

EMU - REACHING A NARROW VERDICT

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EMU - hard to keep up the enthusiasm

The single currency project gelled into a Treaty commitment at a certain moment because it seemed to meet three preoccupations current in the mid-1980s. First, it seemed to offer a chance to lock-in low inflation in Europe for the first time since the early 1970s. Second, removal of currency fluctuations seemed an essential complement to the completion of the single market (as reflected in the title of the Commission's notorious *One Market One Money*). Third, it offered a way to keep the proverbial European bicycle moving forward by establishing a new institution which federalists and statisticians could see as a building block towards the single European government, while the liberal and euro-skeptical could accept it under the emergent idea that central banks should be independent of government anyway.

This coalition has proved somewhat shaky in the light of subsequent developments. The persistence of low inflation despite the removal of almost all regulated exchange rate discipline in the European Monetary System has cast some doubt on the argument that we need an European Central Bank to do that for us - indeed some commentators (especially in France) begin to think of the European Central Bank as a restraint on an excessively doctrinaire Bundesbank. Although separate exchange rates do add to costs and uncertainty, smart computers and ever-improving financial instruments are constantly reducing the micro-economic costs, and serious studies still fail to find much of an effect of exchange rate volatility on trade. Besides, with membership at 15 and looking set to grow towards two dozen, the EU will continue to contain several currencies for the foreseeable future, with the result that the establishment of an inner group using the *euro* could act as a divisive wedge rather than as federalist cement.

But even if some of gloss has gone off the project, and the drawbacks become more evident, the pendulum has not fully swung back. Indeed, since much of the pain of fiscal convergence is now a sunk cost, and considering the political ramifications of stopping now, it is easy to go along with the majority view that continuing with EMU is at this stage still a good idea for the Union.

But still seems good for Ireland

But is it still good for Ireland, bearing in mind our special situation? Were the UK also a member, there would be little doubt, but that may not be on offer. Nevertheless, in our recent study for the Department of Finance, we concluded that, on our best estimate of the quantifiable

economic effects, and assuming prudent policies, EMU membership would be favourable for Ireland. That is, we would be better in it than out. Without entering into all the details, we would like to outline the main reasons for this conclusion.

Note first that the margin of advantage which we see is small - our best estimate is 0.4 per cent of GNP per annum (or 1.4 per cent in the event that the UK also joins). This is the net result of a number of factors, of which two stand out as quantitatively the most important. It is these two main factors, one positive and one negative, that we would like to expand upon this morning, namely, the credibility gain associated with lower interest rates and the inflexibility loss, arising from the inability to adjust exchange rate when under pressure.

A flexibility penalty

Let me start with the latter. How much is it worth to Ireland to have exchange rate flexibility? The way we approached this question was to recognize that the costs that could be avoided are essentially transitional ones. Wages and internal prices will eventually adjust to whatever external price structure is generated by exchange rate movements. One key question is how long does this internal adjustment take? The answer differs from country to country and probably depends on the openness of the economy, on wage setting procedures and on institutional flexibility. The faster the adjustment, the more quickly dampened are the effects of any shock that moves the real exchange rate away from where one would like it to be. The second key question is: how big and frequent are the shocks that disturb the real exchange rate. The third is: how costly to the economy is it to have the real exchange rate out of line.

Once one knows the answer to these questions, it is "only" a technical matter¹ to evaluate a net present value for the costs of not being able to see the nominal exchange rate adjusting promptly and hence the "option value" of having one's own exchange rate.

¹We employ a model of repeated shocks whose logic is roughly as follows: it is assumed that the economy is continuously buffeted by shocks to its competitiveness. These shocks, large or small, are constantly arriving in a random manner: a positive shock can be followed by another positive shock, or by a negative shock offsetting the first. We can think of competitiveness as being measured by the real exchange rate, specifically the nominal exchange rate adjusted for wage rate changes at home and abroad. The shocks could come in the form of a change in either the actual or the desired real exchange rate. In either case, if the authorities are in a position to adjust the nominal exchange rate, they could choose to eliminate the effect of these shocks promptly. Otherwise, the real exchange rate will deviate from its desired level as a result of the shocks, though it is assumed that the economy gradually adjusts to eliminate this deviation.

In order to bracket the size of each of the three elements, we looked at the historical record. To get an indication of speed of wage adjustment we experimented with a simple quarterly error-correction model of wages and prices in Ireland and the UK (Figure 1).² Though not all of the types of ("asymmetric") Ireland-specific shocks that put the real exchange rate out of line would be reflected in the sterling/DM exchange rate, the historic volatility of this rate provides some indication of the order of magnitude likely to be involved here (but note that we did gross it up to allow for other types of asymmetric shock). Finally, we used the Institute's macro model to compute the total output and employment penalty resulting from a single real exchange rate shock of a standard size.

Putting the pieces together, what we discovered is that any reasonable values on these three elements of the flexibility cost / option value gives a relatively low net present value. Our best estimate was about 1 per cent of GNP per annum: though as elsewhere the margin of error is substantial.³

So even before we turn to any question of interest rate gain, the flexibility penalty may not be high enough to offset the likely political gains of membership.

²An important feature of this analysis was the extent to which the effects of a sterling shock were found to unwind due to adjustment in prices in the UK as well as in Ireland.

³This kind of exercise is designed to arrive at a best estimate, and cannot be expected to yield a narrow statistical confidence interval.

Interest rates: a credibility gain

It is from lower interest rates that we projected the largest economic benefit to Ireland from EMU membership. Nevertheless, several commentators have suggested that we were too conservative on this front: that the interest rate gain could be much higher.⁴ Undoubtedly, interest rates depend so sensitively on expectations and financial market sentiment that it is hard, several years in advance, to be sure of what will happen.⁵ We drew both on theoretical considerations and on empirical experience to arrive at a reasonable conclusion of the likely range of outcomes.

The reason for expecting lower interest rates is not simply lower inflation — a sustained lowering of inflation has already been achieved without the single currency. Instead it is through the complete removal of any kind of devaluation risk that Irish wholesale interest rates will lose definitively the premium above German rates which has been a fairly constant feature of financial markets in the last couple of decades. Even after taking account of higher inflation and actual exchange rate movements the premium was particularly large during the narrow-band EMS period 1979-93, but has still remained significant in recent years.

What the textbook says

But let's look at this step-by-step. The textbook benchmark is that interest rate differentials will tend to reflect expected exchange rate movements, with no systematic gain to be had over a period of time, except to the extent that exchange rate movements systematically deviate from expectation. If expected exchange rate changes reflect expected inflation differentials, this would imply that expected real interest rates are the same everywhere.⁶

The theoretical benchmark offers no scope for lower real interest rates, and little scope for lower nominal interest rates inside EMU as compared with outside it, apart from those countries

⁴They observe, for example, that Irish short-term interest rates have averaged about 2 percentage points above German rates in 1996 so far.

⁵And, though many attempts have been made to infer market expectations from swap rates and the yield curve, the evidence from the implicit forward rates is hopelessly muddied by the uncertainty as to membership of EMU.

⁶For example in 1978, when EMS membership was expected to yield lower nominal interest rates for Ireland, this was mainly because it was thought that the exchange rate for the Irish pound would be less prone to depreciation against the DM and that inflation in Ireland would be lower.

outside that have much higher inflation.

Progressing from this simplest of textbook models, we can introduce the idea of a risk premium. If the Irish pound represents a risky asset for many of its holders (either compared with real assets, or compared with other reference currencies such as the DM which would be relevant to foreign investors), then these investors will demand and receive a risk premium in the rate of return on holding Irish pound-denominated assets. The appropriate risk premium depends on the expected covariance of the Irish pound with other relevant assets. If one uses actual covariances in place of expected, the risk-premium model has some difficulty in explaining more than a small risk premium for the Irish pound. It can do better if we assume that market expectations were very pessimistic relative to the outcome – a point to which we return below.

Moving further from the standard textbook towards the real world, it is often observed that the portfolios of financial institutions in the major economies are inadequately internationally diversified, leaving large unexploited gains. If so, a country which is a net borrower in assets denominated in its own currency (like Ireland) will suffer by having to pay a premium to break down the irrational reluctance of fund managers abroad to invest in what would be for them very remunerative foreign assets. This could explain a high premium on Irish pound yields. This explanation will become less and less relevant, assuming that the recent faster trend towards international portfolio diversification worldwide continues.

These theoretical and general considerations thus either fail to rationalise a large interest premium for Irish pound assets, or interpret it as the product of a degree of "home preference" by foreign institutional investors which is both irrational and likely to decline. So far, then, little reason to expect a large reduction in Irish interest rates from entering EMU.

The empirical experience: excess returns

But, whatever the explanation, Irish interest rates have (since the EMS began) been much higher than the simplest textbook model would have predicted. In the literature, currency risk has been seen as the major determinant both of fluctuations in Irish money market interest rates such as interbank or Exchequer bill rates and of the average differential against German rates. Several authors (Thom, Walsh, Honohan and Conroy) have noted the dependence of Irish interest rates on the Irish pound-sterling exchange rate during the narrow-band period. This dependence then dramatically declined (though it was not eliminated) when the ERM bands were widened.

Even more striking is the fact that Irish pound interest rates were on average much higher than

needed to compensate for actual exchange rate decline, i.e., there was an "excess return". The average excess return on Irish pound interest rates during the period 1979-93 was about 0.65 per cent per quarter, equivalent to about 2.6 percent per annum (Figure 2). Other countries also paid a premium, but Ireland suffered the highest excess return of any of the EMS currencies. This excess-return-on-average is largely attributable to what proved to be an exaggerated fear of devaluation.

Four important characteristics of the narrow band period were: the fact that the exchange rate regime allowed for sudden large devaluations, thereby threatening holders of Irish pound assets with sudden large losses; the perceived link between Irish exchange rate policy and sterling movements, heightening the risk of devaluation; the fact that UK interest rates were also relatively high for much of the period, reflecting reliance on monetary policy for disinflation; the prolonged fiscal crisis and the more rapid than expected reduction in Irish inflation. To the extent that some or all of these four contributed to the excess return in an important way, it would be unwise to assume that excess returns would continue on the same scale outside EMU. (Thus, for example, the interest rate gain from membership might not be so high if UK excess returns were lower, reflecting more stable monetary conditions, but note that in that case the sterling-related asymmetric shocks would also be lower).

Extending the regressions beyond mid-1993 produces striking changes. The removal of the one-way devaluation bet, which had been associated with the previous rigid narrow band system has reduced both the association of Irish interest rates with sterling movements and the average excess return. In particular, the post-crisis dependence on sterling has more than halved to about 1.25 percentage points. Furthermore, although the downward trend in the Irish pound-DM interest differential has ended, this differential has averaged 1.04 percentage points lower than if it had retained its pre-crisis relationship (conditional on sterling, and freezing the trend at end-1993).

Assuming that, outside EMU, Ireland can – after an initial period of uncertainty – retain as much credibility as it has in the wider band, this evidence suggests that the currency risk premium or credibility penalty would be much lower than the 2.6 per cent per annum average under the narrow band. Subtracting the 1.04 percentage point intercept shift in the equation from the actual excess return 1983-92 would give about 1.6 per cent per annum.⁷

⁷Excess returns against the DM during the wide-band EMU have been very volatile - but the average to September 1996 happens to work out at about 2½ per cent per annum once again.

In sum, whether it is to be thought of as an EMU credibility bonus or simply as a premium for risk and unfamiliarity of a small currency, it appears that a figure of 1 percentage point for the likely long-run differential in wholesale rates is defensible. This does not exclude the likelihood of a higher differential in the initial period of non-membership. Despite the simple textbook theory, a much lower figure has no basis in historical experience, or in current long-term yields.

Our projection may be too conservative: as mentioned, some commentators have proposed larger interest gaps. But to adopt a higher figure would seem to rely too much on the experience of the 1980s, when special factors — disinflation, speculation-prone exchange rate regime — were in effect. Furthermore, it is not impossible that the gap might turn out lower, notably if market confidence in the *euro* was low.

How does an interest rate reduction affect output and employment?

In our macro-model-based calculations, lower interest rates consequent on Irish membership of EMU impact on the economy through 3 channels:

- (a) the effect on national debt interest payments
- (b) the effect on the household sector - chiefly housing investment
- (c) by reducing the cost of capital for the company sector thereby increasing competitiveness.

The first of these channels - the public finances - proves to be the least important. This is because EMU would not change the interest rate payable on the bulk of Ireland's (and the government's) foreign liabilities. The change in debt interest payments largely corresponds to a reduction in receipts by the household sector.⁸ The net national effect of this change would therefore be small. (A change in foreign interest rates - such as that generated by German unification - has much larger effects on the indebted Irish economy.)

According to the model simulations, up to one-fifth of the net benefits (measured in terms of employment and output) from a fall in interest would accrue from a higher level of investment in housing. Most of the remainder accrues from a rise in the competitive level of production in Ireland consequent on lower interest rates. This would result initially in a major increase in investment by the manufacturing and the service sectors. As the new investment would come on

⁸Of course the significant foreign holdings of Irish pound denominated debt would also see a loss in income.

stream it would be reflected in increased output in the economy.

Summary

How do our overall conclusions fit with the idea that we needed and used exchange rate flexibility in the 1980s to rescue us from some nasty difficulties? It is true that, as things worked out, it was just as well that we did not stay tied to sterling in 1980-81. That would have meant a nominal trade-weighted appreciation of over 10 per cent in one fourteen-month period in which the actual trade-weighted index fell by over 13 per cent. Put another way, the effective index would have been as much as 32 per cent higher than it actually was. Heading into the worst of the fiscal-correction induced recession this would have been crippling, and indeed unsustainable. Likewise, when we had become accustomed to a fairly lax interpretation of the EMS regime - taking the easy option at most multi-currency realignments - it would have been unfortunate had we not been able to act promptly to offset the effects of the sharp fall in sterling during 1986 by an 8 per cent devaluation in that year.

But we also paid a heavy price in terms of high interest rates in the EMS: less dramatic than the exchange rate adjustments, but a steady pressure just the same. These interest rate pressures worsened when sterling was weak, an additional and important twist to the sterling-factor which would be absent in EMU.

Our discussion today has been on the implicit assumption of good supportive policies. But exchange rate regimes are often chosen with a view to robustness in the face of a risk of poor domestic policy. A theoretical analysis of regime choice with this in mind might well not produce EMU as optimal on *a priori* grounds. However, external considerations strongly condition what possible choices of exchange rate regime are available. That is why it is futile to hanker after a sterling link: such a link is not in practice available unless the UK joins the EMU. External conditions have made available to us an EMU regime. At first sight not an obvious choice (given that it may well involve only a small group of countries accounting for only a quarter of our trade), it is nevertheless unique in its institutional and political context. It should be evaluated not against some hypothetical but unattainable regime, but against the limited range of practical alternatives available. The best of these - probably some kind of managed float - seems relatively unattractive and could be less robust to domestic policy errors than membership of EMU.

Today's presentation necessarily omits much of the argument which we developed in our main paper. So it is with apology for oversimplifying that we say that the key economic arguments in

favour - which are not particularly decisive - reflect in part Ireland's disappointing experience with the interest rate credibility factor in the 17 years of *de facto* currency autonomy and in part our interpretation of recent wage and price movements as implying that labour market institutions now have a sufficient degree of short-term adaptability to external price and exchange rate conditions to make the necessary adjustments.