

No. 1040

**CURRENCY BOARD OR CENTRAL
BANK? LESSONS FROM THE IRISH
POUND'S LINK WITH STERLING,
1928-79**

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**INTERNATIONAL
MACROECONOMICS**



Centre for Economic Policy Research

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Discussion Paper No. 1040
October 1994

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CEPR Discussion Paper No. 1040

October 1994

ABSTRACT

Currency Board or Central Bank? Lessons from the Irish Pound's Link with Sterling, 1928–79

There has been a resurgence of interest in currency boards as a possible approach to achieving a stable currency in newly established or hyperinflationary financial systems. This paper draws attention to one of the more successful currency board experiences, namely that of Ireland. We review the institutional arrangements which underpinned the Irish pound for a half-century and consider the benefits and costs which resulted. While the regime did have a credibility which led to low interest rates and a degree of price stability, its resilience was partly due to the large additional foreign reserves held by the private banking system and partly to the weakness of sterling, to which the Irish pound was pegged. As a result, the inflexibility of the system was not severely tested. An attempt in 1955 to evade the interest rate discipline of the regime was quickly punished, however, with far reaching policy consequences.

JEL Classification: E42, E58, F31

Keywords: central bank, currency board, exchange rate regime, Ireland

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*This paper is produced as part of a CEPR research programme on *Market Integration, Regionalism, and the Global Economy*, supported by a grant from the Ford Foundation (no. 920-1265). I am indebted to John Fitzgerald, Kieran Kennedy, Colm McCarthy, Padraig McGowan, Cormac Ó Gráda and Brendan Walsh for helpful comments. Financial support for the ESRI Banking Research Centre from AIB, Bank of Ireland, Ulster Bank and Woodchester Credit Lyonnais is acknowledged. None of the above have any responsibility for the opinions expressed.

Submitted 9 September 1994

NON-TECHNICAL SUMMARY

A resurgence of interest in the idea that currency boards might sometimes have advantages over full-fledged central banks in achieving currency stability is attributable both to the sudden wave of newly independent monetary authorities in Eastern Europe and the Former Soviet Union, and to recent experiments in Latin America. The pure currency board ensures stability of the currency regime by confining itself to issuing local currency notes at a fixed rate against receipt of foreign currency, and of maintaining a 100% foreign currency backing against notes issued. It is often argued that because of potential conflicts between different policy objectives, the addition of other monetary policy responsibilities, especially those of acting as banker to the government or the banks, or the regulation of bank credit, can compromise the currency board's status as an independent currency authority.

Recent examinations of how currency boards have operated in practice have neglected the case of the Irish pound, which remained fixed at one-for-one with sterling for over 50 years from 1928. Although as early as 1943 a Central Bank with enhanced powers had assumed the note issue from the original Currency Commission, it scarcely used these new powers at first. Furthermore while this situation began to change from the mid-1950s, the change was gradual. Ireland continued to operate a *de facto* currency board until the 1970s. Thus the Irish currency board experience spans the best part of half a century and, in contrast to many other post-colonial cases, its demise was not followed by a rapid depreciation or by a slide into semi-permanent high inflation and lack of convertibility. Indeed, 15 years after the abandonment of the sterling link, the Irish pound has been trading within about 1% of the old parity, and goods, services and factor markets are completely open to the rest of the European Union.

This paper provides an account of the institutional evolution of the regime, from the manner in which the currency was first introduced (when it gradually took over from private bank notes) to the abandonment of the sterling peg as a result of the beginning of the European Monetary System (EMS) in 1979. The gradual accretion of non-currency board activities by the issuing authority is illustrated by the slowly changing structure of its balance sheet.

Apart from contributing seigniorage to the Government, the regime seems to have made the expected contribution to financial and macroeconomic stability. For better or worse, the regime certainly did guarantee inflation at a rate more or less equivalent to that in the United Kingdom. Over 50 years the cumulative

change in relative prices is measured at less than 6%. Only during the Second World War was there any substantial deviation.

Irish interest rates were also largely driven by those in London. A comparison of this experience with the substantial excess returns earned on Irish assets during the subsequent EMS period suggests that the stability of the sterling link regime ensured avoidance of a risk premium on Irish interest rates.

Stability may not always be unambiguously good for development. One aspect of the sterling link which has always remained controversial is the degree to which it may have perpetuated trading links with an economy which did not share in post-war dynamism. It is difficult to quantify the importance of the argument, but its potential magnitude is limited by the fact that trade dependence on the United Kingdom did in fact decline dramatically over the years.

The most common complaint about currency boards is their inflexibility in dealing with shocks. That the Irish system coped quite well with shocks is attributable to the large external assets of the private banking system (far larger than those of the currency issuing authority for much of the period), which provided the necessary additional elasticity.

So far as the regime's record in influencing wage competitiveness is concerned, although rather high levels of unemployment persisted throughout, it must be borne in mind that for the best part of two centuries Ireland has been a labour-exporting economy. It is doubtful that exchange rate policy as such can be blamed for this sustained excess labour supply. Besides, sterling proved not to be a very strong currency to be pegged to. There was no secular worsening of the rate of emigration during the sterling link period; indeed the mid-1970s was an interlude in the long history of population decline and a period of uniquely high net immigration into Ireland.

A reassessment of the serious crisis of 1955–6 (when the government overreacted to a sharp fall in foreign reserves and pushed the economy into recession) points the finger at the Government's decision to persuade the banks to hold their lending rates despite a 1% increase in London rates. The ingredients of the reserves collapse (credit boom, jump in imports, and surge in capital outflows) probably owe much to this interest rate policy error – a simple failure to observe the implied interest rate discipline of the currency board arrangement. This crisis and its aftermath had far-reaching consequences in decisively shifting economic policy from its inward-looking complacency towards the promotion of a manufacturing export base especially through inward foreign direct investment.

Though we draw some conclusions as to what can be done to help ensure the success of a currency board regime, the fairly satisfactory record of the Irish arrangement does not necessarily imply that it should be imitated by others. For one thing, few countries can have as natural a choice of partner currency as did Ireland, the importance of whose institutional and cultural links with the United Kingdom is hard to exaggerate in this context, and which helped ensure that the regime achieved and retained credibility.

As the financial and fiscal system of a country matures, the apparent advantages of a currency board may eventually wear thin. The evolution of Irish monetary arrangements towards comprehensive central banking took place very gradually, and without compromising the financial stability that the original pure currency board arrangement had established.

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LESSONS FROM THE IRISH POUND'S LINK WITH STERLING, 1928-79**

1. Introduction

A resurgence of interest in the suggestion that currency boards may have advantages over full-fledged central banks is attributable both to the sudden wave of newly independent monetary authorities in Eastern Europe and the Former Soviet Union, and to recent experiments in Latin America (Cf. Liviatan, 1993). Surveys of post-colonial experience are contained in Schwartz (1990) and Walters and Hanke (1992), but they hardly mention Ireland. Nevertheless, the case is an instructive one. It survived for the best part of half a century and, in contrast to many other post-colonial cases, its demise was not followed by a rapid depreciation and slide into semi-permanent high inflation and lack of convertibility. Indeed, 15 years after the abandonment of the one-for-one sterling link, the Irish pound has been trading within about 1 per cent of the old parity, and goods, services and factor markets are completely open to the rest of the European Union.

A currency board is an institutional arrangement for issuing a local (slave) currency at a fixed rate of exchange against a foreign (master) currency. Slave currency notes are issued only against receipt of master currency. The currency board earns seigniorage by investing the proceeds of note issue in external securities denominated in the master currency. The classic examples are those which were operated in former British colonies in Africa and Asia.

A number of advantages are claimed for the currency board arrangement. Compared with a floating exchange rate, the currency board (like other fixed regimes) is expected to provide greater price stability. Compared with other fixed exchange rate systems, the arrangement is thought to generate greater

credibility - a lower risk that the currency will be devalued.¹ Compared with domestic use of a foreign currency, it provides seigniorage. The drawbacks can be summarized as a lack of flexibility, including inability to deal with monetary and price disturbances.

Other possible functions of a monetary authority can be performed by the same body as operate a currency board. Sometimes these will call for a temporary deviation from the strict operation of the currency board rules, just as, in operating rather similar rules under the Gold Standard in the 19th Century, the Bank of England suspended its currency issue rules for the purpose of meeting temporary panics. But the practice of certain types of monetary policy activity can threaten the sustainability of the currency board and its status as an "independent currency authority" in the terms proposed by Osband and Villanueva (1993). Indeed, part of the credibility of the untrammelled currency board arrangement derives from the lack of discretion which the board has in monetary matters: it is not expected to become deeply involved in economic policy and therefore will have no additional objectives that might conflict with the currency peg.

It will prove useful to list here as negative criteria some of the main types of additional monetary management responsibilities which, if assumed by the currency board, could compromise its successful operation:

- (i) Provide credit to Government;
- (ii) Provide credit to the banking system (including lender of last resort facilities);
- (iii) Maintain the liquid assets of the Government;
- (iv) Maintain the liquid reserves of the banking system;

¹Notably (but not only) because devaluation of the slave currency cannot be forced simply by encashment of notes. In mechanical terms, so long as it abides by the rules of the game, the currency board can never run out of the master currency.

- (v) Regulate the volume of bank credit;
- (vi) Regulate liquid reserve ratios of the banking system.

Performing these functions does not necessarily lead to violation of the currency rule through excess issue but, at least for the first four, they risk creating an acute tension between them and the currency rule. After all, substantial drawdowns of liquid assets by the banks or the Government could easily place the board in a position where, to meet the withdrawals, it has few options other than to issue notes beyond the foreign asset backing.² And of course by expanding credit to the banks or to the Government, the board might provide the resources which could subsequently be drawn down.

The last two items listed need not pose the same problem, since they do not directly involve a banking relationship. They substitute administrative regulation of monetary aggregates or prices for the market-based system inherent in the operation of an independent currency authority.³ In short, they also complicate the objectives of the currency board, thereby posing an indirect threat to the regime.

Beginning in 1927 as a pure currency board system adopted by the newly independent State, the Irish currency regime very gradually experienced an accretion of these non-currency board activities. In this its history is analogous

²It is for this reason that the Estonian currency board maintains foreign currency reserves against banks' deposits as well as notes issued (Bennett, 1993).

³Administrative control over interest rates and exchange control would fall into the same category. We do not include these explicitly since (although a degree of moral suasion on interest rates was frequently present) neither of them was exercised by the Central Bank of Ireland during the period under review. Because it does not seem to threaten the currency boards, we do not place prudential supervision of banks in the negative list. The possible conflicts between prudential supervision and monetary policy relate more to a regime of discretionary central banking.

to that of other currency boards.⁴ Although it had the title and legal status of a central bank already by 1943 (a fact which has probably contributed to its neglect in the currency board literature) the Irish issuing authority remained to all intents and purposes a currency board until at least the early 1970s. Opinions may differ as to the when Ireland was no longer operating a currency board system: certainly not after the break with sterling, the master currency, in 1979. Thus the whole period from the 1920s to the 1970s is instructive in considering policy choices by other newly independent or post-socialist states in Europe. This paper reviews this experience and assesses the degree to which the period may be considered a success.

There are six sections. Section 2 provides an account of the institutional arrangements which governed currency and monetary management in Ireland in the period under review. Section 3 assesses the performance of the system in delivering the expected benefits. Section 4 discusses how well it coped with exogenous shocks - a supposed weakness of currency board systems. Section 5 describes how the system came to an end. Section 6 provides an overall assessment of the lessons to be learnt.

⁴Schwartz (1993) documents a quite similar dilution of the distinguishing currency board features even of the Hong Kong Exchange Fund.

2. Institutional Arrangements⁵

Origins of the Irish pound

When the Irish Free State became independent in April 1922, it substantially retained the legal structures which it had inherited from its years in the United Kingdom. Until March 1979, shortly after the establishment of the European Monetary System in which Ireland, but not the UK, fully participated from the start, Irish currency remained at par with sterling. From the legal point of view, the period from independence to the establishment of the European Monetary System in 1979 falls into three parts. First, the period of private currency (before 1928); then the lifetime of the Currency Commission; finally the Central Bank of Ireland sterling link period from 1943. The Currency Commission was clearly a currency board, but we will argue that the later experience - though nominally one of central banking - also retained most of the features of a currency board.

As a consequence of the British currency reforms of the mid-1840s, six of the nine Irish joint-stock banks retained currency issuing privileges, although all issues beyond an initial grandfathered sum had to be fully backed by gold, silver (or during the suspension of convertibility from 1914 to 1920 British currency notes). Accordingly, at independence much of the currency in circulation represented the obligations of Irish banks. However, this was in no sense an autonomous currency. All of the banks still operated in Northern Ireland⁶ and they all held liquid reserves in London, where two of the largest had their head offices. Their notes and other obligations were still payable in British currency. Continuation of this state of affairs posed no obvious problems.

⁵More detailed accounts of various aspects may be consulted in Banking Commission (1938), Fanning (1983), Hall (1949), McGowan (1990), Moynihan (1975), Ó Gráda (1994), Pratschke (1969) and the *Quarterly Bulletins* and *Annual Reports* of the Currency Commission and the Central Bank of Ireland.

⁶The North-Eastern part of Ireland, comprising about 30 per cent of the island's population, remained part of the United Kingdom in 1922.

It was the introduction in 1926 by the new Government of a series of distinctively Irish token coin that began to raise some doubt or ambiguity about the status of Irish currency. Though the new coinage represented more a gesture of national pride than of economic policy, the concept of an Irish pound became an issue. In order to address the question, the Government appointed an *ad hoc* Commission under the chairmanship of Henry Parker-Willis of Columbia University, New York. Four of the other seven members of the Commission were directors of Irish banks. Within six weeks of its establishment in 1927 the Commission had issued a report whose recommendations determined the future course of the Irish pound.

The Currency Commission, 1927-1942

The outcome of the Parker-Willis Commission's recommendations was

- (i) The establishment of a new unit of account at par with sterling;
- (ii) the creation of a standing Currency Commission (1927) to administer the introduction of Irish legal tender currency notes against receipt of sterling - the first notes issued in 1928; and
- (iii) the consolidation of the existing private bank note issue into a single parallel currency, part of the seigniorage on which was taxed.

The new unit of account was, by default, the currency of contract within the State. However, it was fixed at a one-for-one parity with sterling and it was also called a *pound*.⁷ Indeed, a certain degree of ambiguity remained, and as late as

⁷Specifically the *Saorstát pound*, or *Free State pound*. After 1949 when the Irish Free State became the Republic of Ireland, the currency was known simply as the *Irish pound*, the term we use here. The Irish language term *púnt* was almost never used as long as the currency was linked to sterling, and is still not widely or officially in English language usage in Ireland.

the 1970s the Irish banks felt it necessary to make a special effort to advise their customers (within the State) that all deposits and loans were denominated in Irish pounds. Convertibility was effected through a guarantee that any Irish pound notes would be paid at par (without fee, margin or commission) in sterling at the Bank of England in London, acting as agency for the Currency Commission.

The essential financial arrangements of the Currency Commission were those of a currency board, rather than of a central bank. Thus in particular it was not empowered to lend, whether to banks or government. Its notes had the status of legal tender. All notes issued had to be backed 100 per cent by a reserve consisting of gold and sterling balances.⁸

The main banks⁹ were shareholders of the new Currency Commission, and they elected three of the seven directors. Three more were appointed by the Minister of Finance and the seventh was elected by these six as a chair. The very substantial role of the private banks partly reflected the conservative financial policies which the Government of the new state had espoused; it also partly echoed the original balance of power in the US Federal Reserve District Banks (Professor Parker-Willis had been Director of Research at the Federal Reserve Board).

The adopted model thus embodied what might be regarded as a British solution to the question of parity and currency issue and an American solution to the constitution of the governing Commission. To the question of existing notes, the solution was a novel one.

Instead of simply arranging for the existing bank notes to be compulsorily retired in favour of the new and untried Currency Commission notes, it was decided to

⁸As elaborated below.

⁹Other than one which decided to operate only in Northern Ireland and had sold its branches in the Free State.

replace them with a consolidated series of notes guaranteed by the banks¹⁰ as well as by the Currency Commission. These consolidated notes were not legal tender, but each had the private bank of issue's name clearly printed on it and they proved to be fully acceptable. All of the shareholding banks, including the two that had no previous note-issuing rights,¹¹ were entitled to issue up to a fixed quantity of the consolidated notes. The old issues had to be retired, and the size of the total issue of new consolidated notes corresponded more or less to the old issue.¹² An annual fee, which amounted to as much as 3 per cent. (equal to the banks' own prime lending rate) was payable by the banks.¹³ Thus most, if not all, of the seigniorage on the consolidated notes accrued ultimately to the Government. Not surprisingly therefore, the total issue of consolidated notes never reached the ceiling and they were phased out after 1943, by which stage they accounted for only 22 per cent of Irish notes in circulation, down from 40 per cent in 1934.

The Central Bank of Ireland

Following the report of another *ad hoc* Government Commission of Inquiry into Banking, Currency and Credit in the 1930s it was decided to replace the Currency Commission by a Central Bank with expanded powers. The Central Bank of Ireland began operations in 1943. But its activities were severely circumscribed by the continued existence of a backing requirement for the currency and by the fact that the banking system had no need of it as a lender of last resort.

¹⁰Who deposited securities with the Currency Commission to the full value of the notes.

¹¹For years they had lobbied for a level playing field in regard to note issue.

¹²We ignore here a number of complications including the treatment of Northern Ireland (where the private banks still issue notes).

¹³An annual charge of 1.5 per cent was payable to the Currency Commission. From 1932, a further 1.5 per cent was payable directly to the Government, though this was reduced to 1 per cent in 1937. (Previously, under the 1844-45 arrangements, annual duty of only 0.35 per cent had been payable).

For the next decade at least, the Central Bank operated as if it had not acquired the new freedoms. It lent neither to the banks nor to the Government, It made no efforts to influence the trend of credit through regulations or interest rate actions. Its main policy intervention was an outspoken critique of the "constantly increasing scale of the expenditure of the State and local authorities" contained in the Bank's 1950-51 Annual Report. This led to a protracted public controversy which was followed by the early retirement of the Bank's Governor.

For how long did the Central Bank of Ireland act as a currency board?

In order to assess for how long the Central Bank of Ireland, despite the fairly extensive powers given to it, continued to act as a currency board in matters of monetary management, let us recall the positive and negative criteria mentioned in the introduction. The first, positive, criterion is of course that substantially the whole of the currency issue should be backed by foreign exchange, chiefly denominated in the master currency. We also noted above several negative criteria, i.e. things that we would not expect a currency board to be involved in and which might threaten the continued smooth operation of the currency board regime and its backing.

So far as the backing of the currency was concerned, this was achieved in the new Central Bank through the device of a separate account for the note issue and its backing. This account, known as the Legal Tender Note Fund (LTNF), had the same restrictions regarding the assets it could include as the old backing requirements of the Currency Commission, thus limited to gold and sterling. This accounting device, separating the note issue business from the other activities of the Bank, was similar to that of the Bank of England's Issue Department. Over the years there were (as mentioned below and elaborated in Annex 1) some changes which progressively weakened the backing requirements, especially in regard to the composition of the foreign currency component. Once again, however, practice remained conservative and new freedoms were not overused. In particular total gold and foreign exchange reserves of the Central Bank always comfortably exceeded the note issue - and indeed were more than

double the note issue in the late 1970s.

The drift of the Central Bank of Ireland away from the pure currency board model in other respects may be summarized as follows. (The assertions are quantified in Table 1, which displays the balance sheet at ten-year intervals, and more details are contained in Annex 1).

Before 1955 none of the items in the negative list was in operation to any significant degree, and in particular, no lending of any kind was made. A 100 per cent gold and sterling backing rule was still in effect.

Before 1965 lending activities had begun, but were on a modest scale. Government and bankers' deposits had grown to the equivalent of about one-third of the note issue. The currency backing rules had been relaxed, notably to include US dollars, and also some domestic assets.

By 1975 lending activities were still on a relatively modest scale, and were always smaller than the now rather large Government and bankers' deposits. Reserve requirements had been imposed on banks, and credit policy was being enforced.

Finally, from 1971 the parity of the currency was no longer a matter requiring legislative change, but could be altered by the Minister for Finance (after consultation with the Central Bank)¹⁴.

On this evidence it is hard to dispute that the Central Bank was essentially operating a currency board system before the 1970s. And it retained many of the essential characteristics right up to the end of the sterling link in 1979.

¹⁴This change was ostensibly made to remove a legislative conflict between the IMF parity of the currency in terms of gold with the old sterling parity established in 1927.

3. Benefits of the System

The benefits of a currency board system are typically seen in the dimensions of contributing to financial and macroeconomic stability (by strengthening credibility relative to a fluctuating or less reliably stable exchange rate regime) and of contributing seigniorage (relative to dollarization). The main drawback is the inflexibility of the system in responding to shocks. In this section we review the evidence on the stability-inducing characteristics; the following section discusses some shocks.

Seigniorage

The flow of seigniorage diverted from the issuer of foreign currency to the currency board is usually seen as a major advantage of the currency board arrangement. But in the Irish case it is worth noting that the *status quo* immediately before the introduction of the Irish pound involved the circulation of private bank notes. There were no reliable estimates of the quantity of British currency notes in circulation in Ireland, but they are said to have represented a small portion of the total in the 1920s.¹⁵ Although some of the private banks were London based, the greater part of their ownership was (and remains) Irish. Accordingly, insofar as the new notes were introduced at the expense of the private notes, the seigniorage gained was not at the expense of foreigners.

Essentially all of the seigniorage went to the Exchequer. In particular, none was dissipated in subsidized lending by the Central Bank.¹⁶

¹⁵British notes continued to circulate freely until 1979. The banks generally withdrew such notes whenever convenient to do so, and they were promptly repatriated to London. The annual volumes repatriated were substantial. In one twelve month period (1967-68) the volume of sterling notes returned was equivalent to more than one-third of the outstanding stock of Irish notes.

¹⁶And, though it tended to increase over time, a comparatively modest proportion of the Central Bank's net interest income (about 10 per cent by 1978, equivalent to 1 per cent of the stock of currency) was absorbed through administrative expenses.

One quantification of the seigniorage benefit to the Exchequer is the flow of surplus income transferred from the Currency Commission / Central Bank. This averaged 0.21 per cent of GNP over the half-century,¹⁷ with a strong increase towards the end (it averaged 0.37 per cent in the decade 1969-78).¹⁸

An alternative measure of the flow of seigniorage is the change in currency holdings in each year (cf. Fischer, 1982). Although in a steady state the two approaches should come to the same thing (apart from the administrative expenses of the issuing authority) this is by no means true for the data series at hand. Indeed, the change in currency as a percentage of GNP averaged 0.74 per cent over the half-century.¹⁹

The substantial difference between the two measurement approaches - more than a factor of three - is a striking illustration of a well-known problem. The best way to resolve the discrepancy is to consider the institutional arrangements for the flow of seigniorage to the benefit of the budget. If the currency issue were substantially backed by lending to the government, any expansion in the circulation of notes would immediately provide resources to the budget (as is implicitly assumed in the second, currency flow, measure). The currency board approach is quite different: it invests the proceeds of the note issue in foreign securities, and the government's budget only benefits as the income on these

¹⁷In constant 1978 prices, average seigniorage on this measure was £6 million. As shareholders, the banks also received dividends from the Currency Commission, but these were quantitatively negligible.

¹⁸This measure includes a relatively small amount of net income attributable to payment by the Central Bank of below-market interest rates on the compulsory deposits placed by the banks with it from 1972. (A small defect of the measure is that it neglects that part of the duty on the consolidated private bank notes which was paid directly to the Government before 1942).

¹⁹In constant 1978 prices, average seigniorage on this measure was £15 million.

investments is realized.²⁰

It may be asked whether the sterling-only restrictions on the composition of the currency backing may have reduced the potential seigniorage.²¹ Certainly, from this point of view, as well as from its greater convertibility, the US dollar would have been a better reserve asset - even though it would have been less convenient. In particular, the 1949 devaluation of sterling imposed a capital loss on the official sterling holdings approaching 5 per cent of GNP, if measured in dollar terms.²² Nevertheless, most of these holdings had been accumulated since 1940 effectively through exports to the UK paid for in sterling at a time when sterling was essentially inconvertible. To that extent, the loss would thus have occurred even in the absence of the currency backing rules. Still, \$47 million of Marshall Aid funds were converted to sterling in the months before the devaluation (Moynihan, 1975), and the capital loss on these alone amounted to almost one per cent of GNP - a costly decision indeed.

Price stability

That the fixed exchange rate maintained by the currency board arrangement was conducive to a parallel development of retail prices in Ireland and the UK is readily illustrated by Figure 1. No elaborate statistical tests are required to show that the inflationary trend was a common one. Furthermore following a temporary divergence during the 1940s (presumably reflecting tighter war-time price controls in Britain, purchasing power parity was restored by the late 1940s

²⁰Thus in particular, the stock of foreign investments at the end of the period (from which further investment income would continue to accrue) must not be neglected in addition to the flow of investment income. This stock amounted to almost 9 per cent of GNP by 1978 (inclusive of the accumulated reserve). Administrative expenses were accounting for about 10 per cent of the Central Bank's surplus income (or 1 per cent of the stock of currency) by 1978.

²¹Because the Currency Commission chose not to acquire any gold before 1938, it suffered from the depreciation of sterling in the 1930s (cf. Ó Gráda, 1994).

²²And more than twice as much again was lost on the net external assets of the commercial banks (cf. Figure 5).

(Figure 2).²³ The re-emergence of a deviation during the 1960s and early 1970s gave rise to some concern (Morgan, 1975), but it had already been partially reversed by 1978, so that the total measured change in relative prices since 1927 was less than 6 per cent.

Interest rates

A long-time series of interest rates is plotted in Figure 3.²⁴ Although the point can be overstated, all authorities agree that, during this period, Irish interest rates were driven by those in London.²⁵ After all, for most of the period, the wholesale money market available to the banks was that of London. This situation was not at first affected by the establishment of the Central Bank of Ireland, as the banks continued to hold large liquid reserves in London. Even after the first tentative steps towards the creation of a domestic money market in the late 1960s, the banks' close financial links with London, combined with the apparent solidity of the one-for-one parity ensured that interest rates normally moved in step.

²³I am indebted to Kieran Kennedy for pointing out to me how important it is to use a consistent UK price series here. Simply chaining the official cost-of-living indices understates cumulative UK inflation between the late 1930s and the early 1950s. Figures 1 and 2 are based on Feinstein (1976) which draws on earlier work of R.G.D. Allen and of the London and Cambridge Economic Service. The Irish data used are from the official consumer price index.

²⁴ Figure 3 provides an overview of short-term interest rate movements since 1820. It follows the Bank of Ireland rate (after 1920 the Irish Banks' Rate) until 1951 (Source: Hall, 1949 and Moynihan, 1975). The Central Bank of Ireland's minimum rediscount rate for bills is shown for 1943-1972 (Moynihan, 1975). Thereafter the new issue market yield on Exchequer Bills is given from 1973-June 1992. The last few observations refer to the three-month interbank rate. (Source: Central Bank of Ireland Bulletins). Observations are at end-quarter. The differential with Britain refers to Bank Rate until it was discontinued in 1972 and to Treasury bill rates thereafter. Alternative choice of data sets tell much the same story; issues of comparability for these data are discussed in Honohan and Conroy (1994).

²⁵As a simple indication, the quarterly correlation between London and Dublin rates was 0.92 in the 1950s and 0.99 in the 1960s and 1970s. For a sophisticated econometric analysis of the later years, see Browne and O'Connell (1978).

A closer examination does suggest a shift in the relationship from the end of 1921, with the differential of the Irish Banks' Rate differential over London Bank Rate about 0.4 per cent higher than before.²⁶ The increased differential may be attributable to political risk rather than specifically to currency risk; it came into effect long before the Irish pound was set up.²⁷

From 1952, the Irish interest rate shown in Figure 3 is the Central Bank Minimum Rediscount Rate. Though from the start it was pitched at ½ per cent below Irish Banks' Rate, movements in the Central Bank Rate tended to reflect rather than determine market conditions throughout the period under review.²⁸ It was the Minister for Finance rather than the Central Bank who attempted moral suasion over bank interest rates.

Such persuasion was effective for the first time in 1955, when the Irish banks were prevailed upon by political pressure not to follow an upward movement of 1½ percentage points in London rates. The Central Bank's rediscount rate also failed to follow the London rise on that occasion. It is no surprise that 1955-56 also saw the first use of the rediscount facility, with bills both of a state-owned enterprise and of the Exchequer being refinanced at rates considerably more favourable than obtainable in London. To what extent this first opening-up of this interest gap contributed to the balance of payments and fiscal crisis which immediately ensued is a question to which we return in the next section.

²⁶The Banking Commission (1938) provides a formula for the "historical experience" of the relationship. The formula is exact for the period from 1921, but overstates Irish rates for the previous century by an average of 0.41 per cent.

²⁷A further instance of political risk is documented by Ó Gráda (1994), who shows that the yield differential on long-term Irish government securities over UK gilts jumped by about 50 basis points in 1933 following the change of government which brought the (ex-revolutionary) Fianna Fáil party to power.

²⁸This rate tracks London rates more closely than do the bank lending and deposit rates which, as is explained below, were frequently influenced by moral suasion from 1955 on.

What would interest rate trends have been like if the currency board arrangement had not been in operation? Some evidence for the success of the arrangement in ensuring that substantial risk premia did not open up comes from the subsequent experience with the EMS. Fairly systematic excess returns (i.e. interest differential exceeding subsequent exchange rate depreciation) on Irish assets relative to DM-denominated assets during the EMS are illustrated in Figure 4, which plots the cumulative excess returns, measured as a percentage deviation from 1971. From the figure we can see that (obviously) there are no excess returns vis-a-vis sterling before the EMS. It is also clear that, in the years before the EMS began, Irish and UK assets displayed predominantly negative excess returns compared with DM assets. A holder of German marks from 1971 would have been about 80 per cent better off by the start of EMS than the holder of Irish pounds over that period. But from the beginning of the EMS the story is quite different. We note

- a long period of generally positive, though modest, excess returns against the DM in the EMS period, significantly interrupted only by the mid-1986 devaluation, giving a cumulative excess return from the start of the EMS of almost 40 per cent by 1992;

- a low frequency oscillation against sterling during the EMS, beginning with a sustained period of negative excess returns until late 1981, followed by mostly positive excess returns until mid-1986, with lesser cumulative fluctuations thereafter;

While this EMS interest rate experience is open to different interpretations, we have suggested elsewhere (Honohan and Conroy, 1994) that, following Ireland's membership of the EMS, the market made what proved to be excessive allowance for the perceived risk of devaluations against the DM.²⁹ Not only were cumulative excess returns against the DM substantial, but periods of sterling weakness - itself a predictor of Irish pound depreciation - also led to excessive

²⁹The market's expectations could be rationalized as a "peso" effect, where *ex post* biased expectations may reflect a rational discount against the risk of a big negative realization which never actually occurred within the sample - but might well have.

interest rate surges. In sum, realignment policy within the EMS regime lacked credibility, leading to high interest rates.

That the currency arrangement contributed to lower interest rates by reducing perceived risk through a credibility effect is a corollary of our conclusion on the EMS period.

Stability versus development?

Stability may not always be unambiguously good for development. One aspect of the sterling link which has always remained controversial is the degree to which it perpetuated trading links with a market (that of the sterling area) which did not share in post-war dynamism. The costs of currency risk and foreign exchange transactions represented barriers to Irish exporting enterprises who might otherwise have established trading relationships with continental Europe and elsewhere. Had trading with the UK been subject to the same costs, the argument goes, more enterprises would have incurred the fixed costs of learning how to deal with foreign exchange and would then have benefitted from a more dynamic market. But in fact, with a no margins, one-for-one link, trade with the Sterling Area involved no greater financial complexity than internal trade.

It is possible to make sense of this argument without departing from the usual assumptions of rational behaviour, provided we allow for some externalities. What is difficult is to quantify the potential importance of the argument. Over the years, dependence on the UK declined dramatically. In 1926 the UK accounted for 96.7 per cent of Ireland's merchandise exports and 75.6 per cent of imports. These figures had fallen to 62.0 per cent and 54.8 per cent on the eve of Ireland's accession to the EEC, and by 1978 they had fallen further to 47.0 per cent and 52.6 per cent.³⁰

A similar argument can be made in regard to the financial system. The currency

³⁰The figures for 1992 are 31.5 and 42.5.

board type arrangement, and use by the banks of the London money market for their liquidity needs, were not conducive to the development of risk management and trading skills in Ireland. The acquisition of such skills was largely delayed until the emergence of a domestic money market in the early 1970s and of a foreign exchange market even later.

It seems fair to conclude that, in providing stability, the currency board regime may have tended to put a brake on some developments which might have had favourable dynamic effects. It is still too early to judge whether the economy has improved its medium-term growth path as a result of exposure to a more challenging and unstable monetary environment since 1979.

4. Responding to shocks

The most common complaint about currency boards (as with the gold standard) is their inflexibility in dealing with shocks. This is what encouraged the development of such central banks as the US Federal Reserve, and it also led to the Bank of England's 19th Century practice of violating the strict gold-backing rules for its notes in times of panic. The problem for a small open economy is that a capital outflow, or a current account balance of payments deficit, could result in a very deflationary shrinkage of the money supply.

How did the Irish system cope with shocks of this type? The answer is that it coped quite well. But it was able to do so because of the large external assets of the private banking system which augmented those of the currency issuing authority. Figure 5 illustrates the magnitudes, and reveals that the net external assets of the Associated Banks were far higher than those of the Currency Commission or the Central Bank until 1955. Indeed they remained larger until 1963. In 1969 the net external assets of the Associated Banks were bought by the Central Bank with Irish pound deposits, boosting the official external reserves, which thereafter averaged about two-and-a-half times the currency stock.

The fact that the total banking system always had external reserves far in excess of the note issue provided the necessary additional elasticity. Net capital outflows were absorbed without any shrinkage in the currency. Indeed, as is evident in Figure 5, the foreign exchange drain resulting from the deficits of the period between the end of the Second World War and 1956 (including the crisis of 1955-56) were absorbed almost entirely by running down the external holdings of the private banks.

Competitiveness

One aspect of the lack of flexibility of a fixed currency regime relates to its inability to respond to losses of competitiveness, which can be important if the wage-setting system does not take account of external constraints. Although the

matter is controversial, it does not appear that this happened in Ireland to any substantial extent during most of the period under review. We cannot be sure because of difficulties of data and of analysis.

Obtaining a definite *quantification* of developments here is complicated by the substantial structural shifts in the occupational and skill structure of the economy, especially by comparison with trends in the UK. Recent reviews of available data conclude that relative wages in Ireland may have drifted downwards from the 1920s to the 1940s (Figure 6).³¹ After remaining broadly in line until the mid-1960s, there appears to have been a fairly strong upward shift in the relative level of Irish wages.

In a context where many workers on both sides of the Irish Sea were represented by the same unions and where labour mobility between the two countries is exceptionally high, a variety of *hypotheses* have been proposed to account for the increase in wage levels between 1966 and 1979. These include supply side factors (shifts in union behaviour; wage leadership in public utilities; increasing expectations of living standards and improvements in relative social welfare benefits) and demand-side factors (improved productivity in manufacturing and marketed services, free trade, growing inward foreign direct investment). (Cf. Curtis and Fitz Gerald, 1994, Walsh, 1994). On the former, the most successful econometric models of short-term wage determination in Ireland (e.g. Bradley et al. 1989) suggest that the wage bargain was couched in terms of after-tax real wages; if so, a softer currency policy would only have had a transitory effect in lowering real wages.

A more direct approach to the question of wage competitiveness would be to ask whether the economy achieved and maintained full employment during the period. By this measure, the outcome appears disappointing: rather high levels of unemployment persisted throughout. But it must be borne in mind that for the best part of two centuries Ireland has been a labour exporting economy. It is not clear that exchange rate policy can be blamed for such a sustained period of excess labour supply. Indeed, accepting that Irish wages fell to a relative minimum (since the 1920s) about 1950, the depressed years of the 1950s, with soaring unemployment³² and massive emigration, cannot be attributed to a sudden

³¹The data before 1949 is from Curtis and Fitz Gerald (1994), thereafter from Walsh (1994).

³²Though much lower than in the 1980s.

loss of labour competitiveness induced by wage rates running ahead of what could be afforded given the exchange rate regime. And later on, much improved employment conditions returned, without any adjustment to the exchange rate regime.³³

In fact, an examination of relative unemployment rates and migration flows does not suggest any tendency for Irish labour to be priced out of the market progressively by the 1970s. The gap between Irish and UK unemployment did not show any systematic trend before the 1980s (Honohan, 1992). Finally, there is certainly no secular worsening of the rate of emigration during the sterling link period, indeed the mid-1970s was an interlude in the long history of population decline and a period of uniquely high net immigration into Ireland.

These conclusions on competitiveness need not be a surprise when one recognizes that, from the 1930s on, sterling proved not to be a very strong currency - a lax master in fact.

The 1955 interest rate blunder

One of the biggest shocks ever to face the system arose in 1955. In January and February of that year London Bank Rate was raised in two steps by 1½ per cent (to 4½ per cent). The disturbance came not from this interest rate increase itself, but from the Irish policy response to it. The Irish banks would normally have followed suit, but on this occasion for the first time they were persuaded by the Minister for Finance to refrain from a corresponding increase in their interest rates. The differential was closed only at the end of the year. It is possible to interpret the balance of international payments crisis that ensued as being in no small part attributable to the emergence for the first time of a substantial interest differential. In this context it is important to recall that there was complete freedom of capital movements between Ireland and the rest of the Sterling Area.

³³There were shifts in trade policy and in industrial subsidies during the period, but these do not affect the conclusion being drawn.

As detailed in Annex 2, the main symptom of the crisis was a fall in the net foreign assets of the banking system by an amount equivalent to about 8 per cent of GNP during 1955.³⁴ About a half of the fall can be attributed to net capital outflow, to which a substitution of Irish bank credit for foreign may have contributed. Certainly there was a large surge in bank credit, especially to sectors likely to have pre-existing credit lines in the UK. The remainder of the fall in the net foreign assets of the banking system was associated with a sharp increase in imports and a decline in meat exports. Although previous studies have stressed the role of increased consumer expenditure in inducing the growth in imports, much of the fall in exports and some of the growth in imports was related to inventory accumulation. The relatively low real interest rate may have helped induce this accumulation.³⁵

The fiscal authorities responded to the crisis in early 1956 by imposing heavy import duties on finished and semi-finished consumer goods. This was quickly effective in reducing imports, but it also induced a domestic recession and led to a surge in emigration (which reached the post-war record level of 1.8 per cent of population in 1957).

With hindsight, the interest rate policy pursued in 1955 appears to have been a policy blunder. The authorities simply failed to observe the implied interest rate discipline of the currency board arrangement. But in the longer run, the crisis of 1955-56 led to a comprehensive and epochal reassessment of economic policy shifting the emphasis to an outward-looking view, ultimately involving a move towards free trade and the promotion of a manufacturing export base especially

³⁴The earlier and larger balance of payments crisis of 1950-51 was largely due the terms of trade effect of the 1949 sterling devaluation and the Korean war commodity price boom. Receipt of Marshall Aid funds helped up to 1951, but a deflationary budget was introduced in 1952 which proved more than enough to correct the situation.

³⁵That, when similar gaps emerged in subsequent years, they were not followed by a credit boom, may be partly explicable in terms of an emergence of credit rationing or other changes in banking practice.

through the encouragement of inward foreign direct investment.³⁶ Somewhat paradoxically, therefore, it may have been the failure to observe the implied interest rate discipline of the currency board arrangement that led to economic policy being shaken out of the inward-looking complacency into which it had fallen by the mid-1950s.

³⁶The events surrounding the November 1958 publication of the White Paper *Economic Development* are discussed by FitzGerald (1968).

4. The Breaking of the Link

Why the decision was taken

Although the wisdom of the sterling link was questioned from time to time, especially after the 1949 sterling devaluation,³⁷ it is fair to say that a change in the policy was not a live issue on the policy agenda before the mid-1970s. By that time, the collapse of the Bretton Woods system had brought all fixed exchange rate regimes into question, and the highly inflationary experience of the UK, fully imported into Ireland gave rise to the suggestion that a more stable, lower inflation regime could usefully be achieved by breaking the link.

One indication of how seriously this was being taken by 1976 can be found in the fact that the Governor of the Central Bank of Ireland took the unusual course of publishing a lecture entitled: "Should the Sterling Link Be Broken?".³⁸ Although he came down against any change, partly because he feared that domestic inflationary discipline might be difficult to assure following a break, it is interesting to realize that an upward movement of the currency was the preferred direction of any change. Instead, protected by the general weakness of sterling and by the low real interest rates prevailing, the Government pursued a very expansionary policy in the late 1970s, financed to a considerable extent by foreign borrowing.

The occasion of the break came with the establishment of the European Monetary

³⁷An apparently confused argument appears to have been aired widely after the 1949 sterling devaluation. That event worsened Ireland's terms of trade by lowering the price of exports (mainly going to the Sterling area) more than of imports, a higher proportion of which came from other currency areas. There was also a fall in the purchasing power of the important sterling investments held by the Irish banking system. But some commentators appear to have jumped to the erroneous conclusion that these shocks could have been avoided by not following sterling down. (For an account see Moynihan, 1975).

³⁸Whitaker (1976). Somewhat quixotically (but no doubt deliberately) he chose to write this particular piece in the Irish language, thereby greatly limiting its audience.

System, which represented France's return to a joint European currency arrangement. It was recognized that adherence to a hard currency bloc might cause problems for high inflation countries, and so, in order to help smooth participation for Ireland and Italy in the new system, a set of subsidized loans was negotiated. The net present value of the subsidy element was estimated at about 3 per cent of GNP - less than the annual transfer of structural aid from the EU to Ireland during the mid-1990s. But it was enough, and Ireland signed up for the new system which began operating on March 13, 1979 without the full participation of the UK. Before the end of the month, a strengthening sterling brought the Irish pound to the upper intervention limit of the EMS, and the sterling link had to be broken.

The following 15 years saw wide fluctuations in the Irish pound sterling exchange rate, which went as low as IR£1 = £0.74 stg. (February 1981) and as high as IR£1 = £1.10 stg. (October 1992).

Could the sterling link have survived?

It is arguable that the sterling link would not have survived the early 1980s anyway. By the mid-1970s, no legal or institutional barriers remained to a change in exchange rate regime, and the role of the link in contributing to the rapid inflation of the 1970s had weakened political commitment to it. Although currency reserves were still well above the minimum, they no longer exceeded the sum of the Central Bank's sight liabilities (notes plus deposits); and there was no longer the cushion of private bank net external reserves that had helped weather the storms of the 1950s. As long as there was still a weak tone to sterling, the regime would not have come under pressure, but that weakness suddenly evaporated.

Helped by a tight UK monetary stance, and by the effects of North Sea Oil,³⁹ sterling strengthened considerably during 1978-81. Had the Irish pound remained

³⁹Cf. Honohan (1978).

linked to sterling, its 1981 average value would have been 25 per cent higher than it actually was. The slowness of nominal wages to adjust to such an evolution would certainly have led to an unprecedented deterioration in Irish competitiveness. With a severe recession in Ireland already being deepened from 1981 by the needed fiscal retrenchment (mainly tax increases), the option of a devaluation would surely have come to the fore. Despite the extension of exchange controls to the sterling area from 1978, the potential for capital outflow was considerable, and with the Central Bank now positioned to act as lender of last resort to the Government and the banking system, what was left of the currency board rules would readily have succumbed to the exigencies of current policy.

4. Assessment

What can those who are now considering the best institutional arrangements for new currencies learn from the Irish experience? One lesson is that adoption of a currency board system may not always be as successful as was the Irish experience. Only some of the secrets of the protracted survival of the Irish currency board represent available options for other countries. Helping it were:

The existence of an obvious and unique choice as the master currency. It would be hard to exaggerate the importance of the institutional and cultural links between Ireland and the UK which persisted well into the second half of the century. More narrowly, in the 1920s sterling both accounted for the vast bulk of Irish trade and apparently represented as stable a currency as was then available. By the 1970s, neither criterion applied and the sterling link was no longer unambiguously the peg of choice. For many countries the choice is not so easy. While the Deutsche Mark is a fairly natural peg for Eastern European countries as is the US dollar for Latin American countries, alternative suggestions, including baskets, could be defended. Any such ambiguity tends to cast doubt on the permanence of a particular peg. For some countries, such as the Central Asian Republics, the choice of currency peg is made particularly difficult by the fact that they do have a predominant trading partner (Russia) but one whose currency is very volatile and not a good store of value.

The commitment to a permanent link was also strengthened in Ireland by the choice of a one-for-one peg with no margins or charges. This ensured lower transactions costs for the economy than any other peg and thereby discouraged any parity adjustments. Not all recent currency boards have adopted the one-for-one arrangement (for example, Estonia).

The absence of a tradition of lending substantial sums to the banking system or to the government clearly protected the Irish system from

obvious pitfalls. The same can be said of the fact that the Government adopted the practice of only taking out the seigniorage only when it accrued in normal investment income to the issuing authority, and in particular did not require the issuing authority to make loan subsidies or to raise quasi-taxes through onerous low-interest reserve requirements. In contrast, the financial system of many of the countries now adopting or considering currency board arrangements have had these undesirable structural features for years. A currency board arrangement will not long survive if it is accompanied by financial repression.

A currency board arrangement is different to and proposes to be more lasting than other forms of fixed exchange rate peg.⁴⁰ When we consider the dynamic pressures to which the system will be subject, and the likely administrative and political responses to these pressures, it becomes evident that assuring the survival of a currency board system requires more than simply adhering to the rules about currency issue. But if it does imply such tight limitations on monetary policy behaviour, might it not be too limiting a model for a modern and sophisticated monetary system? After all, we have pointed out that the Irish system's ability to withstand shocks was helped by the additional reserves held by the banks, and by the fact that sterling proved to be a fairly weak peg, imposing no severe discipline.

As the financial and fiscal system of a country matures, the apparent advantages of a currency board may eventually wear thin, and the flexibility of full-fledged central banking will seem seductive. Despite the many failures of central banking in the 20th Century, and although any explicit indication that it will be temporary can fatally compromise the credibility of a currency board

⁴⁰However, one of the most long-lived fixed pegs, that of the African CFA francs, was not a currency board system and often operated with very modest foreign exchange reserves. The central banks' assets were primarily claims on the banks. Instead, the fixed rate was maintained by means of credit facilities provided by the French treasury, to whose currency the CFA francs are pegged. The 47-year old peg of CFA 50 to FF 1 was replaced by a 100 to 1 peg in January 1994.

arrangement, it is hard to disagree with Fischer (1993) that a currency board is likely to be good as a transitional device, but less than optimal as a permanent arrangement.

The evolution of Irish monetary arrangements towards comprehensive central banking took place very gradually, and without losing the financial stability that the original pure currency board arrangement had established.⁴¹ Admittedly there were episodes of high inflation: the first imported from sterling, the second, in the early 1980s, a hangover from the fiscal recklessness of the late 1970s. But already by the late 1980s inflation was low, the currency was trading within sight of the old parity with the former master, and exchange controls were being dismantled.⁴²

Newly independent countries often see an autonomous currency as an essential symbol of their sovereignty. Curiously, in the Ireland of the 1920s, the temptation to abandon sterling for political reasons was resisted and the consequences must overall be considered a success. The currency system which, with self-conscious conservatism, the founders of the Irish State established, worked well for many decades. Though there is no going back, the EMS crisis⁴³ of 1992-93 evoked many wistful recollections of the stability of the old regime.

⁴¹The smooth functioning of the Irish financial system even during protracted bank strikes (as documented by Murphy, 1978) provides one illustration of the stability which had been achieved.

⁴²All remaining exchange controls were removed from the beginning of 1993.

⁴³When the financial markets rightly refused to believe that the Irish pound could remain immune to a sudden plunge in the value of sterling, and drove interest rates to record levels for months.

Annex 1: The Central Bank of Ireland's Drift From the Pure Currency Board Model

In this annex we outline the changes that occurred in Central Bank practice in the direction of carrying out the six activities we have identified as potentially threatening a currency board type operation. We begin by noting the various changes that occurred in the operation of the currency backing rule.

The Currency Backing

Over the years there was some relaxation of the rules and practice concerning the backing of the currency. This included a widening of the range of foreign assets to be included and eventually departed from a strict foreign-asset only rule. However, the relaxations were designed more to facilitate an active management of the foreign reserve portfolio (with a view to optimizing the return on the assets) than to remove the constraints on net domestic lending by the monetary authority. The underlying principle of a high percentage backing in foreign assets was substantially respected throughout the period to 1979.

The original 1927 arrangement was that the currency issue must have 100 per cent gold or sterling backing. However, no separate currency account was maintained. When the Central Bank of Ireland was established in 1943, it was obliged to establish a special "Legal Tender Note Fund" (LTNF) separate from the remainder of the Bank's accounts. This LTNF worked in a similar way to the Issue Department of the Bank of England. Its only liability was the note issue, and its assets were governed by the same rules as had been applied to the Currency Commission.

Sterling was back on the gold standard when the Currency Commission was established and that explains why the initial list of approved assets for backing the currency included gold as well as sterling balances and investments.⁴⁴ At first, such investments had to have a maturity of less than one year, but this soon appeared to be too constraining, if the yield on the investments was to be optimized. This led to the first of a number of relaxations made, as has been remarked, with a view to facilitating improved portfolio management. From 1930 changes to the list no longer required legislation, but (until 1942) any ministerial order making the changes still had to be approved by parliament. Thus:

the one-year restriction was removed in 1930;

US government securities were added to the list in 1956 - and a preference for US dollars brought their share of the LTNF as high as 80

⁴⁴The specific investments listed hint at a greater concern for exchange rate and interest risk than of credit risk. Thus securities with maturity greater than one year were ruled out, as were the securities of any issuer other than the British Government, but sight deposits in *any* bank in the United Kingdom were acceptable.

per cent by 1977, with sterling then accounting for only 6 per cent;

from 1959 foreign exchange to pay for quota subscriptions to the International Monetary Fund was effectively obtained from the LTNF and replaced with a special Irish Government promissory note.

From 1961 the percentage backing was effectively lowered to about 75 per cent by a provision permitting the Legal Tender Note Fund to include a claim on the Central Bank of Ireland's General Fund. (The percentage backing fell further after the sterling link had been broken, and stood at about 65 per cent when the accounting procedures were revised in 1989.)

Despite these relaxations of later years, at all times total gold and foreign exchange reserves of the Currency Commission and later the Central Bank comfortably exceeded the currency issue (after 1932 the excess cover never fell below 8 per cent)

Non-Currency Board Monetary Policy Activities

We review the activities under the headings specified in the main text.

(i) Credit to Government.

It is worth distinguishing between three different types of lending to the Government. The first type was associated with IMF membership and may reasonably be regarded as incidental to domestic monetary policy. The other distinction is between direct lending to the Government and acquisition of Government paper from the market. Direct lending was very limited in scope, and was always remunerated at full market rates of interest. Indirect lending, by its nature, also had to be at market rates.

Lending associated with IMF membership. This included loans to cover the gold subscription, and also the counterpart funds for Ireland's reserve tranche drawing in 1966. The amounts were modest.

Other direct lending. The first significant direct lending to the Government (other than IMF related lending) was the acquisition of a four-year bond in the amount of £20 million or about 2 per cent of GNP in 1965.⁴⁵ The reason for this borrowing was to bridge the emergence of an unexpected budgetary deficit. No interest rate concession was made: the lending was at market rates. This experiment was not repeated until 1974, at which time a further innovation was introduced: an overdraft facility for the Government. The overdraft facility was always at the Central Bank's discretion. Before 1979, it was used on only a couple of occasions, and then only for a matter of weeks and in amounts less than 0.5 per cent of GNP.

⁴⁵In addition, there had been modest loans to cover the cost of subscriptions to the IMF.

Indirect lending to Government through rediscounting of bills, or acquisition of short-term securities from the market. The first rediscounting of Exchequer bills was in early 1956. Amounts extended through this system were initially moderate, never exceeding about 1 per cent of GNP before 1973, and there were long periods with nothing outstanding. Thereafter, combined with short-term Government securities acquired from the market, the Central Bank's total portfolio of Government paper began to increase more noticeably, reaching almost 4 per cent of GNP in 1976, before falling back somewhat.

(ii) Credit to the Banking System.

Up to 1979 the only direct assistance to Banks was the system of bill rediscounting. This was always on an a discretionary basis, and banks had no assurance of being accommodated. The first bills rediscounted, in 1955, were non-Government (though issued by a State-owned enterprise). From 1959 the only non-Government bills to be rediscounted were those issued by the Agricultural Intervention Agency for bridge-financing of agricultural storage related to the EC's Common Agricultural Policy. Bills rediscounted reached a peak of 3 per cent of GNP in 1978, having previously touched 2½ per cent in 1973.

(iii) Maintenance of the Liquid Reserves of the Government.

Until 1972 the Government's bank accounts were held at the largest private bank, the Bank of Ireland. From the beginning of 1972 the main Government accounts were transferred to the Central Bank.

(iv) Maintenance of the Liquid Reserves of the Banking System.

Although banks normally held some transactions balances at the Central Bank, these deposits began to form a material fraction of their total liquid assets only in the mid-1960s.⁴⁶ In fact the main bulk of the banks' liquid assets were held in the form of balances and investment in London. The relevant amount of these liquid balances in London is usually approximated by the net external assets of the banks'. By 1966 banks' deposits at the Central Bank were half as large as their net external assets. In 1969 an agreement with the banks transferred the net external assets into the ownership of the Central Bank,⁴⁷ and from then on the Central Bank held the liquid reserves of the banking system.

(v) Regulation of the volume of bank credit

Although the Central Bank issued formal advise on acceptable rates of bank

⁴⁶An exception was that, in the early months of the Second World War the banks sold £3 million of sterling to the Currency Commission and held the proceeds on deposit with the Commission.

⁴⁷The purpose of this transaction was to benefit from a temporary exchange rate guarantee offered by the UK authorities for official holdings of Sterling, which was under some pressure at the time.

credit expansion from 1965, these were not accompanied by any sanctions until February 1973, when capital inflows became subject for the first time to penal reserve requirements.

(vi) Regulation of minimum liquid asset ratios.

Minimum liquid asset ratios were introduced from 1972. There had previously been an informal understanding from about 1958 (O'Donoghue, 1968).

* * *

In summary, before 1965 only negligible use of non-currency board type monetary policy instruments was attempted. By 1973, the scale of interventions had accelerated to the point where it becomes possible to question the unqualified assertion that the Central Bank was operating a currency board system. Nevertheless, by 1978, the Legal Tender Note Fund was still 81 per cent backed by external assets, and total external assets of the Central Bank still exceeded the note issue by 63 per cent. At a pinch therefore, we could see this as a survival of the currency board system until 1979. On a balanced view, though, we may regard the currency board system as having become somewhat diluted by about 1973.

Annex 2: The Crisis of 1955-56

The balance of payments crisis of 1955-56 is an important episode in post-war Irish economic history, and one which has a particular bearing on the functioning of the currency board system. The main symptoms of the crisis are as follows. Having run at between 1 and 2 per cent of GNP during 1952-54, the current account deficit of the balance of payments jumped to 6½ per cent in 1955. At the same time the net foreign assets of the banking system, which had been rising steadily since the end of 1951, tumbled by about 8 per cent of GNP.

Responding in March 1956 to the crisis, the Government imposed heavy supplementary import duties on a range of finished and semi-finished consumer goods. This was effective in reducing the current account deficit to 2½ per cent of GNP in 1956 and turning it into a surplus by the following year. The net foreign assets of the banking system also began to turn around by early 1957. The real economy suffered. GNP fell by 1.3 per cent in 1956, and recovered by only 0.5 per cent in 1957. Employment fell; unemployment and emigration increased.⁴⁸ The fiscal response to the crisis is widely thought to have been overdone. In the longer term, the crisis led to a reassessment of economic policy on a broad front, and to the adoption of a more outward-oriented policy with regard to the ownership of industry and to protection.

The literature provides no conclusive interpretation as to why the 1955 crisis occurred. The most thorough analysis (Kennedy and Dowling, 1975) provides several explanations, including the impact of a generalized wage increase on consumer spending, speculative accumulation of inventories related to import price increases and a credit boom. Contemporary accounts seem to have placed most emphasis on the expansion of consumption demand, and this was certainly the aspect which was addressed by the policy measures of 1956.

As is mentioned with varying degrees of emphasis by all commentators, bank lending rates in Ireland were not increased in line with increases totalling 1½ percentage points in London Bank Rate in January and February of 1955. Deposit rates for balances smaller than £25,000 were not increased in line either.⁴⁹ The failure to increase interest rates was attributable to political

⁴⁸The usual propagation pattern of a shock in the Irish labour market has been that it shows up first in unemployment, and then after a lag of the order of some quarters is taken up in migration flows with (at least before the 1980s) little or no permanent impact on unemployment. In the response to the 1955-56 crisis, registered unemployment peaked in January 1957, having increased by more than 2 per cent of the labour force. Net emigration, already running at high levels, soared during 1957 to about 1.8 per cent of the population, a figure which has not since been matched.

⁴⁹Moynihan (1975). Meenan's (1970) account appears to be misleading on this point.

pressure, exerted through the Minister for Finance. This was the first time that the Government had influenced bank rates in this way, and it was not until December 1955 that he gave way, observing that the balance of payments situation had deteriorated so that the conditions no longer permitted rates to be held down.⁵⁰

The 1955 interest rate decision both introduced a wedge between London and Dublin, and lowered the real cost of funds, considering that inflation accelerated from less than 2 per cent in 1954 to more than 4 per cent in 1955. In the present context we wish to know how much of the drain on foreign reserves can be attributed to the failure to increase interest rates in line with London. We suggest that this may have had a greater role in inducing the excessive policy response than has previously been recognized.

The fall in net foreign assets of the banking system in 1955 came to £42 million.⁵¹ The main sources of this change were a turnaround in non-bank capital flows and a jump in imports; a fall in exports was also a contributory factor.

In the absence of econometric models of the period (the model-builders have shunned the 1950s) we can get an order of magnitude of the deviations from trends by comparing the actual data for the macroeconomic aggregates with the values they would have taken had they retained the same share of GNP as in 1953-54.⁵² This suggests excess imports amounting to £17 million and a turnaround in private non-bank capital flows amounting to £22 million.⁵³ In

⁵⁰Nevertheless, interest rates were again slow to adjust to a further increase in London rates during 1956, and for several years thereafter political pressure often kept Dublin bank lending rates below their traditional relation with London. It is likely that the banks gradually adapted to this situation through more extensive use of credit rationing and by other changes influencing their effective lending rate.

⁵¹Or somewhat more if we include the fall in Departmental Funds' sterling holdings. This compares with a total increase of £16 million over the two previous years.

⁵²Of course this is very imperfect, as it supposes the same GNP in the counterfactual. Real GNP growth in 1955 was 2 per cent.

⁵³It is true that net capital inflows were a little below average already in 1954, but the main change was in 1955. Looking at the detailed components of the capital account, while identified non-bank capital transactions (especially brokered securities trading and public issues of securities) show little net trend in 1953-55, there is a big turnaround in the "other" capital transactions of the balance of payments in 1955. Specifically, (a) inflows (e.g. borrowing from foreign banks) average £12.6 million in 1953-54, but only £1.7 million in 1955 and (b) outflows (e.g. deposits in foreign banks) average only £0.8 million in

addition, exports underperformed by £10 million. Between them, these three elements account for almost all of the £50 million turnaround in the movement of net foreign assets.⁵⁴

The source of the *excess imports* may be found in both consumption and investment. Consumption rose partly due to a higher share of personal disposable income (there was a substantial pay settlement in that year) and a fall in the savings ratio (Figure 7).⁵⁵ Investment in fixed capital and stock accumulation were also both above trend (Figure 8).⁵⁶ The extensive econometric work on the determinants of Irish imports all relates to later periods and much of it to more disaggregated data sets. If we assume for 1955 the not unreasonable marginal propensities to import out of consumption demand of about 0.6 and out of investment of about 0.9, we obtain a breakdown of the different causal elements in the excess import flow for that year as shown in the Table.

Contributions to Fall in Foreign Assets		
	£ million	%
Fall in foreign assets	50	100
Imports	17	34
Savings ratio	6	12
Wage increase	3	6
Investment	8	16
Exports	10	20
Net Private Capital	22	44
Other	1	2

1953-54, but jump to £9.3 million in 1955.

⁵⁴A fall of £42 million following increases averaging £8 million.

⁵⁵Despite the stress that others have laid on this, it is evident from Figure 7 that the savings ratio for 1955 is well within previous fluctuations, and does not represent an outlying observation. Of excess consumption amounting to £16.5 million, £10.8 million may be attributed to the lower savings and the remainder to higher personal disposable income.

⁵⁶The former by £4.2 million, the latter by £9.0 million, of which £3.5 million represents agricultural stocks. It is not clear how much of non-agricultural stock accumulation in 1955 represented stocks of imported materials.

How much of the various elements which contributed to the fall in net foreign assets could be attributed to the emergence of an interest rate gap?

The items least likely to have an interest rate explanation are *savings* and the *wage increase*. Consumer credit was very little developed and the bank interest rates would not represent an opportunity cost for many households. Likewise, although employers' willingness to agree to the wage settlement might have been influenced by lower real interest rates, any such effect would be slight.

The item *investment* included in the Table includes accumulation of stocks (inventories). Contemporary accounts speak of speculative imports of materials which would fall into this category. A build-up of international tension surrounding Suez might have contributed. The interest rate policy certainly lowered the cost of such speculative purchases.

Even the *export* underperformance may have something to do with the interest rates. It is wholly attributable to a fall in meat exports, and there was a corresponding increase in inventories of live animals. It would be a mistake to attribute the fall in exports to a diversion of production to meet an increase in local final demand.

The most obvious element where a substantial interest differential with London contributed to the fall in external reserves is in the net private non-bank capital outflow which was recorded in the balance of payments account. This might have included switching of small deposits to higher yielding accounts in the UK: non-government deposits at Irish banks fell by £8 million during 1955. However the fall in deposits need not necessarily reflect deposit switching, and it seems likely that small deposits were not very interest sensitive.⁵⁷ More likely to have been significant would be repayment by non-financial enterprises of borrowing from UK banks with the proceeds of borrowing at lower rates from Irish banks.

Sectoral analysis of bank credit suggests that the credit switching route may have been important. Irish bank credit jumped by £24 million in the twelve months to October 1955, representing about three times the rate of nominal GNP growth (or in cash terms an excess of £17 million). While some of the excess is undoubtedly attributable to the financing of the higher inventories we have noted, it is worth mentioning that nearly all of it is accounted for by four sectors "mining and manufacturing", "wholesale merchants", "public bodies" and "shipping, transport and communication, electricity and gas". These sectors probably include many of the more important enterprises and bodies that might previously have been in a position to obtain bank credit in the UK.

It would thus be possible to sustain an argument that at least one-half and possibly as much as three-quarters of the fall in foreign assets during 1955 could

⁵⁷Note also that the fall was disproportionately in non-interest bearing current accounts.

be attributed to factors related to the holding-down of interest rates. This may be unduly reductionist, but it does suggest that failure to abide by the interest rate rules implied by the currency board system could have been the main source of this decisive crisis.

Although the 1955 decline amounted to only 18 per cent of the net foreign assets of the banking system, the situation was evidently unsustainable. From the point of view of the banking system, there was the additional consideration that the banks' profit margins were clearly being eroded by having to cash in higher-yielding London investments to finance the expansion of Irish credit. This may have heightened the sense of crisis as presented to policy-makers and contributed to the overreaction which occurred.

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Table 1: **CENTRAL BANK OF IRELAND: SIMPLIFIED BALANCE SHEET**

£ million		/-----End-March-----\ 1935 1945 1955 1965				End-Dec 1974
Assets	Foreign	8.9	37.1	87.4	153.2	495.4
	Gold	0.0	3.9	4.0	6.0	7.6
	Foreign Currency	8.9	33.2	83.4	147.2	453.1
	SDRs					17.0
	IMF Reserve Position					17.7
	Domestic Bills and Securities	0.1	0.0	0.0	9.5	63.2
	Bills Rediscounted for Banks	0.0	0.0	0.0	2.9	0.9
	Irish Government Securities	0.1	0.0	0.0	6.6	62.3
Liabilities	Legal Tender Notes	7.7	32.9	74.0	106.6	250.5
	Banks' Deposits	0.0	1.2	0.6	22.0	227.1
	Government Deposits	0.3	0.0	0.0	14.1	52.9
	Other Items (Net)	0.9	3.0	12.8	20.0	28.1
<i>Memo:</i>						
	Claim of LTNF on General Fund				23.8	30.0
	Associated Banks Net Foreign Assets	70.7	152.4	85.7	89.3	10.3
	Consolidated Private Bank Notes	4.9	3.1	0.5	0.2	0.1
	Surplus Income	0.2	0.4	1.4	3.5	13.0
% of GNP		/-----End-March-----\ 1935 1945 1955 1965				End-Dec 1974
Assets	Foreign	4.80	11.89	15.86	15.62	13.73
	Gold	0.00	1.25	0.73	0.61	0.21
	Foreign Currency	4.80	10.64	15.14	15.01	12.56
	SDRs					0.47
	IMF Reserve Position					0.49
	Domestic Bills and Securities	0.03	0.00	0.00	0.97	1.75
	Bills Rediscounted for Banks	0.00	0.00	0.00	0.30	0.02
	Irish Government Securities	0.03	0.00	0.00	0.67	1.73
Liabilities	Legal Tender Notes	4.18	10.54	13.43	10.87	6.94
	Banks' Deposits	0.01	0.37	0.11	2.24	6.30
	Government Deposits	0.15	0.00	0.00	1.44	1.47
	Other Items (Net)	0.49	0.97	2.32	2.04	0.78
<i>Memo:</i>						
	Claim of LTNF on General Fund				2.43	0.83
	Associated Banks Net Foreign Assets	38.22	48.85	15.55	9.10	0.29
	Consolidated Private Bank Notes	2.65	0.99	0.09	0.02	0.00
	Surplus Income	0.11	0.13	0.25	0.36	0.48

Figure 1

Irish and UK Retail Prices 1922-1992

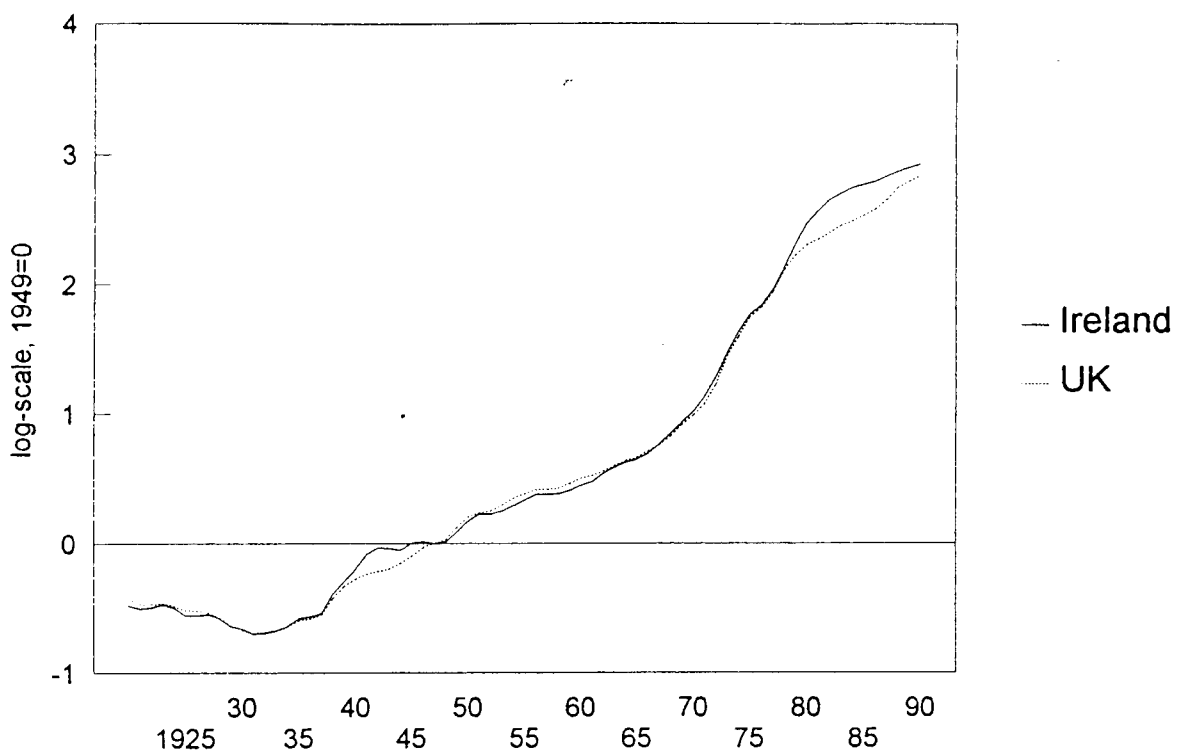


Figure 2

Irish Retail Prices as % of UK, 1926-78 Index, 1949=100

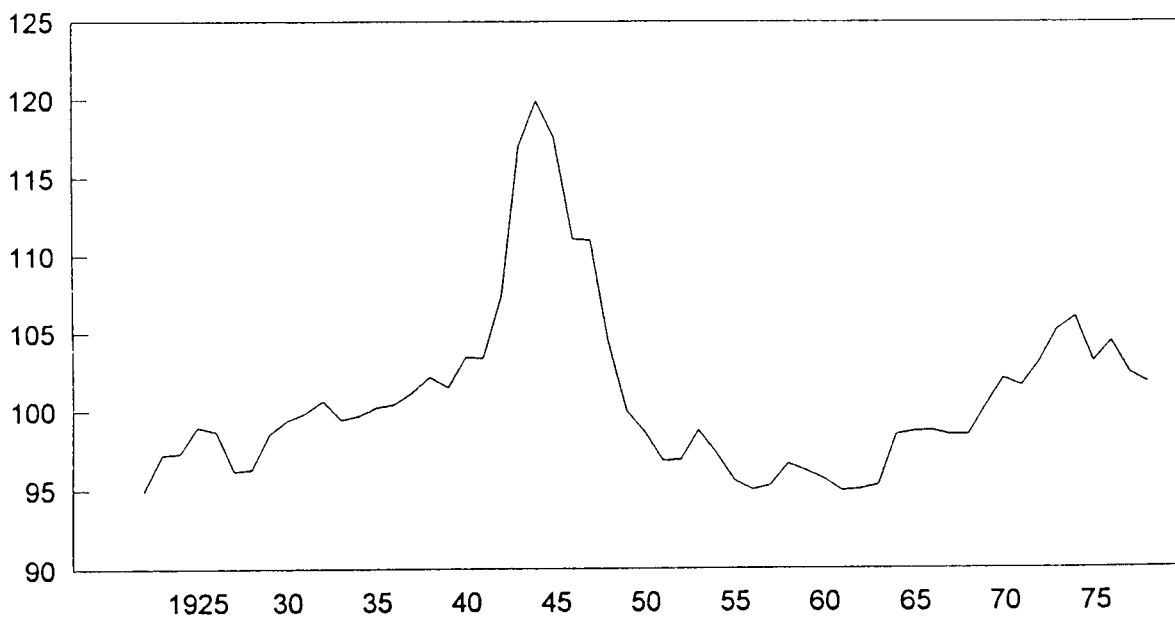


Figure 3

Irish Interest Rates, 1820-1994 and Differential over London

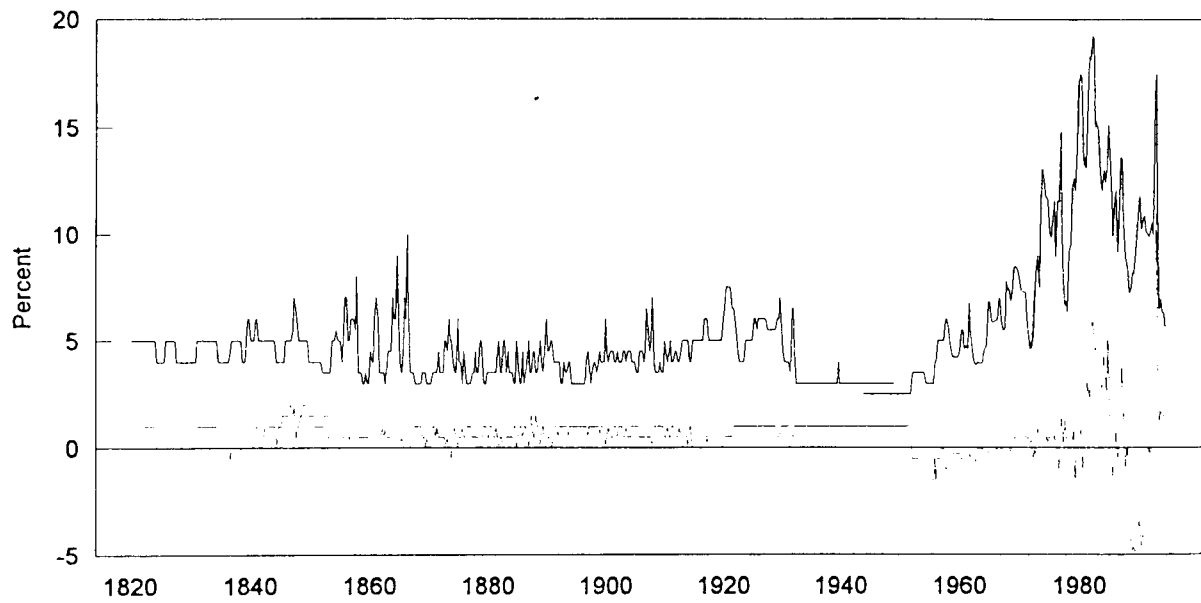


Figure 4

Cumulative Excess Returns on Short-Term Irish Assets Against £ Sterling and DM

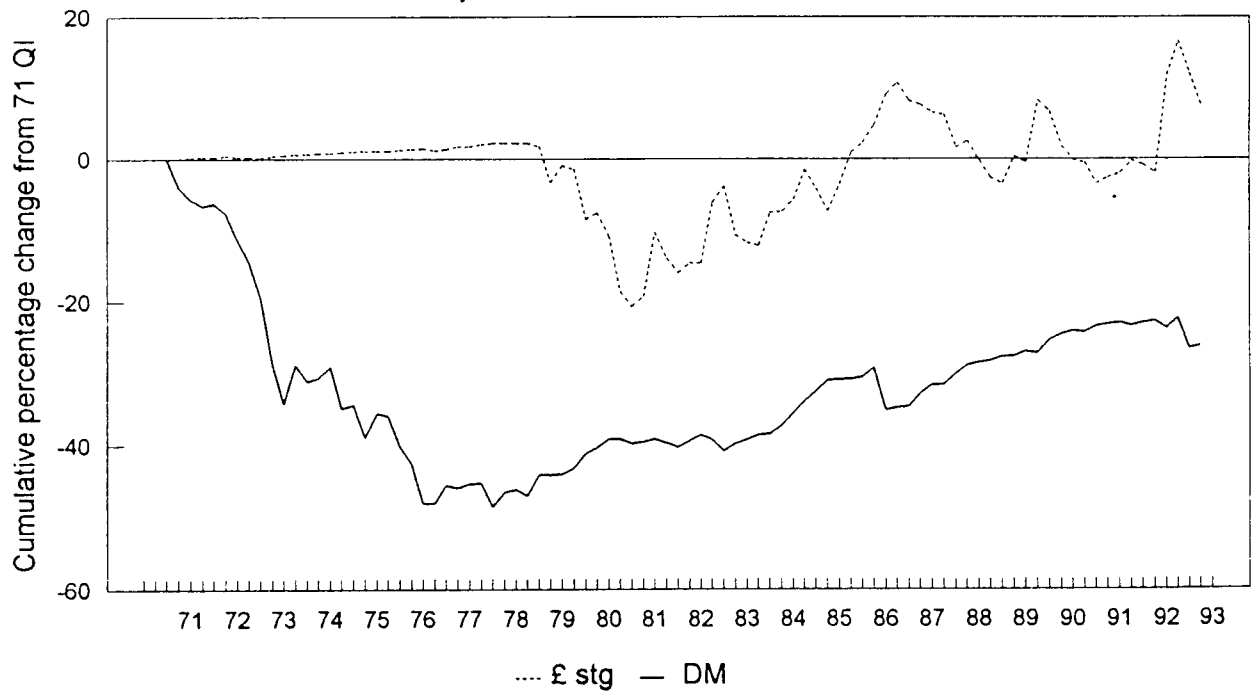


Figure 5

Net External Assets, 1932-68 Associated Banks and Central Bank

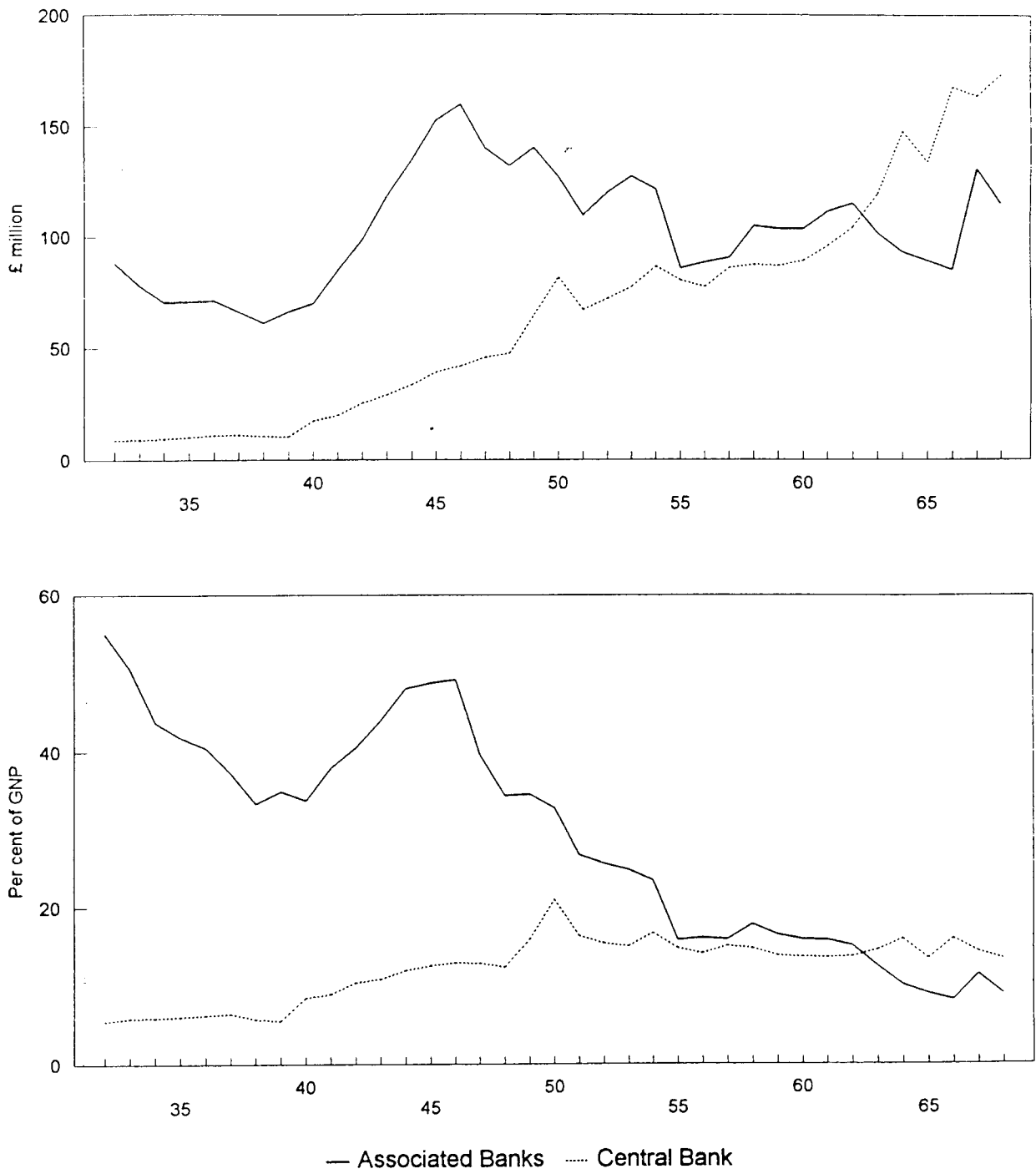


Figure 6

Irish Wage Rates as % of UK, 1926-78 Male Manual Workers in Industry

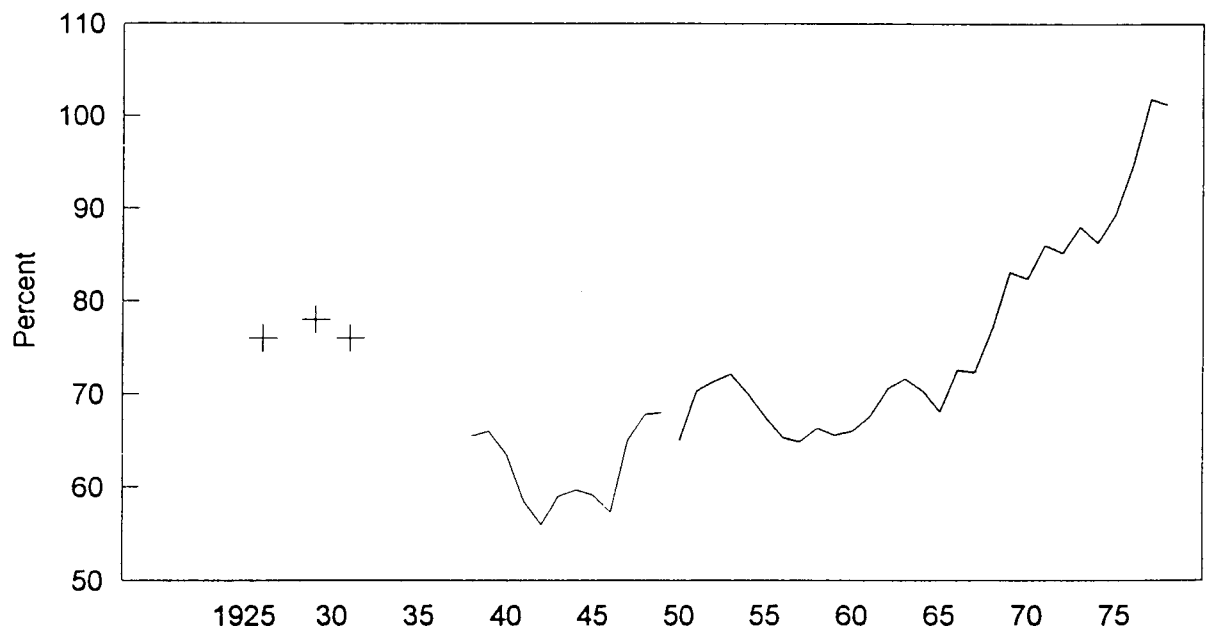


Figure 7

Personal Savings Ratio 1947-57

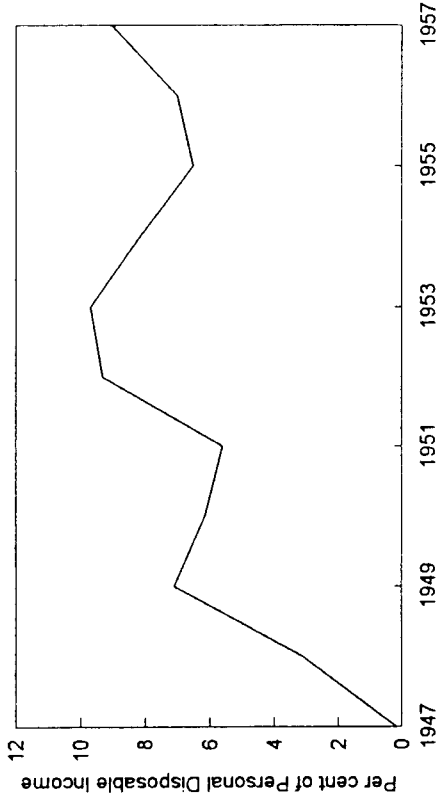


Figure 8

Gross Physical Capital Formation 1947-57

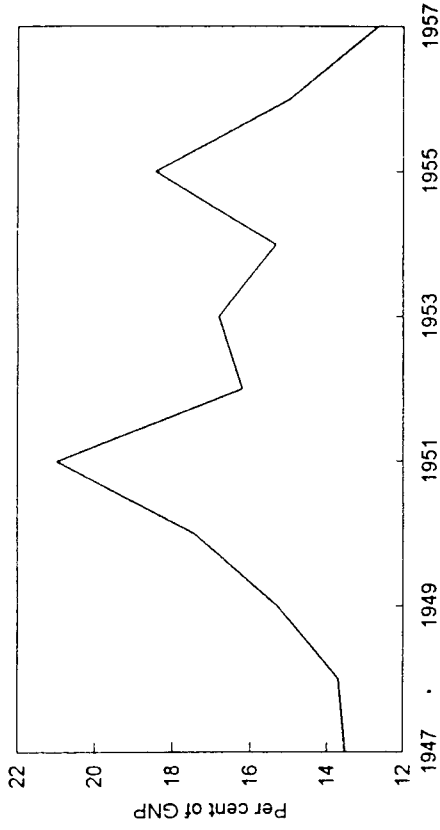


Figure 9

Private Non-bank Capital Flow 1947-59

