



EUROPEAN CENTRAL BANK



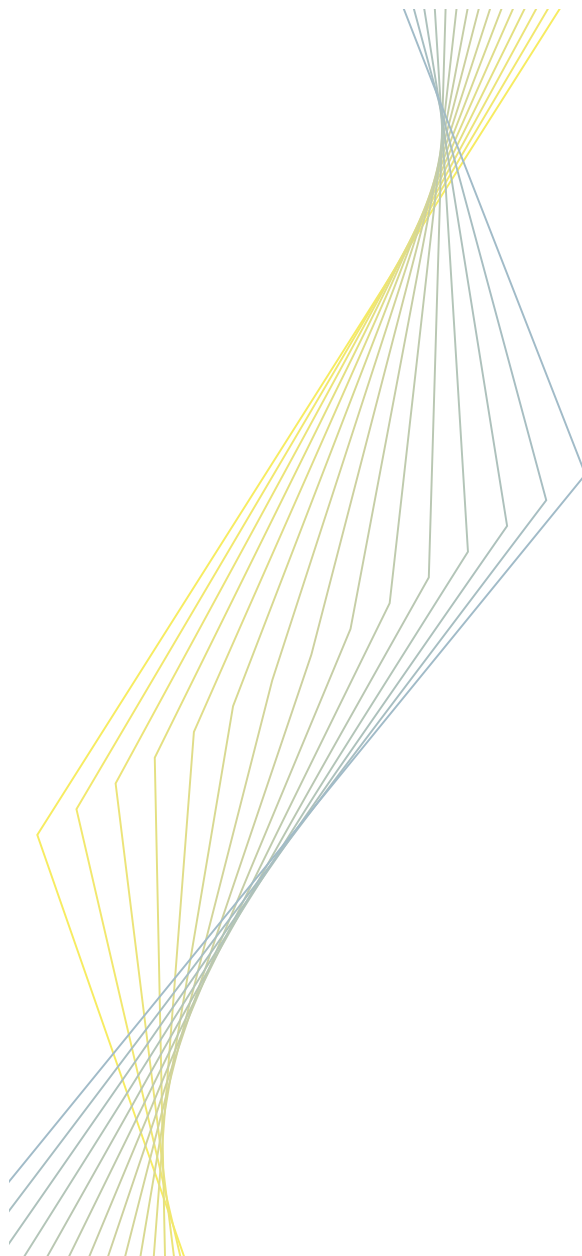
**STRUCTURAL  
ANALYSIS OF THE EU  
BANKING SECTOR**

**Year 2002**

**November 2003**



EUROPEAN CENTRAL BANK



**STRUCTURAL  
ANALYSIS OF THE EU  
BANKING SECTOR**

**Year 2002**

**November 2003**

© European Central Bank, 2003

**Address**            **Kaiserstrasse 29**  
**60311 Frankfurt am Main**  
**Germany**

**Postal address**   **Postfach 16 03 19**  
**60066 Frankfurt am Main**  
**Germany**

**Telephone**        **+49 69 1344 0**

**Internet**          **<http://www.ecb.int>**

**Fax**                **+49 69 1344 6000**

**Telex**              **411 144 ecb d**

*All rights reserved by the authors.*

*Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.*

ISSN 1725-6542 (print)

ISSN 1725-6550 (online)

## Table of Contents

<b>Executive Summary</b>	5
<b>I Introduction</b>	6
<b>2 Developments in the Banking Environment</b>	7
2.1 Changes in the Structure of the Financial Sector	7
2.2 Financial Market Infrastructure	7
2.3 International and National Legal and Supervisory Framework	9
<b>3 Developments in the Banking Industry</b>	10
3.1 Market Structure and Competition of Domestic Banking	10
3.1.1 The Institutional Setting	11
3.1.2 The Size of the Banking Sector	11
3.1.3 Competition within the Banking Sector	11
3.2 Internationalisation	12
3.2.1 Within the European Economic Area	12
3.2.2 Outside the European Economic Area	13
<b>4 Developments within Banks</b>	15
4.1 Organisational Structure	15
4.2 Product and Service Mix	16
4.2.1 Banks' Liability Mix	17
4.2.2 Lending Developments	17
4.2.3 Credit Risk Transfers	17
4.3 Delivery Channels	18
<b>5 Risks and Risk Control in Banking</b>	20
5.1 Risks in Banking	20
5.2 Risk Management in Banking	20
<b>6 Conclusions</b>	21
<b>Statistical Tables</b>	23
<b>Methodological Note on the Statistical Tables</b>	36

## Abbreviations<sup>1</sup>

BE	Belgium
DK	Denmark
DE	Germany
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom

<sup>1</sup> In accordance with Community practice, the EU countries are listed using the alphabetical order of the country names in the national languages.

## Executive Summary

This report aims to provide an overview of structural developments in the EU banking sector in 2002 and, subject to data availability, in the first quarter of 2003. In this period, the banking sector operated under increasingly difficult economic and financial market conditions. These conjunctural developments have had a significant impact on some longer-term tendencies, notably internationalisation, consolidation and disintermediation.

First, banks increasingly focused on their traditional retail operations in their home markets in 2002, owing to the continued retrenchment of investors from equity markets towards safer investments, and the difficulties that firms faced in raising capital market funding. Banks responded to these developments by scaling back their investment banking activities and some international operations. However, international activities in “regional banking clusters” within the EU and operations in Central and Eastern European Countries in particular were maintained or reinforced. In these areas, EU banks have built up significant ownership positions, and the strong results delivered by these activities have also contributed to sustaining their overall profitability.

Second, banks stepped up their cost-saving efforts in 2002 by introducing organisational changes (such as outsourcing) and reducing both their branch networks and the number of employees. This became increasingly necessary as banks’ income streams (other than traditional retail) have suffered, although branches still remain key in the distribution of banking services.

Third, consolidation in the EU banking sector continued to progress, but at a slower pace than previously, as the more difficult financial market environment reduced the possibilities for mergers and acquisitions (M&A). In most countries, the M&A deals completed in 2002 centred on small and medium-sized banks and were mostly on the domestic market, as in

2001. This consolidation process has led to increasing concentration in the banking sector in most countries, although competitive pressures generally remained high.

Fourth, banks continued to expand the range of their products and services. In particular, banks have started to offer new savings instruments comprising products in which returns are linked to an index, frequently including a floor and/or ceiling for losses and yields. This was in response to increased demand for higher-yield investment opportunities as stock markets continued to fall in 2001 and 2002. Additionally, high-risk investment alternatives such as hedge funds have been made available to retail investors in some countries. Consumers are increasingly facing market risks in their savings decisions, while the complexity of products, which are provided through numerous delivery channels, is steadily increasing. Consumer protection thus remains high on the agenda when assessing innovative banking products. The scope and quality of banking services has also expanded, with technological progress leading to new types of activities and sources of income.

Fifth, banks stepped up their efforts to increase investor confidence in securities-related products via organisational changes (e.g. strengthening their formal internal control mechanisms and firewalls) and improvements in their governance structures (e.g. reviewing their management compensation schemes and audit functions).

Sixth, banks intensified their efforts in the area of risk management with a view to managing increased credit risks more effectively, as well as in response to the challenges posed by the upcoming capital regulation changes prompted by Basel II, particularly through efforts aimed at increasing resilience against operational risks. The introduction of credit risk transfer instruments, which have grown tremendously in volume and scope, enables banks to

unbundle risks more easily and better shape their credit risk exposure by focusing on those activities where they can provide greater value added.

Overall, banks in the EU have remained robust, despite temporary and isolated

pressures on liquidity and profits. Structural changes in their business orientation and improved risk management have helped banks withstand the present strains, and have furthermore contributed to improving banking stability over the medium and longer term.

## I Introduction

This report provides an overview of the structural developments that took place in the EU banking system during 2002 and the first quarter of 2003. As in the previous year, this report is based on qualitative and quantitative information collected from EU supervisory authorities and central banks.<sup>1</sup>

The main findings of last year's report serve as a benchmark for assessing developments in 2002. The 2001 report identified three broad trends. The first was related to efficiency pressures in view of the need for banks to increase their income and/or to control costs. These pressures were intensifying in an environment characterised by increasing competition and growing pressure from shareholders, amidst more difficult macroeconomic and financial market conditions. Banks responded by reducing staff, streamlining their organisational structures, scaling back plans/ambitions to a certain extent, particularly in terms of mergers and acquisitions (M&A), and by concentrating more on their core business. The second trend was related to the rapid development of more sophisticated approaches to risk management (e.g. credit derivatives), which permit a more efficient allocation of risks and therefore could enhance banking stability. The third trend concerned the growing

importance of consumer protection issues, owing to banks selling new and increasingly complex products.

The report is structured into *five main sections*. *Section 2* provides an overview of the developments considered to be most important in the banking environment. *Section 3* discusses changes that have taken place within the European banking sector structure and their effect on banks' internationalisation strategies. *Section 4* addresses developments in banks' organisational structures, the product and service mix, and the delivery channels of banking products. *Section 5* examines how the different types of risk area have evolved, what changes can be perceived in banks' risk management, and how supervisors have responded to new challenges. Finally, *Section 6* provides some general conclusions and assessments.

<sup>1</sup> The quantitative information gathered through a standard set of statistical structural indicators is assembled in a separate statistical annex at the end of this report.

## 2 Developments in the Banking Environment

This section offers a brief overview of the main changes in the structure of the European financial sector, the market infrastructure and the regulatory framework, with the aim of providing a backdrop to the analysis of developments in EU banking systems.

### 2.1 Changes in the Structure of the Financial Sector

The financial sector continued to operate in an unfavourable economic and financial market environment in 2002, characterised by limited trading volumes, further price declines in stock markets, and high market turbulence. Investors, particularly retail ones, lost confidence in stocks and shifted to more secure and highly liquid investments such as bank deposits and money market funds. They also searched for alternative higher yield investments such as real estate property. For banks, this meant more demand for traditional banking services. Capital markets, however, continued to play an important role; growth was strong in the area of credit risks in particular, where innovations aim to increase efficiency and reduce risks.

These tendencies are also apparent in the financial asset allocation of the non-financial sector. The share of bank deposits further increased in 2002, whereas the share of equity markets declined owing to the continued withdrawal of funds from this asset class. In contrast to 2000, when the value of shareholdings exceeded the value of deposits with monetary financial institutions (MFIs), the latter re-emerged as the dominant method of saving in 2002. Bond markets were less affected by fragile investor confidence, and securities holdings other than shares continued to increase at a stable rate.

As regards the sources of financing, the non-financial corporate sector has continued to rely mainly on bank loans in the euro area, although the importance of debt securities financing has increased in recent years. Shares

have declined in importance for financing decisions. However, the issuance of hybrid securities that contain equity as well as debt components, such as convertible securities, has increased.<sup>2</sup> New entrants into the financial intermediation arena have also included non-bank intermediaries such as finance companies (auto loans, supermarket financing, etc.). However, their role remains somewhat limited.

Reduced investment in securities and issuance by firms caused banks to scale back their asset management and in particular investment banking activities. In a longer-term perspective, however, household demand for securities-related investment products is still expected to increase, particularly as a result of the changing age structure of the EU population. As these products can be provided not only by banks, but also by insurance companies or other financial firms, competition might also increase across the financial sectors. Furthermore, a new source of long-term financing may emerge as a result of increased pension savings, given the long investment horizon of investors in capital-based pension schemes. While the effect on investment strategies is currently difficult to ascertain, such shifts may influence the demand for investment advice from banks.

### 2.2 Financial Market Infrastructure

Trading platforms such as exchanges or institutions that perform clearing and settlement functions are an important component of the financial system. Financial market transactions crucially depend upon an infrastructure that performs clearing and settlement services. Banks tend to be involved either as owners of trading platforms and exchanges, as providers of ancillary services (such as custodian banks), or as market

<sup>2</sup> Such hybrid products represent a relatively inexpensive funding instrument in highly volatile equity markets. Specifically, high equity volatility increases the value of the option component, which in turn permits a relatively low interest coupon.



participants. More recent developments show that some banks have chosen to internalise securities transactions, thereby contributing to the blurring of sectoral borders between markets and financial institutions.

Developments in market infrastructure are driven by two principal motivations. First, structural changes are driven by cost-saving efforts, and are linked to the desire to facilitate cross-border transactions and to improve the timeliness of processing market transactions. Second, efforts have been aimed at reducing risk in processing market transactions. In pursuing these efforts, solutions that are based on regulated markets have become one, if not the only, option. Moreover, the distinction between markets and market players does not always follow the institutional setting. Markets and firms that provide market infrastructure have also responded to these developments; however, a dominant model is yet to emerge. Ongoing consolidation in a number of institutions that provide services related to market infrastructure is potentially the only generally applicable trend.

Stock exchanges continued to convert themselves into listed and traded companies or to consolidate by engaging in cross-border mergers. The organisation of back-office activities, in particular the issue of whether the 'vertical silo' or the 'horizontal silo' approaches to clearing and settlement will dominate the European scenery, remains unresolved.

Developments in the financial market infrastructure could potentially affect the stability of the financial system if their breakdown interrupts the functioning of financial markets or prevents banks from being able to determine the size of their exposure from trading. However, efforts and innovations aimed at reducing transaction costs and improving the efficiency of capital (re)allocation as well as the overall market liquidity have a strong potential to improve financial stability. The need to focus on operational risks and to establish business

continuity planning and backup sites that are operational within a reasonable time span has also attracted attention. Indeed, the diversity of trading mechanisms – over the counter (OTC), recognised markets, alternative trading systems (ATS), internalisation – may improve the stability of the system. In the immediate aftermath of 9/11, the OTC market was named as an alternative while the trading infrastructure were down.

Banks were seen to be affected by these trends as users of the infrastructure, given that they constitute the main market players, both through their asset management subsidiaries, or as providers that operate or own market infrastructure or are competing with other providers, e.g. central securities depositories (CSDs), international CSDs, and custodian banks.

First, recent developments in the foreign exchange market – i.e. the creation of the CLS Bank<sup>3</sup> – will reduce counterparty risk for most banks in settling foreign exchange transactions (Herstatt risk). These developments have also given rise to new issues such as market concentration aspects and to new roles for banks, for example acting as a liquidity provider to the CLS Bank or as a 'nostro agent' to other banks. Despite its real-time gross settlement (RTGS) nature, settling trade by trade, the CLS Bank only allows members to make net payments, and is thus likely to improve banks' liquidity by making the utilisation of banks' liquid funds more efficient. The management of collateral and intraday liquidity needs may increase in importance for bank-internal liquidity management.

Second, the use of clearing houses as central counterparties (CCP) and the growing use of netting agreements may also improve the liquidity situation of banks on one hand, as payments take place on a net basis. On the other hand, this might increase the need to focus on the legal risks and risk management of these transactions. The concentration of

<sup>3</sup> Short for Continued Link Settlement Bank.

market activity in only using a few CCP may give rise to 'low probability/high impact' risk scenarios, and render CCPs systemically important. The crash in 1987, for example, illustrates the liquidity risk that a CCP faces in meeting margin obligations during adverse market conditions.

Third, the discussion concerning the options for banks to 'internalise' transactions, as well as the implications this has for consumer protection (best execution) and market liquidity in the context of the ongoing negotiations concerning the proposal for a directive on investment services and regulated markets at the EU level demonstrate the importance of these aspects. A possibly crucial question that needs to be answered is whether there are any institutions that are 'too important to fail' for the financial markets.

### **2.3 International and National Legal and Supervisory Framework**

The financial sector operates within a framework of regulations aimed at preserving financial stability and protecting savings. The dynamic nature of the financial sector requires frequent adaptations of the regulatory framework in order to keep it effective and comprehensive. Moreover, the ongoing globalisation of the financial system increasingly highlights the need for greater harmonisation of the existing rules, which would enable market participants to operate on a level playing field basis. Within Europe, the fostering of financial market integration to fully reap the benefits from the introduction of the euro presents an additional challenge. This section describes the key reform efforts at the EU and at the global (i.e. G10) levels.

Within the EU, the Financial Services Action Plan (FSAP) has established a time frame for these reform efforts which aims at achieving three main objectives. First, to establish a single wholesale market; second, to support open and secure retail financial markets; and

third, to guarantee state-of-the-art prudential rules and supervision. Substantial progress was achieved in strengthening the EU legal framework, including the adoption of the Market Abuse Directive in January 2003 and the Prospectus Directive/Pension Fund Directive in mid-2003. The agenda for 2003 also envisages the adoption of the Takeover Bids Directive and the Modernisation of the Accounting Provisions of the 4<sup>th</sup> and 7<sup>th</sup> Company Law Directives. Further important projects that address updating banking, insurance and securities regulation (i.e. Review of Capital Requirements, upgrade of the Investment Services Directive, Solvency II) are expected to progress in the near future.

At the G10 level, efforts aimed at strengthening the regulatory frameworks and establishing internationally agreed principles in supervision have been ongoing for several years in all financial sectors, but are most advanced in the banking sector. The discussions on the reform of the supervisory framework for large, internationally active banks (Basel II), conducted by the Basel Committee on Banking Supervision, have made further progress during 2002 and 2003, also on the basis of the results of a third quantitative impact study carried out in the first half of 2003, with the final proposals to be agreed by the end of 2003 and implemented by end-2006. The new framework will replace the Basel Accord of 1988, which aimed at assuring adequate capitalisation on the part of banks, as well as a level playing field. The reform will help overcome weaknesses in the current framework and will also take into account the innovations that have led to the increasing sophistication of banks' risk management systems. The reform on financial stability is generally recognised to have had a positive impact, as a more risk-sensitive framework is conducive to more efficient supervision.

The EU reform sets out to follow closely the Basel process while also taking into account EU specificities. The EU reform will result in the third Capital Adequacy Directive (CAD3)

which, in line with EU tradition, takes a broader focus by also including smaller banks and investment firms. The underpinning principles of the new proposed regulatory framework encompass requirements for banks as well as competent authorities. The former shall hold adequate funds at all times, taking each individual bank's overall risk profile into account, before implementing and applying a sound control environment which conforms with extended disclosure requirements. The latter shall review and evaluate the compliance of institutions with CAD3 and adopt, where appropriate, relevant measures in relation to the individual institutions' risk profiles.

At the national level, a number of initiatives have been implemented with a view to enhancing the regulatory and legislative frameworks. One strand of these reform efforts relates to the institutional reorganisation of financial supervision, as well as to reshaping supervisory competencies. Another strand concerns the reform of national rules aimed at enhancing the efficiency of financial intermediaries and markets.

The institutional arrangements in the national settings that are designed to supervise the financial sectors vary across the EU countries.

The motivations behind the reform efforts in this area are twofold. These reforms represent, first of all, a response to rapid developments in the financial sectors, also taking national peculiarities into account. Second, they aim at enhancing the effectiveness and efficiency of supervision. Across the EU, a broad tendency has emerged towards consolidation in the number of competent supervisory authorities, while increasing emphasis is placed on the establishment of effective co-operation mechanisms between competent authorities on a cross-sector and cross-border basis. In a number of countries, committees have been established that formalise such co-operation. Memoranda of Understanding are also a widely-used instrument both within the EU and with other countries, particularly the Central and Eastern European Countries (CEEC). Supervisory competencies were also reshaped in a number of countries during 2002. Important areas where reforms have taken place include the scope of supervision, which has been revised to address rating agencies, and the introduction of rules regarding outsourcing. Product innovation also triggered changes in the regulatory framework. The ongoing refinement of the national risk-based supervision frameworks is in many cases interlinked with the Basel reform process.

### 3 Developments in the Banking Industry

The unfavourable economic environment and market turbulence caused banks to react in a determined fashion in some business areas. Overall, these adverse conditions also had a more limited impact on the direction of other long-term structural trends in the European banking sector. This section covers developments in the structure of the banking market and in banks' internationalisation activities.

#### 3.1 Market Structure and Competition of Domestic Banking

During 2002, banking market concentration continued to increase. A decreasing number

of institutions managed greater volumes of total assets, total deposits and total loans at the EU aggregate level as well as in the majority of Member States, giving rise to larger banks in terms of assets and more concentrated national banking sectors.<sup>4</sup> However, the reorientation towards core activities and the continuation of the 'wait and see' strategy with regard to mergers and acquisitions in a more difficult financial market environment limited the pace of changes compared with 2001.

<sup>4</sup> The ratio of total banking assets to GDP in the euro area decreased slightly in 2002, as is evidenced in Table 5 in the statistical annex, while the ratio of total deposits to GDP remained unchanged (see Table 11). Absolute figures in total assets and total deposits increased however in 2002, but are not included in this report.

### 3.1.1 The Institutional Setting

The trend of consolidation that has been observed over several years in the banking industry continued in most countries, and was most clearly apparent in the declining number of credit institutions. At a country level, the pace of consolidation greatly varied, with large countries showing the most substantial decrease in the total number of institutions. The number of banks did not greatly change in Belgium, remained constant in Greece while Sweden conversely reported a substantial increase as evidenced in Table 1.<sup>5</sup> Institutions in these countries, however, already operate in a rather concentrated banking system if we compare the CR5 ratio across countries.<sup>6</sup>

The characteristics of consolidation in the EU banking system during 2002 were in line with the developments in M&A activity observed in 2002. The focus was on domestic activities and small and medium-sized institutions (often co-operative and savings banks). However, a few substantial mergers have received significant attention in large Member States. In the Scandinavian countries, a number of large banks have expanded business by acquiring other – usually, but not predominantly – smaller banks

The overall structure of M&A activity in terms of geographical distribution broadly remained the same in 2002 compared with previous years.<sup>7</sup> The number of domestic M&A transactions continued to exceed the figures for cross-border activity, and mostly involved small and medium-sized banks. With regard to future developments, the implementation of the Takeover Directive and the further withdrawal of the State from banking may facilitate concentration as well as cross-border merger activity.

### 3.1.2 The Size of the Banking Sector

The size of the banking sector still varies in Member States, as the absolute and per capita-adjusted levels of total assets, number of branches and banks' employees differ

substantially across countries.<sup>8</sup> Even similar size countries show very different ratios of branches and employees per capita. Luxembourg stands out in this respect, producing ratios that are ten times higher than the lowest value observed.

In 2002, the general tendency to reduce the number of branches and staff continued, reflecting cost-saving measures. Figures are lower in almost all countries and the overall levels are similar to those observed in 1998. In a few cases, the recent cuts amounted to as much as 3% of the total number of employees. National developments during 2002, however, showed increased divergence when compared with 2001. Moreover, the consolidation in the banking sector appeared to be less pronounced when developments in the number of branches and bank employees rather than changes in the number of banks are considered.

At a euro area and EU aggregate level, the total assets in the banking sector continued to grow, albeit at a slower rate than in previous years owing to the economic slowdown. When adjusted for GDP growth, total banking assets declined at a marginal rate, with some diversity at the country level.

### 3.1.3 Competition within the Banking Sector

The wave of consolidation continued in 2002, leading to concerns in some EU countries as to whether competitive pressures were still sufficiently in place. The overall level of competition, however, appears to be sufficiently intense. Barriers to market entry are constantly being overcome by new entrants, many of them non-financial companies such as telecommunications companies or supermarkets offering financial

<sup>5</sup> See Table 1, *ibid*.

<sup>6</sup> The CR5 indicator can be found in Table 3 in the annex, and represents the share of the five largest banks in total banking assets.

<sup>7</sup> See Tables 14 to 16 in the annex.

<sup>8</sup> Tables 2, 4 and 5 in the annex provide country-level information on the number of branches, employees and assets in the banking sector, adjusted for the size of the population and the economy, as reported in Tables 25 and 26 respectively.

services (and, in some cases, applying for a banking licence). The pressure for innovation in products and procedures appears to be reasonably strong.

Among banks, narrower margins or changes in pricing behaviour also point to active competition. In some instances, smaller institutions have offered higher yields on savings accounts, forcing larger institutions to react. Moreover, the internationalisation strategies adopted by banks are largely driven by high levels of competition in their home markets, and also tend to increase competitive pressures in the target country as a result of their market entry. In non-traditional banking markets such as asset management, competition has intensified and consolidation is expected in the future in some countries.

Competitive pressures might remain unsatisfactory in specific market segments, e.g. providing banking services to small and medium-sized enterprises. Additionally, retail cross-border payment systems have been the subject of active debate, as the fees charged in this area are frequently deemed excessive. Finally, competition does not guarantee access to these services to all households. In some countries, the right to access financial services is guaranteed to specific groups of bank customers.

### 3.2 Internationalisation

In recent years, banks have reacted to intense competitive pressures in their home markets by expanding their activities internationally, particularly into business areas and countries which offered higher profit margins. However, the decline in equity prices and turbulence in capital markets, which started in 2001 and continued in 2002, prompted banks to revisit these strategies and scale back activities in some areas. There are various reasons for abandoning an internationalisation strategy: group restructuring, a reorientation of strategies, insufficient risk/return figures, cost-cutting and technological changes that

allow support services to be concentrated centrally, or the use of alternative delivery channels. In 2002, international activities were selectively curtailed, while in some regions investments actually expanded.

Despite the reduced pace of internationalisation, banks' cross-border activities remained substantial. The overall exposure structure of EU banks illustrates the dominance of linkages within developed countries, which have more than 80% of all consolidated foreign claims, although individual countries show a bias towards developing countries (in one case particularly towards eastern Europe).<sup>9</sup> It has also become evident from recent strategy revisions that banks increasingly consider their home market to cover several jurisdictions in Europe, in which these revised strategies have led to constant or even increased cross-border activities.

#### 3.2.1 Within the European Economic Area

The analysis in this section focuses on the geographical distribution of international activities and on the organisational form of cross-border activity through branches and subsidiaries, rather than on the types of activities and segments of the banking market.

First, some structural characteristics of EU banks at a regional level are worth noting. There appears to be a bias in consolidated foreign claims towards neighbouring countries, forming regional clusters that banks more or less consider to be their 'home markets'. Banks in the Nordic countries tend to define their home banking market as comprising Denmark, Sweden, Norway and Finland. In continental Europe, Belgium, the Netherlands, Luxembourg and to some extent France are becoming closely interlinked and are thus approaching a 'home market' status. It should be noted that this development

<sup>9</sup> See Bank for International Settlement publications on the consolidated foreign claims of the banking sectors in EU Member States.

coincides with the integration of their trading infrastructure within Euronext, although the latter has recently expanded more widely. Germany, in turn, has established close links with Austria and Luxembourg, while Portugal and Spain are similarly closely linked.<sup>10</sup> To sum up, banks' 'home markets' tend to expand across borders, with activities in other countries considered as core activities. As a result, banks' cross-border activity within such regions tends to be less affected by the scaling-down of international activities.

The institutional setting under which these cross-border exposures are managed is not uniform across countries or across types of activity. On aggregate, the number of branches owned by banks from EEA countries continued to exceed the number of subsidiaries from these countries, whereas in terms of assets, subsidiaries are generally more important.<sup>11</sup> This situation has been apparent for several years on aggregate, although at the country level there are notable exceptions to this general picture. In fact, the number of branches and subsidiaries in smaller countries exceeded in several cases those in the largest countries. There are also significant differences between the UK and Luxembourg, which may be considered as international financial centres on the basis of total assets of branches and subsidiaries from EEA countries relative to their GDP. In the UK, most activity is carried out by branches rather than subsidiaries, whereas subsidiaries dominate cross-border activity in Luxembourg. This difference can be explained: the main type of activities conducted under the organisational form of a branch (i.e. capital market operations) differ from those activities that are frequently performed under the organisational form of a subsidiary (i.e. retail and asset management business).

During 2002, both the number of branches of banks from EEA countries and total assets started to decline after having increased in previous years. This was particularly marked in those countries that showed a strong increase in the business volume of branches in 2001, with a decline in assets taking place

in 2002 that in some cases overcompensated for previous increases. With regard to subsidiaries from EEA countries, most countries reported an increase in assets in 2002, whereas the number of subsidiaries largely remained unchanged. This divergent development could be explained by the increased focus of banks on those types of banking activities that are generally performed through subsidiaries rather than branches, i.e. retail and corporate banking.

### **3.2.2 Outside the European Economic Area**

EU banks continued to strengthen their presence in the Central and Eastern European Countries (CEEC), while scaling back their exposures in some regions in the Americas. In addition to risk diversification possibilities, this strategy offers considerable growth potential as the local markets in CEEC are relatively underbanked and inefficient. However, as market conditions and margins in the wholesale markets in CEEC become tighter, the focus of EU banks has begun to shift towards retail banking in CEEC. In response to these linkages, EU supervisory authorities have started to focus their attention on these foreign activities and have strengthened their co-operation with local supervisors.

In spite of these changes, the bulk of EU banks' international exposure remains with developed countries. With a view to the most recent developments in 2002, the reduction of investment banking activity and scaling-down of banks' presence in international financial centres may have contributed to explaining the downward trend in the EU banking system's total consolidated claims vis-à-vis the US, as reported by the Bank for International Settlements. With regard to Japan, the overall level of exposure of EU

<sup>10</sup> Beyond these interlinkages at the country aggregate level, individual banks may view their involvement in other countries as belonging to their core activities, although they are not captured at the country aggregate level.

<sup>11</sup> Tables 17 to 20 in the annex provide an overview of the number of cross-border subsidiaries and branches, together with their assets within the EEA.

banks is significantly lower when compared to the US, while country differences are also significant here.

At the EU level, the number and total assets of branches owned by banks from non-EEA countries declined in 2002.<sup>12</sup> The majority of countries reported a decrease in the assets of subsidiaries and branches from non-EEA banks. In contrast, IE and BE reported a substantial increase in assets of subsidiaries,

while ES reported an increase in the total assets of branches from non-EEA countries.<sup>13</sup> The motivation behind the internationalisation strategies of EU banks over time is reviewed in the Box below.

<sup>12</sup> See Tables 21 to 24 in the annex for an overview of the number of cross-border subsidiaries and branches along with their assets from non-EEA countries.

<sup>13</sup> In BE, this increase resulted from a change in the ownership structure of a middle-sized bank.

## Box

### Banks' Motivations behind their Internationalisation Strategies

The emergence of specific cross-country linkages over a longer period of time appears to be the result of a combination of factors. Four stylised strategies appear to be most relevant in analysing internationalisation trends.

*The most important strategy may be characterised as profit-driven.* Profit considerations resulting from competitive pressures in the home market have been the main driving forces behind banks' increasing internationalisation strategies across the vast majority of countries in recent years. Following this strategy, banks have built up international activities in those countries and activities where profits/margins were (at least originally) higher than those in their respective home country and/or where growth potential was high. Conversely, the scaling-back of international activity may have been related to tightening competition in the target markets, often owing to the entry of foreign banks in those markets. An unfavourable economic environment may accelerate this process, since demand for financial services tends to be limited if general economic activity is slow, thus increasing competition for lending to the limited numbers of high-quality customers. An alternative focus in banks' internationalisation strategies is to establish a representation office in a financial centre, where capital market activities and thus fee income in market-related activities is generally of greater importance.

Target countries are located in both developed and emerging markets (especially Central and Eastern European Countries, as well as Latin America). When selecting a target country for investment, key factors are generally its geographic proximity, cultural links plus linguistic aspects. Banks' market penetration strategies mainly rely on purchasing existing institutions and operating them as subsidiaries rather than setting up green-field operations. By contrast, bank activities in financial centres are mainly carried out through branches, enabling banks to benefit from brand name recognition, the external rating of the parent institution, etc.

*A second major strategy is related to customer requirements.* In these cases, large, internationally active corporates expect their banks to be able to provide the full range of services that they need in their activities. In some important regions, such as Central and Eastern Europe, trade integration has increased and foreign direct investment has been directed to those countries where profit considerations already favour market penetration. Conversely, the scaling-down of banks' international activities in individual countries may also have been a reaction to reduced international activity on the part of their corporate clients.

*A third strategy is determined by risk diversification.* In most countries, however, this motivation appears to have played a relatively subordinate role. This potentially contradicts the economic literature, which often stresses the diversification effects from internationalisation strategies, as risk factors in different countries

tend to be imperfectly correlated. In practice, however, correlations are hard to quantify and tend to be unstable.<sup>1</sup>

Finally, a fourth expertise-driven strategy can be distinguished, whereby a bank only expands the geographic scope of its activities in business segments where it has built up specialised expertise and thus has a comparative advantage over its competitors in the target country. Banks with strong expertise in one area, e.g. asset management, tend to expand across borders in that field. However, the extent to which banks have moved in the direction of internationalisation owing to the desire to utilise their superior expertise varies across countries.<sup>2</sup>

*1 In the banking regulatory context of Basel II, difficulties in reliably quantifying the correlation among banking book exposures has caused the reform to stop short of recognising diversification effects for regulatory reporting.*

*2 In this regard, it is frequently stated that EU banks' engagement in CEEC countries has contributed to banking sector stability in the latter by introducing superior risk management expertise.*

## 4 Developments within Banks

The key challenges banks faced in 2002 included the need to limit or cut costs along with making necessary investments to improve risk management procedures. Banks have successfully improved their internal procedures, and cost-income ratios started to come down in 2002.<sup>14</sup> Besides cost-efficiency, organisational changes have been implemented to restore investors' confidence in securities-related products. This section describes how banks' reacted in 2002 as regards the structure of their business activities, internal procedures and delivery channels.

### 4.1 Organisational Structure

In many cases, banks initiated efforts to improve their management structures some time ago; these efforts were further pursued in 2002. These structures have generally become leaner and more centralised, and internal control mechanisms have been strengthened. These improvements, many of which were partly facilitated by technological advances, have affected the organisational structure of banks, particularly that of large banking groups, where specific functions have been pooled across individual banking groups while other functions have been outsourced. Moreover, some functions have gained in importance, while internal committees such

as asset and liability committees (ALCO), credit risk committees and internal audit committees have been introduced or strengthened in their role.

Banks have also made substantial efforts to improve the quality of their corporate governance. Recent scandals have shown that even in a well-developed financial market, investor confidence may weaken with potentially severe consequences. Investment banks in particular have incurred severe criticism for their handling of conflicts of interest, for the ineffectiveness of their internal fire walls, and for providing biased advice to their clients. Moreover, management compensation schemes and the treatment of stock options under accounting rules were also widely criticised for being insufficiently transparent. Banks have reacted to these criticisms by upgrading their internal organisation and introducing audit committees and compensation committees. In April 2003, a number of large investment banks settled open cases with the US securities regulator that included alleged fraudulent behaviour. This settlement represents an important step in overcoming one of the worst financial scandals in recent history, and is intended to limit the

*14 See ECB (2003) EU Banking Sector Stability, which provides figures on cost-income ratios for 2001 and the first half of 2002.*



reputational losses of the firms involved. Improvement in corporate governance continues to be high on the agenda of supervisory authorities as well. International initiatives by the IOSCO, the IAIS and the Basel Committee as well as at the EU level aim at promoting standards in the banking, securities and insurance sectors as well as increasing transparency.

Efficiency-increasing organisational changes have sometimes resulted in interlinking subsidiaries more closely by centralising functional operations when similar services are provided. Organisation by business lines and partly by regions appears to be the main model in a number of countries. Banks are making efforts to separate peripheral tasks from core ones, a division, which is increasingly reflected in their organisational structures.

Outsourcing the former is widely seen as a viable option, particularly with the improvements to the regulatory frameworks in this respect. The centralisation of information technology and back-office activities and the establishment of unified platforms appears to be a widely applied strategy. This reorganisation aims at reducing costs, standardising operating and information procedures and exploiting specialisation according to the customer segment. These efforts also affect the institutional setting in some cases, as subsidiaries that conduct business in the same market segment are merged. The overall reduction in the number of bank employees and branches demonstrates the successful implementation of these strategies. In the future, ongoing efforts pointing in the same direction are expected, although the pace of and need for consolidation in the banking sector differ substantially across countries.

Current efforts to improve risk management systems are mainly focused on cost-saving or on meeting future regulatory requirements under Basel II.<sup>15</sup> However, enhanced expertise in credit risk measurement will probably feed

into the pricing of exposures and may lead to a restructuring of lending portfolios.

Strategic alliances and joint ventures among banks are also forged as one alternative business strategy to a fully-fledged merger. These alliances can also be observed between banks with different specialisations and across borders. Furthermore, banks are increasingly co-operating with either European institutions or with non-financial companies. However, in some cases joint ventures between banks and non-financial companies proved less successful and were wound up, as was the case in PT.

Banks with a similar business orientation may forge alliances with a view to providing specific services such as cash services. In some cases, these alliances include the establishment of cross-shareholdings and board representation, and can represent one step in a gradual strategy that aims at a complete merger. FR saw the initiation of such an alliance in its co-operative banking sector in mid-2002, while in DE major efforts have been made to strengthen links within the co-operative and savings banks sectors.

In a number of cases, these alliances are not immediately apparent in the final product that is sold to a customer, so that the immediate effect on competition and the range of options for bank customers is likely to be limited. In assessing these alliances and mergers, the relevant market may be increasingly difficult to define; however, where the barriers to entry in the banking sector continue to be not overly high, this concern may be somewhat alleviated.

## 4.2 Product and Service Mix

As already noted, in 2002 banks focused more on traditional activities. Banking services have however continued to become increasingly complex, for example in the area of savings instruments. This has given rise to increased

<sup>15</sup> See Section 2.3 for details.

focus on consumer education and consumer protection, while simultaneously, ongoing standardisation can be observed in other areas. Another important feature is that the increased focus on traditional banking activities now takes place in an environment where credit risk can be managed more flexibly. The introduction of credit risk transfer instruments, which have grown tremendously in volume and scope, enables banks to unbundle risks more easily and to shape their credit risk exposure more successfully, by focusing on those activities where they can provide greater value added. Thus, the production and distribution of financial services increasingly involves more than one institution, while at the same time some products are becoming more standardised, and new products are being introduced.

#### **4.2.1 Banks' Liability Mix**

In addition to the general shift to deposits, consumers have reacted to a low interest rate environment and weak capital markets by searching not only for high-quality investments, but also ones providing a higher return. Bank deposits tend to be seen as a very low risk savings instrument, and thus the absolute values of the euro area banks' total deposits increased slightly in 2002, even though some countries reported a decrease in total deposits.<sup>16</sup> Banking services have also become more complex, with savings products being introduced in response to increased public interest in investments offering relatively high yields. These new savings instruments comprise products where returns are linked to an index, frequently including a floor and/or ceiling for losses and yields. Additionally, in some countries high-risk investment alternatives such as hedge funds have been opened to retail investors. These new products increase the need for customer education and advice from banks, particularly in shaping informed investment decisions. Consumer protection thus remains high on the agenda when assessing innovative banking services products.

#### **4.2.2 Lending Developments**

On the asset side of banks' balance sheets, credit demand may have benefited from the low interest rate environment. However, the weak economic environment has prevented this effect from fully unfolding. In the retail segment, products have become increasingly standardised (the commoditisation of retail loans). The structure of banks' domestic lending activities has generally shifted from corporate lending towards household lending.<sup>17</sup> Lending for house purchase increased in all countries during 2002, as did lending for consumer credit, albeit at a very slow rate. Despite this change in focus, however, lending to non-financial corporations remains the most important lending activity for EU banks.

The ratio of total loans to total banking assets, which can be derived from the tables at the end of this report, illustrates the importance of lending in banks' overall activities. However, this ratio does not take into account off-balance-sheet items, which play an important role in banks' activities. In most countries, the ratio of total loans to total assets has only changed to a limited extent and lacks a clear common direction.<sup>18</sup> This suggests that the focus on retail activities has mainly reduced the relative share of off-balance-sheet (investment banking, asset management) activities, rather than changed the composition of banks' assets.

#### **4.2.3 Credit Risk Transfers**

The overall market for innovative credit risk transfer instruments continues to grow in the funded as well as in the unfunded segment, although the growth rate slowed down somewhat in 2002 and issuance volumes declined in some markets. Issuances in the European securitisation market increased by

<sup>16</sup> See Table 11 in the annex.

<sup>17</sup> See Tables 7 to 10 in the annex.

<sup>18</sup> GR is a notable exception to this general finding, as a strong increase - albeit from a comparatively low overall level - instead occurred.

2.7% in 2002, reaching EUR 157.7 billion. New issuance in mortgage-backed securities (MBS) increased by 21%, while the issuance of asset-backed securities (ABS) declined by 10%. The structure of the ABS market is rather diversified with regard to the underlying collateral, comprising receivables, auto loans, credit card exposures, consumer and commercial loans. The MBS market remains predominantly focused on residential mortgages. The geographic composition of the collateral was also broadly confirmed, with the UK, Italy and Spain the main countries for collateral. In DE, risk transfers were predominantly carried out through synthetic securitisation, while most recently, there have been more initiatives in the 'true sale' segment.<sup>19</sup>

The market for credit derivatives also continues to grow at a very high rate. The growth in the use of new and complex instruments to transfer credit risk has dramatically surpassed earlier market expectations. The size of the global credit derivatives market, for example, is now estimated at over EUR 1 trillion. The use of these instruments is however not evenly distributed across countries: while volumes are growing in some countries, others have made less use of them. Credit risk transfer instruments may be useful for a variety of reasons, such as risk diversification and risk management. Price information on credit derivatives can also provide a useful signal on financial fragility in the corporate sector or in banks and other financial institutions. This is frequently available from increasingly liquid markets, and might be used for monitoring financial stability. Credit derivatives could however also represent a potential threat to financial stability, as these instruments make the institutional distribution of risk less transparent. Moreover, additional risk may arise from the immature nature of some market segments, where the effectiveness of risk transfers so far remains untested in court.<sup>20</sup>

The issuance of covered bank bonds continued to rise in 2002, with the market

dominated by Pfandbriefe (totalling EUR 223 billion). Germany remains by far the most important Pfandbrief market in Europe, followed by France and Spain, each with less than 10% of the total volume. Changes in the German Law on Pfandbriefe bolstered the market by expanding the geographical scope of collateral and emphasising the importance of credit quality in this market; Ireland too has also recently introduced a new law on Pfandbriefe. The role of this type of funding instrument for banks is bound to increase in importance in the future in other EU countries as well.

### 4.3 Delivery Channels

Branches remain key in banks' distribution strategies, despite the decreasing density of branch networks in Europe.<sup>21</sup> The reduction in the number of branches has been observable over several years and is predominantly motivated by banks' efforts to control costs. Other structural developments, such as M&A activity, also contributed to consolidation in the number of branches.<sup>22</sup> The role of branches is changing towards the provision of more advice-intensive tasks, while other services are becoming increasingly automated. Overall, the reform of internal management structures according to customer segments has led to a higher degree of integration of branch activities into centralised procedures.

Technological progress also ensures higher efficiency in providing banking services as it allows new distribution channels to be utilised and enhances the degree of automatisation. Alternative distribution channels are more used, albeit at a lesser rate than initially

<sup>19</sup> In a synthetic securitisation, the securitised assets remain on the bank's balance sheet while the credit risk that stems from these assets is hedged via credit derivatives.

<sup>20</sup> The ongoing modification of standard documentation is one indication of the rather immature nature of this market.

<sup>21</sup> Table 2 in the annex provides an overview of national developments.

<sup>22</sup> In other cases, however, mergers involved institutions with limited geographical overlap so that no substantial rationalisation potentials are expected in terms of the branch network.

expected. In the past years, cost-cutting efforts by banks gave rise to the establishment of innovative distribution channels, which were seen as a more cost-efficient alternative to branches as well as a market penetration tool. Today, these innovative channels are mostly seen as complementing branch networks rather than as a substitute for them. Expectations of reducing costs by focusing on innovative channels have therefore generally been revised downwards. Automatisations requires products to become more standardised and enables the separation of product development from distribution (e.g. an open architecture), as well as the outsourcing of specific activities. In addition, it allows banks to handle higher volumes with the same number of staff: the ratio of total banking assets per employee has actually constantly increased in recent years.<sup>23</sup> However, the increasing degree of automatisations in banking is likely to reduce still further the need for relatively low-skilled labour, and will increase banks' focus on operational risks and error handling procedures.

With regard to the impact of technological progress on banking, there is no particularly dominant strategy across countries in Europe, as most banking systems seem to be pursuing different strategies in parallel. However, Internet banking has become an important distribution channel in northern Europe as a complement to traditional branches, and substantial investments have been made in individual cases with some success. In southern Europe, on the other hand, Internet banking plays a relatively marginal role. As a more general observation, only a few pure Internet banks tend to survive, usually providing a limited set of services. The main use of Internet banking comprises bank-to-bank payments, account keeping and information services relating to investment opportunities. Online trading is also

performed via the Internet, but loans are rarely granted in this fashion. General sentiment has recently turned less optimistic owing to increasing costs, limited customer potential and, as regards online trading activities, poor stock market performance. Future growth might be further hampered as banks seem reluctant to invest in innovative distribution channels, given the current situation of constrained profitability. Instead, consolidation is also apparent in Internet banking, with some banks terminating activities, merging their Internet activities or reintegrating them into the parent institution.

Overall, the number of ATMs increased in 2002. In the majority of countries, the scope of services offered by this means is constantly expanding, from distributing cash to bank-to-bank transfers, account statements, tax payments, the buying of transport tickets, cheque requests, money deposits and the provision of additional information. In some cases, the number of staff in branches has been reduced as standard procedures become more automated thanks to ATMs. Banks have also used ATMs to increase the density of their networks in a cost-efficient way by placing them within supermarkets, rather than establishing new and costly offices.

Banks are increasingly using independent intermediaries to distribute their products, and important legal changes have been introduced in Member States that enable banks not only to pursue this strategy further, but also to address supervisory concerns. In some countries, legal reforms have aimed at increasing competition among agents who have exclusive contracts with banks. In Sweden, the number of retailers that offer financial services has increased.

<sup>23</sup> This preliminary finding is derived from Tables 4 and 5 in combination with Tables 25 and 26 in the annex. A comprehensive assessment should take account of possible biases, including inflation.

## 5 Risks and Risk Control in Banking

This section outlines the developments in banks' risk exposure as well as changes in banks' risk management and control procedures. In 2002, credit and market risk remained the two most important banking risks, although the advancing complexity of the banking business has increasingly brought other risks, such as operational ones, to the forefront.

### 5.1 Risks in Banking

The assessment of risks in banking has become more comprehensive as intermediaries increasingly take strategic, reputational, legal and operational risk into account. Credit risk increased in 2002 owing to worsening economic conditions, reflected in an increase in losses and provisioning needs across most countries. Banks reacted to these developments by reducing exposures or by partly hedging them using innovative risk transfer instruments. The mortgage market remains quite active in a number of countries, and real estate price increases have given some cause for concern.<sup>24</sup> Exposures to the telecommunications sector continue to be actively monitored but appear of less concern.

Market risk is a traditional focus of attention, although it no longer plays a dominant role in banks' overall risk exposures. Over the years, banks have gained extensive experience in dealing with these risks, and have implemented models which are also recognised by supervisors. This 'best practice' is now spreading across the industry so that the overall standard of market risk management systems is improving. The key challenges in this respect are to have a comprehensive overview of current exposures on a timely basis, and to have effective procedures in place to react to any limit breaches. The increasing role played by the markets, coupled with longer trading hours and new trading platforms, have made data collection a key component. The emergence of '24-hour trading books' in large

banks as well as increasingly strict deadlines for margin requirements pose new challenges in controlling both market risks and liquidity risk.

Strategic risk is increasing as banks review their business organisation and strategic orientation. The investment banking segment, where initial investments have not been matched so far by expected returns, represents one potential aspect of this risk.

### 5.2 Risk Management in Banking

Banks are increasingly focusing on non-traditional risks in banking such as operational risk, strategic risk and legal risk, and have stepped up efforts to control and quantify these risks. In most cases, these risks have not been addressed individually, but instead as part of a more comprehensive strategy intended to improve management systems. Legal opinions form one cornerstone in addressing legal risks, while many banks tend to follow a cautious limit-setting strategy when entering new markets or using products that have not been tested in court. Banks' internationalisation strategies clearly increase the relevance of legal risks, as banks operate as a result in several jurisdictions, making the governing law of specific contracts part of the contract negotiations. In some cases, banks have co-operated in pooling data to establish a reliable database to quantify these risks, although efforts in this direction are only in initial stages. A general consensus is emerging that these risks seem far from negligible.

Liquidity risks have gained additional attention, especially in view of the changing slope of the yield curve. Banks are increasingly focusing on asset liability management (ALM), and have established various high-level

<sup>24</sup> See Tables 7 to 10 in the statistical annex to this report on the structure of bank lending volumes.

committees (for example, asset liability committees (ALCOs) to manage this risk.

Interest risk in the banking book is somewhat related to liquidity risk, as maturity transformation has implications for liquidity needs over time. So far, regulations in this regard are mainly of a qualitative nature, and a global industry 'best practice' has yet to emerge. In a low interest rate environment,

as was the case in 2002, banks generally find it difficult to attract long-term savings, which tends to increase the maturity mismatch between the asset and liability sides. The divergent impact that changes in interest rates have on the different assets and liabilities owing to their individual duration may be perceived as a form of market risk. This risk is far from negligible for most banks.

## 6 Conclusions

Banks remain predominant in financial intermediation in the EU. With regard to domestic banking sectors, consolidation in terms of the number of institutions and local units continued in 2002, while the aggregate figures for total assets, total deposits and total loans of the banking sector showed a further increase. Banks focused their lending activities mainly on retail activities, with consumer lending and lending for house purchase increasing, whereas corporate lending generally showed slower growth, reflecting deteriorating economic conditions. Moreover, the growth in complex savings products, which banks offer to meet demand for higher returns, ensured that consumer protection issues remained at the forefront.

Banks underwent substantial pressure during 2002, which caused them to redouble their efforts to improve management procedures, to limit risk exposures, and to restore profitability through cost-cutting measures, including laying off staff. Efforts to implement planned reform programmes have gained impetus, with banks making substantial efforts to improve the quality of their corporate governance and to organise their activities more efficiently via leaner management structures. Thus, the three major themes in the 2001 structural report, namely cost-income pressures for banks, changes in their risk exposures and risk management and the growing importance of consumer issues, continued to apply in 2002.

As regards the type of banking activities, banks have increasingly concentrated on traditional banking activities such as retail and corporate banking, while scaling back investment banking and trading activities. The concentration on regions considered to be their 'home markets' led many banks to restructure their international exposures. Internationalisation strategies, which in the past were frequently driven by competitive pressures in home markets, were revised in the course of banks' reorientation towards traditional banking activities.

Branches remain at the core of banks' distribution strategies, but their role is changing as specific tasks become increasingly automated. As a result, branch networks continue to be downsized and alternative distribution channels gain pace, albeit the latter at reduced growth rates. Some regions place a relatively strong emphasis on Internet banking, while others are more focused on expanding the services provided through ATMs. The focus of branches is increasingly on products that have a relatively high value-added and/or are advisory-oriented. Overall, banks continue to pursue multi-channel strategies. The effect of alternative distribution channels on costs appears limited, as these channels complement rather than substitute for branch networks, and thus contribute to enhancing the quality of the services provided to the banks' customers.

Capital markets continue to play a crucial role in the financial sector. The market for new and complex instruments (credit derivatives and securitisation instruments) which can transfer credit risk continues to grow extremely rapidly, with large banks predominant in this market. The ever-increasing complexity of financial products makes it harder to reach informed investment decisions, as well as more difficult to understand risks clearly. The sheer complexity of this situation enhances the role of banks in advising their customers.

As regards the future outlook, disintermediation and internationalisation may

regain importance in the future if the banking environment improves and is seen to be durable. In this case, the concentration on core activities and home markets might simply represent a reaction to the current economic situation and could therefore be of a temporary nature. The banking sector will benefit from current investments in risk management procedures, making it set to emerge from the current situation in a stronger position once improvements in risk pricing and risk management have been fully implemented. The current structural developments could thus contribute to preserving financial stability in the medium to long term.

**Table 1**  
Number of credit institutions (CI)

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	134	120	119	119	113	111
DK Denmark	100	212	210	210	203	178
DE Germany	3,577	3,238	2,992	2,742	2,526	2,363
GR Greece	53	59	57	57	61	61
ES Spain	411	402	387	368	367	359
FR France	1,273	1,226	1,159	1,099	1,050	1,011
IE Ireland	70	78	81	81	88	85
IT Italy	935	934	890	861	843	822
LU Luxembourg	215	212	211	202	189	177
NL Netherlands	100	634	616	586	561	539
AT Austria	995	898	875	848	836	823
PT Portugal	235	227	224	218	212	202
FI Finland	375	348	346	341	369	369
SE Sweden	124	148	148	146	149	216
UK United Kingdom	480	521	496	491	452	440
MU12 Monetary Union	<b>8,373</b>	<b>8,379</b>	<b>7,955</b>	<b>7,521</b>	<b>7,214</b>	<b>6,922</b>
EU15 European Union	<b>9,077</b>	<b>9,260</b>	<b>8,809</b>	<b>8,368</b>	<b>8,018</b>	<b>7,756</b>

Source: ECB.

**Table 2**  
Number of local units (branches) of CI per 1,000 inhabitants

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	0.72	0.70	0.68	0.65	0.60	0.54
DK Denmark	0.43	0.43	0.43	0.44	0.45	0.40
DE Germany	0.77	0.73	0.71	0.69	0.65	0.62
GR Greece	0.23	0.25	0.25	0.26	0.27	0.28
ES Spain	0.97	0.99	0.99	0.98	0.97	0.96
FR France	0.43	0.42	0.42	0.42	0.43	0.43
IE Ireland	0.32	0.29	0.26	0.23	0.25	N/A
IT Italy	0.44	0.46	0.47	0.49	0.51	0.52
LU Luxembourg	0.76	0.76	0.80	0.76	0.62	0.61
NL Netherlands	0.44	0.43	0.40	0.38	0.35	0.31
AT Austria	0.58	0.57	0.57	0.56	0.56	0.55
PT Portugal	0.47	0.49	0.53	0.55	0.54	0.52
FI Finland	0.25	0.24	0.23	0.23	0.24	0.24
SE Sweden	0.28	0.25	0.24	0.23	0.23	0.23
UK United Kingdom	0.28	0.27	0.26	0.25	0.25	N/A
MU12 Monetary Union	<b>0.60</b>	<b>0.59</b>	<b>0.59</b>	<b>0.58</b>	<b>0.57</b>	<b>N/A</b>
EU15 European Union	<b>0.54</b>	<b>0.53</b>	<b>0.53</b>	<b>0.52</b>	<b>0.51</b>	<b>N/A</b>

Source: ECB.



**Table 3****CR5 - Share of the 5 largest CI in total assets (as a %)**

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	54	63	76	75	78	82
DK Denmark	70	71	71	60	68	68
DE Germany	17	19	19	20	20	20
GR Greece	56	63	67	65	67	67
ES Spain	45	45	52	54	53	53
FR France	40	41	43	47	47	45
IE Ireland	41	40	41	41	43	46
IT Italy	31	26	26	23	29	31
LU Luxembourg	23	25	26	26	28	30
NL Netherlands	79	82	82	81	82	83
AT Austria	48	42	41	43	45	46
PT Portugal	46	45	44	59	60	60
FI Finland	88	86	86	87	80	79
SE Sweden	59	60	60	62	61	63
UK United Kingdom	24	25	28	28	29	30

Source: ECB.

**Table 4****Number of employees of CI per 1,000 inhabitants**

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	7.52	7.51	7.46	7.45	7.40	7.27
DK Denmark	9.09	9.17	9.02	9.09	9.11	8.84
DE Germany	9.35	9.37	9.39	9.39	9.31	9.06
GR Greece	5.26	5.33	5.38	5.51	5.45	5.52
ES Spain	6.25	6.24	6.15	6.09	6.08	5.99
FR France	6.92	6.85	6.84	6.75	6.87	N/A
IE Ireland	N/A	N/A	N/A	9.38	9.23	N/A
IT Italy	6.02	5.95	5.91	5.96	5.94	5.89
LU Luxembourg	45.45	46.51	49.07	52.59	54.18	52.24
NL Netherlands	7.14	7.58	7.86	8.12	8.19	7.93
AT Austria	9.32	9.14	9.08	9.08	9.18	9.09
PT Portugal	6.40	6.12	6.03	5.68	5.39	5.29
FI Finland	5.22	4.92	4.79	4.86	5.16	4.96
SE Sweden	4.88	4.92	4.88	4.73	4.68	4.67
UK United Kingdom	7.71	7.71	8.06	8.02	7.97	N/A
MU12 Monetary Union	N/A	N/A	N/A	7.37	7.36	N/A
EU15 European Union	N/A	N/A	N/A	7.43	7.42	N/A

Source: ECB.

**Table 5****Total assets of CI as a ratio of GDP**

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	3.06	2.98	3.03	2.82	3.05	2.97
DK Denmark	2.11	2.27	2.36	2.47	2.63	N/A
DE Germany	2.56	2.75	2.86	2.99	3.03	3.02
GR Greece	1.07	1.39	1.53	1.68	1.55	1.43
ES Spain	1.70	1.73	1.78	1.85	1.92	1.94
FR France	2.44	2.39	2.51	2.47	2.57	2.55
IE Ireland	2.61	3.02	3.37	3.46	3.69	3.70
IT Italy	1.56	1.43	1.47	1.52	1.52	1.61
LU Luxembourg	33.50	32.01	32.20	31.13	33.52	30.18
NL Netherlands	2.31	2.55	2.63	2.85	2.95	3.05
AT Austria	2.28	2.39	2.47	2.59	2.71	2.56
PT Portugal	2.37	2.86	2.80	2.73	2.86	2.72
FI Finland	0.97	0.93	0.99	0.98	1.20	1.18
SE Sweden	1.78	1.57	1.66	1.67	N/A	N/A
UK United Kingdom	3.17	2.94	3.17	3.31	3.61	N/A
<b>MU12 Monetary Union</b>	<b>2.30</b>	<b>2.36</b>	<b>2.45</b>	<b>2.51</b>	<b>2.58</b>	<b>2.57</b>
<b>EU15 European Union</b>	<b>2.42</b>	<b>2.43</b>	<b>2.55</b>	<b>2.63</b>	<b>N/A</b>	<b>N/A</b>

Source: ECB.

**Table 6****Total loans of CI to non-MFI as a ratio of GDP**

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	0.95	0.96	0.99	1.00	1.04	1.07
DK Denmark	1.34	1.38	1.41	1.47	1.56	N/A
DE Germany	1.37	1.41	1.42	1.45	1.47	1.43
GR Greece	0.36	0.42	0.47	0.54	0.62	0.67
ES Spain	0.83	0.89	0.94	1.01	1.06	1.10
FR France	0.85	0.83	0.85	0.90	0.91	0.92
IE Ireland	1.12	1.24	1.48	1.56	1.67	1.55
IT Italy	0.72	0.74	0.77	0.82	0.83	0.85
LU Luxembourg	5.49	6.17	6.58	6.27	6.89	6.03
NL Netherlands	1.25	1.35	1.44	1.51	1.53	1.59
AT Austria	1.17	1.17	1.20	1.24	1.27	1.26
PT Portugal	0.79	0.94	1.14	1.32	1.39	1.42
FI Finland	0.48	0.50	0.54	0.55	0.60	0.61
SE Sweden	0.97	0.89	0.96	0.94	N/A	N/A
UK United Kingdom	1.18	1.07	1.21	1.21	1.31	N/A
<b>MU12 Monetary Union</b>	<b>1.03</b>	<b>1.06</b>	<b>1.10</b>	<b>1.14</b>	<b>1.16</b>	<b>1.16</b>
<b>EU15 European Union</b>	<b>1.06</b>	<b>1.06</b>	<b>1.12</b>	<b>1.15</b>	<b>N/A</b>	<b>N/A</b>

Source: ECB.

**Table 7****Loans to non-financial corporations (EUR millions)**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	75,691	81,475	92,371	95,094	94,247	90,840
DK	Denmark	N/A	N/A	N/A	N/A	N/A	N/A
DE	Germany	719,928	769,796	761,870	811,330	844,235	840,664
GR	Greece	N/A	31,958	34,890	41,796	48,603	52,295
ES	Spain	175,872	200,169	227,958	266,944	306,019	338,768
FR	France	433,865	442,973	469,743	520,013	540,275	546,927
IE	Ireland	22,290	26,178	34,991	44,523	52,830	54,912
IT	Italy	384,007	401,114	427,967	488,621	520,857	546,751
LU	Luxembourg	23,614	30,149	33,981	40,878	45,391	40,160
NL	Netherlands	145,059	171,775	188,184	204,166	213,285	215,413
AT	Austria	105,911	114,117	119,741	129,060	134,059	132,492
PT	Portugal	32,026	39,743	50,533	62,446	72,597	78,715
FI	Finland	17,178	19,150	21,705	24,644	30,943	32,938
SE	Sweden	N/A	N/A	N/A	N/A	N/A	N/A
UK	United Kingdom	N/A	N/A	N/A	N/A	N/A	N/A
MU12	Monetary Union	N/A	2,328,597	2,463,934	2,729,515	2,903,341	2,970,875
EU15	European Union	N/A	N/A	N/A	N/A	N/A	N/A

Source: ECB.

**Table 8****Total loans for housing purchase (EUR millions)**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	43,624	44,878	51,487	57,128	58,006	63,578
DK	Denmark	N/A	N/A	N/A	N/A	N/A	N/A
DE	Germany	N/A	N/A	839,788	873,325	901,839	921,822
GR	Greece	N/A	7,008	8,788	11,165	15,517	21,064
ES	Spain	104,519	123,552	145,627	177,407	206,815	241,809
FR	France	253,857	260,727	281,735	302,514	320,741	345,926
IE	Ireland	16,701	20,488	27,944	30,058	34,710	44,126
IT	Italy	53,710	63,476	80,354	96,980	102,257	126,243
LU	Luxembourg	4,583	4,557	4,744	5,823	6,533	7,052
NL	Netherlands	135,702	161,128	190,626	232,274	259,812	277,667
AT	Austria	21,596	22,138	23,620	26,235	29,631	31,980
PT	Portugal	24,097	32,444	42,208	50,803	57,448	64,954
FI	Finland	16,839	19,101	22,020	24,346	27,329	30,960
SE	Sweden	N/A	N/A	N/A	N/A	N/A	N/A
UK	United Kingdom	N/A	N/A	N/A	N/A	N/A	N/A
MU12	Monetary Union	N/A	N/A	1,718,941	1,888,058	2,020,638	2,177,181
EU15	European Union	N/A	N/A	N/A	N/A	N/A	N/A

Source: ECB.

**Table 9****Total loans for consumer credit (EUR millions)**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	7,875	8,170	8,541	8,677	8,472	8,615
DK	Denmark	N/A	N/A	N/A	N/A	N/A	N/A
DE	Germany	N/A	N/A	216,774	223,562	223,380	225,187
GR	Greece	N/A	3,035	3,894	5,512	7,854	9,757
ES	Spain	29,247	36,707	43,379	48,597	48,819	51,845
FR	France	N/A	94,601	104,473	113,256	118,063	121,158
IE	Ireland	5,275	6,367	8,793	10,615	12,991	14,485
IT	Italy	12,952	13,575	17,330	20,042	23,895	29,646
LU	Luxembourg	615	686	951	1,047	1,097	1,114
NL	Netherlands	10,863	12,266	12,848	13,831	13,903	15,264
AT	Austria	14,259	15,189	16,963	24,612	24,043	26,420
PT	Portugal	5,215	6,223	6,913	8,225	8,156	8,161
FI	Finland	3,056	3,055	3,065	3,123	6,387	6,641
SE	Sweden	N/A	N/A	N/A	N/A	N/A	N/A
UK	United Kingdom	N/A	N/A	N/A	N/A	N/A	N/A
MU12	Monetary Union	N/A	N/A	<b>443,924</b>	<b>481,099</b>	<b>497,060</b>	<b>518,293</b>
EU15	European Union	N/A	N/A	N/A	N/A	N/A	N/A

Source: ECB.

**Table 10****Other household lending (EUR millions)**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	22,934	24,455	21,296	17,788	17,137	16,512
DK	Denmark	N/A	N/A	N/A	N/A	N/A	N/A
DE	Germany	N/A	N/A	270,903	275,016	268,655	259,980
GR	Greece	N/A	56	71	187	324	518
ES	Spain	35,409	40,271	47,177	51,728	55,320	61,683
FR	France	N/A	64,447	63,438	62,859	63,664	65,858
IE	Ireland	0	0	0	0	0	0
IT	Italy	99,178	108,195	118,275	122,062	126,097	120,065
LU	Luxembourg	6,396	8,606	10,472	12,927	12,597	13,561
NL	Netherlands	14,785	17,803	19,829	22,946	21,366	22,828
AT	Austria	8,886	9,212	11,145	6,221	6,168	4,948
PT	Portugal	4,465	5,576	7,303	9,301	9,889	9,886
FI	Finland	5,692	7,143	7,586	7,795	8,079	8,209
SE	Sweden	N/A	N/A	N/A	N/A	N/A	N/A
UK	United Kingdom	N/A	N/A	N/A	N/A	N/A	N/A
MU12	Monetary Union	N/A	N/A	<b>577,495</b>	<b>588,830</b>	<b>589,296</b>	<b>584,048</b>
EU15	European Union	N/A	N/A	N/A	N/A	N/A	N/A

Source: ECB.

**Table 11****Total deposits of CI from non-MFI as a ratio of GDP**

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	1.06	1.18	1.22	1.18	1.28	1.32
DK Denmark	1.48	1.52	1.59	0.53	0.54	N/A
DE Germany	1.05	1.08	1.10	1.11	1.15	1.14
GR Greece	0.75	0.91	0.89	0.96	1.04	0.95
ES Spain	0.88	0.87	0.93	1.01	1.09	1.08
FR France	0.72	0.72	0.70	0.69	0.72	0.72
IE Ireland	0.91	1.00	1.10	1.12	1.14	1.12
IT Italy	0.61	0.58	0.56	0.55	0.56	0.59
LU Luxembourg	13.40	12.18	10.18	10.41	10.15	9.06
NL Netherlands	1.03	1.07	1.08	1.13	1.22	1.21
AT Austria	0.93	0.95	0.95	0.93	0.99	0.97
PT Portugal	1.07	1.07	1.11	1.12	1.09	1.04
FI Finland	0.54	0.51	0.53	0.51	0.51	0.51
SE Sweden	0.49	0.38	0.42	0.43	N/A	N/A
UK United Kingdom	1.00	0.92	1.00	0.99	1.08	N/A
MU12 Monetary Union	<b>0.90</b>	<b>0.91</b>	<b>0.91</b>	<b>0.93</b>	<b>0.96</b>	<b>0.96</b>
EU15 European Union	<b>0.91</b>	<b>0.91</b>	<b>0.93</b>	<b>0.91</b>	N/A	N/A

Source: ECB.

**Table 12****Total assets under investment by investment funds as a ratio of GDP**

Country	Year					
	1997	1998	1999	2000	2001	2002
BE Belgium	0.14	0.22	0.30	0.34	0.34	0.30
DK Denmark	0.08	0.11	0.17	0.20	0.21	0.21
DE Germany	N/A	0.30	0.38	0.40	0.38	0.35
GR Greece	0.22	0.25	0.31	0.25	0.13	0.11
ES Spain	0.33	0.39	0.30	0.27	0.24	0.21
FR France	0.36	0.44	0.43	0.47	0.44	0.40
IE Ireland	0.61	0.91	1.66	N/A	N/A	N/A
IT Italy	0.18	0.35	0.43	0.38	0.31	0.26
LU Luxembourg	22.68	25.64	38.09	40.23	39.70	33.06
NL Netherlands	0.19	0.21	0.26	0.29	0.26	0.21
AT Austria	0.22	0.29	0.40	0.44	0.46	0.47
PT Portugal	0.24	0.27	0.26	0.22	0.21	0.20
FI Finland	0.03	0.04	0.08	0.10	0.09	0.08
SE Sweden	0.19	0.21	0.35	N/A	N/A	N/A
UK United Kingdom	0.18	0.19	0.27	N/A	N/A	N/A
MU12 Monetary Union	N/A	<b>0.41</b>	<b>0.50</b>	N/A	N/A	N/A
EU15 European Union	N/A	<b>0.36</b>	<b>0.45</b>	N/A	N/A	N/A

Source: ECB and authorities represented in the BSC.  
Funds of funds are excluded.

**Table 13****Total assets of insurance companies as a ratio of GDP**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	0.34	0.38	0.41	0.43	0.45	0.47
DK	Denmark	0.46	0.51	0.56	0.59	0.57	0.57
DE	Germany	0.36	0.39	0.41	0.43	0.46	0.48
GR	Greece	0.04	0.05	0.06	0.06	0.06	0.06
ES	Spain	0.17	0.21	0.22	0.23	0.23	0.23
FR	France	0.45	0.48	0.52	0.56	0.58	N/A
IE	Ireland	N/A	N/A	0.50	0.52	0.49	N/A
IT	Italy	0.14	0.18	0.21	0.23	0.24	0.26
LU	Luxembourg	0.91	1.03	1.21	1.27	1.33	N/A
NL	Netherlands	0.47	0.61	0.65	0.62	0.69	0.64
AT	Austria	0.25	0.25	0.26	0.26	0.27	0.28
PT	Portugal	0.15	0.18	0.20	0.21	0.22	0.24
FI	Finland	0.06	0.06	0.08	0.07	0.06	0.05
SE	Sweden	0.71	0.79	0.91	0.91	0.78	0.69
UK	United Kingdom	1.04	1.02	1.26	1.10	1.09	N/A
MU12	Monetary Union	<b>0.32</b>	<b>0.35</b>	<b>0.38</b>	<b>0.40</b>	<b>0.41</b>	N/A
EU15	European Union	<b>0.45</b>	<b>0.48</b>	<b>0.55</b>	<b>0.54</b>	<b>0.55</b>	N/A

Source: ECB.

**Table 14****Number of domestic M&A involving CI**

Country		Year						
		1997	1998	1999	2000	2001	2002	2003Q1
BE	Belgium	1	6	1	0	1	0	0
DK	Denmark	0	0	2	1	1	1	0
DE	Germany	15	12	22	10	8	6	3
GR	Greece	1	8	3	4	0	2	0
ES	Spain	7	12	9	7	3	3	0
FR	France	17	9	7	10	11	9	0
IE	Ireland	0	0	0	0	0	0	0
IT	Italy	17	16	24	31	21	17	10
LU	Luxembourg	0	0	0	0	0	0	0
NL	Netherlands	3	1	1	0	1	2	0
AT	Austria	5	2	4	4	1	1	0
PT	Portugal	2	3	1	5	2	0	0
FI	Finland	0	0	0	0	0	2	0
SE	Sweden	1	0	1	0	0	1	0
UK	United Kingdom	4	0	0	1	1	6	0
MU12	Monetary Union	<b>68</b>	<b>69</b>	<b>72</b>	<b>71</b>	<b>48</b>	<b>42</b>	<b>13</b>
EU15	European Union	<b>73</b>	<b>69</b>	<b>75</b>	<b>73</b>	<b>50</b>	<b>50</b>	<b>13</b>

Source: SDC Platinum Database (Thomson Financial).

**Table 15****Number of EEA country M&A between CI**

Country	Year						
	1997	1998	1999	2000	2001	2002	2003Q1
BE Belgium	2	1	6	1	2	1	0
DK Denmark	1	0	4	3	1	1	1
DE Germany	3	5	9	5	2	3	0
GR Greece	0	1	1	2	1	2	0
ES Spain	2	4	10	9	3	4	1
FR France	3	2	7	8	4	3	1
IE Ireland	0	0	1	0	1	1	0
IT Italy	0	4	12	5	2	4	0
LU Luxembourg	2	4	3	4	4	1	0
NL Netherlands	2	1	3	3	2	3	1
AT Austria	0	1	0	0	3	0	0
PT Portugal	0	0	2	5	2	1	1
FI Finland	0	0	1	1	1	2	0
SE Sweden	1	0	5	2	1	3	1
UK United Kingdom	2	0	3	2	2	2	0
MU12 Monetary Union	8	12	30	24	14	26	4
EU15 European Union	9	12	35	26	17	32	6

Source: SDC Platinum Database (Thomson Financial).

**Table 16****Number of M&A involving non-EEA countries**

Country	Year						
	1997	1998	1999	2000	2001	2002	2003Q1
BE Belgium	6	0	5	5	2	6	1
DK Denmark	0	1	0	1	1	0	0
DE Germany	5	6	14	11	8	5	0
GR Greece	0	0	3	4	0	1	1
ES Spain	6	10	3	8	5	6	2
FR France	6	7	6	3	8	3	2
IE Ireland	1	0	2	0	0	0	1
IT Italy	1	2	2	4	3	3	1
LU Luxembourg	0	1	0	1	0	0	0
NL Netherlands	4	4	2	1	5	1	0
AT Austria	1	3	2	3	4	8	0
PT Portugal	0	1	1	3	0	0	0
FI Finland	0	0	2	3	0	0	0
SE Sweden	1	3	2	4	1	2	0
UK United Kingdom	4	3	8	3	4	2	2
MU12 Monetary Union	30	34	42	46	35	33	8
EU15 European Union	35	41	52	54	41	37	10

Source: SDC Platinum Database (Thomson Financial).

**Table 17****Number of branches of CI from EEA countries**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	25	25	30	34	35	36
DK	Denmark	7	8	9	9	9	8
DE	Germany	46	53	57	62	59	64
GR	Greece	14	14	13	13	13	14
ES	Spain	35	36	41	42	49	51
FR	France	52	53	56	59	55	51
IE	Ireland	18	20	26	28	32	31
IT	Italy	62	65	70	82	94	91
LU	Luxembourg	61	61	60	55	54	48
NL	Netherlands	9	10	16	18	19	19
AT	Austria	6	9	12	13	15	15
PT	Portugal	15	15	17	23	23	21
FI	Finland	6	6	7	5	18	19
SE	Sweden	14	17	16	19	19	18
UK	United Kingdom	100	100	99	95	87	85
MU12	Monetary Union	349	367	405	434	466	460
EU15	European Union	470	492	529	557	581	571

Source: ECB.

**Table 18****Total assets of branches of CI from EEA countries as a ratio of GDP x 100**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	26	19	16	16	12	10
DK	Denmark	9	14	9	13	11	12
DE	Germany	2	3	4	4	4	4
GR	Greece	10	9	9	10	7	8
ES	Spain	8	8	7	6	8	9
FR	France	7	6	7	9	8	8
IE	Ireland	46	50	56	55	51	47
IT	Italy	6	7	6	7	6	6
LU	Luxembourg	643	632	577	565	609	496
NL	Netherlands	5	6	6	8	6	6
AT	Austria	2	2	2	2	2	2
PT	Portugal	10	11	11	11	12	12
FI	Finland	8	7	9	7	8	10
SE	Sweden	22	46	42	67	88	99
UK	United Kingdom	73	78	77	81	86	78
MU12	Monetary Union	8	8	8	9	9	9
EU15	European Union	19	21	21	24	25	24

Source: ECB.



**Table 19****Number of subsidiaries of CI from EEA countries**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	16	17	21	21	22	21
DK	Denmark	2	4	5	5	7	7
DE	Germany	31	32	23	22	21	22
GR	Greece	1	1	1	2	2	2
ES	Spain	46	40	36	38	44	40
FR	France	48	54	54	66	70	64
IE	Ireland	21	24	26	26	27	27
IT	Italy	4	5	6	7	7	10
LU	Luxembourg	97	96	99	96	89	86
NL	Netherlands	9	9	9	12	14	14
AT	Austria	20	11	10	11	13	13
PT	Portugal	6	8	8	10	9	9
FI	Finland	0	0	0	0	0	0
SE	Sweden	3	2	2	2	2	1
UK	United Kingdom	21	15	15	16	17	17
MU12	Monetary Union	299	297	293	311	318	308
EU15	European Union	322	319	316	336	334	333

Source: ECB.

**Table 20****Total assets of subsidiaries of CI from EEA countries as a ratio of GDP x 100**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	43	44	46	46	58	54
DK	Denmark	0	0	0	0	18	20
DE	Germany	4	4	4	4	5	11
GR	Greece	2	4	6	14	15	17
ES	Spain	7	7	6	7	8	8
FR	France	11	10	9	21	20	19
IE	Ireland	73	93	114	118	130	91
IT	Italy	3	4	4	2	2	0
LU	Luxembourg	2,154	2,177	2,269	2,111	2,322	2,348
NL	Netherlands	7	6	4	19	23	21
AT	Austria	4	2	2	2	49	52
PT	Portugal	21	43	24	46	56	54
FI	Finland	0	0	0	0	0	0
SE	Sweden	4	4	6	1	0	N/A
UK	United Kingdom	5	4	5	4	5	4
MU12	Monetary Union	14	15	15	19	23	23
EU15	European Union	12	13	13	16	19	N/A

Source: ECB.

Figures for FR are the sum of the assets of subsidiaries from both EEA countries and non-EEA countries.

**Table 21****Number of branches of CI from non-EEA countries**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	15	14	14	13	11	10
DK	Denmark	1	1	1	2	1	1
DE	Germany	31	31	30	28	21	19
GR	Greece	9	9	9	9	8	7
ES	Spain	18	15	11	10	7	8
FR	France	41	36	32	31	28	28
IE	Ireland	2	2	2	2	1	1
IT	Italy	19	18	18	16	16	15
LU	Luxembourg	7	7	8	8	7	7
NL	Netherlands	11	11	10	10	9	9
AT	Austria	0	2	1	1	0	0
PT	Portugal	2	3	3	2	2	1
FI	Finland	0	0	0	0	0	0
SE	Sweden	3	2	1	1	1	1
UK	United Kingdom	152	142	128	126	114	105
MU12	Monetary Union	155	148	138	130	110	105
EU15	European Union	311	293	268	259	226	212

Source: ECB.

**Table 22****Total assets of branches of CI from non-EEA countries as a ratio of GDP x 100**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	20	15	9	5	5	4
DK	Denmark	0	0	0	0	0	0
DE	Germany	2	2	2	2	2	2
GR	Greece	7	6	6	8	7	4
ES	Spain	3	2	1	1	0	1
FR	France	5	3	2	2	1	1
IE	Ireland	3	4	3	3	N/A	N/A
IT	Italy	2	1	1	1	1	1
LU	Luxembourg	46	42	33	37	33	29
NL	Netherlands	1	1	1	1	0	0
AT	Austria	0	0	0	0	0	0
PT	Portugal	0	1	1	0	1	0
FI	Finland	0	0	0	0	0	N/A
SE	Sweden	2	3	N/A	N/A	N/A	N/A
UK	United Kingdom	76	63	66	73	76	68
MU12	Monetary Union	3	3	2	2	N/A	N/A
EU15	European Union	15	13	N/A	N/A	N/A	N/A

Source: ECB.

**Table 23****Number of subsidiaries of CI from non-EEA countries**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	15	10	6	6	7	8
DK	Denmark	0	0	0	1	2	2
DE	Germany	45	40	38	34	32	27
GR	Greece	2	2	2	2	2	2
ES	Spain	14	13	13	14	12	11
FR	France	46	44	39	39	35	33
IE	Ireland	8	10	9	10	13	12
IT	Italy	3	3	3	2	2	5
LU	Luxembourg	45	41	39	39	35	36
NL	Netherlands	20	19	17	16	17	17
AT	Austria	0	12	13	12	10	10
PT	Portugal	3	3	4	3	3	4
FI	Finland	0	0	0	0	0	0
SE	Sweden	1	1	1	1	1	1
UK	United Kingdom	79	79	75	74	76	78
MU12	Monetary Union	201	197	183	177	168	165
EU15	European Union	281	277	259	253	247	246

Source: ECB.

**Table 24****Total assets of subsidiaries of CI from non-EEA countries as a ratio of GDP x 100**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	3	2	1	2	1	2
DK	Denmark	0	0	0	0	0	0
DE	Germany	3	3	3	3	3	2
GR	Greece	1	1	1	1	1	1
ES	Spain	3	3	2	2	2	2
FR	France	11	10	9	21	20	19
IE	Ireland	19	23	27	32	43	47
IT	Italy	0	0	0	0	0	0
LU	Luxembourg	256	172	166	156	180	146
NL	Netherlands	4	4	4	4	4	4
AT	Austria	0	3	3	3	2	1
PT	Portugal	4	5	6	3	3	3
FI	Finland	0	0	0	0	0	0
SE	Sweden	N/A	N/A	N/A	N/A	N/A	N/A
UK	United Kingdom	18	16	17	18	19	18
MU12	Monetary Union	5	5	4	7	7	7
EU15	European Union	N/A	N/A	N/A	N/A	N/A	N/A

Source: ECB.

Figures for FR are the sum of the assets of subsidiaries from both EEA countries and non-EEA countries.

**Table 25****Population (number, at end of period)**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	10,192,264	10,213,752	10,239,100	10,263,400	10,310,000	10,334,000
DK	Denmark	5,294,860	5,313,577	5,330,000	5,349,200	5,349,200	5,376,000
DE	Germany	82,057,379	82,037,011	82,163,500	82,192,600	82,192,600	82,488,000
GR	Greece	10,510,965	10,521,669	10,554,400	10,564,700	10,564,700	10,950,170
ES	Spain	39,387,500	39,519,200	39,733,000	40,121,700	40,121,700	40,546,200
FR	France	58,299,000	58,496,600	58,748,700	59,037,200	59,037,200	61,230,000
IE	Ireland	3,693,999	3,734,901	3,776,600	3,826,200	3,826,200	3,910,560
IT	Italy	57,563,354	57,612,615	57,679,900	57,844,000	57,844,000	58,027,760
LU	Luxembourg	423,700	429,200	435,700	441,300	441,300	444,880
NL	Netherlands	15,654,192	15,760,225	15,864,000	15,987,100	16,105,285	16,155,300
AT	Austria	8,075,425	8,082,819	8,102,600	8,121,300	8,121,300	8,145,000
PT	Portugal	9,957,270	9,979,450	10,178,200	10,242,900	10,242,900	10,350,670
FI	Finland	5,147,349	5,159,646	5,171,300	5,181,100	5,181,100	5,200,000
SE	Sweden	8,847,625	8,854,322	8,861,400	8,882,800	8,882,800	8,919,000
UK	United Kingdom	59,089,589	59,391,100	59,623,400	59,832,100	59,832,100	59,832,100
MU12	Monetary Union	<b>300,962,397</b>	<b>301,547,088</b>	<b>302,647,000</b>	<b>303,823,500</b>	<b>303,823,500</b>	<b>307,782,540</b>
EU15	European Union	<b>374,194,471</b>	<b>375,106,087</b>	<b>376,461,800</b>	<b>377,887,600</b>	<b>377,887,600</b>	<b>381,909,640</b>

Source: Eurostat.

**Table 26****Gross Domestic Product at market price (EUR or ECU millions)**

Country		Year					
		1997	1998	1999	2000	2001	2002
BE	Belgium	216,137	223,687	235,632	247,469	254,283	260,744
DK	Denmark	149,169	154,069	162,430	171,829	177,840	182,800
DE	Germany	1,863,458	1,916,370	1,978,600	2,030,000	2,071,200	2,108,200
GR	Greece	107,102	108,978	118,053	123,099	130,927	141,132
ES	Spain	495,627	525,454	565,199	609,319	651,641	693,925
FR	France	1,241,129	1,297,574	1,355,102	1,416,877	1,463,722	1,506,118
IE	Ireland	70,693	77,699	89,770	102,910	114,479	128,187
IT	Italy	1,029,991	1,068,947	1,107,994	1,166,548	1,220,147	1,258,349
LU	Luxembourg	15,422	16,892	18,586	20,815	21,510	21,956
NL	Netherlands	332,654	351,648	374,070	402,599	429,172	444,323
AT	Austria	181,645	189,333	197,154	207,037	211,857	216,830
PT	Portugal	93,901	100,355	108,030	115,546	122,978	129,188
FI	Finland	108,288	115,679	119,961	130,234	135,971	139,734
SE	Sweden	218,489	221,385	235,997	260,120	244,905	255,423
UK	United Kingdom	1,171,548	1,271,085	1,368,181	1,550,364	1,590,763	1,659,624
MU12	Monetary Union	<b>5,756,047</b>	<b>5,992,616</b>	<b>6,268,151</b>	<b>6,572,453</b>	<b>6,827,887</b>	<b>7,048,686</b>
EU15	European Union	<b>7,295,253</b>	<b>7,639,155</b>	<b>8,034,759</b>	<b>8,554,766</b>	<b>8,841,395</b>	<b>9,146,533</b>

Sources: ECB/Datastream.

## Methodological Note on the Statistical Tables

Data included in the statistical annex are derived from a variety of sources, using different statistical concepts, collection techniques, etc. This makes it difficult to compare series across indicators, countries and – perhaps to a somewhat lesser extent – over time as well. The reader should keep this caveat in mind when interpreting and possibly using the data any further. The set of indicators can be grouped according to the data source used, namely:

- Indicators derived from data already available at the ECB;
- Indicators that required a new data collection from the statistical departments of national central banks;
- Other sources, such as commercial databases.

The ECB's statistical department was entrusted with setting up the second category of indicators. Guidelines for the compilation and transmission of these indicators are included in Annex VI of Statistical Guideline ECB/2003/2.

### Number of credit institutions (Table 1)

Credit institutions are a subset of monetary financial institutions or MFIs, on which the ECB publishes more detailed information on its website ([www.ecb.int](http://www.ecb.int)) under “MFIs and Eligible Assets”/“Monetary Financial Institutions”.

The number of credit institutions in each Member State includes the credit institutions under the law of that country, regardless of whether they are subsidiaries of foreign banks or not. The number also includes the branches of foreign banks in that Member State. If a foreign bank has several branches in a given country, then they are counted as a single branch. However, if the same bank has several subsidiaries, the latter are counted

separately because they are considered to be separate legal entities.

In the case of credit institutions that depend on a central organisation (such as groups of co-operative banks), these may be counted separately, in accordance with Statistical Regulation ECB/2001/13.

### Number of local units or branches of credit institutions per 1,000 inhabitants (Table 2)

A local unit or branch is an unincorporated entity (without independent legal status) wholly owned by the parent. Only branches that belong to credit institutions are included. The indicator refers to the number of branches at the end of the reference period.

The set of credit institutions considered in the calculation of the local units is consistent with the definition used for the indicator in Table 1. If the same foreign bank has several branches in a given country, these are counted as a single branch. For additional information, please consult the above mentioned ECB Regulation.

### CR5 (Table 3)

The CR5 of a Member State is the percentage share of the five largest credit institutions, ranked according to assets, in the sum of the assets of all the credit institutions in that particular Member State. The set of credit institutions and the definition of assets used in the calculation are consistent with the definitions used for the indicators in Tables 1 and 5. The set of the five largest credit institutions may vary over time.

The ratio is calculated on a non-consolidated basis, meaning that banking subsidiaries and foreign branches of a particular credit institution are considered to be separate credit institutions.

### **Number of employees of credit institutions per 1,000 inhabitants (Table 4)**

The indicator refers to the average number of staff employed during the reference year by the credit institutions mentioned in Table I. Employees of financial institutions which are not themselves credit institutions are excluded, even if these institutions belong to the same group of the credit institution.

### **Total assets of credit institutions as a ratio of GDP (Table 5)**

The set of credit institutions considered in the calculation of this indicator is consistent with the definition of the indicator in Table I.

The total assets are calculated on a residential basis, meaning that for each Member State, the credit institutions under the law of that Member State are included (independent of whether or not they are a subsidiary of a foreign bank). However, the activity of the foreign branches of these credit institutions is not included, as this is reported by the host country. For additional information, please consult the above mentioned ECB Regulation.

### **Total loans of credit institutions to non-MFIs as a ratio of GDP (Table 6)**

The approach followed for these indicators is very similar to the one used for total assets.

Monetary financial institutions (MFIs) are a set of institutions that mainly comprises credit institutions and, to a lesser extent, money market funds as well.

### **Number of M&As (Tables 14, 15 and 16)**

As data on the number of mergers and acquisitions (M&A) in the banking sector are not readily available from all authorities, making their collection very time-consuming,

data have been retrieved from a commercial database, Thomson Financial's SDC Platinum Database<sup>25</sup>.

The authorities represented on the Banking Supervision Committee have checked the individual transactions in the database; some expressed reservations about the quality of the data, especially where small to medium-sized deals are concerned.

### **Number of branches/subsidiaries of credit institutions from EEA/non-EEA countries (Tables 17, 19, 21 and 23)**

Two distinctions are made in these tables. The first is according to the entry mode of the foreign credit institution in the Member State, i.e. as a branch (which is not considered to be separate legal entity) or as a subsidiary (which is considered to be separate legal entity). If the same foreign bank has several places of business, the latter are counted as a single branch. The second is according to the nationality of the foreign credit institution, i.e. either EEA (European Economic Area) or non-EEA. The EEA includes the 15 Member States of the European Union, plus Norway, Iceland, and Liechtenstein. The European banking directives also apply in the last three countries.

The figures for a particular Member State only include the non-domestic component: the branches and subsidiaries of credit institutions under the law of that Member State are not included.

<sup>25</sup> This same data source was used for the so-called "Ferguson report". See Group of Ten (2001).