

Directorate-General for Research

WORKING PAPER

Prudential Supervision in the context of EMU

Economic Affairs Series ECON 102 EN REV 1 This publication will be available in EN, FR and DE

A summary will be available in all the Community languages.

PUBLISHER: European Parliament

Directorate General for Research

L-2929 Luxembourg

AUTHORS: Centre for European Policy Studies (CEPS)

BRUSSELS

EDITOR: Ben Patterson

Economic Affairs Division Tel.: (00352)4300-24114 Fax: (00352)4300-27721 E-Mail: GPATTERSON

Internet: gpatterson@europarl.eu.int

The opinions expressed is this working paper are those of the authors and do not necessarily reflect the position of the European Parliament.

Reproduction and translation for non commercial purposes are authorised, provided the source is acknowledge and the publisher is given prior notice and sent a copy.

Manuscript completed in March 1999.



Directorate-General for Research

WORKING PAPER

Prudential Supervision in the context of EMU

Economic Affairs Series
ECON 102 EN REV 1
03/99

PRUDENTIAL SUPERVISION

iv

Executive Summary

Monetary union is triggering a broad debate on the adequacy of the supervisory framework governing financial institutions. Three concerns inform this debate:

- First, strong interpenetration of financial markets as a result of EMU poses a challenge to the home country control rule in the supervision of financial institutions in the EU, and to the limited integration and co-operation in the supervision of markets.
- Second, the trend towards scale-enlargement and conglomeration in the financial sector, to which EMU has partially contributed, raises the question of whether the current institutional set-up for the supervision of financial institutions and markets is indeed adequate for the task.
- Third, the transfer of monetary policy-making to the European Central Bank (ECB) raises the question of what role that institution will play in the areas of prudential supervision and financial stability, which in large part remain member state responsibilities.

The European Central Bank has sometimes been characterised as being more of a monetary policy rule than a full central bank. The ECB has independent powers to maintain price stability, but prudential control and financial stability responsibilities, including the lender-of-last-resort role, remain in the hands of national authorities. It can only act in an advisory and co-ordinating capacity in the prudential supervision of banks, and promotes the smooth operation of payment systems in EMU. By contrast, a full central bank performs all three functions with the aim of maintaining overall economic and financial stability.

Although it is too early to draw far-reaching conclusions, some observations and policy recommendations can be made at this point. These are based on an analysis of the effects thus far of financial market integration in the EU, the trends in prudential control at the European and global levels, and the actions undertaken to date within the European System of Central Banks (ESCB).

- The European Central Bank might be tested early on its interpretation of its task in the domain of prudential supervision and financial stability. EMU dramatically increases competition in the financial sector, and may augment bank fragility. The cushions European banks may fall back upon in order to withstand increased competition are limited. Bank profitability has been low over the last few years in most EU countries, and recent events, such as the 1998 crisis in emerging markets, have strained the internal risk management capacities of most European banks. The current trend towards scale-enlargement in European finance aggravates this problem, and may rapidly make a national banking problem also a euro-zone problem, as a result of the size of the national groups and single euro money market. The ECB is confident that banking supervision is fully co-ordinated in its Banking Supervisory Committee, but it remains to be seen whether this Committee will have the capacity to exercise integrated supervision, and whether the ECB will have the means to carry out this task.
- There exists some ambiguity in the lender-of-last-resort procedures in EMU, which the European Central Bank should resolve by instituting a hierarchy. The ECB would be a useful entity to constrain the use of lender-of-last-resort and bank rescue operations at the national level and to create a more level playing field for European banking and financial institutions in this domain. Approaches to banks in trouble still differ importantly across the EU and need to be aligned with a view towards greater market integration and competitive equality. An effort should be made in this respect to revitalise the draft

directive on the reorganisation and winding-up of credit institutions that has been blocked before the EU Council for many years.

- No institution is currently in charge of aggregating and monitoring exposures in European financial markets on a systematic basis. The emerging market crisis suddenly revealed that the exposure of European banks to emerging markets was more than three times greater than that of North American banks. In response to stronger market integration and interdependence in EMU, the European Council should consider the creation of a European observatory for systemic risk. Its function would be to introduce common supervisory and transparency standards, to monitor market developments across Europe and to alert national and European authorities to exposures with a potentially systemic impact.
- Monetary policy and bank supervisory functions are separated in one-half of the Community's countries, and combined in the other half. In view of the increasing complexity of banking, the independence of monetary policy and the cost of bank rescues, the argument in favour of separating central banking and bank supervisory functions is becoming stronger. There is, however, no strong argument in favour of combining all financial supervisory functions within a single entity; but this does not mean that supervision should remain along functional lines of business. The increasing conglomeration in the financial sector calls for more supervision based on the objectives of supervision: control of systemic risk in markets, solvency of financial institutions, and protection of consumers.
- The current EU regulatory framework for financial market supervision, based on the home-country-control principle, is appropriate in EMU as long as strong co-ordination between supervisory authorities exists; and, as far as banking is concerned, well developed communication lines among the national central banks within the European System of Central Banks (ESCB) are in place. The central institution of this system, the ECB, will be the only organ capable of deciding on immediate liquidity support to the euro-market in times of generalised crisis, but bank rescues can only be decided and executed at the local level. The institutional set-up of regulation should be reviewed in view of European financial market integration, which might require more centralised supervision in the long run. The nationality of financial institutions will grow less clear in Europe, requiring supervisors to develop an integrated multilateral mode of supervision as a precursor of a European system of supervision.
- According to cross-border surveys on banking and insurance services, the single-market
 programme in financial services has not led to more convergence in the pricing of
 financial services in EU member states. In fact, financial institutions have increased their
 product diversification in response to the intensification of competition. Moreover, there
 remain important tax and regulatory barriers, limiting cross-border provision of financial
 services. The absence of significant benefits for consumers as a result of the move to the
 single market has led to demands for more consumer protection measures.
- In view of the prevailing trend towards national consolidation in the banking industry and the ensuing dangers for oligopolistic practices at national level, authorities will need to watch carefully whether financial markets in Euroland become truly integrated. Further reduction of remaining tax and regulatory barriers to a single financial market becomes imperative; and competition policy authorities should closely examine whether markets are sufficiently open and European.

Contents

EXE	EXECUTIVE SUMMARYV		
I.]	INTRODUCTION	1	
II. I	EUROPEAN FINANCIAL MARKETS COMPARED	3	
A. B. C.	METHODOLOGY, TERMINOLOGY AND CAVEATS EU BANKING MARKETS EU INSURANCE MARKETS	4	
III.	MARKET DEVELOPMENTS IN EUROPEAN FINANCE	9	
A. B.	DEVELOPMENTS AT THE COMPANY LEVEL		
IV.	REMAINING BARRIERS TO A SINGLE FINANCIAL MARKET	15	
A.	THE REGULATORY FRAMEWORK.	15	
BOX	1. THE BASLE CAPITAL ACCORD	17	
В. С.	New Priorities	20	
V.	THE IMPLICATIONS OF EMU FOR PRUDENTIAL CONTROL	23	
вох	2: STATUTORY BASIS OF THE ECB'S INVOLVEMENT IN PRUDENTIAL SUPER	VISION23	
A. B.	THE TOTAL DESIGNATION OF THE SOURCE STATES OF THE S	27	
BOX	3: THE UK FINANCIAL SERVICES AUTHORITY		
	2. Single Financial Supervisor or Specialist Supervisors		
BOX	4. THE CASE FOR		
C. D.		32	
VI.	CONCLUSION	39	
ANN	EX I. STATISTICS	41	
ANN	EX II. PRICE DIFFERENTIAL FOR FINANCIAL SERVICES IN THE EU	46	
	EX III. THE EU REGULATORY FRAMEWORK FOR THE FREE PROVISION OF I		
ANN	EX IV. SUPERVISORY STRUCTURES	54	
DEF	EDENCES	56	

Tables and Figures

TABLE 1. KEY DATA ON EUROPEAN BANKING (1996)	5
TABLE 2. KEY DATA ON EUROPEAN INSURANCE (1996)	6
TABLE 3. CONCENTRATION IN BANKING	11
GRAPH 1. PROFITABILITY IN BANKING (AVERAGE 1994-96)	12
TABLE 4. SOLVENCY RATIOS (1996) IN BANKING	18
TABLE 5. AN INSTITUTIONAL FRAMEWORK FOR FINANCIAL MARKET CONTROL	31
TABLE 6. OBJECTIVES OF SUPERVISION AND DEFICIENCIES IN THE PERSPECTIVE OF EMU	38
TABLE A1. PROFITABILITY IN BANKING	41
TABLE A2. INHABITANTS PER BANK BRANCH (1986-1996)	42
TABLE A3. BANK EMPLOYMENT AS % OF TOTAL EMPLOYMENT	43
GRAPH 2. GROSS INCOME IN BANKING (1996)	44
TABLE A4. TOTAL ASSETS OF BANKS AND INSURANCE COMPANIES (1996)	45
TABLE A5. CECCHINI STUDY RESULTS: THE PRICES OF FIVE FINANCIAL SERVICES IN 19874	46
TABLE A6. POSTAL SURVEY STUDY RESULTS: THE PRICES OF FIVE FINANCIAL SERVICES IN 1996	46
TABLE A7. THE REGULATORY FRAMEWORK FOR THE FREE PROVISION OF FINANCIAL SERVICES IN THE EU	53
TABLE A8. MONETARY AND BANK SUPERVISORY FUNCTIONS IN EU COUNTRIES, SWITZERLAND AND THE US	54
TABLE A9. REGULATORS OF BANKING, SECURITIES AND INSURANCE IN EUROPE, JAPAN AND THE US	

I. Introduction

The 1990s have witnessed an era of sea change in the regulation of European financial markets. It started with the liberalisation of capital movements in 1990. The single market programme for the financial services sector was implemented in three steps, with the free provision of banking services in 1992, life and non-life insurance in 1994 and investment services in 1996. The unification of monetary policy and the introduction of the single currency in 1999 completed this process. In the course of one decade, markets were almost totally liberalised and re-regulated at European level.

So far, the regulatory framework for the control of financial markets has worked well. On the basis of a single licence, banks, insurance companies and investment firms are allowed to provide financial services throughout the EU, under the sole supervision of the home country regulators. Some fine-tuning has been necessary, but the basic principle has not been called into question. On the contrary, it also applies at the global level. It is accepted that a lead coordinator, being the home country supervisor, needs to take final responsibility for supervising globally active firms in the sense of ensuring that all final controls are applied.

In the context of EMU and a unified monetary policy, however, the question arises of whether this regulatory framework is still adequate. Within EMU, monetary policy alone is delegated to the European Central Bank (ECB), whereas responsibility for prudential supervision and financial stability remains at the national level. Will EMU not necessitate more centralised supervision, at least for banks? Will European banks and financial institutions continue to have a clearly discernible home market? How will the ECB react to bank troubles in one member state, which might necessitate the injection of extra liquidity to preserve the stability of the financial system, but which might conflict with its objective of price stability? Who will act as lender-of-last-resort for truly European banks?

This debate received additional impetus by the IMF's International Capital Markets report, released in September 1998, which argued that the framework for dealing with pan-European banking problems and financial crisis management in EMU was inadequate, since banking supervision and lender-of-last-resort remained at the national level. EMU would give a European dimension to financial markets in Europe and would increase contagion at European level as a result of the emergence of a euro money market. The ECB would however have neither the means nor the information to respond to a European financial crisis. Moreover, the IMF experts argued, the ambiguity of the current division of responsibility between the ECB and the national authorities could increase moral hazard.

This study attempts to answer these and other questions. To put the debate into perspective, it starts with a comparison of the importance of the financial sector in the EU on the basis of selected macroeconomic and microeconomic criteria, using consolidated national data. It documents the extent to which European financial markets have become more integrated over the last ten years. A second chapter reviews developments taking place at the level of individual banks and financial institutions and the implications for individual customers. Chapter III discusses the remaining barriers to a truly single market for financial services in the EU, and examines the extent to which they will be further reduced by EMU. The fourth chapter, the main focus of this paper, assesses the adequacy of the regulatory framework and the implications of EMU.

This overview is limited to the implications of EMU for prudential supervision, i.e. the supervision of financial institutions to protect depositors and policyholders and ensure financial stability. This paper does not address the question of the implications of EMU for the supervision of capital markets at micro level, to ensure market integrity and the equality of participants.

This study updates and adapts a previous paper for the European Parliament on the subject (ECON-102, published in February 1998). It draws upon CEPS and other research that has been published in the meantime.

II. European Financial Markets Compared

Using different criteria as the basis for comparison, European financial markets show a fairly varied picture. Generally speaking, this can be explained by differences in wealth and savings habits, social and economic traditions and geography. The question arises, however, of whether markets are becoming more integrated, whether some common trends are discernible or a convergence can be observed in certain areas. In the following chapter, we make use of national consolidated data to compare banking and insurance markets in EU countries on the basis of some general macroeconomic and microeconomic criteria.

A. Methodology, Terminology and Caveats

The consolidated data on the banking sector per country need to be handled with care. Banking structures in the EU member states show important differences and therefore defy quick comparisons. The various legal statutes reflect former national differences and diverse governance structures. The four most important groups are commercial banks, savings banks, mutual or co-operative banks and mortgage banks or building societies. But even within these distinct categories, important variations exist across countries. Mortgage banks in Denmark and Germany, for example, finance mortgage loans at the wholesale level with long-term bonds, whereas UK building societies refinance in the short term with retail deposits. Apart from these four main groups, there are post banks, municipal banks and specialised financial institutions. Several member states have recently simplified and reduced the various legal regimes of banks.

In its publication entitled *Bank Profitability: Financial Statements of Banks*, the OECD presents consolidated financial data on the banking sector for each of the different groups of banks that are present in each country, and for the whole banking sector, if available. Apart from financial data, the publication gives basic information on the number of banks, bank branches and employees. Compared to previous editions, the OECD data have become fairly complete. They now include consolidated balance sheets for and structural information on the whole banking sector in nine EU countries (Austria, Belgium, Finland, France, Germany, Ireland (since 1995), Italy, the Netherlands and Spain). For Denmark and Sweden, the data refer to commercial and savings banks, and are thus almost complete. For Luxembourg, Greece, Portugal and the UK, they refer only to commercial banks. Statistics for the UK were supplemented with data on the UK building societies where possible, the second-most important banking group in that country, as provided by the UK Building Societies Association.

EU averages refer to a number of EU countries in the survey. Other countries covered in our survey are Switzerland, Japan and the US. The data for Switzerland are complete. For the US, they refer to savings institutions and commercial banks, and for Japan to commercial banks only. The incomplete character of these data has to be kept in mind when they are used in conjunction with other general and macroeconomic statistics, such as the number of branches per inhabitant (See Table A2 in Annex I). This is of lesser importance for the microeconomic analysis, however, in which ratios are determined on the basis of one set of data, such as profitability.

¹ Commercial banks control 54% of the total assets and 66% of the commercial loans of the banking sector in Japan. Apart from commercial banks, there are also long-term credit banks and cooperative banks in that country.

Regarding the terminology used, gross income is the sum of net interest income (the net income on interest-bearing assets and dividend income on shares and participations) and net non-interest income (net fees and commissions, realised losses and gains on foreign exchange and securities operations). Gross income is used as an approximation for the value-added in the banking sector. Gross income per employee refers to the labour productivity in the banking sector.

The insurance sector is easier to bring into the picture, although it is also subject to differences in legal regimes and governance structures for commercial insurance companies, mutual or cooperative insurers, and publicly-owned firms. In some EU states, composite insurance companies (i.e., companies offering life and non-life insurance) are still prohibited, whereas they are common in others. The basic element of comparison is premium income. Premium income is however not comparable to gross income in banking. To be more comparable, we should deduct annual disbursements for accident claims and life policies, on which no data are available. The data on the insurance sector are based on data from Eurostat's Services Statistics and the association of European insurers (Comité Européen des Assurances - CEA). They cover all European countries and the European Economic Area (EEA).

General macroeconomic data are drawn from European Commission sources.

B. EU Banking Markets

The importance of the banking sector in the different national economies has not changed significantly in recent years. The value-added of the banking sector, calculated as gross income as a percentage of GDP, amounted in our sample to an average of 5% in 1996 (see Table 1). Apart from Luxembourg, where the banking sector dominates the economy with a value-added of 39%, most countries have come closer to the average over time, with a declining standard deviation.

The banking sector plays a much more important role in the EU than in the US. Total assets of EU banks are more than three times larger than these of their US counterparts (see Table A4). But US bond and equity markets are twice the size of their EU counterparts. This results from the segmentation of the US financial system in the 1933 Glass-Steagal Act, which separated commercial from investment banking and brokerage, and the popular mistrust against concentrated financial power, embedded in the anti-trust legislation. In Europe, on the contrary, the universal banking system, i.e. the combination of commercial and investment banking in a single entity, has remained dominant, and was taken as the model in the EU's financial market liberalisation of the single market programme.

Employment in the banking sector is stabilising at about for 1.86% of total EU employment. Only in Luxembourg, where this sector represents close to 10% of employment, is there to be found an increase in banking sector employment (see Table A3 in Annex I). Banks are a considerably more important employer than the insurance sector, which accounts for 0.58% of all employment in the EU. Real labour productivity in the banking sector, measured as gross income per employee, has increased over the last years in the EU. It stands at about the same level as in the US.

It is often assumed that one of the prime indicators of structural reform would be a reduction in the number and extensiveness of branches that exist in the banking sector in many European countries. This is not so obvious if one looks at the number of inhabitants per branch, which declined continuously until 1996, the last year for which we have data (i.e., the number of branches continued to increase, see Table A2 in Annex I). The wide diversity in the density of branch networks in the EU, which as yet shows no sign of convergence, is more an indication of differences in the market situations in general, and in savings habits in particular. In Italy, for example, banks pursued a competitive growth strategy in response to the single market programme (SMP) and increased the number of branches, growing by 46% in the period 1990-96.

Table 1. Key Data on European Banking (1996)

	Inhabitants per branch	bank employment as % of total employment	gross income as % of GDP	gross income per employee (1000 ECU)
В	567	2.11	5.8	156.7
DK	2382	1.71	4.2	129.6
DE	1880	2.10	4.5	117.3
EL	6614	1.11	2.7	59.5
Е	1060	1.95	5.9	112.6
F	2220	1.86	4.9	146.3
I	2675	1.64	4.8	140.8
IRL	2375	2.53	7.3	126.2
L	1210	9.45	39.4	256.4
NL	2277	1.69	7.1	190.6
AU	1721	1.92	6.4	162.3
P	2620	1.37	6.1	84.6
SF	3634	1.30	3.8	137.9
SW	3545	1.07	3.9	182.4
UK	3525	1.94	4.7	101.0
EU15	1986	1.86	5.0	128.2
USA	3740	1.37	4.1	134.9
J	8561	0.59	1.8	172.5
СН	1967	3.06	10.8	222.1

Sources: OECD (1998) and others.

The differences in the density of branch networks should thus not be overstated. Total personnel is a much more important cost factor. It can be noted that differences in bank employment as a percentage of total employment are much smaller (with the exception of Luxembourg, see Table 1). Whether a given number of employees are distributed over many small branches or a few larger ones is not material.

Neither is the change in the number of licensed banking institutions active in one market a useful indicator. It is more an indication of the importance of the different sub-groups in a certain banking market than of any structural evolution. In Germany, for example, 3,578 different banking institutions were active in the market in 1997, in France there were 1,299, in Italy 935, in the UK 551 and in Spain 416 (ECB, 1999, Table 4.1). The difference is due to the high number of co-operative banks in Germany (about 2,500), which are separate legal entities,

but often belong to one group. Although there is a decline in the number of licensed credit institutions over the last years, the number has to be considered with care.

A more useful indicator of reform is a comparison of bank profitability. Such a comparison shows that some countries have already successfully restructured their banking sector in response to increased competition and market integration, while other countries have not yet even begun such restructuring. This subject is discussed in closer detail in the next chapter.

C. EU Insurance Markets

In asset terms, the insurance sector is of much less importance in the EU economies than is banking. Total bank assets stand at about 196% of EU GDP in 1996, as compared to 36% for total assets of insurance companies (see Table A4).

Gross premium income as a percent of GDP varied from 1.7% in Greece to 22.5% in Luxembourg, with an EU average of 7.2% (see Table 2). Overall, the number of premiums written is lowest in the southern European countries and Finland, which indicates that insurance is linked to wealth. Employment is much lower in the insurance sector than it is in banking, accounting on average for 0.58% of all employment in the EU. Employment is highest in Austria, with 0.82%, and lowest in Greece, with 0.25%. Switzerland ranks much higher, with 1.26%.

Table 2. Key Data on European Insurance (1996)

1996	gross premium as % GDP	gross premium income per employee (1000 ECU)	insurance employment as % of total employment
В	5.7	471	0.69
DK	6.5	527	0.66
D	6.6	508	0.71
EL	1.7	171	0.25
Е	5.0	474	0.39
F	9.6	859	0.62
IRL	6.8	439	0.80
I	3.9	829	0.23
L	22.5	2113	0.66
NL	9.3	708	0.60
A	6.2	366	0.82
P	5.3	310	0.32
FIN	4.3	390	0.51
S	5.9	639	0.47
UK	11.2	501	0.77
EU15	7.2	577	0.58
СН	15.0	747	1.26

Sources: Eurostat (1998) and CEA (1998).

At the EU level, the life insurance business is equal to non-life in terms of premium income. The figures vary more widely at the member state level, and are influenced by country-specific patterns and regulations. In some countries, composite insurance companies, this is, firms that

offer life and non-life insurance products, are forbidden by law, while they are allowed in others.

Insurance companies have their own distribution outlets, but such outlets are much less important than they are in the banking sector. Insurers rely to a large extent, though in varying degrees between countries, on independent agents and brokers. As regards the number of insurance companies active in one market, the same holds here as it does for banking. The number of institutions active in one market depends more on country-specific elements and is difficult to compare. Overall, no clear trends can be discerned in the EU. In some countries the number of companies is stable, in others it is going up, while it is declining in still others (CEA, 1998).

PRUDENTIAL SUPERVISION

PE 167.301/rev.1

8

III. Market Developments in European Finance

A. Developments at the Company Level

The forces that have transformed financial institutions in the last decades in Europe and elsewhere throughout the world can be summarised in two words: globalisation and technology. Globalisation is the effect of the world-wide liberalisation of markets, by which the world becomes the market. In the area of finance, it requires the free movement of capital and freedom of establishment. These principles were recently institutionalised in the GATS (General Agreement on Trade in Services) agreement for the financial services sector, concluded in the World Trade Organisation (WTO) in Geneva on 12 December 1997. The EU's single market programme is an element of globalisation, since it liberalises trade in financial services in the EU - to a much greater extent than at the world-wide level. Globalisation has increased competition and reduced margins for financial institutions, requiring them to adjust their size.

Technological developments are an important contributor to this process. From a tool, technology has become an enabler to add value and reduce risk. As a result of technological progress, banks and institutional investors can act on world capital markets, while at the same time controlling and integrating their global risk exposure. Back-office operations have become predominantly paperless and fully automated. At the retail level, automation has advanced at an enormous pace, making the traditional types of distribution networks, namely branches, less important. In less than a decade, automatic cash dispensers and direct debit cards have become an element of everyday life. The Internet is a further step in the direction of virtual banks, allowing customers to execute all forms of financial operations from a personal computer at home.

Technology requires huge investments, which have contributed to the consolidation process in the financial sector. Large US banks spend annually over 1 billion dollars on technology. According to a recent study, technological progress had a positive impact on reducing European banking costs by about 3% per annum between 1988 and 1995, but large banks benefited more than did their smaller counterparts (Molyneux, 1997). Technological progress has affected efficient bank size, since the overall cost saving increases with the size of the bank. This cost reduction effect of new technologies should further continue in the decade ahead, with the rapid growth of low-cost hardware and software.

In restructuring their activities, financial institutions have started to focus on productive efficiency, on better internal capital allocation and risk management, and, finally, on higher profitability and shareholder value. To attract the huge sums needed to finance their expansion plans, financial institutions have to prove they can produce value for their investors, hence the increased attention for return on equity (ROE) also in European banking. In marketing, financial institutions have aimed to improving customer focus and enhancing service quality.

Financial institutions have pursued different strategies as a result of this drive towards higher efficiency and customer focus. Some have pursued a strategy of *Allfinanz*, whereas others have concentrated on their core business and the development of niche markets. The former strategy is the one most in evidence, although it is probably the most publicised as well. By following the *Allfinanz* concept, financial institutions want to generate economies of scope by providing banking, insurance and asset management services. This approach is a particularly effective way for banks with extensive branch networks to increase their productivity. Bank insurance needs

to be qualified, since only standardised insurance products are useful to be sold via banks, such as life, fire and car insurance, often linked to a typical bank product, such as a mortgage or car loan. Modules of such standardised products can be stored on the networks of banks, again allowing a more extensive use of technology while reducing processing errors. More specific insurance policies are left for insurance companies or brokers.

The data on mergers and acquisitions in the financial sector provide evidence of this consolidation process. The total number of mergers and acquisitions increased sharply from the announcement of the single market programme onwards, and has subsequently been maintained at high levels, reaching unprecedented levels in 1998. This was not only a result of the advent of EMU, but of a global tendency for concentration. In the US as well as in Europe, banking was the most merger intensive sector in 1998; insurance was the 6th most merger intensive in the US, and the third in Europe. Concentration is however still higher inter-sector than across sectors, which confirms that bank-insurance is more the exception than the rule. For the US, this also due to the restrictions on cross-sectoral and interstate (for insurance) integration. Regulatory reform of the 1933 US Glass-Steagall Act has been under discussion in Congress for 5 years and now concretely challenged by the Travellers-Citigroup merger. In banking, consolidation has mainly remained national in Europe. In the insurance sector, on the other hand, the cross-border element dominated, as several European and international mergers and acquisitions occurred lately (Danthine, *et al.*, 1999: p.55).

Academic studies find no conclusive evidence concerning the economic effects of large banking mergers. Diseconomies of scale arise for large banks in several European member states. There is also evidence of diseconomies of scope for bank-insurance companies. The main positive effect of mergers seems to be the improvement of operational efficiency (X-efficiencies) through cost reductions (Molyneux *et al.*, 1997). The latter was confirmed in a more recent study, which found a higher degree of cost efficiency in universal banks and conglomerates as compared to more specialised banks. De-specialisation may thus lead to more efficient banking systems (Vander Vennet, 1998).

As a result of this trend towards national consolidation, the levels of concentration in banking have increased to worrying levels in some markets. The best example is in the Netherlands, where five groups control 80% of the banking market (see Table 3). In the insurance sector, on the other hand, concentration, measured as the market share of the five largest institutions, declined. Only in some markets has concentration in the insurance sector increased between 1992 and 1996, most markedly in Belgium, in the life sector in Portugal and non-life in Spain (CEA, 1998). The euro should reduce the danger of monopolistic or concerted practices, since it eliminates an important barrier to cross-border financial market integration. According to estimates for the EU 11, euroland would start with a low degree of market concentration in the banking sector (10.8%, see Table 3), allowing scope for further consolidation. From a competition policy point of view, monitoring financial integration in euroland to examine whether it effectively is a single financial market thus is crucial.

Table 3. Concentration in Banking

	1985	1990	1995	1997
В	48	48	54	57
DK	61	76	74	73
D		13.9	16.7	16.1
E	38.1	34.9	45.5	43.6
F	46	42.5	41.3	40.3
I	20.9	19.1	26.1	24.6
NL	69.3	73.4	76.1	79.4
A	35.9	34.6	39.2	48.3
P	61	58	74	76
SF	51.7	53.5	68.6	77.8
SW	60.2	70	85.9	89.7
UK			27	28
EU 11				10.8
EU 15				9.2
US		9	13	

Note: Concentration is defined as the share of top five banks in assets held by banks in a certain country. Data for EU 11 and EU 15 are

Source: De Bandt (1998), ECB (1999).

The European picture resulting from this restructuring process is unclear. Cross-border market integration is still very limited so far, and bank performance differs considerably across borders. In the five largest EU countries, only 4.25% of the assets and 6.2% of the liabilities were cross-border in 1996 (White, 1998). The market share of subsidiaries and branches from other EU and EEA (European Economic Area) countries is still limited in most EU countries. Only in Luxembourg and Ireland reach high levels. In the UK and Belgium, institutions from other EU and EEA countries reach a market share of 23%, respectively 28%, of total domestic assets in 1997. In other countries, the share falls well below 10%. In Germany, other EU institutions have a share of 2.4%, in Italy 5.3% (ECB, 1999).

Cross-border business in the insurance sector is non-existent, due in large part to limitations on tax deductibility to insurance policies purchased from foreign providers. In non-life insurance, cross-border business is marginal, with cross-border business accounting for between 0.13% to 4% of non-life premium income (European Commission, 1999).

A comparison of the performance of European banking institutions shows that some countries have already successfully restructured their banking sector in response to increased competition and market integration, while other countries have yet to even begin this process (Graph 1). Overall, according to the OECD statistics on bank profitability (OECD, 1998), return on equity (ROE) of European banks remained at around 10% between 1990 and 1996. This status quo hides important national differences, however. Profitability decreased drastically in some southern European countries in the same period, reaching lows of 3.6% in France and 3.7% in Italy in 1995, and it was also low in Portugal and Switzerland. In the meantime, the competitive situation of banks in some northern European countries improved strongly, most markedly in the Netherlands, rising from 12.3% in 1990 to 17,6% in 1996, and the UK from 14.4% to 25.6% in the same period.

Seen from a bank efficiency point of view, return on assets (ROA) is probably a better indicator, indicating the total return on the loan portfolio. On an average for 1994-1996, France ranks lowest again with 0.2%, followed by Belgium with 0.35% and Italy with 0.36% (excluding Finland, see Table A1 in Annex). On both indicators, Europe is far below the US. US commercial banks realised a return on assets of 1.74% as compared to 0.49% for EU banks for the period 1994-1996. Return on equity stood at 21.6% for US banks compared to 9.8% for the EU over the same period.²

2,0 1.8 US 1,6 1.4 SW 1.2 UK **A** 1,0 0,8 NL 0,6 LUX 0.4 CH 0,2 0,0 15 20 25 ROE

Graph 1. Profitability in Banking (average 1994-96)

Source: OECD (1998)

B. Implications for Consumers

The effects of European and global financial market integration for individual consumers are difficult to assess. Consumers have started to enjoy a wider variety of financial products, offered by providers from different member states. Technological developments have greatly facilitated bank access, financial transactions, international travel, etc., and this is likely to continue in the coming years with the spread of the Internet in financial services.

The Cecchini report, which formed the rationale behind the 1985 single market programme, forecasted that large price reductions would result from its implementation in the financial services sector. Cecchini envisaged deregulation as a kind of supply-side shock, in which price reductions and output increases stimulate demand, which in turn leads to further price reductions and output increases. The financial services sector had a strategic importance in

² The Graph excludes Finland, which had negative return figures over the period considered due to heavy restructuring, and Greece, where the OECD figures reported in the table only relate to commercial banks, but where overall bank profitability is much lower (European Commission, 1997, p.108)

generating economic gains, contributing to up to one-third of the total economic gains from the entire SMP during the first six years after 1992. Cecchini assumed that post-1992 prices of financial products and services would tend towards the then-observed lowest prices. These price reductions and price convergence assumptions were the basis of the Cecchini microeconomic model of consumer gains from the single market.

The projected price reductions for financial products, however, have not (yet) materialised. Cecchini found differences in the price for the same service of up to 200% in the EU. A postal survey, carried out with 115 EU banks as part of the Commission study on the effectiveness of the single market in banking (European Commission, 1997b), found no real convergence in the prices of the same banking services as covered by the Cecchini study (see Tables A5 and A6 in Annex II). On the contrary, the price differentials increased in some cases, as with commissions and fees. The survey found evidence of increased competition in all EU banking and credit markets, but only relatively small price adjustments have been made. Generally speaking, the study attributed this to the contradictory pressures to which banks have been exposed. Banks have been exposed to both downward (competition-induced) and upward pressures (prudential controls) on their profits and prices. More particularly, the lack of price convergence was the reflection of the non-existence of a common European money market, which changed with the introduction of the euro. A final reason has been the fragmentation of retail banking markets, caused by continuing differences in the cultural, legal and regulatory environments, and the limited competition from foreign providers, as exemplified above.

The 1997 Commission study concluded that the single market seems to have made little impact on the pricing strategy of banks, from which it follows that economic gains from price decreases have not materialised either. The most common strategic response by banks to increased competition was found to have been the introduction of new products and services and diversification of the product range into areas such as insurance and investment products. The cost structure associated with this product diversification has been very heterogeneous and has reduced the transparency for consumers of the cost of financial services. In many European countries and at Community level, it has resulted in consumer demands for more information and for regulation of the pricing of financial services.

The price differentials have not converged in the insurance sector either. The insurance business is less international than the banking sector and insurance products are very often tied to specific regulatory environment. According to a Commission study on the subject, few insurance undertakings have started selling the same insurance product at European level, and are thus even less concerned with harmonising price and policy conditions (European Commission, 1998a). The reasons can be found in regulatory obstacles, the non-harmonisation of contract law, and differences in taxation. The possibility for consumers to compare products does not really exist yet, but this should change with EMU, the study noted.

Inquiries showed that, for example in car insurance, large price differences remain. In a 1997 survey, the Bureau of European Consumers (BEUC) found that premiums for car insurance still differed significantly in the EU (BEUC, 1997). Premiums for a young driver for a similar car ranged from 346 ECU in Portugal to 1,391 ECU in Germany. Insurers in Spain, the Netherlands, Belgium and Italy all charged less than 1,000 ECU for this group of drivers, while French insurance companies charged 1,145 ECU. The consumers' organisation, however, remarked that the motor vehicle insurance policy itself varies from country to

country. It would be useful if consumers could buy their car insurance cross-frontier, but this possibility remains largely theoretical. "In practice", it observed, "the single market is not yet a reality for consumers". Significant differences in contractual terms between insurance policies in different member states make comparisons difficult for consumers, and the EU insurance directives "limit active consumers who want to shop elsewhere". The BEUC therefore called for basic harmonisation at the EU level of laws governing insurance contracts and for steps to encourage the cross-border purchase of insurance policies.

The German Insurance Association (GDV), for its part, found that considerable differences remain in the level of compensation paid to victims of car accidents.³ It concluded that integration of EU insurance markets remains limited, but that further legal harmonisation may not be desirable. The discrepancies in coverage are caused by differences in legal regimes, compensation structures and levels of premiums. Compensation is highest in Germany, as are the levels of premiums, with an average level of compensation of 1796 ECU (Belgium at 1472 ECU, the Netherlands at 1372 ECU and France 1165 ECU). Italy and the UK disburse half as much, 909 and 899 ECU, respectively, and Spain takes the last place with 571 ECU. Various factors influence the level of coverage, such as the average cost of the vehicles involved in an accident; the prices and means of repair; wages; legal regime; cost of assessment; existence of car replacement schemes; the level of compensation for physical injury, etc. For German insurers, these differences will continue to exist, since European harmonisation, as tackled in directives of 1972, 1983 and 1990, was minimalist. Further harmonisation is not foreseen, and possibly not desirable. Better insurance coverage leads to higher premiums, a matter regarding which the user should have a say.

³ Survey published in July 1997.

IV. Remaining Barriers to a Single Financial Market

From a regulatory point of view, the single market for operators on financial markets is almost complete. With the exception of pension funds, EU markets have been opened up for the free provision of banking, investment and insurance services with a single licence. The liberalisation was implemented in different phases: in 1993 for banking, mid-1994 for insurance and 1996 for investment services. This applies also to foreign-owned institutions, which often enjoy a more favourable treatment in the EU than in their home market. This is, for example, the case for US financial institutions, which are constrained by Glass-Steagal-type barriers on universal banking at home. Expressed in GATS language (General Agreement on Trade in Services), the EU offers effective market access, which goes further than the national treatment provided in the WTO framework.

The same cannot be said for the regulatory framework for financial products, and is one of the reasons for the continuing price differences discussed above. The question arises whether further harmonisation of financial products in required at EU level, such as for mortgage loans or contracts sold at distance, for example, or whether competition will bring about more convergence. Some further harmonisation will, no doubt, be required, since too many barriers are still in place for cross-border provision of services.

A. The Regulatory Framework

In the single market programme, the financial services sector is divided along functional lines. Legislation is aimed at the three traditional components of the financial services sector: banking, securities brokerage and insurance. These activities are exercised in different legal entities in the member states. The first category comprises commercial banks, savings banks, mutual or cooperative banks, and mortgage banks or building societies. The legal status of the firm is used as a basis for including them within the scope of the directives on credit institutions. For investment services, on the other hand, the services provided, which embrace a series of instruments, are used to define which firms are covered. This means brokerage, dealing, market-making, portfolio management, underwriting, investment advice and safekeeping of transferable securities, money market instruments, futures and options, and exchange- and interest-rate instruments. In common terms, these are merchant or investment banks, securities firms, and stockbrokers and - dealers (agents de change). Insurance comprises life and non-life insurance companies, defined as undertakings that have received an official authorisation to provide these services. They may be structured in different legal forms: plc's, mutuals or co-operatives, and federations.

These distinctions are to a certain extent arbitrary, however, and are not equally clear-cut for every member state. Above all the distinction between credit institutions and investment services poses problems. In Germany, for example, investment services are generally not separate legal entities and are therefore supervised along with banks ("universal banks"). In the United Kingdom, on the other hand, supervisory authorities preferred that the same entity does not transact both kinds of business under one roof. Instead, it was more common for securities business to be performed through a subsidiary with a separate legal status from the

_

⁴ See annex of the investment services directive.

parent institution. Hence the directive of investment services had to take these national differences in institutional set-up into account. Significantly lower capital requirements for investment firms than for credit institutions would penalise countries with the universal banking structure. Therefore, universal banks can calculate the capital requirement for their trading books on the same basis as investment firms. Credit institutions, on the other hand, have to be regulated more rigorously because they are involved in deposit-taking.

Insurance and banking are still regulated as separate entities in all member states. Many financial institutions are, however, expanding the scope of their services and becoming financial conglomerates (*bancassurance* or *Allfinanz*), which creates new problems for supervisors. This is clearly the case in the banking sector, where many banks are already providing life and old-age insurance products through their distribution networks, with separate authorisations.

Four key directives define the provisions that had to be harmonised by the member states in order to allow free cross-border provision of services in each area: 1) the second banking directive, 2) the investment services directive, and 3) the third life and 4) non-life insurance directives. Basically, these directives give financial institutions the possibility to present their services across the EU with a single the licence, after having duly notified their home authorities of their plans with regards to this or another market. The key measures are supplemented by one or more directives defining specific subjects, such as, for example, the own funds and solvency-ratios directives in banking and the capital adequacy directive for investment firms and trading departments of banks. The latter directives set the minimum capital standards for these firms. Harmonisation often extended to other areas that needed to be tackled at the European level to create the level playing field, for example, the directives on money laundering and insider trading. Table A7 (in annex) gives an overview of the EU regulatory framework for the financial services sector.

The key issue in prudential control is the solvency of financial institutions. Such control should guarantee that these firms have a cushion with which to respond to sudden demands of clients or financial shocks. In banking, in accordance with the 1988 Basle Capital Accord, a minimum solvency ratio of 8% is required, measured as the proportion of own funds of the risk-adjusted value of a bank's total assets and certain off-balance-sheet items. These rules are implemented for the EU in the solvency ratios and own funds directives. The large exposures directive requires banks to have a wide spread in their loans and prevents them from becoming too dependent on a few big clients.

-

⁵ An amendment to the solvency ratios directive was recently approved by the EU Council, generalising the 50% weighting for all forms of mortgage loans, depending on the approval of the home country authorities.

Box 1. The Basle Capital Accord

The 1988 Basle Capital Accord, concluded by G-10 Committee of Banking Supervisors, based in Basle, calls for a minimum 8% ratio of capital to risk-weighted credit exposure. At least half of the recognised capital must be in the form of core, or tier-one capital, including common stock, non-cumulative preferred stock and disclosed reserves. The remainder, termed supplementary, or tier-two capital, includes such components as undisclosed reserves, general loan-loss, provisions, asset-revaluation reserves, hybrid capital instruments and subordinate debt. The specific items recognised as tier-two capital vary, however, subordinate debt is limited by the Accord to 50% of tier-two capital. General provisions can qualify as tier-two capital only if they do not reflect a known deterioration in the value of assets.

Credit exposures are assigned to five broad categories of relative risk. They are given weights ranging from 0 to 100%. The most important ones are:

	Risk Weight
1. Loans to official OECD borrowers	0%
2. Claims on banks and securities firms from OECD countries	20%
3. Inter-bank claims of less than one year	20%
4. Residential mortgages	50%
5. Claims on non-OECD countries, all other credits to the private sector	100%

According to the OECD, banks in European countries for which data are available have a solvency ratio well above 8%, with most countries having ratios of about 12% (see Table 4). Interesting to note that there is no immediate relation between the profitability ratios, measured as return on assets, discussed below (see Table A1 in annex) and the solvency ratio. Countries with higher profitability ratios do not necessarily have higher solvency ratios, and vice versa. This underlines the relativity of the solvency ratio, or indicates that other elements affect the soundness of banks. The Banesto Bank in Spain went bust with a solvency ratio of 9%, but did not make sufficient provisions for bad loans. Japanese banks continue to have ratios above 8% but many often them are at the brink of bankruptcy. The need for a reform and refinement of the Basle ratios, currently under discussion, is clear.

Solvency ratios for investment firms are set in the capital adequacy directive (CAD), but these rules are also applicable to the trading books of universal banks if these institutions choose not to subject their total business to the banks solvency ratios directive (SRD). The SRD is more demanding than the trading book rules, since it always requires banks to have at least 8% own funds. The CAD initially followed the building block approach for measuring market risk: risk in interest rate and equity instruments is added to counterpart and settlement risk for the total risk exposure calculation. This directive was however seen as much too detailed and later overtaken by new developments in supervision of trading activities of banks and investment firms, the internal models or Value-at-Risk (VAR) approach.

Table 4. Solvency Ratios (1996) in Banking

В	13.71
DE	10.2
EL	10.43
E	12.33
F	9.8
I	12.89
NL	11.40
AU	13.77
P	11.14
SW	16.29
UK	11.52
USA	12.72
J	9.18
СН	10.27

Source: OECD (1998); data for France and Germany are approximations, based upon information from the largest banks, no data are available for other EU countries.

This new approach was accepted by the Basle Committee on Banking Supervision in the 1995 Amendment to the Basle Capital Accord to Incorporate Market Risk and became operational from 1998 onwards. It allows banks, under certain conditions, to control their market exposure through their own models. The CAD was consequently amended to take the VAR models into account (CAD II). However, even the VAR will need to be further refined, as appeared during the September 1998 emerging market crisis. Many models had not taken account of the likelihood of such an exceptional situation. This raises the further problem of a flexible framework for financial regulation. The EU legislative procedure typically takes at least 2 years to have a proposal adopted, with another year for national implementation, which is long is the rapidly changing financial business.

In insurance, potential claims of policy-holders are backed by technical provisions that are set to cover the anticipated claims and associated costs arising from the policies underwritten. The third-generation insurance directives introduced minimum rules for the qualitative and quantitative investment of assets. The directives specify the list of admissible assets and the required level of diversification. Investments must take account of the type of business carried on by an undertaking in such a way as to secure their safety, yield and marketability. They must be adequately diversified and spread ("prudent man" rule). Requirements to invest in particular categories of assets are abolished and replaced by minimum rules for the investment of technical reserves, the list of admissible assets to cover these reserves, their diversification and valuation. Maximum percentages apply for cash (<3%), unlisted securities (<10%), and the total of single large holdings or loans (large exposures). Member states can lay down more detailed rules on the acceptable assets for firms under their supervision, which is for example the case for investments in equity, but this should not hinder EU-licensed firms

from countries with more liberal regimes to offer their services on its territory. The directives also contain rules on currency matching, which prohibit insurance firms from holding more than 20% of their assets denominated in currencies that do not match the currency denominations of the liabilities. Moreover, insurance companies are required to maintain a solvency margin, or a buffer that they need to maintain to cover unexpected losses and costs.

Pension funds are not included in the EU regulatory framework for financial services. A draft directive liberalising the management and investment of pension funds in the EU had to be withdrawn by the European Commission in 1994, as a result of broad disagreements between the member states. The draft pension funds directive contained only qualitative rules for the spread of investments in the EU and a lower currency matching rule than the life insurance directives, which represented the main stumbling block of the proposal. This directive would have favoured retirement savings in the form of pension funds, as compared to group insurance schemes, which are subject to the rules of the life insurance directives. Some member states with pension funds, such as Denmark, have however made their pension funds subject to the rules of the life insurance directives, but most other member states with pension funds have kept them under a separate legal regime. Restrictions on pension fund investments have thus not yet been harmonised.

The free provision and cross-border recognition of securities instruments is covered by a series of directives covering unit trusts, listing prospectuses and initial public offerings (IPOs). Whereas the harmonised legal regime has worked for unit trusts, it is much less complete for primary securities instruments. Free provision of unit trusts was instituted by the 1985 UCITS directive (undertakings for collective investment in transferable securities), which sets minimum standards to allow for a single licence for the sale of UCITS throughout the Community. Member states that apply more stringent standards may not forbid the sale on their territory of UCITS authorised in another Member State. The directive sets out harmonised rules for the composition, management and investment of UCITS as well as the information requirements. National marketing and tax rules do not fall within the scope of this directive. They remain under host country control, which means that UCITS must still comply with national regulations in that respect. Two draft amendments under consideration in the EU Council extend the single licence to the companies managing UCITS and the types of funds that can be considered as UCITS. The first draft harmonises the prudential rules for companies managing funds and allows cross-border management of funds with a single licence, thus making a step towards an EU-wide pension fund market. The second allows new forms of UCITS such as funds investing in bank deposits and other liquid financial assets.

As regards primary securities instruments, minimal harmonisation and mutual recognition of securities particulars is basically governed by two directives:

- i) the listing particulars directive, covering the listing particulars of securities in an organised market in the EU; and
- ii) the prospectus directive, regarding initial public offerings of securities in EU capital markets in general. The former directive dates back to 1980, but was amended in 1987 to achieve mutual recognition of listing particulars, and in 1990 to achieve mutual recognition of public-offer prospectuses as listing particulars.

⁶ See Lannoo (1996) for a detailed overview of the objectives of the draft directive and the reasons for its withdrawal

In theory, one Member State's approval for listing is extended mutual recognition by the others. Home country disclosure requirements, which are at least as strict as the minimum required by the directive, are to be recognised mutually. The 1989 prospectus directive covers all securities in general, including unit trusts, debt and equity securities, and Euro-securities. It defines the required content of securities prospectuses when they are offered to the public. The problem with these directives is that it failed to remove many impediments to a greater integration of securities markets and left opportunities open for host country control. The minimum disclosure standard of the directive is often too low for mutual recognition to work. De facto, the directives were not sufficiently comprehensive.

One specific aspect where the regulatory framework is incomplete regards the harmonisation of restructuring and winding-up (bankruptcy) procedures of banks and insurance companies. Draft directives on the subject are on the Council table since many years, but discussions have not progressed so far. The problem relates, in a nutshell, to the acceptance of the principle of unity and universality of winding-up procedures, under the responsibility of the home country authorities, which differs from separate entities approach, followed in non-financial sector (local assets available to local creditors). The Commission has often insisted on the need to get these measures adopted, which becomes even more important in a single currency area.

B. New Priorities

Notwithstanding these problems affecting securities markets, home country control has worked in integrating markets. The problems that have emerged thus far in the functioning of the single market have been of a different nature, and have mainly affected specific products: they relate to the impossibility or irrelevance of buying financial products in other markets because of regulatory or tax barriers. Or they have been caused by loopholes in the regulatory framework, such as the "general good" issue. The European Commission has in the meantime acted on the latter issue, whereas the other remaining barriers are more difficult to tackle. At the retail level, they are one of the reasons of the continuing price differences for financial services in the EU and have resulted in calls for further regulation, most notably by consumer groups.

Financial institutions operating with a single licence since 1992 have often been hindered in particular member states by restrictions justified on the grounds of the "general good" or by the notification procedure to host country authorities. Member states have prohibited the exercise of certain activities or the sale of certain products on their territory, alleging that these activities and products go against the general interest, or that the notification procedure was not duly respected. Both clauses, which form part of all key free-provision-of-services directives, have proved to be serious barriers to market integration, leading the Commission to adopt an interpretative Communication to define the circumstances in which they could be invoked in the banking sector.⁷ The interpretation has been characterised as a "courageous initiative" (Dassesse, 1997), and is now being followed by an interpretative Communication for the insurance directives as well, and probably, for the investment services directive.

⁷ Commission Interpretative Communication, Freedom to provide services and the interest of the general good in the second banking directive, OJ C 209 of 10.7.1997.

Another exception to home country control in the second banking directive (SBD) should disappear in EMU. According to Art. 14 of the SBD, host countries retained responsibility for the liquidity control of branches of credit institutions for monetary policy reasons. Now that monetary union came into effect, there should be no reason for maintaining this provision, although there has been no indication yet in this direction by local authorities.

Tax differences have proved more difficult to tackle, but will become even more distorting with monetary union. Deliberations within the Monti Group at the Commission have recently allowed some headway to be made in this area, but it will take some time before markets become truly integrated from the tax point of view. Products from host countries are of interest only if they are cheaper than those provided by local providers *after tax*. Tax relief for interest payments does not apply across borders. Agreement on a minimum level of withholding tax on interest income, proposed again by the European Commission in 1998, and to be implemented in 2001, will be a big step forward; but it will only be a first step.

Thus far, the single-market programme in financial services has not led to more convergence in the pricing of financial services in EU member states, as cross-border surveys for banking and insurance services prove. Although the non-appearance of price convergence for financial services might have been caused by elements outside of the SMP package for the financial sector, it has certainly contributed to consumer disenchantment with the single financial market and provoked calls for more regulation. This disenchantment was evident in the adoption of a directive for cross-border payment transfers (directive 97/5/EC), and other elements might be tackled in the near future. In a recent Communication, the European Commission (June 1997) proposed a series of measures to enhance consumer confidence in the single financial market. Highest on the list are the regulation of distance contracts for financial services, of unregulated financial intermediaries, of insurance agents, of motor insurance abroad and of electronic payments. Progress on consumer information and redress procedures will be followed-up in other areas as well.

Separately, the European Commission also indicated that pension funds should enjoy the freedoms of the single market. The investment and management of pension funds should be liberalised and remaining investment restrictions abolished. The European Commission relaunched the discussion with the publication of a Green Paper in June 1997 and will possibly adopt a new proposal for a directive in the near future.

C. The Effects of Monetary Union

The preceding discussion raises the question which barriers will be further eliminated by monetary union. With the introduction of the euro, currency-related transaction costs have been eliminated in the euro-zone, which removes another barrier to cross-border purchases of services. Currency matching requirements in the insurance directive have become irrelevant for euro-zone based insurance companies, allowing them to spread their investments in a much wider area. Joint monetary policy also limits recourse to the "general good" clause and other forms of host country controls that have restricted the liberalising effects of the single financial market. On the other hand, monetary union will render the unfinished agenda more visible. Continuing inefficiencies with cross-border payments have become unacceptable. Remaining barriers to an integrated euro-capital market will need to be tackled soon.

EMU gives a further boost to competition between financial services providers in the EU. The euro is no longer the domestic currency of a small groups of banks, but of a much bigger group

of financial institutions spread over 11 different countries. There is one single currency in government bond markets in EMU, in stock markets, in corporate loan markets. Competition in the wholesale business can thus be expected to be very intense, which is one of the reasons why banks prefer to merge with their former competitors to remain competitive overall.

The changes might initially be less marked in retail banking. The different national currencies will remain in circulation until 2002, but they are linked at an irrevocably fixed rate with the euro and the other participating currencies. The transition period only gives some further illusion of local market protection.

Monetary union reduces bank profits. In some countries, interest rates have come down considerably, and this might have reduced interest income more than it reduces the cost of collecting deposits. Interest income might also stay low as an indirect result of the tight budgetary criteria (convergence criteria of the Maastricht Treaty and the Stability Pact) and of more intense competition in the loan and government bond markets. National banking industries that have a large share of their assets invested in government debt, as is the case in Belgium for example, will need to think about other sources of income. On the non-interest income side, banks lose on foreign exchange and related commissions. To these, one must add the one-off costs of the transition.

The clumsy attitude of some banks to continue to charge for conversion between EMU currencies after the start of EMU should be seen in the perspective of the tight competitive climate. It should however be clear to these banks that the costs of such an attitude will be high for the European banking sector as a whole. It has strengthened the calls for more regulation of cross-border payments, which no bank would wish at this moment. It could also lead to an initiative to create an integrated system for retail cross-border payments in the EU.⁸

EMU makes capital market financing more attractive. Direct issues by firms on capital markets have become more attractive as the market has become broader and more liquid. However, it appears that the regulatory framework for capital market issues and operations still leaves much to be desired. Simplification of the regulatory framework for securities offerings should be urgently considered. The Commission should prepare a text that integrates existing legislation in one single document, simplifies the provisions and updates the requirements in light of recent developments. There is no need for new legislation, but rather for a synthesis of the existing provisions, allowing for a more transparent framework. Also the directive regulating securities operators, the investment services directive, should be simplified and cleaned-up. The directive has defined certain concepts insufficiently, such as an exchange ("a regulated market"), and has not sufficiently liberalised cross-border business, since the host country conduct of business rules remain applicable. Whether this can be done through a interpretative document, or an amendment, is not clear at this moment. The European Commission should thirdly actively examine implementation of the existing provisions by the member states, and initiate infringement procedures where necessary.

⁸ TARGET, the payment system of the European System of Central Banks (ESCB), is designed for large value transfers, not for retail payments.

V. The Implications of EMU for Prudential Control

The ECB has only got a limited co-ordinating and advisory role in the domain of prudential control. The ECB's task is limited to monetary policy, it has to ensure price stability, whereas prudential supervision and financial stability stay at the state level. This raises the question how the ECB will act in this field, and how inherent tensions with the member states can be overcome.

Before discussing the implications of EMU for prudential control, we first analyse the rationale for prudential control and examine the institutional structure of control. We then see how this issue was approached in the EU context and how it has been reflected in recent trends in financial sector supervision. Finally, we discuss the implications of EMU and recommend what should be changed in the institutional set-up.

Box 2: Statutory Basis of the ECB's Involvement in Prudential Supervision

The relevant provisions for the ECB's involvement in prudential supervision are Arts. 105.5 - 105.6 of the Maastricht Treaty and the ECB Statute's Art. 25. Art. 105.5 assigns a co-ordinating role to the ECB in prudential supervision, but these duties may be extended by a Council decision. Moreover, the ECB needs to be consulted by the Community and the member states on supervisory matters (art. 105.4).

Arts. 105.5 and 105.6 of the EU Treaty read:

105.5. The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.

105.6. The Council may, acting unanimously on a proposal from the Commission and after consulting the ECB and after receiving the assent of the European Parliament, confer upon the ECB specific tasks concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings.

According to article 105.4 of the Treaty, the ECB needs to be consulted on any proposed act of the Community or member states in its field of competence. This was interpreted by Council decision 98/415/EC of 29 June 1998 as including, amongst others, "rules applicable to financial institutions insofar as they materially influence the stability of financial institutions and markets".

Art. 25 of the statutes of the ECB reads:

25.1. The ECB may offer advice and be consulted by the Council, the Commission and the competent authorities of the member states on the scope and implementation of Community legislation relating to the prudential supervision of credit institutions and to the stability of the financial system.

A. The Rationale for Prudential Supervision

The functional division in the supervision of financial institutions has traditionally been based on the differences in risk factor for banks, investment firms and insurance companies. Regulation at the retail level is valid for all three sectors. Consumers are not in a position to judge the safety and soundness of the institutions with which they are dealing, because of imperfect information (agency problem), which raises a public policy issue. Systemic risk was seen as an issue for banks, to a lesser extent for investment firms, and, in principle, not for insurance companies and mortgage banks (which refinance on a long-term basis).

Banks transform liquid short-term liabilities (deposits) into illiquid long-term assets (commercial loans). The deposits can be easily withdrawn, whereas the loans are not readily marketable. A bank can afford this asymmetry as long as withdrawals by depositors take place randomly over time and assets are held to term. In case of a loss of confidence in the solvency of a bank, however, depositors are faced with a prisoner's dilemma (Goodhart et al., 1997). While they stand to gain more, collectively, by agreeing to refrain from withdrawals and allowing the bank to realise its assets, their individual interest lies in withdrawing their own deposit first, while the bank is still able to pay. Faced with this situation, a bank can only realise its assets by accepting a discount on the book value of its loans, or worse, can be confronted with a growing proportion of bad loans, which would trigger the insolvency of the bank.

The failure of one bank can have contagious effects on other banks. A run on one bank can lead to a run on all banks, or can have repercussions on the interbank market and the payment and settlement system, thereby endangering the stability of the financial system. The failure of one bank to respect its commitments will immediately affect its creditors. In such situations, central banks should stand by and be ready to inject extra liquidity into the financial system to alleviate temporary liquidity constraints on banks and prevent a crisis from becoming systemic. They should act in close co-operation with banking supervisors, to judge the creditworthiness of a particular bank. In case the bank is judged illiquid but not insolvent, lenderof-last-resort support should be provided. Banks contribute to economic efficiency by allocating savings to productive investments, and confidence in this function should be maintained. However, excessively explicit support may stimulate moral hazard, i.e. the incentive to take higher risks than normal, thereby reducing prudence in risk management.⁹ This was exemplified in the US with the savings and loan crisis at the end of the 1980s, when 1,142 savings and loan associations and 1,395 banks went bankrupt, mainly as a result of maturity mismatching and imprudent lending (9.1% of the total number of banks failed in the period 1980-1994, representing 9.0% of total bank assets). The Swedish financial crisis of the early 90s is a more recent example of this phenomenon.

The Basle Committee, the international organisation of banking supervisors, agreed in 1988 that a solvency ratio of 8% was the minimum required for a bank to be sound. A bank needs to have a minimum of 8% tier-one and tier-two capital of the total risk-weighted assets. This rule was implemented, as far as the EU is concerned, in the 1989 solvency ratios directive. A good solvency ratio, however, is a necessary but not sufficient condition to ensure a bank's soundness. Much more thus comes into play: the management and structure of the bank, the internal control system, the lending procedures and loan portfolio, etc. A synthesis of such

⁹ The term moral hazard comes from the insurance world, which focused attention to the problem arising when an insurance company cannot observe whether the insured exerts effort to prevent a loss.

key issues for bank control was recently published by the Basle Committee, entitled *The Core Principles of Banking Supervision* (September 1997), in response to calls from the G-7 to strengthen financial control at global level. The definition of the solvency ratio itself also contains weaknesses, such as the weighting categories (a zero risk weighting for loans to *all* OECD countries, compared to 100% for all commercial loans, see above), and the overall low level of tier one capital. It is therefore being revised within the Basle Committee.

At the retail level, depositors of banks and investment firms are protected through deposit protection schemes. By protecting deposits, regulators reduce the likelihood of a bank run and increase the stability of the financial system. Depositor protection, however, is rather recent in Europe. It was instituted in most member states only in the 1970s, compared to 1933 in the US, and was still non-existent in Greece and Portugal when it became obligatory following the EU's 1992 deposit guarantee schemes directive. This directive introduced a minimum level of protection on deposits of 20,000 ECU and brought it under the responsibility of the home country. In the EU, the home country, which is in charge of controlling the banks under its supervision, is also in charge of guaranteeing its depositors (albeit with a non-export provision and a top-up clause). The same principles and levels of consumer protection were recently introduced through the investor compensation schemes directive for retail clients of investment firms.

The nature of risk in the investment business is different from that in banking. The assets of investment firms (investment bankers, brokers, fund managers) mainly comprise marketable securities, which are quoted and transacted every day. The asymmetry of contracts that exists in the banking sector does not arise in the investment sector, and thus the susceptibility to a loss of confidence is less high in the latter sector. It is becoming increasingly difficult to use this argument, however. The risk profile of investment firms has changed with the practice of trading in derivative instruments, where the risk exposure can be much higher than in the primary business and can change rapidly. Investment banks are also big players in many large-value transactions in the financial system. The failure of one large investment bank or fund manager could thus impact on the whole financial system and have systemic effects, as could recently be noticed in south-east Asia with the failure of Peregrine Investments, the largest investment bank in South-East Asia. It was also maintained in favour of the rescue of Long-Term Capital Management, the US hedge fund which almost went bust in September 1998. Finally, investment banking has become increasingly fused with traditional banking business, certainly in Europe, where universal banking was taken as the model in the second banking directive.

In the insurance sector, the risk of systemic effects through the insolvency of one company does not occur, except for connected undertakings with large intra-group exposures. The failure of one insurance company should not lead to a run on insurance companies to withdraw policies. As compared to bank deposits, policies are illiquid claims that are transformed into liquid assets. On the life-side of the business, policies are held until a predefined date of maturity, and contributions are set on the basis of the mortality statistics. On the non-life side, contributions are defined on the basis of variables like accident statistics or other variables.

Prudential supervision in insurance is mainly a matter of controlling the asset-liability match. Liabilities of insurance companies are backed by technical reserves, mostly readily marketable assets, established to cover future claims from the policies underwritten. Rules on

the prudential asset spread are defined in the EU's third insurance directives. In addition, insurance companies are required to hold a certain amount of additional resources for unexpected losses, the solvency margin, and to reinsure their claims with reinsurance companies. According to a recent Commission report, this system has worked well: over the last 20 years, only a few cases of deficiencies of insurance companies were observed in the European Economic Area (EEA). A significant proportion of these could be remedied through a capital increase or by a take-over by other insurance undertakings, thus avoiding final insolvency and winding-up. Three factors could make insurance companies (and also mortgage banks) more prone to systemic risk:

- i) elements of consumer protection law which allow consumers to withdraw policies easily (and before maturity), or regulation which requires a guaranteed nominal rate of return on life insurance policies, as is set by legislation in most EU member states;
- ii) macro-economic instability, deflation and meltdown of assets, as in Japan;
- iii) the emergence of bancassurance firms and integrated financial conglomerates.

In case of the two first factors, systemic risk would be provoked by bad government policies, the latter is, within a European perspective, the most critical for regulators at present. While both entities are separately authorised and controlled, supervisory authorities could be unaware of the overall risk profile of the group. The risks at group level do not necessarily equal the sum of the risks of the different entities of the group: the group might have large exposures that do not exist at the entity level. The danger of double gearing of capital or uncontrolled intra-group transactions to cover losses on the one side with gains from the other, also arises. International and European authorities are considering these problems, but no legislation exists at European level yet.¹¹

In banking, on the other hand, the evidence of and proneness to systemic risk is less clear-cut than before. On the basis of empirical research, Kaufman (1995, 1996) shows that there is little solid proof of systemic risk in US banking. Insolvencies at one bank have rarely caused insolvencies at others. Bank failures result from bad management and economic downturns, but banks do not fail in dominos. Shareholders as well as depositors have been able to differentiate successfully financially strong from financially weak banks. According to Kaufman, bank fragility was increased by government policies, not decreased, and has thus become an element of government failure, rather than market failures. Regulators should not concentrate on solving liquidity problems, which induce moral hazard behaviour, but focus on the risks to the macro-economy.

Secondly, the asymmetry in the asset-liability structure is slowly diminishing, with the proportion of commercial loans to non-banks in total bank assets declining, while marketable securities are increasing. In France, Germany and the UK, the share of securities on the balance sheet doubled over the last ten years to about 20% in 1996 (OECD, 1998). The process of asset securitisation is widely expected to be further stimulated in EMU. Moreover, the ECB has also included illiquid loans in its list of eligible assets for monetary policy

¹⁰ European Commission, Report to the Insurance Committee on the Need for Further Harmonisation of the Solvency Margin, COM(97)398, 24.07.97.

¹¹ The Tripartite Group, composed of banking, securities and insurance regulators, published a report on the subject in 1995; in February 1998, the Basle Committee published a report on "Supervision of Financial Conglomerates".

operations. The blurring of boundaries in the financial services sector is thus not only applicable on the product side, but also on the risk side, which has important implications for the institutional set-up of supervision.

B. The Institutional Set-Up

In several countries, the institutional structure of prudential control has become a policy issue. Increasing emphasis is being given to the general question of whether the efficiency of regulation and supervision might be influenced by a particular institutional structure. A particular structure might cause an unnecessary duplication of regulatory activity and hence impose a cost on firms and society, or it might miss some aspects of supervision altogether.

As regards banking, the discussion centres on whether banking supervision needs to be under the same roof of the central bank. The increasing tendency towards conglomeration in the financial services industry is an argument in favour of a single supervisory authority, but the differences in risk profile of the various types of business plead for the opposite. Conglomeration might also strengthen the arguments for more supervision by the objectives of regulation.

1. Central Bank or Separate Banking Supervisor

Monetary policy and banking supervisory functions are separated in one-half of the Community countries and combined in the other half. Generally speaking, the arguments in favour of combining both functions revolve around the fact that it is the central bank's role (in all EU countries) to ensure the stability of the financial system and prevent contagious systemic crises. The performance of bank supervisory and regulatory functions by the central bank should contribute to better control of overall financial stability. Through its role as lender-of-last-resort (LOLR), the central bank should, it is argued, be involved in supervision as well. At the same time, however, this raises an argument against combining both functions. For a conflict of interest might arise. The central bank's participation in bank rescues might endanger price stability and increase moral hazard. It might create competitive distortions if central bank money is allocated at preferential rates to a bank in trouble as compared to other banks. Finally, it might raise the expectation in the private sector that the central bank would be influenced by considerations of financial system stability when determining monetary policy. The central bank's reputation might then be at stake.

The fact that both regimes are equally represented in the EU shows that there are no definitive arguments for either model (see Table A8). According to Goodhart and Schoenmaker (1995), the question of the appropriate design has to be approached in the context of the particular financial or banking structure of each country rather than as an abstract problem to be solved. An analysis of bank failures over the last two decades showed there to be a much higher frequency of failures in countries with a separated regime than in those with a combined one. This should not, however, lead immediately to the conclusion that the latter regime is better. Many other factors come into play, such as the quality of supervision, the willingness of governments to let a bank fail or the existence of oligopolies in banking. Goodhart and Schoenmaker also find a stronger likelihood of commercial banks being involved in bank rescues in a combined regime, but they see this as a receding possibility.

There is, however, a general trend among central banks to retreat from supervisory functions. This was exemplified recently in the UK by the breakaway of the supervisory functions from the Bank of England in May 1997 and the establishment of the Financial Services Authority (FSA), a single financial supervisory authority. Several reasons can be advanced for this trend. First banking is becoming an increasingly complex business and less clearly defined. Leading banks are active in several jurisdictions as providers of a whole series of financial services. Linked to this are new developments in financial supervision, which increasingly emphasise the role of self-regulation and internal risk management in financial institutions. Finally, there is increasing acceptance that the government, not the central bank, should take responsibility for ultimate financial support. The ability of central banks to organise and coordinate bank rescues has been slipping, and bank rescues have become more expensive, going beyond the sums which the central bank can provide from its own resources.

Box 3: The UK Financial Services Authority

After only a few weeks in office, the new Labour government announced far-reaching changes to the financial regulatory system in the UK. Several bank failures (BCCI, Barings) and fraud affairs (personal pensions) had brought increased public criticism of the UK's financial regulatory system, which was based on a mixture of statutory legislation and a quasi-private system of self-regulatory organisations. All financial supervisory tasks are now concentrated in the Financial Services Authority (FSA), a fully statutory system of regulation. According to its initiators, the reform should bring about greater coordination and consistency across different areas of regulation, simplified access to the regulator for consumers, clearer lines of accountability and greater efficiency achieved through economies of scale.

The FSA combines banking supervision (formerly belonging to the Bank of England), securities (formerly the Securities and Investment Board, SIB) and insurance regulation (formerly the Department of Trade and Industry, DTI). The reform abolished three self-regulatory organisations: the Securities and Futures Authority (SFA), the Investment Management Regulatory Organisation (IMRO) and the Personal Investment Authority (PIA). The FSA will also absorb the powers of the Building Societies Commission and the Friendly Societies Commission. The FSA has rule-making powers and cooperates with exchanges and clearing houses. It is accountable to the government and Parliament.

The Bank of England remains responsible for ensuring the overall stability of the financial system, which involves monitoring and, when necessary, intervening in the market. A Memorandum of Understanding between the Treasury, the Bank of England and the FSA divides the responsibilities of the different bodies. It establishes a standing committee between these three groups to discuss financial stability and an information sharing agreement between the Bank and the FSA.

This was demonstrated earlier this decade in Norway and Sweden, but also more recently in France. There has consequently been no alternative but to rely on taxpayer funding, leading to more demand for political control of supervisory functions. Close co-operation between the

supervisors and the central bank is required, however, since only the central bank can provide immediate liquidity to the market in case of trouble, and price stability cannot be achieved without financial stability.

2. Single Financial Supervisor or Specialist Supervisors

Once the question of central bank versus separate banking supervisor is settled, a second question to be addressed is whether financial supervision should be assigned to one entity or should be determined by the type of business of the institutions under supervision. The case for the former seems obvious, and was illustrated above in the case of the UK's FSA. It presupposes that there are economies of scale (and probably economies of scope) in supervision, as well as some practical and political advantages. There is a one stop shopping for authorisations for conglomerate financial groups. Expertise is pooled and co-operation between the different functional supervisors is guaranteed. A single authority could also lead to lower supervisory fees, at least in these countries where the financial sector contributes directly to the cost of supervision.

The differences in risk profiles and in the nature of the businesses remain an important argument against a single supervisor, most importantly for banking as compared to the insurance business. In fact, it is doubtful that a single authority would be more efficient (see Goodhart et al., 1997). A single authority could quickly become a collection of separate divisions. Moreover, it would be a very powerful entity and could increase moral hazard, i.e. it could reduce the incentive for financial institutions to prudently manage their business. The public perception could emerge that the whole financial sector is under control, and the loss of confidence as a result of the failure of one institution would be even larger.

A specialist supervisor could be closer to the business, more specialised and better aware of the problems of the sector. It could also be more effective and easier to manage. Two other arguments stand out: increasing specialisation in supervision and interagency 3competition. As a result of new developments in financial supervision, increasing emphasis is being given to market discipline in risk control. This move originates from the realisation that formal rules are increasingly cumbersome tools to capture market risk, since a bank's risk exposure can change very quickly with its investments. Under value-at-risk models, the task of the supervisory authorities is to set the risk parameters and validate the statistical models. Secondly, a single authority suppresses competition among regulatory agencies. Where several agencies work side by side, institutional competition can work and create incentives for each agency to work efficiently (von Hagen, 1998).

An overview of financial sector supervision in the EU and the rest of Europe shows that three EU countries (Denmark, Sweden and the UK) as well as Norway have a mega-financial services authority. In some of these countries (as also recently in Japan and South-Korea), integration of supervision resulted from important financial sector bankruptcies or bail-outs. In Belgium, the Netherlands and Ireland, the creation a mega-authority is on the political agenda or close to be completed. In the other countries, a broad mixture of systems exists, ranging from separate supervisors to combined banking-and-securities or combined securities-and-insurance supervisors (see Table A9).

Box 4. The Case for

A Mega-financial Supervisor

Specialist Supervisors

- One-stop shopping for authorisations
- Pooling of expertise and economies of scale (certain units could be merged, e.g., authorisations)
- Lower supervisory fees (?)
- Adapted to evolution in financial sector towards financial conglomerates
- Cooperation between type of financial business guaranteed; one lead supervisor for conglomerates
- No regulatory arbitrage, regulatory neutrality
- More transparent to consumers

- more effective and easier to manage
- clearly defined mandates
- more adapted to the differences in risk profiles and nature of the respective financial business, clear focus on objectives and rationale of regulation
- closer to the business
- better knowledge of the business
- lower profile
- stimulates interagency competition

To complete the overview, it should be noted that a varying degree of institutionalised self-regulation exists in the financial sector in the EU. It was clear in the former supervisory regime in the UK, with the Self-Regulatory Organisations (SRO's) SIB, IMRO and SFA (see Box 3). Self-regulation in the financial sector is most widespread in the area of securities supervision, where the powers exercised by the stock exchange as compared to the statutory supervision by the securities commission differs importantly across EU countries, and distorts rapid comparisons.

The discussion of mega versus specialist regulator often bypasses the key issue, namely, the exchange of information between the different supervisors and the appointment of a lead supervisor. As the problem also rises at the international level, the emergence of financial conglomerates calls for a good exchange of information between the specialist supervisors concerning the risk exposure in the different parts of the group and agreement on a "lead supervisor", i.e., an authority that takes final responsibility for supervising the 3group. There is no guarantee that a mega-authority eases this process. To quote a Bank of England official: "It is tempting to think that all regulatory questions can be resolved by the creation of a single regulator. Even with everything under one roof, regulatory problems can be resolved efficiently only by close co-operation between regulators, whether they wear different institutional labels or simply different divisional labels within the same regulatory institution". Different entities with clearly defined responsibilities might be as effective.

3. Supervision by Objective

A possible outcome of the conglomeration trend is that supervision will become more objective-driven, since the functional divisions of the business will be increasingly difficult to make. As the differences in risk profiles in the financial sector become less clear to

_

¹² J. Footman, official of the Bank of England, quoted in Goodhart et al., 1997.

distinguish, and also risk management within large groups has converged across the bank and non-bank activities, supervision should adjust accordingly, and tilt towards a horizontal model, driven by objectives of regulation.

Financial supervision could be carried out separately by one agency for systemic stability, a second for prudential supervision, and a third for consumer protection and conduct-ofbusiness considerations. Conduct-of-business supervision looks after transparency, disclosure, fair and honest practices, and equality of market participants. The "stability" agency should concentrate on systemic problems, the prudential agency controls the solvency and soundness of financial institutions and enforces depositor protection. Such structure was instituted in Australia, further to the Wallis Committee of Inquiry (1997), which advised that the regulatory system had to facilitate market developments and therefore proposed a triple structure. The Australian Prudential Regulatory Authority (APRA) supervises financial institutions on prudential grounds, the Reserve Bank of Australia looks after systemic stability and provides liquidity assistance, and the Australian Securities and Investment Commission (ASIC) controls market integrity and conduct-of-business rules. APRA and ASIC report to the Treasury. Some EU countries have elements of an objective-driven system of supervision. In Italy, for example, the Banca d'Italia is in charge of controlling financial institutions on financial stability and prudential grounds, the CONSOB enforces conduct of business rules for the banking and securities industry.

A schematic overview of the objectives of supervision and their importance per type of financial business is given below. Banking and securities are given as one, in view of the universal banking model in Europe. Systemic risk is considered to be of a lesser problem in insurance than in banking and securities business. Control of solvency is equally important for both sectors. An advantage of supervision by objective is that a distinction can be made between retail and wholesale business in the banking and securities sector, but probably as well in insurance. The asymmetry of information and the implications of market failures are much greater in the retail sector, as will be the demand for consumer protection.

Table 5. An Institutional Framework for Financial Market Control

Type of Business/ Objective of Supervision	Banking -	Securities	Insurance
Systemic Risk	XX		Х
Prudential (solvency control)	XX		xx
Consumer Protection/ Conduct of Business	retail xx	wholesal e x	XX

Note: xx = very important; x = of lesser importance.

From this point of view, it could be argued that the wholesale business would certainly not be better off under a single authority, contrary to what is often asserted. The result of a single supervisory authority would be that the different objectives of supervision are merged and later disappear which could ultimately lead to more regulation, including for the wholesale business. This fear was already raised in recent reports on the UK's FSA, since the distinction retail/wholesale had disappeared in the draft financial services and markets bill (July 1998). 13

C. The International Dimension

Recent international bank failures and financial problems have highlighted the global interdependence of financial markets and the need for solutions at that level. The collapse of the British Barings Bank (February 1995) was caused by uncovered positions taken by one trader in Singapore, leading to a loss of \$1.4 billion. The Japanese firm Daiwa incurred a loss of \$1.1 billion as a result of fraudulent transactions by a trader in its New York branch (August 1995). The repercussions of such problems induced the G-7 to discuss the issue at all its recent meetings. The Halifax G-7 meeting (June 1995) called for an integrated approach to potential systemic risks and for closer international cooperation in the regulation and supervision of financial institutions and markets. The G-7 invited the Basle Committee on Banking Supervision and IOSCO (International Organisation of Securities Commissions) to work closely together to address the major issues in this area, to examine desirable solutions for the problems identified and to report back.

The Lyon G-7 communiqué (June 1996) focused on the challenges posed to supervisors by financial innovations, the growing phenomenon of cross-border capital movements and the increasing number of internationally active firms. It called for enhanced cooperation among supervisors of global firms, clarification of their roles and improved risk management and transparency in markets. The G-7 Finance Ministers issued a companion report that lent support to the proposals of the Basle Committee and IOSCO for international co-operation and information exchange between banking and securities supervisors through the appointment of a lead supervisor for globally active firms. It lent support to the Joint Forum on financial conglomerates, comprised of banking, securities and insurance supervisors, which agreed on ways to enhance co-operation and to organise the supervision of complex groups. The Joint Forum agreed that supervisors must have the powers to obtain adequate information on the ownership and management structure, and, if necessary, to prohibit structures that hinder effective supervision. And it encouraged private sector efforts to enhance market transparency, to improve reporting and disclosure of derivatives activities, and to expand co-operation among exchanges and securities supervisors for information-sharing arrangements.

In response to the G-7 calls, the Basle Committee on Banking Supervision issued a consultative paper on "Core Principles for Effective Banking Supervision" in April 1997. The paper was submitted to the G-7 Denver summit (June 1997) and formally published in September 1997.

In the Amendment to the Basle Capital Accord to Incorporate Market Risk, reached by the Basle Committee in 1995, supervisors may allow banks to use, under certain conditions, internal risk measurement models (value-at-risk (VAR) models). This agreement signalled an important change in the thinking about risk control in banking. For the first time, banks are authorised to use their own risk control models to determine the minimum regulatory capital that is required

_

¹³ See Clifford Chance, 1998.

to guard against market risk. This move originates from the realisation that formal rules are increasingly cumbersome tools by which to capture market risk, since a bank's risk exposure can change very quickly with its investments. The supervisory authorities set the risk parameters and validate the statistical models. Banks can calculate the VAR against which capital must be held. The VAR estimates potential future losses in a given portfolio within a certain time horizon through fluctuations in interest rates, exchange rates, equity and commodity prices. The Amended Basle Accord became fully effective at the end of 1997 and was incorporated into EU legislation through an amendment to the capital adequacy directive for investment firms and credit institutions (CAD II).

The emphasis on internal models has recently been taken a step further in the US with the "precommitment" approach, which devises an incentive contract between banks and their regulators. It stipulates that a bank or investment firm has to pre-commit to its regulator to not exceed a certain portfolio loss over a certain period. This pre-commitment approach, which should be determined using the institution's own internal VAR models, is at the same time its regulatory market risk capital requirement. If it violates this commitment, then it faces a regulatory penalty.

As recent bank failures have shown, however, even the best models cannot substitute for sound risk-management practices. The Group of Thirty, a Washington-based finance think tank, recommended in a recent report that global institutions and supervisors should work jointly to ensure the safety and efficiency of the international financial system and to prohibit the occurrence of systemic shocks (Group of Thirty, 1997). With increasing volumes and speed of transactions in financial markets, the interdependence of markets is growing and disruptions in the financial system could have more far-reaching effects than in the past. The Group of Thirty therefore proposed the establishment of procedures to contain such crises. As major participants in the large-value payment system, large internationally active banks have a special responsibility in this respect: they should be well capitalised and have management systems that are global in scope and of high standards. Market participants, on the other hand, should be able to judge the risk exposures and controls of such firms, which are difficult to obtain at the moment. National supervisors have difficulty in achieving a global view of such firms, which act beyond their borders and jurisdiction. Global supervision remains a challenge.

The Group therefore recommended a two-pronged approach.

- 1. Global banks must take the lead and establish a standing committee to develop global principles for managing risk. Such a risk management framework should cover all aspects of risk monitoring and management and provide the basis for evaluating the firm's own operations and those of major counterparts. These management systems must be submitted to a global audit. Risk exposure should be disclosed on a global, consolidated basis.
- 2. Supervisors should pursue stronger international co-operation. They should agree on a lead supervisor for global firms, apply a global framework for management controls and set consistent reporting requirements. They should also establish performance criteria and risk management guidelines for exchanges, clearing houses and settlement systems to strengthen the underpinnings of the entire international system.

D. The Implications of EMU and the role of the ECB

EMU should lead to a further quantum step in the integration of European financial markets. Notwithstanding 5 years of single market, financial markets have remained fairly isolated. Different currencies have kept the local markets protected from foreign competition. Furthermore, a strong home bias can be noticed. Public debt is largely issued on the local market and is domestically held. Institutional investors are strongly biased towards the local market and are not internationally diversified. Cross-border banking penetration is still very limited. This home bias is confirmed in the analysis of balance sheets of European banks with global ambitions, such as ING, ABN-AMRO or Deutsche Bank. In each case, about 50% or more of the income and profits are generated in the local market, while the European share is still limited.

The EU regulatory framework, which is based on the system of home country control, is adapted to this situation of limited cross-border activity. The home country supervisors are in charge of controlling the operations of the financial institution throughout the Community. The home country is also in charge of organising rescue operations for its domestic banks, be it via liquidity support by the central bank, with assistance of other commercial banks, or, if necessary, with tax-payers' money. In case the latter route is followed, it will need to comply with the EU's state aid rules.

The limited ECB mandate is in line with the single market framework, and coincides with the trend of retreat of supervisory functions in central banking. Involvement of the ECB in bank supervision could force it to assist banks in trouble, which both could be difficult to reconcile with the task of maintaining price stability and could compromise its independence. More centralisation of functions than those essentially required for the execution of joint monetary policy would also have been difficult to realise, as it went against the subsidiarity principle. Bank supervision can be better executed at the local level, because of the availability of specific expertise of the local market and the limited integration of European financial markets.

But will this framework face EMU? Monetary union will bring great change in the structure of European financial markets. The euro is the domestic currency in 11 member states. Competition will increase, margins will go down, and scale increases will be required by banks and financial institutions to remain competitive. This is anticipated by the financial sector in the current restructuring and rationalisation process, which often crosses national and sectoral boundaries. Assets will be held more cross-border in EMU. Since all public debt is denominated in euro, and currency matching rules in insurance regulation become meaningless, fixed income investments will be spread over debt of different countries, which would also be prudentially sound, and yields will be measured as compared to a euro bond index. Returns on equity investments will be measured against euro equity indexes. Financial market integration can thus be expected to make a quantum step.

Stronger competition in EMU could intensify bank fragility, but the shock absorbers which European banks have are limited. Average profitability of European banks is low, as compared to US commercial banks. Return on assets of all European banks, measured as profit before tax as percentage of total assets, stands at about 0.50% for the period 1994-1996, as compared to 1.75% for the US commercial banks (see Table A1). Some countries are doing much better than the EU average, such as the UK and Dutch banks, but in others, such as France, the situation is problematic, with a return on assets of 0.2% in 1996. The

concentration wave in the financial sector does not immediately change this situation: it is not by merging two weak institutions that a strong one will emerge, rather on the contrary, it could aggravate the "too big to fail" problem. Also supervision will thus need to make a huge step forward.

A first reaction to this situation of advanced market integration and restructuring is to step-up co-operation between supervisors and central banks at the European level. Strong communication lines should be established between supervisory authorities at national and international level to aggregate exposures of financial groups and exercise consolidated supervision. The present system of supervisory co-ordination, based on *bilateral* memoranda of understanding, risks to miss certain elements in the picture of European-wide operating groups, and should be supplemented with a more intensified form of *multilateral* co-operation. In a recent statement, the European Shadow Financial Regulatory Committee (ESFRC, 1998) proposed that co-operation between supervisors be underpinned by a clear EU-wide agreement on a code of conduct covering supervisory responsibilities and standards in order to avoid misunderstandings, institutional rivalry, and excessive forbearance by national supervisors. Some institution should thereby be in charge of overseeing the web of bilateral memoranda of understanding.

In the "Framework for Action" paper, the European Commission (October 1998) endorsed the need for greater co-operation between supervisory authorities and proposed to contribute to the elaboration of a "supervisors charter", setting down relative responsibilities and mechanisms for co-ordination between supervisors. The Commission also committed to cooperate in the review of the Basle capital rules and to examine prudential issued raised by conglomerates. This paper was endorsed by the Vienna European Council (11-12 December 1998), which asked a policy group of special representatives of the Ministers of Finance to report on concrete measures for the Cologne European Council (June 1999).

Something more might however be needed within EMU, as was revealed as a result of the recent financial market crisis. It emerged that the exposure of European banks to emerging markets was more than three times higher than that of North American banks. The aggregate exposure of European banks to Asia, Latin-America and Eastern-Europe stood at about 400 bn ECU at the end of 1997, compared about 125 bn ECU for the North American banks (US and Canada). Moreover, lending of European banks to these regions increased strongly over the last 3 years, and also after the first signs of the emerging market crisis became apparent in July 1997 (BIS, 1998). European banks have thus actively contributed to the asset bubble in emerging markets. This raises questions about internal risk management within European banks, and external control on lending policies. No European body was (and still is) apparently aware of the aggregate exposure of European banks to these regions.

This situation should be seen in the perspective of EMU and the role of the ECB. As indicated before, the ECB is in charge of monetary stability, but not of financial stability, which remains a member state responsibility, together with prudential supervision. ¹⁴ This setup could be characterised as part of the "constructive ambiguity" (Schinasi, 1998) which is used in the design of safety nets in the banking sector. In order to reduce moral hazard, lender-of-last-resort (LOLR) procedures in banking were deliberately kept ambiguous. However, this argument is no longer valid. Maintaining a high degree of ambiguity has led to

_

¹⁴ Art 105.5 of the Treaty and Art. 25.1 of the ESCB Statute, see box 3.

excessive risk taking by financial institutions and too much forbearance by authorities in the face of banking problems. Such policy can only be modified in a climate of greater transparency on the support which will be offered to banks in trouble, and under what circumstances (Enoch, et al, 1997).

Within the EMU context, the ambiguity of LOLR procedures could, however, rapidly become "destructive", if national central banks continue to provide liquidity assistance to local problem banks at their own discretion. In EMU, the capacity of national central banks to provide liquidity to local institutions is potentially in conflict with the ECB's responsibility for determining liquidity at EMU level. Any operation that is undertaken on the national level has EMU-wide monetary repercussions. For example, an interest rate subsidy to a local problem bank may in the end be paid for by other banks in the EMU and their customers. For these reasons, and on the grounds of competitive equality, procedures for LOLR operations should be harmonised and responsibility for emergency liquidity provision should be clearly allocated between the ECB and national central banks. The procedures should require adequate collateral (following the ESCB Statute), penal interest rates and, above all, prior authorisation from the ECB for the injection of liquidity at local level. This should be made public and thus contribute to reducing moral hazard.

The problem is that the current Treaty provisions are not sufficiently clear whether ECB authorisation is required for local LOLR operations. According to the ESCB statute, national central banks can purchase non-eligible collateral from illiquid institutions on their own responsibility (Art. 14.4), or they can expand the list of eligible tier 2 collateral. The ECB's Governing Council from its side could prohibit such operations when it "interferes with the objectives and tasks of the ESCB" (Art. 14.4) or with the guidelines and instructions issued according to articles 12.1 and 14.3 of the Statute. The IMF therefore called upon the ECB to clarify the procedures for LOLR in EMU (IMF, 1998: p.108-109).

The LOLR issue should, however, not be overemphasised. The "central bank money solution" to banks in trouble is limited, and has been a rare event in industrial countries over the past decades. Markets and regulation have evolved since Bagehot developed his theory on LOLR. The probability of a bank being solvent, but illiquid, and at the same time lacking sufficient collateral to obtain central bank funding is limited, Tommaso Padoa-Schioppa, member of the ECB Board, emphasised in a speech on banking supervision in EMU. More common are the "private money solution", as with Barings and Long Term Capital Management (LTCM) and the "taxpayers' money solution", as used with Crédit Lyonnais and Banco di Napoli. The latter solutions are not a matter for central banks, although they may be involved in the rescue. It does, however, also raise a European issue, since the approaches differ across countries, and affect the equality in market participation.

As regards stability of markets, the current institutional set-up has as implication that nobody is in charge of aggregating and examining exposures in the European banking system to detect signs of potential financial trouble. According to Bini-Smaghi (1998), this information

established by national central banks, subject to the minimum eligibility criteria established by the ECB.

¹⁵ According to the ESCB statute, lending by central banks to commercial banks must be based on adequate collateral, i.e. marketable paper, such as government bonds. Collateral is subdivided in two tiers: tier one consists of consists of marketable debt instruments which fulfil uniform euro area-wide eligibility criteria specified by the ECB; tier two consists of additional assets, marketable and non-marketable (loans on the books of banks), which are of particular importance for national financial markets and banking systems and for which eligibility criteria are

is not available at ECB level and will seriously impede its capacity to judge about the extent of liquidity crisis in European markets. The ESFRC (1998) therefore recommended that, within EMU, the current co-operative mechanisms for supervision of institutions will have to be supplemented by a European-wide structure to monitor markets. This reflects the fact that any supervisory shortcomings in a particular jurisdiction would be quickly felt in other member states. The new structure could take the form of a European Observatory of Systemic Risk (Aglietta and de Boissieu, 1998). The aim would be to ensure common supervisory and transparency standards, to monitor market developments across Europe and alert national and European authorities to exposures with a potentially systemic impact. This body may or may not be a part of the ECB. In the former case, the legal mechanism exists already, since Art 105.6 of the Treaty provides for an expansion of the role of the ECB in this domain. Following the subdivision of supervision along objectives, as discussed above, Table 6 summarises the required changes to the current set-up of supervision in the perspective of EMU.

For the time being, the ECB will need to have sufficient resources to make a quick assessment of the situation in the different financial markets. National supervisory authorities will need to transmit information on the exposure of the banking system on a regular basis to the ECB. Opposition of national authorities in sharing information with the ECB will only strengthen and accelerate the emergence of a more centralised supervisory authority in this domain. At ECB level, the establishment of the Banking Supervision Committee within the ECB is a useful step towards information sharing. In contrast to the Commission's Banking Advisory Committee (BAC), which has mainly a legislative role, the EBSC's task's fall on the macro-prudential side: to monitor the overall stability of the financial system, to promote the exchange of information between supervisors and give ample warning of new developments.

For Tommaso Padoa-Schioppa, Member of the ECB board in charge of prudential matters, the Banking Supervision Committee is an embryonic euro area banking supervisor, which can be "enhanced to the full extent required for banking supervision in the euro area to be as prompt and effective as it is within a single nation". This Committee should develop the multilateral form of supervision, which has so far been little used in the EU. Padoa-Schioppa was also confident about the coordinating role of the ECB in the area of prudential supervision, which it can exercise on the basis of its advisory role in banking supervision. ¹⁶

In the area of insurance, a parallel of the BAC, the Insurance Committee, was established in 1991, as part of the opening-up of insurance markets in the EU. This Committee met already jointly with the BAC to discuss problems related to the supervision of conglomerates. Proposals for an EU securities markets committee were recently abandoned, after it had been deadlocked for the last five years between the European Parliament and the Council on a matter of principle, i.e. the degree of implementing powers it would be granted ("comitology"). In the Framework for Action paper, the European Commission (1998) signalled this change and granted support to FESCO, the Forum of European Securities Commissions. Launched in December 1997, FESCO is an informal and intergovernmental network between securities supervisors, with a permanent secretariat at the COB (Commission des Opérations en Bourse) in Paris. Above all in the latter domain, rapid progress will need to

-

¹⁶ Tommaso Padoa-Schioppa, Banking Supervision in EMU, Speech for the London School of Economics, London, 24 February 1999.

be made in supervisory practices, in view of the acceleration in the cooperation between stock exchanges in the EU, compared to the big differences in regulatory standards, investor protection and market disclosure (See Lannoo and Gros, 1998).

Table 6. Objectives of Supervision and Deficiencies in the Perspective of EMU

Objective of Supervision	Current Set-Up	Required changes for EMU
Systemic risk	National supervisory authorities and/or NCB's	Clear role for ESCB/ECB Create European Observatory of Systemic Risk
Prudential control (solvency control)	National supervisory authorities (home country) Bilateral Memoranda of Understanding Different attitudes to banks in trouble Excessive forbearance	Strengthen exchange of information: need for multilateral Memoranda of Understanding; intensified cooperation Draft code of conduct between supervisors Align lender of last resort procedures, prior authorisation of ECB Harmonise bank exit policies
Consumer protection/ conduct of business	Host country (country where service is provided) for retail and wholesale business	Home country for wholesale business

VI. Conclusion

European financial institutions have gone through a decade of far-reaching regulatory reform. The single market programme streamlined financial regulation at the European level to allow for free cross-border branching and provision of services. It introduced a consistent legal framework to preserve a safe and sound financial system. Monetary union adds another building block to strengthen the financial system: a stable macroeconomic environment. Within EMU, monetary policy is set at the European level, reducing macroeconomic shocks and reinforcing the stability of the financial system.

So far, structural changes as a response to market liberalisation have been limited. Financial institutions have invested heavily in technology and adapted their size to be competitive at a global level, but no clear trends can be perceived in structural reform at the European level. In banking, which is by far the most important part of the financial sector, there has been little change in such indicators as the number of branches, employment or profitability. A closer look at the evolution of the different national markets reveals some worrying trends: whereas bank profitability showed strong improvement in some markets, it declined in other countries, in particular France, to alarming levels.

At the retail level, the benefits of the single market have not yet materialised. Neither the studies for the European Commission on the effectiveness of the single market in banking nor other studies on the insurance sector have found more convergence in price levels. A stronger consumer-oriented European policy agenda, as has emerged over the last years, seems to have been justified. The single currency should bring change, certainly in banking. Local banks will see their monopoly as dealers in the domestic currency disappear. The high levels of market concentration, which exist at the national level in several member states, should disappear, thereby reducing the possibilities for financial institutions to exploit their market power. But a truly single financial market also requires that remaining tax and regulatory obstacles be lifted.

As regards prudential supervision, initiatives will have to be undertaken to adapt the regulatory framework to EMU, and the resulting higher degree of market interpenetration and interdependence. But it would be wrong to believe that EMU calls immediately for a single supervisory authority at EU level. Many elements must be taken into account in the design of an optimal structure for financial supervision: moral hazard, the objectives of supervision, interagency competition, market discipline, efficiency and accountability.

Limiting the ECB functions to monetary policy is part of a general trend of withdrawal from supervisory functions in central banking and fits with the home country control principles of the single market. Specific expertise in and knowledge of prudential control is situated at the local level, where the bulk of the operations of financial institutions are still located, and where eventual rescue operations will be organised. Greater centralisation of functions than what is essentially required for the execution of joint monetary policy would have been difficult to achieve, as that would violate the principle of subsidiarity.

However, EMU adds an additional layer to the already complicated structure of financial supervision in the EU, which might reduce consistency and operability, mainly on the systemic side. What needs to be done primarily is to step up co-operation between supervisors at national and European level, and institute a hierarchy when it comes to emergency lending

and responses to financial stability problems. Although the latter tasks remain at the local level, it is clearly related with monetary policy. Unlimited lender-of-last-resort support for banks at the local level will spill over in the whole euro area. Price stability cannot be achieved if financial stability is not in place.

It is therefore of utmost importance to develop firm procedures between national central banks, local supervisors and the ECB to monitor the stability of financial institutions and markets. The ECB will need to be fully informed about developments in local financial markets, to judge whether they might become systemic at the European level. It will at the same time have to make sure that the playing field is levelled for financial institutions in the EU. To avoid misunderstandings and institutional rivalries, the ECB should exploit its position as "primus inter pares" and set common rules in co-operation with the NCB's and national supervisory authorities on the scope of the safety net for financial institutions. These arrangements should, to the extent possible, be made public.

As far as the stability of financial markets is concerned, procedures should be agreed to be followed in times of crises. It is however clear that, should a generalised liquidity crisis emerge at European level, the ECB will be the institution to intervene and to co-ordinate the response. The creation of a European observatory for systemic risk, close to the ECB, would most useful to scrutinise developments in European financial markets and to aggregate exposures in the European banking system.

Supervisors and policy makers will need to closely watch the effects of financial market integration as a result of EMU, and be prepared to adapt the institutional structure of financial control to market developments. In the longer run, more far-reaching institutional adaptations will be required. Consideration should thereby be given to a more holistic approach to financial supervision, in line with the conglomeration trend in the financial sector. Regulatory objectives will increasingly be difficult to be applied on a functional or vertical basis, but need to be assessed across the board. This will also allow to see where the biggest gaps in efficient supervision exist at European level.

Annex I. Statistics

Table A1. Profitability in Banking

	return on equity						reti	ırn on ass	sets	
	1985	1990	1993	1995	1996	1985	1990	1993	1995	1996
В	13.4	8.3	14.1	12.9	15.3	0.34	0.28	0.36	0.33	0.39
DK	34.2	-3.3	10.6	18.5	16.1	2.96	-0.26	0.58	1.28	1.11
DE	19.1	11.9	13.6	12.6	12.3	0.68	0.45	0.54	0.53	0.50
EL		20.8	21.6	24.4	16.7		0.81	0.98	1.14	0.75
E	10.1	13.6	3.8	9.2	9.7	0.79	1.25	0.33	0.79	0.84
F		10.1	2.9	3.6	4.8		0.34	0.13	0.16	0.20
IRL				20.2	20.4				1.36	1.36
I		12.2	8.8	3.7	5.1		0.91	0.75	0.34	0.46
L	9.5	6.7	19.9	19.9	22.3	0.33	0.22	0.50	0.50	0.55
NL	19.5	12.3	15.9	17.0	17.6	0.73	0.49	0.65	0.71	0.72
AU		8.6	8.7	8.1	9.6		0.40	0.44	0.38	0.42
P	5.4	12.5	9.2	7.7	7.7	0.30	1.38	0.88	0.63	0.64
SF	5.6	5.6	-28.4	-7.9	8.0	0.36	0.39	-1.43	-0.38	0.42
SW	4.8	3.1	4.5	21.5	24.3	0.31	0.18	0.26	1.35	1.30
UK	24.2	14.4	19.3	28.6	25.6	1.09	0.69	0.73	1.11	1.07
EU 11		11.3	8.2	8.4	9.3		0.53	0.42	0.42	0.46
EU 15		10.9	9.0	10.0	10.9		0.54	0.41	0.63	0.53
USA	14.0	10.7	21.2	21.6	21.6	0.86	0.69	1.69	1.75	1.78
J	19.0	11.3	5.0	-5.0	0.8	0.45	0.36	0.19	-0.17	0.03
СН	11.5	7.8	10.5	8.5	1.7	0.70	0.51	0.68	0.54	0.10

Sources: OECD (1998); Greece and Japan only include commercial banks.

Table A2. Inhabitants per Bank Branch (1986-1996)

	1986	1990	1993	1995	1996
В	403	542	507	555	567
DK	1551	1783	2218	2359	2382
DE		2009	1807	1855	1880
EL		9310	8636	7266	6614
E	1179	1106	1112	1082	1060
F		2172	2193	2185	2220
I	4892	3913	3014	2749	2675
IRL		5037	3877	2755	2375
L	1473	1286	1287	1174	1210
NL	1972	1870	2133	2297	2277
AU		1716	1704	1717	1721
P	6559	4937	3351	2857	2620
SF	1682	1767	2303	3169	3634
SW	2734	3012	3086	3423	3545
UK	2798	3014	3403	3723	3525
EU15		2050	1978	1999	1986
USA		3636	3833	3705	3740
J	13133	8624	8421	8537	8561
СН	1665	1602	1731	1883	1967

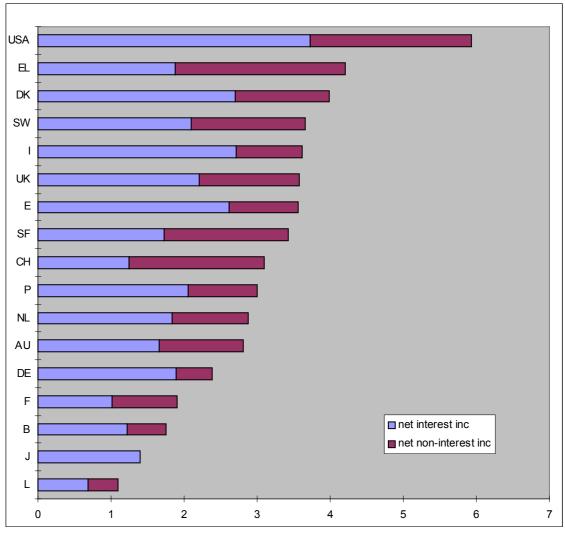
Sources: OECD (1998); Greece and Japan only include commercial banks, UK includes building societies, US includes Savings and Loans Institutions

Table A3. Bank Employment as % of Total Employment

	1985	1990	1993	1995	1996
В	2.05	2.15	2.09	2.10	2.11
DK	2.06	2.08	1.96	1.84	1.71
DE		2.33	2.06	2.10	2.10
EL		0.97	1.02	1.05	1.11
Е	2.29	2.00	2.08	2.03	1.95
F		2.01	1.88	1.87	1.86
I		1.56	1.68	1.70	1.64
IRL					2.53
L	6.39	8.74	9.14	9.87	9.45
NL	1.64	1.95	1.76	1.66	1.69
AU		2.01	1.93	1.91	1.92
P	1.46	1.33	1.39	1.38	1.37
SF	1.77	1.88	1.77	1.47	1.30
SW	0.92	0.99	1.03	1.08	1.07
UK	1.64	1.78	1.86	1.82	1.94
EU15		1.89	1.86	1.85	1.86
USA		1.56	1.48	1.38	1.37
J	0.56	0.64	0.65	0.62	0.59
СН	2.92	3.18	3.09	3.04	3.06

Sources: OECD (1998); Greece and Japan only include commercial banks, UK includes building societies, US includes Savings and Loans Institutions

Graph 2. Gross Income in Banking (1996)



Source: OECD (1998)

Note: Gross income is composed of net interest and net non-interest income, expressed as

percentage of total assets

Table A4. Total Assets of Banks and Insurance Companies (1996)

(in absolute numbers and as % of GDP)

in ECU bn	banks	% GDP	insurance	% GDP
В	688.6	330.3	59.1	28.3
DK	158.2	115.4	55.1	40.2
D	3709.5	198.8	530.9	28.5
GR	65.0	67.3	2.0	2.1
Е	785.5	170.6	50.5	11.0
F	2892.1	237.8	460.6	37.9
IRL	118.7	180.3	9.8	14.9
I	1368.4	143.2	122.9	12.9
L	490.0	3656.7	6.4	47.5
NL	816.0	263.7	138.9	44.9
A	424.5	235.7	36.2	20.1
P	181.7	218.7	10.4	12.6
FIN	107.9	110.7	13.4	13.7
S	212.0	106.2	119.4	59.8
UK	1247.3	139.5	846.4	94.6
EU 15	13265.4	195.6	2462.1	36.3
EU 11	11582.9	212.3	1439.2	26.4
СН	917.9	387.6	171.7	72.5
US	3584.5	62.5	2307.5	41.7
JAPAN	4431.0	122.4	3864.6	98.9

Source: OECD (1998) and Eurostat

Annex II. Price Differential for Financial Services in the EU

Table A5. Cecchini Study Results: the Prices of Five Financial Services in 1987

Product	UK	F	D	В	NL	I	E	Range ¹
Commercial loan	6,875	4,375	5,000	4,500	6,750	5,125	5,625	2,500
Credit card	61	37	84	94	75	99	66	62
Mortgage	290	653	575	480	343	350	800	510
Current cheque account	112	10	117	0	0	240	2	240
Personal equity transaction	23	9	11	14	22	10	17	13

NB: All prices are in ECU

Table A6. Postal Survey Study Results: The Prices of Five Financial Services in 1996

Product	UK	F	D	В	NL	I	E	Range ¹
Commercial loan	7,500	3,885	2,114	3,755	2,741	4,843	6,976	5,386
Credit card	35	33	32	71	27	40	43	44
Mortgage	475	626	245	408	180	552	540	446
Current cheque account	4	-70	52	38	N.A.	280	109	350
Personal equity transaction	18	51	20	13	13	3	13	48

NB: All prices are in ECU

¹ The range is simply the difference between the most and least expensive Member States *Source: European Commission (1997b).*

¹ The range is simply the difference between the most and least expensive Member States *Source: European Commission (1997b)*

Annex III. The EU Regulatory Framework for the Free Provision of Financial Services

I. Banking

A. Adopted Legislation and Measures

The basic measures in the area of banking are the second banking directive, which defines the modalities for the free provision of banking services across the EU with a single licence (the first banking coordination directive of 1973 instituted the freedom of establishment for banks in the EU) and a series of related directives, such as the own funds directive, which defines the elements that can be considered as own funds; and the solvency ratios directive, which sets the capital ratios and the weighting of assets. Other key directives concern the method for consolidated supervision, the limitation of large exposures and the obligatory institution of deposit protection schemes.

- **Second banking directive**: Second Council Directive 89/646 of 17 December 1989 on the co-ordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of credit institutions and amending directive 77/780/EEC, OJ L 386 of 30.12.1989.
- Own funds: Council Directive 89/299 of 17 April 1989 on the own funds of credit institutions, Implementation date 1.1.1993, OJ L 124 of 5.5.1989.
- **Solvency ratios:** Council Directive 89/647 of 18 December 1989 on a solvency ratio for credit institutions, OJ L 386 of 30.12.1989.
- **Consolidated supervision**: Council Directive 92/30 of 6 April 1992 on the supervision of credit institutions on a consolidated basis, OJ L 110 of 28.4.1992.
- **Deposit guarantee scheme:** Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes, OJ L 135 of 31.5.94.
- Large exposures: Council Directive 92/121 of 21 December 1992 on the monitoring and control of large exposures of credit institutions, OJ L 29 of 5.2.1993.

Other measures concern issues that had to be tackled with the coming into force of a single financial area. They relate to the harmonisation of the annual accounts of banks and the finality of payments.

- Annual accounts of banks: Council Directive 86/635 of 8 December 1986 on the annual accounts and consolidated annual accounts for banks and other financial institutions, OJ L 372 of 31.12.1986.
- **Settlement finality**: Council Directive 98/26/EC of 19 May 1998 on settlement finality in payment and securities settlement systems, OJ L 166 of 11/06/1998.

Several directives and recommendations relate to the retail dimension of the single financial market. They set rules on consumer credit, the use of credit cards and the performance of cross-border payments in the EU.

- **Consumer credit**: Council Directive of 22 February 1990 amending directive 87/102/EEC for the approximation of laws, regulations and administrative provisions of the Member States concerning consumer credit, OJ L 61 of 10.3.90.
- Credit cards: Commission Recommendation 87/598 of 8 December 1987 on a European Code of Conduct relating to electronic payment, OJ L 365 of 24.12.1987; Commission Recommendation 88/590 of 17 November 1988 concerning payment systems and in particular the relationship between cardholder and card issuers, OJ L 317, 24.11.1988.
- Cross-border payments: Directive 97/5/EC of the European Parliament and of the Council of 27 January 1997 on cross-border credit transfers, OJ L 43 of 14.2.1997.

B. Draft Legislation and Communications

The most important measure awaiting adoption is a draft directive instituting common rules for the winding-up (or failure) of credit institutions. One communication gives guidance on the application of the "general good" clause in the second banking directive, another deals with consumers and electronic payments.

- **Reorganisation and winding-up of credit institutions:** (amended) Proposal for Council Directive concerning the reorganisation and the winding-up of credit institutions and deposit guarantee schemes COM(85)788 & COM (88)4, OJ C 36 of 8.2.1988.
- **General good**: Commission Interpretative Communication, Freedom to provide services and the interest of the general good in the second banking directive, OJ C 209 of 10.7.1997.
- **Electronic Payments**: Boosting customers' confidence in electronic means of payment in the single market, Communication from the Commission, COM(97)353 of 09.07.1997.

II. Investment Services

A. Adopted Legislation

The basic measure in the domain of investment service is the investment services directive (ISD), which defines the modalities for the free provision of investment services in the EU for brokers and securities markets. The ISD refers to the capital adequacy directive, which sets capital ratios for investment services firms, and for the trading books of banks. The investor compensation schemes directive introduces a minimum level of protection for (retail) clients of investment firms.

- **Investment services (ISD)**: Council Directive 93/6 of 10 May 1993 on investment services in the securities field, OJ L 141 of 11 June 1993.
- Capital adequacy (CAD): Council Directive 93/22 of 15 March 1993 on the capital adequacy of investment firms and credit institutions, OJ L 141 of 11 June 1993; Value at Risk amendments (CAD II): Directive 98/31/EC, Official Journal L 204, 21/07/1998
- **Investor compensation schemes**: Directive 97/7/EC of the Council and the European Parliament on investor compensation schemes, OJ L 84 of 26.3.1997.

A second series of measures relate to the functioning of capital markets and exchanges, and

set minimum rules regarding particulars to be disclosed for stock exchange listing and initial public offerings, to allow for mutual recognition. Other directives make insider trading an statutory offence and require firms to disclose major holdings to the market.

- **Stock exchange admission**: Council directive of 79/279/EEC co-ordinating the conditions for the admission of securities to official stock exchange listing, OJ L 66 of 16.3.1979.
- Stock exchange listing particulars: Council Directive 87/345 of 22 June 1987 amending Directive 80/390 co-ordinating the requirement for the drawing-up, scrutiny, and distribution of the listing particulars to be published for the admission of securities to official stock exchange listing, OJ L 185 of 4.7.1987; Eurolist amendments, Directive 94/18/EC, OJ L 135 of 31.5.1994.
- **Mutual recognition of public-offer prospectuses**: Council Directive 90/211 of 23 April 1990 amending directive 80/390 in respect of the mutual recognition of public-offer prospectuses as stock exchange listing particulars, OJ L 112 of 3.5.1990.
- **Prospectus for public offerings of securities**: Council Directive 89/298 co-ordinating the requirements for the drawing-up, scrutiny and distribution for the prospectus to be published when securities are offered to the public, OJ L 124 of 5.5.1989.
- **Regulation of insider trading:** Council Directive 89/592 co-ordinating regulations on insider trading, OJ L 334 of 18.11.1989.
- **Publication of information on major holdings:** Council Directive 88/627 on the information to be published when a major holding in a listed company is acquired or disposed of, OJ L 348 of 17.12.1988.

A final series of measures allow for the cross-border sale of unit trusts or collective investment undertakings in the EU. Two proposed amendments extend the scope of unit trusts and harmonise basic rules for the management of unit trusts.

Collective investment undertakings (Ucits): Council Directive 85/611 on the coordination of laws relating to undertakings for collective investment in transferable
securities, OJ L 375 of 31.12.1985; Council Directive 88/220 amending directive 85/611
relating to undertakings for collective investment in transferable securities, OJ L 100 of
19.04.1988.

B. Proposed Legislation

- UCITS Amendment 2: Proposal for a European Parliament and Council Directive amending directive 85/611 on the co-ordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) with a view to regulating management companies and simplified prospectuses, COM (1998) 451 of 17.07.1998.
- **UCITS Amendment 1**: Proposal for a European Parliament and Council Directive amending directive 85/611 on the co-ordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), COM(1998) 449 of 17.07.1998.

III. Insurance

A. Adopted Legislation

The free provision of insurance services was instituted in two phases, with limited free provision of services in the second generation directives, and full liberalisation in the third generation directives (the first generation directives instituted freedom of establishment). Regulation is subdivided along the lines of the life and non-life business. A recent measure harmonises the supervision of insurance groups, taking the particularities of risk exposure in insurance groups, as compared to banking, into account.

- Third non-life insurance directive: Council Directive 92/49 of 18 June 1992 on the coordination of laws, regulations and administrative provisions relating to direct insurance other than life insurance and amending Directives 73/239/EEC and 88/357/EEC, OJ L 228 of 11.8.92.
- **Second non-life insurance directive:** Council Directive 88/357 on the co-ordination of laws, regulations and administrative provisions relating to direct insurance other than life insurance and laying down provisions to facilitate the effective exercise of freedom to provide services and amending directive 73/239, OJ L 172 of 4.7.1988.
- Third life insurance directive: Council Directive 92/96 of 10 November 1992 on the coordination of laws, regulations and administrative provisions relating to life insurance and amending directives 79/267/CEE and 90/619/CEE, OJ L 360 of 9.12.92.
- **Second life assurance directive**: Council Directive 90/619 on the co-ordination of laws, regulations and administrative provisions relating to direct life assurance, laying down provisions to facilitate the effective freedom to provide services and amending directive 79/267/EEC, OJ L 330 of 29.11.1990.
- **Insurance groups**: Directive 98/78/EC of the European Parliament and of the Council of 27 October 1998 on the supplementary supervision of insurance undertakings in an insurance group, OJ L 330, 05/12/1998.

Special directives were required to harmonise liability in car insurance, to ensure adequate protection of third parties. The role of brokers in the distribution of insurance policies is the subject of another directive. A separate directive was adopted to institute co-operation between insurance supervisors, which, in banking, is part of the first banking co-ordination directive.

- Car insurance: Council Directive 90/618 amending, particularly as regards motor vehicle liability insurance, Directive 73/239/EEC and Directive 88/357/EEC which concern the co-ordination of laws, regulations and administrative provisions relating to the direct insurance other than life assurance, OJ L 330 of 29.11.1990.
- Motor vehicle liability insurance passengers coverage: Third Council Directive 90/232 on the approximation of laws of the member states relating to insurance against civil liability in respect of the use of motor vehicles, OJ L 129 of 19.5.1990.
- **Intermediaries**: Council Directive of 13 December 1976 on measures to facilitate the effective exercise of freedom of establishment and freedom to provide services in respect of the activities of insurance agents and brokers and, in particular, transitional measures in

respect of those activities, OJ L 26 of 31.01.1977; Commission recommendation of 18 December 1991 on insurance intermediaries, OJ L 19 of 28.1.92.

- **Annual accounts of insurance companies:** Council Directive 91/674 on the annual and consolidated accounts of insurance undertakings, OJ L 374 of 19.12.1991.
- **Insurance Committee:** Council Directive 91/675 setting up an Insurance Committee, OJ L 374 of 19.12.1991.

B. Draft Legislation and Communications

As in banking, the most important draft piece of legislation concerns the harmonisation of winding-up procedures. A new proposal is awaited covering the freedom of management and investment of pension funds, on which on earlier proposal was withdrawn. A draft communication is being debated regarding the application of "general good" in the insurance sector

- **Winding-up of insurance companies:** Amended proposal for Council Directive on the co-ordination of laws, regulations and administrative provisions relating to the compulsory winding-up of direct insurance undertakings, COM(86)768 and COM(89)394.
- **Fourth motor insurance directive:** Proposal for a European Parliament and Council Directive on the approximation of laws of the member states relating to insurance against civil liability in respect of the use of motor vehicles and amending directives 73/239/EEC and 92/49/EEC, COM(97)510 of 10.10.1997.
- **Pension funds:** Commission communication on the freedom of management and investment of funds held by institutions for retirement provision, C 360/08, OJ C 360 of 17.12.94; (Proposal for a Council Directive relating to the freedom of management and investment of funds held by institutions of retirement provision, COM(91)301, OJ C 312 of 3.12.1991, amended proposal COM(93)237 of 26 May 1993, withdrawn on 7 December 1994.) Supplementary pensions in the Single Market, A Green Paper, COM(97)283 of 10.06.1997.
- **General good**: Draft Commission Interpretative Communication, Freedom to provide services and the interest of the general good in the sector of insurance, SEC(97)1824 of 10.10.1997.

IV. Horizontal Measures and Communications

Three directives are of a "horizontal" nature and apply to the financial services sector as a whole. There is first the 1988 directive defining the freedom of capital movements, which at the same time signalled the start of Phase 1 of EMU. The money laundering directive requires financial institutions to inform authorities about suspected transactions and obliges them to ask for identification of clients depositing or investing significant amounts of money. The BCCI directive was adopted as a result of the failure of BCCI bank and reinforces certain elements of prudential supervision, such as the exchange of information between auditors and supervisors. A new proposal on the distance selling of financial services is currently being debated.

- **Freedom of capital movements**: Council Directive of 88/361 of 24 June 1988 for the implementation of Article 67 of the Treaty, OJ L 178 of 08.07.1988.
- **Money laundering**: Council Directive 91/308 of 10 June 1991 on the prevention of the use of the financial system for the purpose of money laundering, OJ L 166 of 28.6.91.
- **BCCI follow-up directive:** European Parliament and Council Directive amending Directives 77/780/EEC and 89/646/EEC in the field of credit institutions, Directives 73/239/EEC and 92/49/EEC in the field of non-life insurance, Directives 79/267/EEC and 92/96/EEC in the field of life assurance, Directive 93/22/EEC in the field of investment firms, and Directive 85/611 in the field of undertakings for collective investment in transferable securities (UCITS), with a view to reinforcing prudential supervision, OJ L 168 of 18.7.95.
- **Distance selling of financial services (draft):** Proposal for a directive of the European Parliament and the Council concerning the distance marketing of consumer financial services, COM(98)0468, OJ C 385 of 11.12.1998.

Two horizontal communications address consumer issues in the financial sector and the adaptation of the regulatory framework for financial services to EMU.

- **Consumer issues**: Financial Services: Enhancing Consumer Confidence, Communication from the European Commission, COM(97)309 of 26.06.1997.
- Framework for Action: Financial Services: Building a Framework for Action, COM(98)0625 final.

V. Euro Legislation

The legal framework for the introduction of the euro and issues relating to the transition phase 1999-2002 are addressed in two directives. The first one affects all EU countries, the second concerns the participating member states in EMU.

- **Art. 235 Regulation**: Council Regulation (EC) No. 1103/97 of 17 June 1997 on certain provisions relating to the introduction of the euro, OJ L 162, 19/06/1997.
- Art. 109L(4) Regulation: Council Regulation No. 974/98 of 3 May 1998 on the introduction of the euro, OJ L 139 of 11.05.98.

Table A7. The Regulatory Framework for the Free Provision of Financial Services in the EU

	Banking	Investment services	non-life insurance	life insurance
key directives	second banking directive	investment services directive (ISD)	third non-life insurance directive	third life insurance directive
	own funds directive	capital adequacy directive (CAD)	second non-life insurance	second life insurance directive
	solvency ratios directive or CAD for trading book	value at risk models (CAD II)	directive	
		unit trusts (UCITS)		[pension funds]
Consolidation	consolidated supervision		supervision of insurance groups	
supplementary directives	deposit insurance directive	investor compensation schemes	car liability insurance	
	large exposures directive			
other measures	money laundering directive	insider trading	insurance	e intermediaries
	settlement finality	major holdings		
	cross-border payments	public offer prospectus		
	consumer credit	listing particulars		
annual accounts	annual accounts of banks		annual accounts	of insurance companies
cooperation btw. supervisors	banking advisory committee	[securities committee]	Insurar	nce committee
winding-up	of banks*		of insura	nce companies*

^(*) not yet adopted, as at December 1998

Annex IV. Supervisory Structures

Table A8. Monetary and Bank Supervisory Functions in EU Countries, Switzerland and the US

	Regime	Monetary Agency	Supervisory agency
AU	S	National Bank of Austria (CB)	(Federal) Ministry of Finance (MF)
В	S	National Bank of Belgium (CB)	Banking and Finance Commission
DK	S	Danmarks Nationalbank (CB)	Finance Inspectorate (MI) ¹
FIN	S	Bank of Finland (CB)	Bank Inspectorate (MF)/ Bank of Finland (CB)
F	С	Banque de France (CB)	Banque de France (CB)/ Commission Bancaire ²
D	S	Deutsche Bundesbank (CB)	Federal Banking Supervisory Office/ Deutsche Bundesbank ³
GR	С	Bank of Greece (CB)	Bank of Greece (CB)
IRL	С	Central Bank of Ireland (CB)	Central Bank of Ireland (CB)
I	С	Banca d'Italia (CB)	Banca d'Italia (CB)
L	S	Bank of Luxembourg (CB)	Commission de Surveillance du Secteur Financier
NL	С	De Nederlandsche Bank (CB)	De Nederlandsche Bank (CB)
P	С	Banco de Portugal (CB)	Banco de Portugal (CB)
S	С	Banco de Espana (CB)	Banco de Espana (CB)
SW	S	Sveriges Riksbank (CB)	Swedish Financial Supervisory Authority
UK	S	Bank of England (CB)	Financial Services Authority ⁴
СН	S	Swiss National Bank (CB)	Federal Banking Commission
US	S/C	Federal Reserve Board (CB)	Office of the Comptroller of the Currency (CB)/ Federal Reserve board (CB)/ State Governments/ Federal Deposit Insurance Corp ⁵

C = Combined, S = Separated, CB = Central Bank, MF = Ministry of Finance, MI = Ministry of Industry

Notes:

- 1) The Danish National bank is the granter of liquidity support, while the Inspectorate is responsible for the supervision of banks. The inspectorate has no formal link with the Nationalbank, although there is in practice cooperation between the two on many issues.
- (2) The Banking Commission (Commission Bancaire) is a composite body chaired by the governor of the Banque de France, with representatives from the Ministry of Finance. The Banking Commission supervises compliance with the prudential regulations. The inspections and on-site examinations are carried out by the Banque de France on behalf of the Banking Commission.
- (3) The Federal Banking Supervisory Office (Bundesaufsichtsamt für das Kreditwesen) is entrusted with the supervision of banks. It is responsible for sovereign acts, such as licensing and issuing regulations, whereas the Bundesbank is involved in current supervision by collecting and processing bank prudential returns. The Banking Act provides for co-operation between the Supervisory Office and the Bundesbank (i.e. the two bodies exchange information. The Supervisory Office has to consult the Bundesbank on new regulations).
- (4) The Bank of England Bill (October 1997) transferred the banking supervisory responsibilities from the Bank of England to the Financial Services Authority, a mega-financial supervisor. The Financial Services and Markets Bill (July 1998) integrated all supervisory bodies in one authority.
- (5) The Office of the Comptroller of the Currency, an agency within the US Treasury Department supervises national banks and federally licensed branches of foreign banks. The Federal Reserve Board and the State Governments supervise state chartered banks which are members of the Federal Reserve System. State chartered non-member banks are supervised by the State Governments. The Federal Reserve Board has the authority to supervise all bank holding companies and their subsidiaries. In addition, the autonomous Federal Deposit Insurance Corporation has some supervisory responsibilities.

Source: Adapted from Goodhart and Schoenmaker (1995), p. 558.

Table A9. Regulators of Banking, Securities and Insurance in Europe, Japan and the US

	Banking	Securities	Insurance
В	BS	BS	I
DK	M	M	M
DE	В	S	I
EL	СВ	S	I
E	СВ	S	I
F	B/CB	S	I
I	СВ	S	I
IRL	СВ	СВ	G
L	BS	BS	I
NL	СВ	S	I
AU	G	G	G
P	СВ	S	I
SF	BS	BS	G
SW	M	M	M
UK	M	M	M
СН	BS	BS	I
CZ	СВ	SI	SI
Н	В	S	I
N	M	M	М
PL	СВ	S	I
SLOE	СВ	S	G
USA	СВ	S	I
J	M	M	M

Note: $CB = Central\ Bank,\ BS = banking\ and\ securities\ supervisor,\ M = overall\ financial\ supervisory\ authority,\ B=\ specialised\ banking\ supervisor,\ S=\ specialised\ securities\ supervisor,\ I=\ specialised\ insurance\ supervisor,\ SI=\ specialised\ securities\ and\ insurance\ supervisor,\ G=\ government\ department.$

Source: updated and adapted from Goodhart et al. (1997)

References

Aglietta, Michel and Christian de Boissieu (1998), Problèmes prudentiels, in *Coordination européenne des politiques economiques*, Conseil d'analyse économique, Paris.

Bank for International Settlements (1998), *International banking and financial market developments*, various issues.

Basle Committee on Banking Supervision (1997), "Core Principles for Effective Banking Supervision", a Consultative Paper, September.

BEUC (1997), L'assurance automobile, June.

Cecchini, Paolo (1988), The European challenge 1992, Commission of the EC.

Clifford Chance (1997), The Reform of the UK Financial Regulatory System, August.

(1998), The draft financial services and markets bill, A framework for the future, September.

Comité Europeen des Assurances (CEA), Annual Statistics. Various Issues.

Crockett, Andrew (1997), *The Theory and Practice of Financial Stability*, Essays in International Finance, No. 203, Princeton University.

Dale, Richard, and Simon Wolfe (1998), The structure of financial regulation, Journal of financial regulation and compliance, Vol. 6, No. 4, pp. 326-350.

Danthine, Jean-Pierre, Francesco Giavazzi, Xavier Vives, Ernst-Ludwig von Thadden, The Future of European Banking, Monitoring European Integration, CEPR, 1999.

Dassesse, Marc (1997), "A Courageous Initiative and an Important Precedent: The Commission's Interpretative Communication on the Second Banking Directive", *Butterworths Journal of International Banking and Financial Law*, Vol. 12, No. 8, September.

De Bandt, Olivier (1998), EMU and the Structure of the European Banking System, Paper presented at the Suerf Conference, October.

Enoch, Charles, Peter Stella and May Khamis (1997), Transparency and Ambiguity in Central Bank Safety Net Operations, IMF working paper 97/138, October

European Central Bank (1999), Possible Effects of EMU on the EU Banking System in the Medium to Long Term, February.

European Commission (1997a), Report to the Insurance Committee on the Need for Further Harmonisation of the Solvency Margin, COM(97)398, 24.07.97.

(1997b), *The Single Market Review: Credit Institutions and Banking*, Subseries II, Volume 3, Kogan Page: London.

(1998a), *The Single Market Review: Insurance*, Subseries II, Volume 1, Kogan Page: London.

(1998b), *Financial Services: Building a Framework for Action.* Communication to the Concil and the European Parliament, 28 October.

European Shadow Financial Regulatory Committee (1998), EMU, the ECB and Financial Supervision, Statement No 2, 19 October.

Eurostat (1998), *Insurance Service Statistics, Statistics in Focus*, No. 1.

Fender, Ingo and Jurgen von Hagen (1998), Central bank policy in a more perfect financial system, ZEI policy paper B98-03.

Folkerts-Landau and Peter Garber (1992), "The ECB: A Bank or a Monetary Policy Rule?", in M. Canzoneri et al. (eds.), *Establishing A Central Bank: Issues in Europe and Lessons from the US*, Cambridge University Press, Cambridge.

Goodhart, Charles, Philipp Hartmann, David T. Llewellyn, Liliana Rojas-Suarez and Steven R. Weisbrod (1997), Financial Regulation: Why, how and where now?, Routledge.

Goodhart, Charles, and Dirk Schoenmaker (1995), "Should the functions of monetary policy and banking supervision be separated?", in *Oxford Economic Papers*, Vol. 47, pp. 539-560.

Gros, Daniel (1998a), *Macroeconomic policy in the first year of euroland*. 1st Annual Report of the CEPS Macroeconomic Policy Group, December.

(1998b), European Financial Markets and Global Financial Turmoil: Any Danger of a Credit Crunch? CEPS working document No. 127.

Group of Thirty (1997), *Global Institutions, National Supervision and Systemic Risk*, Study Report.

International Monetary Fund (1998), International Capital Markets, Developments, Prospects and Key Policy Issues, September.

Kaufman, George G. (1995), Comment on systemic risk, Research in Financial Services Private and Public Policy, Volume 7, p. 47-52.

(1996), Bank failures, systemic risk and regulation, Cato Journal, Vol. 16, No. 1, p. 17-45.

Lannoo, Karel and Daniel Gros (1998), Capital Markets and EMU, CEPS.

Molyneux, Philip (1997), "Internet and the Global Challenges for Financial Services in Europe", CEPS, mimeo.

Molyneux, Philip, Edward Gardener and Rudi Vander Vennet (1997), *The Strategic Implications of EMU for Banks*, CEPS Business Policy Report No. 4, Centre for European Policy Studies, Brussels.

OECD (1998), Banking Profitability: Financial Statements of Banks, Paris.

Padoa-Schioppa, Tommaso (1999), Banking Supervision in EMU, Speech for the London School of Economics, London, 24 February.

(1996), "Developments in the Field of Banking Supervision", Address to the 9th International Conference of Banking Supervisors, Stockholm, 12-14 June.

Prati, Alessandro and Garry Schinasi (1998), Will the ECB be the lender of last resort in EMU? Paper presented at the SUERF Conference, Frankfurt, October 1998.

"Problèmes économiques" (1997), Le système financier international, No. 2541/2542, novembre, La documentation française.

Schoenmaker, Dirk (1995), "Banking Supervision in Stage III of EMU", in *The Single Market in Banking: From 1992 to EMU*, CEPS Research Report No 17, Centre for European Policy Studies, Brussels.

Taylor, Michael (1995), *Twin Peaks: A Regulatory Structure for the New Century*, Centre for the Study of Financial Innovation, No. 20, December.

Vander Vennet, Rudi (1998), Cost and profit dynamics in financial conglomerates and universal banks, Paper presented at the Suerf Conference, October.

White, William R. (1998), *The Coming Transformation of Continental European Banking*, BIS Working Paper No. 54, June.2

New .eu Domain

Changed Web and E-Mail Addresses

The introduction of the .eu domain also required the web and e-mail addresses of the European institutions to be adapted. Below please find a list of addresses found in the document at hand which have been changed after the document was created. The list shows the old and new address, a reference to the page where the address was found and the type of address: http: and https: for web addresses, mailto: for e-mail addresses etc.

Page: 2 Old: mailto:gpatterson@europarl.eu.int
Type: mailto
New: mailto:gpatterson@europarl.europa.eu