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INTEGRATION OF FINANCIAL
MARKETS IN EUROPE:
IMPLICATIONS FOR THE IRISH
BANKING SYSTEM

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Abstract

Even if the single currency of EMU looks less likely than it did to come on stream before the end of the century, there are still strong forces of integration in the European financial markets. These will colour the environment for the development of the Irish financial system and they call for responses both at the level of individual institutions and at the level of the Irish financial system as a whole. This paper considers the following aspects of integration of financial markets in Europe.

- (i) The degree to which evolving plans for the implementation of monetary policy in the EMU are likely to take account of the particular needs of the banking systems in peripheral countries.
- (ii) The consequence of a relatively high dependence of the Irish (and UK) banking systems on short-term and variable interest rate deposits and loans
- (iii) The question of regional variation in access to credit and in interest-rates in large markets.

Implementation of monetary policy

Monetary policy in a single currency EMU regime will be geared to EU-wide goals such as a target for the EU money supply or average EU inflation. There could be little sensitivity of the aggregate policy to Irish conditions. Thus Ireland will continue to import its interest rates from abroad with even less chance of avoiding local deviations than before. While this might not seem to be the optimum from the point of view of avoiding fluctuations in economic activity, it may not be much of a price to pay for inflation stability and avoidance of speculative surges.

Nevertheless, there remains a degree of ambiguity as to how much independence of action will remain to the Central Bank of Ireland in implementing policy. While it would not be in Ireland's interest that monetary policy should fragment across Europe in the EMU, still it will be desirable to ensure that a mechanism is available to provide liquidity to the Irish financial system in the case of crisis. In the detailed planning for the implementation of monetary policy in the EMU, Ireland should ensure that the design of the policy instruments, and the degree of delegation of policy initiative to the national Central Banks, is such as to allow the Central Bank of Ireland the authority and the ability to act promptly to

head off any domestic liquidity crisis that might emerge.

Floating interest rates

There has been some concern about the relatively high dependence of the Irish (and UK) banking systems on short-term floating interest rate instruments on both sides of the balance sheet. Could this make them more vulnerable to interest rate volatility and also hinder their competitiveness in an increasingly integrated European financial market?

Our preliminary analysis of this problem suggests that it may not be as serious as meets the eye. Furthermore, attempts to lengthen the nominal maturity of deposits and loans could entail hidden risks for the banks: the actual maturity of deposits will not increase as much as the nominal maturity and the risk profile of the borrowers may worsen for banks which offer fixed interest loans.

Regional variation in SME credit and interest rates

Because of the importance of fixed costs in the profit and loss account of banks, the threat of increased competition in EU banking markets and lower margins on some lines of business is obviously a matter for concern. To the extent that competition for other parts of the banks' activities intensifies, fixed costs will have to be recovered from more captive markets. Among these, lending to small and medium firms (SMEs) is a prime candidate. But will it remain captive? Such detailed evidence as is available suggests that some local informational advantages remain even within regions of a single country such as the US or Italy, but the advantages can be small.

If foreign competition eats into Irish banks' share of SME lending, or into available margins in such lending, the consequences could include a sharp increase in the margins that have to be charged on the remaining pockets of less mobile borrowers, which in turn could entail adverse selection of poor credit risks.

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Introduction

Even if the single currency of EMU looks less likely than it did to come on stream before the end of the century, there are still strong forces of integration in the European financial markets. These will colour the environment for the development of the Irish financial system and they call for responses both at the level of individual institutions and at the level of the Irish financial system as a whole.

This is the second paper prepared by the Banking Research Centre on aspects of monetary policy implementation in the context of greater financial integration in Europe. The first paper (Honohan, 1993) reviews the mechanics of policy, highlighting such issues as the role of reserve requirements and the discount rate and central bank secrecy. It ends by noting a number of issues which could become increasingly important for the Irish banking sector especially in the context of an EU-wide implementation of monetary policy under EMU. The present paper takes up the discussion from that point and examines these issues in greater depth. Specifically, this paper considers the following aspects of integration of financial markets in Europe.

- (i) The degree to which evolving plans for the implementation of monetary policy in the EMU are likely to take account of the particular needs of the banking systems in peripheral countries.

(ii) The consequence of a relatively high dependence of the Irish (and UK) banking systems on short-term and variable interest rate deposits and loans

(iii) The question of regional variation in access to credit and in interest-rates in large markets.

1 EMU monetary policy implementation and the peripheral countries

Progress of plans at EU level

Despite the travails of the EMS exchange rate mechanism, plans are continuing apace for the operation of the single currency. The European Monetary Institute (EMI) was established on January 1, 1994, and expectations are that its staff (drawn mainly from the small staff - some thirty at present - of the Secretariat to the Committee of EC Central Bank Governors, hitherto based at the Bank for International Settlements in Basel) will soon move to a new headquarters in Frankfurt. The EMI is to prepare for the single currency, and to this end it has identified four main areas of preparatory work:

- Monetary policy (conceptual underpinnings and implementation methods);
- Payment systems - need for interconnection;
- Bank notes denominated in ECU;
- Consistent statistical base.

Each of these areas will have a potential impact on the operation of the Irish banking system. However, the last two are mainly of concern to the Central Banks, and operational implications for the banking system are unlikely to pose important problems of principle. The question of interconnection of payment systems will be potentially of greater importance to the banks, but here again it is likely that no special problem will be posed for the Irish banks if an adequate overall system is put in place by the EMI. The last three areas will not be discussed further here.

Monetary policy planning

It is this first area that has the potential for really significant strategic consequences for banks in peripheral countries, as the method of operation of monetary policy could end up placing these banks at a competitive disadvantage, with long-run consequences for the operation and performance of the banking system. It seems likely that, while final decisions are not needed yet and even

if the single currency remains several years away, the coming couple of years or so will be the time in which attitudes towards the outline of the monetary policy framework will begin to harden. Therefore it is now that Ireland should be considering what position to adopt.

Committee of Governors has stated that it will "keep the public informed on the progress it is making in examining the issues involved through regular and special publications". So far, the Committee has identified three main topics in the area of monetary policy: these are:

- (i) The conceptual basis for monetary policy, including the relative merits of different target variables.
- (ii) Methods and organizational aspects of executing monetary policy operations, especially the division of responsibilities between the European Central Bank (ECB) and the national central banks.
- (iii) Choice of monetary policy instruments

"Conceptual basis"

By the conceptual basis is the whole question of what the authorities should target, how to choose a target path, on what basis to revise it, and how closely to try to track the chosen target¹. For the ECB, the most likely candidates for targeting would likely include interest rates, monetary or credit aggregates across the EU, the average EU inflation rate or aggregate EU nominal GDP growth.

Most academic economists have focused attention on targeting of an EC-wide monetary aggregate as the likely central technique of policy by the ECB. A number of studies have examined the technical feasibility of such a policy, with

¹The current relevance of these issues for Ireland was discussed in my recent paper on Irish exchange rate policy (Honohan, 1993).

generally positive conclusions.² It seems that the aggregate behaviour of money demand across the EU is more stable than in any single country, offering both the prospect it would be easy to achieve any desired target path for the monetary aggregate, and that achieving a stable monetary path would likely induce macroeconomic stability and low inflation. However, the transition to the single currency could disturb traditional relationships in this area and make monetary targeting considerably more hazardous than it might appear now.

Furthermore, the ECB will not be starting with an entirely blank sheet. European central banking traditions and practices will certainly influence the decisions about what to target. Different member states have different traditions in this regard, and there is no absolute agreement on which is best. Smaller member states, especially Netherlands and Belgium, have used the exchange rate as an anchor for monetary policy in the past, but it is unlikely that a fixed exchange rate policy for the EMU as a whole (against the dollar or the yen, for example) would be adopted. To the extent that other countries, especially those in the Mediterranean region, have been notably unsuccessful in the matter of inflation and monetary control generally, the credibility of any arguments they might present for adhering to their traditional monetary policy practices will be weak.

All in all, the dominant voices in influencing the monetary policy approach of the ECB will probably be the monetary authorities of France, Germany and the United Kingdom. In the past, the British and French laid great emphasis on interest rates as the indicator as well as the main instrument of monetary policy, and such thinking is still important in the French approach. The British authorities, having experimented with monetary aggregates during the 1980s, have now reverted to inflation itself as a target. The German view remains eclectic, though they are usually perceived as continuing to rely more heavily than most on targeting a monetary aggregate - in their case a weighted average of the components of the aggregate money stock.

²Cf. Kremers and Lane (1990).

It is likely that the end result on the question of targeting will be something of a fudge, laying primary emphasis on inflation - since it is the main responsibility of the ECB - but allowing the monetary aggregates and interest rates to be taken into account. If so, considerable flexibility will remain for the annual variations in policy stance.

Whatever targets are finally chosen, they will certainly be framed in terms of the EU as a whole. Any exceptional variations in the Irish component of whatever variables are targeted will not have any practical implication for policy. Thus Irish interest rates could, for example, go very high without any corrective response from aggregate policy. This is an implication of the surrender of sovereignty to a multinational central banks and its consequences must be studied. Perhaps the smooth operation of international capital flows will prevent any untoward shocks arising, but can we be sure of this, and should there be any safeguards, such as allowing some emergency procedure to come into play in the case of unsatisfactory evolution in certain countries? In short, should national or regional targets be adopted also as secondary indicators, potentially triggering corrective action at the regional or national level (albeit authorized from the centre)?

Division of responsibilities between central and national level

Not unrelated to the question of a separate regional targeting exercise is the question of national implementation of monetary policies. It is not at all clear that the national Central Banks will either wither away or become merely regional offices of the ECB in this regard. Indeed in discussions leading up to the Delors Report and the Maastricht Treaty, two alternative models of the functioning of the system were considered: a *centralized* or two-tier model (where the ECB would effectively deal directly with the banks in each member state) and a *decentralised* or three-tier model (according to which the ECB would deal through the national Central Banks). The Maastricht Treaty does contain a detailed protocol on the Statute of the European System of Central Banks and of the ECB, but it does not clearly come down on one side or the other of this

centralized-decentralized debate. The key subsection of the Protocol in this regard is 18.2 which merely says that:

"The ECB shall establish general principles for open market and credit operations carried out by itself or the national central banks, including the announcement of conditions under which they stand ready to enter into such transactions."

This drafting is undoubtedly ambiguous. The degree of precision and comprehensiveness of the "general principles" and "conditions" which are to be established by the ECB is left unclear. The drafting could be consistent with a regime in which practically no independence is left to the national Central Banks, thus reducing them to the status currently enjoyed by the Landeszentralbanken in Germany or the twelve Reserve Banks of the US. But it is not easy to see how the protocol's text could be used to deny the national Central Banks from exercising considerable freedom in the manner in which monetary policy is to be implemented. In the latter interpretation, the "general principles" and "conditions" might relate, for example, only to such aspects the quality of collateral, and the frequency and maturity of open market or credit operations.

What might such independence mean in practice? The loosest form of decentralized regime would have the national Central Banks operating with almost full independence subject only to reserve requirements imposed on them by the ECB. The local banks would then be like customers of their national Central Bank, which would be free to manage its affairs subject only to the reserve requirements. Such a regime would be very similar to present arrangements in terms of the access of Irish banks to Central Bank liquidity support.

On the other hand, the ECB and the national Central Banks might agree on a very centralized model, in which each open market or bilateral liquidity operation would effectively have to be approved by the centre. In such a case the role of

the national Central Bank would be limited to the administration - checking the collateral, processing the clearance of payments instructions etc. The experience of the US Federal Reserve System, which began in a rather decentralised mode in 1913 but moved fairly quickly in the first decades of its existence to a very centralized operating method has been widely quoted in support of the proposition that, however the ECB begins, it will eventually end up with a centralized model.

Some consideration has been given to half-way houses in terms of decentralization.³ For example, open market operations might become the preserve of the ECB itself, while bilateral credit operations (including the discount window or, in the Irish case, the STF and similar credit operations) undertaken to meet seasonal or secular trends in liquidity needs, would be left to the national Central Banks. This could certainly avoid early difficulties of harmonizing the national money markets, which at present differ widely in terms of the type of collateral accepted by the Central Banks, the degree to which the banks rely on Central Bank refinancing and the size of the reserve and other regulatory requirements. But the potential for conflict is severe, both in terms of monetary policy and in terms of competitive distortions.

From the monetary policy point of view, while such a demarcation might work in normal times, turbulent periods could see the national Central Banks operating in opposite directions; one might even have the ECB operating to nullify the collective actions of the national Central Banks.

From the competitive distortion point of view, it is clear that a national Central Bank could employ the freedom given to it to favour the emergence of the banks in its financial centre by providing them with

³Cf. Monticelli and Viñals (1993).

assured liquidity with low risk and low transactions costs.⁴

Response of ECB monetary policy to Irish financial market needs

Bearing in mind the considerable national benefits that Ireland will enjoy from the single currency, including the avoidance of speculative surges, removal of the risk premium on Irish pound interest rates, saving on foreign exchange transactions, and so on, we may still ask whether monetary policy in the EMU is likely to be optimal for the Irish financial system, and if not whether there is anything that can be done about it.

Whether the centralised or decentralised model of central banking within EMU is adopted, it seems impossible that any actions by the national Central Bank could be successful in achieving a different level of domestic money market interest rates to those abroad. If they did try, for example, to lower interest rates by buying paper in the market, this would simply lead to wholesale borrowing by AAA non-residents in potentially unlimited quantities. The absence of exchange rate risk would ensure this. Even if the Central Bank only dealt with local banks, these in turn would find themselves inundated with profitable foreign lending and investment possibilities with essentially no credit risk (including investment in foreign gilts). I can see no institutional gimmick that would succeed in getting around this. The money market interest rate cannot be engineered away from the EMU-wide level.⁵

Furthermore, because of its tiny relative size, Ireland can expect little response of EU-wide monetary policy to changing conditions at home. This, of course is little different to the situation under the narrow-band EMS, where the Bundesbank's policies have been fairly reliably transmitted to Irish interest rates. Thus, for example, had Germany experienced the kind of credit market conditions

⁴The idea that some national Central Banks might compete to "capture" the centre of the EMU money market has been argued by Méritz (1993).

⁵That is not to preclude the possibility that, in a severe confidence or liquidity crisis, the market itself might drive local interest rates away from the EU norm.

(persistent weak demand) and the trend of inflation of Ireland since 1991, we can be sure that the Bundesbank would have lowered interest rates without fear of any inflationary consequences.

The monetary policy stance of the ECB will, to an even greater extent, be transmitted to Ireland in the form of an externally determined money market interest rate. Even if the ECB is targeting an EMU-wide monetary aggregate, or EMU inflation, the consequences of its targeting will be reflected, not in a particular supply of money, or level of inflation in Ireland, but in an Irish interest rate which does not depend on Irish conditions.

Is an externally determined interest rate stabilizing for the Irish economy? There are two aspects to this. First, we ignore the fact that the externally determined interest rates may vary. Then we ask just how often international conditions and those in Ireland are likely to deviate in such a way as to give Ireland the wrong interest rate for its own circumstances.

Taking the externally determined interest rates as fixed, then, will the Irish economy be more stable with fixed or with flexible interest rates? There could be some stabilizing effect from a degree of elasticity in the interest rate insofar as a decline in economic activity caused by investment, export or consumption weakness (what we may call real demand shocks) might trigger a lowering of money market interest rates which could provide a cushion. As against that, a fixed interest rate can inhibit otherwise destabilizing effects of the demand for money on domestic economic activity.⁶ On balance, the fluctuations in real demand seem likely to be more important in the Irish context than those in money demand. To this extent an unresponsive interest rate would seem unhelpful.

⁶This, of course, is essentially a restatement of Poole's (1970) prescription of policy instruments; cf. Sardelis (1993).

Nevertheless, demand shocks often hit Ireland and the rest of the Community simultaneously. When that occurs, EMU-wide policy will lead to a lowering of interest rates just when Ireland needs it. Research designed to assess how well these shocks are correlated between different members of the EMU in practice have tended to conclude that quite a lot of such shocks hitting the EMU are of a symmetric type. If so, centralized policy would produce the right interest rate for all.

Overall, therefore, the price (in terms of loss of interest rate flexibility) to be paid for the benefits of the Union seem small. Admittedly, the fact that Ireland will continue to import its interest rates from abroad, with even less chance of local deviations than before, may not be the optimum from the point of view of avoiding fluctuations in economic activity. But the ability of local interest rate movements to dampen fluctuations of economic activity seems limited in practice (Nugent and O'Connell, 1993). Furthermore, though externally determined, the interest rates movements that emerge may prove to be what is needed domestically anyway much of the time.

Monetary policy instruments and the response to national financial crises

As described in Honohan (1993) a degree of convergence of the instruments used in implementing monetary policy has been taking place worldwide. For normal conditions any of a variety of toolboxes will work. But the set of instruments actually available to each national Central Bank in the EMU will strongly condition their ability to respond quickly to local liquidity crises. More generally, will the ECB be geared to dealing with financial crises?

Most of the discussion of monetary policy takes the normal functioning of the banking and financial system for granted, and indeed the Maastricht Protocol setting out the aims and objectives of the ECB is no different in that it ignores the possibility of liquidity crises or panics. Yet it is just such crises that led to the establishment of central banks in the first instance, and the dramatic actions of central banks in heading-off crises stand out as the high points in the history

of central banking (just as their failures to do so, as in the 1930s depression in the US, stand out as among their greatest failures).

Will the ECB be prepared to provide liquidity to the securities and derivatives markets to the extent required to support their smooth operation, or will it confine its activities narrowly to the maintenance of low inflation? Recently, Folkerts-Landau and Garber (1993) have highlighted the potential risks entailed in a Central Banking approach which neglects the lender-of-last-resort function. They observe that the financial system in most (but not all) industrial countries has been growing rapidly on the basis of securitization, risk-sharing through the use of derivatives, and in general through market-led rather than institution-led financial innovations. The effectiveness of these markets depends on there being a high degree of confidence that there will be enough liquidity for contracts to be fulfilled. Because individual borrowing or lending transactions typically lead to a pyramid of related contracts designed to share risk efficiently, the liquidity requirements of the modern market-based financial system are highly variable. Active management of aggregate liquidity and a readiness to supply deficiencies is a prerequisite for the functioning of such markets.

A recent dramatic illustration of what is needed was the market collapse of October 1987. Extensive provision of liquidity by the Central Banks of the industrial world staved off widespread insolvencies on that occasion. While some observers complain that action fuelled inflationary pressures, there can be no doubt that, without some action, the consequences would have been very severe.

The only big country which has not, to any great extent, followed this market-driven model is Germany. There the financial system remains very much bank-based, and the central banking tradition in Germany reflects that background. If that tradition is imported into the ECB's operations we may find that the flexibility of the ECB's approach to monetary policy is insufficient. Not only could that threaten financial market stability in those parts of the EU that are

more dependent on financial derivatives and traded securities, but the erosion of market confidence in the availability of liquidity could drive much financial market activity offshore.

For Ireland (as with other small countries) the threat is reinforced by the remoteness of ECB decision-makers. There is undoubtedly a risk that a local liquidity crisis in Ireland might not receive the prompt reaction that it required for the double reason that the ECB is overly concerned not to jeopardise its overall monetary target and that it is too far removed from the local Irish market to recognize the scale of the problem and to distinguish adequately and quickly between illiquidity and insolvency of market participants.

Here is where the local implementation of monetary policy by the national Central Bank, provided for in the Maastricht Protocol, could come into play. But inevitably there will be a caution on the part of the ECB in taking at face value pleas for assistance from the national Central Bank. In this context the precise terms under which the local implementation is to operate could be quite crucial. Unless the ECB or the national Central Bank is in a position to provide support directly to illiquid local financial institutions during a crisis there could be a risk of collapse. When liquidity crises emerge, they are related to a lack of confidence. A local liquidity crisis affecting certain financial institutions in Ireland will lead to withdrawals of lines of credit from other parts the EU. Such withdrawals will tend to be indiscriminate and create a contagion effect extending the liquidity shortage to otherwise unaffected financial institutions.

The likely monetary policy response to such a situation depends on the precise institutional arrangements that have been set up. In the previous paper (Honohan, 1993) the various options in this regard were described as was the trend towards open-market types of support in normal circumstances. For crises, especially local ones, open market operations are not sufficient. In such a situation, specific and direct assistance to key institutions is needed.

Implications

The policy conclusion relevant to the Irish banking community must be to press for sufficiently flexible procedures to allow for direct assistance to Irish financial institutions in the event of a liquidity crisis. This need not necessarily come through the national Central Bank, but there must at least be adequate channels of information and communication between key Irish financial institutions and the ECB to ensure that, should urgent needs arise, they will be met promptly and in adequate volume of support. In particular, Irish banks must be given direct access to a lender of last resort, otherwise they will become retail institutions dependent on the goodwill of wholesale banks which are also among their competitors.

2 *Floating interest rates*

This section considers the consequences of the high dependence of the Irish banking system on short-term and variable interest rate deposits and loans. There are various concerns. The fact that Ireland and the UK are especially characterized by short-term and floating rate contracts has been emphasized in the aftermath of the 1992-93 currency crisis, during which the prevalence of medium-term fixed interest contracts in other EC countries is held to have insulated SMEs and households from the effects of speculative fluctuations. This in turn may have allowed the governments of those other countries to pursue their policies without as much regard to the interest rate consequences.

In an increasingly integrated financial market in Europe, will this floating interest emphasis of the Irish banking system place it at a competitive disadvantage? In particular, in the context of a single currency, with monetary policy operated by a single central bank, the question arises as to whether the differential impact of certain monetary policies on structurally different banking systems can or will be taken into account. Will this, in itself, force a convergence of banking practice and contracts; will it put pressure on the risk profile of banking in Ireland countries because of an increased interest rate volatility?

These questions are addressed in this section. Our preliminary conclusion is that the problem may not be as serious as meets the eye. Furthermore some methods of lengthening the maturity of bank contracts could themselves entail risks.

Maturity structure of bank assets and liabilities in Europe

It would be desirable to have a clearer picture of the facts here. Unfortunately, I have yet to come up with comprehensive information. There is plenty of data on the maturity of lending in different countries, but hardly any systematic information on the degree to which long-term lending is at variable or floating interest rates.

A number of official reports have adverted to the fact that "in most Community countries (excluding the UK and Ireland) the bulk of corporate borrowing is at fixed interest rates"⁷. However, there are contrary indications. In one of the few systematic surveys of the matter, the Banque de France (Cusson, 1991), carefully distinguishing between the concepts of long-term and fixed interest rate borrowing, estimated that two-thirds of French corporate debt (other than trade credit) was at long-term; but of that, three-fifths is at variable interest rate. That leaves only 27 per cent of French corporate indebtedness at long-term fixed interest - hardly "the bulk".^{8,9}

On the household side, there does seem to be unanimity on the fact that fixed-rate mortgages predominate in the Community, apart again from the UK and Ireland.

Let us consider the competitive consequences for the banking system in a country (like Ireland) with predominantly floating interest rates in an international environment where most lending and borrowing is at fixed interest rates.

There are a number of issues. First is the greater international mobility of depositors than of borrowers, and, among borrowers of the larger and more secure corporate borrowers. Second is the risk of mismatch and the cost of hedging or of attracting deposits of the right maturity, this includes issues of

⁷Committee of Governors of the EC Central Banks *Annual Report* 1992, p.13.

⁸However, an interesting feature of the French data is that the smaller the firm, the less likely it is to use floating rate borrowing. For example, considering medium and long-term loans to firms, 80 per cent of loans under FF 0.5 million were at fixed rate, whereas that was true of only 13 per cent of loans larger than FF 10 million.

⁹In its Annual Report, the Bank of Spain also presents some data concerning the breakdown between fixed and floating interest rates on new asset flows in Spain. In 1990 and 1991, over three-fifths of credit provided to firms and households by the Spanish credit system was at fixed interest, but this fell to just 12 per cent in 1992.

disintermediation and of financial distress among borrowers.

Greater international mobility of depositors than of borrowers

Even in an internationally integrated banking market, not all bank customers are equally mobile. So far as depositors are concerned, it is they who have the greater need to have information about and confidence in the banks than *vice versa*. In contrast, when it comes to borrowers, it is the banks who need to know enough about the borrowers and their repayment prospects.

Communication of such information and the building of such confidence in themselves across international frontiers is not easy. An illustration of how difficult it is for foreign banks to establish a presence in new markets is the comparative failure of international banks to penetrate retail markets in Australia and Canada. This is also why much of the recent international activity in European banking has taken the form of equity stakes rather than direct attempts to establish a retail presence across borders.

Still, it is easier for large and secure corporate entities, whether banks or non-banks, to build an international reputation. It follows that banks can establish their credibility with foreign depositors more easily than many borrowing clients can with foreign banks. That is why the interest elasticity of deposits to the banks of a peripheral country like Ireland will become greater as integration proceeds. Likewise, the large corporate borrower will have an ever-increasing range of alternative lenders.

These effects would be reinforced by the single currency, but can take place even in advance of that. For one thing, the large corporate borrower is not necessarily interested only in local currency borrowing; recently, Irish banks have been rapidly increasing their foreign currency lending. Equally, foreign banks are by no means precluded from making Irish pound lending, though overall they will need to hedge such currency mismatch risks.

Interest rate mismatch

A long tradition in banking holds that there is a tendency for deposits to be placed at short-term unless an interest rate inducement is provided to attract longer term placements. This principle is subject to many exceptions: notably when market expectations are for a fall in interest rates. But that does not deny the general principle that depositors want to lend at short term whereas borrowers want to borrow at long-term - the so-called "constitutional weakness" of the long end of the market. The British banking tradition has largely dealt with this problem by ignoring the long end. Deposits have traditionally been taken at short-term and on-lent on a floating rate basis. Although that has provided a stable volume of financing for many firms, it has passed much of the interest rate risk to the borrower. The market for long-term fixed interest funds has been predominantly a securitized market in the UK.

Movements in short-term interest rates can have consequences even for a bank whose portfolio is maturity-matched on paper. There are two reasons for this. First, the nominal maturity of deposits and loans may not reflect the actual maturity:

Nominal maturity of loans will tend to exceed the actual maturity in conditions of rising interest rates. This can happen through premature withdrawal if penalties are not sufficient, or because the bank is under competitive pressure not to lose market share.

In contrast, the nominal maturity of loans will exceed the actual in conditions of falling interest rates. In this case the problem is pre-payment as borrowers seek to re-finance at the lower rates. Only what may be regarded as onerous pre-payment penalties can eliminate this.

Second, even if it insists on floating interest rates, the bank does not pass *all* of the interest rate risk to the borrower. Some marginal borrowers may be pushed into financial distress by a surge in short-term interest rates. The resulting loan

losses will effectively pass some of the consequences of the high interest rate back onto the bank.

Demand for term loans: the information theory approach

From the point of view of minimizing interest rate risk, borrowers would prefer to match the maturity or duration pattern of their operating cash-flows with that of their financing flows. But there are other factors at play, especially in a competitive banking market. For example, rolling over short-term debt is quite a riskless operation for a sound enterprise, and the knowledge that one is sound will make a borrower happy to accept a short-term rollover type of arrangement if it yields a lower interest rate. In contrast, a firm that considers itself in a more volatile or risky situation will be more anxious for long-term finance and will pay a premium for it.

Banks devote resources to evaluating the prospects of their borrowers, and (in addition to rejecting many) will tend to confine longer term loans to those borrowers for which the apparent risk profile does not seem to call for a need to have the option of continuous reassessment. More risky-looking loan applicants will only be offered a short-term loan in order to preserve the bank's option of not rolling over. Nevertheless, because of imperfect information, medium-risk borrowers do not always get longer-term finance despite their willingness to pay higher interest rates. Conversely, some low-risk firms accept some interest rate risk in return for lower rates overall.

In this way the gap between bank lending rates and riskless government bond rates probably increases with maturity, reflecting a systematic relationship between default risk and loan maturity.

Impact of increased integration and bank lending policy

The considerations which we have advanced imply that decisions in this area are by no means clear-cut. The issues are undoubtedly complex:

On the one hand, the banks' existing situation of a largely short-term and matched book is not as immune to interest risk as it appears. Furthermore, confining oneself to the short end may mean a loss of competitiveness both in the deposit and the loan market. The increased competition from foreign financial institutions will be from institutions which have greater experience at the long end.

On the other hand, with increased financial integration (and even in the absence of a single currency), it will be increasingly difficult for banks and other domestic financial institutions to insulate their borrowers from swings in money market interest rates. The higher interest elasticity of deposits will mean that, unless interest rate increases are passed quickly to depositors, withdrawals will occur. We have already seen this in the 1992-93 currency crisis; the unexpected severity of interest and devaluation-sensitive flows observed then is a clear foretaste of what is likely to remain inherent in the financial scene in the years ahead.

Attempts to forestall the consequences of increased interest sensitivity by lengthening the nominal maturity of deposits and loans could be quite risky for the banks: the actual maturity of deposits will not increase as much as the nominal maturity and the risk profile of the borrowers may worsen for banks which offer fixed interest loans.

Finally, looking forward to the era of the single currency, the prospects are not unambiguous. Undoubtedly, monetary policy decisions will be taken with little regard to the problems of banks or regions that are more indexed to short-term rates. To that extent, the Irish banking system could be buffeted by sharp interest movements that do not affect other banking systems as badly. Nevertheless, overall interest volatility will probably be lower in the EMU than it was for Ireland in the narrow band EMS. Accordingly, even if the Irish banking system is relatively disadvantaged in this regard in the EMU by comparison with foreign systems, it may be better off than under the old EMS.

3 *Regional variation in SME credit and interest rates*

Because of the importance of fixed costs in the profit and loss account of banks, the threat of increased competition in EU banking markets and lower margins on some lines of business is obviously a matter for concern. To the extent that competition for other parts of the banks' activities intensifies, fixed costs will have to be recovered from more captive markets. Among these lending to SMEs is a prime candidate. But will it remain captive? This section focuses on the degree to which SMEs in Ireland and other peripheral countries are likely to be able to access funds from foreign banks within the EU. If foreign competition eats into Irish banks' share of SME lending, or into available margins in such lending, the consequences could include a sharp increase in the margins that have to be charged on the remaining pockets of less mobile borrowers, which in turn could entail adverse selection of poor credit risks.

International shifts in intermediation - mobility of some borrowers

As already stressed in the context of deposits, increased financial integration in Europe is likely to be effective in differing degrees, depending on the nature of the financial assets involved. Here we focus on different classes of borrowers. At the limit, identical securities of internationally well-known issuers of highest credit rating (for instance the European Investment Bank) will be (indeed are already) traded in different financial centres within the EU at essentially common prices. The absence of exchange controls is enough to ensure this.¹⁰

Once we move away from this top category of financial asset, a degree of international market segmentation begins to emerge. Even companies which are well-known in Ireland will have to embark on a costly process of publicity and communication in order to ensure fine borrowing rates abroad. Nevertheless, the

¹⁰Even for such high quality borrowers the currency of issue is not altogether immaterial, hence the extensive use of currency swaps by such issuers as the EIB and the IBRD: the market is still sufficiently segmented that excessive reliance on one currency denomination will lead to marginally less fine rates.

increasing financial market integration and development is likely to offer improved international borrowing opportunities for the larger companies.

Already the international trend is for the larger corporations to migrate away from the banking system altogether to finance themselves on the open market through corporate paper. Admittedly, most of the growth to date in the Irish corporate paper market is probably related to regulatory costs, but it is not unlikely that the largest firms will continue to move away from bank borrowing here too, especially if the single currency allows corporate access to international money markets without currency risk. In addition, there will be some tendency for large international banks to pick up an increasing share of the lending business to large Irish corporate borrowers, even if that tendency will certainly not be an avalanche.

But access to foreign borrowing will still be more limited for small and medium-sized Irish firms (as well as the less secure large firms). Trade financing will be available as will equipment leasing and other low-risk forms, but project financing and ordinary working capital financing will be more difficult to secure across frontiers. The information base that is necessary for making loans to SMEs is costly to develop, and may be prohibitively so across international and linguistic boundaries.¹¹ If so, the financing of small and medium sized enterprises will continue to be the bread and butter business of local banks.

The market for bank deposits will also - as already discussed - become more competitive. Increased integration in the deposit market will add to the degree to which deposit resources are remunerated at market interest rates. Because of the nature of the deposit market, with heavy quasi-fixed costs in the branch and money transmission area, this will not be good news for Irish banks which may have to resource an increasing share of their deposits from the European interbank market, at a high marginal cost of funds. (Though their demand for

¹¹This argument is made, for example by Grilli (1989) and Neven (1990).

such funds will depend on how strongly their market share on the lending side holds up). Depending on the integration of the interbank market, smaller banks may be relatively disadvantaged in that market and may not always be able to secure the finest rates. That will adversely affect their ability to compete in the market for large corporate loans.

Thus SMEs will depend on the Irish banks, and the Irish banks on SMEs. The degree to which the SME loan market remains internationally segmented will be a key to the future prosperity of the small peripheral banks in Europe. If it is segmented, they will be able to earn enough to offset the other disadvantages of financial integration.

Just how segmented are regional credit markets?

It is therefore important to have a feel for just how segmented the market for SME loans is likely to be. There is only very limited serious academic evidence on regional integration in credit markets.¹² Two recent studies for Italy and the US suggest that, while market integration for loans within Italy and within the US is not perfect, the market power of local banks is not enormous.

For Italy (Faini et al., 1992), the analysis was based on an extremely large and detailed data set of some 36,000 loan contracts. The major finding was that borrowers in the South pay higher interest rates than are available in the Centre or the North. The gap (between 50 and 100 basis points) was attributed by the researchers to the informational advantages that Southern banks have in lending to local firms.

¹²Indirect evidence can be deduced from the degree to which the degree of local competition, as measured by the concentration ratio, higher profitability on banks in different markets. US studies surveyed for example by Gilbert, 1984, find very little local market power of this type in the United States. Using less elaborate methodologies, international comparative studies do tend to suggest that banking is more profitable in countries where there is more size-concentration (e.g. Molyneux and Thornton, 1992).

For the United States (Osborne, 1988), the study looked separately at average interest rates paid for short and long-term loans in various size categories for six regions.¹³ For only one region (the South-East US) was there statistical evidence of significant interest rate deviations from the rest of the US, and then it was only for the smallest class of loans (less than \$9,000).

The modest size of regional differentials uncovered in these studies relate only to regions within one country. It would be a big jump to conclude that the differences would be no larger between different regions of an integrated financial market, especially in the absence of a single currency. More information and systematic research on this subject would seem essential.

Implications

The trends discussed here are similar to, and to some extent part of, the worldwide competitive pressure on banks coming from the rapid development of securitized lending and related markets. But for banks in peripheral countries, the threats are arguably greater in view of the disproportionately heavy fixed costs that have to be supported. The need to cover such costs will put upward pressure on those prices over which local banks still have some market power, including the interest on lending to the residual group of immobile borrowers. Such increases carry their own risks, in particular, banks will tend to find that loan-losses are higher among the borrowers that are prepared to pay high interest rates, and that will reduce the degree to which higher interest rates will actually contribute to covering fixed costs. Technological and commercial action to reduce the cost base would seem to be the only long-term solution.

¹³The author of that study assumed that banks had access to a common marginal cost of funds and that, had there been no regional segregation, the mark-up of average interest rates paid over the marginal cost of funds should have differed by at most a time-invariant regional add-on (reflecting possible differences in the mix of risk and non-interest terms).

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