

DEREGULATION OF THE EUROPEAN BANKING INDUSTRY (1980–1991)

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Discussion Paper No. 703
August 1992

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ABSTRACT

Deregulation of the European Banking Industry (1980–1991)*

In this paper the experience of deregulation in the banking sector of seven EC countries (Belgium, France, Germany, Italy, the Netherlands, Spain and the UK) is analysed. Lessons are drawn for assessment of how the EC directives affecting this sector could further affect the industry. Our findings broadly confirm intuition: there is some evidence that firms in protected markets earn large rents, which are partly dissipated in excessive costs and captured by workers. Conduct deregulation seems to be effective in triggering more intense price competition; as deregulation takes place, profits are reduced, cost control is improved but wages appear somewhat more sticky. We observe that restructuring seems to take place in the product rather than the capital market and that trade is a significant pro-competitive force.

JEL classification: G21, L10, L50,

Keywords: banking regulation, European integration

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*This paper is produced as part of a CEPR research programme on *Market Structure, Industrial Organization and Competition Policy* supported by a grant from the Commission of the European Communities under its SPES programme (no. SPESCT910071). Comments by P Bachetta, F Ilzkovitz, C Mayer, A Sapir, G Thomas and X Vives are gratefully acknowledged. Judith Reviejo (IAE) and Avelino Hernandez (IESE) provided excellent research assistance. This paper is part of a study undertaken for DG II of the Commission of the European Community.

Submitted 3 August 1992

NON-TECHNICAL SUMMARY

The object of this paper is to analyse the possible impact of EC directives, which are being progressively implemented in the banking sector, in the light of the experience of the 1980s. We distinguish between structure and conduct regulation and document the salient features of banking regulations in EC markets as well as the significant changes that have taken place since 1980. We also characterize the regulatory framework likely to emerge from the implementation of EC directives that directly affect the banking sector.

We find evidence that regulation significantly affects the structure and competitiveness of the industry; strongly regulated markets feature rather high interest margins, unusually profitable banks, excessive wages and high costs. Conduct regulations, like interest rate ceilings, also tend to favour extensive branching. The experience of deregulation (mainly in Belgium, France and Spain) is instructive. The process of restructuring triggered by deregulation takes place mostly in the product rather than the capital market, and within, rather than across, industries. Mergers and acquisitions concern a rather small fraction of the industry's capital and involve companies in similar activities. At the same time, a fall in interest margins indicates more active competition in the product market. It is only in the Netherlands that the process of restructuring has led to an increased concentration which could be associated with an apparent fall in rivalry. Interestingly, it seems that cross-border competition has played a significant role in fostering rivalry; trade in banking services had indeed developed at a rather unexpected pace. The liberalization of capital flows within Europe could thus increase competition further in markets like Italy, Portugal and Spain. At the same time we also observe that improving market access to foreign firms works best when the move is accompanied by some process of deregulation which is initiated domestically.

Overall, deregulation seems to work in terms of performance to the extent that profits fall and cost control is improved. Excessive wages seem to be more persistent, however. Given that projects and the franchise value of banks has fallen, it can be questioned, however whether current regulatory arrangements provide adequate safeguards for the stability of the financial system.

I. Introduction

The objective of this study is to assess how the European banking industry is changing in response to regulatory changes brought about by national authorities and the European Commission and to gauge future developments related to ongoing changes in the regulatory framework.

Since 1980, various changes in regulation have been implemented in national markets, which tend to liberalize the provision of services and increase competition. Relative to regulatory changes at the national level, the new directives put forward by the Commission, which affect the banking sector, emphasize the integration of markets and cross border activities. The directive on the liberalization of capital flows has already been implemented in most countries and its effects can already be traced out. The second banking directive is about to be implemented but a number of adjustments have already taken place in anticipation of this implementation.

This study will document the regulatory changes that have taken place in Europe since 1980 and assess the impact of these changes on the structure and performance of the banking industry. In terms of prospects, particular attention will be given to the potential impact of the second banking directive.

The study is organized as follows¹. Section 2 will describe how the regulatory framework has evolved in Europe since 1980. Section 3 will assess how this evolution has altered the industry. Changes in conduct and market structures will be reviewed, with an emphasis on the trade and performance effects of deregulation. Section 4 uses the lessons derived from the experience of the 1980's to conclude with an assessment of future developments.

¹Annex 1 discusses some broader trends affecting the banking industry. In this annex, we focus on the provision of payment services and intermediation. We analyze whether these activities are likely to be performed increasingly by non-bank institutions. Annex 2 lists the main regulatory changes in selected EC countries. Annex 3 provides data on reserve ratios and the interest rates used in Charts 1 and 2.

II. Deregulation of the European banking industry

II.1. The rationale for regulation

Government and national regulators have presumably a wide variety of social and political motives to implement bank regulations. From the point of view of economic efficiency, the rationales for regulation can be summarized as follows².

II.1.1. The social value of banks

Banks perform an array of functions including the provision of liquidity and payment services, the transformation of maturity, the provision and monitoring of loans and the diversification of risks.

The rationale for regulation arises because the social value associated with some of these functions exceeds their private value. In particular, the provision of liquidity and payments services are central to the functioning of the economy. The interruption of these services is costly as the production process is severely affected and assets are liquidated prematurely. For example, Grossman (1989) estimates that a shock of bank failures comparable to that observed in 1873 in the US could reduce investment by 40% and hence aggregate output by eight to ten percent. It is also commonly agreed that the major causes of the recession in the 1930's were bank runs and an inadequate management of the crisis by the Federal Reserve (see eg. Friedman and Schwartz, 1963).

Hence, the costs of financial failure in terms of real resources underpins the wider social value of banks and justifies their protection.

II.1.2. Risks to banks and the banking system

Banks and the banking system are also exposed to risks such that banking operations and the stability of the banking system cannot be taken for granted.

²Another justification for banking regulation on distributional grounds is the protection of depositors.

Indeed, as banks lend to companies rather than invest in marketable securities, their activities are difficult to monitor. The quality of a loan portfolio is hard to ascertain and a large number of individual depositors have little incentive to seek the necessary information. There is a problem of free riding in the collection of information leading to an inadequately low level of monitoring. In any event, in the case of banks, it might be difficult for investors to collect information about bank investments even if they wanted it.

This asymmetry of information between banks and investors also gives rise to potential runs against banks. Indeed, banks transform short term deposit into long term loans. This leaves them exposed to withdrawals that necessitate the premature liquidation of assets. If the net realizable value of assets falls below deposits, insolvency may result. Perceiving this risk, investors who cannot assess the quality of the banks may withdraw their funds from sound banks in anticipation of similar behaviour by others. Banks are thus prone to panic runs.

Banks are also vulnerable to the failure of other institutions in the financial system. First of all, default by one bank on interbank commitments can deteriorate the situation of its counterparties. The failure of one bank may lead investors to question the solvency of others. Depositors may thus withdraw funds from healthy banks because they are uncertain about their soundness or simply about whether other investors are about to run.

II.2. Regulatory tools

There are several ways in which the stability of the financial system can be enhanced. First, investors can be protected against potential losses by deposit insurance, the possible bail-out of failed banks and lender of last resort facilities. This suppresses the incentive to withdraw funds before others and hence, reduces the probability of runs. Second, the safety of the banking system can be enhanced by organizing the industry in such a way as to reduce risks and the associated probability of failures. By ensuring a high level of profitability, these regulations allow banks to accumulate reserves which act as a cushion in case of trouble. By creating a high franchise value, these regulations will also give banks the incentive to avoid leaving or being expelled from the industry and, hence, to reduce risks.

In terms of regulatory instruments, it is useful to distinguish between those that affect directly the structure of the industry and those that affect the behaviour (conduct) of the industry participants. Indeed, the theory of industrial organization suggests that conduct and structure regulation have potentially different effects on the shape and performance of the industry. Since our objective is to assess how deregulation has affected the European banking industry, it is useful to distinguish between the two.

Structural regulations will include functional separations of institutions (such as the separation between commercial and investment banking), entry requirements and discriminatory rules regarding foreign banks and investors³. These regulations can be expected to reduce entry and thereby to encourage collusion, to affect the presence of foreign firms, the size of banks, the frequency and type of mergers, acquisitions and participations and the scope of products that can be offered.

Conduct regulations will take the form of direct restrictions on assets and liabilities (including prudential rules and rules on participations in non-banking firms), rules relating to information disclosure, credit ceilings, limitations on branching and the determination of fees commissions and rates on assets and liabilities (floors and ceilings, concerted practices). These regulations can be expected to provide banks with an incentive to overemphasize competitive tools which are not restricted.

II.3. National deregulation in the 1980s

Annex 2 describes the important characteristics of national regulatory systems regarding structure and conduct as well as the main changes that have taken place in the 1980s in France, Germany, Italy, Spain, the UK, Belgium and the Netherlands.

The annex includes also a table (table A.2.1) describing regulation pertaining deposit insurance. Coverage of deposits schemes varies substantially across countries. Most of the coverage systems were introduced in the late 1970s, in parallel with deregulation. As competition increases, the role played by deposit insurance in providing stability is enhanced and it is a matter of debate whether the current schemes are sufficient (see CEPR, 1991).

³Although it is not a banking regulation, we include under this heading changes in the control of capital flows.

As for structure and conduct regulation, the following pattern emerges; in the early eighties, Spain, France and Italy had extensive restrictions on conduct. These were direct restrictions on assets and liabilities as well as restrictive rules relating to competitive behaviour (regulated prices and credit quotas). Belgium had significant restrictions on competitive behaviour whereas restrictions on assets and liabilities were by and large confined to savings and public banks. Similarly, significant restrictions in the UK only concerned building societies. At the other end of the spectrum, the Netherlands had restrictions on competitive behaviour which were confined to fees and commissions and limited investment requirements; Germany had hardly any restriction, except that capital requirements were unusually large by European standards. One should however not conclude that vigorous competition was taking place in these two countries; it seems that regulators had a fairly relaxed attitude towards agreements and informal collaboration between banks.

In terms of structure, restrictions have always been very limited in Germany. The purpose of these restrictions was mainly to separate banking from insurance. Entry was not formally restricted. The UK was also very liberal; the only restrictions in force related to the activities of building societies. At the opposite, Italy had a very complex system of specialized institutions facing particular restrictions, significant entry restrictions towards foreign firms and restrictive rules on ownership. Spain had important functional separations, some specialization of institutions and important entry restrictions. Belgium also had functional separation, a fairly extensive system of specialized institutions but a more liberal policy towards entry. France had a system of universal banking but extensive specialization. Little formal impediment of entry could be observed but the widespread public ownership which prevailed was probably a significant barrier to entry by acquisition.

Even though cross country comparisons of regulatory system are notoriously difficult to perform, a general overview of differences in national regulatory system is presented in figure 1.

(Insert figure 1)

Regulatory changes that have taken place in the 1980s can be summarized as follows; Spain has undertaken the most significant deregulation; deregulation has focused on conduct where most rules have been relaxed (mainly after 1985-87). Significant

structural deregulation has also taken place, particularly in terms of product scope and entry. France has undertaken some deregulation of conduct in particular regarding fees and commissions; some despecialization has occurred but structural impediments have by and large remained in place. There is also some evidence that the arrangements between banks to fix rates are becoming very fragile.

Basically, no deregulation has taken place in Germany and the Netherlands. As mentioned above, regulation was however not extensive to start with in these two countries. For the Netherlands, it is however worth noticing that the functional separation between commercial and investment banking (which was informally implemented by the Ministry of Finance) is slowly disappearing. In the UK, which was also lightly regulated, structural restrictions have been progressively lifted and conduct regulations have all but disappeared.

Belgium is somewhat peculiar; in this country structural rules have been relaxed but conduct rules have been somewhat strengthened. At the same time, informal agreements between banks on rates have by and large collapsed, so that conduct is probably becoming somewhat more competitive. Finally, Italy has undertaken some structural deregulation; if anything, the discrepancy between Italy and the rest of Europe in terms of regulation is all but widening.

The changes in national regulatory systems are illustrated in figure 1, where the arrows indicate the direction and the extent of the change.

II.4. European directives

Two important directives put forward by the EC Commission affect directly the banking industry⁴.

First, a directive on capital flows has lifted remaining barriers even for payments relating to retail banking activities. This corresponds to a structural deregulation (such that entry barriers are lifted). Except for Spain, Greece and Portugal which have been granted some time to adjust, this directive has been implemented. As a result of this directive, private and corporate customers can now obtain retail (and investment)

⁴Other directives of importance include those relating to investment services, UCITS, own funds and solvency ratios.

banking services in EC countries other than the country in which they reside. Trade in banking services should put all European banks in competition. Mixed competition will occur, to the extent that national banks will be competing with foreign institutions subject to different regulations. Mixed competition can be seen as a situation where partial deregulation occurs (in the sense that some competitors are deregulated). In terms of figure 1, the effect of this directive should thus be to move all countries towards the least regulated point, corresponding to Germany and the UK. This directive should thus be particularly significant for Italy, Spain, Belgium and France, which still have extensive regulations. The importance of the mixed competition (or partial deregulation) which is induced by this directive is hard to assess a "priori"; indeed, conventional wisdom suggests that trade in banking services is relatively unimportant and likely to remain so because the geographical proximity of the banker and his clients is central to the adequate provision of banking services. This conventional wisdom will be assessed further in the next section, which will include a analysis of the evolution of intra-european trade in banking services.

Second, the so called "second banking directive" has established a principle of mutual recognition such that particular banking services can be provided across the Community if these services can be supplied according to the national regulation of a member state. The scope of services to which the principle of mutual recognition applies is determined by the directive and encompasses most traditional retail and wholesale banking activities, as well as some investment banking activities. The implementation of this directive is due to take place shortly. Similarly to the directive on capital flows, this directive will induce extensive mixed competition. One should expect banks to open branches in foreign countries to provide services for which their national regulation gives them a competitive advantage over domestic firms. According to the conventional wisdom, the extent to which mixed competition will occur through branches should also be larger than through imports.

In addition to mixed competition, these directives will presumably trigger a process of competitive deregulation, which spans both structure and conduct rules, such that national authorities in each member state attempt to create some competitive advantage for local banks in foreign markets by allowing them to provide services which are not allowed by foreign regulators. Short of trying to foster some competitive advantage, one would expect at the very least that national authorities will adopt their own regulation to put domestic banks on a level playing field with foreign institutions.

Such a process is already observed, for example in Belgium and France with respect to mutual funds and mortgages, where national regulators act in anticipation of Community directives. On the whole, one should expect all countries to move toward Germany in figure 1.

The second banking directive has however also introduced some minimum standard for conduct and structural rules. According to the directive, banks must satisfy a minimum capital requirement of at least 5 million ECU to start operations. They may not hold more than 15% of their own funds in a qualified participation⁵ of a non-financial firm, and the total value of such holdings may not exceed 60%. Home country authorities must be informed of shareholdings in excess of 10% of voting rights and require those acquiring stakes in banks to give notifications when their holdings pass 20, 33 or 50%. EC requirements on solvency ratios are also imposed, which are close to those of the Basle agreement⁶. Large exposures are defined as those in excess of 15% of banks' own funds. Any of these is limited to 40% of a banks own funds and in total are limited to 800% of own funds.

On the whole, the minimum EC standards introduce structural and conduct rules which are somewhat stronger than the rules currently prevailing in Germany and somewhat weaker than those prevailing in the Netherlands. In terms of figure 1, the minimum EC model is therefore somewhere in between these two countries. This could become the focal point towards which national countries will converge through competitive deregulation.

III. Deregulation, market structure and trade

The evolution of european banking markets in the 80s is the result of the simultaneous impact of three institutional changes, namely, the national deregulation processes which we have just briefly described, the liberalization of capital flows and, finally, the second banking directive or, at the least, some anticipation thereof.

The implications of these effects are hard to disentangle. However, an understanding of the role played by each of the three changes is crucial for a sensible assessment of

⁵A qualified participation is defined as one that involves no less than 10% of equity.

⁶Directive on solvency ratios.

the potential impact of financial integration in Europe. In this section we look in detail at the impact of deregulation and increased capital mobility on the structure of European banking markets.

We start by considering the performance of the industry in the early 80s and assess to what extent deregulation has prompted changes in conduct, market structure -with special focus on foreign direct investment (FDI)-, and trade.

We analyze how regulatory changes have modified competition in national markets, how domestic market structures have been affected and how previously segmented national markets have been integrated.

Finally, if the structure of markets has indeed changed, one would expect substantial changes in performance. To this issue we turn at the end of this section.

III.1. The situation in the early eighties

The European banking industry at the beginning of the eighties was characterized by wide differences among national banking systems. Such differences were related in part to the wide variety of regulations which we have summarized in the previous section. In regulated markets such as those of Italy, Spain, France and -to a lesser extent- Belgium, the regulatory environment directly affected the structure and the conduct of the industry and, consequently, its performance and efficiency. In the unregulated markets, the industry was more readily responsive to market incentives, in particular as regards to competition of foreign banks. The difference in regulatory environments clearly resulted in banking systems with substantially different results.

Regulated markets were characterized by the generation of significantly higher rents when compared to unregulated markets (see Table 1). Financial margins were largest in these countries, often as a result of direct controls on deposit rates by regulators (France, Belgium) and sometimes even on loan rates (Spain, Italy or Belgium). Banks in these countries were subject also to investment restrictions which limited the returns on their asset portfolios. Nonetheless, by and large these restrictions did not seem to be stringent enough to reduce the profitability of the industry. Table 1 compares the profitability in banking (measured as the return on equity) in the early

eighties relative to profitability in non-financial firms. In regulated markets -with the only exception of the less protected market of Belgium-, banking profitability was substantially above the profitability of non-financial firms. In the midst of a considerable recession and with low profitability in the economy, both in France, Spain and Italy, the banking industry was able to obtain returns which exceeded by more than seven points the average return in other industries.

Another significant feature of regulated markets was the extent to which labor was able to appropriate some of the rents created in the industry. In all regulated markets wages in banking were above the average wage in the economy by a wide margin (the differential ranging from 50 to 100%, see Table 1). On the contrary, in unregulated markets, such as those of Germany and the Netherlands, the gap did not exceed 25%. The relatively high level of wages observed in the lightly regulated market of the UK seems to be associated with a superior level of productivity (see below).

The lack of competitive pressure as a result of regulation and protection led also to national banking systems with very different degrees of efficiency. Banks in regulated markets had comparatively larger operating expenses both in terms of staff costs (which is not surprising given the high wage levels already discussed), but also with respect to non-wage operating expenses (see Table 2). Overall operating expenses were particularly high in France, Belgium and Italy.

(Insert tables 1 and 2)

The situation of France and Italy was particularly worrying in the early eighties. Both banking systems not only had high staff costs, but staff costs per employee were growing faster than productivity. We measure productivity by net (interest and non-interest) income plus staff costs (which constitutes an approximation to value added) over the total number of employees. From 1981 to 1984 productivity grows little in France and Italy, far behind the growth of the cost of labor. As a result, unit labor cost grew, in a period where the other main EC banking industries (including Spain - which undergoes some restructuring- and Belgium) were reducing unit labor costs at an average rate of 10% per year.

On the whole, the effects of protective regulation in terms of excessive rents and poor performance were particularly striking in France and Italy, followed by Spain and Belgium.

III.2. Deregulation and pricing

As we have discussed in section II, deregulation has taken place in France and Spain, and to a lesser extent in the UK and Belgium.

The pro-competitive effects of deregulation should be readily noticed in the pricing of the industry since an important feature of conduct deregulation has been the lifting of controls on loan and, especially, deposit rates. After the deregulation process few rates have remained controlled (some in France, Belgium and Italy).

In some countries, rate regulation encouraged other forms of competition, particularly through quality or network expansion. As interest rate deregulation has taken momentum over the second half of the 80s, it is interesting to analyze whether this has resulted in more price competition or if, on the contrary, banks have been able to implicitly or explicitly coordinate their strategies and maintain a low degree of rivalry.

Before analyzing the data, theoretical predictions regarding the behaviour of rates are, however, worth spelling out.

(i) Theoretical predictions

One can distinguish between the loan and deposit market. For the loan market we will define the loan spread as the difference between the loan rate i^L and the interbank rate i for a comparable maturity (which we take as three month)⁷. The interbank rate i , which we assume that is determined in a competitive market, constitutes a measure of the opportunity cost of funds. The mark-up will be the ratio between the loan spread and the loan rate. That is:

⁷ This is a gross spread which does not allow for a measure of risk. To the extent that the probability of loan failure is pro-cyclical, the stickiness of gross spreads will exceed that of net spreads. Our conclusions regarding the stickiness of margins should thus be taken cautiously.

$$\frac{(i^L - i)}{i^L}$$

For the deposit market, the relevant cost is precisely the deposit rate i^D , and the deposit spread will be the difference between the revenue that can be obtained from a marginal unit of deposits minus its cost i^D . The revenue that can be obtained by a bank from a marginal unit of deposits equals the interbank rate, i . However, the presence of reserve coefficients limits the amount of funds that can be invested. If the reserve coefficient is α and funds subject to this coefficient earn interest at rate r , the deposit spread can be written as:

$$(1-\alpha)i + \alpha r - i^D$$

It is then immediate to define the deposit mark-up as follows:

$$\frac{((1-\alpha)i + \alpha r - i^D)}{i^D}$$

For both the loan and the deposit mark-up standard economic theory offers clear-cut predictions as to their magnitude and behaviour. In competitive markets both mark-ups should not differ significantly from zero. In non-competitive markets, the mark-ups will be strictly positive and their magnitude will depend on the extent of rivalry in the industry, with larger mark-ups in more collusive markets⁸. If the degree of rivalry does not change over time, equilibrium mark-ups will react more or less than proportionally when the interbank rate changes depending on the shape of the

⁸In a standard static Cournot model with homogeneous products (and neglecting costs other than the cost of funds), the equilibrium mark-up for a representative firm j in the loan market will be:

$$\frac{(i^L - i)}{i^L} = \frac{s_j}{\mu}$$

where μ is the elasticity of the demand function and s_j is the equilibrium market share of firm j . With simple transformations it is easy to show that the industry mark-up will be equal to H/μ , where H is the Herfindahl index of concentration, a typical measure of potential collusion in an industry.

demand or supply functions (with proportional changes and -therefore- constant mark-ups in the case of constant elasticity functions⁹).

An adequate analysis of rates' behaviour however has to include some dynamic considerations, given that banks are likely to set rates while taking into account an horizon which exceeds one period. We will focus on two important considerations.

The first of them stems from the supply side of the banking firms and stresses the difficulties faced by a bank of adjusting its level of output to changes in prices. The second focuses on the demand side, by emphasizing the clientele relationships and the presence of significant switching costs in banking.

(a) Hysteresis

From the viewpoint of the provision of banking products, some authors have argued that financial institutions incur adjustment costs when they modify their prices. This leads to interest rate rigidity when marginal cost conditions change. Flannery (1982) adopts this approach and considers deposits as "quasi-fixed" production factors. This implies that when the bank decides to change its interest rates as a reaction to an interbank rate change, it takes into account the corresponding adjustment costs.

Of course, this is an "ad hoc" argument and it begs the question of why is it so costly to increase or decrease rapidly the amount of deposits.

An alternative explanation could arise from the sunk cost nature of most of the expenses that are undertaken by banks to capture new clients (advertising campaigns, costs of opening new accounts). If these costs are significant -even if small- there might exist regions of inertia, where banks optimally decide not to react to interbank rate changes. In this "hysteresis" model¹⁰ when the interbank rate goes up, banks take into account not only the costs of setting up new accounts, but also the cost of

⁹For example, with linear demand functions we get less than proportional price changes.

¹⁰"Hysteresis" models (see Dixit, 1987) are commonly used to analyze situations where decisions that involve sunk costs are taken under conditions of uncertainty about the future evolution of the underlying state variable (in our case the interbank rate). As Dixit points out, in these models "action should be taken only when the value of the underlying state variable becomes especially favourable, and reversed only when it becomes specially unfavourable. There is an intermediate range over which inaction is optimal".

exercising the option to increase rates rather than to wait and see if the increase is a permanent one or if it is subsequently reversed.

Similarly, when i goes down there is a cost to banks of immediately lowering deposit rates. Maintaining the option to decrease rates is valuable to the bank to the extent that the potential loss of clients would be costly to revert where the interbank rate to increase in the future.

As a result, one might expect from this supply side view, that rates will be fairly rigid and that permanent changes in the interbank rate will only be accommodated with a lag. In the case of the deposit market, this will imply a positive correlation between the mark-up and the interbank rate, and the correlation will be negative for the case of the loan market. Moreover, as usual with "hysteresis" models, increased volatility in interest rates will reinforce the rigidity in pricing and the correlations between the interbank rate and the mark-ups.

(b) Switching costs

An alternative explanation can be invoked from the demand side; indeed, consumers will typically bear some cost of switching banks when they decide to leave their traditional bank in response to a price change. The existence of switching costs changes substantially the form of competition in the industry. In general, these costs enhance the attractiveness of *building up market share* in the early periods of competition in order to be able to reap higher profits in later periods with captive market share. In this sense switching cost -and their correspondent market share effects-, induce greater current competition in return for higher future profits (see Froot and Klemperer, 1989).

Consider the case of the deposit market, where these type of effects may be even more present than in the loan market. In the absence of switching costs (when market share does not matter) an increase in the interbank rate changes the marginal revenue of firms and -in the static Cournot framework-, yields an increase in the deposit rate i^D .

However, when market share matters, firms will tend to set low prices (high deposit rates) in the early stages of competition. Accordingly, there is a cost of building up

market share, and when the interbank rate changes, the banks' reaction will depend on whether the change in the interbank rate is perceived as permanent or temporary.

Consider the case of a temporary increase in the interbank rate. To the standard static effect we will have to add a dynamic effect of opposite sign that will create rigidity in prices. When i increases, the relative value of current profits increases vis a vis future profits, and banks will prefer not to increase i^D but let profitability grow¹¹.

However, when the increase in the interbank rate is a permanent one, this "interest rate effect" disappears. In this instance, firms will have both a static and a dynamic incentive to increase prices. Banks will increase prices more than in the static case because with a permanent increase in i , the market share -that will be exploited in future periods of high interbank rates- becomes more valuable.

With permanent changes, therefore, there will be less rigidity of interest rates and, in fact, i^D might even overreact, so that there is a negative correlation between the interbank rate and the deposit mark-up.

In practice, it is therefore very important to distinguish between temporary and permanent changes in interbank rates when explaining observed patterns.

(ii) Some stylized facts

The evidence on the magnitude and the evolution of banking mark-ups in some of the European markets is presented in Charts 1 and 2. A distinction is made between the mark-ups observed in the corporate and the household markets. The latter (Charts 1.B and 2.B) is the basis of traditional retail banking and in all countries mark-ups for households exceed those obtained from corporate clients. This corresponds with the intuition that there is less market power in this market since clients have lower loan demand elasticities (or supply elasticities in the case of deposits)

(Insert charts 1.A, 1.B, 2.A and 2.B)

¹¹This effect is introduced by Froot and Klemperer (1989) in a model of exchange rate pass-through based on consumer switching costs.

Charts 1 and 2 distinguish also between the deposit (Charts 1.A and 1.B) and the loan markets (Charts 2.A and 2.B). By and large the deposit market shows larger mark-ups. In fact the loan mark-up is even negative for prolonged periods of time in countries such as Spain, the UK, Germany and France. Thus, in general, the loan market tends to be more competitive than the deposit market. However, it should be reminded that under conditions of interest rate regulation on deposits, and if the granting of loans is contingent on the maintenance of deposit balances, firms will have an incentive to maintain lower loan rates in order to capture clients (see Chiappori et al. 1991).

There is a wide dispersion of mark-ups in the european *loan markets*. In household markets high margins are detected in the Netherlands, Spain and Germany. The lowest appear in France and the UK, and for some countries -like France, Germany or Spain- a clear downward trend seems apparent.

In corporate markets, again the Netherlands presents high margins, together with Belgium and Italy. Low margins appear at the end of the period in countries such as Spain and Germany, where a downward trend is observed.

As far as *deposits*, the Netherlands, Germany, Spain and Denmark present the highest household margins. However in the first two markets the mark-up has gone up recently together with increases in interbank rates, while in the other two there have been substantial declines with and without drops in the interbank rates. The lowest margins correspond to Italy and Belgium, and the mark-ups seem to be increasing in France and the UK.

As far as corporate deposits, again the Netherlands comes top of the list with Denmark and France. Interestingly, the UK corporate market for deposits is the only market consistent with the perfectly competitive model. Apart from the UK, Germany seems to have quite a competitive market.

Apart from these general observations which are intuitive, the most striking observation from Charts 1.A to 2.B is the fact that interest rate mark-ups tend to change dramatically over time as conditions in the money markets change¹².

Overall, two important facts should be emphasized: the substantial variability of the mark-ups to changes in interbank rates and the fact that in certain markets interest rates tend to be extremely rigid, while in other markets we observe overreaction to interbank rate changes (as it is the case in the corporate deposit markets of France and Germany).

In general, we observe that deposit mark-ups tend to be positively correlated with interbank rates, while loan mark-ups are negatively correlated. This highlights the importance of the hysteresis effect (or that most of the interbank rate changes are considered temporary), although for some markets rigidity may be the result of the permanence of collusive situations after deregulation.

Only in a few markets we observe what could correspond to drastic changes in the competitive regimes (Spain, with a clear move to a more competitive environment, and, possibly, the Netherlands, with a decrease in competition).

The correlation between mark-ups and interbank rates requires that time comparisons be made with care, by looking at the evolution of the mark-up adjusted by the level - and possibly the (permanent) changes-, of the interbank rate. Casual observation of charts 1.A to 2.B indicates that in countries such as France (for corporate clients) and Spain (for households) there is a downward trend in mark-ups if adjusted for the evolution of the interbank rates.

Finally, in some markets for deposits we observe a negative correlation between the mark-up and the interbank rate (the corporate deposit markets of France and Germany, and in the household deposit market of the UK). This behaviour of the mark-up over time would then correspond to more competitive markets where firms

¹²The deposit mark-ups in charts 1.A to 2.B have been computed without taking into account reserve coefficients. This implies that the mark-ups in high reserve coefficient countries such as Italy are overestimated. Reserve coefficients and details about the interest rates used in the charts are presented in annex 4.

price more aggressively in order to capture market share, and thus react differently to changes in the interbank interest rate.

As a summary, the analysis of pricing in European markets reveals the persistence of divergent degrees of price competition in the industry. Price competition tends to be stronger in previously deregulated markets (UK, Germany), and is increasing in some (France and Spain) but not all, of the markets that have undergone deregulation (little change is observed in Italy and Belgium). In other deregulated markets, such as the Netherlands, price competition actually seems to decline over time.

A better understanding of this somewhat irregular reaction to deregulation can be obtained if we consider other factors that have an impact on the extent of the pro-competitive effect spurred by regulatory change. In particular, we will look at the effect on the extent of competition of changes in market structure - which themselves may be a result of changes in the degree of rivalry in the industry. As we will see, changes in market structure might explain the decline of rivalry in the Dutch market (and to some extent the evolution of competition in Spain).

III.3. Deregulation and market structure

The structure of EC banking markets has evolved over the 80s mostly as a reaction to national deregulation processes and in anticipation of EC-wide regulatory changes and the increased integration of the European market.

One can distinguish two channels through which changes in structure have taken place: both structural and conduct deregulation have had an impact on the structure of the industry.

First, structural deregulation has promoted changes by reducing entry barriers (both for domestic and foreign competitors) and by allowing increased imports (through capital flows deregulation). Additionally, structural changes have resulted from the reduction of functional separation and the elimination of the compulsory specialization of banking institutions. These developments have promoted entry by many firms in lines of business in which they could not previously compete.

Second, conduct deregulation and the prospect of increased competition has had an indirect effect on market structure. To the extent that these changes have resulted in increased rivalry and lower profitability, they have triggered a restructuring process.

The restructuring that has taken place can be described as follows:

(i) Concentration

First, one observes that in most countries concentration has increased substantially over the period 1987-1990 (see table 3). In some countries like Italy, this is accompanied by a reduction in the actual number of firms.

(Insert table 3)

Concentration has increased most significantly in Spain, the Netherlands¹³, France and Italy. Both in the Netherlands and Spain this development could arise from an attempt to restore profitability, possibly eroded because of conduct deregulation and the breakdown of implicit agreements. In France and Italy concentration goes up as a result of domestic mergers and acquisitions (M&As), but in both cases, as we will review next, there is significant cross-border activity.

(ii) Mergers and acquisitions

The restructuring that has taken place in the European banking industry can be further characterized by looking at acquisitions and joint ventures. We examine the period 1984-june 1991¹⁴.

M&A activity in the Community peaks both in terms of number of deals and volume in the period 1989-1990. Our data set -that comprises banks, insurance companies and other financial intermediaries- has a particularly good coverage on public and private acquisitions (which include mergers, acquisitions with controlling interest and minority holdings) and we will focus the study on this type of events. Given its

¹³Concentration in the Netherlands goes up in 1988 as a result of the merger between two of the largest banks in the country.

¹⁴ A description of the AMData database that has been used will be supplied upon request. It has been omitted for brevity. We thank Ph. Haspelglah (INSEAD) on this regard. We are also grateful to Alex Davis, who provided us with the software to adequately work with the data set.

importance in terms of volume, we will also consider later on public bid acquisitions. As for private acquisitions, a detailed inspection of the data reveals the following salient features.

First, little activity is observed in Greece, Portugal, Ireland and Luxembourg. Second, the majority of private acquisitions are of a domestic nature (70% of the deals in the sample). Contrary to what is observed in other industries (see eg. *The Economist*, december 7, 1991), there is no apparent fall over time in the relative importance of domestic deals either.

In Belgium and Spain only about 40/45% of the acquisitions of domestic firms are undertaken by national competitors. This proportion raises to around 70% for the rest of the large banking markets. As for the acquisitions undertaken by domestic firms, they are mostly domestic in Italy, the UK and Germany, but much less so in Belgium, France, the Netherlands and Spain.

In terms of absolute numbers, France, the U.K, and Italy are the main bidding countries in non-domestic deals. The main target countries for non-domestic deals are France, Italy and Spain, and to a lower extent Germany. This accords with intuition at least for Spain and France where deregulation has occurred at a relatively large scale (see table 4).

(Insert table 4)

Altogether (see figure 2), most of the non-domestic M&A activity has taken place in Southern Europe (which we define as including Italy, Spain, Greece and Portugal). The acquirers have been usually companies from the northern EC countries (which includes France). Acquisitions in Northern Europe have been mostly of an internal nature, but also a significant flow has come from Non-EC companies. Overall, there is a significant imbalance and the number of acquisitions of EC companies by non-EC companies is much larger than the number of operations whereby a EC institution takes control of a non-EC company.

(Insert figure 2 and table 5)

Next, it is apparent from table 5 that corporate restructuring involves small firms and that the proportion of the industry overall capital which has been affected is limited. It

also appears that non-domestic deals seem to be of a larger magnitude (see table 6). Only in France and Spain -two countries with significant non-domestic activity- has the domestic restructuring involved the larger deals. Table 5 is also indicative of significant differences in the average value of the acquisitions depending on the role of the company. For Germany, the Netherlands and Denmark deals are larger when the domestic company is the bidder. For Italy, Belgium, France and Spain the larger deals correspond to acquisitions where the domestic company is the target.

Since the data set includes banks as well as insurance companies and other financial intermediaries, it is interesting to analyze whether the M&A activity has involved intra-industry deals (that is a bank acquiring, say, a savings bank) or inter-industry acquisitions (reflecting the impact of deregulation and financial innovation that eliminates the artificial separation of industries).

Figure 3 presents the total number of events by type of participants involved. Approximately 70% of acquisitions are of an intra-industry nature. Outside their industry, banks seem to be acquiring mostly other financial intermediaries, such as leasing companies, finance companies and brokerage houses. As we know, in some countries they already own significant parts of the insurance industry, and in certain markets they cannot actually enter in this industry.

Insurers enter both the banking industry and other financial activities. The same seems to be true of the rest of financial intermediaries, that buy both insurance companies and banks. Finally, non-financial companies are entering into the industry basically through the acquisition of financial intermediaries other than banks and insurers.

(Insert figure 3 and table 6)

As for the size of the deals according to the industry involved, the data on table 6 indicates that in banking intra-industry deals tend to be larger. This is not the case in the rest of the industry. Similarly, the deals in which other financial intermediaries are targets are on average much larger than deals where these financial intermediaries are the bidders.

It is also of certain interest to consider whether intra-industry deals are in general domestic deals or whether, on the contrary, they involve firms from different

countries. The relevant information is presented in table 7. As we have already seen most of the deals - intra-industry or not- tend to be domestic. However in stark contrast with other industries, we observe that most of the intra-industry activity in insurance has taken place across borders.

(Insert table 7)

Public bid acquisitions have been less significant in number over the 1985-1991 period, but much more larger in magnitude. Table 8 presents a summary of the available data for the main Community countries. Most of the activity occurs in France and the United Kingdom, although Italy and particularly the Netherlands, register a significant fraction of the total volume. As with private acquisitions, most of the deals are domestic. However, domestic deals tend to be larger, not only for France and Spain like in private acquisitions, but also for most of the countries¹⁵.

(Insert table 8)

On the whole, restructuring has been a domestic, intra-industry process involving rather small firms and a limited fraction of the industry. Increased concentration is observed in the markets that were most fragmented and where important deregulation has taken place. In these markets (France, Italy and Spain), we also observe some significant cross-border acquisitions, even in retail banking. Firms from these countries are usually the targets (the bidders sometimes are also from the same zone) indicating that some cross-border deals have taken place with the objective of achieving market share in banking systems which, because of previous regulation and protection, presented more opportunities both in terms of growth and of improved profitability of the targeted firms.

The small share of inter-industry deals which is observed is somewhat surprising given the highly publicized linkages between banking and insurance products. The evidence seems to suggest that the provision of insurance services by banks has not been organized by the acquisition of insurance companies but rather through the extension of banks product lines. Such strategy is certainly consistent with the view

¹⁵ Other remarkable facts on public bid acquisitions refer to the scarce activity in Belgium and, specially in Germany.

that banks diversified their activity into insurance products partly in order to increase throughput in their network and thereby lower average cost.

The predominance of domestic deals also accords with the view that acquisitions are undertaken for the sake of reaping scale economies, because scale economies in banking (however small they may be) are presumably more likely to arise in domestic rather than cross-border operations (see Neven, 1989). Indeed, scale economies in banking arise mainly from the rationalisation of payment systems (within rather than across banks) and from the amortization of the fixed costs associated with information technology and software development. Both types of rationalization are more likely to be profitable for domestic rather than cross-border deals because most payments are still national are because the treatment of information is often country-specific (especially software development).

III.4. Trade and FDI

As mentioned above, national deregulation and especially European directives have allowed for easier entry of foreign (EC) firms, through trade and foreign direct investment. In this section, we attempt to trace out the effects of these regulatory changes.

Trade in banking has been traditionally linked to the establishment of foreign subsidiaries; Financial services have been usually provided from abroad for the sake of supporting local branches so that trade and FDI were complements. The liberalization of capital flows in some European countries and the progressive lifting of restrictions to the establishment of foreign firms may, however, have changed the traditional link between trade and FDI in banking. As it is the case in most industries, trade and FDI may, in the end, constitute complements in the early stages of integration but alternative channels once foreign firms have achieved a significant presence.

III.4.1. Trade

At the outset, it can be observed that Community countries tend to enjoy a surplus in trade in the financial industry ¹⁶ (see table 9 for the most recent data corresponding to the period 1981-1988). The main surpluses correspond to the UK and UEBEL (Belgium and Luxembourg), traditional international financial centers, but Germany, the Netherlands and Spain, also enjoy surpluses which, furthermore, have continuously increased in recent years even when taking into account the growth of trade in the industry (revealed comparative advantage indices in table 9). The main deficit countries are France and Italy, albeit in the case of Italy the deficit was substantially reduced in the later part of the period.

Note that these patterns of trade are barely changed when we consider intra-Community trade (with the exception of the Netherlands which is a deficit country in intra-Community trade). For surplus countries approximately half of their trade surplus comes from trade with EC Member States.

(Insert table 9)

Inspection of table 9 reveals that the role of trade in the industry has increased substantially. Measured by the weight of exports over total output (and the same happens if we use imports over apparent consumption), it goes up dramatically for France, and significantly for Belgium, Spain and Denmark. In Germany and the Netherlands, we observe substantial increases in exports. Only in the case of Italy, there is a sharp reduction of the role of trade both with the EC and with the rest of the world. It appears that the reduction of the trade deficit in this country has been achieved at the expense of a sharp reduction in the degree of openness of the Italian banking markets.

As for trade diversion, the data clearly indicate that much trade diversion has occurred over the period. Again this is particularly true in the case of France, but also in other countries such as Belgium, Spain and the Netherlands.

¹⁶According to Eurostat definitions, trade flows in financial institutions correspond to non-interest income plus net capital gains. We have defined output in table 9 accordingly.

The integration of EC markets is also indicated by the sharp increase in non-domestic claims held by banks (see table 10). According to table 10, French and German banks have been particularly active in diversifying their assets across EC countries.

(Insert table 10)

Overall, the trade effects of deregulation and capital flows liberalization are large and have taken place rapidly. It appears that capital flows liberalization has a dramatic impact on the volume of trade in the industry, as observed by the evolution in the French market.

Similarly, the divergent evolution of trade in regulated countries such as Spain and Italy, which only very recently have liberalized capital flows, is illustrative of the key role of other aspects of international competitiveness in banking. Spain has offered a less protectionist environment (better access to foreign firms) than Italy, and -for much of the 80s- has enjoyed declining unit labor costs while, as we will see later, Italian unit labor costs started to decline only in the mid-80s, and staff costs are still very high.

III.4.2. Foreign Direct Investment

The Community is a net recipient of FDI in the financial institutions industry according to recently published data by Eurostat. This is the result both of the importance of international financial centers located in Community countries such as the UK and Luxembourg, but possibly also a consequence of the attractiveness of some European markets to non EC competitors for retail business. FDI has been growing at annual rates above 25% in the period 1984 to 1988 but, most remarkably, intra-EC FDI has accelerated dramatically with annual compounded rates of growth of 50% over the same period (see Table 11).

(Insert tables 11 and 12)

It should be noted, however, that despite this sharp increase in FDI, there have been no dramatic changes in the presence of foreign firms in most EC markets (see Table 12). With the exception of France -which shows a clear increasing trend- at the end of the eighties EC markets continue to show various degrees of foreign penetration, but they remain mostly closed markets. In fact, in countries such as Italy we observe an stagnation in the penetration of foreign firms. The growth of FDI has not significantly changed the market shares of foreign firms, as domestic competitors have taken a substantial share of growing markets.

Overall, there is thus no compelling evidence that the increase in FDI observed during the last years of the decade has significantly changed the extent of integration of European banking markets. At the same time, some remarkable, and somewhat unexpected, changes seem to have occurred in the domain of trade, where -as a result of capital flows liberalization- there have been substantial changes within Community countries. As a result we may tentatively conclude¹⁷ that trade should not be neglected as an important channel through which European banking markets became more integrated over the 80s.

¹⁷Note, however, that partial ownership, while relevant in terms of the degree of openness and captured by our data on M&As, is not included in table 12, since only participations with control are considered. FDI data does include in some cases partial acquisitions. However, most often these investments are considered portfolio investments and they are not recorded as FDI.

III.5. Deregulation and performance

Deregulation, increased trade and the resulting burst in competition should have impinged upon the performance of the industry. In this section we will determine the extent to which as deregulation progressed over the 80s, significant changes in the efficiency and performance of the different national industries were observed.

The first thing to note is that the expected efforts in cost reductions are limited and different across countries (Chart 3). Staff costs tend to converge at an EC level although Italy continues to have extremely high costs, while Germany and the Netherlands have the lowest ratios. The sharpest declines in staff costs are observed in France and Belgium.

(Insert chart 3)

Together with the evolution of staff and other costs, it is important to consider the behaviour of productivity in the period. The highest productivity increases correspond to the markets that undergo deregulation (Chart 4). In all of them unit labor costs decrease despite large nominal wage increases in the case of Spain and Italy. It is only in the countries with no substantial regulatory change that productivity improvements are not enough to compensate growing wages costs and negatively affect the competitiveness of the industry.

Apart from the impact in efficiency and productivity, increased competition should in principle affect the profitability of the industry. This can be assessed by looking at the evolution of financial margins in the industry, and at the extent to which rents in banking have improved or deteriorated over the second half of the 80s.

Chart 6 shows that, with the exception of Italy, financial margins -measured as net interest income over non-bank deposits- are declining over the 80s for most of the EC countries. This is particularly the case in France and Belgium, but also more recently in Spain and other markets.

(Insert charts 4 and 5)

It is interesting to observe that this decline in interest margins despite the efforts to boost non-interest income and to reduce costs, has had a differential impact in the rents generated by the industry. By and large, the rents that accrue to personnel have been maintained and the compensation per employee in banking continues to be substantially above economy-wide compensation (see Chart 6). On the contrary, even though profitability has not declined in absolute value over the 80s, it has not benefited (with the exception of the Dutch banking industry) from the general recovery of returns observed in European non-financial industries. Thus the attractiveness of banking vis a vis other industries has declined as returns to invested capital converge to economy-wide returns (see Chart 7).

(Insert charts 6 and 7)

V. Conclusions

One should exercise great care in drawing any conclusions regarding the effects of deregulation across countries. Indeed many different factors will affect the structure and performance of the banking industry, which are not easy to control for. Yet, in broad terms, it seems that the following pattern is at least suggestive of the effects of deregulation.

Three countries, the UK, Germany and the Netherlands have experienced little deregulation but they were lightly regulated to start with; in those countries, little is changing in terms of performance, conduct and market structure. There is no further penetration of foreign firms.

The Netherlands is somewhat different from Germany and the UK since in the Dutch banking market we observe some signs of reduced competition (more profit, wider margins) which is accompanied (spurred?) by increasing concentration. Interestingly, we also observe that banks located in these three countries have been relatively active in foreign acquisitions (the UK) and in the provision of services abroad (Germany). Hence it could be said that banks located in these countries were originally in a favourable position (as indicated e.g. by their lower cost) and have exercised the competitive advantage that light regulation had indirectly conferred upon them.

At the opposite, Italy had the most restrictive regulation in the early eighties and has undertaken only limited structural deregulation in the course of the last decade. Not much has changed in the industry; costs are still high by European standards, productivity is low and the Italian market is, if anything, rather less integrated with Europe than in the early eighties. Some internal restructuring has occurred and profitability has fallen. The liberalization of capital flows does not seem to have had much effect in Italy.

In between these two extremes, Belgium and especially France and Spain, were fairly strongly regulated and have undertaken significant deregulation with a relative emphasis on conduct deregulation in France and Spain. In the latter countries, bank's behaviour seems indeed to have change, and mark-ups have been reduced (not much can be detected in this regard in Belgium). Profits have fallen but productivity has increased and unit costs seem to have fallen as well. The liberalization of capital flows seems to have contributed a great deal to the increase in competition with significant foreign acquisition in Spain and strongly increasing trade in France.

Overall, this analysis suggests that deregulation inspired by the EC will work best when it is accompanied (preceded) by national deregulation. A possible explanation underlying this observation could be that restructuring is best initiated by domestic firms. Foreign firms might be in a more difficult position to initiate the process and might prefer (because eg. of asymmetry of information regarding the behaviour of domestic players) to wait until initial actions by domestic firms have taken place (so that some uncertainty has cleared) before joining.

Annex i
Prospective developments in banking functions

This report has emphasized the role of regulation as a determinant of the conduct of banks and of the structure of the banking industry. The purpose of this annex is to discuss some structural changes which currently occur in the banking industry and are not directly related to regulation. Particular attention will be given to the changes in the environment which may alter the scope of banking functions.

Traditional banking functions include the provision of a payment system, the creation of money, the transformation of maturity and the provision of loans to private and corporate clients. Banks have usually performed these functions by acting as intermediaries between agents with surplus and shortage of funds, namely by collecting deposits and awarding loans of a longer maturity than deposits.

In what follows, we shall focus on two important developments; first, we shall assess current developments in the payments system with a particular attention to the role played by credit cards. Second, we shall discuss how the activity of intermediation undertaken by banks is likely to evolve.

1. Undertaking payments

Various technologies can be used to undertake payments, ranging from cash transactions, direct transfers, automatic transfers (domiciliation), the issuing of cheques, credit cards and debit cards. In the last case, the payment service is bundled with the provision of credit. With the exception of credit cards, payment services have traditionally been provided by banks. In this context, the issue arises as to whether, as often argued by professionals¹⁸, credit cards will progressively dominate and, relatedly, whether banks will be progressively competed away from the undertaking of payments and credit card operations by non-bank institutions.

¹⁸See for example The Economist (June 1991) or Salomon Brothers (1991).

1.1. The current situation

As Table A.1.1 indicates, the relative importance of these various means of payments varies across countries. In particular, countries like Belgium, Germany and the Netherlands have well established systems of electronic funds transfers which are owned by banks and in those countries cheques account for a relatively low share of transactions. In all countries except the UK banks perform at least 98% of transactions through traditional means of payments. It is only in the UK that credit cards account for a significant share of transactions.

Table A.1.1. Payment mechanisms
Relative use of alternative technologies - 1987
(% of the total value of transactions)

Country	Cheques	Transfers	Domic.	Debit	Credit
Germany	8.6	54.8	36.0	0.0	0.6
Belgium	32.9	54.0	6.6	5.5	1.0
France	65.4	17.3	9.4	7.9	0.0
Netherlands	19.0	64.5	16.5	0.5	0.5
Italy	52.5	44.6	2.0	0.0	0.9
UK	57.0	22.0	9.0	0.0	11.0
Spain	84.7	10.4	4.1	0.5	0.3

Source: Quoted from the BIS by Santillán, J. in *Boletín Económico*. Banco de España. February 1991. Data for Spain correspond to 1989.

The question then arises as to whether participating banks or the network to which they are associated (Visa, Mastercard, Amex, Diners Club) are providing the service. In this regard, it seems useful to distinguish between payment and credit services. The transfer of funds between debtors and creditors is undertaken through the network and this service operates like any other electronic fund transfer system. This part of the service is therefore provided by banks which form the network. Whether the network is owned by banks or not is unimportant; what matters is that without banks, the network is nonexistent.

Whether credit services are also performed by banks varies across card systems and depends on whether participating banks actually bear the credit and settlement risks associated with transactions. With respect to Visa and Mastercard, it seems that the risk is effectively borne by the banks¹⁹. At the opposite, when banks distribute American Express or Diner's Club cards, they don't bear the risk associated with transaction.

Hence, it seems that under current arrangements banks bear most of the risk associated with credit cards; in Europe, only 6 % of all cards have been issued by Amex and Diner's Club²⁰. So far, banks have therefore not been competed away by non-bank financial institutions.

Future developments regarding the position of banks will thus depend on whether credit cards will progressively dominate as a means of payment (bundled with credit) and whether banks will be in a favourable position to compete with non-bank financial institutions in this market. We take these questions in turn.

1.2. Competition between alternative technologies

Whether payments through cards (debit or credit) will progressively dominate the market depends on consumers' willingness to pay for this service and the cost of providing it, relative to alternative technologies. On the cost side, it seems that card payments are superior to payments by cheques but that direct transfers through electronic networks involve even lower costs than card operations. Yet, not all transactions can be performed through electronic networks; the experience of Belgium, Germany and the Netherlands (see Table A.1.1) suggests that some 50 to 60 % of transactions can be performed through an electronic network. Whether this proportion could be further increased is not clear.

On the demand side, consumer's willingness to pay for card payments will be determined by the relative convenience of cards, which is itself largely determined by

¹⁹According to some interviews with banks participating in these networks.

²⁰Source: Salomon Brothers, 1991.

their acceptance. There is a *network externality* such that consumer's willingness to pay is a function of the number of outlets accepting their cards; in turn, outlets will have increased incentives to accept cards, the larger is the number of cards issued. Considering the relative importance of this externality for alternative technologies, it seems that the externality is largest for cash, followed by electronic networks (which involve all holders of banks accounts) and smaller with checks (where the settlement risk is such that acceptance is reduced). The relative size of the externality for any consumer associated with a credit or debit card is a function of the proportion of counterparties in transactions which accept the card. This proportion is hard to assess so that comparing externalities between credit cards and relative to other technologies within countries is difficult. Comparison of the relative externalities associated with cards across countries is relatively easier; Table A.1.2 compares the number of outlets accepting Visa and Eurocard in the UK, France and the former West Germany (three countries of roughly similar size).

Table A.1.2 Cards and network externalities

Number of retail outlets accepting cards (1988)
(Number of cards issued in thousands)

Country	VISA	EUROCARD
UK	316 252 (17 177)	309 654 (12 994)
France	476 723 (6 639)	420 000 (2 027)
Germany	89 803 (328)	106 959 (984)

Source: Visa International/Mastercard International

This comparison suggests that the externality associated with cards is largest in France and the UK and moderate in Germany. However, the externality associated with cards in countries which have extensive electronic network like Germany could

be instantly established by associating the cards and the network (as was done in Belgium with the Bancontact/Mistercash system).

The issue of whether externalities will develop in markets where there is no electronic network is more intricate; on the one hand, one would expect that decisions by private individuals to join the network will not take into account the benefit accruing to others, so that the network will be unduly small. On the other hand, competition between networks might lead to excessively rapid development, relative to the social optimum. The experience of the UK suggests that private incentives to develop the network are likely to be sufficient. Yet, it is worth noticing that in principle, the efficient organization of payment services would require to organize a unique network in which cards could compete (such outcome could easily arise in countries which have an established electronic network - the competition between Mistercash and Bancontact in Belgium being a case in point).

On the whole, this analysis suggests that in countries which do have electronic networks the market share of cards could increase very quickly as cards become associated with the network. Yet, given that a large proportion of transactions is undertaken through direct transfers in the network in those countries, one would expect the development of card payments to be more limited than in countries which do not have a network. In other countries, one can expect card payments to develop even though an efficient development would require some coordination and an efficient organization would involve the creation of a network. In any event, a convergence in the pattern of payments across countries is unlikely to occur in the short term, especially between those countries which have an electronic network and those which don't.

1.3. The relative position of banks

As mentioned above, the payment service is always performed by banks, which as deposit taking institutions hold clients accounts. Credit services can however be performed by non-bank financial institutions.

In principle, one would also expect that banks should have a sustainable competitive advantage in this market, *provided that they stick to their own customers*. Indeed, the

competitive advantage of banks in providing credit card services stems from their privileged access to information on customers assets and other long term loans in addition to their credit card operations and they will often be aware of customers' non-financial assets which matter for their long term solvency (human capital, prospective inheritance). As a result, banks should be better able to manage their short term credit risks.

However, in the presence of multiple competing networks, customers, especially unsafe ones, might be tempted to obtain short term credit card facilities from other banks than the one they usually do business with. These other banks will then be in a position akin to that of a non-bank financial institution which does not have privileged information on customers. That is to say that bank will lose their competitive advantage. The problem of adverse selection arising from this asymmetric information would also presumably affect the average interest rate and quality of banks providing the service. This problem could be alleviated by systematic exchange of information across networks. It is not clear however that banks will have the appropriate incentive to share the information (see Pagano and Japelli, 1991). Even if information was freely available, its precision (on matters like human capital) would presumably be affected by the systematic procedures which would necessarily be used to undertake the transfers.

2. Intermediation

As mentioned above, banks act as intermediaries between agents with surplus and shortage of funds, by collecting deposits and awarding loans of a longer maturity than deposits. It is often argued that the intermediation performed by banks is being eroded and likely to decrease further as agents with surplus of funds have direct access to lending opportunities in capital markets.

In terms of principles, it seems worth distinguishing between the collection of deposits and the provision of loans. To the extent that banks have similar networks and are perceived by depositors as equally safe, deposits are by and large a homogeneous commodity (where imperfect information does not play a major role). At the opposite, loans are a highly differentiated commodity where the asymmetric information between banks and borrowers plays a central role. The provision and

monitoring of loans in particular to small and medium size enterprises and private individuals for whom little information is public, requires the acquisition of information about their long term solvency. Banks can establish the necessary relationships with clients to acquire this information which is not immediately available or transparent. An appropriate assessment might indeed require to consider non financial assets like human capital. Such assessment cannot be undertaken easily by investors in the capital market. However, when relevant information about long term solvency can be made available in a comprehensive form, the role of banks is likely to be more limited, and investors in capital markets are likely to play a more important role. This will typically be the case for large corporations.

On the whole, it seems that the competence which is required for the collection of deposits and the provision of loans to large corporations is not obviously specific. Arguably, the area where banks can develop a particular competence is in the provision of loans to small and medium size enterprises. Banks are not likely to be competed away in this function by market operators. However, they will still have to face competition from other financial intermediaries which have access to privileged information on firms' solvency or a superior capacity to process this information. Increasingly, one can therefore expect that banks will select loans to enterprises and sell the associated claims in the capital market (as claims to individual loans or in bundles), while earning a fee for this operation. In the process the share of bank's earnings which is accounted by fee should therefore increase (relative to interest earnings).

The extent to which this process of disintermediation has already occurred is hard to assess. Table A.1.3 provides one measure, namely the growth in direct purchases of financial assets by households. The growth in direct holding of assets is impressive, particularly in Italy, France and Belgium.

These figures clearly indicate that the market for marketable financial claims has increased; as indicated above, banks compete with other financial institutions in issuing such claims. Table A.1.4 tries to assess whether banks have been able to capture a significant share of this market for financial claims. According to this table, (net) fees and commissions have increased from the early to the late eighties by a factor of more than 2 in France, Italy and Germany, and more than four in Spain with Belgium being an intermediate country. Hence, it appears that in all countries but Italy

non interest income has increased at a faster pace than the overall market for direct holding of assets. Banks have apparently been able to switch from interest to fees without losing market share.

(Insert tables A.1.3 and A.1.4)

Annex 2

Main regulatory changes in selected EC banking markets.

a) Conduct

I. General rules

Belgium

- Introduction of new regulation on interest rates for savings accounts in 1984.
- Maximum interest on savings fixed, 1986.
- Interbank agreements on interest for checking accounts.
- Agreements on fees and commissions.
- Agreements regarding loans (less than 20 million BF) and time deposits.
- Legal provisions for the imposition of credit ceilings still in place.

France

- No interest on demand deposit.
- Regulation on time deposits Relaxed partially in 1986.
- 1986: abolition of credit ceiling.
- Deregulation of commission/fees in 1986.
- 82-86: control on number of branches.

Germany

- Some coordination on interest rate fees and commissions, through banking associations explicitly allowed (waiver of competition policy).

Italy

- Agreement on Lending/Borrowing rates until early 1980's.
- Direct control on interest rates on liabilities for special credit institutions.
- Direct control on lending; abolished in 1981 reconstituted in 1987 (temporarily).

- Restrictions on the number of branches - partially lifted in 1987 (with strong discriminatory guidelines).

Spain

- All interest rate deregulated in 1987. Previously some regulation existed on checking accounts and small short term time deposits.
- Restrictions on the number of branches lifted (1985, and 1989 for saving banks).
- Fees and commissions regulated, up to 1987 (some prior deregulation in 1981).
- Credit ceilings reinstalled between June 1989 and December 1990.

Netherlands

- Credit ceilings enforced temporarily in 86-87.
- Some evidence of parallel behaviour on rates.
- Minimum fees and commissions subject to interbank agreements.

UK

- Recommended Interest rate system for Building Society discarded in 1984.
- Lending guidance - finally withdrawn 1987.

2. Direct restrictions on assets and liabilities

Belgium

- Temporary mandatory investment requirement on all banks.
- Participations in non-financial firms are -in principle- prohibited. Since May 1990 shares in those firms may be held within limits.
- Strict mandatory investment requirement on public and saving banks.
- Implementation of BIS rules will involve stronger requirements

France

- 85: abolition of mandatory investment requirements.
- 5% capital ratio, plus individual restrictions
- As of 89/90, European directive with stronger requirements.
- Control of non-financial firms is allowed with some restrictions.

Germany

- Implementation of the European directive would soften requirements on capital adequacy.
- Some restrictions on the matching of maturity between assets and liabilities.
- No significant restrictions on the control of non-financial firms.

Italy

- Significant reserve requirements.
- No equity participation in non financial firms.
- Widespread mandatory investment requirements partially removed as of 1987.

Spain

- Mandatory investment requirement phased out gradually between 1989 and 1993.
- Since 1985 regulations have been adapted to conform to BIS rules. Adoption of EC rules will soften the requirements.
- Participations in industry are allowed, but they involve some penalties in the capital adequacy ratio since 1985.

Netherlands

- Removal of mandatory investment requirement.
- Participations in non-financial firms larger than 5% requires approval from the Ministry of Finance.

UK

- Some specific restrictions on capital - case by case.
- 1989: BIS agreement. Effects unclear except for loss of flexibility.
- No restrictions on the control of non-financial firms.
- Building societies allowed to borrow wholesale funds for up to 20% of total (40% in 1988).

b) Structural

1. General rules

Belgium

- Separation between commercial and investment banking, progressively relaxed.

- No direct trading of securities; participations in brokerage houses progressively allowed.
- Banks may own insurance companies.
- Recent despecialization of savings and public banks.

France

- 1984: widening scope of products of mutual Banks and Cooperative Banks. End of specialization within the banking system.
- No direct trading of securities by banks. May be performed by subsidiaries.
- No underwriting of insurance by banks but banks may own insurance companies without restrictions.
- Mutual funds may be owned through subsidiaries.

Germany

- Mortgages restricted to mortgage banks and building societies.
- Leasing and mutual funds through subsidiaries.
- No underwriting of insurance but banks may own insurance companies.

Italy

- Significant specialization within the banking system. Up until 1986, distinction between short term funding undertaken by commercial banks (up to 18 months) and medium and LT funding (undertaken by special credit institutions). Only very limited lifting of restrictions in 1986.
- May 1980: banks are allowed to buy stock in insurance.

Spain

- Widening scope of savings banks and disappearance of specialization, even before the 80s.
- In 1988, lifting of remaining restrictions on bank's businesses (leasing, mortgages bonds and fund management).
- Insurance and mutual funds may be undertaken through subsidiaries.
- Dealing in securities through subsidiaries.

Netherlands

- Functional separation "de facto"

- Restrictions on the ownership of insurance companies by banks.
- No underwriting of insurance (brokerage allowed).

UK

- No investment advice and sale of investment products after 86 (FSA).
- 1986: dealing in stocks is permitted (100% ownership of Stock Market Members).
- 1986: building societies allowed to undertake unsecured lending and provide credit cards.
- No restrictions on the ownership of insurance companies by banks.

2. Entry/Exit barriers (domestic and foreign banks)

Belgium

- Minimum capital.
- Fit and proper test.
- No restrictions on the establishment of foreign banks.
- Change of ownership subject to approval by the banking commission.

France

- Fit and Proper.
- Minimum Capital.
- Widespread Public Ownership.
- Remaining capital controls partially lifted in 1986/1987, and full liberalization in 1989/1990.

Germany

- No restrictions on the establishment of foreign banks.

Italy

- Important restrictions on the ownership of banks
- Fit and Proper.
- Widespread public ownership.
- Requirement of a non-interest bearing deposit against the holding of foreign assets.

- Capital controls partially lifted October 1988 and fully lifted by April 1990.
- Some restrictions on the activities of foreign banks, partially lifted in 1990 but still penalizing foreign institutions (i.e. ceilings on certain loans).

Spain

- Fit and proper test and minimum capital.
- Significant entry barriers for domestic banks up to 1988.
- Significant public ownership.
- Significant restrictions on foreign banks, to be eased by the end of 1992.
- Some deregulation of capital controls between 1988 and 1990. Remaining controls to be removed by the end of 1992.

Netherlands

- Minimum capital.
- Insurance companies cannot control banks.
- Fit and proper test.

UK

- Fit and proper test.
- 5 m£ capital (disbursed) (Banking act 1987).

(Insert table A.2.1)

Annex 3

Interest rates used in charts 1 and 2 and Minimum reserve requirements in selected EC countries and

(Insert Table A.3.1)

Table A. 3. 2. Minimum reserve requirements in selected EC countries

	Reserve Ratio ¹	
Belgium ²	0.00	
Netherlands ³	0.00	
Germany	4.15	Time liabilities
	4.95	Savings deposits
	12.10	Checking Accounts
United Kingdom ⁴	0.45	
Denmark	It doesn't exist	
France	5.50	Checking Accounts since Oct.90
	3.00	Savings and Time deposits since Oct.90
Spain	5.00	
Portugal ⁵	17.00	
Italy ⁶	22.50	
Luxembourg	It doesn't exist	

1- There are ample differences within the Community as to the funds that may satisfy the reserve requirement and the basis for the computation of the requirement (see Bundesbank, March 1990).

2- A law passed in 1988 allows the Central Bank the introduction of a reserve requirement if required by monetary circumstances.

3- An agreement between the Central Bank and the commercial banks allows the introduction of a reserve requirement.

4- Does not serve monetary policy objectives.

5- The average remuneration of these reserves was 7.5% in 1990 and is increasing in 1991.

6- 25% of the increment until 22.5% of the level is reached.

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Table A.1.3

Household savings flows (net acquisitions of financial assets) not held in the form of deposits

	Current domestic currency 1980=100				
	1982	1984	1986	1988	1989
France	127	167	259	259	256
Spain*	n.a.	92	339	116	216
Germany	95	120	104	777	197
Belgium**	115	143	117	265	-
Italy	115	308	432	500	-

* Base year 1983

** (Household & non-financial firms)

Source: OECD, Financial Accounts

Table A.1.4

Growth of non-interest income

	Current domestic currency 1981=100				
	1982	1984	1986	1988	1989
Belgium	145	172	268	334	316
Spain	133	174	264	404	408
France	118	119	154	209	276
Italy	126	162	241	229	235
Germany	110	126	164	156	231

Source: OECD, Bank Profitability

Table A.2.1 Deposit protection schemes in some European banking systems

Country	Year of introduction	Limitations	Coverage		
			Deposits in foreign currency	Branches of foreign banks	Branch in other country
Belgium	1985	11820 ECU	No	Yes	If no host country protection No
France	1979	57310 ECU	No	Yes	
Germany	1977	30% of bank's liable capital	Yes	Yes	Yes
Italy	n.a.	130290 ECU*	Yes	Yes	If no host country protection n.a.
Netherlands	1972	14957 ECU	n.a.	n.a.	
Spain	1978	11720 ECU	Yes	Yes	No
UK	1979	75% of first 28570 ECU	No	Yes	No

* From 130290 up to 651460 ECU only 75% coverage

n.a.: Not available

Source: CEPR (1991) and Baistenperger and Dermine (1990) for the dates of introduction and coverage of the Netherlands.

Table A.3.1. Interest rates used in charts 1 and 2.

	Money market rates	Corporate rates Loans	Deposits	Household rates Loans	Deposits
UK	Interbank rate (3 months)	Overdraft (minimum rate)	Sterling certificates of deposit (3 months) (min)	Building society mortgage loans (nominal rate)	Deposit accounts at 7 days notice with London clearing banks
Belgium	3-Month Treasury Certificates	Ordinary Advances, not more than 5 years	3 Months Ordinary Deposits with the commercial banks	Ordinary mortgage loans	Deposits in ordinary savings banks books with the CGER
France	interbank 3 months	Bank's prime lending rate	Time deposits	Housing loans	Bank accounts on passbooks
Germany	3-month Fiber	Discount credits	Time deposits	Mortgages: variable rate	Savings deposits with legal period of notice
Netherlands	Treasury paper 3 months	Advances in current accounts against securities (max)	Time savings deposits 3 months	Mortgage loans nominal rate	Ordinary savings accounts
Spain	interbank loans 3 months	Prime rate	Checking account	Mortgage Loans	Checking account

Source: OECD, Financial Statistics Monthly, (several issues)

Notes (for further details on the interest rates used see OECD, op. cit.):

Spain: Corporate loans: from Jan. 84 to Dec. 85; medium term credits (1 to less than three years)

from Jan. 86 onwards, prime rate (1 year)

Corporate deposits: from Jan. 84 to Dec. 85, 1 year deposits. From Jan. 86 to Dec. 87, 1-2 years

deposit. From Jan. 89 onwards, checking accounts

Households deposits: Jan. 84; Feb. 87; savings deposits. Afterwards Jan. 88, checking accounts

U.K.: Corporate deposits: since Jan. 86, sterling certificates of deposit (3 months) (min)

Netherlands: Household loans: Jan. 84 - Dec. 85, overdrafts against collateral securities (max)

From Jan. 86, advances in checking accounts against securities (max)

Money market: Jan. 84-Aug. 90, Treasury paper with remaining maturity of 3 months. Afterwards 3 month AIBOR

France: Deposits corporate: Jan. 84 - Dec. 85, time deposits (over 500000 FF. up to 6 months) From May 86, time deposits

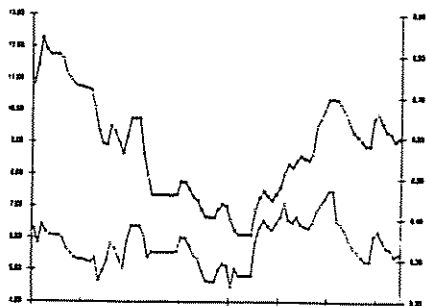
less than 3 months (max.)

Loans household: March 84 - Sept. 86, housing credit (min). Jan. 87 onwards, reference rate for special housing loans

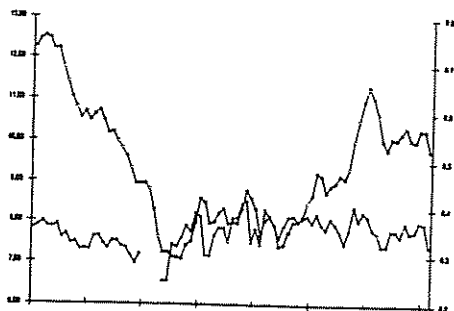
Money market: Jan. 84 - Dec. 86, 3 month interbank loans against private bills. Afterwards, 3 months Plbor

CHART 1.A
CORPORATE DEPOSITS MARKUPS (1984-1991)

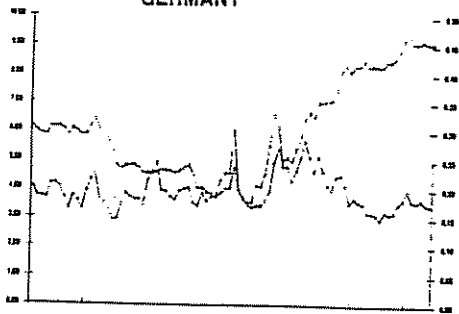
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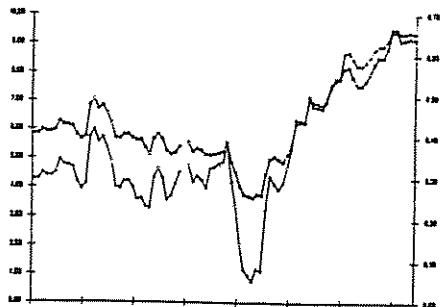
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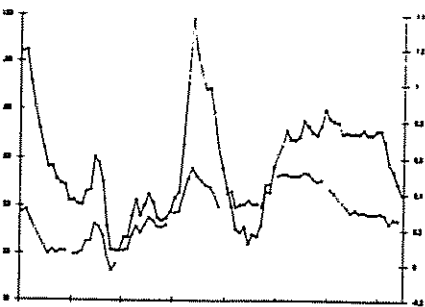
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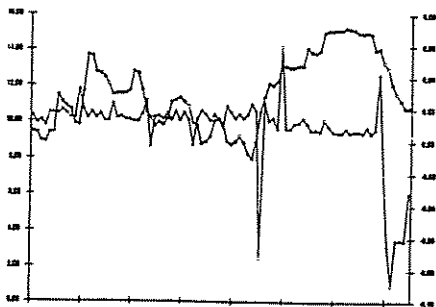
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SPAIN



UNITED KINGDOM



RCE: OECD

□ Interbank rate 3-months
■ Deposits markup

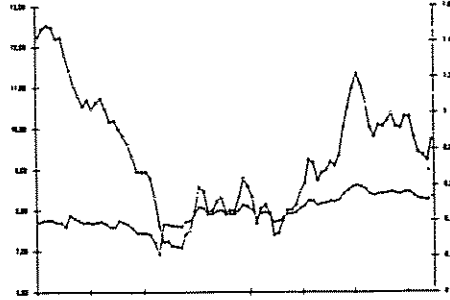
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CHART 1.B
HOUSEHOLDS DEPOSITS MARKUPS (1984-1991)

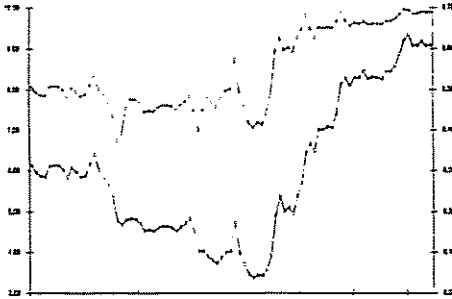
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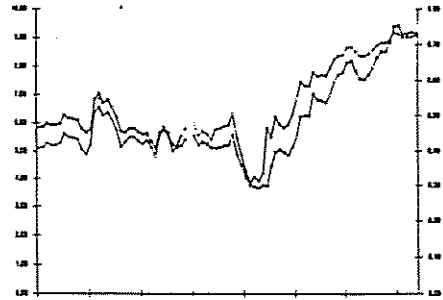
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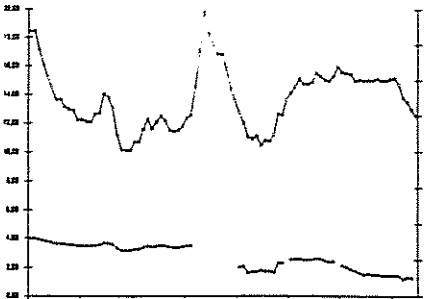
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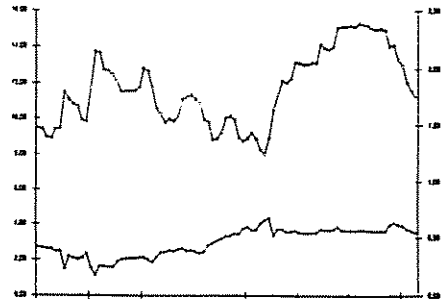
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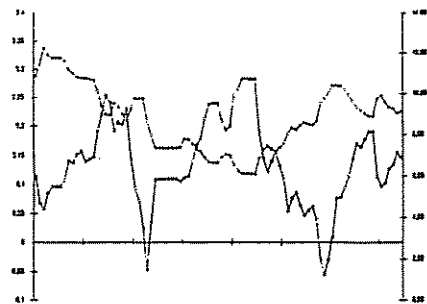
SOURCE: OECD

□ Interbank rate 3-months
 ■ Deposits markup

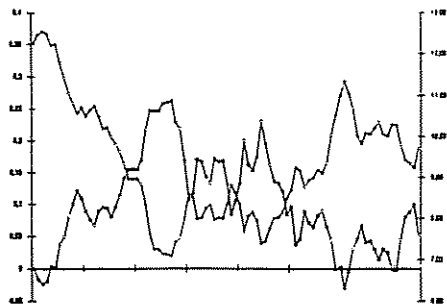
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CHART 2.A
CORPORATE LOANS MARKUPS (1984-1991)

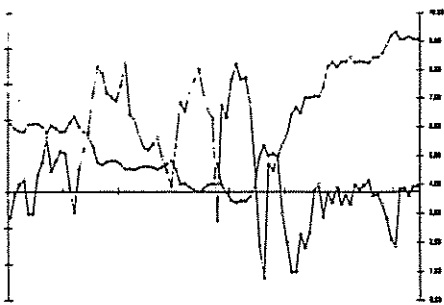
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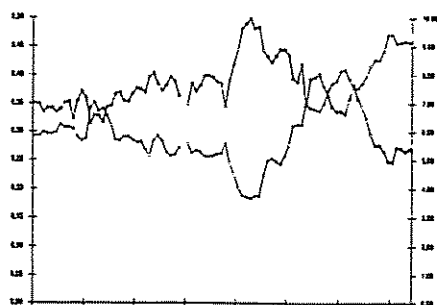
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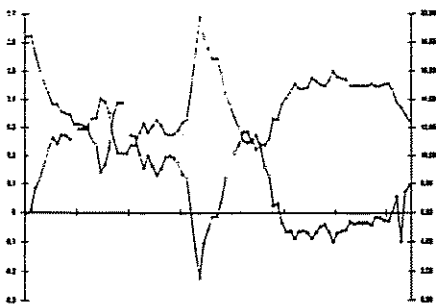
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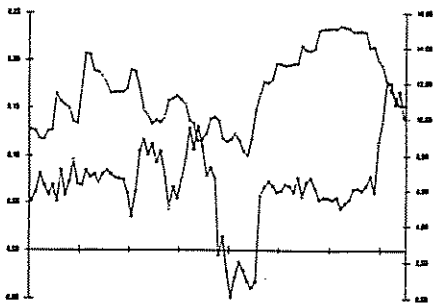
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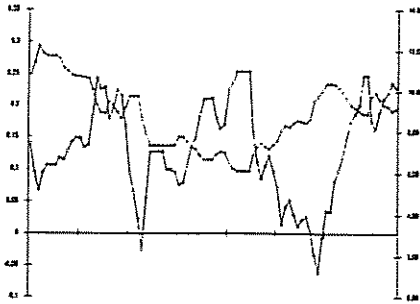
RCE: OECD

□ Loans markup
▨ Interbank rate 3-months

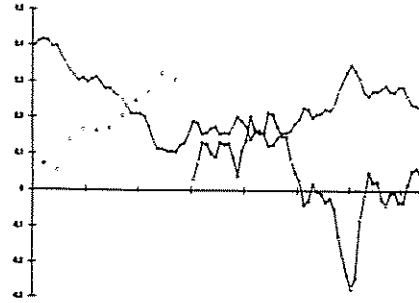
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CHART 2.B
HOUSEHOLDS LOANS MARKUPS (1984-1991)

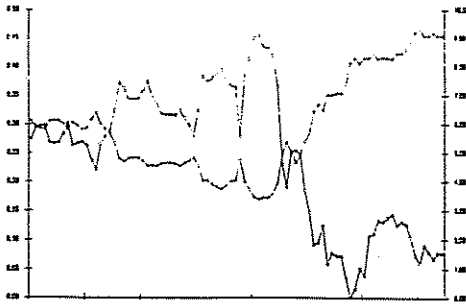
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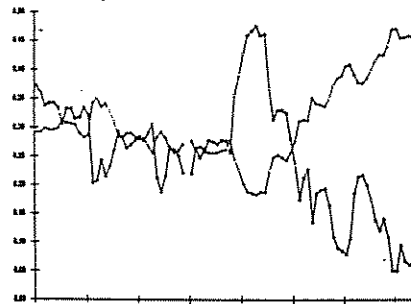
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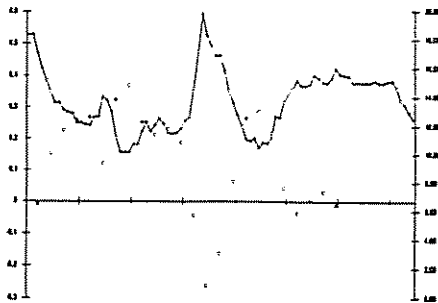
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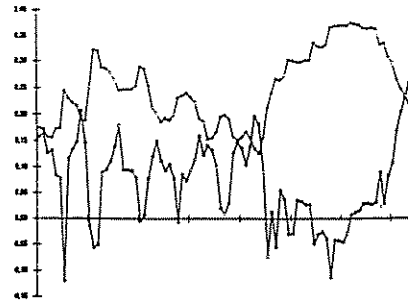
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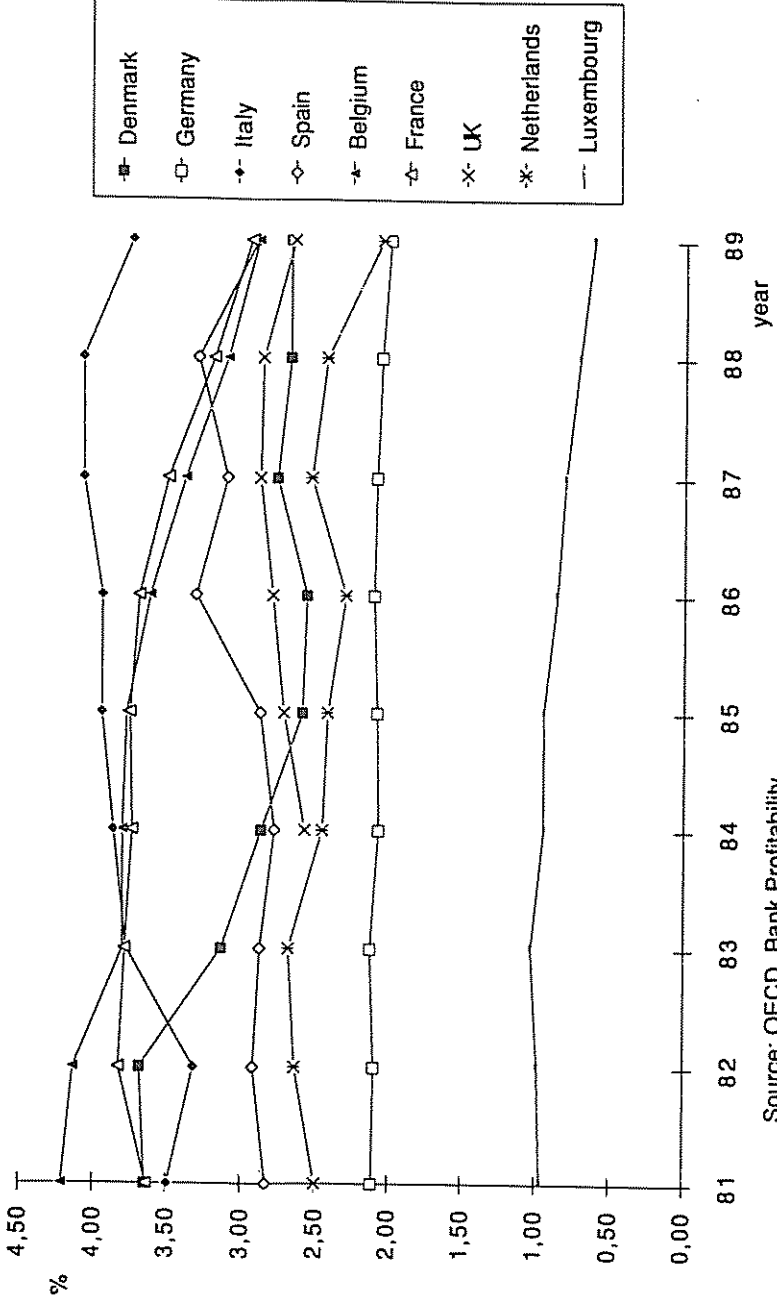
SOURCE: OECD

□ Loans markup
▨ Interbank rate 3-months

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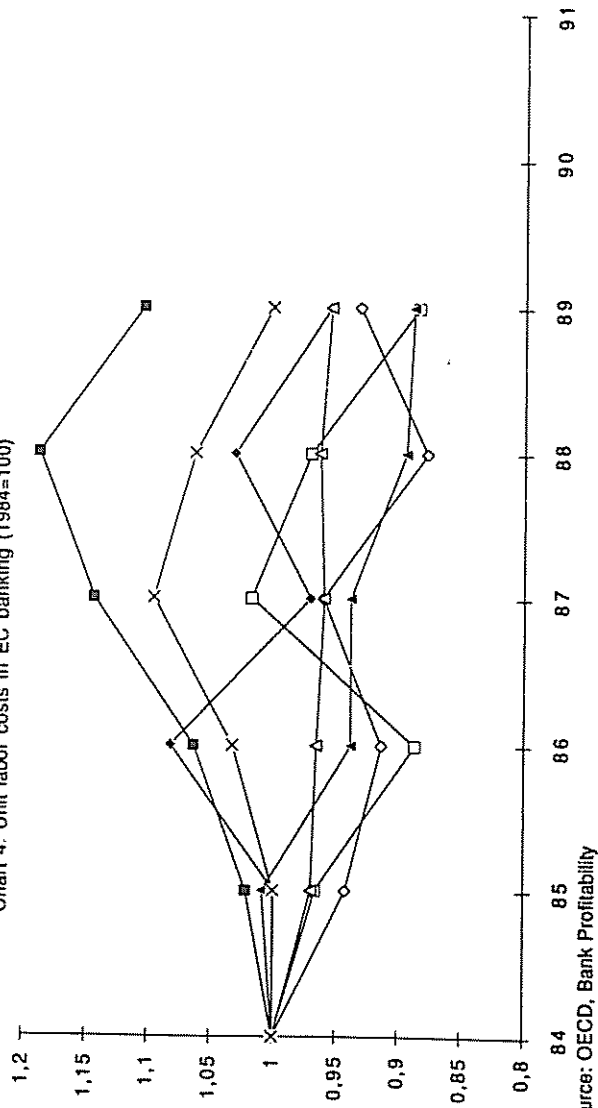
CHART 3

STAFF COSTS/NON-BANKS DEPOSITS IN EC BANKING MARKETS



Source: OECD, Bank Profitability

Chart 4. Unit labor costs in EC banking (1984=100)



Source: OECD, Bank Profitability

CHART 5

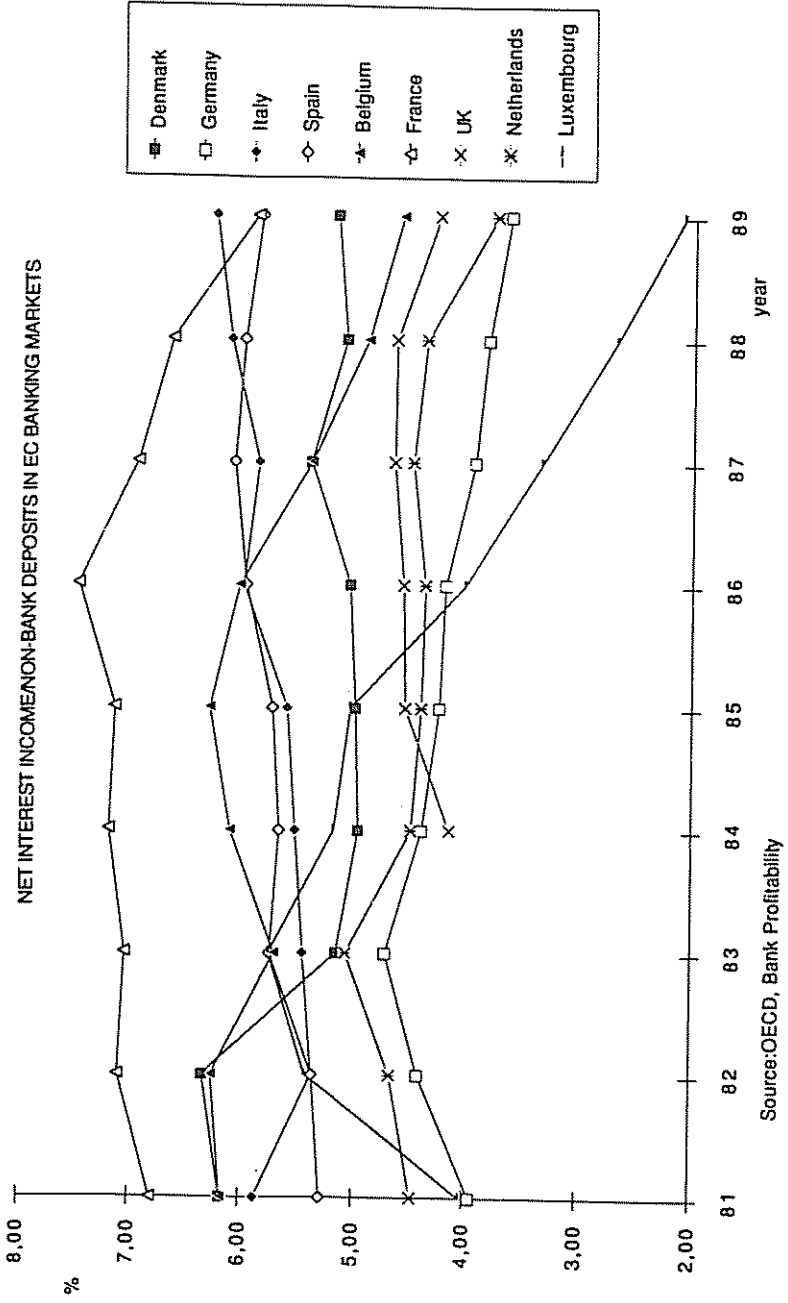
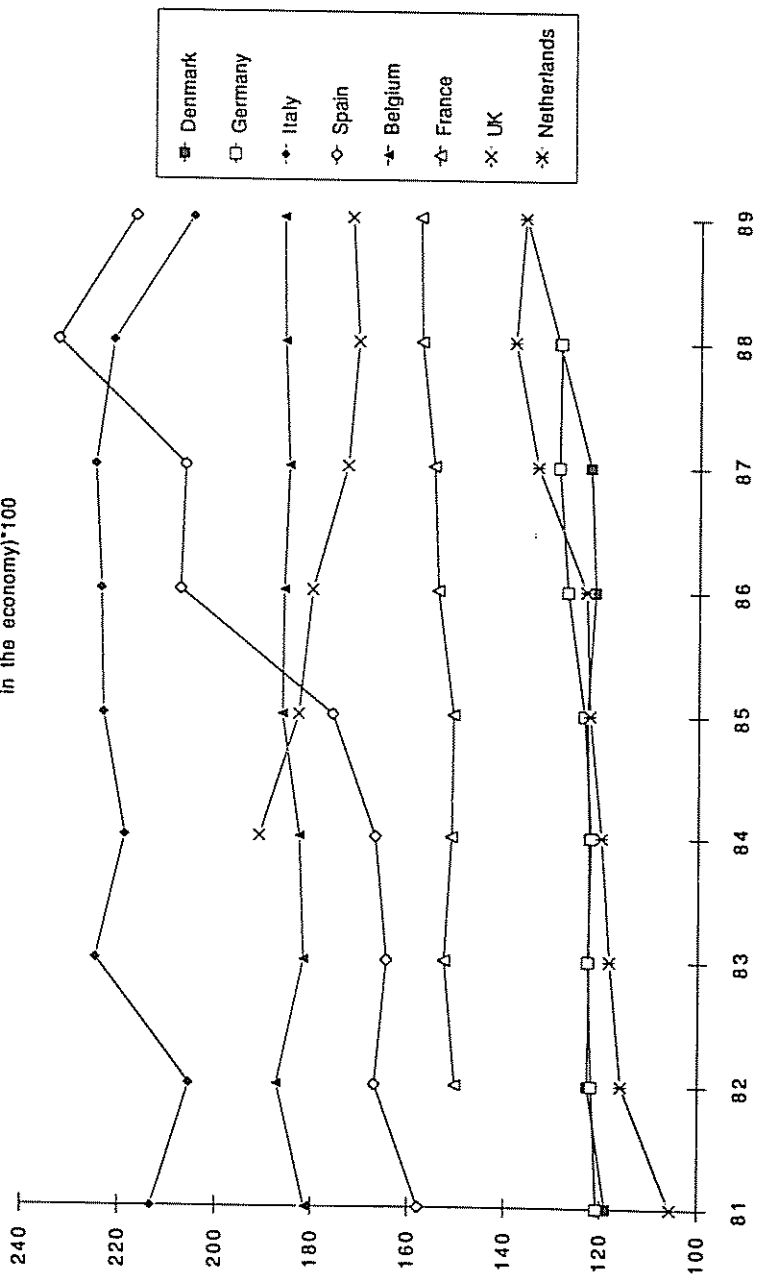
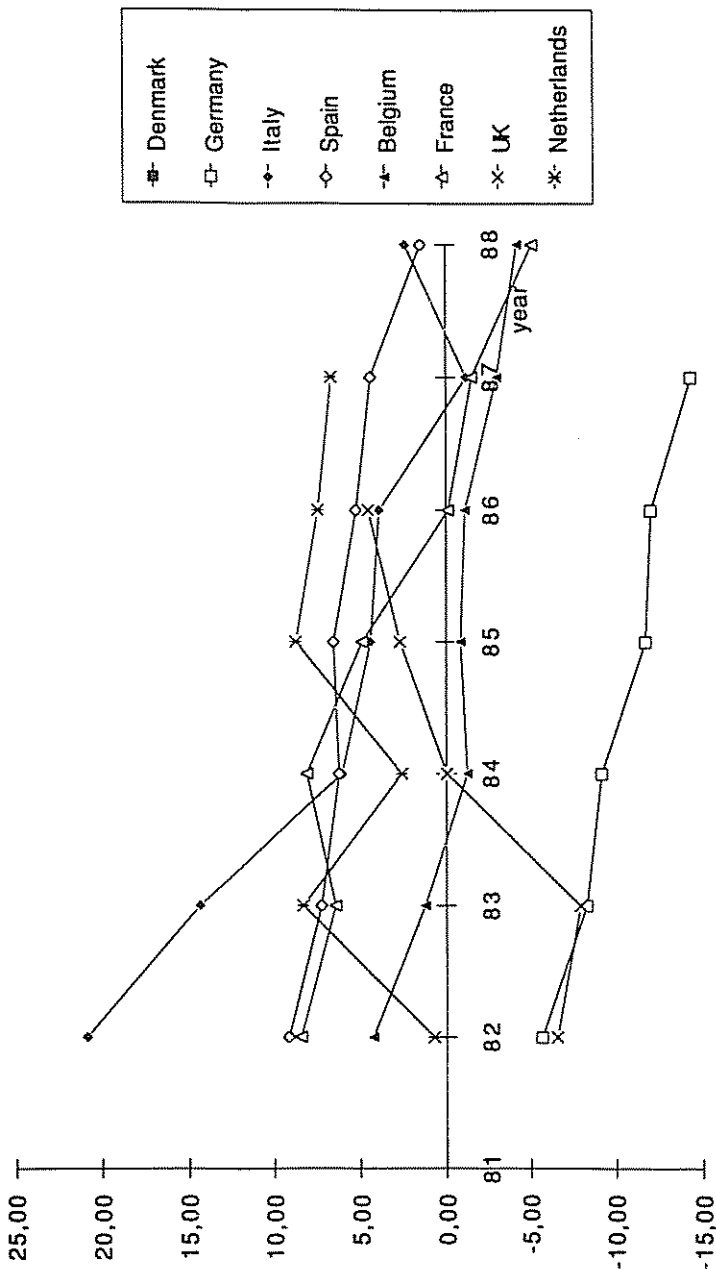


CHART 6. RELATIVE COMPENSATION PER EMPLOYEE IN SELECTED BANKING MARKETS (Staff costs in banking/Compensation per employee in the economy)*100



Source: OECD, Bank Profitability and National Accounts

CHART 7. RELATIVE PROFITABILITY IN SELECTED EC BANKING MARKETS (ROE in banking minus ROE in non-fina institutions)



Sources: OECD and BACH DG II. ROE: Profits after tax over capital plus reserves, in %.

Figure 1. National deregulation in the 80s and the European Directives

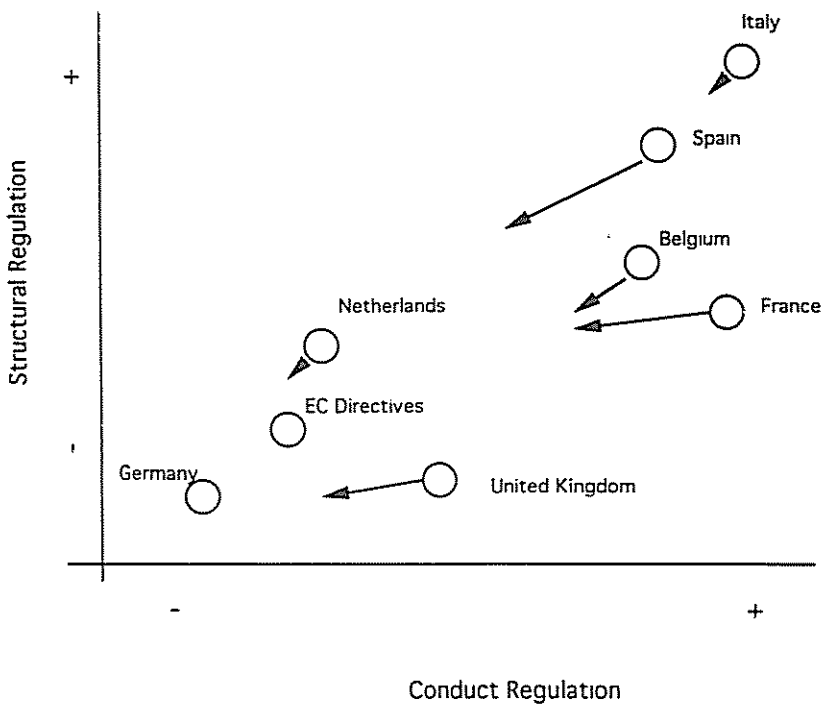
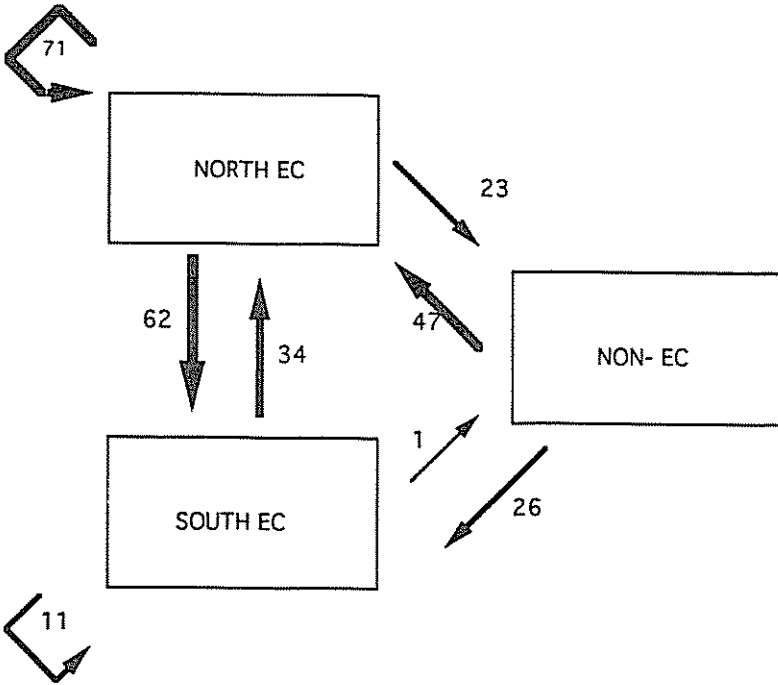
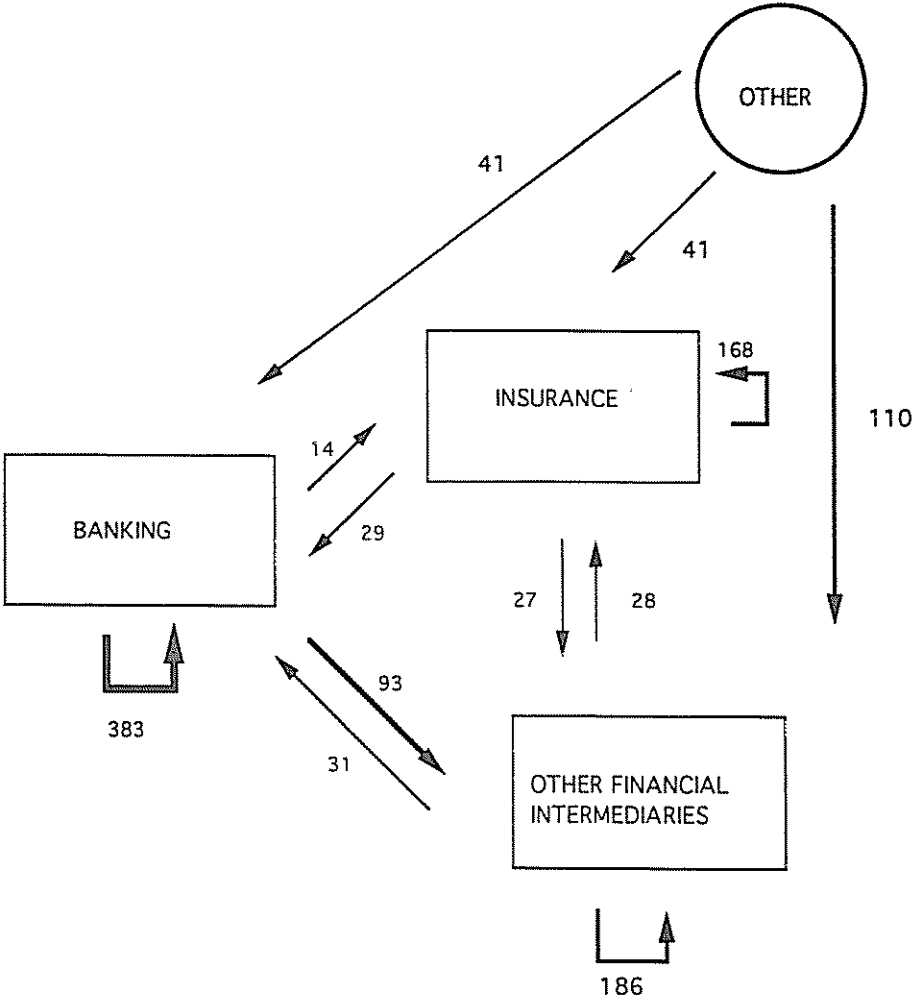


Figure 2. Acquisitions in the financial industry by zone (number of deals)



SOURCE: AM Data and author's calculations

Figure 3. Private acquisitions in the financial sector by industry (number of deals)



SOURCE: AM Data and author's calculations

TABLE 1
 PERFORMANCE OF THE EUROPEAN BANKING SYSTEMS IN THE EARLY 80s
 (averages 1981-1984)

	(Net interest income/ Non-bank deposits)*100	ROE in banking minus ROE in non-financial firms	(Wage in banking/wage in the economy) *100
Germany	4,37	-7,71	122
Italy	5,56	13,78	216
Spain	5,52	7,56	167
Belgium	6,06	1,44	183
France	7,04	7,68	151
United Kingdom	4,16	1,57	191
Netherlands	4,68	3,88	115

Source: OECD, Bank Profitability and National Accounts; and BACH, DG II

UK data for 1984

Italy and France, only commercial banks

ROE is defined as Profits after tax over equity (in %)

TABLE 2
 THE EFFICIENCY OF THE EUROPEAN BANKING SYSTEMS IN THE EARLY 80s
 (averages 1981-1984)

	(Staff costs / Non-bank de- posits)*100	(Non-wage operating expenses/Non- bank deposits)*100	% change in unit labor cost	Branches per bank
Germany	2,10	1,07	-12	12
Italy	3,62	1,40	15	44
Spain	2,85	1,41	-11	86
Belgium	3,99	1,45	-14	44
France	3,75	1,91	3	49
UK	2,58	1,73	n.a.	n.a.
Netherlands	2,57	1,35	-4	64

Source: OECD

Italy: Number of branches corresponds to 1983

UK: data for 1984

Italy and France, only commercial banks

Data on branches corresponds to the average number of branches of those banks included in the OECD reports.

TABLE 3
CONCENTRATION IN EEC BANKING SYSTEMS
Market share of the five largest banks
(as % of total assets)

	1.987	1.988	1.989	1.990
BELGIUM	58,2	57,5	57,9	54,9*
DENMARK	n.a.	74,3	77,1	n.a.
GERMANY	24,6	25,7	26,3	27,4
GREECE	63,7	62,3	63,4	n.a.
SPAIN	33,2	38,7	38,8	41,8
FRANCE	42,8	42,8	42,8	45,
ITALY	39,1	41,1	44,5	43,0*
LUXEMBOURG	25,4	26,8	25,9	24,7
NETHERLANDS	86,8	90,4	83,7	84,1
PORTUGAL	n.a.	n.a.	56,4	n.a.
UK	n.a.	29,	29,1	27,8

Source: IBCA, central banks and other national sources.

* Estimates

Table 4. INTRA AND EXTRA-EC PRIVATE ACQUISITIONS (1984-June 1991)
(Number of deals)

Country of target	Country of bidder											UK	Abn-EC	Not available	Total	(% domestic)		
	Belgium	Denmark	France	Germany	Greece	Netherlands	Ireland	Italy	Luxembourg	Portugal	Spain							
Belgium	14	0	0	7	1	0	0	0	1	0	0	0	1	1	0	0	32	44
Denmark	0	24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	36	67
France	6	0	72	2	0	0	1	14	1	1	3	0	0	0	0	1	110	61
Germany	0	1	5	67	0	5	0	5	0	0	1	0	3	12	0	0	90	67
Greece	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	4	25
Netherlands	4	0	3	1	0	36	1	0	1	0	0	0	2	3	0	0	53	72
Ireland	0	0	0	1	0	0	0	3	0	0	0	0	4	1	0	0	8	33
Italy	0	0	14	3	0	1	0	140	0	0	1	0	5	17	5	0	180	75
Luxembourg	4	0	2	0	0	0	1	1	0	0	0	0	1	3	0	0	12	4
Portugal	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	4	4
Spain	0	0	19	2	0	0	0	6	0	2	10	4	0	0	0	0	64	42
UK	0	1	0	2	0	1	0	1	0	0	1	0	185	10	0	0	202	92
Abn-EC	2	2	6	7	0	2	0	1	0	0	0	0	4	252	1	0	277	4
Not available	0	0	0	0	0	0	0	0	0	0	0	0	5	17	0	0	56	0
Total	30	28	142	90	1	64	8	178	4	3	32	225	341	7	0	0	1151	0
(% domestic)	4.7	0.6	5.1	7.4	0.1	5.0	3.8	60.0	0.4	0.3	5.0	82.0	8.2	0.0	0.0	0.0	82.0	0.0

Source: AMData and author's calculations

Table 5. Size of private acquisitions by country
(1984-june 1991)

COUNTRY	DOMESTIC DEALS			BIDDING ROLE (1)			TARGET ROLE (2)			Size of the banking industry (3)
	Total million ECUs	Number of deals	Average million ECUs	Total million ECUs	Number of deals	Average million ECUs	Total million ECUs	Number of deals	Average million ECUs	
Belgium	153,62	3	51,20	465,89	9	51,76	471,85	8	58,98	13049
Denmark	726,14	11	66,01	903,54	14	64,53	1075,22	19	56,59	9945
France	3640,01	24	151,66	6418,56	58	110,66	4367,53	33	132,35	39283
Germany	585,99	4	146,49	3171,17	14	226,512	1030,60	7	147,23	62723
Greece	12,41	1	12,41	12,41	1	12,41	14,32	2	7,16	1437
Ireland	20,50	2	10,25	24,91	3	8,30	159,89	3	53,30	na
Italy	3493,01	37	94,41	4776,33	50	95,52	5467,22	51	107,20	47001
Luxembourg	0,00	0	0,00	29,99	1	29,99	135,38	2	67,69	6990
Netherlands	20,24	2	10,12	291,94	9	32,44	53,04	4	13,26	12642
Portugal	0,00	0	0,00	98,06	2	49,03	66,72	3	22,24	4002
Spain	1208,65	10	120,86	1256,49	14	89,74	3298,62	35	94,25	31477
UK	1591,76	109	14,60	3106,93	126	24,66	3209,06	117	27,42	85252
Not available	0,00	0	0,00	82,74	1	82,74	1899,60	20	94,97	
TOTAL	11452,33	203	56,42	20638,97	302	68,34	21249,06	304	69,90	

(1) Deals in which the bidder is from the country involved

(2) Deals in which the target is from the country involved

(3) Pro-memoria. Capital and reserves. Average 1985-1989 in million ECUs Source: OECD Bank profitability and own corrections for incomplete coverage of OECD data

Source: AM Data and author's calculations

Note: Not all acquisitions in the database include information on the amount of the transaction

Table 6. Size of private acquisitions by industry
(1984-june 1991)

INDUSTRY	INTRA-INDUSTRIES			BIDDING ROLE (1)			TARGET ROLE (2)		
	Total million ECUs	Number deals	Average million ECUs	Total million ECUs	Number deals	Average million ECUs	Total million ECUs	Number deals	Average million ECUs
Banking	7829,71	68	115,13	10914,71	111	98,33	10375,49	106	97,88
Other financial activities	2915,24	68	42,87	4430,18	97	45,67	9183,96	168	54,66
Insurance	5305,66	68	78,02	7855,25	93	84,46	8272,68	113	73,20
Other	-	-	-	4632,00	86	53,86	-	-	-
TOTAL	16050,61	204	78,68	27832,14	387	71,92	27832,13	387	71,92

(1) Deals in which the bidder is from the industry involved

(2) Deals in which the target is from the industry involved

Source: AMData and author's calculations

Table 7. Private acquisitions, domestic and intra-industry deals
(number of deals, 1984- June 1991)

	Intra-banking	Intra-insurance	Intra-OFI	Other	Total
EC domestic deals	131	68	131	233	563
Non-EC domestic deals	159	8	19	50	236
Non domestic deals	93	92	36	131	352
Total	383	168	186	414	1151

OFI: Other financial intermediaries

Source: AMData and author's calculations

TABLE 8

PUBLIC BID ACQUISITIONS IN THE EUROPEAN COMMUNITY'S FINANCIAL INDUSTRY

Country of the bidder	TARGET IS					S I Z E O F D E A I S					
	Number of events	Domestic		Extra EC		Not available	DOMESTIC		ALL		
		EC Non Domestic	Domestic	Domestic	Extra EC		Total amount (million ECUs)	Number of events	Total amount (million ECUs)	Number of events	Average (million ECUs)
Belgium	3	2	1	0	0	0	0	0	1829.72	1	1829.71
Germany	3	0	3	0	0	0	0	0	1488.50	3	496.17
France	50	39	6	2	3	8029.36	29	276.87	11104.30	40	277.61
Italy	8	7	1	0	0	2884.27	5	576.85	2896.94	6	482.82
United Kingdom	24	12	2	0	10	5074.36	12	422.86	3363.97	11	305.62
Netherlands	8	6	2	0	0	7069.28	6	1178.21	7673.20	8	959.15
Spain	4	4	0	0	0	787.52	2	393.76	787.52	2	393.76
Other EC	9	3	1	2	3	0	0	0	217.28	5	43.46
TOTAL	109	73	16	4	16	23844.79	54	441.57	29361.43	76	386.33

Source: AM Data and autor's calculations

Country of the target	BIDDER IS					S I Z E O F D E A I S					
	Number of events	Domestic		Extra EC		Not available	DOMESTIC		ALL		
		EC Non Domestic	Domestic	Domestic	Extra EC		Total amount (million ECUs)	Number of events	Total amount (million ECUs)	Number of events	Average (million ECUs)
Belgium	4	2	2	0	0	0	0	0	144.75	2	72.375
Germany	1	0	1	0	0	0	0	0	1423.75	1	1423.75
France	44	39	3	1	1	8029.36	29	276.87	8239.81	34	242.35
Italy	10	7	3	0	0	2884.27	5	576.85	3247.01	6	541.17
United Kingdom	28	12	3	2	11	5074.36	12	422.86	7974.54	28	284.81
Netherlands	5	6	1	0	0	7069.28	6	1178.21	8899.00	7	1271.28
Spain	5	4	1	0	0	787.52	2	393.76	787.51	2	393.76
Other EC	6	3	2	0	1	0	0	0	150.21	3	50.07
TOTAL	105	73	16	3	13	23844.79	54	441.57	30866.59	83	371.89

Source: AM Data and autor's calculations

TABLE 9
TRADE IN BANKING SERVICES IN THE EC (1981-1988)

	1981	1984	1985	1986
Germany				
Trade balance (milECUs)	182	344	379	531
of which intra-EC	74	147	161	236
RCA Index (in %)	53.22	64.66	64.13	72.05
Exports/Output (in %)	5.34	6.30	5.61	5.86
of which intra-EC	2.47	2.91	2.58	3.17
Imports/App. Consumption (in %)	1.69	1.42	1.28	1.18
of which intra-EC	1.00	0.83	0.75	0.65
Danmark				
Trade balance (milECUs)	-4	0	3	8
of which intra-EC	-3	-1	1	2
RCA Index (in %)	-50.00	0.00	8.57	13.11
Exports/Output (in %)	0.29	3.77	0.60	2.00
of which intra-EC	0.15	2.03	0.31	1.03
Imports/App. Consumption (in %)	0.87	3.48	0.50	1.49
of which intra-EC	0.58	2.32	0.28	0.92
Spain				
Trade balance (milECUs)	14	21	30	123
of which intra-EC	5	8	11	64
RCA Index (in %)	17.95	15.00	27.78	39.55
Exports/Output (in %)	3.78	3.50	3.21	7.20
of which intra-EC	1.40	1.20	1.21	3.52
Imports/App. Consumption (in %)	2.66	4.72	1.84	3.25
of which intra-EC	1.00	0.89	0.71	1.45
France				
Trade balance (milECUs)	-39	-56	11	-227
of which intra-EC	-38	-94	-46	-48
RCA Index (in %)	-4.40	-5.30	0.78	-5.88
Exports/Output (in %)	9.79	11.89	14.86	24.71
of which intra-EC	1.54	1.83	4.07	7.69
Imports/App. Consumption (in %)	10.66	13.05	14.66	26.99
of which intra-EC	2.46	4.01	5.02	8.10
Italy				
Trade balance (milECUs)	-778	-293	-195	20
of which intra-EC	-173	-103	-128	-99
RCA Index (in %)	-32.18	-14.07	-7.56	1.06
Exports/Output (in %)	17.54	13.47	15.90	11.34
of which intra-EC	4.51	2.56	2.55	1.64
Imports/App. Consumption (in %)	29.31	17.13	18.02	11.14
of which intra-EC	7.06	3.94	4.14	2.81
Netherlands				
Trade balance (milECUs)	4	58	-4	118
of which intra-EC	-2	4	-49	-2
RCA Index (in %)	2.30	17.79	-1.02	26.76
Exports/Output (in %)	7.53	12.68	11.64	18.65
of which intra-EC	2.62	4.76	2.57	3.31
Imports/App. Consumption (in %)	7.22	9.20	11.85	6.41
of which intra-EC	2.80	4.67	5.48	3.50
UK				
Trade balance (milECUs)	1076	1903	2311	2446
of which intra-EC	539	953	1156	1224
RCA Index (in %)	NA	NA	NA	NA
Exports/Output (in %)	NA	NA	NA	NA
of which intra-EC	NA	NA	NA	NA
Imports/App. Consumption (in %)	NA	NA	NA	NA
of which intra-EC	NA	NA	NA	NA
UEBL				
Trade balance (milECUs)	121	176	200	299
of which intra-EC	0	0	22	115
RCA Index (in %)	26.25	23.53	19.96	18.82
Exports/Output (in %)	34.53	41.90	37.82	38.33
of which intra-EC	8.66	11.97	12.59	19.65
Imports/App. Consumption (in %)	23.55	30.86	28.87	29.81
of which intra-EC	10.11	14.25	12.81	17.01

Source: Eurostat. RCA: (Exports - Imports) / (Exports + Imports) (in %)

Table 10. Foreign assets held by banks in selected European countries

	1986	1987	1988	1989	1990
By location* (index numbers: 1985, 100 constant dollars)					
Belgium	129	159	146	158	163
France	116	148	147	169	189
Germany	160	201	193	239	289
Italy	115	121	116	147	139
Luxembourg	128	159	157	183	217
UK	118	138	135	135	142
By nationality** (index numbers: 1987, 100 constant dollars)					
Belgium			101	109	121
France			128	138	158
Germany			128	150	180
Italy			137	165	186
Luxembourg			203	238	287
UK			118	116	119
Spain					
Netherlands					
As a % of total assets (only foreign loans as % of total loans)					
Belgium	58,8	57,3	58,9	56,9	
France	34,4	35,2	35,2	37,4	
Germany	13,9	14,2	14,8	16,7	
Italy	13,4	12	11,9	11,9	
Luxembourg	97,8	97,5	96,4	96,5	
UK	68,9	63,6	59,6	61,3	
Netherlands	34,5	34,4	32,5	35	

Source: BIS and Association Belge des Banques.

* Foreign assets held by banks located within the country.

** Foreign assets held by banks depending on its nationality and whatever the location.

Table 11. Foreign Direct Investment in Financial Institutions* (1984-1988)

(million ECUs)	1984	1985	1986	1987	1988
Extra-EC					
Undertaken	2941	2124	2932	1620	2303
Received(**)	2087	-179	3226	4466	3929
Net Extra-EC	-854	-2303	294	2846	1626
Intra-EC (***)					
by destination	1450	1589	3137	2332	4832
(% of total FDI)					
Extra-EC					
Undertaken	17	14	13	5	7
Received	34	-3	47	36	28
Intra-EC (***)					
by destination	33	28	30	20	21

Source: Eurostat

(*) All financial institutions except insurance companies.

(**) A negative number corresponds to a disinvestment

(***) Intra-EC as reported by destination countries.

TABLE 12
 MARKET SHARE OF FOREIGN INSTITUTIONS* IN SOME EC COUNTRIES
 (as % of total assets)

	1986	1987	1988	1989	1990
GERMANY	4,27	4,21	4,39	4,61	3,92
SPAIN	9,12	9,69	9,00	9,68	9,97
BELGIUM**	46,00	47,00	47,00	47,00	n.a.
FRANCE**	10,90	11,40	12,40	n.a.	n.a.
ITALY	2,45	2,91	2,79	2,90	n.a.
PORTUGAL	3,10	4,06	4,17	4,73	5,16
UK***	62,24	61,63	60,77	59,14	57,20

Source: central banks and other national sources. (Italy: ASS Bank, Portugal: Banco de Portugal)

* Includes banks incorporated under domestic law but controlled by foreigners.

** Banks registered under domestic law but belonging to foreigners plus branches of foreign banks

*** UK: does not include building societies

