Kredit und Kapital, Heft 3/1999
Seiten 369 - 392

The Forces Behind the Consolidation Trend in the European Banking Industry

By Johannes M. Groeneveld*, Amsterdam

I. Introduction

The European banking industry is changing rapidly. Mergers and acquisitions (M&A's) in the banking sector regularly hit the headlines. A recent example is the announced mega-merger of Swiss Bank Corporation and Union Bank of Switzerland, which will create the second-largest bank in the world, with total assets equivalent to around 600 billion dollars. For the Netherlands, the NMB Postbank merger and the ABN AMRO merger come to mind. In France, Germany and Italy, the – partial – privatisation of state-owned banks is high on the agenda.

This article takes a closer look at the background and implications of M&A's in the banking sector. According to some economists, the question of competition and concentration has gained in importance due to the Economic and Monetary Union (EMU) (see *Molyneux* and *Gardener,* 1997). Competition, and hence the pressure to use the banking capacity more efficiently, is expected to increase. Moreover, it may be assumed that the euro capital markets will become more transparent, deeper and more liquid than the existing national capital markets, which will make it cheaper for firms to obtain their financial means directly from the euro capital market (*Alogoskoufis* et al., 1997; *Shinasi* et al., 1997). This implies a relative decline in bank borrowing by companies, which could have repercussions for the volume of traditional banking operations and the position of banks in the intermediation process. If these predictions prove correct, M&A's between national and/or international banks or independent attempts to penetrate foreign banking markets could well

* The author wishes to thank J. Swank and anonymous referees for their comments on an earlier version of this article. All views expressed in this article are personal.

become necessary in order to survive or to establish a good position in certain segments of the euro market.

This paper provides a systematic overview of the reasons behind M&A's in the banking sector. It combines theoretical insights with evidence from existing empirical studies, which mainly focus on the US banking sector, so that recent developments in the European banking industry can be put in a historical perspective. To this end, I divide the driving forces behind M&A's into two broad categories. From the literature, it appears that M&A's are mostly aimed at achieving input and/or output efficiencies. These two categories of arguments will be discussed in Section III. If the prevailing legal framework impedes M&A's, possible efficiency improvements through M&A's obviously remain beyond reach. Therefore, this article begins with a brief outline of the backgrounds of and recent developments in EU banking regulation. Section IV. presents a picture of M&A's in the EU during the past decade. Subsequently, Section V. characterizes the market structure in a number of representative European countries as well as in the EU banking industry as a whole in terms of capacity, competitiveness and concentration. The individual countries comprise France, Germany, Italy, the Netherlands, Sweden and the United Kingdom, because their banking systems appear to differ remarkably in various respects. The main findings and some policy considerations are presented in Section VI.

II. Regulation of banks

The institutional environment in which banks operate is largely determined by regulatory rules. The traditional arguments for regulating banks hinge on their prominent position in the financial intermediation process. Banking regulation essentially serves three main purposes: (i) to protect creditors, (ii) to counter market imperfections, such as lack of competition, and external effects, and (iii) to maintain financial stability. Protecting the interests of creditors is intended to maintain confidence in the banking system. The basic argument is that individual depositors are not really in a position to judge whether their bank is financially sound. In practice, creditor protection often takes the form of deposit guarantee schemes. As regards the second purpose, it should be borne in mind that, in certain circumstances, market dynamics in the banking sector can result in an unstable market and loss of wealth. This 'excessive or destructive' competition argument, as it is known, has been used particularly in the United States to justify strict regulation of the banking sector. In addition, possible externalities of banking behaviour are put forward as arguments to subject banks to some form of supervision. Against this background, capital adequacy standards have been formulated for banks. The classical example of an externality is the possible adverse consequences of the failure of one credit institution on the entire financial system (that is, systemic risk). A related, third objective of banking supervision is to maintain financial stability, that is, to promote confidence in the financial system as a whole. The quality and the allocative function of the financial system must be safeguarded in order to ensure a smooth functioning of the real economy. Among other things, this requires a smooth operation of (inter)national payments systems, in which banks play a dominant role.

The first argument for regulating banks, i.e. consumer protection, has hardly been challenged in recent decades. However, this is not the case for a certain facet of the second argument, i.e. improving the allocation of resources in the economy and fostering a sound competitive environment. This argument became critized by academics in the early '70s. The prevailing view prior to that time was that regulation contributed to a smooth functioning of the market. However, now the idea began to gain ground that regulation was in fact maintained by pressure groups – in this case, established financial firms – with the purpose to safeguard their positions, so that they could make excessive profits as monopoly suppliers at the expense of politically weaker groups in society (consumers). By supporting regulation, established players were able to avoid competition from new entrants. In other words, the effect of regulation is not confined to redistributing income; it can also erect barriers to new entrants to the market and create inefficiencies. This altered perception recently resulted in the United States in the removal of numerous restrictions on opening bank branches outside the home state, which has produced considerable efficiency gains (see *Jayaratne* and *Strahan,* 1997).

In practice, it can be shown that government intervention was fairly extensive in most of the banking systems in Europe up to the mid-'80s. Moreover, there were numerous barriers restricting competition as regards the activities of banks both within their national markets and across borders. Some countries applied capital restrictions or erected high obstacles to the establishment of branches by foreign banks. This institutional environment constituted a serious impediment to M&A's in the banking sector, particularly the cross-border ones.

The Second Banking Coordination Directive of 1989 can be seen as a turning point[1], and is, in fact, the outcome of the aforementioned altered perceptions concerning a specific facet of regulation. This Directive heralded drastic changes in the European banking industry. In the first place, it boosted financial deregulation and internationalisation. This process was accompanied by the formulation and implementation of other policy initiatives such as the gradual abolition of restrictions on capital flows, the lifting of restrictions on interest payments and the development of a harmonised framework for European banking supervision. Since the beginning of 1993, there has been total freedom as regards the provision of financial services in the European Union. Banks which are licensed anywhere in the Union are given a 'single banking licence', which allows them to service the entire European market, either by setting up branches in other countries or by offering products across national borders within the EU. Thus, the formal obstacles to bank M&A's have been largely eliminated.

However, the abolition of a large number of formal restrictions obviously does not guarantee that attempts by national banks to expand their activities into other countries will be easy. Even today, differences in national tax systems, consumer protection and legal requirements continue to prevent the creation of a perfectly 'level playing field'. Moreover, the divergent corporate governance structures of banks could also constitute large impediments for domestic or cross-border M&A's.[2] Apart from these informal obstacles, the special bank/customer relationship and the fact that national banks lack any sort of reputation in other countries form effective barriers to banks with international ambitions in the retail market as well (*Conigliani* et al., 1997). The latter aspects will be examined in greater detail below.

III. Driving forces behind M&A's

Berger et al. (1993) and *English* et al. (1993) approach the question of M&A's from two different angles. They point out that M&A's are prompted by input and/or output arguments. Input arguments concern

---

1 See the *European Commission* (1997) for a detailed study on the consequences of the implementation of the single market programme for the European banking sector.

2 For Germany, the ten largest banks include five banks under public ownership. Going by the standard of direct or indirect control of over 50 percent of equity, the share of public banks in Italy is 57 percent.

the desire to use the production factors more efficiently. Through M&A's, banks try to achieve the same production output with a smaller input. The literature relating to this argument devotes considerable attention to the cost functions of banks. On the other hand, banks may also seek to achieve efficiencies on the output side. As we shall see in Section III.2., such output efficiencies should be understood in the broadest sense of the word.

1. Input efficiencies

In official press releases, cost considerations are frequently mentioned as the main argument for M&A's. It is expected that M&A's will enable the banks involved to produce the same level of – different – products with less input factors. Here, banks are considered to be multiproduct firms. In other words, M&A's are assumed to lead to more efficient production processes and lower costs per unit of output. This aspect has been very exhaustively studied in the US literature over the years, with the emphasis on three measures of efficiency (*Berger* et al., 1987; *Allen* and *Rai,* 1996). Where unit costs are cut with increased output of different products, economies of scale are said to have been achieved. Companies can also achieve cost savings if it is cheaper to produce certain products jointly rather than in separate businesses (economies of scope). In addition, expansion allegedly leads to greater X-efficiency, a measure referring to the quality of the management and the efficiency – that is, the organisation – of the production process.

The prevailing view in the literature is that the optimal size, the size of the market and the demand-side perception of the extent to which the products offered differ, determine the number of viable banks (*Sapir,* 1993). A natural monopoly will eventually emerge when only one producer is able to produce all products at minimum cost. If, however, there is room for more than one producer, an oligopoly will obviously develop. Here, it should be borne in mind that, if the banking market is characterized by increasing returns to scale, the optimal size of an individual bank (in terms of an efficient operation) will be constantly increasing with expanding demand. In this situation, the natural driving forces behind M&A's will always be present, and consolidation is the result of a dynamic market process. This may provide an explanation why the consolidation trend in the banking industry has, in fact, always been present and is likely to continue in the future. Taken to its logical extreme, this natural tendency to concentrate activities should ultimately lead to the survival of only one viable bank. On the other hand, in the absence of economies of scale and scope for all products, it will be possible for numerous banks to operate in a highly competitive market in certain circumstances. There is also room in the marketplace for various banks if customers perceive the products offered heterogenous rather than homogeneous.

Most empirical studies on the impact of M&A's on scale, scope and X-efficiencies pertain to the US.[3] The general picture emerging from these studies is that the situation in banking markets can best be qualified as naturally oligopolistic. Most of these studies also come to the conclusion that M&A's in the US banking sector have yielded hardly any economies of scale. In other words, increasing the size of a credit institution does not significantly reduce the costs per unit of output.[4] As far as economies of scope are concerned, the empirical results are less clear-cut (see *Berger* et al., 1987). A recent study on the effect of M&A's on the X-efficiency indicates that, a few years after merger, the X-efficiency of merged banks compared with that of non-merged banks exhibits a small, but significant deterioration (*Peristiani,* 1997). This kind of empirical study suffers from some serious caveats, though. The drawbacks mainly concern the way in which bank inputs and outputs are measured, what items are included in the cost function and what estimation techniques have been used. The results also depend on the assumptions made with respect to branch networks (see *Schaffer,* 1993). When national banks with dense branch networks merge, substantial cost savings could well be achieved by closing branches.[5]

---

3 *Vennet* (1995) is one of the few studies on the efficiency effects of takeovers in the European banking industry. This study draws on a sample of 492 takeovers between EU credit institutions over the period 1988 - 1993. The methodological approach consisted of a univariate comparison of the pre- and post-merger performance of involved parties. Vennet hardly finds any efficiency gains and therefore concludes that managerial motives are likely to lie behind most domestic M&A's. The principal driving force behind cross-border M&A's seems to be the opportunity to gain a foothold in other EU markets.

4 *Swank* (1996) reaches the same conclusion regarding the Dutch banking industry.

5 *Rhoades* (1998) studies the efficiency effects of nine mergers. The mergers analyzed were, however, selected on the basis of characteristics that, according to some industry observers, should cause a merger to result in efficiency gains. Therefore, mergers between banks with considerable office overlap were chosen. Among other things, Rhoades concludes that four of the nine mergers showed clear efficiency gains relative to peers.

2. *Output efficiencies*

Apart from input considerations, the reasons behind M&A's are often related to the desire to achieve efficiency gains on the output side of the banking production process. For instance, M&A's can be motivated by so-called strategic considerations. This category of arguments includes, for example, the diversification of risks, the expansion of geographical coverage or the increase of market share. It should also be pointed out that a merger or acquisition can provoke other banks to think that there are output efficiencies to be gained. In fact, something of a herding behaviour then comes into play. Many banks will begin to ask themselves whether they can really afford not to be part of the M&A activities. Finally, less noble motives, such as boosting the standing and prestige of the management, can play an important role in some M&A's.

With M&A's prompted by output considerations, it is important to distinguish between M&A's involving two domestic banks and those involving a domestic bank and a foreign bank. In the first case, as already mentioned, the cost savings (or input efficiencies) which are expected to accrue are commonly cited. It should be remembered, however, that a side effect, if not the main purpose of a M&A between two domestic banks, can be that their combined market power, particularly in the domestic retail market, will be strengthened. This could enable the new banking combination to reduce existing or potential competition or, in a worst-case scenario, to realize extra profits. The desire to increase market power is, of course, never explicitly mentioned, but the possibility that this output argument has been a significant factor in some domestic M&A's cannot be excluded. On the other hand, strengthening the position in the home market can be seen as a necessary precondition for creating a financial base for a possible future expansion abroad. Domestic M&A's can also take place with a view to establishing a good position in the international wholesale markets. In these markets, it is more important to have a certain critical mass in order to be able to serve the increasingly internationally oriented clients. Put another way, the benefit of the latter M&A's lies more in the increased financial strength.

In the case of cross-border M&A's, the following points should be noted. Where the aim is to expand geographical coverage, it is important to take into account the special nature of banking services, and specifically the contacts with and the information on customers (*Tirole,* 1988). This is particularly relevant for the traditional activities of banks, namely deposit-taking and lending in the retail markets. In the lending and savings markets, the distribution network continues to play an important role (although for how long remains to be seen). For domestic banks wishing to gain a foothold in retail markets in other countries, the obvious strategy is a M&A with a foreign bank rather than a M&A with another domestic bank (see *Vennet*, 1995). Building up an international distribution system from the home country is after all costly and time-consuming, mainly because of the informal barriers faced by national banks attempting to enter foreign markets. By merging with or acquiring a foreign bank, the domestic bank also has direct access to information on the clients of the foreign bank in question. This information is usually based on a longstanding bank-customer relationship and is therefore extremely valuable.[6]

IV. Mergers within the EU

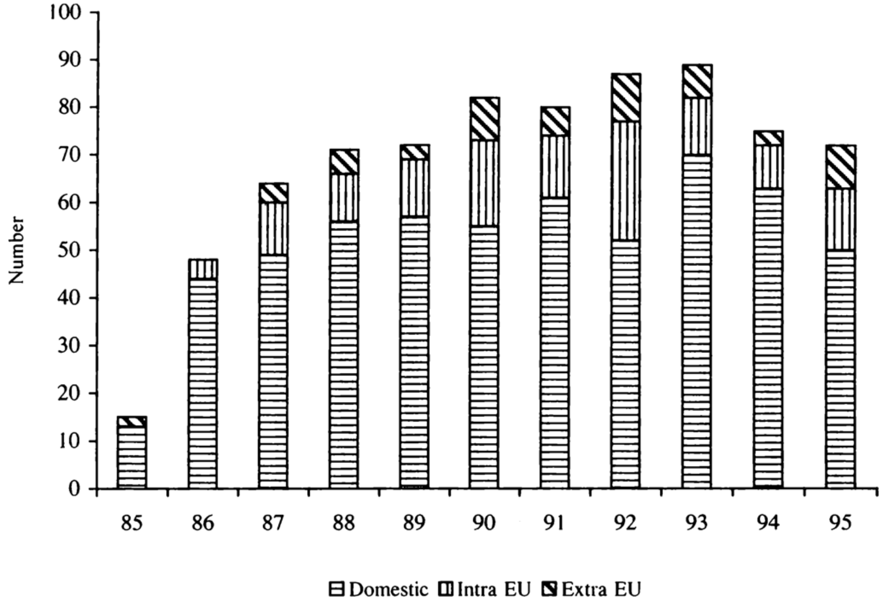
The scope for and perceptions with respect to input and/or output efficiencies to be achieved by M&A's mainly depend on the market environment in which banks operate. This market structure is not static, but very dynamic. For instance, formal barriers to different markets have largely been removed and a diversification of financial services has taken place. The latter aspect reflects the abolition of the functional segregation of financial institutions and hence of their 'compulsory' specialisation.[7] Developments in the information technology have also considerably altered the market conditions for banks in recent years. Electronic banking and electronic money are obvious new products of this technological progress (*Groeneveld* and *Visser*, 1997), which potentially make cross-border banking operations easier. In addition, the creation of EMU is bound to affect the playing field for the banking world in general and for European banks in particular.

All these inherent dynamics in the market structure have clearly left their mark on the European banking scene since the mid-1980s. This is reflected in Graph 1, which shows the number of mergers, acquisitions and joint ventures in the EU since 1985. In the intervening years, there

---

[6] For international wholesale operations, having an extensive international branch network is hardly important.

[7] As far as the Netherlands is concerned, there is the additional factor that the policy of strict structural segregation in the financial services industry was abandoned in the mid-'80s, thereby enhancing the scope for mergers, takeovers and other forms of alliance between banks and insurance companies.



Source: European Commission (1997).

Figure 1: Number of M&A's in the EU financial sector

have been approximately 750 such transactions. As further analysis of the figures was not possible, they relate to financial transactions in the whole of the financial sector in the EU. Although no other source of historical data for earlier years appears to be available, *Hoschka* (1993) concludes on the basis of a qualitative study that the number of transactions in the period 1975 - 81 was much lower than it has been since the mid-'80s. The stabilisation of M&A activity at a relatively high level after 1985 suggests that the implementation of the Single market program, if not its anticipation, prompted banks to intensify their M&A activities. The *European Commission* (1997) provides some anecdotical evidence that the volume of M&A transactions has risen somewhat in the course of time. Initially, small savings or cooperative banks have been most likely to be involved in M&A activities due to (anticipated) changes in the market environment, which altered the prospects to realize input and/or output efficiencies. M&A's enabled small banks to safeguard their competitive position or implied that they fell victim to takeovers by larger, nationally or regionally oriented banks. After this consolidation among small banks, M&A activities involving larger banks have become more common. The mega-mergers in the Netherlands around 1990 illustrate this point.

Graph 1 also reveals that the share of foreign M&A's, both inside and outside the EU, has increased. Obviously, input and output arguments have also played a role. It is, for example, much easier to establish a good position in retail markets in other countries via cross-border M&A's. Even so, over two-thirds of the transactions in 1995 still involved a domestic partner. The underlying figures indicate that financial institutions in the United Kingdom, France and Germany are the most active predators on the M&A front, while financial institutions in the United Kingdom, France, Spain, Italy and Belgium are the main M&A targets. German banks are hardly targets, which partly reflects their established protective ownership structure (see *Bank of England*, 1993).

V. The structure of the European banking industry

In the following, I shall examine how the European banking scene has developed in recent years, in the light of the wave of M&A's. To this end, the banking industry in a number of representative European countries will be characterized on the basis of several key indicators. I focus on the banking industry in France, Germany, Italy, the Netherlands, the United Kingdom and Sweden, because the features and history of their banking industries differ considerably. I shall also attempt to extract future scenarios for the European banking sectors from this analysis.

More specifically, attention will be paid to capacity, competition and concentration. It is worth noting that these concepts are interrelated and accordingly affect each other, although not necessarily in the same way.[8] These concepts will be given empirical content on the basis of simple indicators commonly used in the literature. Obviously, the effects of M&A's on the banking structure are difficult to isolate from those of other factors. For instance, our proxies for capacity, competition and

[8] In certain circumstances, a highly concentrated banking sector can hinder competition. The assumption is that concentration translates into greater market power in such cases, thus leading to extra profits for the expanded financial institutions (see *Gual* and *Neven*, 1992). On the other hand, a concentrated banking industry can behave competitively if the hurdles to be surmounted by new entrants to the market are low. The continuous threat of potential new players is, it seems, the compelling factor behind competitive behaviour (see *Baumol*, 1982).

concentration are also influenced by the business cycle and technological developments. Although the data presented are derived from the same international source, the figures are in some cases based on different national accounting standards. Therefore, some caution should be exercised when interpreting these data.

Table 1 contains proxies for capacity in the banking industry in the aforementioned European economies and in the EU as a whole. The key figures indicate considerable rationalisation in the European banking sector.[9] This is reflected particularly in the sharp drop in the number of banks per 10,000 inhabitants. Apart from bank failures, it can be safely said that M&A's are largely responsible for the fall of this ratio. Undoubtedly, M&A's have also led to input efficiencies in the form of a reduction in the number of branches. However, the contraction of the branch network in most countries has presumably also been facilitated by the widespread acceptance of Automatic Teller Machines, thus reducing the need for front desk personnel. Interestingly, the restructuring process in the period covered has only resulted in a slight loss of jobs in the banking sector per 10,000 inhabitants. A decline in counter staff appears to have been largely compensated by an increase in the number of jobs in other parts of the banking business. It may be, for instance, that customer advice on investments or portfolio management, or trading in financial products has created additional jobs.

Another noticeable feature is that the levels and the development of the indicators vary from country to country. Compared with other countries, the capacity in the German banking sector is fairly ample on all fronts. As far as Italy is concerned, only the number of banks points to ample capacity, albeit to a far lesser extent than in Germany. The UK banking industry operates under the lowest level of distribution capacity. The United Kingdom has, for example, by far the lowest branch network density.

Concerning the reduction in capacity, the Scandinavian countries occupy the highest position, with cuts in the number of banks and branches ranging from almost 70 % for Sweden to 30 % for Denmark. These figures reflect the extensive rationalisation operations following the wave of bank failures in the early '90s. Incidentally, the number of banks in France and Germany also shows a sharp drop of more than 35 % and 25 %, respectively. The third indicator reveals that cash dispen-

9 In terms of numbers of bank branches, Italy forms an exception to this rule. The increase has to do with the deregulation of bank branching policy in the late 1980s.

Table 1

Simple proxies for capacity in the European banking industry (per 10,000 of the population)

	Banks			Bank branches			ATMs			Bank employees		
	1985	1990	1995	1985	1990	1995	1985	1990	1995	1985	1990	1995
France	0.16	0.15	0.10	4.6	4.5	4.4	1.6	2.5	3.9	77	76	71
Germany	0.57	0.56	0.43	7.3	7.0	6.4	1.2	1.4	4.4	94	98	93
Italy	0.19	0.18	0.16	2.3	3.1	4.3	0.0	1.7	3.8	57	60	63
Nether-lands	0.09	0.12	0.11	5.9	5.3	4.3	0.7	1.8	3.6	75	78	73
Sweden	0.41	0.37	0.13	4.2	3.8	3.1	1.5	2.5	2.7	50	53	49
UK	0.11	0.10	0.10	3.9	3.5	2.8	1.6	3.0	3.6	68	79	69
EU average[a)]	0.41	0.39	0.29	5.2	4.7	4.8	na	2.0	4.3	65	69	64

Notes:
a) Unweighted average for the fifteen countries of the European Union. – na = not available.

Source: National supervisory authorities.

sers were almost absent from the Italian and Dutch street scene in 1985. But these two countries have caught up quickly. Right now, throughout the EU each 10,000 inhabitants have four ATMs at their disposal. The capacity of the Dutch banking industry is currently just below the European average, and it is obvious how the mega-mergers around 1990 were accompanied by a substantial reduction in the number of bank branches (over 25 %).

As noted earlier, competition considerations can be important driving forces behind M&A's. Competitive relationships in the banking market are often analysed by reference to the income and cost structure of bank systems (see *Berger* et al., 1993). The usual argument is that competition squeezes income, and thus necessitates cost-cutting.[10]

Net interest income relative to total assets gives an indication of the net return which banks are making on their lending and funding opera-

10 It should also be noted that other factors can be at work. For instance, the level of the cost ratios is also determined by the type of banking products and by the complexity of the banking operations.

tions. Table 2 presents these data in terms of averages across three consecutive periods. This seeks to reduce the impact of cyclical fluctuations on the data, although severe crises such as in the Nordic countries in the 1990s remain apparent even when averaged out over a 4-year period and different divisions of the 1984 - 95 period could be appropriate in order to capture the business cycle of banks in some instances. With the exception of Sweden, net interest income has fallen in all countries. Underlying OECD figures reveal that interest income on lending operations exhibits a slightly sharper drop than the interest expenses for funding. This consistent picture suggests that, to a certain extent, the decline in these two components is attributable to the same factors in different countries, e. g. the general fall in interest rates. Net interest revenues have also dropped, because banks have partly switched to wholesale market operations, where the net interest margin is generally smaller than in the retail segment. If the figures are roughly corrected for income from wholesale activities by deleting central bank and interbank assets from total assets and the resulting figure is used as denominator, the decline in the interest margins on traditional lending turns out to be 5 - 7 percentage points lower than the reductions shown in Table 2.

So how should the level of interest income be interpreted? On the one hand, a relatively high ratio may reflect a lack of competition in the lending market, the argument being that borrowers are obliged to turn to banks for funds. In this situation, banks are able to charge higher interest rates for loans. On the other hand, a low ratio can indicate a less competitive environment in certain circumstances. For example, if there is extensive government regulation of the banking sector, the profit incentive may possibly be reduced. The ratios are also influenced by the nature of the banking activities, of course.[11]

It appears that Italian and British banks have almost always realized the highest net interest revenues. Net interest income in France, however, lags behind that in other countries. The fairly large government influence in the French banking sector presumably diminishes the incentive to maximise profits. The relatively high interest income of the Italian banking industry, where a large part of the banks is also owned by the state, may appear difficult to reconcile at first sight with the relative ample capacity in Italy. However, this finding could be related to the relatively low degree of competition in the Italian domestic financial sector.

[11] For instance, Luxembourg banks, which occupy a prominent position in the highly competitive, and therefore less attractive interbank deposit market, have the lowest ratio (1992 - 1995: 0.8).

Table 2

Income and expenses of the European banking industry[a)]

	A			B			C			D (≈ A + B - C)		
	Net interest income			Non-interest income			Operating expenses			Net income		
	84/87	88/91	92/95	84/87	88/91	92/95	84/87	88/91	92/95	84/87	88/91	92/95
France	na	1.8	1.3	na	0.5	0.9	na	1.6	1.5	na	0.7	0.7
Germany	2.4	2.0	2.1	0.6	0.6	0.6	1.8	1.8	1.7	1.1	0.9	1.0
Italy	3.4	3.3	2.9	1.2	1.0	0.8	2.9	2.7	2.5	1.7	1.6	1.3
Netherlands	2.4	2.1	1.8	0.8	0.8	0.8	2.0	1.9	1.8	1.1	0.9	0.9
Sweden	2.3	2.2	2.5	1.1	0.8	1.9	1.9	2.3	4.5	1.2	0.7	-0.1
UK	3.1	3.1	2.4	1.8	1.9	1.9	3.2	3.3	2.8	1.6	1.7	1.5
Average[a)]	na	2.4	2.2	na	0.7	1.0	na	2.3	2.6	na	1.3	0.9

Notes: a) Expressed as a percentage of total assets; b) Unweighted average of the fifteen countries of the European Union. – na = not available.

Source: OECD, Bank Profitability.

Column B in Table 2 reflects a shift – albeit slight – in the activities of the majority of European banks.[12] Commission and fee-based income is growing, while the net income from the traditional banking activities of lending and deposit-taking is shrinking (see column A). Banks have become more active in securities and derivatives trading, in portfolio and liquidity management and in the management of share and bond issues. Putting it another way, banks have shifted their focus to activities which are not reflected in the balance sheet.[13] In addition, banks are closely involved these days in the establishment, management and promotion of investment funds. In the period 1984 - 1995, the increase in non-interest income was insufficient to compensate the drop in interest income. The stock market boom has changed all that. According to press releases from major European banks, commission income has shown a spectacular rise in 1996 and 1997, thus enabling the majority of European banks to achieve sizeable profits.

The desire to cut costs is frequently cited as an important reason for M&A's. However, a glance at the figures in column C of Table 2 does not give the impression that the aggregate level of costs has fallen significantly, despite all the M&A's that have taken place since the mid-1980s. Admittedly, this observation is somewhat tentative because (i) off-balance sheet activities have increased in recent years (albeit not necessarily to the same degree in individual banking systems) and (ii) changes in operational costs also depend on factors unrelated to M&A's. Anyway, the marginal fall in this ratio in the non-Nordic countries agrees with the findings of other, more in-depth studies, which by and large provide no support – certainly as far as the short term is concerned – for the hypothesis that M&A's can be expected to yield substantial cost reductions and/or input efficiency gains.[14] With the exception of the Scandinavian countries, operating expenses generally show only a slight down-

---

12 Some economists take the view that this represents banks' reaction to their diminishing market share in the financial intermediation process (disintermediation). The process has presumably to do with the increased importance of institutional investors and investment funds, but can also stem from the increased scope which non-banks have for going directly to the capital market to raise external funds (securitization). According to *Korteweg* (1996), supply and demand factors, demographic developments and changes in tax systems play an important role in the former aspect. *McCauley* and *White* (1997) stress the importance of the second factor.

13 The question of whether tapping new sources of income has altered the risk profile of banks is beyond the scope of this article. A study of this aspect would require more detailed analysis of the changes in capital ratios.

14 For a general overview, see *Pilloff* and *Santomero* (1998).

ward trend.[15] OECD figures suggest that staff costs have been slightly reduced, but that spending on information technology has increased instead.

Intuitively, the link between the M&A process and the level of concentration is more obvious than the relationship between M&A's and competition. M&A's lead to larger banking combinations, which shows up in more concentrated banking sectors. Table 3 contains three simple indicators of concentration. Here, the market share of the five largest banks in the whole banking sector in each country is presented for total assets, lending and deposits. It appears that the degree of concentration in the various national banking sectors differs considerably and has increased somewhat in the entire EU. Prior to the early '90s, the Netherlands scores highest on all fronts, followed by Sweden and France. Owing to the wave of restructuring via M&A's and of bankruptcies, Sweden takes the lead from the Netherlands in two of these three areas since 1990. Finally, the banking sector in Germany stands out as having the lowest degree of concentration.

Looking at all EU countries, it appears that, on average, the larger countries exhibit lower concentration ratios than the smaller countries. This is not so surprising, since there is room for more viable banks in countries with greater populations. Indeed, if it is assumed that banks have the same optimal size and the same cost function, the number of viable banks is larger the larger the country. In the case of the smaller EU countries, it is perhaps also possible that the authorities have, in fact, deliberately encouraged the creation of large national banks with an eye to the establishment of the single market.

At this point, it should stressed that it is difficult to draw conclusions about the competitive nature of the banking markets based on these concentration ratios (see also footnote 8). Firstly, the figures for the banking industry as a whole can mask sharply different degrees of concentration in specific segments of the market. In professional markets, competition is perhaps more fierce, and a critical mass may be required that exceeds the one which would be appropriate for national markets. In contrast, in the retail lending market, banks still operate in fairly fragmented national markets. A prime example is mortgages; very few consumers turn to foreign mortgage lenders. This implies that the degree of concen-

15 In contrast to the practice in other EU countries, losses on lending activities in Sweden (and Finland) are accounted for as operating expenses and not included in the provisions.

Table 3

Degrees of concentration in the banking sectors of several European countries (five largest banks as percentages of the total)

	Assets			Loans			Deposits		
	1985	1990	1995	1985	1990	1995	1985	1990	1995
France	na	43	41	na	45	47	na	59	68
Germany	na	14	17	na	14	14	na	12	13
Italy	21	19	25	17	17	26	20	19	25
Netherlands	73	73	76	67	82	81	85	86	86
Sweden	67	70	88	63	65	90	58	61	84
UK	na	22	22	na	31	33	na	23	24
EU average	na	45	49	na	46	50	na	47	52

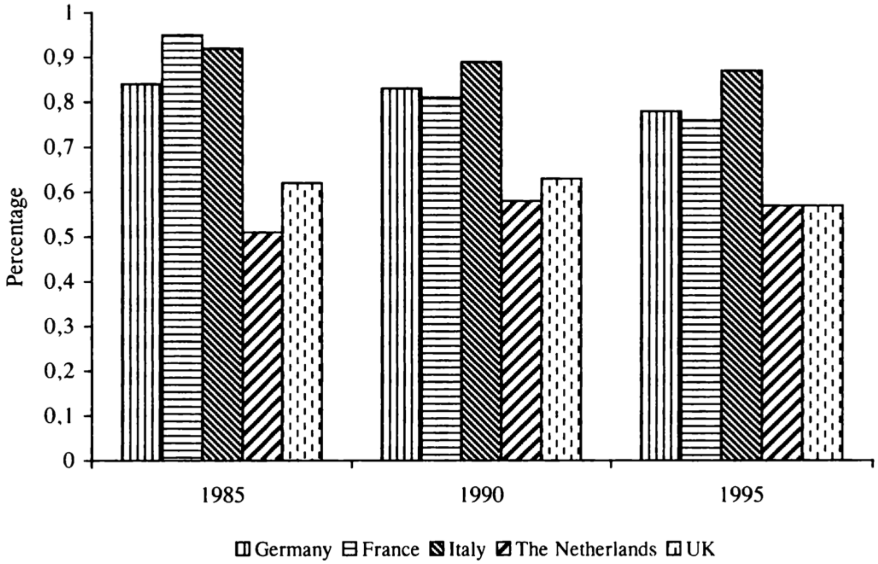
Notes: na = not available.

Source: National supervisory authorities.

tration in local markets should be viewed in a different light than that in wholesale operations.

Secondly, for a proper evaluation of the relationship between concentration and competition, one should also take into account the volume of the intermediation activities on behalf of non-bank financial institutions in specific segments of the retail markets. The high concentration index for the banking industry must be interpreted differently if other financial institutions also have a significant market share. Unfortunately, owing to a lack of international data, a detailed analysis by market segment is not possible. Graph 2 does, however, provide useful information on the relative position of banks and other financial intermediaries at the macro-level.

In this graph, domestic lending by banks is expressed as a percentage of aggregate borrowing by domestic consumers and businesses. The graph reveals the dominant position of local banks in the financial systems of Germany and Italy. The market share of Italian banks, at no less than 87 %, is by far the greatest. According to *Conigliani* et al. (1997), this large market share reflects the relative underdevelopment of the Italian capital market. Trailing some way behind are the German banks, with a market share of 78 %. The graph indicates that the low level of



Source: National balance sheet statistics; The Netherlands: Statistical Bureau.

Figure 2: Share of banks in the total domestic intermediation process

concentration in the German and Italian banking sectors is not quite the full picture, since the importance of other financial intermediaries in these countries is fairly limited. On the other hand, although the Dutch banking industry is strongly concentrated, other financial institutions also perform an important function in the intermediation process. The position of the five major UK banks in the financial system of the United Kingdom is also smaller than the figures in Table 3 suggest. Other financial institutions take care for almost fifty percent of all financial intermediation in the UK. In more general terms, banks appear to have lost some ground over the years. In all countries, however, banks continue to be the most important financial intermediaries.

Another way to illustrate this point is to look at the market share of foreign banks. In this respect, the market share of foreign banks, measured in terms of total assets, amounts to almost 50 % in the United Kingdom. The corresponding figures for France, Germany, Italy, the Netherlands and Sweden are 11, 4, 3, 10 and 2, respectively.

VI. Summary and conclusions

Developments in the information technology, the process of deregulation and the establishment of EMU have impacted on the structure of European banking markets. These factors have changed the scope for and perceptions with respect to input and/or output efficiencies to be achieved through M&A's in the banking industry. Indeed, the number of M&A's has increased considerably since the mid-80s. M&A's are, in turn, partly responsible for the reduction in capacity and the slight increase in concentration in the EU banking industry during the last decade. Concerning the competitiveness of banking markets, the impact of M&A's is more difficult to disentangle from that of other elements.

The theoretical and quantitative evidence presented in this article suggests that the cost argument for M&A's in the European banking industry is not very convincing. Since 1985, operating expenses relative to total assets have shown only a marginal decline, despite the fact that the number of independent banks in the EU has fallen by around 4,000 to 9,800 over the past ten years. Taking into account the main findings of empirical studies on the input efficiencies of M&A's in the US banking sector, this leads me to conclude that output arguments – such as the desire to increase the critical mass, market power, market share, geographical coverage, diversification of risks, management prestige or financial strength – are more important driving forces behind M&A's in the EU. It is also possible that the urge to merge or acquire is simply catching within the industry.

Looking at individual countries, the indicators for the German banking industry generally compare unfavourably with those of other countries and with the European average. For instance, the capacity in the distribution channels appears to be very ample. The data for Italy and France also indicate a relatively abundant capacity, or perhaps a less competitive environment. As far as Italy is concerned, the relatively high net interest income and operating expenses are an indication of this. The low net interest income and commission income of the French banking industry, on the other hand, probably reflects the fairly extensive government influence. As regards both income and expense structures and capacity, the Dutch banking industry occupies an intermediate position, while its concentration is well above the EU average. The UK banking sector is characterized by a low branch network density, high net interest and commission revenues as well as high operating expenses and a low level of concentration. Taken in conjunction with the large share of banks in the total domestic intermediation process (see Graph 2), the evidence also suggests that German and Italian banks face less competition from foreign banks and other domestic financial intermediaries than banks in the other countries under review.

The above considerations imply that further consolidation may be expected in the French, German, and Italian banking sectors in particular. It is questionable, though, whether this process will follow the same pattern as, for example, in Sweden or the Netherlands, because the share of publicly owned banks has been traditionally much higher in France, Germany and Italy. In this respect, it must be noted that different schemes for the privatisation of banks are or have been implemented in these countries. It is also unlikely that the expected consolidation process will ultimately lead to similar concentrated banking sectors as, for instance, in the Netherlands. Indeed, the size of their domestic markets is bigger and, consequently, offers room for more viable banks.

Anyway, the consolidation possibly involves mainly domestic M&A's at the initial stage. Asymmetric information problems plus the time-consuming nature of any attempt to build up lasting relationships with customers in other countries will surely remain obstacles for other European banks with aspirations of establishing a foothold in France, Germany and Italy. It is, therefore, also likely that the latter banks will opt for some form of partnership with local credit institutions, provided that their ownership structures allow for this.[16] The dense branch network in Germany, for instance, makes it difficult for foreign banks to penetrate the German market independently. Saturation of the domestic retail markets is often the driving force behind the desire of the major national banks to expand in foreign markets.

Looking into the future, we can expect the establishment of EMU to reinforce already prevailing trends in the European banking sector. To begin with, the introduction of the euro creates a bigger playing field for financial institutions. In other words, the market structure in the European banking sector is about to undergo drastic changes, and national banks will become less dependent on their traditional markets. For instance, the single currency will result in deeper and more liquid European capital markets. This may intensify the disintermediation process, resulting in a decline in demand for bank loans, especially as far as large

16 According to the *Bank of England* (1993), the German financial sector has yet hardly been contested because of the established protective ownership structure, the historically strong bank/customer relations and customer loyalty.

companies are concerned. If mainly small firms remain dependent on bank loans, a deterioration of the risk profile of the banks could be expected. Moreover, the establishment of EMU will bring about further convergence of national regulatory regimes, intensify competition and expose hidden excess capacity. For some countries, especially those where there is ample capacity in the banking industry, further restructuring in the banking sector can be expected. Consequently, this would lead to more concentrated national banking sectors. However, it will become increasingly difficult to interpret national concentration ratios in the single currency area. Concentration ratios for different segments of the 'EMU' retail market will become much more informative and relevant in the future.

These various developments mean that European regulatory authorities will continue to be confronted with new M&A's in the banking sectors in the near and distant future. Their task will be to guarantee healthy competition and to ensure an orderly process of rationalisation. Initially, M&A's will predominantly be of a domestic nature, since cross-border M&A's will still be accompanied with numerous formal and informal hurdles. In some cases, M&A's are complicated by legal or fiscal aspects, but often cultural differences with regard to management style, strategies and the way in which customer contacts are maintained, constitute the main obstacles (see *Kalff,* 1996).[17] Furthermore, bank supervisors have to be aware of the possibility that the risk profile of banks deteriorates.

All in all, I feel that a European banking consisting of three layers sector will eventually emerge. The first group comprises small institutions with a strong regional basis. These banks function as banks 'at the corner of the street', mainly for private individuals, and offer tailor-made products. The second category consists of banks which are active in more than one country, the EU regional players. These institutions will specialise in serving large European companies. The third group will be formed by a few, very large institutions with operations throughout the EU (and beyond). For these institutions, the home territory will not be an individual European country but the entire EU.

---

[17] On the basis of a comparative study of the situation in France, Germany and Italy, *Conigliani* et al. (1997, p. 297) come to the conclusion that: 'National boundaries, having become almost evanescent through the process of integration in the European Union, seem to maintain their discriminating role in terms of the practice and the customs which characterize the customer relationship between banks and firms'.

References

Allen, L. and A. *Rai* (1996): 'Operational Efficiency in Banking: An International Perspective', Journal of Banking and Finance, vol. 20, pp. 655 - 672. – *Alogoskoufis*, G., R. *Portes* and H. *Rey* (1997): 'The emergence of the Euro as an International Currency', CEPR Workshop, Options for the Future of the Exchange Rate Policy of the EMU, 4 - 5 April, Paris. – *Bank of England* (1993): 'Cross border alliances in banking and financial services in the single market', Quarterly Bulletin, vol. 33, no. 3, pp. 372 - 378. – *Berger*, A. N., D. *Hancock* and D. B. *Humphrey* (1993): 'Bank efficiency derived from the profit function', Journal of Banking and Finance, vol. 17, no. 2 - 3, pp. 317 - 347. – *Berger*, A. N., G. A. *Hanweck* and D. B. *Humphrey* (1987): 'Competitive Viability in Banking: Scale Scope and Product Mix Economies', Journal of Monetary Economics, vol. 20, pp. 501 - 520. – *Baumol*, W. J (1982): 'Contestable Markets: An Uprising in the Theory of Industrial Markets', American Economic Review, vol. 72, no. 1, pp. 1 - 15. – *Conigliani*, C., G. *Ferri* and A. *Generale* (1997): 'The impact of Bank-firm Relations on the Propagation of Monetary Policy Squeezes: An Empirical Assessment for Italy', Banca Nazionale del Lavoro, Quarterly Review, vol. 50, no. 202, pp. 271 - 299. – *English*, M., S. *Grosskopf*, K. *Hayes* and S. *Yaisawarng* (1993): 'Output allocative and technical efficiency of banks', Journal of Banking and Finance, vol. 17, no. 2 - 3, pp. 349 - 366. – *European Commission* (1997): 'Single Market Review: Impact on Services vol. 3: Credit Institutions and banking', subseries II. – *Groeneveld*, J. M. and A. *Visser* (1997): 'Seigniorage, Electronic Money and Financial Independence of Central Banks', Banca Nazionale del Lavoro, no. 200, pp. 70 - 88. – *Gual*, J. and D. *Neven* (1992): 'Deregulation of the European banking industry', CEPR, Discussion Paper, no. 703. – *Hoschka*, T. C. (1993): Cross-Border Entry in European Retail Financial Services, New York, St Martins Press. – *Jayaratne*, J. and P. E. *Strahan* (1997): 'The Benefits of Branching Deregulation', Economic Policy Review, Federal Reserve Bank of New York, vol. 3, no. 4, pp. 13 - 29. – *Kalff*, P. J. (1996): 'The Future of International Banking: The ABN AMRO View', in Essays on Money, Banking and Regulation, (Eds.) C. Kool, J. Muysken and T. van Veen, Kluwer Publishers, pp. 173 - 184. – *Korteweg*, P. (1996): 'The Competition between Funds and Banks', in Essays on Money, Banking and Regulation, (Eds.) C. Kool, J. Muysken and T. van Veen, Kluwer Academic Publishers, pp. 149 - 157. – *McCauley*, R. and W. *White* (1997): 'The Euro and European Financial Markets', BIS Working Papers, no. 41, Basle. – *Molyneux*, P. and E. P. M. *Gardener* (1997): 'Cost Economies in European Banking and the Implications of EMU', CEPS, Business Policy Report, no. 4, pp. 1 - 14. – *OECD*: Bank profitability, various issues. – *Rhoades*, S. A. (1998): 'The efficiency effects of bank mergers: An overview of case studies of nine mergers', Journal of Banking & Finance, vol. 22, pp. 273 - 291. – *Sapir*, A. (1993): 'The Structure of Services in Europe: A Conceptual Framework', in European Economy Social Europe: Markets Services and European Integration, no. 3, pp. 83 - 97. – *Schaffer*, S. (1993): 'Can megamergers improve bank efficiency?', Journal of Banking and Finance, vol. 17, no. 2 - 3, pp. 423 - 436. – *Shinasi*, G. and A. *Prati* (1997): 'European Monetary Union and International Capital Markets: structural implications and risks', IMF, Seminar on EMU and the International Monetary System, 17 - 18 March, Washington, DC. – *Swank*, J. (1996): 'How Stable is the Multiproduct Translog Cost Function? Evidence from the

Dutch Banking Industry', Kredit und Kapital, vol. 29, no. 1, pp.153 - 172. – *Tirole*, J. (1988): The Theory of Industrial Organization, Cambridge, Mass, MIT Press. – *Peristiani*, S. (1997): 'Do Mergers Improve the X-Efficiency and Scale Efficiency of U.S. Banks? Evidence from the 1980s', Journal of Money, Credit and Banking, vol. 29, no. 3, pp. 326 - 337. – *Pilloff*, S. J. and A. M. *Santomero* (1998): 'The Value Effects of Bank Mergers and Acquisitions', in Bank Mergers and Acquisitions, (Eds.) Y. Amihud and G. Miller (Eds), Kluwer Academic Publishers, Boston. – *Vennet*, R. V. (1995): 'The Effect of Mergers and Acquisitions on the Efficiency and Profitability of EC Credit Institutions', University of Ghent, Department of Financial Economics, no. 95/07.

Summary

The Forces Behind the Consolidation Trend in the European Banking Industry

This paper analyzes the backgrounds and implications of the consolidation trend in the European banking sector in a systematic way. Aside from deregulation and innovations in the information technology, it is argued that the EMU constitutes an important driving force behind mergers and acquisitions in the EU banking industry. Here, a distinction is made between so-called input and output considerations on the one hand, and domestic and cross border mergers and acquisitions on the other. The desire to achieve input efficiencies refers to the proclaimed existence of scale, scope and X-efficiencies. The other category of arguments emphasizes the wish to realize efficiencies on the output side of the production process (e.g. an increase in market share or the prestige of the management). The latter category of arguments appears to be more valid. On the basis of theoretical and empirical reflections, further consolidation is expected to take place in France, Germany and Italy in particular. Moreover, a European banking sector consisting of three layers is a distant prospect. (JEL G21, G28, G34, L11)

Zusammenfassung

Die dem Konsolidierungstrend im europäischen Bankensektor zugrundeliegenden Kräfte

Dieser Beitrag untersucht systematisch die Hintergründe und Implikationen des Konsolidierungstrends im europäischen Bankensektor. Das Argument lautet, daß zusätzlich zu Deregulierung und Innovation in der Informationstechnik die EWU eine bedeutende Triebkraft ist, die für Zusammenschlüsse und Übernahmen im europäischen Bankensektor verantwortlich ist. Hier wird unterschieden zwischen sogenannten Input- und Outputerwägungen einerseits und inländischen sowie grenzüberschreitenden Zusammenschlüssen und Übernahmen andererseits. Der Wunsch nach Effizienzgewinnen auf der Inputseite betrifft die angebliche Existenz von Größen- und Umfangsvorteilen sowie sonstigen nicht näher bezeichneten Vorteilen (X-Vorteile). Die andere Kategorie der Argumente betont den Wunsch nach Effizienzgewinnen auf der Outputseite des Produktionsprozesses

(z.B. Ausweitung des Marktanteils oder das Prestige der Unternehmensleitung). Die zweite Kategorie von Argumenten scheint eher zuzutreffen. Auf der Grundlage theoretischer und empirischer Überlegungen muß insbesondere in Frankreich, Deutschland und Italien mit weiterer Konsolidierung gerechnet werden. Darüber hinaus ist ein aus drei Schichten bestehender europäischer Bankensektor eine eher entfernte Perspektive.

Résumé

Les forces qui sous-tendent la consolidation dans le secteur bancaire européen

Cet article analyse d'une manière systématique les fondements et les implications de la tendance à la consolidation dans le secteur bancaire européen. Abstraction faite de la dérégulation et des innovations dans la technologie de l'information, on argumente ici que l'UME constitue une force motrice importante des fusions et des acquisitions dans le secteur bancaire de l'UE. Une distinction est faite ici entre les considérations d'input-output d'une part et les fusions et acquisitions nationales et transnationales d'autre part. Le désir de réaliser des inputs efficients se réfère à l'existence proclamée d'économies d'échelle, de gammes et d'efficiences-X. L'autre catégorie d'arguments souligne le souhait de générer des efficiences du côté de l'output du processus de production (c'est-à-dire une croissance de part de marché ou le prestige du management). Cette dernière catégorie d'arguments semble plus valide. Sur la base de réflexions théoriques et empiriques, on s'attend à d'autres consolidations en France, en Allemagne et en Italie en particulier. En outre, un secteur bancaire européen constitué de trois plans est une perspective éloignée.