107	230	163
Non-financial assets			
Land & buildings	315	349	365
Other	193	188	70
Total assets	9 182	9 009	8 531

Source: Friendly Societies, Assets and Liabilities, Australia (5660.0.40.001).

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.

23.18 General insurance — key statistics(a)
(\$ million)

Year(a)	Private sector insurers			Public sector insurers	Total
	Direct underwriters	Private sector reinsurers	Total		
Premium revenue					
1993	8 290	948	9 238	4 892	14 130
1994	9 693	1 214	10 907	4 798	15 705
Investment revenue					
1993	1 217	176	1 393	2 290	3 683
1994	1 331	372	1 703	1 250	2 953
Net claims, reinsurance & underwriting expenses					
1993	8 755	954	9 709	4 058	13 767
1994	10 209	1 218	11 427	5 851	17 278
Net profit after tax					
1993	397	104	501	2 327	2 828
1994	471	242	713	199	912
Total assets					
1993	22 484	3 922	26 406	21 207	47 613
1994	25 613	4 847	30 460	18 215	48 675
Total liabilities					
1993	16 095	2 433	18 528	20 773	39 301
1994	18 839	2 866	21 705	19 504	41 209

(a) Companies reporting on a variety of balance dates during the year ended 30 June. Comparable statistics not available prior to 1993.

Source: *Insurance and Superannuation Commission*.

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. 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 pieces of 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)

	1992-93	1993-94	1994-95
All ordinaries			
Index(a)	1 722.6	2 040.2	2 000.8
High	1 760.4	2 340.6	2 122.1
Low	1 357.2	1 755.3	1 823.3
All industrials			
Index(a)	2 665.7	2 984.7	3 012.1
High	2 701.2	3 525.9	3 095.3
Low	2 170.1	2 692.7	2 685.0
All resources			
Index(a)	1 002.7	1 331.1	1 235.7
High	1 043.0	1 442.8	1 433.2
Low	734.9	1 034.1	1 129.5

(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, followed by the sectors that hold the equities as assets.

**23.20 The equity market(a)
(\$'000 million)**

	Amounts outstanding at end of June quarter		
	1993	1994	1995
Total equities & units in trusts	381.4	543.2	559.1
Issued by			
Commonwealth public trading enterprises(b) & held by			
Private corporate trading enterprises	0.6	0.5	0.6
Commonwealth general government	21.4	20.9	23.4
Total	22.0	21.4	24.0
State & local public trading enterprises(b) & held by			
State & local public trading enterprises	0.1	—	—
Private corporate trading enterprises	0.3	—	—
State & local general government	7.7	101.5	103.9
Total	8.1	101.5	103.9
Private corporate trading enterprises(d) & held by			
Commonwealth public trading enterprises	0.3	0.3	0.2
Private corporate trading enterprises(e)	21.1	25.5	26.4
Banks	4.0	3.8	3.6
Non-bank deposit taking institutions	2.2	2.2	2.4
Life offices & superannuation funds	52.1	61.3	64.8
Other financial institutions	17.4	21.4	23.1
Households & unincorporated businesses	59.7	70.4	60.6
Rest of world	104.4	132.7	142.8
Total	261.3	317.6	323.9
Banks(c) & held by			
Banks(e)	4.2	2.7	2.8
Life offices & superannuation funds	6.8	8.4	9.1
Other financial institutions	1.9	2.5	2.7
Commonwealth general government	5.2	3.6	4.5
State & local general government	3.8	3.8	1.3
Households & unincorporated businesses	12.7	14.4	19.6
Rest of world	8.9	12.3	12.5
Total	43.6	47.8	52.5
Non-bank deposit taking institutions(d) & held by			
Private corporate trading enterprises	0.7	0.8	0.8
Banks	4.4	3.6	3.5
Life offices & superannuation funds	0.9	1.1	1.1
Other financial institutions	3.2	2.8	3.4
Households & unincorporated businesses	1.6	1.7	2.1
Rest of world	3.4	3.8	4.0
Total	14.2	13.8	14.9
Life offices & superannuation funds & held by			
Rest of world	2.0	2.1	1.7
Total	2.0	2.1	1.7
Other financial institutions(d) & held by			
Life offices & superannuation funds	4.7	6.2	7.2
Other financial institutions(e)	0.4	1.5	1.8
Commonwealth general government	0.2	0.2	0.2
State & local general government	0.5	0.5	0.6
Households & unincorporated businesses	19.0	25.2	23.8
Rest of world	3.4	4.1	4.2
Total	28.1	37.7	37.8
State & local general government(c) & held by			
State & local general government	2.0	1.2	0.3
Total	2.0	1.2	0.3

(a) Includes units in trusts. (b) Net asset values except for 1993 values for State and Local Public Trading Enterprises, which are book 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.

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		
	1993	1994	1995
\$1	42	21	20
\$2	70	69	49
\$5	297	313	332
\$10	591	634	614
\$20	1 813	1 795	1 848
\$50	6 284	6 837	7 193
\$100	7 269	7 907	8 482
Total	16 367	17 577	18 538
Increase (%)	7.8	7.4	5.5

Source: Reserve Bank of Australia.

23.22 Value of Australian decimal coin on issue (\$ million)

	Last Wednesday in June		
	1993	1994	1995
1c	24.2	23.5	23.1
2c	33.5	32.0	31.3
5c	87.3	92.9	98.6
10c	95.0	98.0	98.0
20c	131.4	134.0	136.0
50c	183.6	188.8	197.2
\$1	237.3	263.1	300.4
\$2	385.7	415.9	445.0
Total	1 178.0	1 248.1	1 329.6

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.

23.23 Money supply measures (\$ million)

	Money base(a)	M3(b)	Broad money(c)
June 1993	20 497	229 612	279 393
June 1994	22 025	246 234	295 836
June 1995	23 491	263 777	316 783

(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 most of the key rates offered to individuals and businesses in the market.

23.24 Key interest rates

	At 30 June		
	1993	1994	1995
Private			
Authorised dealers weighted average rate(a)	5.21	4.69	7.44
90-day bank bills(b)	5.25	5.45	7.55
Fixed bank deposits \$5 000 to \$100 000 — 1 year	5.20	5.55	7.10
Unofficial market rate(c)	5.25	4.75	7.50
Business indicator — large business(d)	9.40/9.50	8.95/9.00	10.60/10.75
Business indicator — small/medium business(d)	9.70/9.90	9.20/9.50	10.90/11.25
New bank housing loans	9.50	8.75	10.50
Commonwealth government securities 13 week			
Treasury notes	5.08	5.40	7.50
Treasury bonds			
3 year	6.15	8.55	8.20
5 year	6.85	9.05	8.60
10 year	7.35	9.65	9.20

(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 11am 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 and imports), for financing overseas borrowing and investments, for arbitrage (that is, taking advantage of short-term discrepancies in rates) and for speculation on possible exchange rate movements with a view to making a significant profit.

23.25 Exchange rates for the Australian dollar

	At 30 June		
	1993	1994	1995
United States dollar	0.6722	0.7291	0.7086
United Kingdom pound	0.4453	0.4721	0.4452
German deutschemark	1.1366	1.1591	0.9814
Japanese yen	71.5400	72.2000	60.0800
New Zealand dollar	1.2478	1.2258	1.0621

Source: Reserve Bank of Australia Bulletin.

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 *Chapter 20, Construction and housing*.

23.26 Lending commitments by financial institutions (\$ million)

Type of lending activity	1992-93	1993-94	1994-95
Housing finance	36 778.0	47 831.9	42 293.0
Personal finance	20 720.7	25 453.2	28 515.2
Commercial finance	86 967.2	95 139.4	104 674.2
Lease finance	4 914.1	5 846.2	6 572.4
Total	149 380.0	174 270.7	182 054.8

Source: See the tables which follow for each type of lending.

Personal finance

The following tables present statistics of commitments made by significant lenders (i.e. banks, credit cooperatives, finance companies, etc.) to lend to individuals for their own personal (non-business) use.

23.27 Personal finance commitments — type of lender(a) (\$ million)

Year	All banks	Finance companies	Credit cooperatives	Other lenders(b)	Total
1992-93	r13 435.6	r3 910.2	r2 459.9	914.9	r20 720.7
1993-94	17 351.3	4 572.4	2 662.1	867.4	25 453.2
1994-95	19 294.4	5 197.1	2 768.6	1 255.2	28 515.2

(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 — type of facility (\$ million)

Year	Fixed loan commitments	New & increased credit limits	Cancellations & reductions in credit limits	Revolving credit commitments	
				Total	Used
1992-93	r13 415.8	r7 304.8	r5 841.8	r33 938.9	r14 068.3
1993-94	16 556.2	8 897.0	7 203.4	37 792.1	16 060.7
1994-95	18 624.3	9 890.9	7 326.1	39 599.5	16 174.0

Source: *Personal Finance, Australia* (5642.0).

Commercial finance

The statistics in the following tables measure commitments, made by significant lenders (i.e. 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) — type of lender (\$ million)

Year	Banks	Finance companies	Money market corporations	Other lenders(b)	Total
1992-93	r69 477.8	r5 774.4	9 029.0	2 686.0	r86 967.2
1993-94	72 491.0	6 531.0	10 504.4	5 613.1	95 139.4
1994-95	75 345.6	7 873.7	14 800.6	6 654.3	104 674.2

(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 — purpose (\$ million)

Year	Construction	Purchase of real property	Purchase of plant & equipment	Re-financing	Other purposes	Total
1992-93	r2 933.3	r6 658.2	r4 289.4	6 945.1	r15 774.9	r36 600.8
1993-94	4 318.9	9 316.6	5 985.2	6 621.0	r20 341.2	46 582.9
1994-95	5 253.9	9 762.8	7 113.2	7 999.5	20 411.6	50 541.1

Source: *Commercial Finance, Australia* (5643.0).

Lease finance

The statistics in the following tables measure lease finance commitments made by significant lenders (i.e. 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 — type of lessor (\$ million)

Year	All banks	Money market corporations	Finance companies	General financiers	Total
1992-93	1 612.4	338.8	2 304.2	658.7	4 914.1
1993-94	1 818.5	450.1	2 706.9	870.7	5 846.2
1994-95	1 922.7	433.7	3 115.4	1 100.6	6 572.4

Source: *Lease Finance, Australia* (5644.0).

23.32 Lease finance commitments — type of goods leased (\$ million)

Type of goods	1992-93	1993-94	1994-95
Motor vehicles & other transport equipment	3 070.3	3 654.9	3 992.1
Construction & earth moving equipment	235.2	279.4	434.1
Agricultural machinery & equipment	182.7	238.5	243.5
Automatic data processing equipment & office machinery	1 754.6	805.5	988.1
Shop & office furniture, fittings & equipment	217.1	233.7	250.6
Other goods	1 454.2	634.2	663.9
Total	4 914.1	5 846.2	6 572.4

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 (i.e. after the cross investment between the institutions has been eliminated), by type of fund and by type of investment.

23.33 Assets of managed funds — type of fund, 30 June 1993

Type of fund	Assets		
	Cross invested	Consolidated	Total
Statutory funds of life offices	7 670	111 210	118 880
Superannuation & approved deposit funds	10 733	102 549	113 282
Public unit trusts	3 375	36 890	40 265
Friendly societies	19	8 512	8 531
Common funds	115	4 908	5 023
Cash management trusts	—	5 625	5 625
Total	21 913	269 693	291 606

Source: *Managed Funds, Australia* (5655.0).

23.34 Consolidated assets of managed funds (\$ million)

Type of investment	30 June 1993	30 June 1994	30 June 1995
Deposits, loans & placements	27 290	28 588	27 471
Short-term debt securities	27 218	28 660	29 378
Long-term debt securities	46 259	52 226	53 341
Equities & units in trusts	56 510	72 095	74 853
Land & buildings	30 140	29 352	32 261
Overseas assets	35 358	40 634	43 167
Other assets	7 927	7 899	9 233
Total	237 656	259 458	269 693

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. 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 1995, \$225,100 million, or 83.0% 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.

Professional fund managers also manage money from investors other than managed funds. At 30 June 1993, professional fund managers also invested \$25,400 million on behalf of government, general insurance and other sources.

23.35 Assets of managed funds managed by professional fund managers, 30 June 1995
(\$ million)

Type of fund	Unconsolidated assets of managed funds	Assets invested with professional fund managers
Statutory funds of life offices(a)	118 880	1 115 224
Superannuation & approved deposit funds	102 549	74 932
Public unit trusts	36 890	28 967
Friendly societies	8 512	6 146
Common funds	4 908	1 937
Cash management trusts	5 625	4 326
Total	269 693	225 099

(a) Includes both superannuation and ordinary business.

Source: *Managed Funds, Australia* (5655.0).

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Government finance

Introduction	625
The government sector	625
Finance of all levels of government combined	625
Commonwealth government finance	629
Outlays, revenue and financing transactions	629
Commonwealth government financial assistance to the States and Territories	630
Commonwealth government taxation	631
State/Territory government finance	633
Local government finance	636
Financial assets and liabilities	637
Bibliography	638

Government finance

Introduction

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

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, State Rail, 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 macroeconomic 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 1993–94, total government outlays for Australia totalled \$165,222 million, a rise of 1.0% over 1992–93, reflecting a rise of 5.2% in current outlays offset by a fall of 30.4% in capital outlays.

Total government revenue was \$199,031 million, a rise of 7.1% in 1993–94.

Of this, \$124,992 million (83.9%) 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 \$10,776 million in 1993-94, a drop of \$7,805 million over the previous year. The current deficit moved to a surplus of \$1,406 million, mainly reflecting higher revenue from taxation. The capital deficit moved from \$17,945 million in 1992-93 to \$12,184 million in 1993-94 mainly reflecting lower capital outlays by both the Commonwealth and State/Territory and local governments as a result of major asset sales.

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 1993-94.

24.1 Economic transactions of all levels of government combined (\$ million)

Item	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Current expenditure	57 619	64 547	70 750	75 621	79 394	82 779
Less sales of goods & services(a)	7 200	9 648	10 558	11 377	12 336	13 300
<i>Equals</i> final consumption expenditure	50 420	54 900	60 193	64 244	67 058	69 479
Interest payments	17 490	19 346	19 448	18 193	17 339	18 240
Subsidies paid to PTEs	2 838	2 625	3 654	3 163	2 841	2 821
Personal benefit payments	29 466	32 578	37 351	42 385	45 944	49 614
Other transfer payments	6 655	7 479	7 958	9 445	11 460	11 944
<i>Total current outlays</i>	106 868	116 927	128 604	137 430	144 643	152 098
Expenditure on new fixed assets	18 620	22 042	21 984	21 392	21 389	20 517
<i>Plus</i> expenditure on secondhand assets (net)	-1 683	-1 389	-2 124	-1 487	-2 438	-2 888
<i>Equals</i> gross fixed capital expenditure	16 937	20 653	19 860	19 905	18 951	17 629
Expenditure on land & intangible assets (net)	-595	140	101	52	-186	-767
Other capital outlays	1 159	3 666	2 221	2 680	93	-3 738
<i>Total capital outlays</i>	17 501	24 459	22 182	22 636	18 859	13 124
Total outlays	124 370	141 386	150 785	160 067	163 502	165 222
Taxes, fees & fines	106 009	115 201	118 891	114 642	117 662	124 992
Net operating surplus of public trading enterprises	9 897	9 655	11 071	10 750	11 506	13 111
Interest received	5 022	5 705	5 553	4 505	4 008	3 911
Other revenue	3 700	3 633	3 966	5 300	5 912	7 018
Total revenue	124 627	134 195	139 481	135 198	139 088	149 031
Increase in provisions						
For depreciation	4 973	5 341	4 850	6 470	5 833	5 415
Other	4 574	4 835	5 581	7 418	6 902	7 109
Total	399	506	-732	-948	-1 069	-1 694
Borrowing (net)	-488	-1 602	11 383	21 113	22 345	16 587
Other financing transactions	-4 743	3 451	-4 929	-2 714	-3 765	-5 811
Total financing	-257	7 191	11 304	24 869	24 414	16 191
Current deficit(b)	-21 692	-21 661	-14 874	-3 311	635	-1 408
Capital deficit(c)	16 461	23 510	21 328	21 710	17 945	12 184
Total deficit(d)	-5 231	1 849	6 454	18 399	18 581	10 776
Net financing requirement(e)	-5 231	1 849	6 454	18 399	18 581	10 776

(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)

Item	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Taxes on incomes						
Income taxes levied on individuals	47 433	49 881	50 061	46 687	47 328	50 323
Income taxes levied on enterprises	10 090	13 143	15 227	14 494	15 026	13 918
Income taxes levied on non-residents	898	1 097	1 095	903	850	1 026
<i>Total taxes on income</i>	<i>58 421</i>	<i>64 121</i>	<i>66 383</i>	<i>62 084</i>	<i>63 205</i>	<i>65 268</i>
Employers' payroll taxes						
General taxes (payroll tax)	4 723	5 210	5 802	5 904	5 807	6 035
Selective taxes (stevedoring industry charges)	28	35	51	54	45	40
Other employers' labour force taxes	974	1 139	1 207	1 288	1 305	1 382
<i>Total employers' payroll taxes</i>	<i>5 725</i>	<i>6 384</i>	<i>7 059</i>	<i>7 247</i>	<i>7 157</i>	<i>7 457</i>
Taxes on property						
Taxes on immovable property(a)	4 583	5 367	6 149	6 533	6 697	6 730
Estate, inheritance & gift duty	2	1	—	—	—	—
Taxes on financial & capital transactions	5 502	4 624	4 279	4 479	4 900	6 005
<i>Total taxes on property</i>	<i>10 086</i>	<i>9 992</i>	<i>10 429</i>	<i>11 012</i>	<i>11 597</i>	<i>12 736</i>
Taxes on provision of goods & services						
General taxes (sales tax)	9 402	10 132	9 365	9 113	9 252	10 414
Excises & levies						
Crude oil & LPG(b)	1 188	1 232	1 354	64	116	62
Other excises	8 079	8 655	9 005	9 417	9 560	10 751
Agricultural production taxes	617	587	1 238	735	633	647
Levies on statutory authorities	325	360	378	423	451	476
Total excises & levies	10 209	10 834	11 975	10 639	10 760	11 936
Taxes on international trade	3 831	4 026	3 377	3 350	3 336	3 231
Taxes on gambling	1 571	1 757	1 946	2 018	2 161	2 583
Taxes on insurance	895	1 104	1 176	1 295	1 427	1 561
<i>Total taxes on provision of goods & services</i>	<i>25 908</i>	<i>27 853</i>	<i>27 839</i>	<i>26 415</i>	<i>26 937</i>	<i>29 725</i>
Taxes on use of goods & performance of activities						
Motor vehicle taxes	2 167	2 421	2 366	2 491	2 801	3 128
Franchise taxes	1 771	2 392	2 620	2 842	3 394	3 999
Other taxes on use of goods & performance of activities	169	241	195	269	276	448
<i>Total taxes on use of goods & performance of activities</i>	<i>4 108</i>	<i>5 054</i>	<i>5 181</i>	<i>5 602</i>	<i>6 470</i>	<i>7 575</i>
Fees & fines						
Compulsory fees	1 420	1 403	1 542	1 745	1 755	1 683
Fines	342	395	458	537	542	549
<i>Total fees & fines</i>	<i>1 762</i>	<i>1 798</i>	<i>2 000</i>	<i>2 282</i>	<i>2 297</i>	<i>2 232</i>
Total taxes, fees & fines	106 009	115 201	118 891	114 642	117 662	124 992

(a) Partly estimated. (b) Oil produced (except from the North West Shelf production licence area) is not subject to crude oil excise duties from 1991-92 onwards. Amounts collected under petroleum resource rent taxes are included in TFFC 121 (Company income tax).

Source: *Government Finance Statistics, Australia (5512.0)* and *Taxation Revenue, Australia (5506.0)*.

24.3 Consolidation of outlays by level of government, 1993-94 (\$ million)

Item	State/ Territory govts	Local govts	Transfers between State/ Territory & local govts	State/ Territory & local govts	C'wealth govts	Transfers between C'wealth, State/ Territory & local govts	C'wealth, State/ Territory & local govts
Final consumption expenditure	40 651	4 683	—	45 334	24 145	—	69 479
Interest payments	11 101	664	42	11 723	8 267	1 750	18 240
Personal benefit payments	1 562	—	—	1 562	48 052	—	49 614
Subsidies paid	3 697	2	—	3 700	2 742	—	6 442
Current grants to —							
Non-profit institutions	4 786	7	—	4 793	2 000	—	6 793
Foreign governments & others	—	—	—	—	1 257	—	1 257
State/Territory or local governments	1 349	1	1 346	4	28 467	28 467	—
Total current grants	6 135	8	1 346	4 797	31 723	28 467	8 053
Other current outlays	78	107	105	80	235	44	271
Total current outlays	63 224	5 464	1 493	67 195	115 164	30 261	152 098
Gross fixed capital expenditure	11 222	2 595	—	13 818	3 811	—	17 629
Capital grants	790	3	337	456	4 094	3 879	670
Advances paid (net)	-2 189	10	-12	-2 167	-2 953	-1 314	-3 806
Other capital outlays	-691	98	—	-593	-777	—	-1 370
Total capital outlays	9 132	2 706	325	11 513	4 176	2 565	13 124
Total	72 357	8 169	1 818	78 708	119 340	32 826	165 222

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% in 1993-94 and comprised 25.3% of total government outlays.

24.4 Outlays of Commonwealth, State, Territory and Local governments (\$ million)

Purpose	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
General public services	9 467	10 032	11 540	14 632	13 352	13 976
Defence	7 189	7 734	8 326	8 607	9 010	9 237
Public order & safety	4 454	5 030	5 361	5 642	5 638	5 173
Education	15 761	17 226	18 870	20 416	21 469	21 972
Health	17 050	18 820	20 327	21 413	22 613	23 537
Social security & welfare	25 497	28 172	32 798	37 939	41 028	44 174
Housing & community amenities	3 835	4 872	4 462	4 581	4 638	3 874
Recreation & culture	3 282	3 585	3 681	3 856	4 035	3 761
Fuel & energy	3 113	3 334	3 216	3 370	2 629	1 695
Agriculture, forestry & fishing & hunting	2 688	5 852	5 102	2 755	3 475	2 438
Mining, manufacturing & construction	881	1 117	886	898	706	533
Transport & communications	11 557	14 298	13 895	13 206	13 177	11 852
Other economic affairs	2 540	2 605	3 034	3 735	4 489	4 870
Other purposes	17 052	18 707	19 286	19 015	17 243	17 591
Total	124 368	141 384	150 783	160 065	163 501	165 223

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 1993–94 are summarised in the tables 24.5 and 24.6.

24.5 Economic transactions of the Commonwealth government
(\$ million)

Item	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Current expenditure	18 834	21 471	23 937	25 570	27 302	28 395
Less sales of goods & services(a)	1 299	2 994	3 278	3 623	4 119	4 250
<i>Equals</i> final consumption expenditure	17 535	18 477	20 659	21 946	23 184	24 145
Interest payments	8 838	9 141	8 304	7 837	7 207	8 267
Subsidies paid to PTEs	333	344	1 223	685	480	464
Personal benefit payments	28 410	31 360	36 022	40 973	44 535	48 052
Current grants						
To private sector	2 100	2 283	2 239	2 694	3 088	3 257
To State governments	17 251	18 624	19 563	20 546	21 420	22 309
Onpassed through State governments	3 860	4 163	4 535	5 155	5 439	5 972
To local governments	81	97	97	155	190	185
Total current grants	23 292	25 167	26 434	28 550	30 137	31 723
Other transfer payments	1 477	1 574	1 623	1 622	2 482	2 513
<i>Total current outlays</i>	79 885	86 063	94 265	101 613	108 024	115 164
Expenditure on new fixed assets	5 137	6 869	6 874	6 519	5 035	4 486
<i>Plus</i> expenditure on secondhand assets (net)	-827	-404	-887	-483	-394	-675
<i>Equals</i> gross fixed capital expenditure	4 310	6 465	5 987	6 036	4 642	3 811
Expenditure on land & intangible assets (net)	111	167	87	58	3	-219
Capital grants to other governments	3 093	3 556	4 357	3 721	5 290	3 879
Advances paid to other governments (net)	-111	-485	-1 858	-2 753	-2 669	-1 314
Other capital outlays	603	3 188	2 393	492	796	-1 982
<i>Total capital outlays</i>	8 006	12 891	10 965	7 554	8 062	4 176
Total outlays	87 891	98 953	105 230	109 167	116 087	119 340
Taxes, fees & fines	83 963	91 235	93 315	87 385	88 615	93 061
Net operating surplus of public trading enterprises	3 444	3 223	4 278	3 419	4 056	4 877
Interest received	3 633	3 557	3 261	2 895	2 500	2 100
Other revenue	1 243	1 134	1 398	2 465	3 142	3 919
Total revenue	92 283	99 148	102 252	96 164	98 313	103 957

For footnotes see end of table.

...continued

24.5 Economic transactions of the Commonwealth government — *continued* (\$ million)

Item	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Increase in provisions						
For depreciation	2 077	2 075	2 418	3 834	2 863	2 898
Other	-141	-34	-924	-986	-917	-1 256
Total increase in provisions	1 936	2 041	1 493	2 848	1 946	1 642
Borrowing (net)	-4 079	-5 148	3 901	9 706	17 026	13 296
Other financing transactions	-2 249	2 913	-2 416	449	-1 198	444
Total financing	-4 392	-195	2 978	13 003	17 774	15 383
Current deficit(b)	-14 334	-15 102	-9 478	2 601	7 766	9 571
Capital deficit(c)	8 006	12 866	10 963	7 554	8 061	4 170
Total deficit(d)	-6 328	-2 236	1 485	10 155	15 828	13 740
Net financing requirement(e)	-6 328	-2 236	1 485	10 155	15 828	13 740

(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	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
General public services	5 470	5 773	6 331	6 958	7 373	7 761
Defence	7 189	7 732	8 325	8 606	9 009	9 236
Public order & safety	690	777	749	934	883	851
Education	6 205	6 674	7 551	8 482	9 260	9 877
Health	10 805	11 827	12 851	13 722	14 788	16 052
Social security & welfare	23 836	26 362	30 613	35 493	38 455	41 762
Housing & community amenities	1 251	1 306	1 037	1 223	1 328	1 088
Recreation & culture	1 061	1 097	1 116	1 105	1 099	1 033
Fuel & energy	529	522	583	694	708	606
Agriculture, forestry & fishing	1 520	4 627	3 916	1 532	2 114	1 128
Mining, manufacturing & construction	481	655	493	544	551	230
Transport & communications	5 417	7 433	7 064	6 463	6 047	4 692
Other economic affairs	1 490	1 553	2 048	2 473	3 115	3 157
Other purposes	21 946	22 613	22 553	20 938	21 352	21 869
Total	87 889	98 951	105 229	109 165	116 085	119 340

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, 1993–94 (\$ million)

Purpose	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Current									
General public services, defence, public order & safety	140	106	60	41	39	12	3	3	406
Education	2 078	1 661	1 045	524	600	160	75	75	6 219
Health	1 464	1 103	839	476	516	146	81	71	4 697
Social security	391	321	167	117	87	38	10	12	1 144
Housing & community amenities	3	2	2	1	1	6	1	7	22
Recreation & culture	—	—	11	—	—	—	—	—	11
Fuel & energy	3	—	—	—	—	—	—	—	3
Agriculture, forestry, fishing & hunting	27	7	36	19	11	13	8	—	121
Transport & communications	158	126	96	32	74	22	10	11	530
Other purposes	4 263	3 167	2 913	1 552	1 654	613	815	337	15 314
Total	8 527	6 493	5 168	2 764	2 982	1 011	1 004	518	28 467
Capital									
General public services, defence, public order & safety	—	—	—	—	—	—	—	—	—
Education	263	181	114	50	71	20	14	9	721
Health	102	3	1	1	3	—	—	—	111
Social security	9	15	10	4	7	2	1	1	49
Housing & community amenities	360	230	189	98	113	29	38	19	1 077
Recreation & culture	52	1	3	1	1	1	—	—	59
Fuel & energy	—	—	—	—	—	—	—	—	—
Agriculture, forestry, fishing & hunting	4	6	6	4	1	—	—	—	20
Transport & communications	458	232	208	79	91	32	30	—	1 131
Other purposes	173	144	66	164	45	38	45	35	711
Total	1 422	812	597	401	333	122	129	64	3 879

Source: Unpublished ABS Government Finance data.

Commonwealth government taxation

Table 24.8 shows Commonwealth government taxation revenue classified by type of tax for the six years ending 1993–94.

24.8 Commonwealth government taxes, fees and fines(a) (\$ million)

	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94
Taxes on income						
Income taxes levied on individuals						
Personal income tax	46 228	48 285	48 810	45 601	46 146	48 986
Mining withholding tax		1	1	2	2	2
Prescribed payments by individuals	1 203	1 595	1 250	1 084	1 181	1 335
Total income taxes levied on individuals	47 433	49 881	50 061	46 687	47 238	50 323
Income taxes levied on enterprises						
Company income tax(b)	9 994	12 651	14 088	13 269	13 406	12 612
Income tax paid by superannuation funds	7	376	1 053	1 139	1 522	1 191
Prescribed payments by enterprises	105	139	109	94	103	116
Total income taxes levied on enterprises	10 106	13 166	15 250	14 502	15 031	13 918
Income taxes levied on non-residents						
Dividend withholding tax	97	115	109	50	88	84
Interest withholding tax	638	799	790	651	557	467
Other income tax levied on non-residents	162	183	196	202	205	476
Total income taxes levied on non-residents	898	1 097	1 095	903	850	1 026
Total taxes on income	58 436	64 144	66 407	62 093	63 210	65 268

For footnotes see end of table.

...continued

24.8 Commonwealth government taxes, fees and fines(a) — continued (\$ million)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Employers' payroll taxes						
General taxes (payroll tax)	51	—	—	—	—	—
Selective taxes (stevedoring industry charges)	28	35	51	54	45	40
Other employers labour force taxes						
Fringe benefits tax	974	1 139	1 207	1 288	1 305	1 377
Superannuation guarantee charge	—	—	—	—	—	5
Total other employers labour force taxes	974	1 139	1 207	1 288	1 305	1 382
<i>Total employers' payroll taxes</i>	1 053	1 174	1 258	1 343	1 350	1 422
Taxes on property						
Taxes on immovable property	58	—	—	—	—	—
Estate, inheritance & gift duties	1	—	—	—	—	—
Taxes on financial & capital transactions						
Stamp duties	60	—	—	—	—	—
Financial institutions' transaction taxes	358	378	229	3	1	—
Government borrowing guarantee levies	9	9	18	12	19	10
Total taxes on financial & capital transactions	427	387	247	15	19	11
<i>Total taxes on property</i>	486	387	247	15	19	11
Taxes on provision of goods & services						
General taxes (sales tax)	9 402	10 132	9 365	9 113	9 252	10 414
Excises & levies						
Excises on crude oil & LPG	1 188	1 232	1 354	64	116	62
Other Excise Act duties	8 079	8 655	9 005	9 417	9 560	10 751
Agricultural production taxes	606	575	1 228	723	618	633
Total excises & levies	9 874	10 462	11 587	10 204	10 294	11 446
Taxes on international trade						
Customs duties on imports	3 752	3 954	3 319	3 299	3 331	3 226
Customs duties on exports	54	61	54	49	2	1
Agricultural produce export taxes	24	11	3	2	3	3
Total taxes on international trade	3 831	4 026	3 377	3 350	3 336	3 231
Taxes on gambling	21	—	—	—	—	5
Taxes on insurance	5	—	—	—	—	—
<i>Total taxes on provision of goods & services</i>	23 132	24 620	24 329	22 667	22 882	25 097
Taxes on use of goods & performance of activities						
Motor vehicle taxes	38	21	18	19	21	24
Franchise taxes	21	—	—	—	—	—
Other taxes on use of goods etc. n.e.c.						
Other taxes on use of good etc.	2	2	3	2	12	39
Broadcast & TV station licences	108	177	125	135	101	231
Departure tax	38	39	38	82	93	112
Total other taxes on use of goods etc. n.e.c.	149	217	166	219	206	382
<i>Total taxes on use of goods & performance of activities</i>	208	238	183	238	227	406
Fees & fines						
Compulsory fees, of which						
Aviation en route charges	320	314	409	433	286	237
Light dues & navigation Act charges	40	41	42	43	41	44
Total compulsory fees	643	663	864	1 014	910	827
Fines	5	8	27	15	16	32
<i>Total fees & fines</i>	647	671	891	1 029	926	859
Total taxes, fees & fines	83 963	91 235	93 315	87 385	88 615	93 061

(a) 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. (b) Excludes income taxes paid by public trading enterprises.

Source: Government Finance Statistics, Australia (5512.0) and Taxation Revenue, Australia (5506.0).

State/Territory government finance

24.9 Economic transactions of State and Territory governments (\$ million)

Item	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Current expenditure	33 664	37 367	40 498	43 397	45 098	47 211
Less sales of goods & services(a)	4 021	4 688	5 112	5 488	5 822	6 561
<i>Equals</i> final consumption expenditure	29 642	32 679	35 385	37 909	39 276	40 651
Interest payments	10 276	11 732	12 543	11 854	11 430	11 101
Subsidies paid to PTEs	2 501	228	2 427	2 475	2 356	2 355
Current grants to other governments	885	929	952	1 290	1 328	1 349
Other transfer payments	4 141	4 877	5 487	6 574	7 337	7 769
<i>Total current outlays</i>	47 446	52 496	56 795	60 102	61 727	63 224
Expenditure on new fixed assets	10 807	12 217	11 977	11 939	13 027	13 117
Plus expenditure on secondhand assets	-832	-1 078	-925	-740	-1 705	-1 895
<i>Equals</i> gross fixed capital expenditure	9 975	11 139	11 052	11 199	11 322	11 222
Expenditure on land & intangible assets	-650	-201	-74	-83	-277	-646
Capital grants to other governments	471	499	578	265	307	337
Other capital outlays	568	609	-177	2 157	-717	-1 781
<i>Total capital outlays</i>	10 364	12 045	11 380	13 539	10 636	9 132
Total outlays	57 810	64 541	68 174	73 640	72 363	72 357
Taxes, fees & fines	18 385	19 953	21 120	22 564	24 084	26 776
Net operating surplus of public trading enterprises	5 801	5 969	6 284	6 964	7 160	7 715
Interest received	3 381	3 923	4 096	3 401	3 159	3 193
Grants received						
For own use	20 164	22 078	23 600	23 952	25 924	25 838
For onpassing	4 089	4 347	4 818	5 462	5 869	6 241
Total grants received	24 253	26 425	28 418	29 414	31 793	32 079
Other revenue	2 253	2 507	2 414	2 645	2 715	2 925
Total revenue	54 073	58 778	62 332	64 988	68 912	72 687
Increase in provisions						
For depreciation	2 327	2 554	2 900	3 286	3 665	4 106
Other	494	539	190	35	-153	-438
Total increase in provisions	2 821	3 093	3 091	3 321	3 512	3 667
Advances received (net)	-113	-488	-1 856	-2 735	-2 710	-1 401
Borrowing (net)	3 441	2 695	7 254	11 464	6 694	3 419
Other financing transactions	-2 412	463	-2 647	-3 398	-4 045	-6 016
Total financing	3 737	5 763	5 842	8 652	3 451	-331
Current deficit(b)	-5 676	-5 118	-3 967	-4 006	-5 064	-8 687
Capital deficit(c)	6 592	7 789	6 718	9 337	5 003	4 689
Total deficit(d)	916	2 670	2 751	5 331	-61	-3 998
Net financing requirement(e)	1 029	3 158	4 607	8 066	2 649	-2 597

(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).

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.

24.10 Outlays of State and Territory governments (\$ million)

Purpose	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
General public services	3 059	3 217	4 030	6 493	4 888	5 110
Public order & safety	3 787	4 315	4 682	4 790	4 828	4 953
Education	14 038	15 431	16 728	17 763	18 635	19 021
Health	9 281	10 397	11 145	11 550	11 930	12 141
Social security & welfare	1 942	2 174	2 548	2 903	3 138	3 334
Housing & community amenities	2 608	3 388	3 064	3 136	3 274	2 558
Recreation & culture	1 238	1 478	1 502	1 711	1 727	1 573
Fuel & energy	2 328	2 014	2 299	2 438	1 635	1 001
Agriculture, forestry & fishing	1 263	1 357	1 316	1 436	1 604	1 428
Mining, manufacturing & construction	310	378	290	269	64	196
Transport & communications	5 992	6 597	6 744	6 789	7 614	6 988
Other economic affairs	1 029	1 022	950	1 270	1 385	1 707
Other purposes	10 932	12 771	12 876	13 091	11 640	12 348
Total	57 808	64 540	68 172	73 638	72 361	72 358

Source: Government Finance Statistics, Australia (5512.0).

24.11 State and Territory government taxes, fees and fines (\$ million)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Employers' payroll taxes	4 672	5 210	5 802	5 904	5 810	6 035
Taxes on property						
Taxes on immovable property						
Land taxes	956	1 295	1 602	1 774	1 492	1 389
Municipal rates	—	56	66	72	78	83
Metropolitan improvement rates	47	52	59	69	68	75
Property owners' contributions to fire brigades	88	92	105	111	119	124
Taxes on immovable property n.e.c.	9	97	111	116	299	261
Total taxes on immovable property	1 100	1 592	1 944	2 141	2 056	1 932
Estate inheritance & gift duty	1	1	—	—	—	—
Taxes on financial & capital transactions						
Stamp duties	4 569	3 645	2 926	3 027	3 341	4 165
Financial institutions' taxes	469	554	1 057	1 388	1 483	1 750
Government borrowing guarantee levies	37	38	49	49	57	79
Total taxes on financial & capital transactions	5 075	4 237	4 032	4 464	4 881	5 994
<i>Total taxes on property</i>	6 175	5 830	5 976	6 606	6 937	7 927
Taxes on provision of goods & services						
Excises & levies						
Agricultural production taxes	11	11	10	12	15	14
Levies on statutory corporations	325	360	378	423	451	476
Total excises & levies	336	371	388	436	466	490
Taxes on gambling						
Taxes on government lotteries	395	448	506	545	524	557
Taxes on private lotteries	259	304	325	325	318	316
Poker machine taxes	239	278	295	315	502	752
Casino taxes	75	78	93	97	115	149
Race betting taxes	574	639	651	646	683	703
Taxes on gambling n.e.c.	7	10	76	90	94	100
Total taxes on gambling	1 549	1 757	1 946	2 018	2 236	2 578
Taxes on insurance						
Insurance companies' contributions to fire brigades	303	359	363	382	399	409
Third party insurance taxes	22	149	137	141	152	205
Taxes on insurance n.e.c.	566	596	676	772	877	947
Total taxes on insurance	890	1 104	1 176	1 295	1 427	1 561
<i>Total taxes on provision of goods & services</i>	2 775	3 233	3 510	3 748	4 129	4 628
Taxes on use of goods & performance of activities						
Motor vehicle taxes						
Vehicle registration fees & taxes	1 242	1 342	1 402	1 606	1 765	1 901
Stamp duty on vehicle registration	651	728	641	626	750	872
Drivers' licences	190	268	251	184	187	240
Road transport & maintenance taxes	47	63	56	55	78	91
Total motor vehicle taxes	2 129	2 401	2 349	2 472	2 780	3 104
Franchise taxes						
Gas franchise taxes	10	11	11	15	15	18
Petroleum products franchise taxes	680	1 016	1 061	1 128	1 174	1 346
Tobacco franchise taxes	564	818	944	1 085	1 575	1 975
Liquor franchise taxes	496	546	603	615	630	661
Total franchise taxes	1 751	2 392	2 620	2 842	3 394	3 999
Other taxes on use of goods etc.	20	23	30	50	70	66
<i>Total taxes on use of goods & performance of activities</i>	3 900	4 816	4 998	5 364	6 243	7 169
Fees & fines						
Compulsory fees	586	546	481	500	595	579
Fines	276	318	354	442	448	437
<i>Total fees & fines</i>	862	865	834	942	968	1 016
Total taxes, fees & fines	18 385	19 953	21 120	22 564	24 084	26 776

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.

Local governments also 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	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Current expenditures	5 122	5 743	6 351	6 693	7 033	7 173
Less sales of goods & services(a)	1 879	2 000	2 203	2 304	2 434	2 490
<i>Equals</i> final consumption expenditure	3 242	3 743	4 148	4 389	4 599	4 683
Interest payments	958	1 070	1 128	918	831	664
Other transfer payments	179	160	147	143	193	117
<i>Total current outlays</i>	4 379	4 973	5 423	5 451	5 623	5 464
Gross fixed capital expenditure	2 653	3 050	2 821	2 670	2 987	2 595
Expenditure on land & intangible assets (net)	-55	173	88	77	88	98
Other capital outlays	-4	152	-4	-9	14	12
<i>Total capital outlays</i>	2 594	3 375	2 905	2 738	3 089	2 706
Total outlays	6 973	8 348	8 328	8 189	8 713	8 169
Taxes, fees & fines	3 677	4 037	4 480	4 703	4 969	5 155
Net operating surplus of public trading enterprises	655	466	514	373	298	520
Interest received	594	833	721	528	419	337
Grants received	1 501	1 467	1 675	1 808	2 200	1 942
Other revenue	367	309	345	343	328	320
Total revenue	6 794	7 111	7 734	7 754	8 213	8 273
Increase in provisions	213	205	261	294	365	104
For depreciation	167	204	259	292	365	104
Borrowing (net)	352	739	155	11	-183	-350
Other financing transactions	-394	135	187	150	338	147
Total financing	179	1 238	594	435	499	-104
Current deficit(b)	-1 825	-1 558	-1 562	-1 825	-2 006	-2 068
Capital deficit(c)	1 791	2 591	1 896	1 966	2 140	1 860
Total deficit(d)	-34	1 033	333	141	134	-208
Net financing requirement(e)	-42	875	342	162	155	-203

(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 (\$ million)

Purpose	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
General public services	958	1 179	1 375	1 423	1 382	1 392
Public order & safety	132	105	116	120	127	128
Education	28	35	36	38	45	44
Health	148	153	163	167	162	160
Social security & welfare	256	281	311	358	409	394
Housing & community amenities	1 126	1 213	1 335	1 319	1 421	1 400
Recreation & culture	1 071	1 082	1 143	1 159	1 352	1 323
Fuel & energy	445	848	405	324	391	27
Agriculture, forestry & fishing	21	15	16	17	16	12
Mining, manufacturing & construction	91	107	119	117	114	114
Transport & communications	1 730	1 966	2 078	2 102	2 252	2 220
Other economic affairs	68	79	70	72	81	72
Other purposes	900	1 287	1 161	974	961	884
Total	6 973	8 348	8 328	8 189	8 714	8 169

Source: Government Finance Statistics, Australia (5512.0).

24.14 Local government taxes, fees and fines(a) (\$ million)

Purpose	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Taxes on property	3 424	3 775	4 205	4 392	4 641	4 798
Fees & fines	253	262	275	311	328	356
Compulsory fees	192	194	198	231	250	277
Fines	61	68	77	80	77	79
Total taxes, fees & fines	3 677	4 037	4 480	4 703	4 969	5 155

(a) 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 all levels of government combined(a) (\$ million)

	At 30 June 1993			At 30 June 1994		
	Liabilities	Financial assets	Net financial position(b)	Liabilities	Financial assets	Net financial position(b)
Cash & deposits	2 789	8 599	..	2 799	9 642	..
Advances	—	5 694	..	—	5 076	..
Other lending/borrowing(c)	186 313	26 078	..	203 702	30 496	..
Total	189 102	40 371	148 730	206 577	45 214	161 362

(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 1993			At 30 June 1994		
	Liabilities	Financial assets	Net financial position(b)	Liabilities	Financial assets	Net financial position(b)
Cash & deposits	299	2 284	..	340	1 398	..
Advances	..	20 954	..	—	19 615	..
Other lending/borrowing(c)	95 781	4 218	..	108 029	3 693	..
Total	96 080	27 456	68 624	108 370	24 706	83 664

(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 1993			At 30 June 1994		
	Liabilities	Financial assets	Net financial position(b)	Liabilities	Financial assets	Net financial position(b)
Cash & deposits	4 516	6 350	..	5 099	8 275	..
Advances	18 002	4 097	..	16 664	3 593	..
Other lending/borrowing(c)	95 423	27 388	..	101 060	33 257	..
Total	117 941	37 835	80 106	122 823	45 125	77 699

(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)*.

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National accounts

Introduction	641
Measurement of GDP	642
Constant price or 'real' GDP	643
Implicit price deflators	644
National income, expenditure and product accounts	644
Domestic production account	644
National income and outlay account	647
National capital account	649
Overseas transactions account	651
State accounts	653
The value of unpaid work	655
Input-output tables	658
Basic structure	658
Relationship to the national income and expenditure accounts	658
Further information	658
Financial accounts	658
Bibliography	659

National accounts

Introduction

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	127 162	127 297	127 630	127 363
1963-64	136 164	136 200	136 239	136 201
1964-65	145 787	144 831	145 931	145 516
1965-66	148 957	148 175	147 849	148 327
1966-67	158 753	158 398	157 089	158 080
1967-68	164 674	164 937	164 065	164 559
1968-69	179 162	178 982	179 278	179 141
1969-70	189 206	188 338	188 639	188 728
1970-71	198 279	198 467	196 790	197 845
1971-72	207 872	207 196	202 882	205 983
1972-73	215 868	214 453	209 317	213 213
1973-74	225 894	221 371	225 006	224 090
1974-75	230 163	226 723	228 647	228 511
1975-76	236 931	236 684	232 507	235 374
1976-77	243 792	243 963	241 157	242 971
1977-78	246 302	245 444	243 879	245 208
1978-79	260 023	261 276	255 828	259 042
1979-80	265 427	267 540	261 980	264 982

...continued

**25.1 Gross domestic product at average
1989–90 prices — continued**
(\$ million)

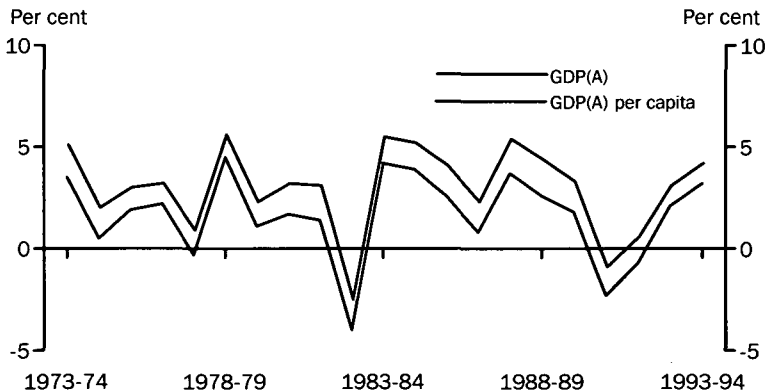
Year	GDP(I)	GDP(E)	GDP(P)	GDP(A)
1980–81	274 782	275 156	270 715	273 551
1981–82	281 042	284 110	281 323	282 158
1982–83	276 235	277 904	271 179	275 106
1983–84	293 003	293 065	284 701	290 256
1984–85	307 904	306 560	301 536	305 333
1985–86	319 925	320 205	313 032	317 721
1986–87	328 206	328 163	318 906	325 092
1987–88	345 264	344 728	337 828	342 607
1988–89	360 045	354 999	358 067	357 704
1989–90	371 051	366 831	371 051	369 644
1990–91	367 639	364 532	366 507	366 226
1991–92	368 365	371 265	365 241	368 290
1992–93	380 036	382 803	376 476	379 772
1993–94	398 537	396 934	392 071	395 847

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

GDP(A) at average 1989–90 prices increased by 4.2% in 1993–94, following a rise of 3.1% in 1992–93. 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% to 1.8% 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 5% higher this year than it was last year. If the

price of cars has increased by 5% 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.

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 three years since the recession in 1990–91 have shown accelerating growth. Although growth in 1991–92 was relatively low (0.6%), it accelerated in 1992–93 to 3.1% and then to 4.2% in 1993–94.

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 63.5% in 1974–75. The wages share has recovered slightly from its recent low value of 55.1% 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 was only 13.6% during the 1982–83 recession but recovered to around 17% by 1984–85, a level it broadly maintained until the 1990–91 recession, during which it fell to just over 16%. In 1993–94, this ratio was 16.6%.

25.3 Domestic production account
(\$ million)

	Five yearly										Annual
	1962-63	1967-68	1972-73	1977-78	1982-83	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Final consumption expenditure											
Private	10 658	15 677	26 001	56 933	105 965	195 613	217 555	229 701	241 742	252 665	263 433
Government	1 995	3 711	6 357	17 272	32 474	56 741	61 620	66 753	71 517	74 714	77 595
Private gross fixed capital expenditure	2 800	4 496	7 726	15 455	27 985	67 196	67 730	60 301	56 176	61 378	67 995
Public gross fixed capital expenditure	1 331	2 178	3 270	7 194	13 120	17 944	21 658	20 794	20 566	19 281	17 968
Increase in stocks	253	113	-270	-430	-2 437	3 571	4 924	-1 896	-1 943	292	1 053
Gross national expenditure	17 037	26 175	43 084	96 424	177 107	341 065	373 487	375 653	388 058	408 330	428 044
Exports of goods & services	2 483	3 559	7 017	14 236	25 540	55 449	60 981	66 249	70 024	76 466	82 170
Imports of goods & services	2 596	4 115	5 392	15 179	29 062	61 316	67 637	66 037	68 091	77 856	83 367
Gross domestic product (GDP(E))	16 924	25 619	44 709	95 481	173 585	335 198	366 831	375 865	389 991	406 940	428 847
Statistical discrepancy	-83	-136	84	-173	-1 109	4 729	4 220	3 204	-3 033	-2 933	1 742
Wages, salaries & supplements	8 361	13 212	23 562	53 066	94 949	164 686	183 438	190 757	194 684	201 583	210 946
Gross operating surplus											
Trading enterprises	6 687	9 527	16 586	31 773	56 886	133 200	143 499	143 342	147 218	154 790	163 857
Total	6 850	9 812	17 125	32 686	58 021	134 036	143 156	143 581	147 899	156 809	166 581
Indirect taxes less subsidies	1 630	2 459	4 106	9 556	19 506	41 205	44 457	44 731	44 375	45 615	51 062
Gross domestic product (GDP(I))	16 841	25 483	44 793	95 308	172 476	339 927	371 051	379 069	386 958	404 007	428 589

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

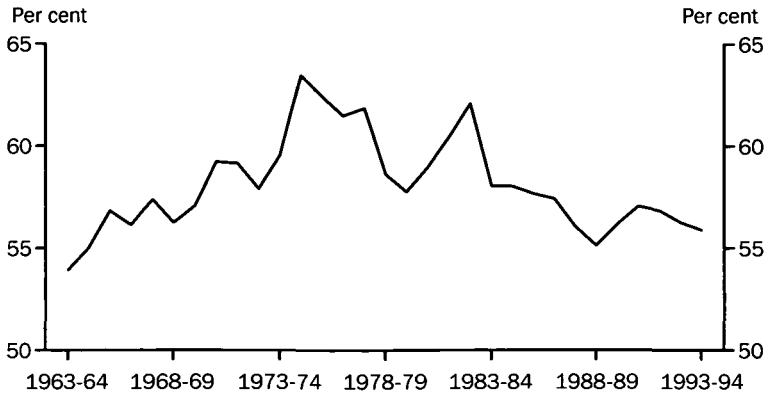
25.4 Domestic production account at constant prices (average 1989–90 prices)(a)
(\$ million)

	Five yearly										Annual
	1962–63	1967–68	1972–73	1977–78	1982–83	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94
Final consumption expenditure											
Private	77 384	98 259	125 420	147 548	172 426	208 246	217 555	518 616	224 421	230 439	236 072
Government	17 814	26 621	31 283	41 399	47 430	59 531	61 620	63 464	65 326	66 689	68 489
Private gross fixed capital expenditure	21 303	30 474	40 338	40 570	46 294	70 958	67 730	59 795	56 063	59 631	64 911
Public gross fixed capital expenditure	10 300	14 205	16 206	18 057	19 185	18 927	21 658	20 345	20 013	18 479	17 318
Increase in stocks	1 439	525	-1 670	-1 140	-3 624	3 812	4 924	-1 379	-2 103	590	761
Gross national expenditure	129 845	170 821	211 985	246 547	281 807	361 474	373 487	360 841	363 720	375 828	387 551
Exports of goods & services	13 704	18 751	28 047	32 921	36 841	57 813	60 981	67 861	74 008	78 258	85 787
Imports of goods & services	15 456	23 431	25 482	34 070	40 865	64 288	67 637	64 170	66 463	71 283	76 404
Gross domestic product (GDP(E))	127 297	164 937	214 453	245 444	277 904	354 999	366 831	364 532	371 265	382 803	398 934
Statistical discrepancy	-135	-263	1 415	858	-1 669	5 046	4 220	3 107	-2 900	-2 767	1 603
Gross domestic product (GDP(I))	127 162	164 674	215 868	246 302	276 235	360 045	371 051	367 639	368 365	380 036	398 537

(a) Estimates prior to 1984–85 have been derived by linking estimates for earlier base years to estimates at average 1989–90 prices.

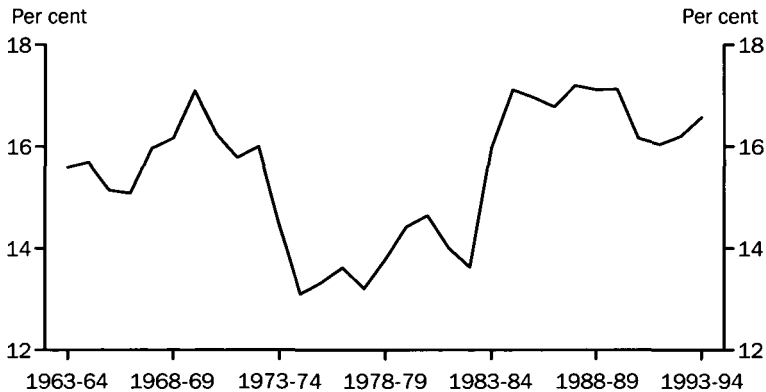
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

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).

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.

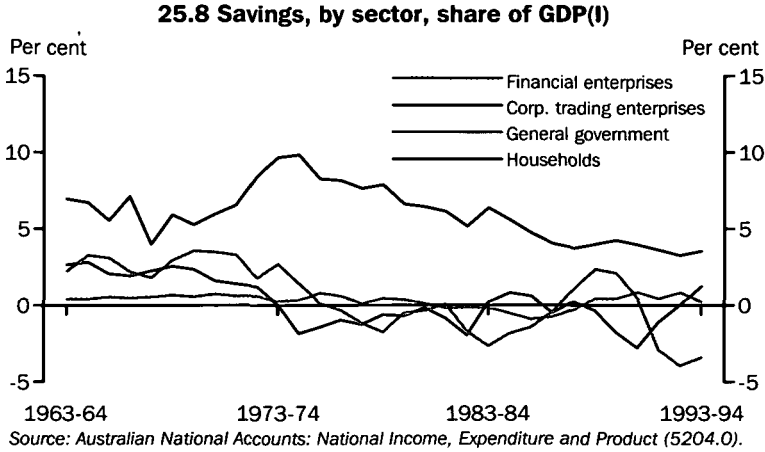
Household saving as a percentage of GDP(I) increased significantly between 1962-63 and 1974-75, but has fallen subsequently from its high of 9.8% in 1974-75 to 3.5% in 1993-94. General government saving fell for four consecutive years as a percentage of GDP(I) from 1988-89 to 1992-93, before rising to

-3.4% of GDP(I) in 1993-94. In current value terms it was \$14,600 million in 1993-94. Saving of corporate trading enterprises has been negative for 14 of the past 20 years. In 1993-94 it was 1.3% of GDP(I) (\$5,500 million in current value terms), the highest percentage level since 1971-72. Saving of financial enterprises was negative from 1981-82 to 1987-88, the only period for which this sector has recorded negative saving. In 1993-94, saving of financial enterprises was 0.3% of GDP(I) (\$1,200 million in current value terms).

25.7 National income and outlay account
(\$ million)

	Five yearly										Annual
	1962-63	1967-68	1972-73	1977-78	1982-83	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Wages, salaries & supplements	8 361	13 212	23 562	53 066	94 949	164 686	183 438	190 757	194 684	201 583	210 946
Net operating surplus	4 709	6 493	11 276	18 345	30 220	82 767	87 250	85 353	88 135	94 116	101 496
Domestic factor incomes	13 070	19 705	34 838	71 411	125 169	247 453	270 688	276 110	282 819	295 699	312 442
Less net income paid overseas	233	343	550	1 210	3 579	13 597	17 428	17 616	15 424	13 634	14 178
Indirect taxes	1 738	2 680	4 572	10 848	22 686	45 817	49 056	50 469	50 299	52 008	57 451
Less subsidies	108	221	466	1 292	3 180	4 612	4 599	5 738	5 924	6 393	6 389
National income	14 467	21 821	38 394	79 757	141 096	275 061	297 717	303 225	311 770	327 680	349 326
Less net unrequited transfers to overseas	22	24	88	257	195	-2 173	-2 290	-2 395	-2 195	-685	-196
National disposable income	14 445	21 797	38 306	79 500	140 901	277 234	300 007	305 620	313 965	328 365	349 522
Final consumption expenditure											
Private	10 658	15 677	26 001	56 933	105 965	195 613	217 555	229 701	241 742	252 665	263 433
Government	1 995	3 711	6 357	17 272	32 474	56 741	61 620	66 753	71 517	74 714	77 595
Saving	1 792	2 409	5 948	5 295	2 462	24 880	20 832	9 166	706	986	8 494
Disposal of income	14 445	21 797	38 306	79 500	140 901	277 234	300 007	305 620	313 965	328 365	349 522
Gross national product	16 608	25 140	44 243	94 098	168 897	326 330	353 623	361 453	371 534	390 373	414 411

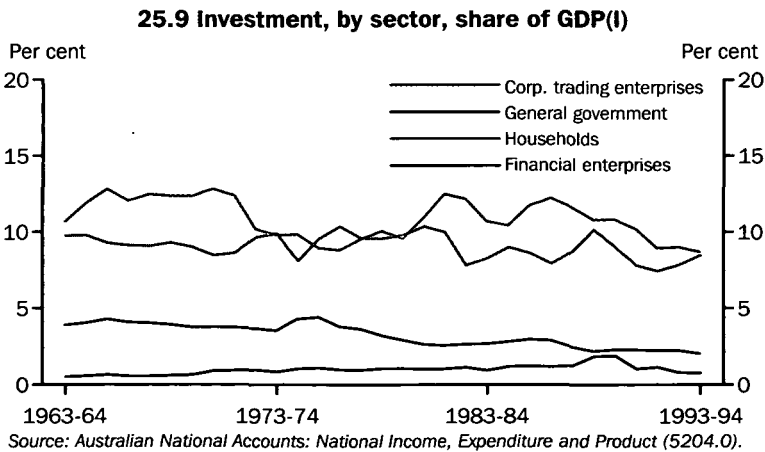
Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).



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.



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 12.5% in 1981–82. It has subsequently fallen fairly steadily to 8.7% in 1993–94. Household investment as a proportion of

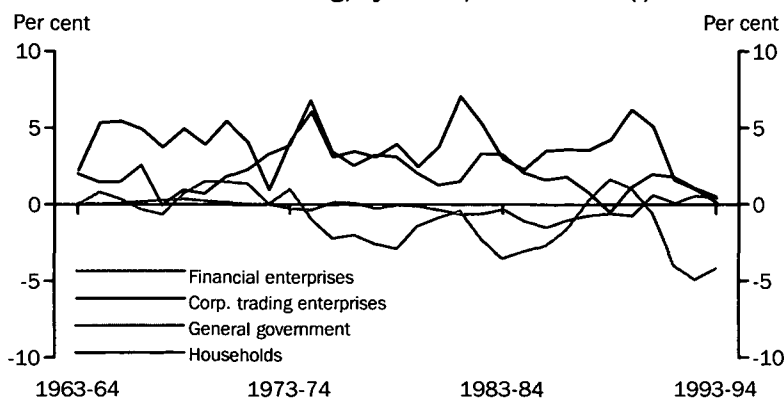
GDP(I) has fallen from 10.1% in 1988–89 to 8.5% in 1993–94. While general government investment as a proportion of GDP(I) peaked at 4.4% in 1975–76, it has fallen steadily since then and is now 2.1% of GDP(I).

25.10 National capital account
(\$ million)

	Five yearly										Annual
	1962-63	1967-68	1972-73	1977-78	1982-83	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Consumption of fixed capital	2 141	3 319	5 849	14 341	27 801	51 269	55 906	58 228	59 764	62 693	65 085
Saving											
Household	925	1 020	3 771	7 294	8 912	13 589	15 811	15 053	14 020	13 197	15 169
General government surplus on current transactions	325	465	802	-1 116	-2 933	8 047	7 837	1 734	-11 270	-15 925	-14 649
Extraordinary insurance claims paid	—	—	—	—	200	—	654	—	—	—	—
Other	542	924	1 375	-883	-3 717	3 244	-3 470	-7 621	-2 044	3 714	7 974
Finance of gross accumulation	3 933	5 728	11 797	19 636	30 263	76 149	76 738	67 394	60 470	63 679	73 579
Gross fixed capital expenditure											
Private	2 800	4 496	7 726	15 455	27 985	67 196	67 730	60 301	56 176	61 378	67 995
Public enterprises	666	1 143	1 615	3 695	8 495	10 379	13 029	12 009	11 752	10 082	9 054
General government	665	1 035	1 655	3 499	4 625	7 565	8 629	8 785	8 814	9 199	8 914
Increase in stocks											
Private non-farm	221	292	-108	-42	-2 218	3 228	1 767	-3 034	-1 639	186	1 288
Farm & public authorities	32	-179	-162	-388	-219	343	3 157	1 138	-304	106	-235
Statistical discrepancy	-83	-136	84	-173	-1 109	4 729	4 220	3 204	-3 033	-2 933	1 742
Net lending to overseas	-368	-923	987	-2 410	-7 296	-17 291	-21 794	-15 009	-11 296	-14 339	-15 179
Gross accumulation	3 933	5 728	11 797	19 636	30 263	76 149	76 738	67 394	60 470	63 679	73 579

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.11 Net lending, by sector, share of GDP(I)



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 and 1988–89. As a proportion of GDP(I), lending by households in recent years has risen from –0.5% in 1988–89 to 2.0% in 1990–91 but declined to 0.5% in 1993–94. Borrowing (that is, negative net lending) by corporate trading enterprises has fluctuated significantly over the whole period from 1962–63 to 1993–94. However, as a proportion of GDP(I), borrowing by corporate trading enterprises has fallen in every year since 1989–90 to the extent that, in 1993–94, this sector has become a net lender. 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 four years.

Overseas transactions account

The overseas transactions account is actually derived from the detailed balance of payments current account — see *Chapter 26*,

International accounts and trade. 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.

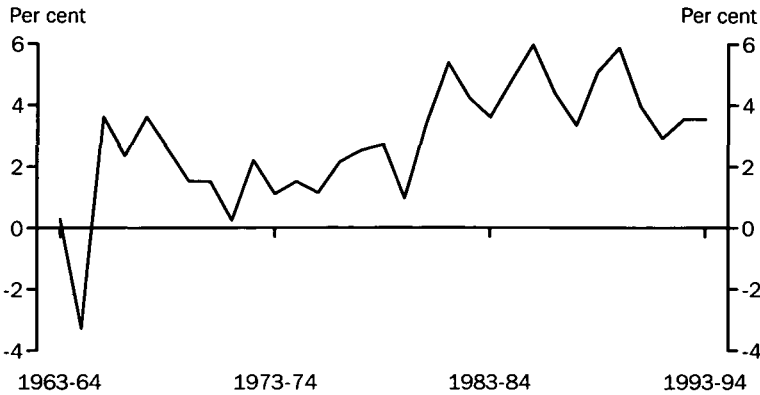
Australia has generally been a net borrower of capital from overseas. In the national accounts, this situation is reflected by a negative value for 'net lending to overseas'. Following a small number of years where Australia actually loaned money to overseas in the early 1960s and 1970s, net borrowing 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. Graph 25.13 shows this proportion since 1963–64.

25.12 Overseas transactions account
(\$ million)

	Five yearly										Annual
	1962-63	1967-68	1972-73	1977-78	1982-83	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Imports of goods & services	2 596	4 115	5 392	15 179	29 062	61 316	67 637	66 037	68 091	77 856	83 367
Interest, dividends, etc. to overseas	290	428	827	1 531	4 619	15 497	20 353	20 996	18 938	17 166	17 070
Labour income to overseas	5	9	25	57	135	279	406	429	326	311	283
Unrequited transfers to overseas	128	240	471	863	1 515	2 037	2 228	2 316	2 389	2 434	2 624
Net lending to overseas	-368	-923	987	-2 410	-7 296	-17 291	-21 794	-15 009	-11 296	-14 339	-15 179
Use of current receipts	2 651	3 869	7 702	15 220	28 035	61 838	68 830	74 769	78 448	83 428	88 165
Exports of goods & services	2 483	3 559	7 017	14 236	25 540	55 449	60 981	66 249	70 024	76 466	82 170
Interest, dividends, etc. from overseas	58	85	278	301	937	1 954	2 811	3 227	3 385	3 346	2 664
Labour income from overseas	4	9	24	77	158	225	370	432	455	497	511
Extraordinary insurance claims from overseas	—	—	—	—	80	—	150	150	—	—	—
Unrequited transfers from overseas	106	216	383	606	1 320	4 210	4 518	4 711	4 584	3 119	2 820
Current receipts from overseas	2 651	3 869	7 702	15 220	28 035	61 838	68 830	74 769	78 448	83 428	88 165

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

25.13 Net lending to overseas, as share of GDP(I)

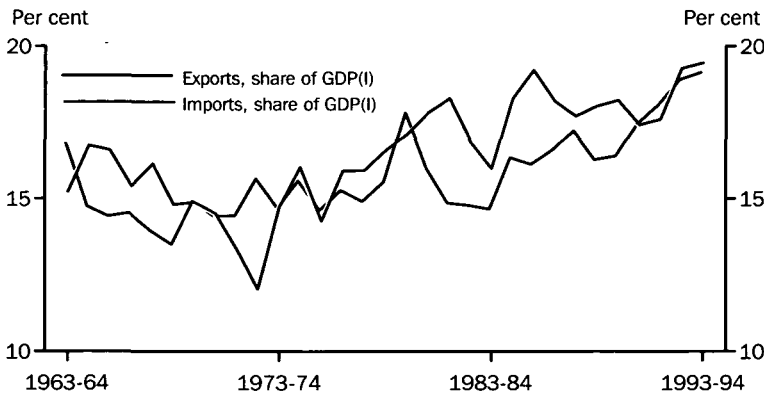


Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

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 1963–64 to 1993–94. In 1993–94 the import ratio was

19.5% and the export ratio was 19.2%. For a detailed discussion about a wide range of balance of payments ratios refer to *Balance of Payments, Australia, 1993–94* (5303.0), pages 11 to 15.

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). 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 and experimental estimates of gross State product are being released each quarter.

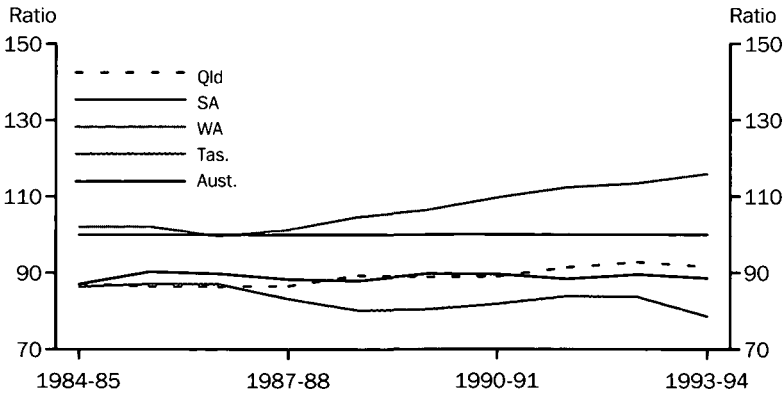
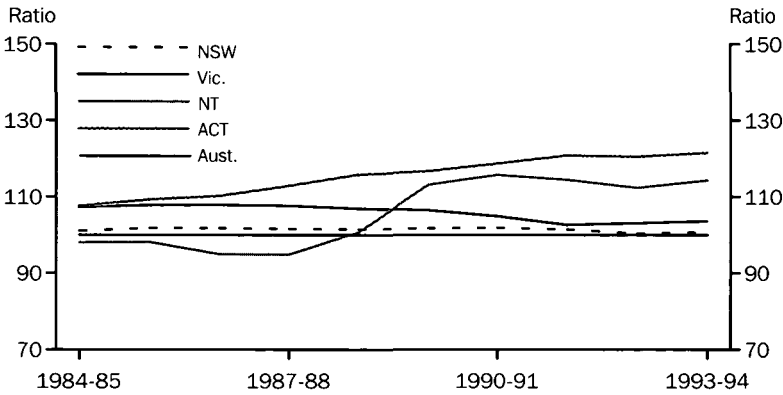
An important use of State accounts is to compare the performance of each State and Territory. The following graphs show gross State product, in current prices, per head of mean population for each State and Territory divided by the Australian value (GDP(I) per head of mean population) since 1980-81.

Gross State product per head of mean population in 1993-94 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 1993-94 were Queensland, Tasmania and the Northern Territory.

25.15 Gross State product per capita (Aust. = 100.0)



Source: Australian National Accounts: State Accounts (5220.0).

The value of unpaid work

The value of unpaid work has traditionally been excluded from estimates of gross domestic product (GDP). As the title implies, unpaid work receives no payment as the majority of the services are produced in the household. Unlike paid work, the services emanating from unpaid work are not produced for the market, so there are no appropriate monetary prices to use in the valuation of these services. Accordingly, the *System of National Accounts, 1993* (SNA) excludes the value of unpaid work from its definition of economic production, as it aims to measure only market activity and activity for which satisfactory near market values exist. Nevertheless there are valuation techniques which can place estimates of the value of unpaid work within a national accounting framework.

Unpaid work is broadly categorised into “unpaid household work” and “volunteer and community work”. Unpaid household work includes the following household activities:

- food preparation and clean up;
- cleaning and tidying;
- laundry, ironing and clothes care;
- purchasing of goods and services;
- physical care of own and other children;
- playing with, teaching, minding children;
- garden, pool and pet care;
- home maintenance and car care;
- household management;
- travel associated with the above activities; and
- transporting household members.

Volunteer and community work includes the following activities:

- helping/caring for sick, frail or disabled relatives;
- helping/caring for sick, frail or disabled other persons;
- voluntary community activities;
- helping/doing favours for others; and

- associated travel.

The methodology for valuing unpaid work can be based on either the “output approach” or the “input approach”. While the former would be preferred conceptually, the necessary data are not generally available, and so the input approach has been used to produce the Australian estimates. The ABS investigated a series of different valuation methods within this approach:

Market replacement cost

- individual replacement cost; and
- housekeeper replacement cost.

Opportunity cost

- gross opportunity cost; and
- net opportunity cost.

The output approach is considered to be the conceptually superior method because it adopts the same approach as that used to value market production and is therefore appropriate at the macro-economic level for comparisons with national accounting aggregates. However, the data requirements are enormous and at present, the ABS does not collect the necessary data to implement this methodology.

To date, the input approach is used by the majority of studies on the valuation of unpaid work. A key feature of this approach is that it is based on data collected by time use surveys. These surveys ask respondents to keep a diary recording every activity undertaken in the course of a day from which a profile of unpaid work, and other activities, can be established. The principal limitation of the methodology is that in measuring unpaid work by the time spent on each activity no account is taken of the productivity of the time used or of the quality of output achieved.

The ABS investigated the four alternative input valuation methods listed above to value unpaid work. It should be noted that there are no international standards specifying the most appropriate input method of valuing unpaid work. The ABS has opted for the *individual function replacement cost* method as its preferred method because it is less theoretically problematical than the other methods.

Also, it is conceptually similar to the approach specified in the framework used in the Australian national accounts for valuing other non-market output.

In February 1990 the ABS published a set of experimental estimates of the value of unpaid work in Australia in 1986–87. Data from the Pilot Time Use survey of 1987, which was conducted in the Sydney

Statistical Division, were used as a basis for the estimates. During 1992, the ABS conducted a more comprehensive time use survey throughout Australia which enabled the initial experimental estimates to be extended and refined. A new set of estimates was published in September 1994 which was also used, albeit with several caveats, to make some comparisons with the 1986–87 results.

25.16 Value of unpaid work(a)

	Value
Type of activity (\$m)	
Domestic activities, child care & purchasing goods & services	209.7
Volunteer & community work	18.1
Total unpaid work	227.8
Female contribution (%)	65
Ratio of value of total unpaid work to gross domestic product	58

(a) Based on the Individual Function Replacement Cost method.
Source: *Unpaid Work and the Australian Economy* (5240.0).

Using the *individual function replacement cost* method, table 1 shows that the value of total unpaid work in Australia for 1992 is estimated to be \$227,800 million, which is about 58% of gross domestic product as measured in the Australian national accounts. There was an increase in the share of volunteer and community work from around 5% to 6% of the value of total unpaid work in 1986–87 to about 8% in 1992.

Females were the main contributors to unpaid work. They were estimated to contribute 65% of total unpaid work in 1992, compared with 68% in 1986–87. However, males and females contributed almost

equally to the volunteer and community work component in 1992, as was the case in 1986–87.

Table 25.17 below shows that the percentage share of unpaid household work spent on each activity varies across the various demographic categories. For instance, it shows that the main activities of females are food preparation, child care and housework, and, especially for unmarried females, shopping. Food preparation is also a significant activity for unmarried males, although less so than for unmarried females. The other main activities for males are shopping, home maintenance, car care and gardening.

25.17 Percentage share of unpaid household work spent in each activity by status

Activity	Female				Male				TOTAL
	Married		Not married		Married		Not married		
	Employed	U/ NILF(a)	Employed	U/ NILF(a)	Employed	U/ NILF(a)	Employed	U/ NILF(a)	
Food & drink preparation & clean-up	22.2	26.3	19.8	24.4	13.7	13.8	18.4	23.6	21.1
Laundry, ironing & clothes care	12.0	11.1	8.2	9.1	1.9	1.7	5.8	5.0	8.0
Other housework	13.5	14.3	12.2	15.6	4.4	5.9	7.7	8.9	11.2
Gardening, lawn care & pool care	3.9	5.0	2.8	6.9	13.9	21.8	7.2	9.1	8.2
Pet, animal care	12.4	2.3	4.3	4.3	3.4	4.2	5.0	5.4	3.3
Home maintenance, improvement & car care	1.7	1.2	3.1	1.7	16.9	16.1	11.2	10.7	6.3
Household paper work, bills etc.	3.5	2.8	5.0	3.8	5.9	5.9	6.9	4.3	4.3
Transport & associated travel	4.6	2.6	2.9	2.0	5.2	3.9	2.1	2.2	3.4
Child care	17.3	17.6	8.2	11.5	14.3	5.2	2.3	1.9	13.4
Purchasing & associated travel	8.9	16.8	33.5	20.7	20.4	21.5	33.4	28.9	20.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Unemployed or not in the labour force.

Source: *Unpaid Work and the Australian Economy (5240.0)*.

Table 25.18 below provides some international comparisons of estimates of unpaid work as a percentage of GDP. The Australian estimates represent a higher proportion of GDP than those for other countries included in the comparison. This reflects, in part, methodological differences as well as differences in social, cultural,

climatic and economic conditions prevailing in various countries. A more detailed set of results and a comprehensive description of the concepts underlying the estimates of unpaid work are provided in *Occasional Paper: Unpaid Work and the Australian Economy, 1992 (5240.0)*.

25.18 International comparisons of estimates of unpaid work

Country and year of study	Reference Year	% of GDP or GNP
Australia		
1990	1986-87	52(GDP)(a) & 57(GDP)(b)
1994	1992	58(GDP)
Canada		
1978	1971	40(GDP)
1994	1992	41(GDP)
New Zealand		
1991	1991	52(GDP)
Norway		
1989	1981	39(GDP)
USA		
1982	1976	44(GNP)

(a) Award wage rate. (b) Adjusted award wage rate.

Source: *Unpaid Work and the Australian Economy (5240.0)*.

Input-output tables

Basic structure

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.

Further information

A table summary and diagram showing the flows of goods and services in respect of 1989–90 are presented in *Year Book Australia 1995*. Data in respect of 1992–93 will be published in the first half of 1996.

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, Financial institutions*.

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International accounts and trade

Balance of payments	663
Conceptual framework	663
Classification	664
Statistical overview	664
Values of exports and imports of goods and services (balance of payments basis)	666
International merchandise trade	670
Scope	670
Coverage	670
Valuation	671
Relationship to balance of payments statistics	671
Total merchandise exports and imports	671
Merchandise exports and imports by state	672
Merchandise exports and imports by country	673
Merchandise exports and imports by commodity	680
Merchandise exports and imports by industry of origin	685
International trade in services	686
International investment	691
Conceptual framework	691
Classification	691
International investment position	691
Foreign debt	693
International investment ratios	695
International investment by country	697
International investment by industry	699
Foreign ownership in Australia	702
Bibliography	704

International accounts and trade

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 following tables, 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 1994-95 was a deficit of \$26,855 million, an increase of \$10,014 million (or 59%) on the deficit recorded for 1993-94. The increase in the deficit in 1994-95 was due to an increase of \$7,652 million in the merchandise trade deficit and an increase of \$2,713 million in the net income deficit. These movements in merchandise trade and net income were partly offset by an increase of \$291 million in the net unrequited surplus and a decrease of \$60 million in the net services deficit.

The net income deficit for 1994-95 rose to \$18,393 million, the highest annual deficit recorded to date. Income credits increased by \$1,168 million (19%) to \$7,183 million due largely to increases in reinvested earnings, earnings on reserve assets and remitted profits. Income debits increased by \$3,881 million (18%) to \$25,576 million due largely to an increase in reinvested earnings, direct dividends, portfolio dividends, remitted profits and private sector portfolio interest. Partly offsetting these rises was a decrease in interest on official borrowing domiciled abroad.

26.1 Current account (\$ million)

Current transactions	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Goods & services						
Merchandise(a)						
Exports f.o.b.	48 564	52 155	54 874	60 022	63 852	66 496
Imports f.o.b.	-50 992	-49 244	-51 055	-59 427	-64 400	-74 696
Balance on merchandise trade	-2 428	2 911	3 819	595	-548	-8 200
Services						
Credits						
Shipment	917	1 029	1 112	1 241	1 487	1 533
Other transportation	3 402	3 811	4 069	4 614	4 604	4 557
Travel	4 639	5 351	5 939	6 411	7 502	8 745
Other services	3 459	3 931	4 003	4 156	5 095	5 538
Total services credits	12 417	14 122	15 123	16 422	18 688	20 373
Debits						
Shipment	-3 443	-3 188	-3 257	-3 772	-3 854	-4 414
Other transportation	-4 058	-4 156	-4 432	-4 637	-4 906	-5 229
Travel	-4 799	-4 827	-4 626	-4 985	-5 157	-5 771
Other services	-4 260	-4 542	-4 620	-5 036	-5 580	-5 708
Total services debits	-16 560	-16 713	-16 935	-18 430	-19 497	-21 122
Net services	-4 143	-2 591	-1 812	-2 008	-809	-749
Balance on goods & services	-6 571	320	2 007	-1 413	-1 357	-8 949
Income						
Credits						
Property income						
Reinvested earnings	1 364	204	556	2 044	2 660	3 500
Other	2 811	3 227	3 385	3 383	2 844	3 133
Labour & other income	520	582	455	497	511	550
Total income credits	4 695	4 013	4 396	5 924	6 015	7 183
Debits						
Property income						
Reinvested earnings	-1 128	-644	-704	-2 384	-4 244	-5 800
Other	-20 353	-20 996	-18 938	-17 165	-17 168	-19 385
Labour & other income	-406	-429	-326	-311	-283	-391
Total income debits	-21 887	-22 069	-19 968	-19 860	-21 695	-25 576
Net income	-17 192	-18 056	-15 572	-13 936	-15 680	-18 393
Unrequited transfers						
Credits	4 518	4 711	4 584	3 119	2 820	3 210
Debits	-2 228	-2 316	-2 389	-2 434	-2 624	-2 723
Net unrequited transfers	2 290	2 395	2 195	685	196	487
Balance on current account						
Balance on current account	-21 473	-15 341	-11 370	-14 664	-16 841	-26 855

(a) Balance of payments basis.

Source: *Balance of Payments, Australia* (5302.0).

As table 26.2 shows, the balance on capital account for 1994-95 recorded a net inflow of \$21,297 million, an increase of \$4,974 million on the net inflow for 1993-94. This increase was due largely to an increase of \$10,213 million, to \$13,277 million, in the inflow from net debt

transactions and a turnaround of \$1,252 million, to a net inflow of \$650 million from net 'other' capital transactions. Partly offsetting these rises was a decrease in net equity of \$6,493 million, to a net inflow of \$7,369 million.

26.2 Capital account and balancing item (\$ million)

Net capital transactions	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Official						
General government						
Foreign investment in Australia						
Borrowing	3 748	725	2 100	11 375	8 340	13 009
Other	-74	-5	-29	-35	83	73
Total	3 674	720	2 071	11 340	8 423	13 082
Australian investment abroad	-31	-420	656	44	-553	544
<i>Total general government</i>	3 643	301	2 727	11 385	7 870	13 626
Reserve Bank						
Foreign investment in Australia	24	-22	21	39	-49	23
Australian investment abroad						
Reserve assets	-2 156	-1 446	3 929	3 950	-1 054	1 971
Other	—	—	—	—	—	—
Total	-2 156	-1 446	3 929	3 950	-1 054	1 971
<i>Total Reserve Bank</i>	-2 132	-1 468	3 950	3 989	-1 103	1 994
Total official	1 511	-1 167	6 677	15 374	6 767	15 620
Non-official						
Foreign investment in Australia						
Direct investment						
Reinvestment of earnings	1 127	643	704	2 384	4 243	5 800
Other	6 108	7 102	5 103	2 974	2 394	762
Portfolio & other investment	13 906	13 459	7 491	2 152	15 892	1 435
<i>Total foreign investment in Australia</i>	21 140	21 204	13 298	7 510	22 529	7 997
Australian investment abroad						
Direct investment						
Reinvestment of earnings	-1 364	-205	-555	-2 045	-2 661	-3 500
Other	-983	1 090	-231	-1 003	-3 080	-585
Portfolio & other investment	-1 217	-3 363	-3 478	-3 906	-7 232	1 766
<i>Total Australian investment abroad</i>	-3 565	-2 478	-4 264	-6 953	-12 973	-2 319
Total non-official	17 575	18 728	9 034	557	9 556	5 677
Balance on capital account						
Balance on capital account	19 086	17 561	15 711	15 930	16 323	21 297
of which						
Net equity	4 088	11 022	1 988	7 052	13 862	7 369
Net debt	15 825	7 178	12 159	8 537	3 064	13 277
Net other	-826	-640	1 565	342	-602	650
Balancing item						
Balancing item	2 387	-2 220	-4 341	-1 265	518	5 557

Source: *Balance of Payments, Australia* (5302.0).

Values of exports and imports of goods and services (balance of payments basis)

Table 26.4 and table 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 International Merchandise Trade later in this chapter regarding the difference between the balance of payments and the foreign trade basis 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 deficit was recorded on merchandise trade in 1994–95 at current prices. Merchandise exports rose 4% to \$66,496 million with significant increases recorded in 'other' manufactures; wool and sheepskins; machinery; 'other' metals; other rural; and sugar. Significant decreases were recorded in cereal grains; gold; and meat. Merchandise imports increased 16% to \$74,696 million. The most significant increases occurred in machinery and industrial equipment; non-industrial transport equipment; processed industrial supplies n.e.s.; 'other' parts for capital goods; and parts for transport equipment. The only decrease recorded was in non-monetary gold.

In current price terms, the net services deficit fell \$60 million to \$749 million in 1994–95. Service credits increased \$1,685 million to

\$20,373 million, mainly due to an increase in the travel credits. Service debit increased \$1,625 million to \$21,122 million, mainly due to travel and shipment debits.

In constant price terms, exports of goods and services increased \$2,992 million (3%) in 1994–95, while imports of goods and services increased \$13,437 million (18%). The turnaround, from a surplus to a deficit on goods and services made a negative contribution of 2.7 percentage points to the expenditure-based estimates of GDP at average 1989–90 prices. The balance on merchandise trade recorded a deficit of \$1,851 million, a turnaround of \$10,630 million on the surplus recorded in 1993–94, while the net services surplus increased \$185 million, to \$749 million.

The published components of merchandise exports and imports of goods free-on-board (f.o.b.) are defined in terms of groupings of items in the United Nations' Standard International Trade Classification Revision 3 (SITC Rev. 3).

26.3 Official reserve assets and exchange rates

	Financial year ending 30 June					
	1990	1991	1992	1993	1994	1995
Levels of official reserve assets(a)						
Foreign exchange						
United States dollars	8 464	8 537	5 553	5 684	7 931	5 483
Other	9 076	10 925	12 203	9 702	7 663	9 538
Special drawing rights	379	360	375	133	110	95
Reserve position in IMF	411	421	471	855	749	753
Gold	3 541	3 804	3 639	4 448	4 208	4 316
Total	21 871	24 047	22 240	20 823	20 661	20 185
Exchange rates						
End of year(b)						
United States dollar	0.7890	0.7681	0.7488	0.6722	0.7291	0.7086
United Kingdom pound	0.4536	0.4712	0.3945	0.4453	0.4721	0.4452
German mark	1.318	1.382	1.144	1.137	1.159	0.981
Japanese yen	120.41	106.19	94.05	71.54	72.20	60.08
Special drawing right	0.5967	0.5825	0.5213	0.4818	0.5026	0.4539
Period average(c)						
United States dollar	0.7697	0.7853	0.7694	0.7030	0.6919	0.7427
United Kingdom pound	0.4733	0.4240	0.4381	0.4363	0.4623	0.4705
German mark	1.367	1.248	1.274	1.103	1.171	1.12
Japanese yen	113.27	107.60	100.97	84.22	73.52	70.35
Special drawing right	0.5958	0.5656	0.5580	0.4982	0.4944	0.4972

(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 (5302.0) for exchange rates.

26.4 Exports of goods and services (balance of payments basis) (\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
At current prices						
Rural exports f.o.b.						
Meat & meat preparations	2 936	3 173	3 434	3 750	4 043	3 652
Cereal grains & cereal preparations(a)	3 288	2 436	2 352	2 954	3 206	2 520
Sugar, sugar preparations & honey	1 104	948	747	1 072	1 315	1 730
Wool & sheepskins	3 753	2 887	3 829	3 367	3 369	4 215
Other rural	4 263	4 578	5 241	5 937	6 508	6 924
Total rural	15 344	14 022	15 603	17 080	18 441	19 041
Non-rural exports f.o.b.						
Metal ores & minerals(a)	7 600	8 557	7 938	7 943	7 671	7 967
Mineral fuels						
Coal, coke & briquettes	5 932	6 480	6 949	7 620	7 256	6 927
Other mineral fuels	2 068	3 595	3 402	3 913	3 350	3 793
Metals						
Gold	3 764	4 136	4 605	4 580	5 548	5 029
Other metals	4 650	4 737	4 702	5 210	5 396	6 079
Machinery	2 468	3 123	3 471	4 344	5 294	6 051
Transport equipment	1 178	1 907	1 655	2 022	2 086	2 002
Other manufactures	4 061	4 355	5 268	6 026	6 967	7 895
Other non-rural(a)	1 499	1 243	1 281	1 284	1 843	1 712
Total non-rural	33 220	38 133	39 271	42 942	45 411	47 455
Total exports f.o.b.	48 564	52 155	54 874	60 022	63 852	66 496
Exports of services	12 417	14 122	15 123	16 422	18 688	20 373
Total exports of goods & services	60 981	66 277	69 997	76 444	82 540	86 869
At average 1989-90 prices						
Rural exports f.o.b.						
Meat & meat preparations	2 936	3 259	3 511	3 766	3 830	3 735
Cereal grains & cereal preparations(a)	3 288	3 466	2 713	3 105	3 810	2 673
Sugar, sugar preparations & honey	1 104	1 029	923	1 228	1 345	1 628
Wool & sheepskins	3 753	4 002	5 781	5 206	5 428	5 041
Other rural	4 263	4 683	5 230	5 655	5 949	6 091
Total rural	15 344	16 439	18 158	18 960	20 362	19 168
Non-rural exports f.o.b.						
Metal ores & minerals(a)	7 600	8 729	8 756	8 805	9 450	9 915
Mineral fuels						
Coal, coke & briquettes	5 932	6 401	6 923	7 226	7 210	7 548
Other mineral fuels	2 068	2 615	2 884	3 156	3 159	3 563
Metals						
Gold	3 764	4 394	5 300	5 014	5 447	5 126
Other metals	4 650	5 140	5 700	6 163	6 753	6 368
Machinery	2 468	3 201	3 668	4 574	5 932	7 219
Transport equipment	1 178	1 885	1 548	1 669	1 633	1 574
Other manufactures	4 061	4 384	5 485	6 064	6 904	7 841
Other non-rural(a)	1 499	1 302	1 383	1 370	1 907	1 785
Total non-rural	33 220	38 051	41 647	44 041	48 395	50 939
Total exports f.o.b.	48 564	54 490	59 805	63 001	68 757	70 107
Exports of services	12 417	13 397	14 178	15 229	17 324	18 966
Total exports of goods & services	60 981	67 887	73 983	78 230	86 081	89 073

(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* (5302.0).

26.5 Imports of goods and services (balance of payments basis)
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
At current prices						
Consumption goods f.o.b.						
Food & beverages, mainly for consumption	1 796	1 923	2 028	2 261	2 430	2 594
Household electrical items	1 184	1 103	1 257	1 382	1 436	1 744
Non-industrial transport equipment	2 477	2 466	2 777	3 478	3 800	4 763
Textiles, clothing & footwear	1 551	1 623	1 799	2 178	2 320	2 567
Toys, books & leisure goods	1 695	1 741	2 015	2 238	2 496	2 546
Consumption goods n.e.s.	3 475	3 449	3 793	4 389	4 751	5 212
Total consumption goods	12 178	12 305	13 669	15 926	17 233	19 426
Capital goods f.o.b.						
Machinery & industrial equipment	5 248	4 488	4 320	5 446	6 414	7 893
ADP equipment	1 997	1 880	1 915	2 319	2 629	3 232
Telecommunications equipment	750	832	949	1 224	1 182	1 805
Civil aircraft	1 589	1 885	1 685	828	241	531
Industrial transport equipment n.e.s.	1 714	1 605	1 240	1 838	2 084	2 712
Capital goods n.e.s.	1 779	1 627	1 788	2 000	2 293	2 365
Total capital goods	13 077	12 317	11 897	13 655	14 843	18 538
Intermediate & other goods f.o.b.						
Food & beverages, mainly for industry	435	390	388	436	509	773
Primary industrial supplies n.e.s.	689	556	586	677	701	902
Fuels & lubricants	2 338	2 977	2 715	3 623	3 317	3 564
Parts for transport equipment	3 275	3 028	2 941	3 675	4 183	4 715
Parts for ADP equipment	1 073	1 109	1 278	1 423	1 681	1 858
Other parts for capital goods	3 717	3 426	3 558	4 232	5 036	5 938
Organic & inorganic chemicals(a)	1 828	1 675	1 804	2 056	2 102	2 431
Paper & paperboard	1 267	1 142	1 295	1 381	1 465	1 798
Textile yarn & fabrics	1 588	1 516	1 680	1 763	1 869	2 039
Iron & steel	1 033	887	822	946	1 039	1 284
Plastics	1 122	1 036	1 086	1 272	1 375	1 647
Non-monetary gold	278	624	1 034	1 019	978	705
Processed industrial supplies n.e.s.	6 224	5 817	6 059	7 135	7 783	8 686
Other goods(a)	870	439	243	208	286	392
Total intermediate & other goods	25 737	24 622	25 489	29 846	32 324	36 732
Total imports f.o.b.	50 992	49 244	51 055	59 427	64 400	74 696
Imports of services	16 560	16 713	16 935	18 430	19 497	21 122
Total imports of goods & services	67 552	65 957	67 990	77 857	83 897	95 818
At average 1989-90 prices						
Consumption goods f.o.b.						
Food & beverages, mainly for consumption	1 796	1 895	1 924	2 010	2 204	2 329
Household electrical items	1 184	1 158	1 292	1 299	1 308	1 678
Non-industrial transport equipment	2 477	2 347	2 435	2 608	2 538	3 100
Textiles, clothing & footwear	1 551	1 646	1 740	1 964	2 080	2 438
Toys, books & leisure goods	1 695	1 682	1 913	2 024	2 205	2 343
Consumption goods n.e.s.	3 475	3 317	3 565	3 830	4 036	4 574
Total consumption goods	12 178	12 045	12 869	13 735	14 371	16 462
Capital goods f.o.b.						
Machinery & industrial equipment	5 248	4 242	3 983	4 442	5 042	6 347
ADP equipment	1 997	2 166	2 552	3 437	4 612	6 728
Telecommunications equipment	750	869	971	1 150	1 051	1 820
Civil aircraft	1 589	1 853	1 588	704	195	451
Industrial transport equipment n.e.s.	1 714	1 577	1 110	1 315	1 368	1 804
Capital goods n.e.s.	1 779	1 566	1 686	1 665	1 859	1 940
Total capital goods	13 077	12 273	11 890	12 713	14 127	19 090

For footnotes see end of table.

...continued

26.5 Imports of goods and services (balance of payments basis) — continued (\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
At average 1989-90 prices — (continued)						
Intermediate & other goods f.o.b.						
Food & beverages, mainly for industry	435	408	392	444	491	515
Primary industrial supplies n.e.s.	689	583	638	675	687	800
Fuels & lubricants	2 338	2 400	2 680	3 260	3 252	3 445
Parts for transport equipment	3 275	3 010	2 799	3 157	3 351	3 801
Parts for ADP equipment	1 073	1 279	1 703	2 110	2 942	3 865
Other parts for capital goods	3 717	3 289	3 352	3 620	4 291	5 310
Organic & inorganic chemicals(a)	1 828	1 733	1 899	2 168	2 391	2 629
Paper & paperboard	1 267	1 165	1 352	1 435	1 533	1 955
Textile yarn & fabrics	1 588	1 412	1 605	1 715	1 883	2 127
Iron & steel	1 033	919	845	972	1 075	1 375
Plastics	1 122	1 156	1 223	1 330	1 381	1 597
Non-monetary gold	278	646	1 106	1 012	864	663
Processed industrial supplies n.e.s.	6 224	5 715	6 106	6 691	7 059	7 935
Other goods	870	445	248	204	280	389
Total intermediate & other goods	25 737	24 160	25 948	28 793	31 480	36 406
Total imports f.o.b.	50 992	48 478	50 707	55 241	59 978	71 958
Imports of services	16 560	15 618	15 647	15 960	16 760	18 217
Total imports of goods & services	67 552	64 096	66 354	71 201	76 738	90 175

(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* (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 trans-shipped 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
- individual transaction lines (within an export consignment) where the value of the goods 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 the transactions value 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 Chapter 9 of *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0).

Total merchandise exports and imports

In the year ended June 1995, merchandise exports rose 4% to reach \$67,063 million while merchandise imports rose 16% to \$74,634 million. Imports exceeded exports by \$7,571 million, a turnaround of \$7,675 million from the exports surplus of \$104 million recorded in 1993–94.

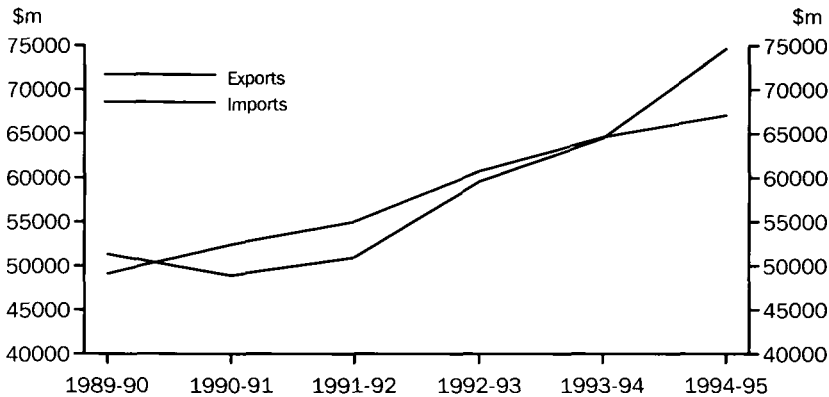
26.6 Total merchandise exports and imports (\$ million)

Period	Exports	Imports	Excess of exports or imports(a)
1989–90	49 078	51 333	-2 255
1990–91	52 399	48 912	3 487
1991–92	55 027	50 984	4 043
1992–93	60 702	59 575	1 127
1993–94	64 574	64 470	104
1994–95	67 063	74 634	-7 571

(a) A minus sign denotes excess of imports.

Source: *International Merchandise Trade: Australia, June Quarter 1995* (5422.0) and unpublished data.

26.7 Total merchandise exports and imports



Source: *International Merchandise Trade, Australia, June Quarter 1995 (5422.0)*.

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.

Re-exports are defined as goods, materials or articles originally imported into Australia which are exported in the same condition, or, after undergoing minor operations (e.g. blending, packaging, bottling, cleaning, husking and shelling) which leave them essentially unchanged.

26.8 Merchandise exports and imports by State/Territory (\$ million)

State/Territory	Exports			Imports		
	1992-93	1993-94	1994-95	1992-93	1993-94	1994-95
New South Wales	13 156	14 655	15 168	26 435	28 496	33 301
Victoria	11 044	12 323	12 969	18 147	20 770	23 969
Queensland	11 798	11 984	12 501	6 334	6 869	7 772
South Australia	3 761	3 890	3 818	3 068	2 803	3 099
Western Australia	14 994	15 630	16 470	4 966	4 793	5 808
Tasmania	1 522	1 575	1 611	334	447	341
Northern Territory	1 280	1 124	1 075	273	269	332
Australian Capital Territory	8	12	17	19	22	12
State not available(a)	387	295	295	—	—	—
Total	57 950	61 489	63 924	59 575	64 470	74 634
Re-exports	2 752	3 085	3 139	—	—	—
Grand total	60 702	64 574	67 063	59 575	64 470	74 634

(a) Includes revisions of \$62 million in exports for November 1992 resulting from the omission of certain export entries for that month and also includes \$10 million of exports for June 1995 which cannot yet be allocated by State/Territory.

Source: *Unpublished International Merchandise Trade data*.

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 Union. The main changes in 1994–95 from the previous year in the pattern of trade with other countries which contributed to the \$7,467 million increase in the merchandise trade deficit were:

- a \$2,456 million (27%) rise in the deficit with the USA as a result of a fall in exports of \$427 million (mainly meat) and a rise in imports of \$2,029 million (mainly transport equipment [excluding road vehicles], electrical machinery, apparatus and appliances, road vehicles and telecommunications, sound recording and reproducing apparatus and equipment);

- a \$1,372 million (172%) rise in the deficit with the United Kingdom as a result of a fall in exports of \$631 million (mainly non-monetary gold) and rise in imports of \$741 million (mainly road vehicles, and telecommunications, sound recording and reproducing apparatus and equipment);
- a \$1,026 million (37%) rise in the deficit with Germany as a result of a rise in imports of \$1,102 million (mainly road vehicles, machinery specialised for particular industries; and telecommunications, sound recording and reproducing apparatus and equipment) partly offset by a rise in exports of \$76 million (mainly textiles and metalliferous ores); and
- a \$704 million (17%) fall in the surplus with Japan, with an increase in imports of road vehicles and other transport equipment being most significant.

These contributions to the increase in the overall deficit were partly offset by:

- a \$422 million (15%) rise in the surplus with Republic of Korea with increases in exports non-monetary gold being most significant; and
- a \$418 million (52%) rise in the surplus with New Zealand as a result of a \$771 million increase in exports (mainly computers, road vehicles and other transport equipment) that was partly offset by a \$353 million rise in imports (chiefly electrical machinery, apparatus and appliances).

26.9 Merchandise exports and imports, by country (\$ million)

Country	1992–93		1993–94		1994–95	
	Exports	Imports	Exports	Imports	Exports	Imports
Association of South East Asian Nations (ASEAN)						
Brunei	53	50	61	17	55	22
Indonesia	1 715	1 305	1 906	1 105	2 105	1 198
Malaysia	1 311	974	1 759	1 103	2 041	1 421
Philippines	598	177	699	188	839	259
Singapore	3 787	1 509	3 207	1 792	3 639	2 247
Thailand	1 205	756	1 277	794	1 558	970
Total ASEAN	8 669	4 770	8 909	5 001	10 237	6 116

For footnotes see end of table.

...continued

26.9 Merchandise exports and imports, by country — continued
(\$ million)

Country	1992-93		1993-94		1994-95	
	Exports	Imports	Exports	Imports	Exports	Imports
European Union (EU)						
Austria	27	226	28	223	32	279
Belgium-Luxembourg	618	512	458	541	465	686
Denmark	67	274	63	300	100	340
Finland	116	415	117	463	247	636
France	850	1 481	792	1 542	793	1 754
Germany	991	3 383	1 006	3 759	1 082	4 861
Greece	41	51	25	52	20	63
Ireland	22	255	28	296	42	432
Italy	872	1 349	1 052	1 617	1 250	2 026
Netherlands	876	624	703	664	706	713
Portugal	41	63	26	66	50	81
Spain	289	218	268	288	277	484
Sweden	136	1 013	139	1 072	155	1 426
United Kingdom	2 394	3 395	2 902	3 698	2 271	4 439
Total EU(a)	7 341	13 258	7 606	14 582	7 491	18 220
Other countries						
Algeria	21	10	24	—	26	—
Argentina	73	76	117	85	114	69
Bahrain(b)	29	4	45	12	32	5
Bangladesh	81	18	104	20	91	21
Brazil	289	329	319	348	307	452
Bulgaria	11	4	10	5	26	5
Cambodia	46	—	9	1	19	—
Canada	1 158	984	1 149	1 055	1 134	1 277
Cayman Islands	—	11	—	12	—	13
Chile	87	33	111	47	141	48
China	2 268	2 557	2 590	3 120	2 960	3 650
Christmas Island	12	—	23	1	27	1
Colombia	13	11	47	11	26	14
Croatia	6	9	3	9	4	9
Czech Republic(d)	5	14	27	53	20	56
Ecuador	7	3	28	2	14	3
Egypt(b)	279	5	286	6	161	8
Fiji	327	130	325	163	377	185
French Antilles	1	—	1	—	12	—
French Polynesia	85	—	61	2	83	1
Ghana	25	1	43	2	34	3
Guam	25	—	27	—	19	—
Hong Kong	2 597	796	2 798	801	2 630	924
Hungary	17	30	4	32	5	38
India	889	362	865	427	978	532
Iran	371	14	535	16	237	21
Iraq	24	—	40	—	40	—
Israel	66	173	67	200	83	273
Japan	15 206	11 139	15 930	11 700	16 303	12 777
Jordan	39	11	48	21	53	14
Kenya	7	8	6	11	15	11
Kiribati	15	—	21	—	19	—
Korea, Republic of	3 970	1 696	4 714	1 882	5 282	2 028
Kuwait	100	59	82	76	75	93
Laos	28	—	25	—	35	—
Lebanon	9	4	11	3	8	4

For footnotes see end of table.

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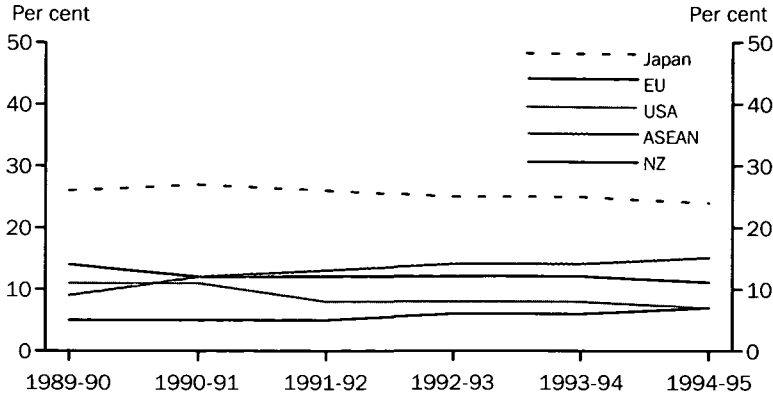
26.9 Merchandise exports and imports, by country — continued
(\$ million)

Country	1992-93		1993-94		1994-95	
	Exports	Imports	Exports	Imports	Exports	Imports
Other countries — (continued)						
Macau	14	15	7	13	5	11
Malta	3	1	5	1	9	5
Mauritius	61	2	70	2	75	2
Mexico	129	90	192	103	132	136
Morocco	3	7	17	15	3	15
Myanmar	7	11	4	11	11	8
Nauru	40	28	32	16	28	12
New Caledonia	154	39	164	37	168	46
New Zealand	3 365	2 785	4 009	3 201	4 780	3 554
Norway	117	124	114	125	68	168
Oman	89	1	101	9	81	3
Pakistan	253	132	221	141	190	141
Papua New Guinea	855	1 254	954	1 296	931	1 125
Peru	22	19	19	29	24	26
Poland	17	23	19	23	24	27
Puerto Rico	5	202	4	222	6	198
Qatar	32	22	45	135	62	184
Romania	63	8	45	9	81	15
Russian Federation(e)	157	25	246	22	200	28
Samoa (American)	18	3	29	3	18	2
Saudi Arabia	329	812	344	593	276	750
Slovenia	5	24	4	27	19	30
Solomon Islands	47	3	71	2	65	3
South Africa	334	192	350	268	565	302
Sri Lanka	77	39	104	50	141	50
Switzerland	302	721	270	818	287	991
Taiwan	2 680	2 213	2 757	2 362	3 100	2 570
Tonga	13	2	14	2	19	—
Turkey	264	39	206	45	228	58
United Arab Emirates	408	698	417	617	337	628
United States of America	4 940	13 004	5 075	14 017	4 648	16 046
Uruguay	34	3	4	2	13	3
Vanuatu	35	1	61	2	45	4
Venezuela	19	4	9	5	10	2
Vietnam	76	237	111	291	150	295
Western Samoa	25	52	22	66	24	75
Yemen	55	17	73	11	14	—
Zimbabwe	8	9	11	13	7	30
Zone of Coop A-Timor Gap	—	—	36	—	33	—
Other countries	259	157	215	122	200	179
Destination or origin unknown	1	40	3	32	—	—
International waters	188	1	249	8	—	4
No country details(b)	325	—	295	—	285	—
Ships' stores	617	—	566	—	575	—
Unidentified(c)	62	—	—	—	10	—
Total	60 702	59 575	64 574	64 470	67 063	74 634

(a) The membership of the European Union (EU) country group has expanded to include Austria, Finland and Sweden, who joined the EU on 1 January 1995. Data for these three countries have been incorporated into the EU totals for the periods covered in this table. (b) Exports of alumina to Bahrain, Egypt and Iceland are excluded from country totals and included in the 'No Country Details' category. (c) Includes revisions of \$62 million in exports for November 1992 resulting from the omission of certain export entries for that month and also includes \$10 million of exports for June 1995 which cannot yet be allocated by country. (d) 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. (e) 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.

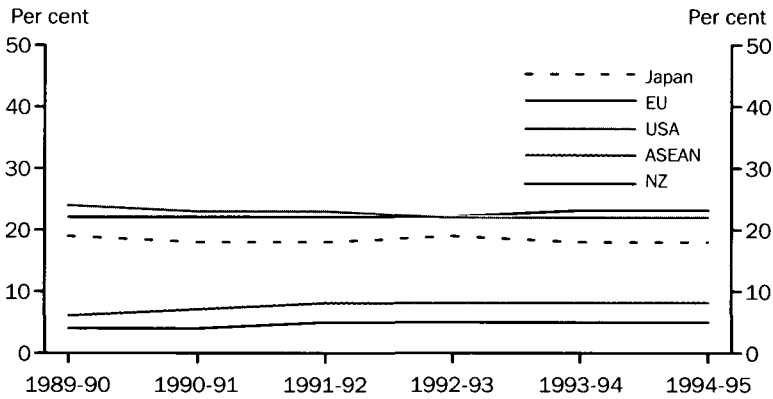
Source: *International Merchandise Trade: Australia, June Quarter 1995 (5422.0) and unpublished data.*

26.10 Destination of merchandise exports (%)



Source: *International Merchandise Trade: Australia, June Quarter 1995 (5422.0) and unpublished data.*

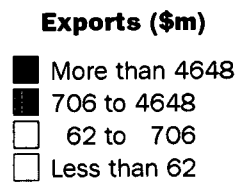
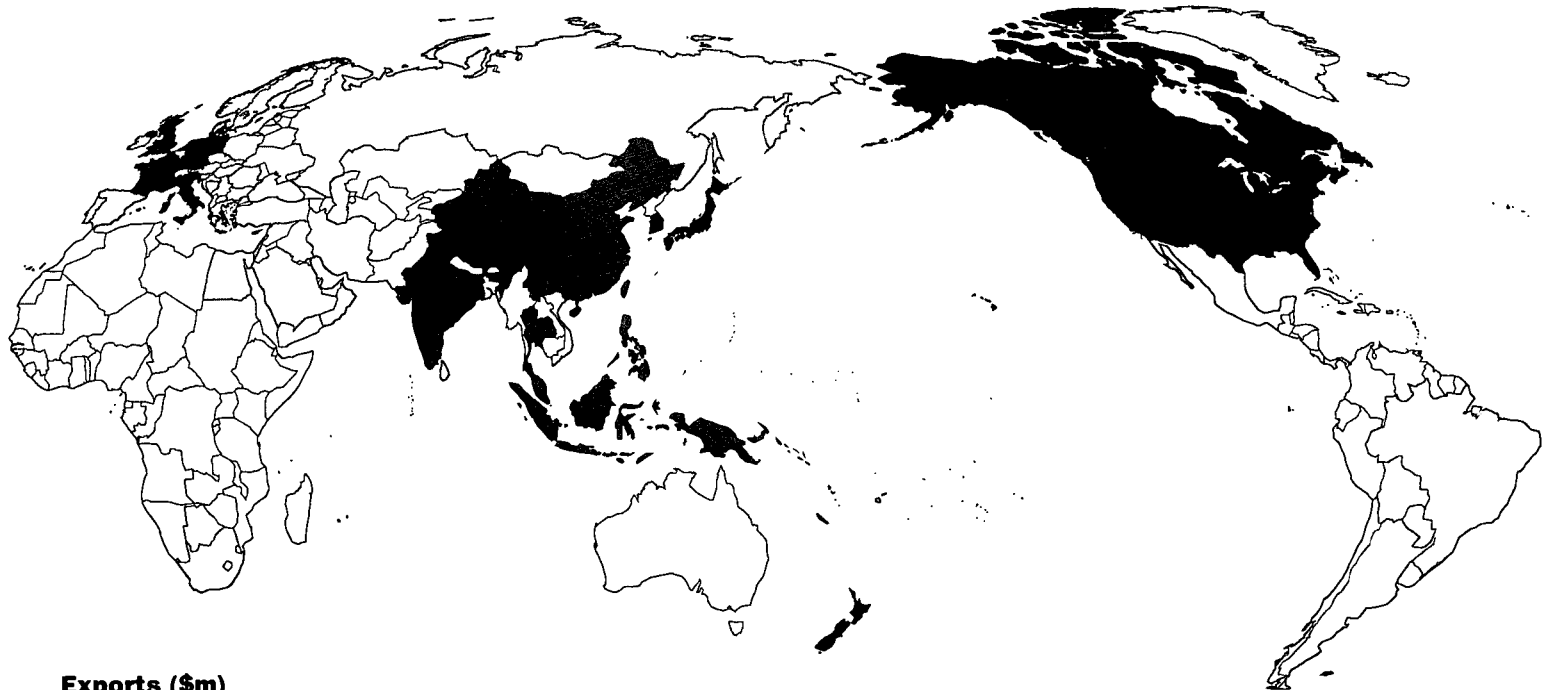
26.11 Source of merchandise imports (%)



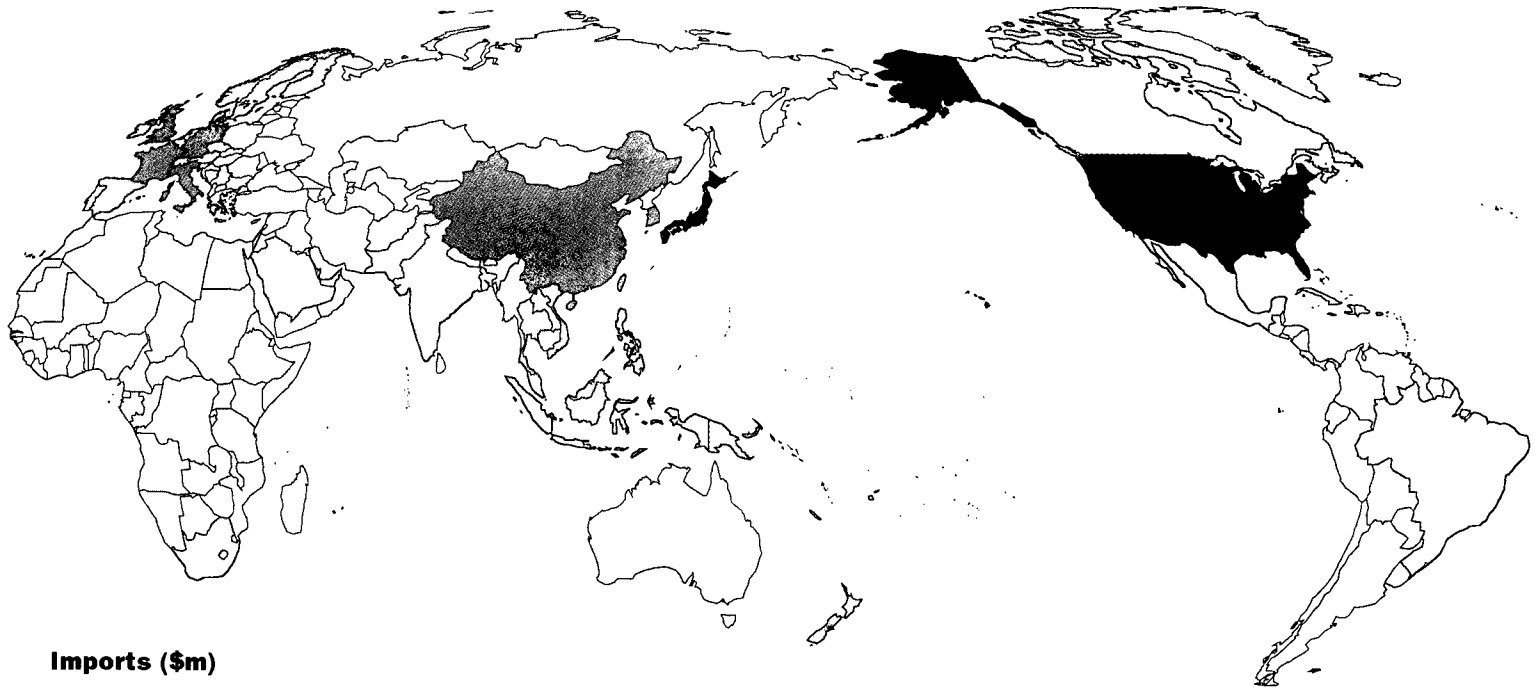
Source: *International Merchandise Trade: Australia, June Quarter 1995 (5422.0) and unpublished data.*

Maps 26.12, 26.13 and 26.14 show the main destination and source countries of Australia's exports and imports.

26.12 Australian merchandise exports: major destinations, 1994-95



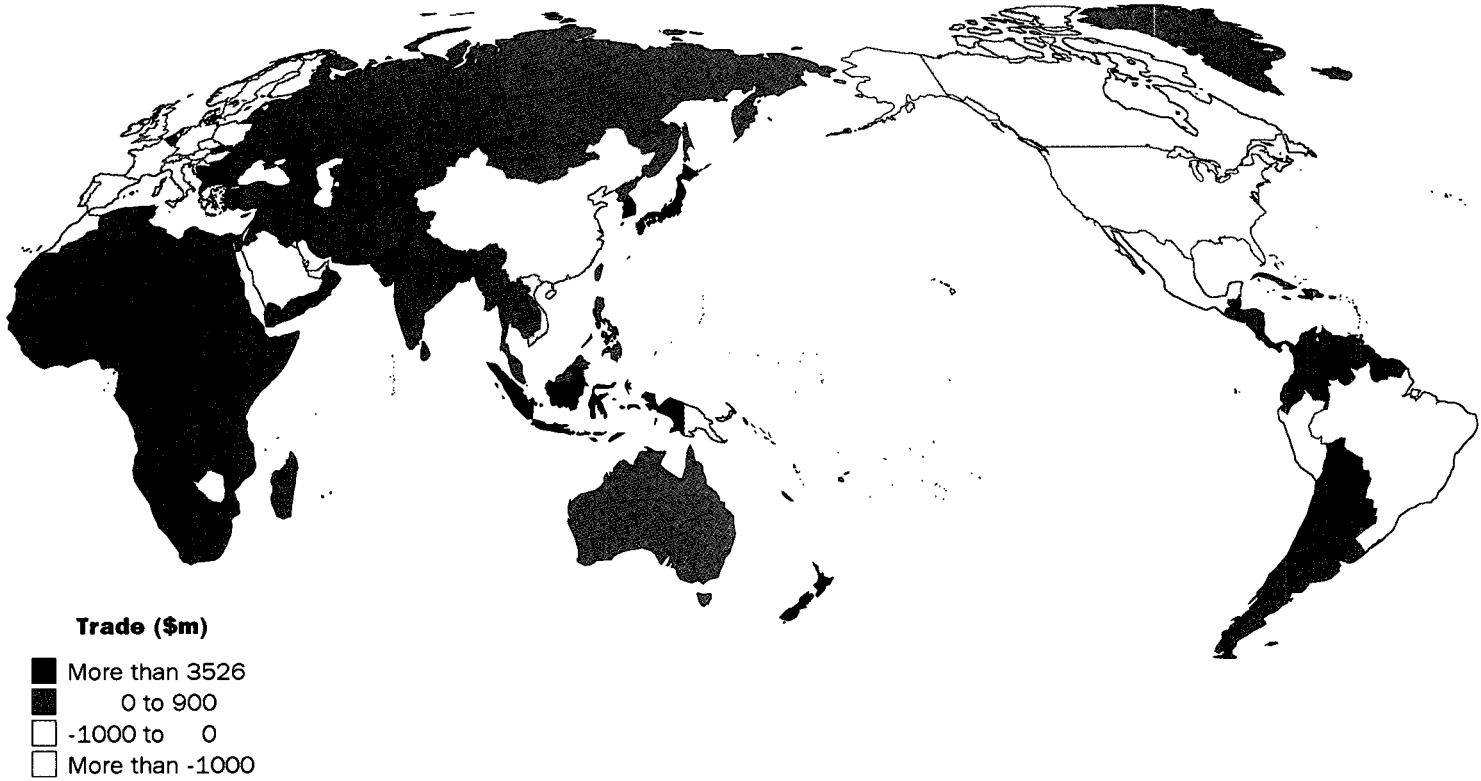
26.13 Australian merchandise imports: major source countries, 1994-95



Imports (\$m)

- More than 12777
- ▨ 1754 to 12777
- 136 to 1754
- Less than 136

26.14 Australia's net balance of trade: major partner countries, 1994-95



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 international 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 1994–95 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 1992–93 to 1994–95. For the year ended June 1995, exports were \$67,063 million, up \$2,489 million (4%) on the previous financial year. The most significant contributors to this rise were textile fibres and their wastes, up \$612 million (15%) to \$4,589 million; non-ferrous metals, up \$610 million (16%) to 4,509 million; and sugar, sugar preparations and honey, up \$413 million (31%) to \$1,729 million. The commodities recording the biggest falls were cereals and cereal preparations, down \$685 million (21%) to \$2,521 million; non-monetary gold, down \$474 million (9%) to \$4,820 million; and meat and meat preparation, down \$391 million (10%) to \$3,653 million.

Australia's major exports for 1994–95 and their principal markets were:

- coal, \$6,889 million — 10% of total exports: Japan (47%), Republic of Korea (13%), India (8%) and Taiwan (6%);
- non-monetary gold, \$4,820 million — 7% of total exports: Singapore (33%), Japan (28%) and Republic of Korea (21%);

- beef, \$2,848 million — 4% of total exports: Japan (55%), USA (22%), Republic of Korea (6%) and Canada (4%); and
- iron ore, \$2,771 million — 4% of total exports: Japan (46%), China (17%) and Republic of Korea (15%).

For the year ended June 1995, imports were \$74,634 million, an increase of \$10,164 million (16%) when compared to the previous year. The most significant rises were recorded for: office machines, and computers, up \$900 million (19%) to \$5,728 million; electrical machinery, apparatus, and appliances, up \$858 million (21%) to \$4,909 million; telecommunications and sound recording and reproducing apparatus and equipment, up \$823 million (32%) to \$3,362 million; machinery specialised for particular industries, up \$728 million (24%) to \$3,790 million; and general industrial machinery and equipment, and machine parts, up \$663 million (18%) to \$4,301 million. Partly offsetting these rises were falls in non-monetary gold, down \$271 million (28%) to \$710 million; and cork and wood, down \$46 million (7%) to \$613 million.

Australia's major commodity imports for 1994–95 and their principal sources were:

- passenger motor vehicles, \$4,353 million — 6% of total imports: Japan (58%), Germany (14%), Republic of Korea (9%) and United Kingdom (6%);
- computers, \$3,235 million — 4% of total imports: USA (32%), Singapore (20%), Taiwan (15%) and Japan (13%);
- crude petroleum, \$2,475 million — 3% of total imports: Papua New Guinea (25%), United Arab Emirates (21%), Saudi Arabia (15%) and Indonesia (14%); and
- telecommunication equipment, parts and accessories, \$2,184 million — 3% of total imports: USA (25%), Japan (19%), Sweden (11%) and Germany (10%).

26.15 Merchandise exports of major commodities, 1994–95

Commodity description	\$m	%
Aircraft & assoc. equipment; spacecraft (incl. satellites) & launch vehicles; & parts thereof	555	1
Alumina (aluminium oxide)	2 191	3
Aluminium	2 532	4
Barley, unmilled	296	—
Cars & other road vehicles (incl. air-cushion vehicles)	1 080	2
Cheese & curd	402	1
Coal, whether or not pulverised but not agglomerated	6 889	10
Copper ores & concentrates	377	1
Copper & copper alloys, unwrought (excl. master alloys)	424	1
Cotton (other than linters), not carded or combed	677	1
Crustaceans, molluscs & aquatic invertebrates (except canned or bottled)	889	1
Fruit & nuts, fresh, dried or preserved & fruit preparations (incl. fruit juices)	535	1
Gas, natural & manufactured	1 355	2
Gold, non-monetary (excl. gold ores & concentrates)	4 820	7
Hides & skins, bovine & equine, raw	223	—
Iron & steel	1 579	2
Iron ore concentrates & agglomerates (excl. roasted iron pyrites)	2 771	4
Lead & lead alloys, unwrought	312	—
Machinery specialised for particular industries	919	1
Meat of bovine animals, fresh, chilled or frozen	2 848	4
Meat of sheep & goats fresh, chilled or frozen	516	1
Milk & cream & milk products other than butter or cheese	848	1
Nickel & nickel alloys, unwrought	383	1
Nickel oxide sinters	274	—
Office machines & automatic data processing machines	1 587	2
Ores & concentrates of molybdenum, niobium, titanium, etc.(a)	393	1
Petroleum oils & oils obtained from bituminous minerals, crude	1 644	2
Petroleum products	1 307	2
Photographic & cinematographic supplies	340	1
Plastics in primary & non-primary form(a)	425	1
Power generating machinery & equipment	724	1
Rice(a)	286	—
Sheep & goats, live	186	—
Skins, sheep & lamb, with wool on, raw	208	—
Sorghum, unmilled	19	—
Sugar, beet or cane, raw, in solid form	1 550	2
Uranium & thorium ores & concentrates	188	—
Wheat (incl. spelt) & meslin unmilled	1 617	2
Wood, in chips or particles	564	1
Wool, greasy (incl. fleece-washed wool)	2 558	4
Wool, other, not carded or combed	855	1
Zinc & zinc alloys, unwrought	372	1
Zinc ores & concentrates	404	1
Total major commodities(a)	48 922	73
Total exports	67 063	100

(a) Excludes commodities subject to a 'No Commodity Details' restriction. For further information see paragraph 29 of the Explanatory Notes in *International Merchandise Trade, Australia* (5422.0).

Source: *Unpublished International Merchandise Trade data*.

26.16 Merchandise imports of major commodities, 1994-95

Commodity description	\$m	%
Aircraft & assoc. equipment; spacecraft (incl. satellites) & launch vehicles; & parts thereof	1 442	2
Articles of apparel & clothing accessories	1 637	2
Automatic data processing machines & units thereof	3 235	4
Baby carriages, toys, games & sporting goods	774	1
Chemical materials & products, n.e.s.	897	1
Civil engineering & contractors' plant & equipment	1 086	1
Clay & refractory construction materials & mineral manufactures n.e.s.	509	1
Coffee & coffee substitutes	256	—
Electrical apparatus for switching or protecting electrical circuits	847	1
Electrical machinery & apparatus n.e.s.	1 361	2
Fish, crustaceans, molluscs, & aquatic invertebrates, & preparations thereof	609	1
Glass, glassware & pottery	474	1
Household type, electrical & non-electrical equipment n.e.s.	650	1
Inorganic chemicals(a)	639	1
Internal combustion piston engines, & parts thereof n.e.s.	957	1
Iron & steel	1 287	2
Machinery & equipment specialised for particular industries & parts thereof	832	1
Manufactures of base metals n.e.s.	779	1
Measuring, checking, analysing & controlling instruments & apparatus n.e.s.	1 262	2
Medical & pharmaceutical products	1 562	2
Motor vehicles for the transport of goods	1 890	3
Non-electrical parts & accessories of machinery n.e.s.	182	—
Organic chemicals(a)	1 795	2
Paper, paperboard & articles of paper pulp, of paper or of paperboard(a)	1 861	2
Parts & accessories of motor vehicles & tractors, track-laying & wheeled	1 759	2
Parts & accessories for office & automatic data processing machines	2 071	3
Passenger motor vehicles (other than transport type) including station wagons & racing cars	4 353	6
Petroleum oils & oils obtained from bituminous minerals, crude	2 475	3
Petroleum oils & oils obtained from bituminous minerals (other than crude)	1 003	1
Photographic & cinematographic supplies	533	1
Plastics in primary & non-primary forms(a)	1 642	2
Printed matter	892	1
Printing & bookbinding machinery, & parts thereof	582	1
Pumps, centrifuges, filtering or purifying apparatus & parts thereof	844	1
Rubber tyres, interchangeable tyre treads, tyre flaps & inner tubes for wheels of all kinds	661	1
Ships, boats (including hovercraft) & floating structures	477	1
Telecommunication equipment n.e.s. & parts n.e.s. & accessories	2 184	3
Television & radio broadcast receivers	788	1
Textile yarn	648	1
Tools for use in the hand or in machines	393	1
Tractors, track-laying & wheeled	324	—
Wood, sawn or chipped lengthwise, sliced or peeled	500	1
Woven cotton fabrics (excl. narrow or special fabrics)	303	—
Woven fabrics of man-made textile material (excl. narrow or special fabrics)	492	1
Total major commodities(a)	49 749	67
Total imports	74 634	100

(a) Excludes commodities subject to a 'No Commodity Details' restriction. For further information see paragraph 29 of the Explanatory Notes in *International Merchandise Trade, Australia* (5422.0).

Source: *Unpublished International Merchandise Trade data*.

26.17 Merchandise exports and imports by commodity (\$ million)

Commodity description	1992-93		1993-94		1994-95	
	Exports	Imports	Exports	Imports	Exports	Imports
Food & live animals						
Live animals other than fish, crustaceans, molluscs & aquatic invertebrates	247	60	323	77	452	101
Meat & meat preparations	3 744	33	4 044	46	3 653	47
Dairy products & birds' eggs	1 102	159	1 287	161	1 413	173
Fish, crustaceans, molluscs & aquatic invertebrates, & preparations thereof	952	500	1 115	542	1 143	609
Cereals & cereal preparations(a)	2 953	136	3 206	143	2 521	207
Vegetables & fruit(a)	872	470	932	515	872	534
Sugars, sugar preparations & honey	1 074	77	1 316	67	1 729	86
Coffee, tea, cocoa, spices & manufactures thereof	125	337	166	383	173	505
Feeding stuff for animals (excl. unmilled cereals)(a)	467	67	385	102	387	109
Miscellaneous edible products & preparations	144	389	194	441	207	451
Total(a)	11 679	2 228	12 967	2 478	12 549	2 821
Beverages & tobacco						
Beverages	385	319	474	332	506	336
Tobacco & tobacco manufactures	32	119	32	135	43	186
Total	417	438	506	467	550	522
Crude materials, inedible, except fuels						
Hides, skins & furskins, raw	388	5	392	3	486	4
Oil seeds & oleaginous fruits	80	68	121	81	110	133
Crude rubber (incl. synthetic & reclaimed)	11	104	10	117	12	153
Cork & wood	465	571	519	659	633	613
Pulp & waste paper	12	157	16	126	44	160
Textile fibres & their wastes (not manufactured into yarn or fabric)	4 017	144	3 977	162	4 589	188
Crude fertilisers & crude minerals (excl. coal, petroleum & precious stones)(b)	369	147	358	141	367	182
Metalliferous ores & metal scrap(c)	7 572	165	7 315	141	7 600	169
Crude animal & vegetable materials, n.e.s.	197	146	208	165	226	193
Total(b)(c)	13 112	1 506	12 917	1 595	14 066	1 794
Mineral fuels, lubricants & related materials						
Coal, coke & briquettes	7 623	7	7 255	27	6 939	22
Petroleum, petroleum products & related materials(b)	3 244	3 829	2 676	3 392	2 951	3 608
Gas, natural & manufactured	1 236	21	1 185	23	1 355	38
Total(b)	12 102	3 857	11 116	3 441	11 244	3 668
Animal & vegetable oils, fats & waxes						
Animal oils & fats	156	2	170	3	220	3
Fixed vegetable fats & oils, crude, refined or fractionated (a)(b)	4	171	7	181	4	208
Fats & oils (processed), waxes & inedible mixtures of animal or vegetable origin, n.e.s.	31	17	31	18	38	20
Total(a)(b)	192	190	207	203	262	232
Chemical & related products, n.e.s.						
Organic chemicals(a)(b)	88	1 402	81	1 615	85	1 795
Inorganic chemicals(a)(b)	197	655	257	488	309	639
Dyeing, tanning & colouring materials	328	320	363	340	401	372
Medicinal & pharmaceutical products(a)	564	1 393	701	1 427	768	1 562
Essential oils & resinoids & perfume materials; toilet, polishing & cleansing preparations	172	463	208	527	257	568
Fertilisers (excl. crude)	12	351	19	394	24	535
Plastics in primary forms(a)(b)	210	706	201	741	282	923
Plastics in non-primary forms(b)	100	562	113	635	143	719
Chemical materials & products, n.e.s.	324	773	408	878	401	897
Total(a)(b)	1 996	6 625	2 351	7 045	2 671	8 010

For footnotes see end of table.

...continued

26.17 Merchandise exports and imports by commodity — continued
(\$ million)

Commodity description	1992-93		1993-94		1994-95	
	Exports	Imports	Exports	Imports	Exports	Imports
Manufactured goods classified chiefly by material						
Leather, leather manufactures, & dressed furskins, n.e.s.	284	134	368	146	515	166
Rubber manufactures, n.e.s.(b)	108	812	120	954	145	1 045
Cork & wood manufactures (excl. furniture)(a)	66	259	92	288	98	329
Paper, paperboard & articles of paper pulp, of paper or of paperboard(b)	259	1 419	258	1 518	267	1 859
Textile yarn, fabrics, made-up articles, n.e.s., & related products	307	2 144	385	2 246	464	2 455
Non-metallic mineral manufactures, n.e.s.(a)(b)	558	1 033	666	1 080	737	1 214
Iron & steel	1 211	945	1 496	1 041	1 579	1 287
Non-ferrous metals(a)(b)	3 996	465	3 900	498	4 509	679
Manufactures of metals, n.e.s.(b)	551	1 569	625	1 674	693	1 876
Total(a)(b)	7 341	8 779	7 911	9 445	9 006	10 910
Machinery & transport equipment						
Power generating machinery & equipment	615	1 605	586	1 690	724	1 769
Machinery specialised for particular industries	695	2 646	822	3 061	919	3 790
Metal working machinery	105	288	92	378	140	573
General industrial machinery & equipment, & machine parts,(n.e.s.)(b)	719	3 110	891	3 638	940	4 301
Office machines & automatic data processing machines	995	4 239	1 370	4 828	1 587	5 728
Telecommunications & sound recording & reproducing apparatus & equipment	502	2 347	674	2 538	540	3 362
Electrical machinery, apparatus, appliances, parts	763	3 362	968	4 051	1 220	4 909
Road vehicles (incl. air-cushion vehicles)	989	6 161	1 074	7 108	1 080	8 677
Transport equipment (excl. road vehicles)	1 031	2 154	1 024	1 620	926	2 050
Total(b)	6 415	25 911	7 502	28 911	8 076	35 158
Miscellaneous manufactured articles						
Prefabricated buildings; sanitary, plumbing, heating & lighting fixtures & fittings, n.e.s.	63	177	45	191	52	218
Furniture, parts thereof; bedding mattresses, mattress supports	64	350	71	396	76	444
Travel goods, handbags & similar containers	7	270	9	286	15	338
Articles of apparel & clothing accessories	199	1 330	247	1 480	302	1 637
Footwear	41	512	61	512	58	570
Professional, scientific & controlling instruments & apparatus, n.e.s.	395	1 569	416	1 707	442	1 834
Photographic apparatus, equipment & supplies & optical goods, n.e.s.; watches & clocks(b)	397	977	460	1 066	509	1 207
Miscellaneous manufactured articles, n.e.s.	722	3 733	798	4 160	852	4 462
Total(b)	1 887	8 918	2 106	9 798	2 306	10 709
Commodities & transactions n.e.c.						
Special transactions & commodities not classified according to kind	219	30	348	31	412	25
Gold coin whether or not legal tender, & other coin being legal tender	267	2	253	1	206	2
Coin (excl. gold coin) not being legal tender	1	—	1	—	1	—
Gold non-monetary (excl. gold ores & concentrates)	4 315	1 021	5 295	981	4 820	710
Combined confidential items of trade(d)(e)	759	69	1 095	72	896	59
Total(d)(e)	5 562	1 122	6 991	1 086	6 334	797
Total	60 702	59 575	64 574	64 470	67 063	74 621

(a) Excludes exports commodities subject to a confidentiality restriction. (b) Excludes imports commodities subject to a confidentiality restriction. (c) Excludes some commodities subject to a 'No Commodity Details' restriction. (d) Includes exports and imports 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 and also includes \$10 million of exports for June 1995 which cannot be allocated to commodity classification codes.

Source: *Unpublished International Merchandise Trade data.*

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 and New Zealand Standard Industrial Classification (ANZSIC). The statistics are

compiled by allocating international trade data for a commodity to an ANZSIC industry of origin category based upon the industry with which that commodity is primarily associated.

26.18 Merchandise exports by industry of origin

ANZSIC Division/subdivision	1992-93		1993-94		1994-95	
	\$m	%	\$m	%	\$m	%
Agriculture, forestry & fishing						
Agriculture	5 554	9	5 848	9	5 696	8
Services to agriculture; hunting & trapping	798	1	780	1	724	1
Forestry & logging	27	—	45	—	34	—
Commercial fishing	348	1	421	1	534	1
Total	6 727	11	7 093	11	6 988	10
Mining						
Coal mining	7 542	12	7 184	11	6 895	10
Oil & gas extraction	3 038	5	2 535	4	2 999	4
Metal ore mining	4 655	8	4 572	7	4 788	7
Other mining	221	—	263	—	236	—
Total	15 456	25	14 554	23	14 918	22
Manufacturing						
Food, beverage & tobacco	9 258	15	10 349	16	10 626	16
Textile, clothing, footwear & leather	1 984	3	2 211	3	2 743	4
Wood & paper products	764	1	824	1	995	1
Printing, publishing & recorded media	314	1	345	1	358	1
Petroleum, coal, chemical & associated products	6 124	10	6 305	10	6 624	10
Non-metallic mineral products	249	—	268	—	307	—
Metal products	11 075	18	12 185	19	12 513	19
Machinery & equipment	7 269	12	8 430	13	9 092	14
Other manufacturing	404	1	491	1	500	1
Total	37 442	62	41 407	64	43 758	65
Other industries(a)	1 077	2	1 521	2	1 399	2
Total trade	60 702	100	64 574	100	67 063	100

(a) Includes revisions for \$62 million in exports for November 1992 resulting from the omission of certain export entries for that month and also includes \$10 million of exports for June 1995 which cannot yet be allocated to commodity classification codes.

Source: Unpublished International Merchandise Trade data.

26.19 Merchandise imports by industry of origin

ANZSIC Division/subdivision	1992-93		1993-94		1994-95	
	\$m	%	\$m	%	\$m	%
Agriculture, forestry & fishing						
Agriculture	434	1	509	1	785	1
Services to agriculture; hunting & trapping	9	—	10	—	9	—
Forestry & logging	4	—	4	—	5	—
Commercial fishing	20	—	21	—	26	—
Total	467	1	544	1	824	1
Mining						
Coal mining	4	—	15	—	11	—
Oil & gas extraction	2 279	4	2 297	4	2 514	3
Metal ore mining	130	—	117	—	130	—
Other mining	145	—	143	—	157	—
Total	2 558	4	2 572	4	2 812	4
Manufacturing						
Food, beverage & tobacco	2 606	4	2 848	4	3 104	4
Textile, clothing, footwear & leather	4 449	7	4 736	7	5 233	7
Wood & paper products	2 278	4	2 455	4	2 808	4
Printing, publishing & recorded media	1 421	2	1 628	3	1 663	2
Petroleum, coal, chemical & associated products	9 946	17	10 184	16	11 382	15
Non-metallic mineral products	878	1	941	1	1 059	1
Metal products	4 406	7	4 663	7	5 103	7
Machinery & equipment	28 654	48	31 868	49	38 485	52
Other manufacturing	1 677	3	1 788	3	1 914	3
Total	56 316	95	61 112	95	70 751	95
Other industries(a)	235	—	241	—	247	—
Total trade	59 575	100	64 470	100	74 634	100

(a) Includes commodities subject to a 'No Commodity Details' restriction. See the paragraph 'Confidentiality' in the explanatory notes, found in the June 1995 edition of *International Merchandise Trade, Australia* (5422.0).

Source: *Unpublished International Merchandise Trade data*.

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 1994-95, services trade accounted for exports of \$20,373 million and imports of \$21,122 million, 23% and 22% of all exports and imports of goods and services, respectively. Table 26.20 provides details of this trade in services.

As shown in table 26.21, the main destinations for services exports in 1993-94

(regional data is not yet available for 1994-95) were: Japan (17%), USA (13%), UK (9%), New Zealand (6%) and Singapore (6%), significant growth has been recorded in services exports to Japan, USA and Singapore since 1988-89. As shown in table 26.22, the main source countries for service imports in 1993-94 were: UK (17%), USA (14%), Japan (8%), New Zealand (5%), Europe n.e.s. (5%) and Singapore (5%), significant growth has been recorded in services imports from USA and UK since 1988-89.

26.20 International trade in services
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Credits						
Shipment						
Freight on exports	905	1 017	1 100	1 229	1 475	1 521
Insurance on exports	12	12	12	12	12	12
Total	917	1 029	1 112	1 241	1 487	1 533
Other transportation						
Passenger services	1 363	1 594	1 782	2 141	2 307	n.p.
Port services etc.	2 039	2 217	2 287	2 473	2 297	n.p.
Total	3 402	3 811	4 069	4 614	4 604	4 557
Travel						
Student's expenditure	878	960	1 115	1 336	1 515	1 701
Other	3 761	4 391	4 824	5 075	5 987	7 044
Total	4 639	5 351	5 939	6 411	7 502	8 745
Other services						
Official	278	309	257	276	344	315
Non-official						
Financial services	191	249	302	264	424	390
Insurance services n.e.c.	110	229	121	172	662	781
Other(a)	2 880	3 144	3 323	3 444	3 665	4 052
Total	3 459	3 931	4 003	4 156	5 095	5 538
Total credits	12 417	14 122	15 123	16 422	18 688	20 373
Debits						
Shipment						
Freight on imports	-3 419	-3 164	-3 233	-3 748	-3 830	-4 390
Insurance on imports	-24	-24	-24	-24	-24	-24
Total	-3 443	-3 188	-3 257	-3 772	-3 854	-4 414
Other transportation						
Passenger services	-2 223	-2 292	-2 464	-2 515	-2 521	-2 726
Port services etc.	-1 835	-1 864	-1 968	-2 122	-2 385	-2 503
Total	-4 058	-4 156	-4 432	-4 637	-4 906	-5 229
Travel						
Student's expenditure	-276	-291	-320	-333	-335	-415
Other	-4 523	-4 536	-4 306	-4 652	-4 822	-5 356
Total	-4 799	-4 827	-4 626	-4 985	-5 157	-5 771
Other services						
Official	-385	-447	-387	-429	-420	-411
Non-official						
Financial services	-137	-241	-193	-151	-206	-244
Insurance services n.e.c.	-245	-278	-407	-666	-1 012	-1 164
Other	-3 493	-3 576	-3 633	-3 790	-3 942	-3 889
Total	-4 260	-4 542	-4 620	-5 036	-5 580	-5 708
Total debits	-16 560	-16 713	-16 935	-18 430	-19 497	-21 122
Balance						
Shipment						
Freight on exports	-2 514	-2 147	-2 133	-2 519	-2 355	-2 869
Insurance on exports	-12	-12	-12	-12	-12	-12
Total	-2 526	-2 159	-2 145	-2 531	-2 367	-2 881
Other transportation						
Passenger services	-860	-698	-682	-374	-214	n.p.
Port services etc.	204	353	319	351	-88	n.p.
Total	-656	-345	-363	-23	-302	-672

For footnotes see end of table.

...continued

26.20 International trade in services — continued
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Balance — (continued)						
Travel						
Student's expenditure	602	669	795	1 003	1 180	1 286
Other	-762	-145	518	423	1 165	1 688
Total	-160	524	1 313	1 426	2 345	2 974
Other services						
Official	-107	-138	-130	-153	-76	-96
Non-official						
Financial services	54	8	109	113	218	146
Insurance services n.e.c.	-135	-49	-286	-494	-350	-383
Other(a)	-613	-432	-310	-346	-277	163
Total	-801	-611	-617	-880	-485	-170
Total	-4 143	-2 591	-1 812	-2 008	-809	-749

(a) A dissection of this data is provided by the International Trade in Services Survey.

Source: *Balance of Payments, Australia* (5302.0).

26.21 Services credits (\$ million)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Countries						
Belgium & Luxembourg	60	62	43	41	34	36
Canada	218	174	262	247	206	288
Central America & Caribbean, excluding Mexico	23	20	65	101	16	25
China, People's Republic of	202	305	255	202	270	287
Fiji	135	116	176	137	148	150
France	94	109	130	117	179	223
Germany(a)	340	334	417	464	480	548
Greece	61	66	70	50	57	70
Hong Kong	370	468	572	645	740	813
Indonesia	258	303	387	404	510	608
Ireland, Republic of	30	36	34	34	38	44
Italy	140	142	146	209	174	195
Japan	1 874	2 208	2 637	3 092	3 131	3 241
Korea, Republic of	117	144	186	258	311	462
Malaysia	328	343	427	537	554	649
Mexico	3	3	3	4	4	5
Netherlands	134	143	130	145	192	180
New Zealand	1 429	1 298	1 318	1 103	1 044	1 082
Papua New Guinea	327	259	243	273	304	330
Philippines	100	103	132	146	145	157
Russian Federation(b)	54	61	68	72	84	94
Singapore	391	473	633	674	880	1 037
South Africa	31	34	30	54	83	119
Sweden	103	91	74	80	69	81
Switzerland	111	119	163	168	203	206
Taiwan	115	136	180	253	388	489
Thailand	137	158	191	235	277	334
United Kingdom	1 365	1 456	1 513	1 716	1 636	1 717
United States of America	1 645	1 734	2 014	1 928	2 071	2 341
Africa n.e.s.	98	100	154	87	144	209
America n.e.s.	46	50	35	45	68	102
Asia n.e.s.	300	355	362	425	547	652
Europe n.e.s.	292	308	286	289	503	721
Oceania n.e.s.	178	183	176	206	223	280
International capital markets	—	—	—	—	—	—
International institutions	1	1	1	—	6	2
Unallocated	444	521	609	682	703	911
Total all countries	11 555	12 417	14 122	15 123	16 422	18 688
Country groups(c)						
APEC	7 526	8 136	9 460	10 038	10 865	12 177
ASEAN	1 226	1 407	1 790	2 033	2 396	2 839
EU	2 299	2 423	2 538	2 862	2 917	3 189
OECD	7 808	8 185	9 153	9 612	9 813	10 602
OPEC	301	363	450	438	587	708

(a) Prior to 1990-91, the former Germany, Democratic Republic is included in Europe n.e.s. (b) The remaining republics of the former USSR have been included in either Europe n.e.s. or Asia n.e.s. from 1992-93 onwards. (c) APEC includes Brunei, Canada, China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand and United States of America. ASEAN includes Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand. EU includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and United Kingdom. OECD includes Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Monaco, New Zealand, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States of America. OPEC includes Algeria, Ecuador, Gabon, Indonesia, Iran, Kuwait, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela.

Source: *Balance of Payments and International Investment Position, Australia, 1993-94* (5363.0).

26.22 Services debits (\$ million)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Countries						
Belgium & Luxembourg	103	98	81	56	133	121
Canada	178	208	220	286	266	361
Central America & Caribbean, excluding Mexico	90	129	167	216	146	204
China, People's Republic of	142	135	131	109	324	335
Fiji	286	352	362	143	153	167
France	184	258	232	246	232	257
Germany(a)	476	607	640	702	588	556
Greece	193	216	210	225	245	295
Hong Kong	762	822	797	718	808	840
Indonesia	235	282	275	354	516	526
Ireland, Republic of	38	41	38	63	74	79
Italy	320	360	355	483	375	387
Japan	1 141	1 275	1 296	1 599	1 355	1 494
Korea, Republic of	84	87	98	87	245	278
Malaysia	258	276	313	319	465	505
Mexico	4	4	5	11	14	15
Netherlands	261	298	281	306	405	435
New Zealand	1 045	1 192	1 134	1 011	896	1 033
Papua New Guinea	157	157	163	104	106	147
Philippines	150	163	150	130	156	154
Russian Federation(b)	112	117	157	138	241	241
Singapore	835	833	913	841	978	914
South Africa	35	43	40	36	53	89
Sweden	63	142	115	95	143	105
Switzerland	116	119	86	102	240	281
Taiwan	80	94	91	139	198	211
Thailand	251	309	329	306	334	336
United Kingdom	2 560	2 665	2 598	2 764	2 968	3 315
United States of America	2 364	2 991	3 282	2 618	2 928	2 811
Africa n.e.s.	109	124	157	189	132	183
America n.e.s.	62	78	78	88	124	112
Asia n.e.s.	437	541	484	549	731	768
Europe n.e.s.	655	763	653	1 061	980	1 019
Oceania n.e.s.	266	330	338	154	207	201
International capital markets	1	1	—	—	—	—
International institutions	1	3	—	3	1	2
Unallocated	179	447	444	684	670	720
Total all countries	14 233	16 560	16 713	16 935	18 430	19 497
Country groups(c)						
APEC	7 693	8 846	9 217	8 648	9 600	9 982
ASEAN	1 736	1 881	2 000	1 966	2 460	2 457
EU	4 250	4 663	4 495	4 954	5 150	5 604
OECD	9 469	10 946	11 000	11 261	11 348	12 092
OPEC	269	331	336	421	625	646

(a) Prior to 1990-91, the former Germany, Democratic Republic is included in Europe n.e.s. (b) The remaining republics of the former USSR have been included in either Europe n.e.s. or Asia n.e.s. from 1992-93 onwards. (c) APEC includes Brunei, Canada, China, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand and United States of America. ASEAN includes Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand. EU includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and United Kingdom. OECD includes Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Monaco, New Zealand, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States of America. OPEC includes Algeria, Ecuador, Gabon, Indonesia, Iran, Kuwait, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela.

Source: *Balance of Payments and International Investment Position, Australia, 1993-94* (5363.0).

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.
- *Re-investment of earnings* of direct investors refers to income retained from after tax profits attributable to direct investors.

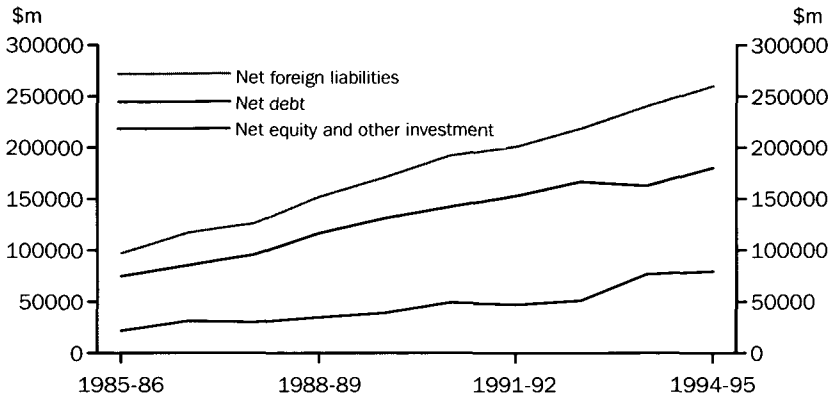
International investment position

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 26.24 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 1995 totalled \$259,922 million, up 8% on 30 June 1994. The rise in Australia's net foreign liabilities since 30 June 1994 was the net effect of rises of \$25,056 million in the level of foreign investment in Australia and \$5,212 million in the level of Australian investment abroad. Of the rise in the level of foreign investment in Australia, \$16,649 million (66%) was attributable to foreign borrowing.

26.23 Net international investment position



Source: Balance of Payments and International Investment Position, Australia, 1993-94 (5363.0).

26.24 International investment position and income
(\$ million)

Year	Changes in levels of investment during the year						Levels of investment at end of year	Investment income(a)
	Levels of investment at beginning of year	Reinvestment of earnings of direct investors	Other transactions	Exchange rate variations	Other changes	Total		
Foreign investment in Australia								
Equity								
1992-93	110 866	2 384	8 303	55	483	11 225	122 091	6 552
1993-94	122 091	4 243	18 249	86	10 387	32 966	155 057	8 645
1994-95	155 057	5 800	5 491	172	-2 310	9 153	164 210	12 058
Borrowing								
1992-93	191 268	..	7 641	9 399	113	17 153	208 420	11 344
1993-94	208 420	..	7 508	-6 239	-3 762	-2 493	205 927	10 938
1994-95	205 927	..	10 139	5 624	886	16 649	222 576	11 465
Other investment								
1992-93	6 841	..	562	53	-582	33	6 874	92
1993-94	6 874	..	903	-66	1 567	2 404	9 278	94
1994-95	9 278	..	-328	-3	-415	-747	8 532	14
Total								
1992-93	308 975	2 384	16 506	9 507	14	28 411	337 386	17 988
1993-94	337 386	4 243	26 660	-6 219	8 192	32 876	370 262	19 677
1994-95	370 262	5 800	15 302	5 793	-1 840	25 056	395 318	23 538
Australian investment abroad								
Equity								
1992-93	63 845	2 045	1 590	3 046	-205	6 476	70 321	2 901
1993-94	70 321	2 661	5 970	-3 613	2 955	7 972	78 293	3 425
1994-95	78 293	3 500	421	3 637	-1 039	6 519	84 813	4 295
Reserve assets								
1992-93	22 240	..	-3 950	1 705	828	-1 417	20 823	1 465
1993-94	20 823	..	1 054	-976	-240	-162	20 661	853
1994-95	20 661	..	-1 971	1 308	186	-477	20 184	989

For footnotes see end of table.

...continued

26.24 International investment position and income (\$ million) — *continued*

Year	Changes in levels of investment during the year						Levels of investment at end of year	Investment income(a)
	Levels of investment at beginning of year	Reinvestment of earnings of direct investors	Other transactions	Exchange rate variations	Other changes	Total		
Australian investment abroad — (continued)								
Lending								
1992–93	15 463	..	3 054	1 491	270	4 815	20 278	699
1993–94	20 278	..	3 390	-1 041	-598	1 751	22 029	815
1994–95	22 029	..	-1 167	1 019	27	-121	21 908	721
Other investment								
1992–93	6 603	..	220	173	486	879	7 482	21
1993–94	7 482	..	1 506	-83	295	1 717	9 200	31
1994–95	9 200	..	-978	92	178	-709	8 491	47
Total								
1992–93	108 151	2 045	914	6 415	1 379	10 753	118 904	5 085
1993–94	118 904	2 661	11 919	-5 714	2 413	11 278	130 183	5 125
1994–95	130 183	3 500	-3 695	6 056	-648	5 212	135 395	6 051
International investment position(b)								
Net equity								
1992–93	47 020	339	6 713	-2 991	688	4 749	51 770	3 652
1993–94	51 770	1 583	12 279	3 700	7 432	24 993	76 763	5 219
1994–95	76 763	2 300	5 069	-3 465	-1 271	2 634	79 397	7 764
Net foreign debt(c)								
1992–93	153 565	..	8 537	6 202	-985	13 755	167 320	9 180
1993–94	167 320	..	3 064	-4 221	-2 925	-4 082	163 237	9 270
1994–95	163 237	..	13 277	3 297	673	17 247	180 484	9 756
Other investment								
1992–93	238	..	342	-120	-1 068	-846	-608	71
1993–94	-608	..	-602	17	1 272	687	79	63
1994–95	79	..	650	-95	-593	-38	41	-33
Total								
1992–93	200 824	339	15 592	3 092	-1 364	17 658	218 481	12 903
1993–94	218 481	1 583	14 740	-503	5 779	21 598	240 079	14 552
1994–95	240 079	2 300	18 997	-263	-1 191	19 843	259 922	17 487

(a) Investment income is calculated before the deduction of withholding tax. Includes reinvested earnings of direct investors.

(b) Australia's net international investment position equals foreign investment in Australia less Australian investment abroad.

(c) Foreign borrowing by Australian residents less the sum of reserve assets and Australian lending abroad.

Source: *International Investment Position, Australia, June Quarter 1995* (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 26.25 shows, the level of net foreign debt at 30 June 1995 was \$180,484 million, up 11% on 30 June 1994. The increase during 1994–95 resulted from net capital transactions of \$13,277 million, exchange rate variations of \$3,297 million and other factors of \$673 million.

Table 26.25 also shows that net foreign debt of the public sector (official sector plus public trading and financial enterprises) rose by 10% during 1994-95, reaching \$71,729 million at 30 June 1995 and accounting for 40% of total net foreign debt at that date. Net foreign debt of

the private sector increased by 11% to \$108,756 million. The increase in total net foreign debt was attributable to the official sector and financial enterprises, with trading enterprises recording a small decrease.

26.25 Levels of foreign debt (\$ million)

Year	At 30 June					
	1990	1991	1992	1993	1994	1995
<i>Foreign borrowing (gross debt)(a)</i>						
Official						
Commonwealth government & Reserve Bank	19 654	17 429	16 848	21 469	22 913	27 929
State government	19 788	24 435	28 425	37 963	39 560	48 473
Total official	39 443	41 864	45 273	59 432	62 472	76 402
Non-official						
Financial enterprises						
Public sector	20 224	20 205	21 105	23 047	23 144	16 099
Private sector	43 574	56 311	63 244	64 321	67 573	82 681
Total	63 798	76 517	84 349	87 368	90 717	98 780
Trading enterprises						
Public sector	12 301	13 331	12 423	11 582	9 294	8 776
Private sector	47 228	47 539	49 222	50 038	43 443	38 619
Total	59 529	60 870	61 645	61 620	52 737	47 394
Total non-official	123 327	137 386	145 995	148 989	143 455	146 174
Total	162 770	179 251	191 268	208 420	205 927	222 576
Public sector						
Official	39 443	41 864	45 273	59 432	62 472	76 402
Non-official	32 525	33 536	33 529	34 630	32 438	24 875
Total	71 968	75 400	78 802	94 062	94 910	101 276
Private sector	90 802	103 850	112 466	114 359	111 017	121 300
<i>Australian lending abroad & reserve assets</i>						
Official						
Reserve assets	21 871	24 047	22 240	20 823	20 661	20 184
Lending	770	452	175	140	661	58
Total official	22 641	24 499	22 415	20 963	21 322	20 242
Non-official						
Financial enterprises	10 457	10 401	13 607	16 195	18 839	20 872
Trading enterprises	-2 082	1 569	1 680	3 942	2 529	978
Total non-official	8 375	11 970	15 288	20 138	21 368	21 850
Total	31 016	36 468	37 703	41 101	42 690	42 092
Public sector						
Official	22 641	24 499	22 415	20 963	21 322	20 242
Non-official	5 925	5 494	7 963	8 378	8 134	9 305
Total	28 566	29 993	30 377	29 341	29 456	29 548
Private sector	2 450	6 476	7 325	11 760	13 234	12 544

For footnotes see end of table.

...continued

26.25 Levels of foreign debt — continued
(\$ million)

Year	At 30 June					
	1990	1991	1992	1993	1994	1995
	Net foreign debt(a)(b)					
Official	16 802	17 366	22 858	38 469	41 151	56 159
Non-official						
Financial enterprises	53 341	66 116	70 742	71 173	71 878	77 908
Trading enterprises	61 611	59 301	59 965	57 678	50 208	46 417
Total non-official	114 952	125 417	130 707	128 851	122 086	124 325
Total	131 754	142 782	153 565	167 320	163 237	180 484
Public sector						
Official	16 802	17 366	22 858	38 469	41 151	56 159
Non-official	26 600	28 042	25 566	26 252	24 304	15 569
Total	43 401	45 408	48 424	64 721	65 455	71 729
Private sector	88 352	97 375	105 141	102 599	97 783	108 756

(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: *Balance of Payments and International Investment Position, Australia, 1993-94* (5363.0) and *International Investment Position, Australia, June Quarter 1995* (5306.0).

International investment ratios

Table 26.26 shows that, at 30 June 1995, the ratio of Australia's net foreign liabilities to GDP was 57%. This was the highest financial year result for this ratio on record. The ratio of net foreign debt to GDP was 40%, an increase of 2 percentage points on the previous year, and the ratio of net equity and other investment to GDP was 18%.

As shown in table 26.28, the ratio of net investment income payable abroad to exports of goods and services was 20% in 1994-95, an increase of 2 percentage points over the previous year.

The net debt service ratio, that is, net interest payable abroad on net foreign debt as a percentage of exports of goods and services, remained constant at 11% in 1994-95. The ratio of net investment income payable on equity and other foreign investment to exports of goods and services increased 3 percentage points to 9% over the year.

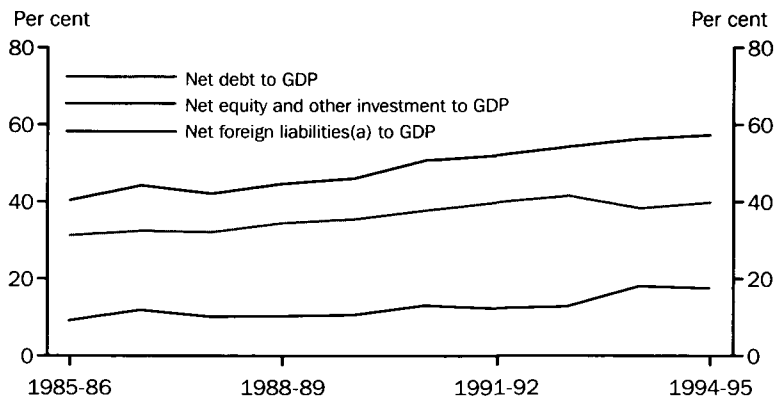
26.26 Net foreign liabilities — ratios to GDP

Year	Annual GDP at current prices	Net foreign liabilities at end of period (\$m)			Ratios of net foreign liabilities to GDP(a) (%)		
		Total	Foreign debt	Equity & other investment	Total	Foreign debt	Equity & other investment
1989-90	371 051	170 871	131 754	39 117	46.1	35.5	10.5
1990-91	378 082	191 982	142 782	49 200	50.8	37.8	13.0
1991-92	386 056	200 824	153 565	47 259	52.0	39.8	12.2
1992-93	402 912	218 481	167 320	51 162	54.2	41.5	12.7
1993-94	426 448	240 079	163 237	76 842	56.3	38.3	18.0
1994-95	453 564	259 922	180 484	79 438	57.3	39.8	17.5

(a) These ratios are derived by expressing net foreign liabilities at end of year as a percentage of GDP(I) for that year.

Source: *International Investment Position, Australia, June Quarter 1995* (5306.0).

26.27 Ratio of net foreign liabilities to GDP



Source: *International Investment Position Australia, June Quarter 1995 (5306.0)*.

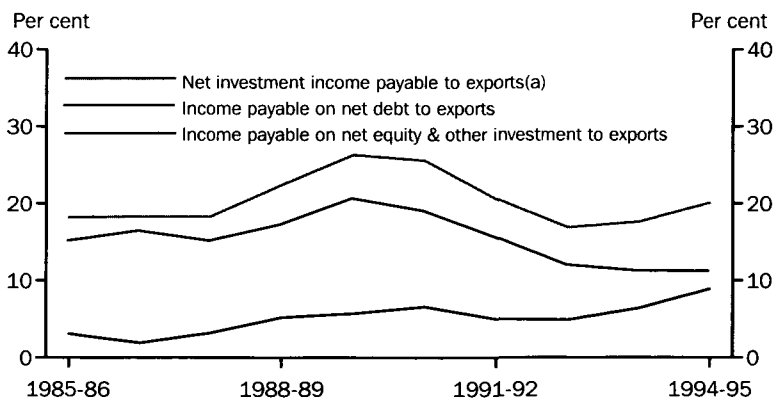
26.28 Net investment income — ratios to exports

Year	Exports of goods & services	Net investment income payable (\$m)			Ratios of net investment income payable to exports(a) (%)		
		Total	Foreign debt	Equity & other investment	Total	Foreign debt	Equity & other investment
1989-90	60 981	16 029	12 532	3 497	26.3	20.6	5.7
1990-91	66 277	16 950	12 568	4 382	25.6	19.0	6.6
1991-92	69 997	14 420	10 941	3 479	20.6	15.6	5.0
1992-93	76 444	12 903	9 180	3 723	16.9	12.0	4.9
1993-94	82 540	14 552	9 270	5 282	17.6	11.2	6.4
1994-95	86 869	17 487	9 756	7 731	20.1	11.2	8.9

(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, June Quarter 1995 (5306.0)*.

26.29 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, June Quarter, 1995 (5306.0)*.

International investment by country

Tables 26.30 and 26.31 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 was the leading investor country at 30 June 1995, with \$89,352 million (23%) of

the total stock of foreign investment in Australia, followed by the United Kingdom with \$72,376 million and Japan with \$50,837 million. The level of borrowing raised on the international capital markets (e.g. Eurobonds and similar issues) was \$70,509 million at 30 June 1995.

As at 30 June 1994, Australian investment abroad was most substantial in the USA, with a level of \$31,449 million (24%), followed by the United Kingdom with \$25,426 million, Japan with \$10,672 million and New Zealand with \$8,459 million.

26.30 Foreign investment in Australia, by country
(\$ million)

Country of investor	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Capital transactions						
OECD						
USA	1 899	6 769	4 313	10 406	10 967	390
Japan	7 901	2 085	-250	-3 161	-1 643	-264
Switzerland	485	-936	-237	22	312	-105
EU						
UK	113	5 225	1 824	3 624	8 759	554
Other(a)	690	-638	-1 005	782	4 522	2 109
Total EU	803	4 587	819	4 406	13 281	2 664
Other OECD	174	1 987	411	833	1 433	-115
Total OECD	11 262	14 492	5 056	12 506	24 349	2 569
ASEAN	645	-1 084	669	-1 136	969	-948
Other countries(b)	659	1 831	2 328	1 721	3 725	-1 772
International capital markets	10 242	3 614	5 489	6 066	325	11 226
International institutions	-30	757	82	-954	12	321
Unallocated	2 060	2 293	1 766	687	1 523	9 706
Total	24 838	21 903	15 390	18 890	30 903	21 102
APEC	10 512	12 063	7 354	8 711	14 537	-2 240
Investment income						
OECD						
USA	4 357	3 971	3 158	4 959	6 080	3 936
Japan	3 633	3 147	2 893	2 225	2 163	2 090
Switzerland	541	479	406	477	501	312
EU						
UK	3 287	3 026	2 719	3 166	3 707	2 815
Other(a)	1 430	998	953	1 084	1 383	945
Total EU	4 717	4 024	3 672	4 251	5 090	3 760
Other OECD	373	150	77	606	349	285
Total OECD	13 621	11 771	10 206	12 518	14 183	10 382
ASEAN	691	545	355	376	277	228
Other countries(b)	624	986	784	909	713	693
International capital markets	4 024	4 950	4 571	3 337	3 712	3 939
International institutions	34	39	25	40	35	-16
Unallocated	999	1 887	2 178	808	758	8 312
Total	19 993	20 178	18 119	17 988	19 677	23 538
APEC	n.a.	n.a.	n.a.	n.a.	n.a.	7 086

For footnotes see end of table.

...continued

26.30 Foreign investment in Australia, by country (\$ million) — *continued*

Country of investor	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Levels of investment at 30 June						
OECD						
USA	47 414	54 916	57 832	74 048	85 217	89 352
Japan	47 834	51 019	52 387	51 377	48 904	50 837
Switzerland	7 530	7 242	6 612	8 102	8 237	8 317
EU						
UK	50 639	54 435	59 569	63 151	74 488	72 376
Other(a)	22 141	21 394	21 940	22 675	30 299	33 424
Total EU	72 780	75 829	81 509	85 826	104 787	105 801
Other OECD	9 774	12 237	11 909	11 039	11 899	11 151
Total OECD	185 332	201 243	210 249	230 393	259 044	265 457
ASEAN	7 723	6 705	8 012	7 500	9 076	8 256
Other countries(b)	11 715	13 189	15 963	19 928	21 803	20 654
International capital markets	46 632	50 743	54 321	60 706	61 136	70 509
International institutions	257	1 014	1 097	142	154	476
Unallocated	14 882	18 151	19 333	18 716	19 049	29 966
Total	266 541	291 045	308 975	337 386	370 262	395 318
APEC	119 203	133 429	141 702	159 106	171 080	175 135

(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 'EU-Other'.

Source: *International Investment Position, Australia, June Quarter 1995 (5306.0)*.

26.31 Australian investment abroad, by country (\$ million)

Country of investment	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Capital transactions						
OECD						
USA	5 964	2 175	276	-276	148	2 943
New Zealand	648	1 680	282	-498	1 268	55
UK	2 056	1 284	1 946	-1 136	940	3 929
Japan	598	375	3 816	4 032	3 617	3 723
Other OECD(a)(b)	1 734	677	2 271	-4 735	-5 113	697
Total OECD	11 000	6 191	8 591	-2 613	860	11 347
ASEAN	801	775	-259	388	748	473
Papua New Guinea	178	157	129	145	155	130
Other countries(c)	-566	-363	-4 076	1 702	322	-98
Reserve Bank gold(d)	—	—	—	—	-19	—
Unallocated	1 315	-1 009	-41	57	894	2 728
Total	12 728	5 751	4 344	-321	2 960	14 580
Investment income						
OECD						
USA	1 159	1 956	1 264	879	1 646	868
New Zealand	307	337	237	306	258	533
UK	710	-93	15	620	839	1 826
Japan	73	95	189	113	90	13
Other OECD(a)(b)	618	249	916	955	1 327	996
Total OECD	2 867	2 544	2 621	2 873	4 160	4 236
ASEAN	139	220	127	118	249	212
Papua New Guinea	81	-10	207	227	224	257
Other countries(c)	571	909	76	131	351	188
Reserve Bank gold(d)	—	—	—	—	—	—
Unallocated	253	300	197	350	101	232
Total	3 911	3 963	3 228	3 699	5 085	5 125

For footnotes see end of table.

...continued

26.31 Australian investment abroad, by country — continued
(\$ million)

Country of investment	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Levels of investment at 30 June						
OECD						
USA	25 976	26 609	26 109	27 774	29 939	31 449
New Zealand	5 230	6 498	7 052	7 090	8 278	8 459
UK	15 461	17 899	18 800	20 206	19 902	25 426
Japan	4 428	4 894	6 220	6 049	7 461	10 672
Other OECD(a)(b)	14 325	15 230	20 128	21 662	21 729	21 248
Total OECD	65 420	71 130	78 309	82 781	87 309	97 254
ASEAN	3 088	4 425	4 045	4 919	5 979	6 583
Papua New Guinea	1 494	1 620	1 693	1 916	2 291	2 358
Other countries(c)	n.p.	n.p.	6 404	8 107	9 052	10 335
Reserve Bank gold(d)	3 861	3 541	3 804	3 639	4 448	4 208
Unallocated	n.p.	n.p.	4 808	6 789	9 825	9 443
Total	89 417	95 670	99 063	108 151	118 904	130 181

(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: Data is consistent with that published in *Balance of Payments and International Investment Position, Australia, 1993-94* (5363.0).

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 foreign investment in Australia it reflects 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.

As shown in table 26.32, when analysed by industry, the largest inflows of investment during 1993-94 were into finance, property and business services (\$11,785 million),

manufacturing (\$10,094 million), and public administration and defence (\$8,594 million). Net withdrawals of investment were recorded for a number of industries, the largest being wholesale and retail trade (\$3,406 million).

At 30 June 1994, the level of foreign investment was highest in the finance, property and business services category, with \$145,771 million (39%). This was followed by manufacturing (\$69,926 million); public administration and defence (\$56,071 million); mining (\$39,645 million); and wholesale and retail trade (\$30,027 million).

26.32 Foreign investment in Australia, by industry(a) (\$ million)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Capital transactions						
Mining						
Coal, oil & gas	650	1 471	477	-42	-634	527
Other mining	833	-87	1 223	131	942	1 187
Services to mining (incl. exploration)	65	69	-212	-212	-366	547
Total mining	1 547	1 453	1 489	-124	-59	2 261
Manufacturing						
Food, beverages & tobacco	1 554	4	1 659	1 251	1 213	2 723
Textiles	9	23	-83	53	39	-26
Clothing & footwear	n.p.	31	—	-4	-3	-56
Wood products & furniture	-18	2	-10	43	-62	6
Paper products & publishing	793	695	-9	-133	1 607	5 177
Chemicals, petroleum & coal product	382	304	362	100	277	99
Non-metallic mineral products	393	-78	-91	-78	66	-184
Basic metal products	n.p.	-557	-341	908	336	829
Fabricated metal products	-136	262	77	49	81	295
Transport equipment	436	-59	-325	-138	91	149
Other machinery & equipment	32	138	75	102	10	158
Miscellaneous manufacturing	1 122	1 346	345	48	412	923
Total manufacturing	5 546	2 112	1 659	2 201	4 067	10 094
Other industries						
Agriculture, forestry, fishing & hunting	104	151	119	-208	80	-81
Electricity, gas & water	-1 797	146	-123	-774	-699	-864
Construction	-350	-48	177	378	208	541
Wholesale & retail trade	1 935	1 383	2 285	1 800	1 169	-3 406
Transport & storage	1 324	723	928	-522	-237	454
Finance, property & business services(b)	23 990	14 114	16 066	9 022	-363	11 785
Public administration & defence(c)	-1 945	3 424	-491	2 214	13 397	8 594
Other industries(d)	909	344	592	99	622	-9
Unallocated	1 524	1 036	-798	1 304	675	1 535
Total other industries	25 695	21 273	18 755	13 313	14 852	18 549
Total	32 788	24 838	21 903	15 390	18 890	30 904
Investment income						
Mining						
Coal, oil & gas	584	1 099	1 182	1 010	1 430	1 459
Other mining	743	708	1 128	694	482	716
Services to mining (incl. exploration)	-17	86	12	28	65	22
Total mining	1 310	1 893	2 322	1 732	1 978	2 198
Manufacturing						
Food, beverages & tobacco	926	777	821	875	884	823
Textiles	26	56	12	26	22	48
Clothing & footwear	15	12	24	2	20	2
Wood products & furniture	12	10	6	6	5	8
Paper products & publishing	87	309	284	509	684	709
Chemicals, petroleum & coal product	483	411	238	238	399	489
Non-metallic mineral products	57	31	-42	-7	37	-5
Basic metal products	990	1 229	978	583	348	554
Fabricated metal products	70	60	54	40	51	108
Transport equipment	233	84	-408	-286	240	66
Other machinery & equipment	295	261	231	222	295	373
Miscellaneous manufacturing	445	568	337	324	588	415
Total manufacturing	3 640	3 807	2 535	2 531	3 573	3 592

For footnotes see end of table.

...continued

26.32 Foreign investment in Australia, by industry(a) — continued
(\$ million)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
<i>Investment income — (continued)</i>						
Other industries						
Agriculture, forestry, fishing & hunting	53	12	84	22	10	-25
Electricity, gas & water	436	295	317	277	224	72
Construction	73	41	3	65	5	35
Wholesale & retail trade	1 937	2 096	1 388	628	1 256	1 516
Transport & storage	595	815	763	663	655	685
Finance, property & business services(b)	4 302	5 781	8 053	7 789	6 444	6 972
Public administration & defence(c)	3 042	3 804	3 298	3 235	2 958	3 614
Other industries(d)	121	76	115	168	-60	-12
Unallocated	823	1 370	1 301	1 008	946	1 032
Total other industries	11 381	14 292	15 322	13 857	12 439	13 890
Total	16 331	19 993	20 178	18 119	17 990	19 679
<i>Levels of investment at 30 June</i>						
Mining						
Coal, oil & gas	9 787	11 512	12 049	12 103	11 894	11 830
Other mining	15 663	15 561	15 428	16 380	17 834	21 565
Services to mining (incl. exploration)	3 793	4 210	4 153	3 980	5 352	6 250
Total mining	29 243	31 283	31 630	32 463	35 080	39 645
Manufacturing						
Food, beverages & tobacco	12 285	12 816	14 243	13 764	14 703	17 494
Textiles	518	398	331	385	407	563
Clothing & footwear	279	330	353	298	405	328
Wood products & furniture	56	73	61	99	77	88
Paper products & publishing	3 641	4 120	3 716	4 067	8 510	13 286
Chemicals, petroleum & coal product	5 343	5 034	4 632	5 111	5 477	6 196
Non-metallic mineral products	1 015	843	884	765	673	568
Basic metal products	11 178	10 536	11 176	12 495	13 696	13 895
Fabricated metal products	906	1 232	1 258	1 302	1 314	1 548
Transport equipment	2 335	2 406	2 533	2 880	2 653	2 946
Other machinery & equipment	2 914	2 629	2 756	2 712	3 029	3 651
Miscellaneous manufacturing	5 839	7 737	7 230	7 457	7 582	9 364
Total manufacturing	46 308	48 154	49 174	51 335	58 526	69 926
Other industries						
Agriculture, forestry, fishing & hunting	1 210	1 311	2 512	1 391	1 671	2 053
Electricity, gas & water	5 071	5 290	5 317	4 775	4 364	3 708
Construction	1 460	1 545	1 906	2 337	2 533	3 081
Wholesale & retail trade	23 733	24 780	28 475	30 532	30 929	30 027
Transport & storage	7 503	7 987	9 089	8 943	8 790	9 431
Finance, property & business services(b)	91 238	105 001	123 549	131 947	133 785	145 771
Public administration & defence(c)	28 681	32 203	33 077	36 579	52 728	56 071
Other industries(d)	3 064	3 302	4 310	5 098	5 649	5 451
Unallocated	4 021	5 686	2 006	3 575	3 331	5 096
Total other industries	165 980	187 105	210 240	225 177	243 677	260 690
Total	241 532	266 541	291 045	308 975	337 386	370 262

(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 : Communications, Community services and Recreation, personal and other services.

Source: *Balance of Payments and International Investment Position, Australia, 1993-94* (5363.0).

Foreign ownership in Australia

Table 26.33 contains estimates of foreign ownership of Australian equity.

Of the total equity on issue by Australian enterprise groups at 31 December 1994, non-residents held equity valued at \$154.5 billion (35%) and residents held \$283.8 billion (65%).

When analysed by sector, it can be seen that the proportion of equity held by non-residents in private corporate trading enterprises dropped from 43% at 30 June 1991 to 40% at 30 June 1992. It has varied between 40 and 42% since then, with 42% being recorded at 31 December 1994.

The value of non-residents' equity in banks rose steadily over the period 30 June 1991 to 30 September 1994, but then declined to \$10.9 billion at 31 December 1994. As a proportion of the total equity issued by banks, foreign-owned equity rose from 20% at 30 June 1993 to 27% at 30 September 1994, but subsequently decreased, reaching 23% at 31 December 1994.

Non-resident equity holdings in non-bank deposit-taking institutions rose steadily as a proportion of the amount on issue from 21% at 30 June 1991 to 30% at 30 September 1994. This was partly due to the decrease in the level of equity on issue by these institutions. With a subsequent rise in both the amount of equity issued by the sector and in the amount of equity held by non-residents, the percentage of foreign ownership at 31 December 1994 rose to 39%.

The other financial institutions sector is largely comprised of general insurers. Foreign ownership of equity in these institutions declined from 17% at 30 June 1991 to 10% at 31 March 1994, rose to 11% at 30 June 1994 and remained at this level at 31 December 1994.

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 26.33, 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 1995 issue of *International Investment Position, Australia* (5306.0). The article includes a regional analysis and an analysis by degree of foreign influence.

26.33 Ownership of equity(a)

	Value of equity outstanding at end of period								
	1990-91	1991-92	1992-93	1993-94				1994-95	
				Sept.	Dec.	Mar.	June	Sept.	Dec.
All sectors									
Amount issued	317.0	338.3	378.0	416.6	456.9	451.0	446.7	454.3	438.3
Amount held by rest of world	105.4	110.9	122.1	138.0	150.5	152.5	155.1	160.9	154.5
Percentage of foreign ownership	33	33	32	33	33	34	35	35	35
Selected sub-sectors(b)									
Private corporate trading enterprises									
Amount issued(c)	211.7	235.8	259.4	293.4	324.5	316.7	319.3	331.3	312.7
Amount held by rest of the world	90.5	95.2	104.4	118.9	129.3	130.6	132.7	138.4	131.7
Percentage foreign ownership	43	40	40	41	40	41	42	42	42
Banks									
Amount issued(c)	35.2	36.1	43.6	49.3	53.0	50.7	48.5	46.3	47.4
Amount held by rest of the world	7.1	7.6	8.9	9.9	11.6	12.1	12.3	12.4	10.9
Percentage foreign ownership	20	21	20	20	22	24	25	27	23
Non-bank deposit taking institutions									
Amount issued(c)	13.4	11.7	12.7	12.4	13.0	12.8	12.7	12.7	14.2
Amount held by rest of the world	2.8	2.8	3.4	3.4	3.6	3.7	3.8	3.8	5.6
Percentage foreign ownership	21	24	27	27	28	29	30	30	39
Other financial institutions(d)									
Amount issued(c)	19.7	22.9	28.1	31.3	35.5	38.8	37.1	36.5	35.3
Amount held by rest of the world	3.3	3.5	3.4	3.7	3.9	4.0	4.1	3.9	3.8
Percentage foreign ownership	17	15	12	12	11	10	11	11	11

(a) Equity 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 1994 (5232.0)

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The figures below indicate the year (in bold type) and page of the Year Book containing the Special Article 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.

- Aboriginal Australia — Unity and Diversity, The history and culture of, **1994**, 397
- Aboriginals and the Government, **1994**, 403
- Australian Capital Territory pictorial history, **1988**, following 928
- Australian Defence Force Academy, **1988**, 198
- Australian Institute of Sport, **1984**, 684
- Australian mineral industry, historical development, **1988**, 592
- Australians at war, **1988**, 192
- Australian Statisticians and the Development of Official Statistics, **1988**, 1
- Black coal in Australia, **1982**, 395
- Blue-green algae, **1992**, 410
- Bushfires — an integral part of Australia's environment, **1995**, 515
- Census 1986 — a portrait of Australia, **1986**, 122
- Cinema, The Australian — an overview, **1989**, 658
- Commonwealth–State financial arrangements, Developments of, **1988**, 859
- Communications, Impact of technology on, **1988**, 772
- Constitution of the Commonwealth of Australia, **1988**, 115
- Crime Victims Survey, **1986**, 240
- Drought in Australia, **1988**, 620
- Endangered Australian species, **1990**, 603
- Ethnic and cultural diversity in Australia, **1995**, 129
- Flag, the Australian, **1989**, 35
- Foreign Affairs, Department of — a brief history, **1988**, 173
- Great Barrier Reef Marine Park, conservation and management, **1990**, 459
- Halley's Comet, Australia and, **1986**, 657
- Home nursing in Australia, history, **1985**, 202
- Household and Family Trends in Australia, **1994**, 149
- Human quarantine, the Australian approach, **1988**, 404
- Indigenous Peoples of Australia, Statistics on the, **1994**, 409
- Integrated Economic Censuses, Australia, **1970**, 1041
- International Year of Youth, **1985**, 244
- Land use, changing patterns, **1988**, 547
- Landforms and their history, **1988**, 202
- Mabo Case, The, and the Native Title Act, **1995**, 49
- Manufacturing industries in Australia, Development of, **1988**, 671
- Meteorology, History of, in Australia, **1988**, 248
- Mineral industry, Australian, historical development, **1988**, 592

National Estate, Australia's, 1988, 488

National Film and Sound Archive, 1989, 376

National Museum of Australia, 1989, 380

Parliament House — Australia's new
Parliament House, 1984, 51

Parliament of the Commonwealth of Australia,
1988, 152

Pensions and benefits in Australia, History of,
1988, 379

Quarantine, human, Australian approach to,
1988, 404

Recent decline in Australian fertility, 1981, 114

Republic, an Australian: issues and options,
1995, 35

Salinity, 1990, 202

Snowy Mountains Scheme, 1986, 430

Space, International Year, 1992, 573

Tourism in Australia, 1985, 633

Weather map, Reading the, 1994, 43

Youth, International Year of, 1985, 1985, 244

Index

A

- AAT
See Administrative Appeals Tribunal
- ABC
See Australian Broadcasting Corporation (ABC)
- ABC Concerts 335
- Aboriginal and Torres Strait Islander
 people 113-122
 education 118
 employment 119-120
 family and culture 115-116
 health 114-115
 housing 116-117
 income 119-120
 labour force status 119-120
 law 121
 music 332
 population 81-83, 113
 poverty 234
 training 118
- Aboriginal Employment and Training
 Assistance Program 182
- ABS
See Australian Bureau of Statistics
- ABSTUDY 293
- Accommodation
See Dwellings
See Tourist accommodation
- ACER
See Australian Council for Educational
 Research
- Acts of the parliaments 36-37
- Adelaide
 population 80
- ADF
See Australian Defence Force
- Administrative Appeals Tribunal 308
- Administrative Review Council 308
- Adult education 292
- Advance Australia Fair* (National
 Anthem) 37
- Advanced English for Migrants Program 180
- Africa 47
 Australian aid to 59
- AFTA
See ASEAN Free Trade Area
- Age Pension 187-188
- Aged Care Assessment Program 214
- Aged persons 214
See also Age pension
See also Retirement
See also Veterans' Affairs
 community based care 213-214
 income support 187-188
 residential care 212-214
 support services 207-208
- Agreement on Trade Related Intellectual
 Property Rights 53
- Agriculture 397-431
See also Crops
See also Livestock
See also under names of products e.g. Sheep
See also Viticulture
 employment 399
 land used 403
 value of production 399-400
- Aid programs
See Overseas aid
- AIDS 249-250
- Air Force 70
- Air transport 562-565, 567-568
 domestic 564
 international 562
 international agreements 567
 international organisations 567
 licences 565
 multiple designation 567-568
 registrations 565
- Airports 565
- Airservices Australia 567
- AIS
See Australian Institute of Sport (AIS)
- Alcohol consumption 244, 429
- ALP
See Australian Labor Party (ALP)
- Alternative Birthing Services Program 261
- Alumina 455-456
- Aluminium 455
- Amnesty International Group of the
 Australian Parliament 56
- Amusement and theme parks 376
- Angola 47
- ANL Limited
See Australian National Line (ANL) Limited

- ANTA
 See Australian National Training Authority (ANTA)
- Antarctic Treaty 52, 55, 392
- Antarctica 55
- Anthem
 National 37
 Royal 37
- ANZEC
 See Australian and New Zealand Environment Council
- ANZUS Treaty 45-46, 50
- APEC
 See Asia-Pacific Economic Cooperation
- Apiarists
 See Beekeeping
- Apprentice Training Incentive 177
- Approved deposit funds 611
- AQFAB
 See Australian Qualifications Framework Advisory Board (AQFAB)
- Aquaculture 442-443
- Archives 332
- Area of Australia 3-4, 6-7
- Aridity 8
- Armed forces
 See Australian Defence Force (ADF)
- Arms control 51-52
 treaties 52
- Army 70
- Art galleries
 See Museums
- Art museums
 See Museums
- Artificial limbs 222
- Arts
 See also Museums
 See also Performing arts training 340
- Arts Training Australia 340
- Asche, His Honour the Honourable Austin 27
- ASEAN
 See Association of South East Asian Nations (ASEAN)
- ASEAN Free Trade Area 53
- ASEAN Regional Forum 49
- Ashburton River 9
- Asia 41-44, 48-49
 See also North Asia
 See also names of individual countries e.g. China, Japan
 See also South Asia
 See also South-east Asia
- Asia-Pacific Economic Cooperation (APEC) 41, 48-49
- Asia-Pacific region 41, 48-49, 56
 See also names of individual countries e.g. Japan, New Zealand
- Asian Development Bank 60
- Asian Development Fund 60
- ASIO
 See Australian Security Intelligence Organisation (ASIO)
- Assault
 See Crime
- Assistance for Isolated Children Scheme 293
- Association of South East Asian Nations (ASEAN) 41, 48-49, 53
- AusAID
 See Australian Agency for International Development (AusAID)
- Australia Group 51
- Australia Post
 See Australian Postal Corporation
- Australia Television 569
- Australia's Anthem 37
- Australia's colours 37
- Australia-Indonesia Ministerial Forum 41
- Australia-Japan Ministerial Committee 44
- Australia-Korea Foundation 44
- Australia-New Zealand Closer Economic Relations 53
- Australian Agency for International Development (AusAID) 58
- Australian and New Zealand Environment and Conservation Council 383
- Australian Archives 332
- Australian Ballet 334
- Australian Ballet School 340
- Australian Broadcasting Authority (ABA) 339, 570
- Australian Broadcasting Commission 335
- Australian Broadcasting Corporation (ABC) 568-569

- Australian Bureau of Statistics xi-xii
 Australian Statistician vii
 bookshops ix
 Catalogue of Publications and Products vii, xi
 inquiries ix
 offices ix
- Australian Capital Territory
 area 3
 energy supply 477
 gross product 654
 population 78-79
 standard time 3
- Australian Centre for International Agricultural
 Research 61
- Australian Constitution 25-26, 36-37
- Australian Consumers' Council 312
- Australian Council for Educational
 Research 295
- Australian Defence Force (ADF) 68
- Australian Democrats 31, 34, 36
- Australian Federal Police 313
- Australian Film Finance Corporation 337
- Australian Film, Television and Radio
 School 340
- Australian Fisheries Management
 Authority 447
- Australian Fishing Zone 446
- Australian Geological Survey
 Organisation 467
- Australian Guidelines for Drinking Water
 Quality 384-385
- Australian Hearing Services 206
- Australian Heritage Commission 326, 438
- Australian Industrial Relations
 Commission 148
- Australian Institute of Criminology 318-319
- Australian Institute of Health and
 Welfare 265, 546
- Australian Institute of Marine Science
 (AIMS) 579
- Australian Institute of Sport (AIS) 344
- Australian International Education Foundation
 Council 294
- Australian Labor Party (ALP) 31, 34, 36
- Australian Language and Literacy Council
 294
- Australian Law Reform Commission
 (ALRC) 304
- Australian Maritime College 280
- Australian Maritime Safety Authority 566
- Australian Mineral Industries Research
 Association Limited 468
- Australian National Botanic Gardens 328
- Australian National Line (ANL) Limited 566
- Australian National Training Authority
 (ANTA) 286
- Australian Nature Conservation
 Agency 386, 438
- Australian Nuclear Science and Technology
 Organisation (ANSTO) 578
- Australian Opera 334
- Australian Postal Corporation 571-572
- Australian Qualifications Framework Advisory
 Board (AQFAB) 295
- Australian Quarantine and Inspection
 Service 266-267
- Australian Radiation Laboratory 268
- Australian Red Cross 269
- Australian Research Council 294
- Australian Road Research Board 566
- Australian Road Transport Advisory
 Committee 565
- Australian Securities Commission 615
- Australian Security Intelligence Organisation
 (ASIO) 312
- Australian Sports Commission 344, 346
- Australian Statistician vii
- Australian Stock Exchange Ltd 615
- Australian Tourist Commission 377
- Australian Traineeship System 177-178
- Australian Transport Council 565
- Australian Urban Export Strategy 546
- Australian Vocational Certificate Training
 System 179
- Australian Vocational Training System 295
- Australian Wool Exchange 426
- Australian Wool Research and Promotion
 Organisation 426
- AUSTROADS 566
- AUSTUDY 292-293
- Authorised money market dealers 605-606
- Ayers Rock 4

B

Balance of payments 663-669
 Baldwin, the Hon. Peter Jeremy 30
 Bangladesh 43
 Australian aid to 59
 Bankruptcy 319-321
 Banks 600-602
 Commercial 601
 Commonwealth legislation 600
 State legislation 601
 Barley 409-410
 Barron Falls 5
 Basel Convention on the Transborder
 Movement of Hazardous Waste 393
 Bauxite 455-456, 461
 Beaches 8
 Beazley, the Hon. Kim Christian 30
 Beddall, the Hon. David Peter 30
 Beef 418-419, 424
 exports 680
 Beekeeping 427-428
 Bennett, His Excellency General Sir Phillip 27
 Bereavement Allowance 197
 Bereavement payments 199
 Bevis, the Hon. Archibald Ronald 31
 Bilney, the Hon. Gordon Neil 30
 Biodiversity 381, 391, 393
 Convention on Biological Diversity 393
 Biological Weapons Convention 51-52
 Biomass 470
 Birthplace of population 102-103
 Births 87-89
 Alternative Birthing Services Program 261
 ex-nuptial 89
 Bogor Declaration 49
 Bolkus, Senator the Hon. Nick 30
 Bond University 280
 Books 330-332
 reading 331-332
 Borbidge, R. E. MLA 35
 Botanical gardens 328
 Brereton, the Hon. Laurence John 30
 Brisbane
 population 79-80

Britain
 See United Kingdom
 Broadcasting 568-570
 Commonwealth Transmission Network 570
 Brown, the Hon. D. C. 35
 Brumby, J. M. MLA 35
 Brunei 42
 Building 521-528
 See also Construction
 non-residential 521-522, 526-527
 residential 521-526
 Building materials
 price indexes 510-511, 528
 Bureau of Transport and Communications
 Economics 565
 Burglary
 See Crime
 Burma
 See Myanmar
 Businesses 356-359
 See also Industry
 farm 397-403

C

Cadmium 461
 Cairns Group 41, 53
 Call to Australia Party 34
 Cambodia 43
 Canada 46, 424
 Canberra
 population 80
 Cancer 243
 breast 260
 cervical 261
 lung 244
 registries 269
 research 264
 screening programs 260
 Cape Byron 3
 Cape York 3
 Capital account 665-666
 Capital expenditure
 manufacturing industry 486
 Caribbean 46
 Carnell, the Hon. K. 35
 Carr, the Hon. R. J. 35
 Cars
 See Motor vehicles

- Cash management trusts 612
- Castles, Mr Ian vii
- Cattle 418-420
See also Beef
See also Dairying
See also Meat
 live exports 425
- Central Lowlands 4
- CER
See Closer Economic Relations Trade Agreement (CER)
- Cereal grains 405-412
- Chemical Weapons Convention 51-52
- Child care 203-205, 210-211
 accreditation 204
 employer sponsored 204
 government assistance 203
 use of 204-205
- Child Disability Allowance 191
- Child Support Agency 307
- Child Support Scheme 196
- Childcare Assistance 202
- Childcare Cash Rebate 203
- Children
 caring for 210-211
- Children's Service Program 203
- China 41, 43
 Australian aid to 59
- Citizenship 110
- Civil Aviation Safety Authority 567
- Climate 9-18
- Cloncurry River 9
- Closer Economic Relations Trade Agreement (CER) 45
- Cloud 16
- Co-operative Research Centres 385
- Coal 455, 457-458, 461
 exports 680
- Coastline 3, 8
- Collins, the Hon. P. MP 35
- Collins, the Hon. Robert Lindsay 30
- Commercial finance 619
- Commission for Sustainable Development 55
- Commission on Human Rights 56
- Commission on the Status of Women 56
- Commodities 399
 agricultural 399-400
 exports and imports 680-684
 manufactured 488
- Common funds 613
- Commonwealth, the 52
- Commonwealth Environment Protection Agency 438
- Commonwealth Government 28-37
See also Commonwealth Parliament
 Cabinet Ministers 30
 finance 629-632
 grants to States and Territories 630-631
 Ministers 30-31
 Ministries 29-30
 taxation 631-632
- Commonwealth of Independent States 47
- Commonwealth Parliament 25-26, 28-37
 elections 32-33
 franchise 31-32
 qualifications for membership 31-32
 representation 32-33
 state of the parties 31
- Commonwealth Rehabilitation Service 206
- Commonwealth Respite for Carers Program 207
- Commonwealth Scientific and Industrial Research Organisation (CSIRO) 468, 577-578
 fisheries research 448
 forestry research 441
- Commonwealth Seniors Health Card 199
- Commonwealth Transmission Network 570
- Commonwealth-State Housing Agreement 547
- Communicable diseases 248
- Communicable Diseases Network — Australia New Zealand 269
- Communications 568-572
 postal 571-572
 telecommunications 571
- Community Aged Care Packages 207
- Community Rainforest Reforestation Program 436
- Community Research Project 202-203
- Comprehensive Test Ban Treaty 51
- Computers 590-594
- Concerts 335-336
- CONCOM
See Council of Nature Conservation Ministers (CONCOM)
- Conference on Disarmament 51

- Confinements 88-89
 Congenital malformations 247-248
 Conservation of Southern Bluefin Tuna 446
 Constitution
 See Australian Constitution
 Construction
 See also Building
 See also Construction industry
 engineering construction 527
 Construction industry 521-530
 industrial disputes 529-530
 labour costs 528-529
 trade union membership 530
 trends 521-523
 Consular services 57, 61-63
 Consumer Price Index (CPI) 503-508
 by city 506
 by commodity 506-507
 international comparisons 508-509
 long-term series 507
 Convention for the Prohibition of Fishing
 with Long Driftnets in the South Pacific 392
 Convention for the Protection of the World
 Cultural and Natural Heritage 392
 Convention on Biological Diversity 55, 393
 Convention on Early Notification of a Nuclear
 Accident 392
 Convention on International Trade in
 Endangered Species of Wild Fauna and
 Flora 393
 Convention on the Conservation of Nature in
 the South Pacific 392
 Convention on the Regulation of Antarctic
 Mineral Resource Activities 55
 Convention on Wetlands of International
 Importance 393
 Cook, Senator the Hon. Peter Francis
 Salmon 30
 Cooperative housing societies 605
 Copyright 321
 Corrective services 317
 prisoners 318
 Cost of living
 See Consumer Price Index (CPI)
 Cotton 416-417
 Council of Nature Conservation
 Ministers (CONCOM) 383
 Country Liberal Party 34, 36
 Court, the Hon. R. 35
 Courts
 appeals 307
 Courts of Marine Inquiry 307
 Federal 304-307
 Licensing 307
 Small Claims 307
 special 307
 State and Territory 307
 CPI
 See Consumer Price Index (CPI)
 Crawford, the Hon. Mary Catherine 31
 Crean, the Hon. Simon Findlay 30
Creative Nation 334
 Credit cooperatives 605
 Crime 314-318
 criminological research 319
 drug offences 317
 victims 315-316
 Criminological research 319
 Croatia 47
 Crops 404-417
 Crosio, the Hon. Janice Ann 31
 Crowley, Senator the Hon. Rosemary
 Anne 30
 CSIRO
 See Commonwealth Scientific and Industrial
 Research Organisation (CSIRO)
 Cuba 46
 Cultural relations 56
 Culture 325-349
 government funding 342
 Culture/leisure activities
 involvement 341-342
 time spent 342
 Current account 664-665
 Cyclones 10, 17
 Czechoslovakia 47
-
- D**
- Dairying 426-427
 cattle 427
 production 427
 Daly River 9
 Dance 333
 See also Australian Ballet
 Darling River 9

- Darwin
population 80
- De Grey River 9
- Death rates 90-92
injury 253
suicide 254
- Deaths 87, 90-93, 250-255
See also Road traffic accidents
causes of 250-253, 255
infant 90-91, 252-253
injury 253
neonatal 252
perinatal 252-253
suicide 253-254
- Defence 67-73
See also International relations
Acquisition and Logistics 71
budget 71-72
Budget and Management 71
contribution to UN activities 71
Defence Forces Executive 70
expenditure 71-72
organisation 68
personnel 72
planning 68-69
policy 67, 69-70
programs 69-71
science and technology 71
Strategy and Intelligence 70
- Defence Service Homes Scheme 219
- Defending Australia* 50, 67-69
- Demography 77-111
- Dental health 245-246, 259-260
- Department of Employment, Education and Training 294
- Department of Human Services and Health 265
- Department of Industry, Science and Technology 577
- Department of Primary Industries and Energy 438
- Department of the Environment, Sport and Territories 346, 438
- Department of Veterans' Affairs 214-215
- Deprivation 228
- Deserts 8
- Diabetes 243
- Diamonds 455, 457, 461
- Diet 259
- Diplomatic representation 63
- Diplomatic services 61-63
- Disability Pension 216-217
- Disability Services Program 206
- Disability Support Pension 189
- Disability Wage Supplement 189
- Disability, people with 246-247
support services 189-191, 205-208
- Disabled Apprentice Wage Subsidy 177
- Disarmament
See Arms control
- Disaster Relief Payment 198
- Divorces 97-99
duration of marriage 98
involving children 99
rates 98-99
- Domestic production account 647
- Double Orphan Pension 196-197
- Down's syndrome 247
- Drivers' licences 557
- Drought 17, 418
National Drought Policy 385
- Drought Relief Payment 198
- Drugs 259
illicit 244, 317
medication 245
prescriptions 245
quality 268
- Drysdale River 9
- Duncan, the Hon. Peter 30
- Dwellings 531-532
energy use 533
insulation 537
price indexes 543
problems 531-532
purchase price 539-540
size 532
-
- E**
- Earnings 150-154
average weekly 150-151
composition and distribution 151-152
- Eastern Highlands 4-5
- Ede, B. R. MLA 35

- Education 273-300
See also Schools
See also Students
See also Teachers
See also Technical and Further Education
See also Tertiary education
 Aboriginal and Torres Strait Islander people 118
 adult 292
 attainment 291
 attendance 289-290
 expenditure 296-299
 government responsibilities 273
 overseas sponsored students 59
 participation in 289
 student assistance 280, 292-294
 training 118
 Veterans' Children Education Scheme 217
 vocational 286
- El Niño 10
- Elections 32, 34
See also Commonwealth Parliament
- Electorates 32-33
- Electricity 471-477
- Elliott, the Hon. Robert Paul 31
- Emergency assistance 60
- Emigration 108
- Employed persons 130-136
See also Employment
 average weekly earnings 153
 by industry 132
 career experience 136
 hours worked 131-132, 164-165
 multiple jobholders 134-135
 non-wage benefits 156-157
 occupation 132
 overtime 153-154, 165, 168
 retirement intentions 146-148
 shift work 168-169
 status of worker 131
 wage and salary earners 133-136
 working arrangements 166, 168-169
- Employment 130-136, 399
See also Employed persons
 agriculture 399
 by sector 133-134
 cultural occupations 340-341
 Government programs 175-182
 manufacturing 483
 radio and television 339
 retail trade 496-497
 within industries 133, 353-354, 356
- Employment and Skills Formation Council 294
- Employment Assistance Australia 177
- Employment Participation Program 179
- Employment Services Regulatory Authority 177
- Energy 468-477
See also under types of energy e.g.
 Electricity, Solar
 administrative arrangements 466-467
 resources 469
 use by households 388-389, 533
- Energy Research and Development Corporation 467
- Engineering construction 527-528
- Enterprising Nation* 296
- Environment 326, 381-393
 costs of protection 391
 environmental law 381
 international 54
 international cooperation 391-392
 international treaties and conventions 392-393
 national activities 383
 research activities 385
- Environmental indicators 381-382
- Environmental issues
 attitudes to 386-388
- Environmental Modification Convention 52
- Equal opportunity 309
- Europe 46
See also under names of individual countries e.g. United Kingdom
- European Commission 46
- European Union 46
- Ex-service personnel
See Veterans' Affairs
- Exchange rates 667
- Exercise 243-244
- Expenditure
 households 223-224
- Exports 666-668, 670-677, 680-681, 683-686
 beef 424
 by country 673-676
 by industry 685-686
 by State 672
 fisheries products 445
 forest products 437
 meat 424
 mining 455
 price indexes 513, 515
- External affairs
See International relations

F

- Families 86
 caring in 209-211
 income support 193-195, 200-201
- Family Court of Australia 306-307
- Family Payment 193-194
- Family planning 260
- Farm businesses 397-403
 financial statistics 400
 indebtedness 402
 turnover 401
- Farm Forestry Program 436
- Farm Household Support Scheme 198
- Faulkner, Senator the Hon. John Philip 30
- Federal Airports Corporation 567
- Federal Bureau of Consumer Affairs 312
- Federal Court of Australia 305, 320
- Federation 25
- Fertilisers 430
- Fertility rates 87-88
- Field, the Hon. M. W. MHA 35
- Film 337-338
 cinema attendances 338
- Film industry 337-338
- Finance
 See also Government finance
 commercial 620
 lease 620
 personal 618-619
- Finance companies 608
- Financial activity 617
- Financial institutions 599-622
- Financial sector 599-600
- Fishing 442-448
 See also Aquaculture
 exports 445
 fisheries resources 442
 imports 445
 legislation 446-447
 processing fisheries products 444
 production 442-444
 recreational 448
 research 447-448
 territorial arrangements 446
- Fitzroy River 9
- Flats
 See Dwellings
- Flinders Ranges 4
- Floods 17-18
 See also Rainfall
- Fodder crops 417-418
- Fog 16
- FOI
 See Freedom of information
- Follett, the Hon. R. MLA 35
- Food
 See also Diet
 consumption 428-429, 442
 inspection 266-267
 standards 267
- Forde, Her Excellency Mrs Leneen 27
- Foreign affairs
 See International relations
- Foreign debt 693-696
- Foreign exchange 618
- Foreign investment
 See International investment
- Foreign ownership in Australia 702-703
- Foreign policy
 See International relations
- Forest and Wood Products Research and Development Corporation 441
- Forestry 435-441
 See also Wood
 Commonwealth government initiatives 439
 exports 437
 Government administration 438
 imports 437
 native forest 435-436
 plantations 436
 tropical forests 436
- Fortescue River 9
- Framework Convention on Biological Diversity 54
- Framework Convention on Climate Change 54-55
- Franchise 31-32
- Free, the Hon. Ross Vincent 30
- Freedom of information 310
- Freight movements 557
- Friendly societies 613-615
- Frost 15
- Fruit 413-414

G

- Gaols
See Prisons
- Gas 454
See also Liquefied petroleum gas
See also Natural gas
 resources 459
- Gascoyne River 9
- GATT
See General Agreement on Tariffs and Trade (GATT)
- Gear, the Hon. George 30
- General Agreement on Tariffs and Trade (GATT) 52
See also International relations
- General financiers 609
- Geography 3-9, 18-20
 landforms 4
 physical 4
 position 3
- Geothermal power 470
- Germany
 trade with 673
- Gilbert River 9
- Glacial periods 8
- Global radiation 16
- God Save the Queen* (Royal Anthem) 37
- Gold 454-456, 461
 exports 680
- Goss, the Hon. W. K. 35
- Government 25-37
See also Commonwealth government
See also Commonwealth Parliament
See also Local government
See also State government
- Government finance 625-638
- Governor-General 25-26, 36-37
- Governors, State 26, 36
- Grain sorghum 411
- Grapes 414-415
- Great Artesian Basin 4-5
- Great Barrier Reef 8
- Great Dividing Range 5
- Greening Australia 386
- Greens, The 31, 34, 36
- Gregory River 9

- Groom, the Hon. R. J. 35
- Gross domestic product 641-644
 industry contribution to 354-355
- Gulf of Carpentaria 4

H

- Hail 13
- Handicap, people with 207-211, 246-247
- Hay 417-418
- Hayden, His Excellency the Honourable William George 26
- Healesville Sanctuary 329
- Health 243-269
See also Dental health
See also Medicare
See also Hospitals
See also under names of disorders e.g.
 Hypertension
 Aboriginal and Torres Strait Islander people 114-115
 expenditure 261-264
 household expenditure 262
 mental 258
 occupational 268
 organisations 264-269
 programs 258
 radiation 268
 research 265-266
 risk factors 244-245
 services for veterans 221-223
 women's 260-261
 work force 257
- Health and Community Services Ministerial Council 264-265
- Health Benefits Card 199
- Health Care Card 199
- Health insurance 264
 Private Health Insurance Administration Council 266
- Heart disease 243-244
- Heat waves 14-15
- Henderson poverty line 229-230
- Heritage 325
- High blood pressure
See Hypertension
- High Court of Australia 304-305
- Higher education
See also Higher education institutions
 eligibility for entry 275
 halls of residence 281
 students 281-286

Higher Education Council 294

Higher education institutions 280-286
See also Higher education
 funding 280
 libraries 330

HIV 249-250

Hobart
 population 80

Home and Community Care Program 207

Home ownership 537-538
 home buyers 539, 541
 purchase price 539-540

Home rental 537-538
 Rent Assistance 199-200
 rental tenants 534-537

Homeless youth 258

Homicide
See Crime

Honey 427-428

Hong Kong 44, 48

Hospitality industries 498

Hospitals
 Commonwealth Government funding of 262
 comparison of public and private 256-257
 private 256
 public 255-256
 Repatriation Auxiliary Hospitals 221-222
 Repatriation General Hospitals 220
 use of 255

Hostels 212-213

House of Assembly 25, 36

House of Representatives 25, 36

Households 85-86
 computers in 590-594
 energy use 533
 expenditure 223-224
 income 223

Houses
See Dwellings

Housing 531-548
See also Dwellings
 Aboriginal and Torres Strait Islander
 people 116-117
 accessibility 539
 assistance 547
 costs 230-231, 541-542
 Defence Service Homes Scheme 219
 finance 544-546
 Government initiatives 546-547
 stock 531

Howard, Mr John W. 31

Howe, the Hon. Brian Leslie 30

Human rights 56, 309

Human Rights and Equal Opportunity
 Commission 309

Humidity 15-16

Hydro-electricity 472, 476

Hypertension 243

 I

IAEA
See International Atomic Energy Agency

IFIOR
See International Forum on the Indian
 Ocean Region

Ilmenite 455-456

Implicit price deflators 644

Imports 666, 669-676, 678, 680, 682-686
 by country 673-676
 by industry 685-686
 by State 672
 fisheries products 445
 forest products 437
 mining 456
 price indexes 513, 515

Income
 households 223
 national 647-650

India 43, 48
 Australian aid to 59

Indian Ocean 48

Indian Ocean Zone of Peace (IOZP) 48

Indigenous Australians
See Aboriginal and Torres Strait Islander
 people

Indonesia 41

Industrial disputes 169-171
 construction industry 529-530
 manufacturing industry 485

Industrial relations 169-172
See also Australian Industrial Relations
 Commission
See also Industrial Relations Court of Australia
 conciliation and arbitration 148-149
 enterprise bargaining 149

Industrial Relations Court of Australia 306

- Industry 353-362
 See also Agriculture
 See also Fishing
 See also Forestry
 See also Manufacturing
 See also Mining
 See also Retail trade
 See also Services industries
 average weekly earnings 153-154
 See also Transport industry
 See also Wholesale trade
 capital expenditure 362
 concentration 361-362, 489
 employment within 353-354
 financial transactions 359
 Labour Adjustment Packages 180-181
 labour costs 161-163
 labour productivity 361
 operating profit 357
 performance 360
 production 358
 sales 357
 structure 356-357
 tourism 376
- Industry Research and Development Board 385
- Inflation
 See Consumer Price Index (CPI)
- Information technology 590-594
- Inhumane Weapons Convention 52
- Injuries 253-254
- Innovation in manufacturing 491-493
- Institutes of Technology 286
- Interest rates 617
- Internal migration 108
- International accounts 661, 663-676, 680-703
- International Agency for Research on Cancer 264
- International Air Services Commission 567-568
- International Atomic Energy Agency (IAEA) 50, 466
- International Committee of the Red Cross 60
- International Convention for the Prevention of Pollution from Ships 392
- International Convention for the Regulation of Whaling 392
- International Convention on Oil Pollution Preparedness, Response and Co-operation 392
- International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 393
- International Development Association 60
- International development organisations 59
- International Energy Agency 467
- International Forum on the Indian Ocean Region (IFIOR) 48
- International investment 691-701
 by country 697-699
 by industry 699-701
- International Plant Protection Convention 393
- International relations 41-63
 See also Defence
 See also International trade
- International Sea-bed Authority 54
- International trade 653, 661, 663-703
 See also Exports
 See also Imports
 See also International investment
 See also International relations in services 686-690
 price indexes 513
- International Tribunal for the Law of the Sea 54
- Introduced species 381
- IOZP
 See Indian Ocean Zone of Peace
- Iron ore 454, 456, 461
 exports 680
- Irrigation 429
-
- J**
- Jails
 See Prisons
- Japan 41, 48, 424, 445-446
 trade with 673, 680
- Jeffery, His Excellency Major General Michael 27
- Jervis Bay Botanical Gardens 328-329
- JET program
 See Jobs, Education and Training Program (JET)
- Job Compact 176, 192
- Job Search Allowance 191-193
- Job vacancies 145
- JobClub 179
- JobFunds 179
- JobNeeds 179
- JobPlace 179

Jobs, Education and Training Program
(JET) 196

JobSkills 180

JobStart 180

Johns, the Hon. Gary Thomas 30

K

Karpin Committee 296

Keating, The Hon. Paul John 30

Kennett, the Hon. J. G. 35

Kerr, the Hon. Duncan James Colquhoun 30

Korea, Democratic People's Republic
of 44-45

Korea, Republic of 41, 44, 48, 424, 673

L

Labour Adjustment Packages 181

Labour costs 162-163

See also Superannuation
construction industry 528-529
manufacturing 484

Labour force 125-182, 289-290

See also Employed persons
See also Employment
See also Unemployment
See also Unpaid work
Aboriginal and Torres Strait Islander
people 119-120
birthplace of 129-130
changes in 127
characteristics of 127-130
health 257
participation 127-129
persons not in 145-146
productivity 361

Labour market

See also Labour force
Government programs 175-182
job vacancies 144-145

Lake Eyre 5, 9

Lake Gairdner 9

Lake George 4

Lake Torrens 9

Lakes 9

Land and Water Resources Research and
Development Corporation 385

Landcare and Environment Action
Program 180

Landfill gas 470, 476

Language

Workplace English Literacy Program 178

Languages 348-349

Latin America 46

Lavarch, the Hon. Michael Hugh 30

Law 303-321

See also Courts
See also Crime
See also Police
Aboriginal and Torres Strait Islander
people 121
administration and expenditure 303
administrative review 308
Commonwealth and State
responsibilities 303
consumer affairs 311-312
family 306-307
legal aid 313
reform 304

Law of the Sea 54

See also United Nations Convention on the
Law of the Sea

Lawrence, the Hon. Carmen Mary 30

Lead 455, 461

Leader of the Opposition 31
State 35

Lee, the Hon. Michael John 30

Legal aid 313

Legislation 36-37
enactment of 37

Legislative Assemblies 25, 36

Legislative Councils 25, 36

Leichhardt River 9

Lending by financial institutions 618-619

Leslie, the Hon. S. 35

Leucoxene 456

Liberal Party 31, 34, 36

Libraries 329-331

Life expectancy 91-92

Life insurance 610

Lindsay, the Hon. Eamon John 31

Liquefied natural gas 465, 471

Liquefied petroleum gas 458-459

Lithium 461

Livestock 424

Local government 636-637
 assets 637
 finance 636
 liabilities 637-638

London Dumping Convention 393

Lone Pine Koala Sanctuary 329

LPG

See Liquefied petroleum gas

M

Mabo case 463

Maize 411-412

Malawi 47

Malaysia 42

Managed funds 620

Manganese 461

Manufacturing
 price indexes 512-513

Manufacturing industry 481-494
 capital expenditure 486
 concentration of enterprises 489
 employment 483
 industrial disputes 485
 innovation 491-494
 labour costs 484
 principal commodities 488-489
 production 481
 profits 487
 research and development 489-490
 stocks 487
 structure 482
 technology 489
 trade union membership 485
 trends 481
 turnover 482-483

Marriages 93-101

See also Divorces

duration of 98

first marriage rates 95-97

remarriages 100

Maternity Allowance 201

Mature Age Allowance 193

MCEETYA

See Ministerial Council on Education,
 Employment, Training and Youth
 Affairs (MCEETYA)

McGarvie, His Excellency the Honourable
 Richard 27

McGinty, J. A. MP 35

McHugh, the Hon. Jeannette 30

McLennan, Mr W. vii

McMullan, Senator the Hon. Robert
 Francis 30

Meat 423-425

cattle 425

consumption 428-429

exports 424

live cattle exports 425

live sheep exports 425

production 423

sheep 425

Medical practitioners 257

Medicare 255, 265

financing 262

Melbourne

population 79-80

Melbourne Zoo 329

Mental health 258

Middle East 47

Migration

from Australia 108

internal 108-110

interstate 108-110

overseas 77, 101-104, 106, 108

refugees 107

to Australia 104, 106-107

Milk 427

domestic market 427

production 427

Mineral sands 456, 461

Minerals

See also under names of minerals e.g. Gold

drilling methods 461-462

exploration 461-463

geology 460

processing 460

production 454

rights 463

royalties 464

Mining 453-469

administrative arrangements 466-467

exports 455

imports 456

legislation 463-464

research 467-468

Ministerial Council on Education,
 Employment, Training and Youth
 Affairs (MCEETYA) 294-295

Ministerial Council on Forestry, Fisheries and
 Aquaculture 438

Mitchell River 9

Mitchell, Her Excellency the Honourable
 Dame Roma 27

Mobility Allowance 191

Modems 593

- Monazite 456-457
 Money 617
 supply measures 617
 Money market corporations 607
 Montreal Protocol on Substances that Deplete
 the Ozone Layer 393
 Moon Treaty 52
 Mortality
 See Deaths
 Motor cycles
 See Motor vehicles
 Motor vehicles 553-557
 See also Road traffic accidents
 average age 553-554
 registrations 553, 555
 use of 556-557
 Mount Gambier 8
 Mount Kosciusko 4, 8
 Mount Lofty 4
 Movies
 See Film
 Mozambique 47
 Murchison River 9
 Murder
 See Crime
 Murray Plains 4
 Murray River 9
 Murray-Darling river system 9
 Musculoskeletal problems 243
 Museums 327
 Music 332-336
 Aboriginal and Torres Strait Islander
 people 332
 Musica Viva 334-335
 Myanmar 43
-
- N**
- National accounts 641-658
 Capital account 649
 Domestic production account 644, 647
 Income and outlay account 647
 Overseas transactions account 651, 653
 National Afforestation Program 436
 National Anthem 37
 National Board of Employment, Education
 and Training (NBEET) 294
 National Centre for Vocational Education
 Research (NCVER) 295
 National Child Protection Council 204
 National Childcare Accreditation Council 204
 National colours 37
 National Crime Authority (NCA) 311
 National Drought Policy 385
 National Estate 325-326
 National Food Authority 267
 National Forest Inventory 436
 National Forest Policy Advisory Forum 440
 National Forest Policy
 Statement 436, 439-441
 National Forests Inventory 440
 National Health Advancement Program 258
 National Health and Medical Research
 Council 266
 National Heart Foundation of Australia 269
 National income and outlay account 647
 National Institute of Dramatic Art (NIDA) 340
 National Landcare Program 384
 National Lead Abatement Education
 Campaign 383
 National Library of Australia 330
 National Occupational Health and Safety
 Commission 268
 National Parks 326-327, 381
 National Party of Australia 31, 34, 36
 National Pollutant Inventory 383
 National Prevention Strategy for Child Abuse
 and Neglect 204
 National Reserve System 383
 National Road Transport Commission 566
 National Strategy for Vocational Education and
 Training 287
 National Training Wage 177
 National Training Wages (NTW) Program 180
 National Transmission Agency 568
 National Water Quality Management
 Strategy 384
 National Waterwatch Program 384
 National Wetlands Management Program 384
 National Women's Health Program 260
 Native title 463
 Natural gas 459, 471

Navy 70

NBEET
See National Board of Employment, Education and Training (NBEET)

NCVER
See National Centre for Vocational Education Research (NCVER)

Neoplasms
See Cancer

New Enterprise Incentive Schemes 181

New South Wales
 area 3
 coastline 3
 energy supply 472-473
 gross product 654
 population 78-79
 standard time 3

New Work Opportunities (NWO) Program 180

New Zealand 41, 45, 50, 67, 445, 673

Newstart Allowance 191-193

Nickel 461

NIDA
See National Institute of Dramatic Art (NIDA)

North Asia 43-45
See also under names of individual countries
 e.g. China
 Australian aid to 59

Northern Territory
 area 3
 coastline 3
 energy supply 476
 gross product 654
 population 78-79
 standard time 3

Nuclear Energy Agency 51

Nuclear issues 50-51, 457
 Convention on Early Notification of a Nuclear Accident 392
 South Pacific Nuclear Free Zone Treaty 392
 Treaty Banning Nuclear Weapons Testing in the Atmosphere, in Outer Space and Under Water 392

Nuclear Non-Proliferation Treaty 50-52

Nullabor Plain 4

Nurses 257

Nursing homes 212-213

Nutrition 259

O

O'Keefe, the Hon. Neil Patrick 31

Oats 406, 408

Obesity 243

Occupational health and safety 268

Occupations
See also employed persons
 average weekly earnings 151-152
 cultural 340-341
 health 257

Office of Australian War Graves 223

Office of Recreation Development 346

Official reserve assets 667

Oil 454-456, 458
 marketing and pricing 465
 resources 459

Oilseeds 416

Ombudsman 308-309

One Billion Trees 386

Open Learning Agency of Australia Pty Ltd 281

Opera 333
See also Australian Opera

Optus Communications Pty Ltd 571

Ord River 9

Organ and tissue donation 260

Osteoporosis 243

Outer Space Treaty 52

Overseas aid 48, 57-60
 Commercial programs 60
 Community programs 60

Overseas born Australians 102-103
 labour force status 129-130

Overseas trade
See International trade

Overseas transactions account 651-653

Overtime 153-154, 165, 168
 by industry 165

Overweight 243

Ozone layer 392-393
 Montreal Protocol on Substances that Deplete the Ozone Layer 393
 Vienna Convention for the Protection of the Ozone Layer 393

P

- Pakistan 43
 Australian aid to 59
- Paper products 437
See also Pulp and paper mills
- Papua New Guinea 41, 45
 Australian aid to 58
- Parenting Allowance 200
- Parliament
See Commonwealth Parliament
See Parliamentarians
See State Parliaments
- Parliamentarians 30-33, 35-36
 number 31, 36
 salaries 31
 salaries and allowances 35
- Partial Test Ban Treaty 52
- Partner Allowance 200
- Passports 57
- Pensioner Concession Card 198-199
- Performing arts 332-336
 in hotels, clubs, etc. 337
- Permanent building societies 603
- Permanent departures 108
- Permanent missions 63
- Personal finance 618-619
- Perth
 population 80
- Petroleum 456
 exploration 462-463, 466
 legislation 464
 secondary tax arrangements 465-466
- Pharmaceutical Allowance 199
- Pharmaceutical Benefits Scheme 262
- Philippines 42
- Physical activity
See Exercise
- Pigs 423, 425
- Poland 47
- Police 313-314
- Political parties 31, 34, 36
- Pollution 383, 393
 Basel Convention on the Transborder
 Movement of Hazardous Waste 393
 from leaded petrol 383
 International Convention for the Prevention
 of Pollution from Ships 392
 International Convention on Oil
 Pollution Preparedness, Response and
 Co-operation 392
 London Dumping Convention 393
 National Pollutant Inventory 383
- Population 77-83, 85, 289-291
See also Demography
 Aboriginal and Torres Strait Islander
 people 81-83
 age/sex profile 82-83, 85
 birthplace 102-103
 distribution 78-80
 education characteristics 289
 growth 77-78
 projections 78
- Postal communications 571-572
- Poultry 423-424
- Poverty 226-239
 among immigrants 233
 among Indigenous Australians 234
 and inequality 227
 and labour force status 232-233
 Henderson poverty line 229-230
 indexes 228
 international comparisons 235
 measures 227
 trends 235
- Price indexes 503-516
See also Consumer Price Index (CPI)
See also Producer Price Indexes
 building materials 510-511, 528
 exports 515
 houses 543
 imports 513-515
 international trade 513
 manufacturing 512-513
- Prices 503-516
See also Price indexes
- Prime Minister 30
 Deputy 30-31
 salary 31
- Prisons 317
- Private Health Insurance Administration
 Council 266
- Producer Price Indexes 509-513
 long-term series 509-510

Production 424, 427
 Profits
 manufacturing industry 487
 Protocol on Environmental Protection to the
 Antarctic Treaty 55
 Public unit trusts 612
 Pulp and paper mills 437
 Pulp mill guidelines 441
 Punch, the Hon. Gray Francis 30

Q

Quarantine 266-267
 Queen Elizabeth the Second 25-27, 37
 Queensland
 area 3
 coastline 3
 energy supply 474
 gross product 654
 population 78-79
 standard time 3

R

R&D
 See Research and development
 RAAF
 See Royal Australian Air Force (RAAF)
 Radio 339, 568-569
 commercial 569
 listening 339
 Radio Australia 569
 Radiocommunication stations 570
 Rail transport 558-560
 Rainfall 10-13
 annual 10, 12
 daily 12
 frequency 11
 intensity 11-12
 seasonal 11
 thunderstorms 12
 Rainforests
 See Forestry
 Rann, the Hon. M. MP 35
 Ray, Senator the Hon. Robert Francis 30
 Recycling
 National Recycling Targets 383
 Red Cross
 See Australian Red Cross
 Refugees 60, 107

Regional Forest Agreements 440
 Register of the National Estate 326
 Religion 347-348
 Remarriages 100
 rates 100-101
 Remote Area Allowance 200
 Rent Assistance 199-200
 Rental tenants 534-536
 Repatriation Auxiliary Hospitals 221-222
 Repatriation General Hospitals 220
 Research and development 579-589, 595
 business sector 583
 government sector 583-584
 higher education sector 586-587
 in manufacturing 489-490
 private non-profit sector 587-589
 tax concession 579
 Reserve Bank of Australia 600
 Respiratory problems 243, 250
 Retail trade 495-497
 employment 496-497
 Retirement 146-148
 Rice 412
 Rio Declaration on Environment and
 Development 54
 Rivers 9
 Monitoring river health 385
 Road traffic accidents 244, 558
 Roads 553
 Romania 47
 Royal Anthem 37
 Royal Australian Air Force (RAAF) 70
 Royal Australian Navy 70
 Royal Commissions 310
 Russia 47
 Rutile 455-456

S

Sales 357
 See also Retail trade
 Salt lakes 8
 Sand dunes 8
 Savings 647, 649
 SBS
 See Special Broadcasting Service (SBS)

- Victoria
 area 3
 coastline 3
 energy supply 473-474
 gross product 654
 population 78-79
 standard time 3
- Victoria River 9
- Video 337, 339
- Vienna Convention for the Protection of the Ozone Layer 393
- Vietnam 42
- Vietnam Veterans Counselling Service 222-223
- Viticulture 414-415
- Volcanoes 8
-
- W**
- Wage rates 148-149
 award rates of pay indexes 149-150
- Walker, the Hon. Francis John 30
- Wallaman Falls 5
- War Widows' Pension 216-217
- Waste management 381
- Water
 Australian Guidelines for Drinking Water Quality 384-385
 conservation by households 390-391
 freshwater resources 384-385
 Monitoring river health 385
 National Landcare Program 384
 National Water Quality Management Strategy 384
 National Waterwatch Program 384
 National Wetlands Management Program 384
 research activities 385
 use by households 388-391
- Water resources 18-20, 381
See also Rainfall
See also Rivers
See also Snow
- Water transport 561-562
- Waterfalls 5
- Wave power 470
- Welfare services 188-223
See also under names of payments e.g. Age Pension
 allowances and payments 187-196,
 198-206, 208, 215-223
 fringe benefits 198-199
- Wentworth Falls 5
- Werribee Zoological Park 329
- Western Australia
 area 3
 coastline 3
 energy supply 475-476
 gross product 654
 population 78-79
 standard time 3
- Western Europe 46
- Western Plains Zoo 329
- Western Plateau 4
- Westminster system 25
- Whales 446
- Wheat 405-407
- Wholesale trade 495
- Widow Pension 197
- Wife Pension 187-188
- Willis, the Hon. Ralph 30
- Wilson's Promontory 3
- Wind power 470, 476
- Winds 9, 17
- Wollombi waterfall 5
- Women, status of 56
- Women's health
See Health, women's
- Wood 437-438
 tropical timber 440
- Wood and Paper Industries Strategy 440
- Wool 422, 424-426
 marketing arrangements 426
 production 425
 receivals 426
 stockpile 426
- Wool International 426
- Working Nation* 176-177, 180, 287
- Workplace English Literacy Program 178
- Worksearch 179
- Workskills 179
- World Bank 60
- World Food Programme 59
- World Health Organization 264
- World Trade Organisation (WTO) 52-53
- WTO Committee on Agriculture 53

- Trade, international
See International trade
- Trade, retail
See Retail trade
- Trade, wholesale
See Wholesale trade
- Traineeships 178
- Training
 Aboriginal and Torres Strait Islander people 118
 arts 340
 by occupation 173
 expenditure 173
 Government programs 175-182
 industry based 177
 practices 175
 reasons for 174-175
- Transport 553-568
 government organisations 565-567
- Transport industry 553
- Treasurer 30-31
- Treaties 52, 55
 environmental 392-393
- Treaty Banning Nuclear Weapons Testing in the Atmosphere, in Outer Space and Under Water 392
- Treaty of Rarotonga
See South Pacific Nuclear Free Zone Treaty
- Tropical cyclones
See Cyclones
- Trucks
See Motor vehicles
-
- U**
- UK
See United Kingdom
- Uluru 4
- UNCED
See United Nations Conference on Environment and Development (UNCED)
- UNCTAD
See United Nations Conference on Trade and Development (UNCTAD)
- Unemployed persons 137-144
 duration of unemployment 139-140, 142
 income support 191-193
 job search experience 139-141
 long-term unemployed 141-144
- Unemployment 137-138, 140-143
See also Labour force
 long-term unemployed persons 141-144
 long-term unemployment rate 143
- United Kingdom
 trade with 673
- United Nations Children's Fund 59
- United Nations Conference on Environment and Development (UNCED) 54, 391
- United Nations Conference on Trade and Development (UNCTAD) 53
- United Nations Convention on the Law of the Sea 54, 392, 446
- United Nations Development Programme 59
- United Nations Economic and Social Council (ECOSOC) 53
- United Nations Fourth World Conference on Women 56
- United Nations Framework Convention on Climate Change 392
- United Nations High Commissioner for Refugees 60
- United Nations Relief and Works Agency 60
- United States of America 41, 46, 50, 67, 424, 445
 trade with 673
- Universities 280
See Higher education institutions
- University of Notre Dame, Western Australia 280
- Unpaid work 655-657
- Upper Darling River 9
- Uranium 455, 457, 461
- Urban and regional development 546
- Urban design agenda 546
- Uruguay Round 52-53
See also International relations
- USA
See United States of America
- USSR, former 47
-
- V**
- Vegetables 413
- Veterans' Affairs 214-223
 expenditure 215
 health services 220-223
 housing assistance 219
- Veterans' Children Education Scheme 217

- Sport and Recreation Ministers Council 344
- Sri Lanka 43
- Standards and Curriculum Council 295
- State accounts 653-654
- State Constitutions 25-26
- State governments
assets 637-638
finance 633-635, 653-654
liabilities 637-638
- State Governors
See Governors, State
- State Parks 381
- State Parliaments 25-26, 35, 37
- Statement of Principles on Forests 54
- Status of women 56
- Steep Point 3
- Stock market 615-617
- Stroke 243
- Students 276-278
Government assistance 292-294
Higher education 281-283, 286
- Sugar 417
- Suicide 254-255
- Sunshine 16
- Superannuation 158-161
See also Labour costs
costs 158-159
coverage 158-161
- Superannuation funds 611
- Supported Wage System 206
- Survivors of torture and trauma 260
- Sydney
population 79-80
- Symphony orchestras 333-335
-
- T**
- TAFE
See Technical and Further Education
- Taiwan 44, 48, 424, 445
- Tantalum 461
- Tasmania
area 3
coastline 3
energy supply 476
gross product 654
population 78-79
standard time 3
- Taxation 627
- Teachers 276-278
- Technical and Further Education 286-288
funding 286
- Technical and Further Education
institutions 280
- Technology
See also Research and development
See Science
manufacturing 489
- Television 337, 339, 568-571
commercial 569
watching 339
- Telstra 571
- Temperature 13-15
- Territory Wildlife Park 329
- Tertiary education 280-288
See also Higher education
See also Technical and Further Education
- Thailand 42, 445
- Theatre 333, 336
- Theft
See Crime
- Theophanous, the Hon. Andrew Charles 31
- Therapeutic Goods Administration 268
- Thorium 457
- Thunderstorms 12
- Time zones 3
- Timor Gap Zone of Cooperation Treaty 464
- Tobacco use 244
- Torres Strait Treaty 46
- Tourism 365-377
amusement and theme parks 376-377
domestic 365, 373-374
economic importance 365
expenditure 365, 373
inbound 377
international 365-370
overseas marketing expenditure 377
- Tourism industry 376-377
- Tourist accommodation 374-375
- Trade missions 63
- Trade Practices Commission 312, 615
- Trade union membership
construction industry 530
manufacturing industry 485-486
- Trade unions 171-172

- Schacht, Senator the Hon. Christopher Cleland 30
- Schools 274-280
 attendance 273
 boarding facilities 279
 correspondence 278
 curriculum development 274-275
 examinations 275
 funding 279
 libraries 330
 number 276-278
 organisation 274
 primary 273, 275
 retention rates 279
 secondary 273, 275
 Special 278
 special programs 274
 students 277-278
 subjects studied 275
 teaching staff 276-278
- Schools Council 294
- Sciacca, the Hon. Concetto Antonio 30
- Science 577-579
See also Research and development
 administration 577-579
- Sea-Bed Arms Control Treaty 52
- Seafood
See Fishing
- Seaworld 329
- Senate 25, 36
- Senior's Health Card 199
- Service industries 498
- Service Pension 218-219
- Service personnel 72
- Share market 615-617
- Shearing 425
- Sheep 418, 421-422, 424
See also wool
 live exports 425
- Sherry, the Hon. Nicholas John 31
- Shipping 561-562
- Ships 561
- Sickness Allowance 190-191
- Silage 417-418
- Silver 461
- Sinclair, His Excellency Rear Admiral Peter Ross 27
- Singapore 42, 48
- Singapore-Australia Business Alliance Forum 42
- SkillShare 180
- SkillTrain 179
- Smoking
See Tobacco use
- Snow 13
- Snowdon, the Hon. Warren Edward 30
- Snowy Mountains Hydro-Electric Scheme 472
- Social security
See Welfare services
- Socio-cultural activities 347
- Solar energy 469
- Sole Parent Pension 195
- South Africa 47-48
 Australian aid to 59
- South Asia 41-43
 Australian aid to 59
- South Australia
 area 3
 coastline 3
 energy supply 474
 gross product 654
 population 78-79
 standard time 3
- South Cape 3
- South Pacific 45, 51
 Australian aid to 58
- South Pacific Commission 45
- South Pacific Forum 45
- South Pacific Nuclear Free Zone Treaty 51-52, 392
- South Pacific Regional Environmental Program 45
- South-east Asia 41-43, 51
 Australian aid to 59
- Southern Oscillation (SO) 10
- Southern Oscillation Index (SOI) 10
- Sovereign 26, 36
See also Queen Elizabeth the Second
- Special Benefit 197
- Special Broadcasting Service (SBS) 569
- Special Trade Training Program 178
- Spencer Gulf 4
- Spina bifida 247
- Sport 343-346
 government funding 346
 involvement 344-346

Y**Youth**

National Youth Housing Strategy 546
services for homeless youth 548

Youth Training Allowance 192

Youth Training Initiative 192

Yugoslavia, former 47

Z

Zinc 455, 461

Zircon 455-456

Zoos 329

