MONEY IN AN ECONOMY WITHOUT BANKS: THE CASE OF IRELAND*

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Ireland is unique in the financial world for the prevalence and duration of its bank closures. Between 1966-76 industrial disputes resulted in the closures of the Associated Banks¹ on three occasions in the Republic of Ireland. These closures, totalling in aggregate almost a year, provide economists with a unique opportunity of examining an economy functioning for long periods without the direct use of the major part of the money supply, bank deposits.

Against the background of the six and a half months closure of 1970, it is intended:

- (1) to examine the alternative "money" structure that arose during the closures;
- (2) to investigate the extent to which the closures affected economic activity;
- (3) to discuss the implications for monetary theory of these events.

THE ALTERNATIVE MONEY STRUCTURE

Current and deposit accounts with the Associated Banks formed 82 per cent of M_2 (currency and Bank deposits) in 1966, 85 per cent in 1970 and 86 per cent in 1976. The bank closures therefore deprived the public of the direct use of, on average, well over 80 per cent of the money supply.

May 7—July 30, 1966 May 1—November 17, 1970 June 28—September 6, 1976.

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¹These disputes involved the closure of all the offices and branches of the clearing banks in the Republic of Ireland. The Associated Banks are the Bank of Ireland, Allied Irish Banks, the Northern Bank and the Ulster Bank. The dates of the closures were:

Unfortunately, for purists in these matters, the closures did not result in the suspension of all the means of payment within the country. Irish currency and sterling continued to circulate. Some of the North American and merchant banks provided current account facilities to major companies, and in some cases alternative banking facilities were availed of in Northern Ireland and Great Britain. Table I shows the changes in currency and current accounts with institutions that remained open during the 1970 closure.

Table I
Changes in Currency and Demand Deposits During 1970 Closure (£millions)

					(1) (2)		(3)	
					Irish Currency	Sterling	Current Accounts with Non-Associated Banks	
May					+9)	+3 +2	
June					+1			
June July					+ 9 +1 +1	i i	+1	
						+35		
August					-3	1	+3	
Septemb	er			•••	-4		+2	
August Septemb October	٠	•••	• • • •	•••	0	ļ	+2	
Overall	Cha	nge			+4	+35	+13	

Source:

Column I Quarterly Bulletins of the Central Bank of Ireland.

Column 2 and 3 Central Bank of Ireland Survey of Economic Effects of Bank Dispute 1970.

Column 1 shows changes in the amount of currency outstanding. The Central Bank was concerned to ensure that adequate supplies of currency were made available to the public. Currency was transferred from the Central Bank to government departments so as to meet the wages and salaries of employees in the public sector and also to meet social welfare payments. After the initial jump in currency in May of £9 million the demand for currency slackened off considerably.

In the months of August and September the volume of currency outstanding fell by £7 million and at the end of the dispute there was only £4 million of currency more in circulation than at the start.

Offsetting part of the additional demand for currency was the increased amount of sterling in circulation. Sterling is freely accepted as a means of payment in the Republic. It has been estimated by the Central Bank that there was a total of about £5 million in circulation in April 1970 and that this built up to £40 million by November with

most of the increase coming from tourist expenditure during the Summer months.²

In remaining open the non-Associated Banks, an amalgam of merchant and North American banks, did provide some transactors with an alternative source for current account transactions. However, their ability to provide alternative means of payment was very limited, as these banks had no branch network system to operate within so that they found themselves physically incapable of dealing with the new volume of business presented to them. By the end of May most of them refused to handle new accounts. Current accounts with these non-Associated Banks only rose by £13 million during the closure.

Some transactors were able to utilize bank accounts held in Northern Ireland and Great Britain. Unfortunately, there are no statistics available on these deposits. However, any outflow of funds to build up bank deposits outside the State in the weeks prior to the closure would have been reflected in a fall in the Republic's official external reserves. No significant fall in the reserves was recorded indicating that such activity did not occur on any sizeable scale. Between the end of March and the end of May 1970 the official external reserves fell from £304 million to £301 million.

In some cases bank accounts outside the State were established and built up with the proceeds of export payments during the closure. These accounts were used to finance part of the import bill.³

Aggregating the known alternative sources of payment money outlined in Table 1, it may be seen that by November 1970 there was an additional £52 million of currency plus deposits in circulation. This does not include deposits held by residents outside the State. Taking it as a rough approximation it still only constituted less than one twelfth of the Associated Banks' current and deposit accounts. This indicates that the alternative standard "money" made available in the form of currency and deposits cannot be held to have filled the gap created by the withdrawal of the direct use of the banks' deposits from the system.

The total of £5 billion of uncleared cheques at the end of the bank closure was, by definition, the exchange medium that was used to finance most transactions. Cheques drawn on the Associated Banks

²As this sterling currency would normally have been collected by the Central Bank and invested in interest bearing bills and bonds in London, the dispute resulted in a saving of over £1 million for the British Exchequer (assuming average excess sterling holdings of £17.5 million and an average Treasury Bill rate of 6.9 per cent).

³Central Bank Survey (1971).

continued to be the main transaction instruments used during the closure.

However, it is important to note that the substance of the chequing transaction changed during the closure. In a normal banking system cheques are readily acceptable because it is believed that they are drawn against known accounts and will be cleared quickly. During the bank disputes they were drawn, not against known credit accounts or allowed overdraft limits, but against the value of other uncleared cheques and/or the transactor's view as to his creditworthiness.

Cheques cleared within a few days and against known accounts have little default risk attached to them or, if they are dishonoured, the mistake will not be repeated. Cheques accepted against uncleared cheques, debits issued against uncleared credits, greatly increased default risk.

The acceptor of a cheque depended not only on the issuer's creditworthiness but also on the creditworthiness of the latter's payers. One transactor's credit was contingent on another's. A break in the credit link could, it was recognized, have a cumulative impact on the creditworthiness of other transactors.

Uncertainty also existed because it was not known when the banks would re-open.⁴

In summary a highly personalized credit system without any definite time horizon for the eventual clearance of debits and credits substituted for the existing institutionalized banking system.

The nature of the economy greatly facilitated the emergence of this new system. The Republic of Ireland has a population of only 3 million inhabitants. The small size of the population meant that there was a high degree of personal contact amongst members of the community. Where information was lacking at the personal level substitute information "storage units" existed in the form of retail shops, numbering around 12,000 and, that well-known Irish institution, the public house, 11,000 of which exist in the Republic—a pub population (over eighteen) ratio of 1:190.

It appears that the managers of these retail outlets and public houses had a high degree of information about their customers—one does not after all serve drink to someone for years without discovering

⁴The public knew from the outset of the 1970 closure that it would be a prolonged one. The *Irish Times* of May 16, 1970 reported that roughly 3,500 out of the total of 7,000 bank employees had taken up alternative work in London. Planes, seemingly, were chartered to bring groups of bank employees to work in Britain! The speed with which employees accepted alternative temporary work was indicative of the magnitude of the impasse between employers and employees.

something of his liquid resources. This information enabled them to provide commodities and currency for their customers against undated trade credit. Public houses and shops emerged as a substitute banking system.

RISK CATEGORIES OF CHEQUES (GOVERNMENT VERSUS PRIVATE)

All cheques were not universally accepted. Cheques were graded into various risk categories. Cheques drawn on the government and on well established institutions were readily accepted by the alternative banking system. In many cases these cheques acted like certificates of deposit in that they changed ownership often during the closure.

The negotiability of personal cheques depended on the degree of information and personal contact that the acceptor had about the issuer of the cheque. The high credit information content possessed by transactors in the community, a major factor facilitating the use of personal cheques, is borne out by the Central Bank's Survey.

"The number of firms (retailers) who expressed concern at the prospect of a large volume of unpaid cheques was small, despite the fact that a very large number of cheques was accepted by them."

"Through the dispute, Associated Bank cheques were freely accepted both within the country and, to a lesser extent, in respect of external payments. There is little evidence that firms or individuals experienced much difficulty in initiating domestic payments by drawing cheques on closed banks, but there was a reluctance to accept third party cheques."

These types of statements run right through the Survey. They indicate the substantial amount of information transactors possessed about one another. The ease with which transactions were carried out using this system is also exemplified by the fact that there was little evidence to indicate that bankers' cards or similar facilities were used more intensively during the dispute of 1970. In addition some printing houses found that there was an active market for blank cheque books which they supplied to the general public through newsagents.

ECONOMIC ACTIVITY DURING THE CLOSURE

To what extent did these three bank closures affect economic activity? For the 1970 closure the Central Bank and the Economic and Social Research Institute carried out a Survey of the economic effects of the bank dispute. The general picture derived from that Survey was that economic activity remained quite resilient throughout the six and a half month closure:

"... the level of economic activity continued to increase, though at a reduced pace . . ."

The conclusion reached by the Central Bank/ESRI was qualitative in nature. We wished to test the quantitative impact of the closure on expenditure.

The monthly Retail Sales Index 1961-76 was taken as the best indicator of consumer expenditure.⁵ Having detrended this series, the average sales for each month between 1961-76, excluding the bank closure years of 1966, 70 and 76, were calculated.⁶ The average sales for each month were taken to represent the expected retail sales. The recorded monthly retail sales for bank closure years were then compared with the expected retail sales to see if, as a result of the closures, there was any statistically significant divergence of retail sales from what would have been expected—see Table 2.

Table 2
Percentage Changes in Actual as Against Expected Retail Sales in the Bank Strike Years
1966, 1970 and 1976

(Strike Months are underlined)

Year 1966 T Statistics	 January +2·0% .9	1.4%	– I ·5%	April +2·1% ·6	May -2·3% 1·07	June 4·9% 3·5*
1970	 + 1 ·6%	-·14%	+ I ∙9%	+3·8%	-5·3	-3·9%
T Statistics	·7	·1	∙8	I·I	2·4*	2·8*
1976	 – · 3%	+5·3%	-4·9%	-1·4%	+ ·4%	+·2%
T Statistics	I ·	I·8	2·0	·4	·2	I·

Year 1966 T Statistics	July 1 · 1% 4	+1.4%	September +6·1% 3·4*	– I·0%	+2%	December 1 · 4% · 3
1970	 ·3%	-3·1%	+3·1%	- ·8%	- ⋅8%	+3·5%
T Statistics	·1	·8	1·7	·2	- ⋅3	·9
1976	 - 10·4%	-4·2%	+2·8%	+·1%	+7·7%	+4·9%
T Statistics	3·8*	I·I	1·6	·02	2·6*	1·2

^{*} Significant at the 5% level.

⁵The emphasis had to be on retail sales because output statistics were available only on a quarterly basis and a further strike in the cement industry during the first half of 1970 caused major difficulties in interpreting the unemployment statistics.

⁶The months were normalized by the yearly total and expressed at annual rates.

The results may be summarized as follows:

- (1) In eight out of the twelve bank closure months, actual retail sales did not significantly diverge from expected retail sales.
- (2) In four cases—June 1966, May and June 1970 and July 1976—there was a significant fall in actual retail sales below expected retail sales.
- (3) Caution needs to be exercised in interpreting the 5·3 per cent (May) and 3·9 per cent (June) fall in retail sales below expected sales in 1970. On May 1st of that year wholesale tax was doubled from 2½ per cent to 5 per cent. Transactors had been notified of this change in taxation in April. It seems plausible to assume that the tax change caused transactors to push forward purchases of cars and heavy consumer durables to April so as to avoid the tax increase. This change in taxation was a contributory factor to the downturn in retail sales in May and June.
- (4) In the case of the "shorter" closures of 1966 and 1976, there was a pick up in retail sales some time after the re-opening of the banks. The deflationary effects of the 4.9 per cent (June 1966) and 10.4 per cent (July 1976) downturns in retail sales were offset by the 6.1 per cent (September 1966) and 7.7 per cent (November 1976) increases in actual above expected retail sales. There was no significant upturn in retail sales at the end of the 1970 closure.

It would seem reasonable to assume that if the public is deprived of the direct use of over 80 per cent of the money supply such a situation would create substantial deflationary forces in the economy. The evidence collected from the monthly Retail Sales Index suggests that this did not happen during the three bank closures. In eight out of the twelve bank closure months retail sales were not significantly affected by the changed monetary circumstances. In the other four months it is noticeable that the downturn in retail sales took place at the start of the closures. A similar learning process seems to have been at work in each case with the initial desire on the part of buyers to maintain liquidity, allied with the reluctance on the part of sellers to extend credit, giving way to the development of a huge multilateral system of credits and debits which permitted the smooth functioning of exchange activity as the closures lengthened.

IMPLICATIONS FOR MONETARY THEORY

It may be contended that there was no fundamental change in the money system as a result of the closures. Transactors drew or accepted cheques of the Associated Banks in the belief that they would eventually re-open their doors to the public. Is there any fundamental distinction between cheques drawn on closed as against open banks?

As was pointed out above, the substance of the chequing transaction underwent a fundamental change during the closures. Depositors were not drawing cheques against known accounts. They were drawing against their pre-closure accounts plus the cheques they themselves had accepted. The payees accepted the cheque, not on the basis of a known bank deposit, but by virtue of the information they possessed about the creditworthiness of the issuer and the latter's payers.

Consider the case of a payee faced with the following:

- (1) A cheque issued against a known credit account which may be cleared with little delay through the clearing system.
- (2) A one/three/six months post dated, from the viewpoint of clearing, cheque.

The former is the type of transaction that takes place when the banks are open. Payment and exchange take place simultaneously. The second represents the situation payees faced during the closures—indeed transactors did not know at what date in the future cheques could be cashed, if at all.

Shackle (1971) recently pinpointed this essential distinction between money as a means of payment and money as a medium of exchange. Defining money in a payments context, Shackle maintained that one needed to define payments first:

"Payment has been made when a sale has been completed. Payment has been made when the creditor has no further claim. Payment is in some sense final...the stock of money can be defined as the means of strictly simultaneous payment."

Money, as a means of payment is, therefore, defined as that which finalises a transaction either immediately (currency) or within the period required to clear a cheque (bank deposits).

⁷The assumption that transactors issue cheques against known accounts when the banks are open is not strictly accurate as cheques can and do on occasion "bounce". The point made here is that the degree of trust and information required was far greater during the closures.

Money, as a medium of exchange does not finalise immediately the transaction process. It leaves the transactor and/or the accepting agency with some liability or contingent liability. Exchange takes place but payment is deferred. Time separates the act of payment from the act of exchange.

As long as exchange takes place, one can define as money the instruments which have facilitated the exchange of goods and services. By using the concept of money as a medium of exchange, the range of items defined as money may be broadened to include instruments such as bills of exchange, IOUs and trade credit.

Money in its means of payment role is largely required because it acts as an information substitute. Once payment money is used the transaction is finalised and information on the creditworthiness of the payer is not required. On the other hand, money as a medium of exchange embodies an information factor which allows exchange to take place prior to payment for goods and services. It is the information possessed by the payee on the creditworthiness of the payer which is vital to the transaction. Without adequate information the payee will demand means-of-payment money in return for his goods or services.

This means that as information on the public's creditworthiness improves and as institutionalized arrangements reduce the cost of acquiring information, exchange becomes less dependent on payment money.⁸ In this way improved information may tend to increase the potential money supply by monetizing bills of exchange, IOUs, trade credit, etc. Due to improved information transactors may be more prepared to exchange goods and services on a deferred payments basis. In other words, exchange may take place without the means of simultaneous payment.

Conclusion

It is held that the bank closures in Ireland illustrate empirically the validity of the distinction between money as a medium of exchange and money as a means of payment as well as the importance of information in the exchange process. The direct use of means-of-payment money (bank deposits) was removed from the transaction process. In the absence of this money, exchange activity remained relatively unaffected because the public was prepared to use undated trade credit

⁸It is of interest to note in this respect that some firms ".... particularly in manufacturing, feel following the dispute that they can manage their affairs with relatively lower money balances in future". Central Bank Survey, op. cit., p. 51.

as the instrument of exchange. The public's ability to do so was based on the vast stock of information available to transactors on the credit-worthiness of fellow transactors. Faced with the necessity for finding alternative exchange instruments, the public used undated trade credit, finding it a close substitute for payment money because of the information content on creditworthiness available in the economy.

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