

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

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1. Introduction

A currency board is an institutional arrangement for managing a currency with a fixed parity. The currency board is much more constrained than the central bank, and these constraints help ensure that the fixed parity is maintained. The board's main activity is to issue 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. Those that were operated in former British colonies in Africa and Asia are usually regarded as the classic examples.

Surveys of this post-colonial experience are contained in Schwartz (1993) and Walters and Hanke (1992), but they hardly mention Ireland. Nevertheless, the Irish currency board is an instructive case. Having been set up following national independence, 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, some 18 years after the abandonment of the one-for-one sterling link, the Irish pound has been trading close to the old parity, and goods, services and factor markets are completely

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open to the rest of the European Union. The Irish experience also allows us to analyze the evolution of a currency board into a central bank through the accumulation of additional responsibilities and activities.

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).

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.² 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.

¹ Notably (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 but, as demonstrated by the Argentine experience in early 1995, a run on the banks can lure the currency board into extending its support to banking obligations denominated in local currency.

² Compared with a strict gold standard, it also economizes on the use of gold as a reserve.

Among the additional monetary management functions, whose exercise by a currency board could compromise its successful operation, we may itemize (as negative criteria) the powers to:

- (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;
- (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.³ 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.⁴ 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 respect its history is analogous to that of other currency boards.⁵

³ It is for this reason that the Estonian currency board maintains foreign currency reserves against banks' deposits as well as notes issued (Bennett 1993).

⁴ Administrative 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.

⁵ Schwartz (1993) documents a quite similar dilution of the distinguishing currency board features even of the Hong Kong Exchange Fund.

Although it assumed the title and legal status of a central bank in 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. An accretion of central banking activities thereafter represented the true transition, and Ireland was clearly no longer operating a currency board system 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.

2. Institutional arrangements⁶

2.1. *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

⁶ A more detailed account is in Honohan (1994) and this in turn draws on 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.

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 Ireland 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.

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 H. 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.

2.2. *The Currency Commission, 1927-1942*

The outcome of the 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 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% by a reserve consisting of gold and sterling balances.

The main banks⁸ were shareholders of the new Currency Commission, and they elected three of the seven directors. Three more were appointed by the Minister for 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 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. But to the question of what to do with the pre-existing bank notes, issued by Irish banks under British law, 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 replace them with a consolidated

⁷ Specifically 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 *piunt* 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.

⁸ Other than one which decided to operate only in Northern Ireland and had sold its branches in the Free State.

series of notes guaranteed by the banks⁹ 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,¹⁰ 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.¹¹ An annual fee, which amounted to as much as 3% (equal to the banks' own prime lending rate) was payable by the banks.¹² 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% of Irish notes in circulation, down from 40% in 1934.

2.3. *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 tightly circumscribed by the continued existence of a backing requirement for the currency and by the fact that the banking system, with its large net holdings of external assets, had no need of the new Central Bank as a lender of last resort.

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

⁹ Who deposited securities with the Currency Commission to the full value of the notes.

¹⁰ For years they had lobbied for a level playing field in regard to note issue.

¹¹ We ignore here a number of complications including the treatment of Northern Ireland (where the private banks still issue notes today).

¹² An annual charge of 1.5% was payable to the Currency Commission. From 1932, a further 1.5% was payable directly to the government, though this was reduced to 1% in 1937 (previously, under the 1844-45 arrangements, annual duty of only 0.35% had been payable).

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.

2.4. 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 continued to act as a currency board in matters of monetary management, despite the fairly extensive powers given to it, let us recall the positive and negative criteria mentioned in the introduction. The first, positive, criterion is 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 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; more details are in Honohan 1994).

TABLE 1
CENTRAL BANK OF IRELAND: SIMPLIFIED BALANCE SHEET

£ million	End-March				End-Dec.
	1935	1945	1955	1965	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
Bank's 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
Memo:					
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					
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
Memo:					
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

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% 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).¹³

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.

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.

3.1. Seigniorage

The flow of seigniorage diverted from the issuer of foreign currency to the currency board is usually seen as a major advantage of

¹³ This 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.

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.¹⁴ Although some of the private banks were London-based, the greater part of bank 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.¹⁵

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% of GNP over the half-century, with a strong increase towards the end (it averaged 0.37% in the decade 1969-78).

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% over the half-century.

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

¹⁴ British 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.

¹⁵ And, though it tended to increase over time, a comparatively modest proportion of the central bank's net interest income (about 10% by 1978, equivalent to 1% of the stock of currency) was absorbed through administrative expenses.

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 investments is realized. In effect, the central bank was accumulating a substantial reserve from undistributed profits.

It may be asked whether the sterling-only restrictions on the composition of the currency backing may have reduced the potential seigniorage. 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% of GNP, if measured in dollar terms. 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 1% of GNP – a costly decision indeed.

3.2. 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 (Figure 2).¹⁶ 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%.

¹⁶ I 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) that 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.

FIGURE 1

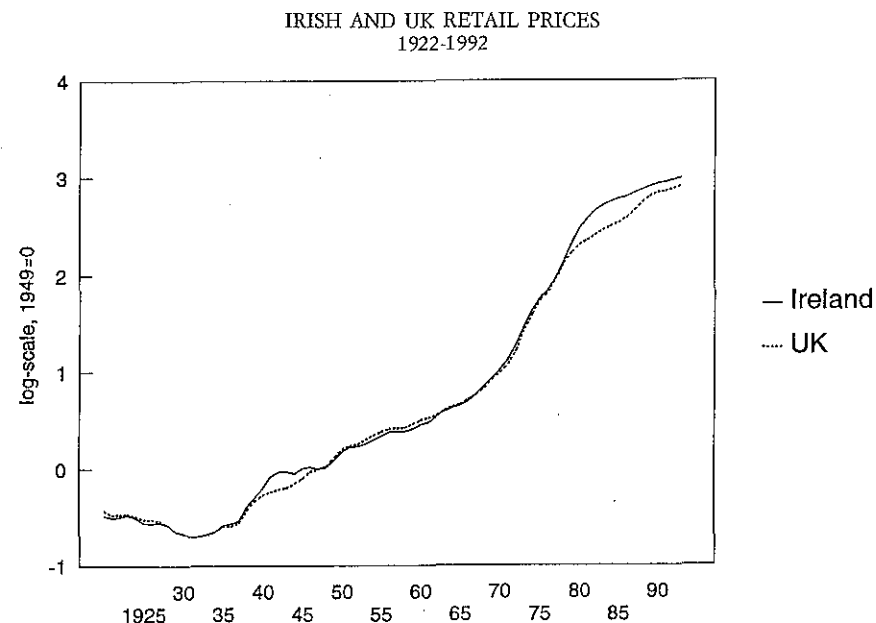
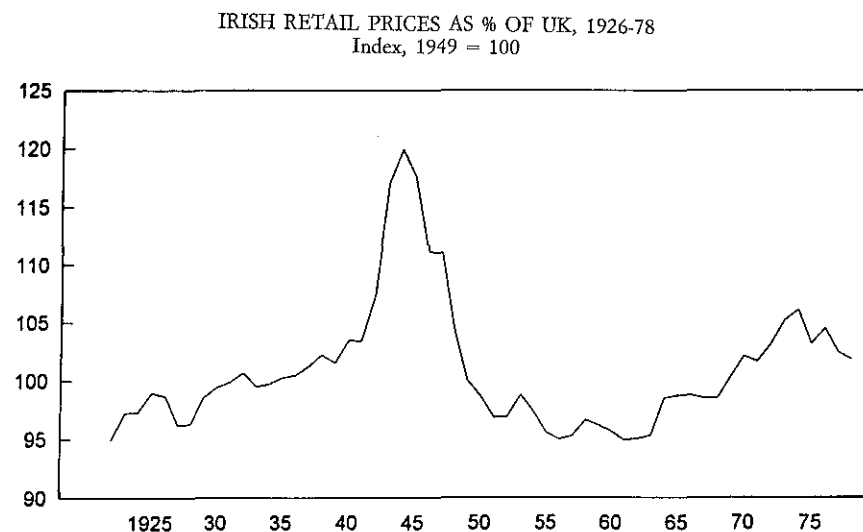


FIGURE 2



3.3. Interest rates

A long time series of interest rates (drawn from Honohan and Conroy 1994) is plotted in Figure 3. Although the point can be overstated, all authorities agree that, during this period, Irish interest rates were driven by those in London.¹⁷ 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.

A closer examination does suggest a shift in the relationship from the end of 1921, with the differential of the Irish Banks' Rate over London Bank Rate about 0.4% higher than before.¹⁸ 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.¹⁹ 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 0.5% below Irish Banks' Rate, movements in the Central Bank Rate tended to reflect rather than determine market conditions throughout the period under review. It was the Minister for finance rather than the central bank who attempted moral suasion over bank interest rates.

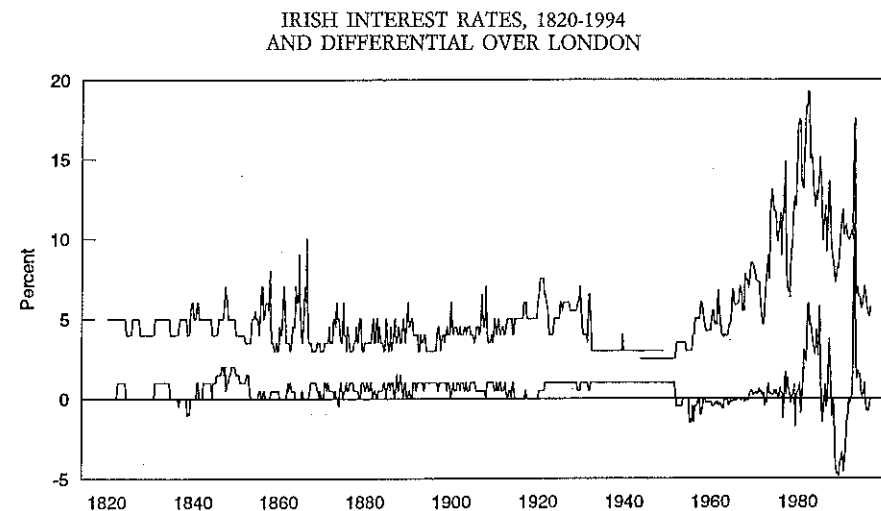
Such persuasion was effective for the first time in 1955, when the Irish banks were prevailed upon by political pressure not to follow an upward movement of 1.5 percentage points in London rates. The central bank's rediscount rate also failed to follow the

¹⁷ As 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).

¹⁸ The 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%.

¹⁹ A 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.

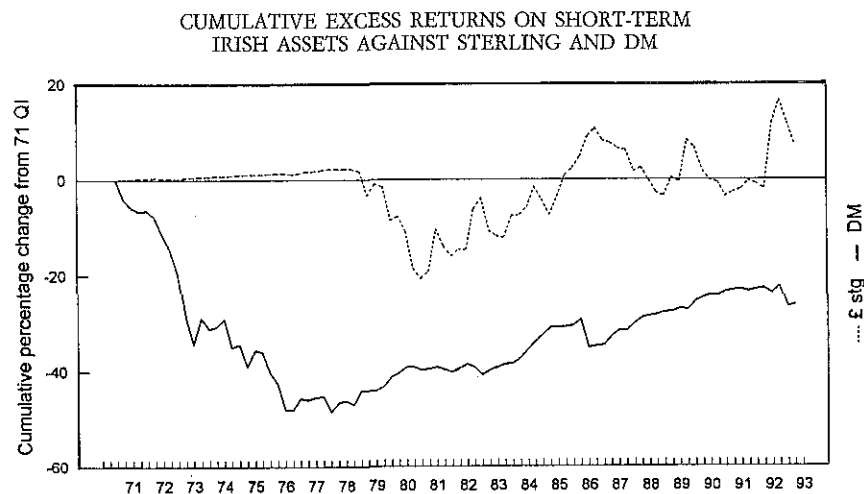
FIGURE 3



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.

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-à-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 assets. A holder of Deutsche Mark from 1971 would have been about 80% better off by the start of EMS than the holder of Irish

FIGURE 4



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% 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.²⁰ 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

²⁰ The 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.

3.4. 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% of Ireland's merchandise exports and 75.6% of imports. These figures had fallen to 62.0% and 54.8% on the eve of Ireland's accession to the EEC, and by 1978 they had fallen further to 47.0% and 52.6% (1995: 25.4 and 35.1).

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

opments 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

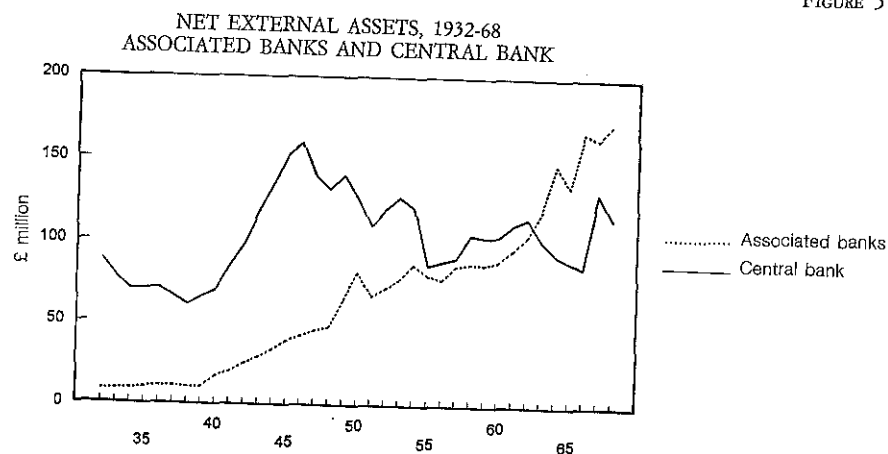


FIGURE 5

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.²¹

4.1. 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.

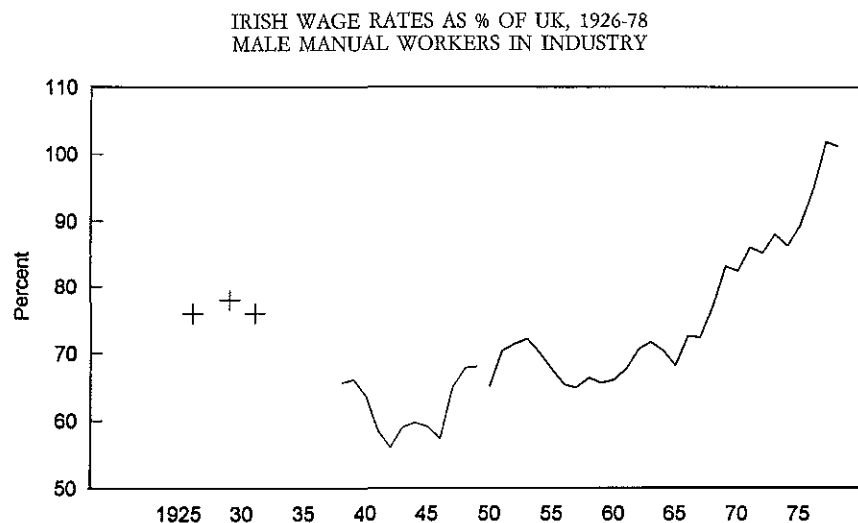
Obtaining a definite *quantification* of developments here is complicated by the substantial structural shifts in the occupational and skill structure of the economy, especially by comparison with trends in the UK. Recent reviews of available data conclude that relative wages in Ireland may have drifted downwards from the 1920s to the 1940s (Figure 6).²² 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

²¹ This experience well illustrates the stabilizing role which commercial bank foreign exchange reserves could play, a role that was stressed by Ingram (1962) in his proposal for international financial integration.

²² The data before 1949 is from Curtis and Fitz Gerald (1994), thereafter from Walsh (1994).

FIGURE 6



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). 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 unemployment and massive emigration, cannot be attributed to a sudden 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.

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.

4.2. *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 1.5% (to 4.5%). 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.

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% of GNP during 1955.²³ About a half of the fall can be attributed to net capital outflow, to which a substitution of Irish bank credit for

²³ The earlier and larger balance of payments crisis of 1950-51 was largely due to 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.

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.²⁴

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% 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 through the encouragement of inward foreign direct investment.²⁵ 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.

²⁴ That, 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.

²⁵ The events surrounding the November 1958 publication of the White Paper *Economic Development* are discussed by Fitz Gerald (1968).

5. The breaking of the link

5.1. *Why the decision was taken*

Although the wisdom of the sterling link was questioned from time to time, especially after the 1949 sterling devaluation,²⁶ 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?"²⁷ 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 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

²⁶ An 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).

²⁷ Whitaker (1976). Somewhat quixotically (but no doubt deliberately) he chose to write this particular piece in the Irish language, thereby greatly limiting its audience.

3% of GNP – less than the annual transfer of structural aid from the EU to Ireland in some years 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 (February 1981) and as high as IR£ 1 = £ 1.10 (October 1992).

5.2. *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 (Honohan 1978), sterling strengthened considerably during 1978-81. Had the Irish pound remained linked to sterling, its 1981 average value would have been 25% 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.

6. 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. The substantial degree of financial integration between Ireland and the UK was also important. By the 1970s, the trade links had weakened and the strength of sterling was no longer assured: accordingly the sterling link was no longer unambiguously the peg of choice.

For many countries the choice is not so easy. While the Deutsche Mark might seem the obvious choice of master currency 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 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. Furthermore, few of these countries have the substantial degree of financial integration with the master financial system that has been recognized as a pre-requisite since the proposals of Ingram (1962).

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 central bank 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 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.²⁸ 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 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 arrange-

²⁸ However, 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.

ment had established.²⁹ 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.

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. Indeed, the EMS crisis³⁰ of 1992-93 evoked many wistful recollections of the stability of the old regime.

This favourable experience helps explain Irish enthusiasm for retiring the Irish pound, and adopting the euro as Ireland's currency from 1999.

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²⁹ The 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 achieved.

³⁰ When 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.

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