

INTEGRATION OF EUROPEAN BANKING AND FINANCIAL MARKETS

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David Marques Ibanez* and Phil Molyneux**

Abstract

This paper investigates banking and capital market developments in Europe and the moves towards the creation of a single financial services market. A critical element in the integration process is the success of the EU's Financial Services Action Plan (FSAP). This seeks to introduce a wide range of legislation aimed at reducing barriers and promoting cross-border trade in financial services - especially for capital markets and retail / SME financial service areas. As was the case in 1992, it is likely that the expectation of further financial market integration will encourage market participants to adjust their strategies in the light of these developments. Or to put it another way, many banks are likely to accelerate their plans to sell financial products cross-border given the changing environment. Stock and derivative markets will be encouraged to consolidate and investment and pension funds in the Euro zone will increasingly embrace the equity market culture and so on. Regulatory standards in the financial sector will move in line with international best practise and further harmonisation will take place. The challenge for the financial services industry is to reorganise and adapt to this new environment. Targeting a successful pan-European strategy post-2005 (the deadline for the FSAP) will be of critical importance for financial services firms in general.

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TABLE OF CONTENTS

1. INTRODUCTION	7
2. STRUCTURAL CHANGE AND INTEGRATION IN EUROPEAN BANKING	9
TECHNOLOGY	14
PRIVATISATION	18
TRENDS IN CREDIT AND DEPOSITS ACTIVITIES	20
EFFICIENCY AND PERFORMANCE IN EUROPEAN BANKING	23
CAPITAL AND RISK	33
3. INTEGRATION OF EUROPEAN BANKING SYSTEMS	39
4. INTEGRATION OF EUROPEAN CAPITAL MARKETS	41
5. CONCLUSION	47
REFERENCES	49

1. INTRODUCTION

The integration of banking and financial systems is of critical importance for the progress of a single European market in general and its function as a driver of growth and creation of employment. There has been constant emphasis on this point over the last decade or so by the different bodies of the Community, and many initiatives of the European Parliament, the European Commission and the ECOFIN Ministers.

The most important current initiative is the EU's Financial Services Action Plan (FSAP), approved in 1999 with a calendar of actions planned to finalise in 2005. The FSAP encompasses some 42 legislative and non-legislative measures that aim to fulfil three main objectives. First, to create an open and secure market for retail financial services. Second, to develop a single EU wholesale financial market and finally to ensure that the financial industry is overseen by appropriate prudential rules and supervisory practices.¹ EU Heads of Government have called for the FSAP to be completed by the beginning of 2005.²

A major motivation for the FSAP has been the political impetus to create a more market-orientated and competitive financial system through Europe by reducing cross-border barriers to trade in financial products and services. The main aim is, of course, to reduce fragmentation across different product areas and markets and to ensure that the system is supervised to the appropriate standard. In the context of these developments, Allen (2002) notes that the EU faces the important decision about how to structure its financial system - whether on 'an Anglo-Saxon market-based model, a German style bank-based system or some combination of the two?' (p.1). While the general tenet of the FSAP legislation veers towards a more market-based approach it is a fact that the bank-based system still predominates in most of continental Europe. It is likely, however, that the ongoing regulatory process is likely to result in the evolution of a more market-based system over time.

¹ For details on the FSAP see:

http://www.europa.eu.int/comm/internal_market/en/finances/actionplan/index.htm

² Information on the timing and adoption of the 42 initiatives can be found at:

http://europa.eu.int/comm/internal_market/en/update/score/score10_en.pdf

The aim of this paper is to consider in detail structural developments in the European banking and financial system and to analyse evidence on integration. The first part of the paper deals with banking sector developments and the second part on the financial markets.

2. STRUCTURAL CHANGE AND INTEGRATION IN EUROPEAN BANKING

Technological advances, de-regulation at the EU level and the introduction of the single market for financial services, have all played their part in fostering greater competition (see Matutes and Vives 1992, and Vives 2000) and market contestability (see De Bandt and Davis 1999) in European banking throughout the 1990's. An outcome of the increased competitive pressure has been reflected in the decline in the number of players in the market, normally as a result of mergers and acquisitions. This, in turn, has tended to increase the level of domestic market concentration. As Table 1 shows, a fall in the number of banks has been a shared tendency in all the largest European countries.

Table 2. 1 Number of institutions in the banking and credit services of five European countries

Country	1985	1990	1995	1998	% Change 85-98
France	1952	2048	1445	1209	-38.1
Germany	4739	4170	3785	3403	-28.2
Italy	1101	1043	970	921	-16.3
Spain	695	696	484	396	-43.0
UK	655	624	578	527	-19.5

Source: Adapted from Eurostat (1999) .

Another indicator of changing banking sector capacity is the number of bank branches per capita. Table 2 shows that the number of branches per capita started to fall much later than the decline in bank numbers. This could be interpreted as an indication that the impact of competition on the efficient allocation of bank physical resources is a more recent phenomenon. The table illustrates that most countries showed a decline in the number of branches, particularly those in which mutual banks (savings and co-operative banks) do not play a large role. However, for 3 out of 11 euro-area countries (Italy, Spain and Ireland), this measure of banking density continued to increase until 1998. Differences in this indicator varied substantially ranging from 0.98 branches for every 1000 inhabitants in Spain to 0.31 in Portugal, which is higher than the figure in the United Kingdom (0.27) or the United States (0.23).

Although this significant range of variation is probably mainly due to geographical conditions, competitive conditions are also very likely to have played a role in reducing the number of branches per inhabitant.

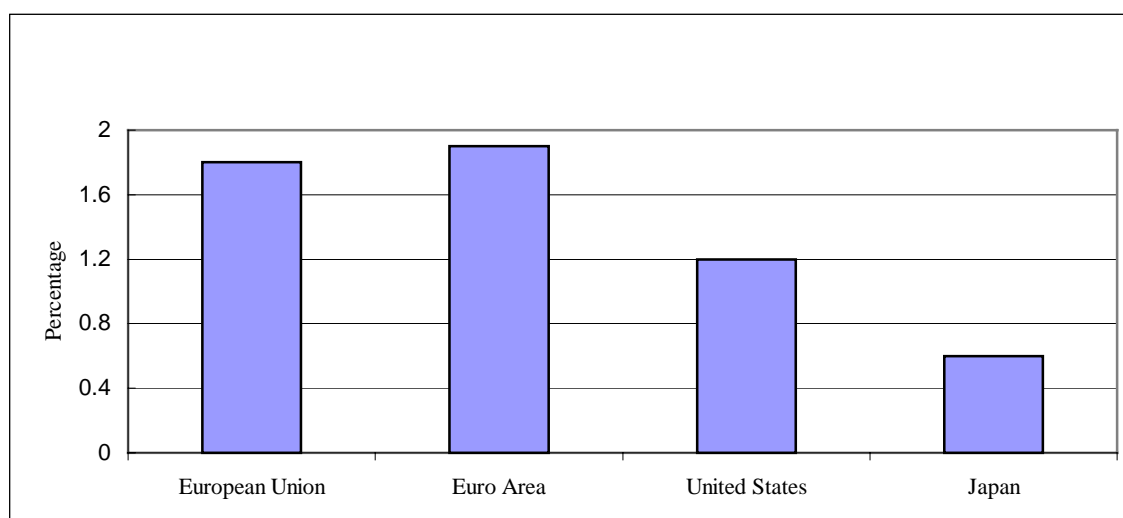
Table 2 Number of bank branches per 1,000 per capita

	1990	1995	1996	1997	1998
Germany	0.50	0.59	0.59	0.58	0.55
France	0.45	0.44	0.44	0.43	0.43
Italy	0.31	0.41	0.43	0.44	0.46
Spain	0.90	0.92	0.94	0.96	0.98
Austria	0.58	0.58	0.58	0.58	0.57
Belgium	1.35	0.76	0.74	0.72	0.70
Finland	0.66	0.38	0.34	0.32	0.31
Ireland	0.27	0.35	0.42	0.30	0.42
Luxemburg	0.78	0.85	0.92	0.95	0.92
Netherlands	0.54	0.44	0.44	0.40	0.39
Portugal	0.20	0.35	0.38	0.38	0.31
United Kingdom	0.38	0.30	0.28	0.28	0.27
United States	0.20	0.22	0.22	0.23	0.23
Japan	0.39	0.38	0.38	0.35	0.35

Source: ECB (2000), and Eurostat (1999)

Another factor that may be suggestive of the relative size of the banking sector would be the amount of employment in the banking industry as a percentage of total employment, as shown in Figure 1. Here, employment in the European banking sector can be seen to be substantially larger than in the United States or Japan.³

Figure 1 Employment in banking as a % of total employment (1997)



Source: ECB (1999) p. 5.

³ See Davis and Salo (1998) for a study in over-capacity in European banking.

The institutional background behind these figures comes from the fact that until the early 1990's, retail banking was relatively isolated from competition, either through formal or informal barriers to entry into the market, collusive agreements or regulatory capture. This situation appeared to occur in various European countries. In this sense, Molyneux, Lloyd-Williams and Thornton (1994), have suggested that between 1986 and 1989, banks in Italy and France earned revenues as if under monopoly or conjectural variations short-run oligopoly conditions. This lack of competition probably produced oligopolistic rents for stakeholders⁴, not only for owners but also for employees and managers in the case of expense preference behaviour and the 'quiet-life-hypothesis'⁵. In general, the limited competitive environment led to substantial inefficiencies and low returns on equity throughout the industry during the 1970's and 1980's. This lack of competition did not appear to be associated with industry concentration at a national level as the traditional Structure-Conduct-Performance paradigm would suggest, but rather at a local level. Various banks were also protected through more lenient tax/regulatory treatment (see IMF, 2000).

Overall, increases in competition appear to have forced concentration in Europe banking during the 1990's. Deregulation and consolidation trends within the European banking sector appears to have paralleled earlier developments in the US. For instance, the consolidation trend in the US resulted in the number of banking firms falling from 11,500 in 1992 to 9,200 by 1997. With the advent of nationwide banking and the full dismantling of the Glass Steagal Act, the number is expected to fall to 4000 (Mishkin 1999). As pointed out by Berger et al. (1999), the US experience may be illuminating because of the arguably strong parallel between financial service de-regulation in Europe and in the United States. Indeed, particularly striking is the common experience with geographical restrictions, namely interstate restrictions in the case of the US which began to fall in the early 1980s, and the cross border deregulation brought about by the Single Market in 1992 and the introduction of the Euro in 1999. Consequently, as shown in Tables 3 and 4, there has been an increase in the number of M&A of credit institutions in the European Union, albeit at a slower pace than in the US.. However, to date, there has been significant domestic consolidation of banking firms as well as significant M&A activity involving securities and insurance firms in European nations, but little international consolidation of European banks (Berger et al. 1999). According to a recent report by the BIS (2000), the preference for national consolidation is that it offers clearer opportunities for reducing costs and fewer complications in terms of handling the merger due to a normally more

⁴ Normally labour in the case of expense preference behaviour that was clearly taking place in the case of saving banks, but also for customers in the form of more branches or subsidised services.

⁵ See Hicks (1935).

homogeneous corporate culture. Besides firms try first to gain a stronger national presence so that they could be large enough to compete in a likely latter cross-country consolidation phase.

The reasons for banks to merge as well as the potential benefits from mergers are not clear in the literature⁶. Focusing only on the Euro area, empirical studies tend to find that the main factors of competitive advantage are not economies of scale but rather improvements in X-efficiencies⁷. Yet, it is surprising that in reality mergers and acquisitions do not appear to offer improvements in either efficiency measures or better stock market returns⁸.

Table 2 Total number of M&As of credit institutions (domestic and foreign)

	1st half					Average
	1995	1996	1997	1998	1999	95-98
Germany	122	134	118	202	97	144
France	98	123	119	160	27	125
Italy	78	60	46	58	31	61
Austria	14	24	29	37	0	26
United Kingdom	6	11	21	24	5	16
Spain	13	11	19	15	9	15
Luxemburg	3	2	3	12	5	5
Greece	0	1	3	9	3	3
Belgium	6	9	9	7	2	8
Finland	9	6	5	7	2	7
Portugal	6	6	2	5	2	5
Ireland	3	4	3	3	3	3
Netherlands	7	11	8	3	2	7
Denmark	2	2	2	1	1	2
Sweden	1	2	5	1	1	2
Sum:	368	406	392	544	190	

Source: ECB. (2000), p. 36.

⁶ See Dermine (2000) for a comprehensive survey of the literature.

⁷ See European Commission (1997), Van der Venet (1998), Altunbas, Molyneux and Thornton (1997)

⁸ Although according to Cybo-Ottone and Murgia (1998), abnormal returns can be expected associated with the announcement of domestic bank deals.

Table 3 Recent Merger and acquisition activity in the Euro area, the United States and Japan

(Euro billions, number of deals and percentage growth over the previous year)

		Euro area		United States		Japan	
		Bank	Non-bank	Bank	Non-bank	Bank	Non-bank
Value of transactions in EUR	1997	41.1	174.3	86.0	857.9	1.9	15.2
	1998	110.2	335.3	271.7	1,309.5	1.5	17.1
	1999	174.5	1,012.6	91.6	1,813.8	77.1	75.1
Annual % change in value of transactions	1998	168.0	92.3	215.9	52.7	-22.0	12.1
	1999	58.4	202.0	-66.3	38.5	5,202.7	340.0
		Bank	Non-bank	Bank	Non-bank	Bank	Non-bank
Number of deals	1997	199	4,323	596	12,325	26	497
	1998	245	5,167	651	13,757	19	564
	1999	278	7,315	535	12,402	82	1,387
Annual % change in the number of deals	1998	23.1	19.5	9.2	11.6	-26.9	13.5
	1999	13.5	41.6	-17.8	-9.8	331.6	145.9

Source: Author's estimations from Securities Data Company data.

The reduction in the number of banks, due to the increased number of mergers and acquisitions, would also suggest an increase in concentration across European banking markets in recent years. In fact, when we compare the percentage of the banking and credit sector controlled by the five largest banks, measured in terms of total assets, we observe an increase in this figure for most countries. Table 5 shows that the largest EU banking markets have experienced increasing⁹ market concentration. Interestingly, activity among Europe largest banks has accelerated recently, so that more than half of the 30 largest European banks are the result of recent mergers. As a consequence, the average size of the top five European banks in terms of total assets has doubled since 1995. (see Table 4)

⁹ The Herfindahl index, which is better proxy for market concentration as it takes into account the full population. As indicated in table 2.9, this figure also pointed towards shows an increase in concentration particularly over the last two years.

Table 4 Five-firm concentration ratio as percentage of total assets

	1980	1985	1990	1995	1996	1997	1998	1st half	% -point change	
								1999	95-2Q99	97-2Q99
SE		80.8	82.7	86.5	86.5	86.8	85.7	87.0	0.5	0.2
NL		72.9	73.4	76.1	75.4	79.4	81.7	82.9	6.8	3.5
DK	62.0	61.0	76.0	72.0	72.0	72.0	76.0	78.0	6.0	6.0
BE	54.0	48.0	48.0	51.2	52.2	53.9	72.5	75.8	24.6	21.9
PT	60.0	61.0	58.0	74.0	80.0	76.0	75.2	74.7	0.7	-1.3
FI	37.0	38.0	41.0	70.6	71.7	72.7	73.5	72.8	2.2	0.1
GR	n.a.	80.6	83.7	75.7	74.5	71.8	72.8	72.3	-3.4	0.5
ES	n.a.	35.1	34.9	47.3	46.0	45.2	44.6	50.8	3.5	5.6
AT		35.9	34.7	39.2	39.0	48.3	50.1	50.4	11.2	2.1
IT			29.2	32.4	32.1	30.7	38.7	40.2	7.9	9.5
IE	59.1	47.5	44.2	44.4	42.2	40.7	40.1	40.0	-4.4	-0.7
UK				28.3	29.1	28.3	27.8	27.6	-0.7	-0.7
LU	31.1	26.8		21.2	21.8	22.4	24.6	26.2	4.9	3.7
DE			13.9	16.7	16.1	16.7	19.2	19.4	2.7	2.7
FR		46.0	42.5	41.3	41.2	38.0	39.2			
Av.	37.9	52.8	50.9	51.8	52.0	52.2	54.8	57.0		

Source: ECB. (2000), *Mergers and acquisitions involving the EU banking industry-facts and implications*, pg.42. Where SE (Sweden), NL (The Netherlands), BE (Belgium), PT (Portugal), FI (Finland), GR (Greece), ES (Spain), AT (Austria), IT (Italy), IE (Ireland), UK (United Kingdom), LU (luxemburg), DE (Germany), FR (FRANCE).

This increase in concentration should be a regulatory concern as the increase in the size of the institutions can give raise to ‘too big to fail’ problems (TBTF)¹⁰. That is the fact that the central bank is more likely to bail out a large bank because its failure may disrupt the payments system and/or create a systemic collapse of the financial system. Large banks that have been actively promoted (and even created) by governments aimed at creating national champions may be subject to more lenient regulatory scrutiny than their smaller counterparts. They may be also allowed to operate on a lower than optimal capital base, as given the systemic risk implications of their failure, it is assumed by the institutions and other market participants that they would receive public support when faced with insolvency. Consequently, and due to TBTF considerations, domestic consolidation is likely to have implications for the capital positions of banks as it could increase incentives for a reduction in the capital positions of the largest banks.

Technology

Technological innovations have transformed most industrial sectors, especially due to the evolution of information based technologies. In the case of the banking industry, due to the role of banks as information-based firms and their role in gathering and analysing information, these changes have been even sharper.

Information technologies offer savings in the cost and time of providing financial services, and increased revenues through the development of an array of new financial products often only

¹⁰ In fact the TBTF problem appears to be quite present in Europe (Fernandez de Lys 2000).

limited by the level of potential demand, which can be created. Indeed, the rapid progress in information technology is transforming the way in which the banking industry works, through a dematerialization of informational sources, a substantial increase of information available, and the possibility of diversification into new business areas compatible with the banks' core activities.

Two main factors can be pinpointed as consequences of technological innovation. First, the production function in banking has become more capital-intensive, given that the share of non-staff operating costs has increased in most of the European systems, at the expense of staff costs. Consequently, it has contributed to a reduction in the costs associated with the management of information (collection, storage, processing and transmission) by replacing paper-based and labour intensive methods with automated processes. Secondly, diffusion of information technology is radically transforming banking delivery channels. In this respect, the competitive advantage which geographical proximity once provided by means of a large number of branches have been achieved through the installation of ATMs or alternative delivery systems and more recently through the introduction of internet banking across Europe. It is clear that all major banks through the EU use remote banking (ECB 1999), but most of it is still offered via automated teller machines (ATMs) (see Table 5) rather than by the use of internet banking.

Table 5 Cash dispensers and ATMs

	Number of machines per one million inhabitants (End of year)			Number of transaction per capita		
	1993	1997	Change 93-97	1993	1997	Change 93-97
Belgium	280	492	+76%	11	16	+40%
Denmark	108	253	+134%	na	Na	Na
Germany	308	504	+64%	na	Na	Na
Greece	82	209	+155%	na	6	Na
Spain	557	863	+55%	12	15	+27%
France	325	462	+42%	13	20	+51%
Ireland	220	286	+30%	16	24	+54%
Italy	262	444	+69%	3	7	+117%
Luxemburg	294	613	109%	10	10	+5%
Netherland	292	410	+41%	21	33	+61%
Austria	320	533	+67%	7	10	+38%
Portugal	283	631	+123%	10	21	+120%
Finland	591	445	-25%	40	43	+8%
Sweden	255	268	+5%	28	35	+24%
UK	328	393	+20%	21	30	+41%
EU	324	488	+51%	14	20	+46%

Source: ECB (2000). Payments systems in the EU, appendix.

On the other hand, the introduction of telephone banking, which started during the 1980s, was not as successful as initially expected. Indeed, even the apparent important success of phone banking in France depended to a large extent on country specific factors such as the experience of the government-subsidised use of Minitel. Internet banking is also expected to radically change the distribution channels of the banking industry, although, since its introduction it has yet to conquer a substantial share of the market¹¹. However, according to various commentators the potential for internet banking will be enormous (see ECB 1999).

Table 6 Indications of telephone banking penetration.

Belgium	5%
Germany	6%
Spain	6%
France	10%
Ireland	5%
Italy	3%
Netherlands	5%
Finland	2%
Sweden	4%
United Kingdom	10%

Source: ECB (1999). The effects of technology on the EU banking systems p. 12.

Regarding its effect on the overall profitability of banking firms, Saunders et al. (1990) argues that the success of technologically related innovations cannot be evaluated independently from the existing financial regulation and regulatory changes in process. Yet, even taking into account changes in the regulatory framework in Europe and its potential effects promoting financial innovation and technological developments, there is no doubt that technology by itself has substantially altered production and distribution of financial services over the last decade. This has radically affected banks' balance sheets as well as their profit and loss accounts. It has also boosted absolute measures of productivity. In fact, overall cost as a proportion of income or total assets has decreased in European countries. This factor becomes apparent in Table.10 in

¹¹ Some Scandinavian countries and particularly Finland are an exception.

which it can be observed that from 1994 to 1997 operating cost to total income has declined in most Euro area countries with the exceptions of Germany, the Netherlands and Sweden.

Table 7 Aggregate operating costs per total income (%)

	1994	1995	1996	1997	1998
Euro area	67	69	67	67	66
EU	66	67	65	65	64
BE	68	66	63	64	60
DK	69	53	50	54	61
DE	64	67	68	68	68
GR	63	69	69	62	60
ES	68	66	63	62	62
FR	73	76	69	68	65
IE	62	59	57	58	52
IT	71	70	70	72	64
LU	39	40	40	38	42
NL	68	68	69	71	72
AT	66	67	66	67	66
PT	66	70	68	62	64
FI	79	83	76	59	64
SE	47	52	50	60	60
UK	62	63	61	59	59
Average	64	65	63	62	61
St Deviation	9	10	9	8	7

Source: ECB (2000), EU banks' income structure, p. 56. Where SE (Sweden), NL (The Netherlands), BE (Belgium), PT (Portugal), FI (Finland), GR (Greece), ES (Spain), AT (Austria), IT (Italy), IE (Ireland), UK (United Kingdom), LU (luxemburg), DE (Germany), FR (FRANCE).

Although this measure would also be affected by the denominator (namely total income) that would be influenced by the economic cycle, this would not be the case with figures showing the average number of bank staff necessary for managing one billion ECU of assets. According to Table 10, from 1986 to 1997, there has been a substantial decline in this staff-to-assets figure for all European countries. This development is particularly pronounced in the case of Portugal, Finland or Ireland. This increase in productivity has accelerated in relative terms in the 1995-1997 period, so that divergences in productivity (according to this measure) have narrowed considerably. These developments are believed to be largely attributable to the development of new technologies. A natural consequence of this is that a higher amount of investment has gone towards IT capital-intensive investment, yet this investment has not been distributed evenly. Recent research (Altunbas et al 1999) also shows that overall cost saving associated with IT investments tends to increase with bank size.

Table 8 Number of bank staff per ECU 1 billion of assets

				% Change	% Change
	1985	1995	1997	1985-95	1995-97
Belgium	267	131	122	-50.9	-6.9
Denmark	316	174	135	-44.9	-22.4
Germany	380	184	158	-51.6	-14.1
Greece	886	627	511	-29.2	-18.5
Spain	637	318	288	-50.1	-9.4
France	347	155	134	-55.3	-13.5
Ireland	512	239	118	-53.3	-50.6
Italy	491	287	219	-41.5	-23.7
Luxemburg	55	38	37	-30.9	-2.6
Netherlands	456	186	155	-59.2	-16.7
Austria	344	193	175	-43.9	-9.3
Portugal	1393	426	316	-69.4	-25.8
Finland	929	327	271	-64.8	-17.1
Sweden	205	137	102	-33.2	-25.5
United Kingdom	388	186	144	-52.1	-22.6
EU	507	241	192	-52.5	-20.3

Source: ECB (2000), and Eurostat (1999), *Banking in Europe* p.10.

Overall, progress in information technology has allowed the set up of new delivery channels and products. It has also accelerated competition, making it easier to compare prices, lowering switching costs and diminishing barriers to entry into markets¹². Although these factors have intensified competition, they have increased efficiency as well, and other things been equal, reduced the amount of capital optimally held by banks. On the other hand, they have also contrived to the existence of over-capacity in terms of staffing levels in traditional or 'physical' delivery channels, which combined with the lack of flexibility in European labour markets, could result in aggressive pricing in order to avoid restructuring. In the short term, this may lead to excessive risk that would probably call for an increase in the amount of capital held by institutions.

Privatisation

Banking sector privatisation has been an uneven process in Europe. In France, privatisation has taken place in two tranches, and although it was quite substantial, it still left room for further reduction of State controlled banks. Initially, by the end of the 1980's, Suez, Paribas, CCF and Societe Generale were privatised. This first phase did little to enhance competition (Morgan Stanley 1995) since the two major banks were still public. In the second tranche, BNP, and

¹² In fact new players have entered the traditional banking market such as powerful financial subsidiaries of industrial corporations, retail supermarkets, and new brokerage firms.

Credit Local de France were privatised; this provoked more aggressive tactics by the French banks. However, savings banks ('Caisses d'Epargne') are still indirectly publicly controlled, and have even acquired some major commercial banks (e.g. Credit Foncier). In Spain, the gradual privatisation and rationalisation of Argenteria spearheaded the privatisation process, however the weight of the public sector in the Spanish banking system has increased in recent years as a result of the expansion of the savings banks ('Cajas'). The policy of the Italian government to privatise an important number of public banks was to a greater extent imposed by the need to reduce public indebtedness. Banco de Napoli (1992), San Paolo di Torino (1993), Credito Italiano (1993), IMI and Banca Commerciale Italiana have been privatised recently with considerable investor enthusiasm, and heavy oversubscriptions. Banca Nazionale del Lavoro followed suit. As Molyneux et al (1996) noted, in Germany, the concept of privatisation of commercial banks owned by a complex network of industrial participations has not been discussed so intensively as in France or Italy. However, there is an increasing pressure for privatisation, and the funding privileges of the Landesbanks (owned by the regional government) have come under closer scrutiny by the European Commission resulting in a recent fine and a commitment to reduce the level of state involvement by 2004-5.

De-regulation and privatisation have also impacted on the savings bank industry. Traditionally, they have been operating in a rather limited geographical area, tend to be small in size, and their management is typically influenced by local and/or regional government (Arthur Andersen 1993). Although still more protected from competition than commercial banks, technological advances and deregulation have also substantially affected this sector. Moreover, there has been a larger fall in the number of mutual banks in European countries, with the exception of Germany (in which concentration has started to pick up lately), due to mergers and restructuring. However, this increase in competitiveness shown by the savings banks has been criticised by commercial banks, which argue that saving banks have certain regulatory advantages in collecting savings. In this sense, most Italian saving institutions have transformed themselves into limited companies, able to obtain a stock exchange quotation, and only 23 out of 77 saving banks that have undergone this process are still wholly owned by their respective foundations¹³. This gradual process of market orientation for both savings and commercial banks has considerable implications, since it would increase the competition and the need for more readily available accurate information on portfolio quality.

Overall, and despite cross-country and institutional heterogeneity, there is a clear trend towards a more market orientated banking system across Europe. This should result in a more efficient allocation of resources but also render the evaluation of soundness of financial institutions more accountable to the financial markets. However, and unlike in the United States, lack of

transparency of asset quality and bank strength prevails in European banks as shown for instance by the fact that several countries do not even have explicit rules to classify loans as non-performing. This would allow banks an important amount of leeway for accounting discretion. More importantly, some countries (Germany, the Netherlands, Austria and Luxemburg) do not publish figures on the levels of non-performing loans. Hence, the move to a more market orientated financial structure means that private investors rather than depositors are increasingly evaluating the performance of banks and other institutions. In this environment, the quest for transparency becomes increasingly more important

Trends in credit and deposits activities

Another major factor that has affected European banking over recent years has been the process of disintermediation and the entry of new competitors. Broadly speaking, disintermediation relates to the connection between borrowers and savers without the intervention of the banking sector. The trend towards disintermediation has been characterised by the shift of personal financial assets from bank deposits into mutual funds investments, which may or may not be actually managed by banks (See Table 12).

Table 9 Total Net Assets of Mutual Funds in Europe (million ecu)

Country	1989	1994	1998	% Increase 1989-98
Austria	10,601	19,155	54,336	513
Belgium	4,215	15,434	48,236	1,144
Denmark	3,126	4,452	16,605	531
Finland	79	889	4,878	6,175
France	248,591	406,498	534,123	215
Germany	52,300	92,065	166,834	319
Greece	111	4,551	27,425	24,707
Ireland	5,631	6,359	20,241	359
Italy	32,520	65,425	371,912	1,144
Luxembourg	61,676	231,376	433,037	702
Netherlands	19,419	39,043	75,102	387
Portugal	1,917	10,521	19,845	1,035
Spain	6,674	70,129	203,779	3,053
Sweden	19,976	16,482	47,136	236
United Kingdom	78,864	108,881	243,607	309
Euro area	545,700	1,091,260	2,267,096	415
European Union	443,623	956,894	1,932,323	436

Source: FEFSI (2000), Annual Statistics, statistical annex.

¹³ . Information obtained from the ABI, the Italian Bankers Association

Indeed, the pool of mutual funds (open and closed) managed in the European Union has increased by more than 400% between 1989 to 1998. The growth has been particularly noticeable in countries which were traditionally more banking orientated, such as Greece, Italy, Spain and Finland. On the asset side of banks balance sheet, disintermediation relates to the transformation of traditional banking assets into tradable securities. Although still underdeveloped in Europe (although finally clearly growing in importance), recent regulations in France, Italy and Spain have encouraged the development of bank asset securitisation in Europe, thus facilitating greater disintermediation. Finally, disintermediation has also been encouraged by the development of new technologies as they have allowed the creation of channels that circumvent banks by directly connecting savers and lenders. An example of this would be the case of internet brokerage firms in the retail sector, or corporate bonds issued via the internet in the corporate sector.

The process of disintermediation is reflected in the structure of banks' balance sheets and profit and lost accounts. On the liability side, traditional deposits have shrunk to the benefit of liquid mutual funds, so that European banks have developed other sources of funding, like the Pfandbriefe in Germany, subordinated debt or channelled some of the short term mutual fund investment towards the purchase of certificates of deposits or banks debentures. As shown in Table 10, from 1995 to 1998, the decline in customer deposits to total assets has been particularly steep in Germany (-11.5%), the Netherlands (-10.9) and Spain (-6.6), whereas in Italy and France, they rose slightly. The rest of European countries have also experienced a fall in the customer deposits to total assets ratio ranging from -17.3% in Ireland to -4.3 in Austria. On the asset side, it is interesting to note that EU banks assets structure reflects the rapid increase in lending due to more buoyant economic conditions (see Table 14), so that the share of loans to total assets has been increasing in Italy, Spain, Austria, Finland, Ireland, Luxemburg and Portugal, whereas it declined in France, Germany, Belgium and the Netherlands. This process of increased bank credit demand by banks has been generated by four main factors. First, overall macroeconomic recovery has boosted credit demand by firms and households. Second, historically low interest rates accompanied by a surge in M&A has intensified credit demand for leveraged loans. Finally, the reduction in margins and the need to grow in size, may have forced banks to take on a larger proportion of loans. This latter factor may be of particular importance as it may have increased the risk-taking propensity of European banks. As previously mentioned, disintermediation is also taking place as highly rated companies are increasingly obtaining funds via the capital markets by the issuance of shares and bonds. In fact, the growth of corporate bonds in the Euro area has increased spectacularly since 1997 onwards, although from a very low base. The introduction of the euro, the reduction of several barriers to entry into the market, and more efficient information technology systems are creating an almost

Euro area wide corporate bond market¹⁴. From a capital and risk perspective, this development is also of interest as it has boosted non-interest income for certain banks that underwrite these issues. These fees however, appear to be concentrated on a handful of banks. Besides, it can also lead to a deterioration in the portfolio of banks as better borrowers would be able to obtain funds from the market at cheaper terms, leaving the banks with lower quality borrowers or those in which asymmetries of information and relationship lending are too strong.

The decline in deposits due to disintermediation coupled with the decline in interest rate margins is creating strong incentives for banks to look for new sources of income. Foremost among these growing sources of income would be commissions derived from mutual fund management, a stronger presence in the stock market, or the generation of fees derived from investment banking activities.¹⁵(See Table 11)

Table 11 Aggregate net non-interest income per aggregate total income (%)

	1994	1995	1996	1997	1998
BE	22	25	28	32	38
DK		25	23	22	26
DE	24	25	27	30	32
GR	60	41	45	46	46
ES	18	26	28	31	32
FR	40	36	45	43	43
IE	28	30	32	35	38
IT	31	28	33	36	44
LU	29	38	40	47	54
NL	29	34	36	40	40
AT	28	27	29	30	31
PT	24	27	32	33	35
FI	43	40	48	47	41
SE	31	31	37	35	46
UK	41	43	42	44	43

Source: OECD (2000), and authors calculations from FITCH-IBCA

¹⁴ For a detailed economic analysis of the process see Prati and Schinasi (1997).

¹⁵ See Davis and Tuori (1999) for a comprehensive analysis on the evolution of non-interest income in European banks.

Table 10 Main components of banks' balance sheets as a percentage of total assets.

	France	Germany	Italy	Spain	Netherlands
1998					
Loans	40.8	51.1	54.0	50.6	57.9
Customers deposits	39.1	35.3	33.9	56.4	45.7
Total contingent liabilities	30.4	14.4	31.0	5.3	8.5
1995					
Loans	41.3	56.4	52.7	43.5	62.3
Customers deposits	38.2	39.9	33.1	60.4	51.3
Total contingent liabilities	23.7	13.1	25.7	6.6	15.5
1992					
Loans	48.0	56.9	51.4	49.7	62.1
Customers deposits	33.7	40.1	30.5	54.5	53.4
Total contingent liabilities	23.7	13.1	25.7	6.6	15.5
Percentage change 1995-1998					
Loans	-1.2	9.4	2.6	16.3	-7.1
Customers deposits	2.2	-11.5	2.5	-6.6	-10.9
Total contingent liabilities	28.3	9.8	20.4	-19.5	-45.0

Source: IMF (2000), Euro banking at the crossroads, appendix. Data from FITCH IBCA

Efficiency and Performance in European Banking

According to traditional microeconomic theory, under perfect competition, less efficient banks will be driven out from the market normally via consolidation. Although it is clear in the literature that this is not always the case and often consistently non-efficient banks are allowed to survive in the market (see Kwan and Eisenbeis, 1996), it is also known that the increase in competition in Europe brought about by deregulation would lead to further consolidation, normally in the form of less efficient banks being taken over by more efficient ones. Hence, also from a political point of view, the concept is also of great importance, as it will affect the long-term viability of the banking sector in individual countries in Europe (Bikker 1999). However, both to measure changes in efficiency and determine its determinants are difficult tasks. Two major problems relate to: i) that banking is a service industry heavily influenced by technology changes and ii) demand characteristics in banking are notoriously heterogeneous. Banking demand is heterogeneous in two dimensions. The demand for retail financial services still depends to a large extent on the peculiarities of each country. Besides, the industry offers a myriad of different products and is subject to an important degree of change. Hence relating costs to specific outputs can be problematic.

Bank efficiency is typically described by a variety of measures such as the number of branches per inhabitant, average number of employees needed to manage a certain amount of assets (see Table 12), the cost to income ratio, or the labour cost share, or even concepts such as net interest margins and competition indices (such as the H value of Panzar and Rosse)¹⁶ A recent study by Bikker (1999) tried to obtain a ranking of the efficiency of the banking sectors in nine countries including the largest Europeans, the US and Japanese markets. The author calculated an array of possible indicators that had been used as efficiency proxies in previous studies showing that once calculated and compared they offered no conclusive and often contradictory results. In fact, it was not possible to obtain an efficiency based ranking of the studied countries as:

‘ Virtually each country is indicated as efficient in one index, and each country but one is referred as inefficient in at least one’ (Bikker 1999, pg. 6)

Table 12 Cost structure in the banking sector

	Number of branches per 1000 inhabitants			Employment per \$100 000 assets		
	1990	1995	1998	1990	1995	1998
United States	0.29	0.28	0.29	0.40	0.32	0.29
Japan	0.18	0.19	0.19	0.07	0.06	0.06
Euro area	0.56	0.55	0.55	0.21	0.15	0.15

Source: Data from IMF (2000), Euro Banking at the Crossroads appendix , and Eurostat (1999), Banking in Europe.

Although it is important to keep these limitation in mind, the wide use of simple ratios such as the cost-to-income ratio and the percentage of total costs derived from personnel costs, also offer useful insights into financial firm efficiency. These measures complement those obtained by more sophisticated procedures (see Berger and Humphrey 1997)

Table 13 shows that the ratio of operating costs to total income has declined in virtually all European countries in the 1990s but remains high (78%) in most continental European systems compared with the United States (65%) or the United Kingdom (69%). These data would clearly mesh with performance differences observed as well as the institutional developments observed, given that these latter two countries, and particularly the United States, experienced earlier deregulation and have more market orientated financial structures.

¹⁶ See Molyneux et al (1994) for estimates of the Rosse-Panzar statistic in European banking.

More importantly, the share of personnel costs remains the largest single component of operating costs, greater than 50% of total costs in most Euro area countries compared with 43% in the US, and 45% in the United Kingdom. Typically, the UK and the US have a higher degree of labour flexibility and therefore it is easier for banks to reorganise their staff levels in the new operating environment.

A more formal approach to measuring bank efficiency comes from the production and cost function literature in microeconomics. The academic literature has considered three main types of efficiencies in the banking sector: scale, scope and X-efficiencies. A bank experiences economies of scale, when the unit average cost of production falls as output increases, while economies of scope occur when production costs for a group of goods or services are less than the sum of the cost for each of the individual products. The underlying philosophy of both is that fixed costs are spread among a number of production units (economies of scale) or through different product mixes (economies of scope). In the case of X-efficiencies, the concept refers to the efficiency differences that do not derive from scale and scope economies but from the optimisation of the technical and allocative behaviour, or, in other words, the ability of the firm to produce at the minimum attainable cost, and price at the optimal market level. Berger, Hunter and Timme (1993), in their review of the bank efficiency literature, found that X-inefficiencies account for around 20% or more of costs in banking, while scale and product mix inefficiencies, when accurately estimated, are usually found to account for less than 5% of costs. Consequently, the analyses of differences in average costs have been orientated less towards the question of economies of scale, and scope and more towards the analysis of the cost and revenue X-efficiency of banks. Thus measuring X-efficiency in banking markets has currently replaced the study of economies of scale as the main object of empirical research (see Berger and Humphrey, 1997).

An early approximation to the problem of relative measurement of efficiency in European banking was undertaken by Altunbas and Molyneux (1996) who used the stochastic frontier approach and found that X-inefficiencies for individual European banking markets amounted to 20% on average between 1987 to 1994. In addition, when all European Union banking markets were considered together, they found that European banks, on average, moved closer to the EU efficient cost frontier between 1990 and 1994. Mean levels of X-inefficiencies fell from around 27% in 1990 to 22% in 1994. This finding, they argue, was consistent with increased levels of competition in the European banking market. Another interesting result of the aforementioned study was that X-inefficiencies of larger banks were lower than for their smaller counterparts. This finding, supports the hypothesis that increases in competition had a bigger impact on improving large bank efficiency compared with that of small banks.

Studying the impact of Internal Market Integration on the banking and credit sector, the EC in 1997 found evidence of scale economies across a broad range of bank output sizes in the European banking market. This result, the EC argued, pointed towards cost reductions that had been brought about by the EU's single market programme. In contrast, the same study also attempted to investigate the impact of internal market integration on the realisation of economies of scope in the banking sector. Here scope economies were only found to exist for two size categories of banks: those with assets size in the range ECU one to ten billion and banks larger than ECU 50 billion. However, the consideration of scope economies has traditionally been analysed by fewer studies, and '*has been proved somewhat problematic*'. (EC 1997). Consequently, the main conclusion of the few cross-country empirical studies was that the introduction of the Single Market for Financial Services produced a small increase in X-efficiency in European banks, which were actually larger than scale and scope economies.

A recent study by Bikker (1999), attempted to rank bank efficiency by countries. This study found that Spanish, French and Italian banks appear to be less efficient than those in Germany, the Netherlands and the UK, while banks in Luxemburg and Belgium emerge as the most efficient. Larger differences in average X-inefficiencies and costs levels between countries also exist, Spain being 40% above and Luxemburg 35% below the European average (see Bikker 1999).

Finally, Maudos, Pastor, Perez and Quesada (1998) studied the efficiency of European banks analysing cost and profit efficiency as well as possible sources of differences in efficiency levels. Their results underlined the importance of inefficiencies both on the asset and liability side of the balance sheet. Regarding the likely explanations for the differences in efficiency between countries, they show that higher loan to assets ratios; market concentration and economic growth are positively related to cost and profit efficiency. Higher risks are positively related to profit efficiency, whereas larger networks of branches are negatively related to bank cost efficiency. Overall, as in the case of Altunbas et al (2001a and b) and Bikker (1999), they also emphasize the substantial range of variation in efficiency levels across banking systems in the European Union.

Table 13 Accounting indicators of efficiency: cost to income and personnel expenses ratio.

		Belgium	France	Germany	Italy	Netherlands	Spain	EU-11	UK	Japan	US
Cost to income	92	85	94	77	81	80	89	85	86	84	65
	95	80	89	77	84	78	80	81	61	127	65
	98	65	85	78	77	83	75	78	69	159	65
Of which: Personnel cost		Belgium	France	Germany	Italy	Netherlands	Spain	EU-11	UK	Japan	US
	92	61	55	49	61	57	59	56	36	29	46
	95	59	42	54	58	38	41	---	47	27	46
	98	54	57	49	55	55	57	53	43	20	45

Sources: Constructed from FITCH-IBCA data.

en the heterogeneous ownership features of European banks, it is important to present a disaggregate analysis of performance by type of institution. Besides, the share of mutually owned or savings institutions, is important in several continental European countries such as Spain, France and Germany. Focusing on the main continental European countries, the main caveat would be that profitability comparisons across bank types are not straightforward because of different constraints and regulatory frameworks in which each kind of institution operates. Indeed, whereas commercial banks are under pressure from shareholders to create market value, savings and cooperatives typically have different managerial objectives such as to supply credit to certain sectors or areas, or to generate a ‘social fund’ to be employed for public and community purposes. Consequently, these different objectives and regulatory and market constraints between different kinds of institutions are likely to have a bearing on performance.

When analyzing different measures of performance by kind of institution, it is clear that net interest margins decreased from the early 1990’s as would be expected in a more competitive and less banking intermediated marketplace (see Table 14 and 15). The decline has been less profound for savings and cooperative banks than for private banks. Surprisingly when compared to their peers, Spanish saving banks and French cooperatives have enjoyed increases in their interest margins. These differences in margins can be partly explained by the comparative

advantage that savings and cooperatives may have in funding themselves at lower costs for two main reasons. First, they tend to have a quite loyal and non-sophisticated deposit base. Secondly, they benefit from implicit or explicit government guarantees that lower the funding costs of these institutions. Overall, this aspect seems to suggest a two-tier market in which cooperatives and savings banks benefit from more favorable market conditions than their private sector counterparts. In fact, looking at the share of different types of institutions on the overall sector's profits, savings and cooperatives banks have grown at the expense of commercial banks in France and Spain whereas they have declined in Italy and Germany¹⁷.

Regarding the overall performance in terms of returns on assets, the ROA of savings and cooperatives does not appear to be considerably different from that of commercial banks. Instead differences in ROA seem to be more related to the country rather than to the institutional characteristics of the institution, this being particularly strong in Spain and Italy, and lower in France and Germany (see Table 16). Yet as a whole, return on assets in continental Europe (with the exception of Spain, and Finland) has been substantially lower compared with the US or the UK.

Increases in competition from other banks and non-bank financial institutions such as mutual funds, pension funds, or credit card organisations has driven up the cost of funds. This competition, together with a decline in asset quality due to the economic recession at the beginning of the 1990's, reduced net interest margins in the European Union from 2.49% in 1990 to 2.09% in 1994¹⁸. The same trend continued, although at a slower pace in most countries during the second half of the 1990s. The decline has been more pronounced in countries that have traditionally been enjoying higher margins such as Italy or Spain.

¹⁷ However note that market share dynamics are more difficult to ascertain in Italy where institutions classified as savings banks in the past have now a status of commercial private banks since their reform in the early 1990's.

²⁶ Net Interest Income/Earning assets.

Table 14 Net interest revenue (% of total earning assets)

	Average 1989-94	Average 1995-97	Difference
Austria	1.94	2.07	+0.13
Belgium	2.39	3.87	+1.48
Denmark	5.30	4.74	-0.56
Finland	3.58	1.80	-1.78
France	3.09	2.66	-0.43
Germany	2.47	2.90	+0.43
Greece	3.11	3.05	-0.06
Ireland	2.67	1.82	-0.85
Italy	4.74	4.44	-0.30
Portugal	4.52	2.29	-2.23
Spain	4.37	3.68	-0.69
Sweden	2.76	2.21	-0.55
United Kingdom	2.36	2.50	+0.14
United States	4.08	4.19	+0.11

Source: Danthine et al. (1999). Appendix

Table 15 Performance indicators for the largest EMU banking markets by type of institution

	Commercial banks		Saving banks		Cooperatives	
Net interest margins to total assets						
	1991	1998	1991¹⁹	1998	1991	1998
France	2.2	1.2	2.4	1.5	1.8	1.3
Germany	2.3	1.3	1.4	1.4	1.2	1.6
Italy	2.5	2.2	3.0	3.0	3.2	2.8
Spain	3.6	2.7	2.8	3.5	4.2	3.5
Return on assets						
	Commercial banks		Saving banks		Cooperatives	
	1991	1998	1991²⁰	1998	1991	1998
France	0.3	0.3	0.3	0.3	0.2	0.4
Germany	0.2	0.3	0.2	0.2	0.2	0.2
Italy	0.4	0.4	0.7	0.5	0.4	0.4
Spain	1	0.9	0.8	1	1.4	1.3
Operating cost/income						
	Commercial banks		Saving banks		Cooperatives	
	1991	1998	1991²¹	1998	1991	1998
France	93.3	91.4	85.0	82.2	90.2	82.0
Germany	101.1	84.0	88.0	74.4	104.8	81.1
Italy	82.0	77.8	71.5	76.3	76.2	74.5
Spain	78.5	75.8	77.0	69.1	66.8	65.0
Share of sector's profits						
	Commercial banks		Saving banks ²²		Cooperatives	
	1991	1998	1991	1998	1991	1998
France	64	35	3	3	29	38
Germany	25	33	42	38	12	11
Italy	34	45	33	14	18	18
Spain	65	51	17	31	1	2

Source: Constructed from Fitch-IBCA data

While interest margins have fallen, European banks have increased their non-interest income (Table 14). This factor can be partly explained by the increased emphasis on the brokerage

¹⁹ 1992 figure for Spain.

²⁰ 1992 figure for Spain.

²¹ 1992 figure for Spain.

²² 1992 figure for Spain.

function²³ and partly by the need of banks to maintain profitability and reduce cross subsidisation. As was considered earlier, technology has been a major factor responsible for the reduction in overhead costs in favour of investments in technological innovations. This will ultimately have a bearing on earnings per unit of capital invested.

Return on equity is the accounting measure most closely monitored by financial analysts and regulators, as it incorporates both profits and financial leverage in one single profitability measure. As is normally the case, in recent years, it has closely followed the economic cycle. However, as can be inferred from Table 19, there has been a substantial impact of national forces affecting ROE in different countries. For the European Union as a whole there was a considerable reduction in returns in the early 1990's. These fell from 10.9% in 1990 to 6.8% in 1992, and then down to 5.1% in 1994 and 1995, and an improvement in the second half of the 1990's up to 14% in 1998. The reduction of ROE in the early 1990's hit commercial banks more heavily than savings banks. Besides, the volatility of the change in performance is lower for commercial banks than savings banks. (EC 1997). After a generalised credit expansion in the late 1980s, the UK and Sweden were among the first European countries to bear the brunt of the economic crises in terms of profits. In the earlier 1990s, Scandinavian countries were hit particularly strongly by the banking crises and obtained particularly poor results as evidenced by a negative ROE of -27% in Finland that wiped out their capital base. This was also the case although to a lesser extent in Denmark where banks recorded losses in 1993 and 1994. Yet, Scandinavian countries also recovered earlier than their continental counterparts as provisions for bad loans in France and Italy were dramatically affecting profits well into 1994/1995.

³¹ By which the banks are specialist intermediaries that can provide an array of services that do not necessarily imply qualitative transformation of the subjacent asset for the banks (see Bhattacharya and Thakor 1993).

Table 16 Return on Equity (aggregate profits after provisions and taxes per own funds)

	1994	1995	1996	1997	1998
Euro area	5.1	5.1	6.4	6.3	7.4
EU	6.8	7.5	8.9	8.8	9.1
BE	9.8	9.9	11.7	11.5	10.6
DK	-0.5	16.0	16.3	12.4	10.8
DE	5.1	5.5	4.9	4.6	4.4
GR	17.3	17.5	16.5	17.8	19.9
ES	11.3	11.4	12.1	14.5	14.4
FR	3.4	0.5	5.4	5.3	6.2
IE	14.5	15.0	15.7	17.3	18.0
IT	0.8	1.2	3.6	1.0	7.5
LU	14.2	14.0	15.3	15.7	35.7
NL	5.9	7.8	8.4	8.6	7.4
AT	4.7	6.7	5.7	6.4	5.3
PT	9.6	9.0	11.8	13.6	13.3
FI	-26.6	-11.4	8.2	18.2	26.0
SE	7.3	12.4	14.7	10.0	13.9
UK	16.3	18.6	18.8	19.3	14.4
Average	6.2	8.9	11.3	11.7	13.9
St Deviation	10.2	7.6	4.8	5.4	8.2

Source: ECB (2000). EU banks' income structure, p. 54.

The poor performance of the French banks are a reflection of two main factors, namely, a real estate crisis and the problems of small businesses. Real estate losses adversely affected the asset portfolio quality of most French banks. From 1990 to 1995, commercial property prices fell by at least 50%, and there was an estimated six million square metres of vacant office space in the Paris region in 1995²⁴. Medium-sized banks have been seriously affected by the decline in ROE, and larger banks have acquired many of them. Simultaneously the French banks preoccupation with market share at the expense of profits has helped to raise competition that bogged down the margins and consequently the return on equity. Italian banking suffered the highest decrease in profitability from 11.16% of ROE in 1990 to 0.70% of ROE in 1994. Indeed, in 1994 ROE for commercial banks in Italy was negative (-0.84%). These results come from lower interest spreads, higher loan provisions and heavy taxes. Italian banks have been forced to achieve better productivity. In this sense, there has been a fall in staff numbers in spite of the increase in the number of branches. Italy remained under-branched, and over-banked due to the previous limitations about branching regulation, and reluctance about mergers of several major banks.

In contrast to France, Germany did not suffer an important decline in the quality of the real estate portfolio of banks, in the earlier 1990s, but its performance has always been modest in comparison with its European counterparts. In general European banking underwent a recession in the early 1990's that hit Scandinavian, French and Italian banks hardest.

²⁴ Information provided courtesy of Morgan Stanley.

As shown in Table 17, from 1994 onwards, European bank performance has improved substantially, helped by better macroeconomic conditions and superior productivity. Credit demand also increased substantially in most countries from 1996 to 1999. There are, nevertheless, two elements that deserve more careful attention. On the one hand, volatility of earnings both across countries and across institutions is rising. On the other hand, when the results obtained for continental Europe are compared with those of the United Kingdom or the United States, they appear unimpressive. Indeed in 1998 ROE in the US or the UK was almost double that of banks in the Euro area.

Table 17 Performance indicators in three major economic areas.

	EU-11			UK			US			JAPAN		
	92	95	98	92	95	98	93	95	98	92	95	98
ROA	0.3	0.3	0.4	0.3	0.8	0.7	1.8	0.9	0.9	0.2	-0.2	-0.7
ROE	9.5	5.1	7.4	6.2	14.3	11.9	28.1	13.7	13.4	5.2	-5.5	-17
Earnings power	0.9	0.8	0.9	1.3	1.4	1.0	3.4	1.6	1.7	0.7	1.5	1.5

Source: Author's own estimation from FITCH – IBCA and IMF (2000), appendix.

The economic crisis of the early 1990s reduced the performance (at one stage or another) of banks in all European countries. Since then, accounting measures of profits have followed an upward trend over the last few years. From the point of view of financial soundness it is interesting to note that the volatility of earnings has increased and that the gap between EU-11, the United Kingdom, the US and Japan in terms of performance has not narrowed in recent years.

Capital and Risk

Many of the aforementioned features are likely to have some influence on the value of firms and, hence on the economic value of their capital. The amount of capital to be held by a bank depends not only on deliberate decision-taking by bank owners and managers but also on the structural features of their market as well as economic shocks and other external factors often exogenous and outside the control of the bank. Foremost among the factors affecting bank's capital are prudential regulations, and more specifically capital adequacy regulations. Indeed, the deregulatory process has made regulators increasingly focus on capital adequacy regulations.

In Europe, legislation such as the Second Banking Directive and the attendant Own Funds, Solvency Ratio and Capital Adequacy Directive for Investment Firms (CAD II) were specifically designed to harmonize and increase bank capital ratios. Typically, European capital

adequacy regulation has closely followed the international prudential regulation of the BIS Basle Committee.

Most observers (see for instance Bennink and Benston, 2000, or IMF, 2000) conclude that the majority of European banks have been under pressure to boost their capitalization. In 1998, the BIS risk-weighted capital ratio of the five largest banks in most European countries exceeded 10% (see Table 18), which is reasonably above the international BIS threshold of 8%. Among the largest countries, the Netherlands, Ireland and Spain had the highest BIS total capital to risk weighted assets ratio. This concords with the fact that these three countries experienced a substantial increase in outstanding credit in the second half of the 1990s. In contrast, Italy and Germany had the lowest BIS capital to risk weighted to total assets ratio. Concerning the simple equity to total assets ratio (see Table 18), the main observation is that despite recent developments, equity-to-assets vary considerably from one country to another, ranging from 3.4 per cent in Germany to 6.4 per cent in Spain. Country specific factors, such as the level of 'hidden reserves' (e.g. Germany²⁵) and the importance of inter bank lending (e.g. France), as well as differences in inflation and non-performing loans (traditionally larger in Italy and Spain) among other variables, can partly explain these differences.

²⁵ Note that with the new German government's 2000 tax reform proposal, the taxation of capital gains on equity holdings will be substantially reduced.

Table 18 Risk and capital measures in 1998 (unless otherwise indicated)

	France	Germany	Italy	Spain	Belgium	Finland	Ireland	Luxemburg	Netherlands	Portugal	Average	Standard deviation
BIS ratio 5 largest banks	11.0	10.1	9.6	12.0	11.0	11.9	13.0	13.0	14.0	11.4	11.7	1.3
Provisions/NPL	6	---	6	---	60	---	42	---	---	115	57.0	39.4
Non-performing loans/total loans												
1995	8.5	---	9.0	6.0	4.0	6.0	---	---	---	5.9	6.6	1.9
1998	6.3	---	8.9	1.7	3.2	1.8	2.4	---	---	2.8	3.9	2.7
Equity/total assets	4.4	3.4	6.3	6.4	3.5	5.0	6.1	3.7	4.2	5.3	4.8	1.1
Equity/net loans												
1992	8.1	7.5	12.6	12.9	7.0	8.8	8.8	13.5	6.9	15.9	10.1	3.1
1995	10.6	6.9	12.9	13.1	7.4	10.2	12.9	17.5	7.4	14.0	11.0	3.4
1998	10.7	6.7	11.8	12.7	9.4	8.5	10.8	17.9	7.3	10.6	10.3	3.2
% Change 1992-1998	32.1	-10.9	-6.4	-0.8	35.5	-3.4	23.3	32.4	4.7	-33.7	2.8	

Sources: Adapted from several issues from *The Banker* and IMF (2000) pg.19.

If we look at the trends in changes of core capital over recent years as shown in Table 19 it is noticeable that there was an increase in both capital ratios in 1993, and more evidently in 1994 after the full implementation of the EU Second Directive and the accompanying capital adequacy regulations. Yet, overall, there is not a clear trend regarding changes in core capital positions during the 1990's. Some countries such as France and the Netherlands have experienced a slight increase, whereas Italy and Germany have had a small decline in this ratio. Table 20 shows a mixed picture for total capital ratios.

Table 19 Median Tier I capital ratio

	Germany	France	Italy	Netherlands	United Kingdom	United States
1990	5.9	4.4	7.8	---	5.5	5.1
1991	6.0	4.7	6.9	---	8.6	7.8
1992	5.4	5.0	6.9	6.0	7.4	9.5
1993	5.7	5.2	6.7	6.9	7.7	10.0
1994	6.0	5.7	7.7	7.9	10.6	10.0
1995	5.9	6.1	9.1	8.8	10.0	10.4
1996	5.5	5.9	9.3	7.9	10.4	10.2
1997	5.9	5.9	7.4	8.1	9.3	10.1
90-97	5.7	5.4	7.6	7.9	9.6	10.1

Source: De Bond and Prast (2000), p. 86.

Table 20 Median total capital ratio

	Germany	France	Italy	Netherlands	United Kingdom	United States
1990	9.1	8.0	9.6	---	10.3	8.4
1991	8.8	8.7	9.0	---	12.0	9.6
1992	9.3	8.7	9.2	10.3	12.0	11.4
1993	9.1	9.0	9.7	11.2	13.1	11.9
1994	9.6	9.8	10.5	12.8	14.4	11.8
1995	9.4	9.7	11.0	12.5	15.0	12.1
1996	9.4	9.9	10.2	12.4	15.4	11.9
1997	9.9	10.4	10.2	10.8	14.2	11.8
90-97	9.4	9.2	10.1	11.3	14.2	11.8

Source: De Bond and Prast (2000), p. 87.

The pressure to increase the amount of bank capital can be related to the fact that banks are taking on more risk. In this sense, various factors outlined above, such as increased competition from new and established operators, de-regulation and technological developments as well as the continuous upwards-economic cycle have overall probably been conducive to a relaxation in credit standards²⁶. This would have probably implied an increase in the risk position of banks.

²⁶ This process will probably be also applicable to the US.

Table 18 also shows that the amount of non-performing loans to total loans in the Euro area countries²⁷ declined substantially from 1995 to 1998, from 6.6% to 3.9% of total loans, pointing towards a lower risk portfolio of loans. According to this measure, Spain, Finland, Ireland and Portugal show a considerably larger amount of non-performing loans than France, Italy, and to a lesser extent Belgium. Clearly, a favorable economic period has helped to reduce the amounts of defaults and raise the amount of loans granted. Yet, a problem with accounting measures of risk such as provisions or non-performing loans is that they only provide historical information on the amount of risk and are normally registered when the default has occurred. They may not be a good indication of future risk.

Given that foreign loans tend to be riskier than domestic loans, an indicator that could give complementary information on possible risk problems derived from a deterioration in external macroeconomic conditions would be the amount of foreign exposure taken by banks. Foreign assets as percentage of claims of the domestic private sector (shown in Table 21) rapidly expanded from 1995 to 1998 in most European countries with the exception of Spain and Portugal²⁸. A more disaggregated measure, incorporating the countries in which foreign assets are invested in, shows that Latin America and Eastern Europe are the regions benefiting from the largest amount of percentage growth from 1995 to 1999. From a banking soundness perspective, it is interesting also to point out that investment in Latin America has been limited to a handful of Spanish and to lesser extent Portuguese banks. Investment growth in Eastern Europe has been shared by a larger number of banks and it has a lower standard deviation of growth, but in absolute terms it is very concentrated in two countries: Austria and Germany.

Table 21 Foreign assets as a percentage of claims to the domestic private sector

	FR	DE	IT	ES	AT	BE	FI	IE	LU	NL	PT	Average	Standard Deviation
1995	51.2	22.8	22.5	33.0	41.7	131. 7	30.1	99.9	2826	59.9	48.2	54.1	35.5
1998	65.0	31.0	26.2	23.8	----	143. 6	31.0	176. 9	2828	67.4	47.7	65.4	52.8
% Change in ratio	27.0	35.8	16.3	-28.0	----	9.0	3.1	77.0	0.1	12.5	-1.1		

Source: constructed from BIS data (1999), Quarterly Review, December.

²⁷ Excluding Austria, Germany, Luxemburg and the Netherlands.

²⁸ Although this two countries have been actively investing into foreign bank equity, particularly in Latin America.

3. INTEGRATION OF EUROPEAN BANKING SYSTEMS

The European Unions '1992' Single Market Programme (SMP), was a credible commitment to liberalisation intended to produce a substantial change in the competitive scenario of European banking (see Vives, 1991). Although home currency advantage started to disappear in most continental European countries with the introduction of the euro on 1 January 1999, regulatory harmonisation is still not complete. It is, however, notoriously difficult to assess to what extent competitive forces have overcome these obstacles. On the one hand, there appears to have been a decline in net interest margins, in X-inefficiencies and in operating cost to total income ratios in European banking during the 1990's. On the other hand, in some instances prices have not fallen: for example in the case of commercial loans, current accounts and personal equity transactions the differences between the highest and the lowest prices have actually increased between 1987 and 1996 (see EC 1997). While various commentators suggest that European markets have become more competitive and contestable (see for instance de Bandt and Davis, 1999) the industry still has important over capacity problems. Substantial parts of the financial system appear to be quite inefficient and largely isolated from competition (Molyneux and Forbes, 1995) (Bikker and Haaf, 2000).

A recent study by Kleimeier and Sander (2002) uses cointegration techniques to investigate the convergence of both retail and corporate lending rates in the Eurozone. They find strong evidence of structural breaks with the introduction of the single currency in January 1999 although there is some evidence of an 'emerging uniform Eurozone banking market. This tendency is more pronounced for the corporate lending market, while consumer lending markets are still fragmented' (p.1). The aforementioned study also identifies three main forces leading to the creation of a single market:

- Cross border borrowing and lending (arbitrage);
- A national and international retail banking environment; and
- A smooth and uniform pass-through of interest rate changes on lending rates.

Kleimeier and Sander (2002) however, caution that lending is still very much a localised business (arbitrage activity, especially, in retail and SME lending is likely to be limited). There

is also little evidence to support the view that pass-through of interest rate changes resulting from policy changes is uniform or smooth (witness the current debate on the monetary transmission mechanism in Europe, see Altunbas et al (2002)).

Competition on credit markets hardly spans national boundaries apart for multinationals and large mid-corporates. Given this, it is perhaps unsurprising that full the integration of corporate (and retail) credit markets are some way off. This is also suggested by Pagano (2002) who finds that '...convergence in the corporate loan market are very weak' and that while there is evidence of integration in the money market and government bond market, '...most indicators of credit market integration suggest that progress in financial integration has so far been modest and is still far from being complete' (p.3)

In addition to the lack of credit market integration, other obstacles to integration in the banking sector relate to a variety of issues including:

- the lack of convergence on cross-border payments (an issue highlighted by various studies during the 1990s);
- differential tax regimes on retail savings;
- limitations on the cross-border marketing of financial services;
- cross-border establishment restricted by legislation not being implemented in the spirit it was drafted; and
- limits to hostile and cross-border takeovers in the financial services industry in general.

The EU's Financial Services Action Plan is currently in the process of drafting and/or finalising directives aimed at addressing many of these issues - in fact those directives likely to have a major impact on banking sector integration will be adopted by the end of 2002.

4. INTEGRATION OF EUROPEAN CAPITAL MARKETS

So far this paper has discussed the main features of the banking sector and issues surrounding structure, performance and market integration in Europe. A major objective of the EU's FSAP, of course, is to promote integration of European capital markets. The introduction of a single currency has been an important factor in the push for further integration of European financial markets along with the Investment Services Directive that created a single licence for investment firms. The creation of the large value payments system TARGET and a euro-wide money market has also been a driving force behind the integration process (as currently witnessed by the moves to agree a Collateral Directive by the end-2003 to facilitate cross-border repo and other money-market related transactions). Technological advances have made remote access to European capital markets now a possibility and the major exchanges are moving to form various alliances with the intention of (presumably) future consolidation.

The competitive environment has undoubtedly altered yet despite these developments the European securities market remains fragmented with a large number of stock and derivatives exchanges, various trading systems and a number of national clearing and settlement systems. The degree of fragmentation in the European capital market still compares unfavourably with that of the US - the benchmark.

Tables 22 to 24 highlight the main features of European capital markets illustrating various well-known facts - namely, that the Euro zone has less quoted companies than the US (around 6000 compared with 8,200), has a lower stock market capitalisation to GDP ratios, and bonds (mainly public) are typically more important. The study of stock market integration (both globally and within Europe) generally suggests that the 1990s was a period of increasing global market integration - probably a reflection of greater global macroeconomic convergence. In a recent study that investigates stock market integration Pagano (2002) notes that market returns within the Euro area became more correlated from 1997 to 1999, although there was a strong offsetting trend in 2000. He suggests that quantity (rather than price) indicators may be more accurate integration indicators and notes that such measures as: the share of equities in internationally managed funds; the share of foreign equities in pension funds and the share of foreign assets held by insurance companies are more appropriate. Using these measures Pagano (2002) finds stronger evidence of stock market integration in the Euro zone over the last few years.

Despite the level of fragmentation and the remaining (but perhaps slowly declining) bank-based features of Euro-zone capital markets major moves are being made at the EU level to bring

about (if not force) further convergence and integration. The Mid-Term Review of the FSAP held in February 2002 ²⁹ emphasised the 'vital importance' of integrated capital markets for achieving higher economic growth and job creation, for financial stability and to enable consumers and businesses to benefit from the introduction of the single currency. In this context, adoption of proposed directives on collateral, market abuse, insurance intermediaries, distance marketing for financial services, financial conglomerates, company prospectuses and pensions, by the end of 2002 was seen as imperative. (As were the call for firms to use International Accounting Standards to prepare their accounts.) During 2002 the EU has speeded up legislation in the securities field in order to get the aforementioned directives adopted in-line with both regulatory and market pressures.

²⁹ See http://www.europa.eu.int/comm/internal_market/en/finances/actionplan/02-36.htm

Table 22 Total number of companies with shares listed in stock markets

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Belgium	Euronext Brussels	341	345	334	304	295	279	269	265	268	278	265
Denmark	Copenhagen	284	271	219	257	251	252	249	249	254	242	235
Germany	Deutsche Borse	-	-	-	-	-	-	-	-	662	851	989
Greece	Athens	140	151	156	145	173	186	200	210	229	262	310
Spain		1,313	1,228	1,132	1,085	980	939	929	980	1,135	1,884	2,385
France	Euronext Paris	804	1,074	1,008	934	922	904	891	924	1,097	969	966
Ireland	Irish	-	-	-	-	-	89	86	102	100	101	96
Italy	Italy	220	267	258	259	260	254	248	239	243	270	297
Luxembourg	Luxembourg	732	218	221	217	272	283	278	284	276	277	270
Netherlands	Euronext Amsterdam	498	412	498	482	466	432	356	345	371	387	392
Austria	Vienna	151	151	160	155	153	148	142	138	128	114	111
Portugal	Lisbon	-	-	-	-	195	169	158	148	135	125	110
Finland	Helsinki	77	65	62	58	65	73	71	126	131	150	158
Sweden	Stockholm	132	127	205	205	228	223	229	261	276	300	311
United Kingdom	London	2,559	2,572	2,440	2,412	2,416	2,502	2,623	2,513	2,423	2,274	2,374
Euro Zone		4,136	3,760	3,673	3,494	3,608	3,570	3,428	3,551	4,546	5,406	6,039
European Union		7,251	6,881	6,693	6,513	6,676	6,733	6,729	6,784	7,728	8,484	9,269
United States		6,765	6,943	6,706	7,445	7,854	8,160	8,783	8,823	8,461	8,512	8,252
Japan		2,890	2,922	2,931	2,953	2,981	3,013	3,089	3,140	3,162	3,216	3,406

Note: Domestic & foreign companies (excluding investment funds). The data for Spain aggregate the following markets: Barcelona, Bilbao, Madrid and Valencia. The data for the US aggregate the following markets: Amex, Chicago, Nasdaq and NYSE. The data for Japan aggregate the following markets: Osaka and Tokyo.

Source: FIBV

Table 23 Market capitalisation of shares of domestic companies / national GDP

Percentage

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
be	Belgium	17.69	19.37	18.60	29.09	23.56	21.43	28.77	46.94	71.03	73.27	92.92
dk	Denmark	15.77	18.59	13.51	23.98	20.99	18.45	25.02	45.73	41.29	59.25	79.47
de	Germany	12.64	12.21	11.30	18.91	15.57	13.67	18.10	32.22	36.91	67.43	78.56
gr	Greece	10.40	8.29	7.71	12.11	8.66	8.37	12.22	23.03	48.26	158.43	112.19
es	Spain	11.83	13.00	11.73	20.41	16.47	14.63	25.69	42.84	49.80	71.25	104.18
fr	France	13.83	16.93	17.19	28.44	22.01	18.38	24.29	39.41	49.43	103.06	129.00
ie	Ireland	-	-	-	-	-	22.61	28.40	52.22	56.60	71.80	99.13
it	Italy	7.33	7.63	7.65	12.18	12.48	10.81	12.95	24.36	34.57	61.10	82.57
lu	Luxembourg	51.04	53.95	58.72	113.75	120.41	96.85	115.68	160.00	150.61	184.14	207.80
nl	Netherlands	21.69	24.78	26.42	44.81	41.61	40.17	59.24	102.65	111.10	172.82	200.28
at	Austria	8.69	8.49	7.50	12.25	10.07	8.05	9.43	14.91	12.26	15.57	18.21
pt	Portugal	6.98	6.63	6.53	12.10	11.77	9.85	13.87	30.53	40.89	59.20	66.66
fi	Finland	9.07	7.10	8.34	21.23	23.75	19.78	31.16	49.96	86.91	269.54	279.35
se	Sweden	21.20	21.66	23.49	45.56	41.70	38.77	59.22	91.67	90.95	148.93	174.40
uk	United Kingdom	45.72	54.23	64.02	93.23	73.89	70.73	80.33	119.52	128.79	185.19	218.44
eu11	Euro Zone	12.11	13.00	12.90	21.74	18.48	16.39	22.22	38.35	46.97	83.69	103.59
eu15	European Union	17.51	19.20	19.75	32.36	26.61	23.93	31.79	53.27	61.05	104.14	125.53
us	United States	31.12	41.61	45.79	59.42	49.12	54.85	68.53	103.80	110.91	169.73	180.79
jp	Japan	68.66	68.02	58.74	78.42	73.90	65.87	70.19	78.57	79.18	132.05	148.97

Source: FIBV

Table 24 Market value of bonds listed / (national) GDP

Percentage

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
be	Belgium	35.10	41.38	107.70	63.57	49.89	50.50	57.46	71.22	71.91	83.77	104.87
dk	Denmark	92.58	103.69	111.26	169.11	120.37	107.96	115.91	142.24	134.95	149.46	180.34
de	Germany	-	39.85	45.28	63.48	58.81	51.61	59.40	78.94	84.24	97.77	-
gr	Greece	-	-	-	-	33.24	36.56	36.78	33.00	49.03	63.97	-
es	Spain	12.26	11.93	10.31	11.49	9.02	6.14	6.14	6.60	5.01	7.27	7.86
fr	France	22.40	25.33	28.35	41.00	33.69	31.07	36.35	45.31	44.50	52.67	65.23
ie	Ireland	-	-	-	-	-	-	23.82	31.54	24.63	17.58	23.59
it	Italy	-	32.73	39.63	48.99	46.01	42.91	60.85	75.58	0.00	86.50	107.63
lu	Luxembourg	4,904.44	5,633.40	5,949.54	7,356.83	6,209.42	5,162.39	5,888.12	8,438.11	8,629.41	13,230.82	19,278.36
nl	Netherlands	30.11	33.31	38.68	54.73	44.33	44.87	53.84	73.34	70.30	86.50	77.77
at	Austria	25.22	26.91	28.91	39.48	33.81	30.43	32.89	42.63	42.39	52.68	69.41
pt	Portugal	-	-	-	-	-	21.38	24.32	30.32	32.43	41.33	53.84
fi	Finland	-	9.79	12.22	18.40	18.11	14.89	22.65	32.18	29.19	-	-
se	Sweden	-	23.62	29.06	51.30	38.92	-	63.51	69.61	-	-	-
uk	United Kingdom	31.00	32.85	41.37	70.98	58.68	52.42	56.87	58.56	66.91	88.42	119.05
eu11	Euro Zone	20.48	41.87	50.26	65.71	58.75	52.23	62.04	83.33	71.59	109.60	108.49
eu15	European Union	22.53	40.60	49.08	67.27	59.12	51.65	62.07	79.30	69.94	102.85	107.29
us	United States	16.43	22.80	20.95	29.56	23.22	21.87	23.21	25.47	22.40	24.56	25.52
jp	Japan	34.18	36.61	41.56	55.42	49.02	46.86	54.73	71.69	75.46	98.07	133.03

Source: FIBV

5. CONCLUSION

This paper investigates banking and capital market developments in Europe and the moves towards the creation of a single financial services market. A critical element in the integration process is the success of the EU's Financial Services Action Plan (FSAP). This seeks to introduce a wide range of legislation aimed at reducing barriers and promoting cross-border trade in financial services - especially for capital markets and retail / SME financial service areas. As was the case in 1992, it is likely that the expectation of further financial market integration will encourage market participants to adjust their strategies in the light of these developments. Or to put it another way, many banks are likely to accelerate their plans to sell financial products cross-border given the changing environment. Stock and derivative markets will be encouraged to consolidate and investment and pension funds in the Euro zone will increasingly embrace the equity market culture and so on. Regulatory standards in the financial sector will move in line with international best practise and further harmonisation will take place. The challenge for the financial services industry is to reorganise and adapt to this new environment. Targeting a successful pan-European strategy post-2005 (the deadline for the FSAP) will be of critical importance for financial services firms in general.

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