

Banking in Western Europe

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Overview

At the beginning of the 21st century, banks in Europe play a dominant role in providing funds to the corporate, private, and public sector. The terms that best describe the European banking market are those of liberalization and integration, processes, which started as early as 1957 with the Treaty of Rome and were enhanced by the 1985 White Paper. In 2001, banks are still adapting to the new European market place. The driving forces behind this process are numerous, including not only deregulation and integration, but also restructuring, disintermediation, demographics, and technological innovations. As a result, European banking markets have become more competitive, more concentrated, and more integrated.

1. The role and state of banking in Europe

Banks play an important role in the financial structure in Europe. When deciding how to invest or raise funds, companies and individuals can choose between raising money from banks in form of loans or from the financial markets in form of equity or debt securities. On the investment side, the choice between bank deposits in form of savings accounts and market investments in securities or funds has to be made. The European Central Bank (ECB) (2001) reports that in 1999 in the euro area including Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Luxembourg, Portugal, and Spain, bank deposits and bank loans amounted to 80 and 91.1 per cent of the gross domestic product (GDP), respectively. These are clearly higher than the percentages found in the market-oriented system of the United States, which shows 41.0 and 76.1 per cent, respectively. For outstanding domestic debt securities, however, the per cent is lower in the euro area with 90.1 per cent compared to the United States with 178.0 per cent. Similarly, stock market capitalisation amounts to 128.7 per cent in the United States but only to 64.7 per cent in the euro area. Compared to the euro area countries, the United Kingdom is considered to be more market oriented. Nevertheless, the overall financial structure in Europe can be characterized as bank rather than market oriented.

The European banking market can be characterized by looking for example at its capacity, its profitability, and its competitiveness. According to De Bandt and Davis (2000), the banking industry not just in Europe but in many industrialized countries has been experiencing increased competition and European banks have responded in various ways including a shift from interest to non-interest income activities or a reduction in excess capacity via mergers or branch closures. In comparison, however, German, French, and Italian banks are less competitive than banks in the United States. The competition in the banking system has an impact on capacity and profitability. Considering capacity, there are more than 8000 financial institutions in Europe, but their numbers have been decreasing since 1990 by on average 16% as Table 1 shows. Similarly, the number of bank employees has been decreasing whereas the number of branches has been stable. However, the total pattern is by no means representative, as significant differences between countries exist in all three categories. Regarding profitability, the ECB (2000a) concludes that between 1979 and 1994, overall bank profitability in Europe was falling due to reduced interest margins but despite an increase in non-interest income and provisions, a decrease in operating and staff cost. Despite the increase in profitability from 1994 to 1997, pressure on profitability still remains due to continuing reductions in interest margins.

Table 1: The capacity of the banking sector:

country	banks		branches		employees	
	number in 1999	change in % 1990-99	number ¹ in 1999	change in % 1990-99	number ¹ in 1999	change in % 1990-99
Austria	951	-21	0.57	-2	9.25	-5
Belgium	119	-24	0.68	-24	7.47	-6
Denmark	109	-12	0.43	-26	8.30	-22
Finland	352	-33	0.30	-55	4.71	-53
France	1,143	-44	0.43	-4	7.03	-8
Germany	3,167	-33	0.54	-14	9.22	-17
Greece	54	32	0.24	24	5.38	17
Ireland	80	67	0.28	4	n.a.	n.a.
Italy	876	-24	0.47	51	5.99	0
Luxembourg	210	19	0.88	0	49.39	18
Netherlands	101	-9	0.40	-26	9.39	19
Portugal	233	-10	0.48	138	5.68	-8
Spain	383	-45	1.00	20	6.25	1
Sweden	123	-75	0.24	-37	4.88	-8
United Kingdom	494	-21	n.a.	n.a.	8.26	-23
Average	560	-16	0.50	4	10.09	-7

Source: ECB (2000c), averages calculated by the author. n.a. indicates that data are not available. ¹ per 1,000 capita.

The falling number of banks that are mainly the result of two merger waves since the late 1980s provide a first indication of the increased concentration in European banking. This perception is enforced when looking at the percentage of assets of the five largest banks relative to the assets of all banks in the country. Even if the extent of concentration differs widely across Europe, it appears that larger countries have relatively less concentrated banking systems. In 1999, European countries can be separated into three groups (ECB, 2000c): (1) high concentration countries with more than 70 per cent including Belgium, Denmark, Finland, Greece, the Netherlands, Portugal, and Sweden, (2) medium concentration countries with 40 to 60 per cent including Austria, France, Ireland, Italy, and Spain, and (3) low concentration countries with less than 30 per cent including Germany, Luxembourg, and the United Kingdom. For loans and deposits, a similar picture emerges.

Finally, considering the internationalization of European banking, two points can be made: First, the on-balance-sheet activities of banks are still predominantly domestic and international activities are only slowly increasing. As data reported by the ECB (2000b) shows, the domestic focus is more pronounced for bank lending and deposit taking than for financial market activities. In 1999, 79.8 per cent of all loans were domestic increasing to 91.2 per cent when considering only loans to the non-bank private sector. Regarding deposits, 72.8 per cent of all deposits and 86.5 per cent of deposits to the non-bank private sector were domestic. For holdings of fixed income securities, 66.7 per cent of all government securities and 39.5 per cent of all non-bank private securities are domestic. Only for this last business activity is the foreign business dominant and euro area

holdings amount to 19.1 per cent. However, for all activities - with the exception of deposits from the non-bank private sector - growth rates for euro area activities are positive and larger than the corresponding growth rates for domestic activities. Second, the market shares of foreign banks in Europe are still very low in most countries in 1997. For Denmark, France, Italy, the Netherlands, Austria, Finland, Portugal, and Spain the market share of foreign banks was below 12 per cent. In Belgium and Ireland, the market shares were in the mid-range with 36.3 and 53.6 per cent, respectively. Only Luxembourg shows with 99.9 per cent a dominance of foreign banks (ECB 1999a, 1999b).

This state of the banking system outlined above is the result of various driving forces, including deregulation, integration, restructuring, technological innovation, demographics, and disintermediation. European demographics, for example, indicate a clear trend towards an ageing population, which in turn will affect saving behaviour as the need for more privately funded pension schemes arises. Demographic can thus impact disintermediation which is defined as a shift from a banking oriented towards a more market oriented system as individuals and companies replace bank deposits by investment in securities and funds or bank loans by debt or equity market issues. Furthermore, bank restructuring via mergers and acquisitions (M&A) naturally leads to a reduced number of banks and the increase in market concentration. However, the restructuring activities themselves are influenced by other driving forces such as deregulation and integration. How these three factors interact is complex and has to be considered in more detail.

2. The regulatory framework for an integrated banking market

The banking market in Europe has been shaped to a large extent by the regulatory process towards liberalization and integration in the European Union (EU). De Bondt (1998) shows that at the beginning of the 1980s, the regulatory characteristics in Europe ranged from highly regulated markets in Italy, France, and Belgium to only slightly regulated markets in Germany, the United Kingdom, and the Netherlands. In Italy, for example, restrictions to foreign entry, ownership, branching were in place as well as regulation of interest rates and fees. In Germany on the other hand the main regulatory restriction focussed on the separation of banking and insurance. In the EU, the establishment of the common market had been on the political agenda since the 1957 Treaty of Rome but according to Benink (2000) no substantial progress had been made in the 1960s and 1970s. In the mid 1980s, this process received more momentum as the 1985 White Paper and the 1986 Single European Act called for the free movement of goods, services, persons, and capital and the completion of the common

market by 1992. In the financial sector, the consequent deregulation took the form of directives, legislation that has to be implemented into national law of each EU member country in order to be binding. The two key directives are the First Banking Directive (1st BD) of 1977 and the Second Banking Directive (2nd BD) of 1989. The 1st BD allowed for cross border branching under the host country rule by which a bank had to obtain permission to operate by the supervisory agencies of the host country. As Zimmerman (1995) argues, the 1st BD was not very effective in reducing differences between national regulatory systems and was thus followed by the 2nd BD with the objective to improve efficiency and competition in the financial sector. The 2nd BD relied on three fundamental principles of harmonization, mutual recognition, and home country control and supervision. Harmonization should lead to a system where banks operating in several countries face a common set of EU regulations. Mutual recognition implies that the banking charter of the home country is sufficient to operate in all EU countries. Home country rule, finally, stipulates that foreign owned banks are regulated by their home country and not by the host country. Since 1986, additional directives have been passed concerning bank supervision, capital adequacy, solvency standards, money laundering, or publishing and consolidation of annual accounts to name but a few.

The latest piece in the regulatory process is the completion of the European Monetary Union (EMU). On January 1, 1999, the euro replaced the national currencies of Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain. Of the remaining EU countries, Greece initially failed to meet the required economic criteria but joined EMU in January 2001, whereas Denmark, Sweden, and the United Kingdom decided not join the EMU as yet. The immediate effects of the EMU included the switch of the foreign exchange, interbank, and securities markets to the euro, the introduction of a EMU-wide payment system, and the conduct of a single monetary policy via the ECB. Bank notes, however, will not be introduced until 2002.

From a legal perspective, researchers such as Zimmerman (1995) or Bredemeier (1995) consider the integration of EU banking as far advanced. However, there exist barriers to integration such as cultural differences in consumer behaviours including preferences for types of credit and investment and for investment horizons, which differ across countries. Thus, whereas interbank markets are integrated in the euro area (see ECB 2000a), retail-banking markets are not. For example, the lack of integration in the mortgage lending market is clearly due to the differences in national tax laws, subsidies, and administration (ECB 1999b) and cannot be expected to change simply based on the current banking regulation or the existence of a single currency.

However, there is evidence for the emergence of a single retail banking market. Regarding prime rate lending in

Europe between 1985 and 1997, Kleimeier and Sander (2000) find that even if European lending markets are not integrated yet, they have been converging since 1993. Looking then at European mortgage, consumer, and corporate lending markets between 1995 and 2000, Kleimeier and Sander (2001) find strong evidence for a structural break coinciding with the introduction of the euro and an associated shift from segmented to more uniform banking markets. This seems, however, to be driven by the single monetary policy under EMU rather than by institutional integration via cross-border borrowing and lending or a competitive international retail banking environment – a conclusion which is consistent with the banking market structure presented in the next section.

3. Restructuring the banking industry

Next to its impact on the integration of the European banking market, the 2nd BD clearly influences the banking sector through its definition of allowable banking activities. Banks in the EU cannot only provide the traditional banking services of deposit keeping, lending, money transmission, and payment services but can also engage in investment services such as trading for own account and for customers, participation in security issues, money brokering, portfolio management and advice, or safekeeping of securities (see Zimmerman 1995, Benink 2000). Furthermore, banks are allowed to hold equity in non-financial companies. Consequently, the 2nd BD implicitly promotes universal banking over specialized banking.

Whether, however, universal banking will be the future model for European banks and will help to achieve the regulatory goals of increased competition and efficiency is under debate. Vander Venet (1998), for example, argues that universal banking can lead to increased profitability due to diversification and cross-selling or due to positive spill-overs from non-bank equity holdings and to reduced operating cost due to economies of scale and scope. In an empirical analysis, he shows that universal banks are indeed more operationally and profit efficient than specialized banks. Eade (1994) reports that banks themselves also hold this view that universal banking leads to cost reductions via economies of scale and is beneficial due to increase possibilities to diversify risk. Canals (1999), however, argues that scale will not be a decisive factor and that the introduction of the euro will favour specialized over universal banks.

Resulting from the deregulation and its focus on universal banking and market integration, the 1990s have observed a large number of restructurings in banking. In principle, banks have to make two choices, one relating to type of bank they want to become in an integrated European banking market and the other concerning

how to become such a bank. Regarding the first choice, a bank can either become a Europe-wide universal bank, a domestic universal bank, a Europe-wide specialized bank, or a domestic specialized bank (Marois 1997). In order to do so, banks can either follow a going-alone strategy, an acquisition strategy, a co-operation strategy, or a merger strategy (Bredemeier 1995). According to Marios (1997), the strategies adopted by European are diverse and a predominant strategy has yet to crystallize. For French banks, the efforts in the early 1990s to become European-wide universal banks via acquisitions were less successful than the co-operation strategies of the late 1990s. Regarding the merger and the acquisition strategies, Table 2 reports the value of banking M&A between 1985 and 1997. What is not observable from this table is the fact that bank mergers occurred in two phases in Europe. The first phase took place in the late 1980s and early 1990s in reaction to the 2nd BD and the second phase took place in the second half of the 1990s in anticipation of the EMU (Tourani Rad and van Beek 1999). Since 1997, the value of annual M&A has more than tripled. According to the ECB (2000a), bank M&A amounted to 41 billion euro in 1997 and increased to 110 and 149 billion euro in 1998 and 1999, respectively.

Based on this table the following conclusions can be drawn: First, the total value of domestic M&A exceeds that of cross-border M&A (panel B and C combined). Looking at the three acquirer-types reveals that this remains true for commercial banks and securities firms. However, for insurance companies the value of cross-border M&A exceed the value of domestic M&A. The picture that results from this is one of a still geographically segmented banking market in Europe. Furthermore, for commercial banks and securities firms as acquirers intro-European M&A are of equal importance as Europe-Non-Europe M&A, a finding which indicates the presence of a global rather than regional consolidation process. Second, for all M&A types, consolidation within the sector is more common than consolidation across sectors. Exceptions are domestic M&A and to a lesser extend Europe-Non-Europe M&A when the acquirer is a securities firm. This indicates that most banks in Europe are still specialized banks. Combining both findings shows that the European banking market in the 1990s is still characterized by specialized domestic banks. More recently, the number of bank mergers, in particular domestic mergers, has increased from about 300 in 1995 to 1997 to 434 in 1998 and 497 in 1999 (ECB 2000c) but it is still too early to consider this a trend.

Table 2: Value of M&A in the financial sector between 1985 and 1997

target	commercial bank		acquirer securities firm		insurance company	
	value	per cent of total	value	per cent of total	value	per cent of total
<i>Panel A: Domestic M&A</i>						
commercial bank	89	36.0	23	9.3	11	4.4
securities firm	9	3.6	19	7.7	6	2.4
insurance company	20	8.1	24	9.7	46	18.6
<i>Panel B: Intra-European M&A</i>						
commercial bank	15.0	17.9	4.3	5.1	11.2	13.4
securities firm	8.7	10.4	5.8	6.9	0.3	0.4
insurance company	0.4	0.5	1.1	1.3	37.0	44.2
<i>Panel C: Europe-Non-Europe M&A</i>						
commercial bank	14.5	14.5	15.6	15.6	1.0	1.0
securities firm	4.3	4.3	15.9	15.9	3.1	3.1
insurance company	0.3	0.3	12.9	12.9	32.7	32.7

Source: Berger, Demsetz, and Strahan (1999). Values are given in billion of US dollar. For each panel, the per cent figures sum to 100.

Considering the effects of these M&A, bank effects have to be distinguished from market effects. Next to the direct effects of M&A on banks such as the reduction of the number of branches and staff reported in section 1, shareholder value effects are of interest. Tourani Rad and van Beek (1999) and Cybo-Ottone and Murgia (2000) conclude that overall M&A create shareholder value. There is also evidence for economies of scale and scope as smaller M&A and M&A between banks and insurance companies create relatively more value. However, the 2nd BD did not affect the value creating by M&A. On the issue whether cross border M&A are more beneficial than domestic M&A, the results differ. Whereas Cybo-Ottone and Murgia (2000) argue that domestic M&A create more value, Tourani Rad and van Beek (1999) do not find any difference between the two types. When considering the effects of M&A on the market as a whole, concentration and competition effects have to be taken into account. As discussed in section 1, the concentration of the banking markets has increased in the 1990s. However, an increase in concentration does not necessarily lead to a decrease in competition and thus to increased spreads for banks. It is rather the view of the ECB (1999b) that increased concentration is the result of increased competition as banks engage in M&A to increase efficiency and reduce cost.

4. The impact of information technology

Information technology (IT) has influenced all areas of banking through two principle channels: An internal and an external channel. Internally, banks have applied advances in IT since the 1960s and 1970s to convert paper

and labour intensive operations into computerized processes. The external application of IT, which shapes the way in which customers access a bank's services has been more recent. As a study by the ECB (1999c) shows, this external application shifts banking services away from the traditional branch banking to remote banking, including automated teller machines (ATM), electronic money, telephone banking, on-line security trading, or internet banking. Despite the fact that it is technologically possible to operate a bank on a fully remote basis without the existence of even a single branch, European banks opt for a combination of branch and remote banking and only very few truly virtual banks exist.

The extent to which remote banking is implemented differs across Europe. In countries where the focus has been on one specific application such as the use of telephone banking via Minitel in France since the early 1980s, the speed with which other technologies are introduced is comparatively slow. Since the late 1990s, however, a trend towards internet banking has been observable all across Europe. Table 3 illustrates the extent of selected remote banking services for different European countries in more detail.

ATMs and telephone banking are the most widely developed remote banking services, which allow customers to inquire about account balances, transfer money, or execute securities transactions. Between 1993 and 1997 access to ATMs has greatly increased with an average growth rate of 50% and fastest growth taking place in Greece, Denmark, Portugal, and Luxembourg. However, country differences are still pronounced. Despite the high growth rate, Greece still has the lowest density of ATMs with 209 per one million inhabitants compared to high-density countries such as Spain and Luxembourg with 863 and 613 ATMs per one million inhabitants respectively. Regarding telephone banking, access ranges from below 5% in Finland, Italy, and Sweden to 10% in France and the United Kingdom. Telephone banking has also been increasing during the 1990s but it can be expected that this growth trend will slow down as internet banking will become more and more common. Regarding the use of electronic payment instruments, Table 3 shows the density and growth of 'electronic funds transfer at the point of sale' (EFTPOS), an electronic terminal in a retail location at which immediate payment can be made via the use of a card. Exceptionally high densities and growth rates can be observed here but the difference between European countries is still quite pronounced. Electronic money is available in form of card-based or network money. In both cases, funds are typically prepaid. The use of electronic money is still much lower than ATMs but high growth rates are observed in some European countries including Belgium, Germany, Spain, Austria, and the United Kingdom. Overall, at the end of the 1990s cash still plays an important role but is used for smaller and more spontaneous payments whereas electronic payments are used for larger and more regular transactions (1999c). Despite the fact that between 1997 and June 2000, the use

of electronic money almost doubled from 75 to 140 million euro, its share remains insignificant as it stands at 0.04 per cent of bank notes and coins and 0.003 per cent of monetary aggregate M3 (ECB, 2000d).

Table 3: Selected remote banking services across Europe

country	telephone banking ¹	ATM machines		EFTPOS terminals		electronic money in 1997	
		number in 1997 ²	change 1993-97	number in 1997 ²	change 1993-97	number of cards ³	number of loading machines
Austria	n.a.	533	+67 %	1,652	+621 %	3,400	3,495
Belgium	5 %	492	+76 %	6,284	+48 %	3,430	6,438
Denmark	n.a.	253	+134 %	11,923	+184 %	n.a.	3
Finland	2 %	445	-25 %	10,506	+27 %	189	2,100
France	10 %	462	+42 %	9,555	+4 %	n.a.	n.a.
Germany	6 %	504	+64 %	1,984	+475 %	35,000	20,000
Greece	n.a.	209	+155 %	2,831	+1,075 %	0	0
Ireland	5 %	286	+30 %	1,402	n.a. %	0	0
Italy	3 %	444	+69 %	4,896	+268 %	62	945
Luxembourg	n.a.	613	+109 %	11,071	+32 %	0	0
Netherlands	5 %	410	+41 %	7,715	+381 %	n.a.	n.a.
Portugal	n.a.	631	+123 %	6,022	+116 %	384	5,129
Spain	6 %	863	+55 %	16,691	+101 %	3,502	10,942
Sweden	4 %	268	+5 %	7,778	+155 %	n.a.	n.a.
United Kingdom	10 %	393	+20 %	8,984	+94 %	113	1,295

Source: ECB (1999c). n.a. indicates that data are not available. ¹ For Germany and Italy in per cent of retail bank accounts. For Netherlands and Sweden in per cent of payment transactions. For France, Minitel users. For all other countries, in per cent of retail customer base. Data for 1997 and 1998 with the exception of 1996 for Belgium. ² per 1 million inhabitants. ³ in thousands.

Banks have been motivated to introduce IT mainly by cost considerations and for competitive reasons. Compared to branch banking, cost reductions of 60 to 70 per cent can be achieved by ATMs and EFTPOS or 75 to 99 per cent by internet banking. Additionally, IT influences the competitive position of banks as it allows for price reductions due to falling cost, faster response time to customer requests and more tailor-made bank services based on readily available customer information, and access to new markets due to the deterioration of geographic restrictions that were present in branch banking but less so in remote banking. However, given the state of the banking system described in section 1, developments in IT have not yet had an significant impact on the banking system in terms of number of branches. The only trend that is in line with the increase in remote banking is the small reduction of in the number of employees since the early 1990s (ECB 1999a, 1999b).

5. Conclusions and future outlook

This article has presented the state of the western European banking system at the beginning of the 21st century. Whereas the driving forces that have led to this system are numerous, specific attention has been given to the deregulation of the banking markets in the context of European integration, to the strategies adopted by banks to efficiently compete in this system, and to the impact of information technology. These existing forces will also shape the European banking market in the future but the single currency is expected to have an especially pronounced impact. Whereas the immediate effects of the EMU were most visible in the security and interbank markets, the effects on the retail banking market will be of a more medium to long-term nature. The ECB (1999a) expects various effects regarding banking activities, structure, strategies and risks. In the area of banking activities, banks expect slightly reduced profitability. Here the largest disadvantage of the EMU is the loss of foreign exchange income but banks expected to compensate with revenues from investment activities. Concerning banking structure, the current trend of capacity reduction is expected to continue as excess capacity still exists in many national markets. Disintermediation will also increase, more on the investment than on the fund raising side. However, on the investment side where the shift takes place mainly from deposits to investment funds, most funds will still remain under the control of banks as the universal banking approach of the 2nd BD allows them to engage in such activities. Future bank strategies are expected to be targeted at changes in product ranges, improvements in services and procedures, and internationalization in combination with mergers, alliances, or co-operative agreements. Finally, banking risks should decrease where credit, market, and liquidity risks are concerned but the still adapting legal environment in the EU will give rise to operational and legal risks in the short term.

Further reading

(* indicates that references are cited in the text)

*Benink, H. (2000) 'Europe's single banking market', Journal of Financial Services Research 17 (1): 319-322.

(A review of the history of EU banking regulation.)

*Berger, A.N., Demsetz, R.S. and Strahan, P.E. (1999) 'The consolidation of the financial services industry: Causes, consequences, and implication for the future', Journal of Banking and Finance 23: 135-194.

(An extensive review of the literature on banking consolidation.)

*Bredemeier, S. (1995) 'Integration within the banking sector' in: Lang, F.P. and Ohr, R. (eds) International Economic Integration, Heidelberg: Physica Verlag: 159-180. (A discussion of financial integration in

Europe with specific focus on Germany.)

*Canals, J. (1999) 'Scale versus specialization: Banking strategies after the euro', European Management Journal 17 (6): 567-575. (A discussion of the strategic affects of the euro on European banks with

specific attention to M&A and universal banking.)

*Cybo-Ottone, A. and Murgia, M. (2000) 'Mergers and shareholder wealth in European banking', Journal of Banking and Finance 24 (6): 831-859. (A research paper investigating the effects of bank mergers

on shareholder wealth considering geographic, legal, scale, and scope effects.)

*De Bandt, O. and Davis, E.P. (2000) 'Competition, contestability and market structure in European banking sectors on the eve of EMU', Journal of Banking and Finance 24 (6): 1045-1066. (A research paper

investigating the degree of banking competition in France, Germany, Italy, and the United States.)

*De Bondt, G. (1998) 'Financial structure: Theories and stylised facts for six EU countries', De Economist 146 (2): 271-300. (A survey of the financial structure in Germany, the United Kingdom, France, Italy,

Belgium, and the Netherlands.)

*Eade, M. (1994) 'Can there ever be a truly European commercial bank?', Banking World December: 13-18. (A practitioner's article discussing the structural changes in European banking in the 1990s.)

*European Central Bank (1999a) Possible Effects of EMU on the EU banking system in the medium and long term, February. (A discussion of how the EMU will effect European banking including a host of

statistics on the banking system.)

- *European Central Bank (1999b) 'Banking in the euro area: Structural features and trends', ECB Monthly Bulletin April: 41-53. **(A description of the trends in European banking including consolidation, cross-border activities, income and balance sheet characteristics.)**
- *European Central Bank (1999c) The effects of technology on the EU banking systems, July. **(A discussion of how information technology affects bank services provision, bank strategies, and bank risks.)**
- *European Central Bank (2000a) 'The euro area one year after the introduction of the euro: Key characteristics and changes in the financial structure', ECB Monthly Bulletin January: 35-49. **(A description of the economy in EMU countries and the financial market changes induced by the euro.)**
- *European Central Bank (2000b) 'EMU and banking supervision', ECB Monthly Bulletin April: 49-64. **(A review of how the euro has affected the banking market, i.e. bank supervision and bank activities.)**
- *European Central Bank (2000c) Mergers and acquisitions involving the EU banking industry – facts and implications, December. **(A discussion of the rationales of bank mergers, their benefits and risk-implications for EU banks and their implications for supervisors.)**
- *European Central Bank (2000d) 'Issues arising from the emergence of electronic money', ECB Monthly Bulletin November: 49-60. **(A discussion of the role of electronic money in the euro area financial system.)**
- *European Central Bank (2001) 'The euro area after the entry of Greece', ECB Monthly Bulletin January: 35-42. **(A description of the economy in EMU countries.)**
- Goddard, J., Molyneux, P., and Wilson, J.O.S., 2001, European Banking – Efficiency, Technology and Growth, Chichester: John Wiley & Sons, Ltd. **(A discussion of the structural changes in European banking with particular focus on competition, consolidation, and EMU.)**
- Kindleberger, C.P. (1984) A financial history of western Europe. London: Allen & Unwin. **(A description of the history of European banking.)**
- *Kleimeier, S. and Sander, H. (2000) 'Regionalisation versus globalisation in European financial market integration: Evidence from co-integration analyses', Journal of Banking and Finance 24 (6): 1005-1043. **(A research paper analysing the degree of retail lending market integration within Europe and between Europe and the United States or Japan.)**
- *Kleimeier, S. and Sander, H. (2001) Consumer credit rates in the eurozone – evidence on the emergence of a single retail banking market, ECRI Research Report No. 2, European Credit Research Institute,

Brussels, available at <http://www.ecri.be>. **(A consultancy report analysing the emergence of a single European retail banking market with particular reference to consumer credit and the role of the single monetary policy under EMU.)**

*Marois, B. (1997) 'French banks and European strategy', European Management Journal 15 (2): 183-189. **(An analysis of European strategies of French banks in the 1990s.)**

*Tourani Rad, A. and van Beek, L. (1999) 'Market valuation of European bank mergers', European Management Journal 17 (5): 532-540. **(A research paper investigating the effects of bank mergers on shareholder wealth considering synergy, cross-border mergers, management efficiency, and merger timing.)**

*Vander Venet, R. (1998) 'Cost and profit dynamics in financial conglomerates and universal banks in Europe', University of Ghent (mimeo). **(A research paper analysing the cost and profit efficiency of European banks.)**

*Zimmerman, G.C. (1995) 'Implementing the single banking market in Europe', Federal Reserve Bank of San Francisco Economic Review 3: 35-51. **(A review of the financial integration in Europe including a description of the legislation and an analysis of the benefits and cost of integration.)**