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EU BANKING STRUCTURES

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EU BANKING STRUCTURES

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ABBREVIATIONS

COUNTRIES

AT	Austria	LT	Lithuania*
BE	Belgium	LU	Luxembourg
BG	Bulgaria*	LV	Latvia*
BY	Belarus	MT	Malta*
CY	Cyprus*	NL	Netherlands
CZ	Czech Republic*	NO	Norway
DE	Germany	PL	Poland*
DK	Denmark	PT	Portugal
EE	Estonia*	RO	Romania*
ES	Spain	RU	Russia
FI	Finland	SE	Sweden
FR	France	SI	Slovenia*
GR	Greece	SK	Slovakia*
HU	Hungary*	TR	Turkey
IE	Ireland	UA	Ukraine
IT	Italy	UK	United Kingdom

OTHERS

EU (EU27)	European Union (27 countries, after enlargement on 1 May 2004)
EU15	European Union (15 countries, before enlargement on 1 May 2004)
MU13	Monetary Union (13 countries participating in the euro area)
NMS	New Member States (12 countries, marked with *)
RoW	Rest of the World (non-EU27 countries)



EXECUTIVE SUMMARY

The EU banking structures report is an annual publication containing information on structural developments in the EU banking sector. It is based on a wide range of indicators, and on the exchange and assessment of qualitative information by the Banking Supervision Committee (BSC) of the European System of Central Banks (ESCB). The BSC comprises representatives of the central banks and banking supervisory authorities of the EU Member States and of the European Central Bank (ECB).

The report analyses the structural developments that took place in 2007 and, where possible, provides information on the first half of 2008. The overview chapter starts with the main regulatory developments in the financial sector, making reference to the evolution of work initiated in the previous years and elaborating on the initiatives following the turmoil in financial markets, both at the global and EU levels, in the areas of transparency, valuation, risk management and supervision, as well as market functioning and, in particular, the fundamentals of the 'originate and distribute' model and credit rating agencies (CRAs). Furthermore, at the EU level, the two major roadmaps aiming to enhance the Lamfalussy process and Financial Stability Arrangements are presented because of their significance for the structure of banking supervision and cooperation of competent authorities in the EU.

The main structural trends in the EU banking system are in line with the ones observed in the previous years. Consolidation continued, despite showing signs of deceleration compared to the previous years. At the same time, the EU banking landscape continued to be dominated by domestic credit institutions (71.3% market share), with the remainder equally divided between foreign branches and subsidiaries. It should be highlighted, though, that there are significant differences among countries, with the NMS characterised by the prominence of foreign entities, especially those with an EU15 parent. M&A activity continued to increase in terms of value, and a number of significant developments were observed in 2007, including

the cross-border expansion of EU banks to emerging markets.

Concentration increased in terms of both the Herfindahl index and the market share of the five largest institutions, reflecting, on the one hand, continuing market consolidation and, on the other, the dynamic growth of certain banking groups, partly as a result of their M&A activity. Finally, banking intermediation was strengthened, as evidenced by the higher growth of total assets of credit institutions compared with that of GDP due to the continued credit expansion in 2007.

The chapter on the incentive structure of the 'originate and distribute' model first presents the main developments in the model, both at the time of pre-turmoil exuberance and after. In this context, the growth of the 'originate and distribute' model supported the increasing size of the structured finance market, while at the same time the level of innovation and complexity also increased. This, coupled with the opacity of information for complex structured finance products, posed challenges for appropriate risk assessment and valuation by investors, thus raising financial stability concerns. In fact, the substantial rating downgrades witnessed, especially in July 2007, cast doubts on the valuation practices for (especially complex) structured finance products and the quality of underlying assets, resulting in a loss of investor confidence. In the aftermath of these events, a significant portion of structured finance products were re-intermediated in banks' balance sheets, public issuance froze and the majority of structured finance products were either retained by banks or placed privately.

Against this background, the chapter reviews the structure, including the possible misalignment, of incentives for the main players involved in the 'originate and distribute' model, namely originators, intermediaries (i.e. arrangers and collateral managers), third parties (including credit rating agencies, as well as servicers, underwriters and trustees) and investors. The

misalignment of incentives can take different forms. At the level of *originators*, it may manifest itself as reduced effort in screening and/or monitoring borrowers. *Intermediaries* may seek to maximise revenues from providing services, which may conflict with investors' objectives of balancing the risk/return trade-off. This may also be the situation with *third parties*: for instance, *credit rating agencies*' increasing reliance on revenues related to structured finance transactions raised concerns about the reliability of ratings and their willingness to effect timely downgrades. Turning to *investors*, they may not have the proper incentives to conduct their own risk assessment of structured finance products, and may thus rely excessively on external ratings and fail to play an effective disciplining role towards other players. Furthermore, different types of investor may have different incentives that depend on their priority in the payment "waterfall" of the structured finance products.

Finally, the chapter discusses a number of possible actions by market participants and policy-makers that could mitigate conflicts of interest in the 'originate and distribute' model. These include: retaining ownership of the risk in a structured finance transaction; reviewing remuneration schemes and improving documentation for securitisation transactions; enhancing transparency and corporate governance; improving the framework of credit rating agencies; and providing incentives to improve investors' scrutiny of structured finance products.

The chapter on the EU Bank Survey on Major Risks for the Year Ahead presents the results of a survey carried out by the Banking Supervision Committee (BSC) concerning the views of the senior management of EU banks on major potential risks that their institution might face over the coming year. The risk assessment builds around five broad risk categories: *macroeconomic, financial markets, banking sector, individual strategy and regulatory development related risks*.

The BSC already carried out similar surveys in 2004, 2005 and 2006. The surveys conducted in those three consecutive years produced highly consistent results showing that EU banks were most concerned about the risks originating from developments in the economy. In the light of the recent events in the financial markets, it was deemed interesting to revisit this issue in order to investigate the views of EU banks with regard to major risks following the ongoing market turbulence, as well as the policy actions they triggered. The results of the 2008 survey bring to light that EU banks are currently most concerned about risks related to the development of financial markets, followed by risks originating from the macro-economic environment. This can be attributed to the more direct impact that the general uncertainty in the various segments of the credit markets and their spill-over effect on financial markets are expected to have on banks' financial results and capital standing, while risks related the macro-economy currently appear more distant. Still, the potential for financial market effects to spill over to the macro-economy could be considered as one of the reasons why banks consider the macro-economic developments as another important source of risks. On the opposite end of the spectrum, a large proportion of responding banks view risks from regulatory developments as relatively the least important, when compared with the other categories of risks.

I OVERVIEW OF DEVELOPMENTS IN EU BANKING STRUCTURES

I OVERVIEW OF DEVELOPMENTS IN EU BANKING STRUCTURES

This chapter provides an overview of the structural developments that took place in the EU banking sector in 2007 and, in certain cases, through mid-2008. This overview chapter presents developments in the regulatory environment that are expected to affect the structure of the EU banking sector as well as the major trends in banking structures in terms of consolidation, mergers and acquisitions, internationalisation and intermediation. Please note that a number of changes have taken place since the previous report was published in 2007: SI has joined the euro area; moreover, BG and RO, which were reported in memo lines last year, are included in the report and contribute to the development of trends in the EU and NMS.

1.1 REGULATORY DEVELOPMENTS

In 2007, while both the EU and international fora continued the work they had already initiated on areas such as liquidity risk, regulatory capital and accounting, a number of new developments were launched in response to the turmoil in the financial markets. Since the early stages, public authorities at the EU and the international level sought to identify the weaknesses in the financial system, draw policy lessons and develop policy measures aiming to avoid the recurrence of such events in the future.

At the global level, the Financial Stability Forum (FSF) delivered its final report containing recommendations to the G7 meeting in April. The FSF recommendations focus, in the short term, on valuation and disclosure as means of rebuilding confidence in the creditworthiness and robustness of financial institutions and of facilitating the smooth operation of financial markets in terms of liquidity flow and provision of credit. Furthermore, considerations for policy actions expected to take place in the medium term cover topics pertaining to the current regulatory framework and practices, as well as to market functioning. The former aim to introduce a number of measures that will reinforce the capital and liquidity buffers of banks, enhance risk management practices and improve competent

authorities' assessments, responsiveness and exchange of information. The latter will address issues relating to the attributes of the 'originate and distribute' model, the role of credit rating agencies and market transparency.

At the EU level, the Economic and Financial Committee (EFC) prepared an interim report which was discussed at the Informal ECOFIN meeting held on 4 March 2008 and which set out the key priorities for enhancing financial stability in line with the deliberations in the international context. The report emphasised that the prompt and full disclosure of exposures to distressed assets and off-balance sheet vehicles, and of the possible related losses by banks and other financial institutions, was essential. In the longer term, policy action will focus on the following areas: enhancing transparency for investors, markets and regulators regarding exposures to structured products and off-balance sheet vehicles; improving valuation standards, in particular for illiquid assets; reinforcing the financial sector's prudential framework and risk management by reviewing certain areas of the Capital Requirements Directive and enhancing the management of liquidity risk; and improving market functioning and incentive structures, including the role of credit rating agencies.

It should be noted that both the FSF and EFC acknowledge the primary role of the industry in addressing the aforementioned challenges. Against this background, a number of initiatives can be identified, including those of the International Institute of Finance, the European Securitisation Forum, the Securities Industry and Financial Markets Association, and the European Banking Federation. Public authorities monitor closely the development of these initiatives and will evaluate the adequacy of the measures they propose in order to assess whether further regulatory action would be appropriate.

Besides the aforementioned policy measures, which were developed in response to the financial turmoil, there are two major roadmaps that will shape the structure of banking supervision and cooperation of competent

authorities in the EU. The roadmap aiming to enhance the Lamfalussy process involves the consideration of the specific tasks and legal instrument that should be given to the EU Committees of Supervisors, as well as the revision of the Decision on the EU Committees of Supervisors to include specific tasks aiming at fostering convergence and cooperation.¹ Finally, the roadmap on Financial Stability Arrangements reached an important milestone with the signing of a Memorandum of Understanding (MoU) in May 2008 by EU Supervisory Authorities, Finance Ministries and Central Banks on Cross-Border Financial Stability. Emphasis in the area of financial stability arrangements now shifts to the implementation of the MoU and to the clarification of cooperation obligations, which may include possible amendments to EU legislation within the upcoming CRD revision.

1.2 CONSOLIDATION AND MERGERS

Following the trend of the past years, the number of credit institutions in the EU continued to decline in 2007 (see Chart 1); however, the consolidation process is showing signs of a moderate slowdown. While DE, FR and UK

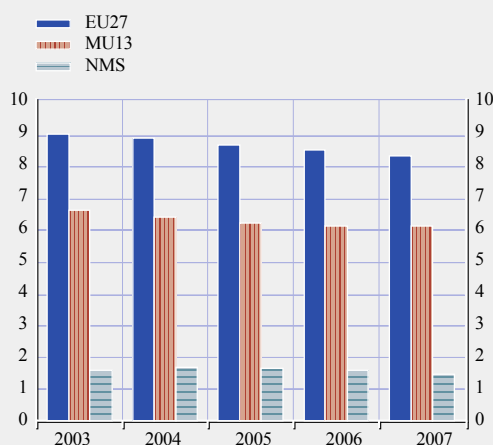
continued to witness a consolidation process in the period under examination, the sharp decline in the number of credit institutions in the NL over the past years seems to have come to a halt. Contrary to this trend, certain EU15 countries, such as BE, ES and IT have reported an increase in the number of credit institutions for a number of consecutive years. In the majority of the NMS the number of credit institutions remained broadly unchanged, with CY being a notable exception, reporting a substantial 36% drop due to the ongoing consolidation in the cooperative credit sector. Owing to the combined effect of these developments, the number of credit institutions declined by 166 units at the EU level (from 8,514 to 8,348), of which 121 represent changes in CY alone. The corresponding figure for the decline in the number of credit institutions in the EU was 175 in 2006.

In parallel with the number of credit institutions, the growth of total assets (10.7%) at the EU

¹ In the context of increased cooperation in the EU, it should be mentioned that, responding to the conclusions of the ECOFIN Council held on 14 May 2008, the BSC and CEBS will enhance their cooperation in the areas of financial stability monitoring, financial crisis management and statistical/prudential reporting.

Chart 1 Number of credit institutions

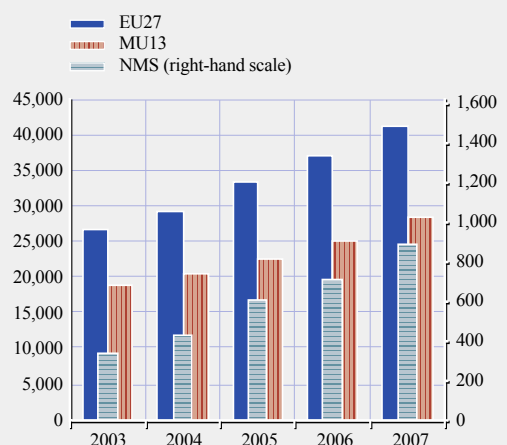
(in thousands)



Source: ECB.

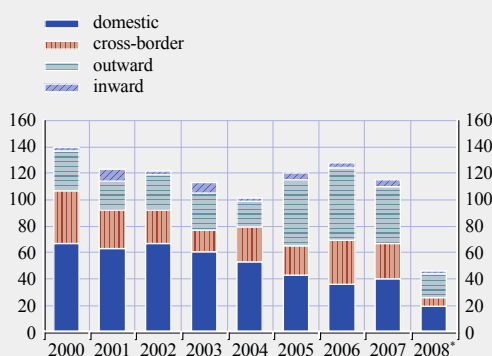
Chart 2 Total assets of credit institutions

(in EUR billions)



Source: ECB.

Chart 3 Bank M&As: Number of transactions



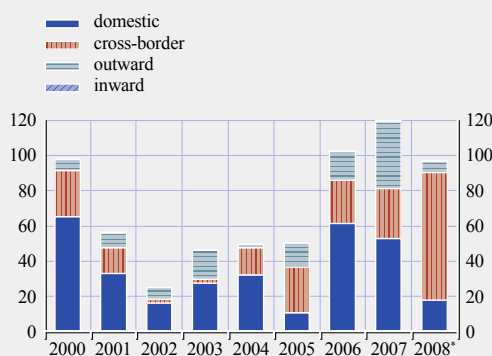
* First half of 2008 data.

Source: Zephyr, Bureau Van Dijk.

Note: M&As include both controlling and minority stakes. For some of the deals, the value is not reported. Cross-border M&A refers to intra-EU27 transactions involving a non-domestic acquirer. Inward refers to M&A by a non-EU27 bank in the EU27 and outward indicates M&A of EU27 banks outside the EU27.

Chart 4 Bank M&As: Value of transactions

(EUR billions)



* First half of 2008 data.

Source: Zephyr, Bureau Van Dijk.

Note: M&As include both controlling and minority stakes. For some of the deals, the value is not reported. Cross-border M&A refers to intra-EU27 transactions involving a non-domestic acquirer. Inward refers to M&A by a non-EU27 bank in the EU27 and outward indicates M&A of EU27 banks outside the EU27.

level decelerated in comparison with that of the last years (2005: 13.7%, 2006: 11.9%).² However, there are wide fluctuations behind this aggregate figure: NMS experienced above-average growth of nearly 25% in nominal terms, while the UK, whose financial sector accounts for approximately a quarter of the EU banking sector's assets, reported only a minor 2.3% increase in total assets.

There are two significant developments that took place in the second half of 2007 and affected the total assets of certain credit institutions: asset valuation write-downs, mainly resulting from the evaporation of liquidity in structured finance markets and the fear of fire sales; and re-intermediation of off-balance sheet vehicles, such as structured investment vehicles (SIVs) and asset-backed commercial paper (ABCP) conduits. As at the moment there are no aggregate data available on both developments at the EU level, their combined impact cannot be fully assessed. However, in a qualitative stock-taking among the BSC member authorities, respondents replied that while asset valuation write-downs and re-intermediation of off-balance sheet vehicles affected individual credit

institutions, their impact on the total assets of their banking system was fairly negligible.

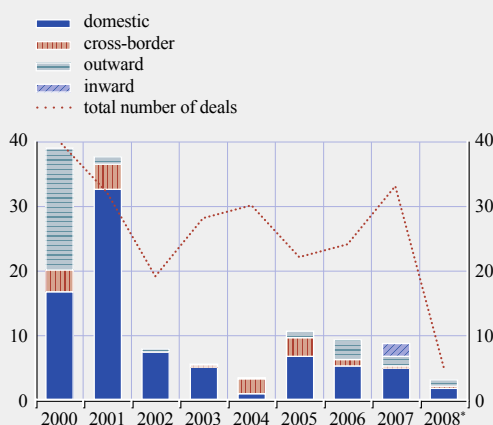
Consolidation in the EU banking sector is closely related to M&A activity and especially domestic transactions. In relation to the number of transactions, no clear trend appears in recent years with the exception of the significant increase of M&As by EU credit institutions in third countries, the number of which has been higher than that of domestic deals for the past three years (see Chart 3).

However, in terms of the value of M&As in the EU, the picture is quite different, as an increase has been observed since 2003. This was also the case in 2007, which was the second consecutive year in which the total value of M&A transactions exceeded that of 2000. Compared

2 Please note that this analysis concerns stock, on balance sheet data. In order to provide a better analysis of trends in relation to total assets, flow data on securitised assets (both publicly and privately placed) would be useful. The lack of data on securitised assets has less of an impact on the analysis for the NMS, where asset securitisation is not that developed. In addition, for non-euro area countries, figures are not exchange-rate adjusted, so developments could be partially influenced by changes in the exchange rate between local currencies and the EUR.

Chart 5 M&A activity between bank and insurance firms

(values in EUR billions)



* First half of 2008 data.

Source: Zephyr, Bureau Van Dijk.

Note: M&As include both controlling and minority stakes. For some of the deals, the value is not reported. Cross-border M&A refers to intra-EU27 transactions involving a non-domestic acquirer. Inward refers to M&A by a non-EU27 bank in the EU27 and outward indicates M&A of EU27 banks outside the EU27.

with the previous year, moderate growth was posted following a number of high profile deals that significantly increased the value of M&As in 2006 (see Chart 4).³

The breakdown between domestic, intra-EU and extra-EU deals varied significantly in the period under examination. Still, with the exception of 2005, domestic M&As have accounted for the majority of total M&As' value. In 2007, the value of outward deals posted a significant increase, mainly due to the acquisition of Finansbank (in Turkey) by the National Bank of Greece.⁴

Available data for 2007 do not reflect an impact of the turmoil on the M&A activity at that point in time; indeed, both the number and value of deals in the second half of 2007 are in line with those in the first half. A number of significant developments took place in this period with regard to M&A activity, although some of them did not directly concern EU credit institutions: sovereign wealth funds acquired material, but non-controlling interests in large cross-border banking groups, including Citigroup, UBS,

Morgan Stanley and Merrill Lynch; other non-bank investors gained sizable participations in institutions affected by the turmoil. Finally, credit institutions, including those based in the EU, expanded their operations, mainly in emerging markets that have not been so adversely affected by the turmoil. For instance, HSBC concluded strategic acquisitions in Taiwan, Korea and Russia; UniCredit acquired a bank in Kazakhstan and intends to use it as springboard for further expansion into Central Asia; Commerzbank acquired a bank in Ukraine; while Deutsche Bank strengthened its share in Hua Xia bank in China. However, it should be noted that, in most cases, this development constitutes longer term planning and was not motivated by the recent market turmoil.

In the first half of 2008 the number of M&A transactions remained at the same levels as in the same period of the previous year, while their value was significantly affected by the acquisition of ABN Amro by the consortium of Royal Bank of Scotland (RBS), Fortis, and Santander.

Looking at cross-sector M&A activity between EU banks and insurance companies, it is evident that it is significantly limited compared to the level of transactions in the banking sector, in terms of both the number and value of deals (see Chart 5). Following higher levels of activity in years 2000 and 2001, both the number and values of transactions plummeted in 2002, while in the period 2002 – 2004 opposite trends are evident in the number and values of M&As, with the former increasing and the latter declining. Values increased again in 2005, but activity remained at much lower levels compared with the period 2000 – 2002 and has been declining over the last three years. In general, M&A activity between banks and insurers is characterised by a small number of

³ Please note that the acquisition of ABN Amro is reported in the data for the first half of 2008.

⁴ Other large M&A deals in 2007 include the acquisition of Capitalia by UniCredit, of Banca Popolare Italiana by Banca Popolare di Verona e Novara, of Caisse Nationale des Caisses d'Epargne et de Prevoyance by Groupe Caisse d'Epargne, and of Compass Bancshares by Banco Bilbao Vizcaya Argentaria.

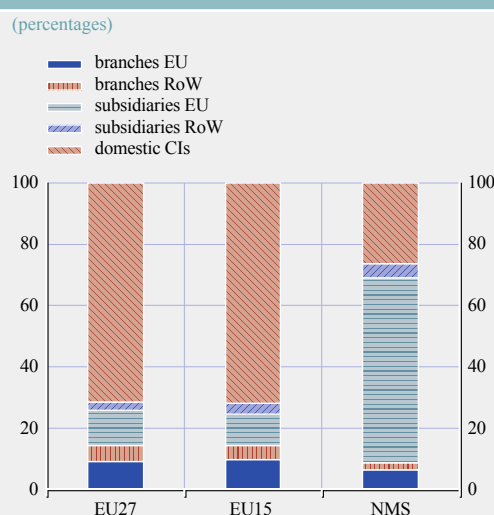
transactions (fluctuating between 19 and 40 in the period 2000 – 2007) with the total values in years 2000 and 2001 highly influenced by large individual transactions (namely the acquisition of Scottish Widows by Lloyds TSB in 2000 and Dresdner Bank by Allianz in 2001).

1.3 INTERNATIONALISATION OF THE EU BANKING SECTOR

The EU cross-border banking landscape did not show signs of major changes in 2007. At the EU level, domestic credit institutions accounted for slightly more than 71% of total banking assets, while the remainder is almost equally divided between foreign branches (14.2%) and subsidiaries (14.5%). However, this is significantly influenced by the situation in the UK, where assets of foreign branches account for 42.3% of total assets versus a mere 11% of foreign subsidiaries. With respect to the home countries of foreign entities in the EU, those with an EU parent and those with a third country parent stand at similar levels with 2006, namely at 20.5% and 8.2% of total assets respectively (see Chart 6).

It should be noted that substantial differences can be observed in the level of internationalisation of the EU15 and NMS banking sector, especially in relation to the role of subsidiaries having an EU parent. Foreign entities in the NMS account for 70.3% of total banking assets, while the corresponding figure stands at 27.8% for the EU15. Furthermore, there is diversity as

Chart 6 Share of foreign bank branches and subsidiaries in 2007



Source: ECB.

to the type of prevalent foreign establishment in the NMS and EU15: while in the former, foreign subsidiaries hold a market share of 62.4% of the total assets of the banking sector (out of which those having an EU parent stand at approximately 58%), the corresponding figure for the EU15 is only 13.4%. However, it should be noted that in contrast to the situation in 2006, foreign branches marked an increase in terms of market share of total assets; especially in the NMS, they increased their market share by approximately 1 percentage point while foreign subsidiaries saw a decline of approximately 4 percentage points.

Box

MAIN DRIVERS OF THE INTERNATIONAL EXPANSION OF EU CREDIT INSTITUTIONS

Following up the previous work on population ageing,¹ a survey was carried out to investigate the main drivers of international expansion and in particular whether the implications of ageing for credit institutions provide incentives for cross-border expansion within and outside the EU. Furthermore, the potential implications of cross-border expansion for financial stability and the current supervisory framework were assessed, especially in relation to host countries having

¹ ECB, "EU Banking Structures", The impact of ageing on EU banks, October 2006.

rather different political, legal and operational environments than that of the EU, posing thus challenges to EU banks' risk management systems.

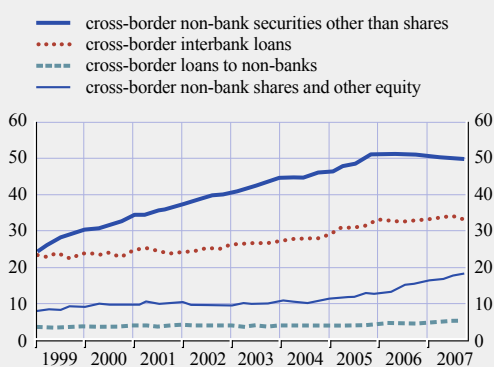
The empirical findings of the survey, which covered 34 cross-border banking groups from 18 EU countries,² indicate that the main drivers of international expansion are limited growth potential in the home country (cited by 28 banks) and higher growth potential in the host countries (26), followed by higher profit margins in the host countries (22) and the internationalisation strategies of the bank's customers (20). Economies of scale and scope constitute a motivation for 14 banking groups, while 12 refer to compressed profit margins in the home country as a driver for cross-border expansion. The diversification of business lines (8) and the internationalisation strategies of their peers (3) seem to play a minor role.

Demographic change *per se* is not a key motivation for international expansion, although demographics are often integrated into forecasting models of economic/market growth in the home/host markets. One factor that could explain the limited role that demographic change appears to play as motive for international expansion is that the planning horizons referred to by banking groups are shorter than those over which demographic change is expected to have a direct impact on the fundamentals of the banking sector. Another factor is that, in the future, most regions are expected to experience faster demographic change than the EU (where the largest part of the demographic transition has already occurred over the past thirty years). These relative dynamics of ageing across the world make it unlikely that the effects of adverse demographic trends can be avoided through international diversification. In their current strategies, banking groups expect the impact of demographic change to be outweighed by other growth drivers, such as institutional change in the host country due to EU integration (new Member States) and endogenous institutional change (non-EU South-eastern Europe, BY, RU, TR and UA), which have the potential to lead to a process of catching up to the EU15 level in terms of both economic growth and intermediation ratios.

With respect to the risk associated with expansion into markets with younger populations and rather different political, legal and operational environments (e.g. Sub-Saharan Africa, Bangladesh, Pakistan, India and North Africa), the survey shows that EU banks hardly expand into these regions. They mostly target host markets within and in close proximity to the EU (non-EU South-eastern Europe, BY, RU, TR and UA). The risk categories that pose a particular challenge in terms of risk management (political, legal and operational risk) are unlikely to be substantially higher in the host markets within the EU. In these cases, international diversification can therefore be expected to reduce the country-specific exposure to these risk categories at the group level. With respect to the host markets outside the EU, the banks are well aware of the associated risks, consider them relevant and integrate them into their quantitative risk management and capital allocation models, as well as into their ICAAP at the group level, or plan to do so in the near future.

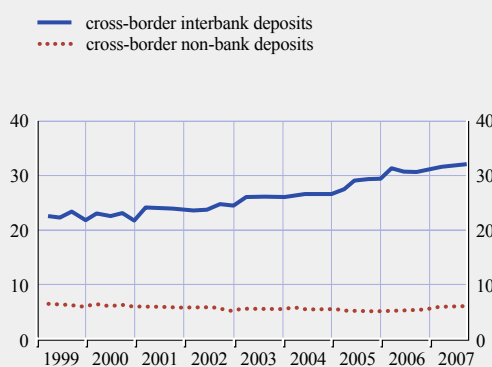
In conclusion, the major drivers of banks' cross border expansion are limited growth potential in the home country and higher growth potential in the host countries, while demographic change is unlikely to lead to international diversification over and beyond the levels observed for the aforementioned reasons, especially with respect to markets with potentially heightened political, legal, and operational risk.

2 AT, BE, BG, CY, DE, ES, FI, FR, GR, HU, IE, IT, LT, LU, NL, PT, SE and SI.

Chart 7 Cross-border provision of financial services in the euro area – assets

Source: ECB.

Note: Cross-border activity is expressed as a percentage of the total euro area provision of financial services.

Chart 8 Cross-border provision of financial services in the euro area – liabilities

Source: ECB.

Note: Cross-border activity is expressed as a percentage of the total euro area provision of financial services.

As regards cross-border provision of financial services in the euro area, holding non-bank debt securities and extending interbank loans remained the predominant banking activities, although after years of dynamic expansion, both cases showed stagnation or even a moderate decline in the ratio of cross-border to domestic assets in 2006 and 2007. The available data reveals, however, that credit institutions are gradually turning towards holding other types of cross-border assets; the doubling of the ratio of cross-border to domestic holdings of non-bank shares and other equity over the past two years should be highlighted in this respect. Moreover, after a long period of stagnation, cross-border lending to non-banks is also picking up momentum, though still remaining at a very low level.

As to the funding side, changes in cross-border interbank deposits in the euro area reflected developments observed in cross-border interbank loans, following a similar, though not identical pattern. At the same time, the share of cross-border non-bank deposits began to rise in the last two years, remaining, however, at a relatively low level of about 6% of domestic non-bank deposits.

The above developments in the cross-border provision of financial services are in line with

the findings of the report on financial integration,⁵ which highlights significant differences in the level of integration in various market segments of the euro area. While capital markets and interbank activities are more advanced in the process aimed at creating a single market for financial services, other market segments, in particular retail banking, still lag behind. Nevertheless, available data (e.g. on the convergence of interest rates)⁶ indicate that a convergence process is underway, while dispersion in this respect is mainly attributed to differences in the national economies, institutional factors and financial structures.⁷

The process of retail integration is supported by various regulatory measures, among which the establishment of the Single Euro Payment Area (SEPA) should be highlighted.⁸ In

⁵ ECB, "Financial Integration in Europe", April 2008.

⁶ With the exception of interest rates on some banking products, e.g. on loans to households for consumption purposes, for which dispersion has remained relatively high and tended to increase over recent years.

⁷ Differences in the national economies may include credit and interest rate risk, firm size, industrial structure and degree of capital market development. Institutional factors cover taxation, regulation, supervision and consumer protection, while financial structure relates to issues such as degree of bank/capital market financing and competitiveness.

⁸ For recent information on SEPA see Chapter III of the 2008 ECB report on Financial Integration in Europe. Please note that a comprehensive overview of the SEPA project was provided in the ECB report on Financial Integration published in 2007.

addition, technological developments, such as the spreading of electronic banking, could also provide further impetus to this process.⁹

1.4 MARKET STRUCTURE

Market concentration, as measured by the Herfindahl index,¹⁰ increased at both the EU15 and the EU level, reflecting, on the one hand, the decline in the number of credit institutions and, on the other, the dynamic growth of certain banking groups, partly as a result of their M&A activity.

Changes in the five largest credit institutions' share of total assets presents a similar pattern, as it has increased from 42.1% to 44.4% at the EU level and from 41% to 43.2% in the EU15.¹¹ Smaller countries tend to have more concentrated banking sectors, with the notable exceptions of AT and LU, the former having a strong savings and cooperative banking sector, the latter hosting a large number of foreign credit

⁹ For more information on this issue see chapter 3 of the ECB report on EU Banking Structures, published in 2007.

¹⁰ For further information on the definition of the Herfindahl index, see Annex III

¹¹ The cited figures refer to the weighted average.

Table 1 EU banking sector capacity indicators relative to population in 2007

Country	Number of CIs	Population per CI	Population per branch	Population per ATM*	Population per employee	Population density	Assets per employee
BE	110	96,564	2,400	756	158	321	19,347
BG	29	263,456	1,311	2,103	250	69	1,022
CZ	56	184,250	5,541	3,129	258	131	3,497
DK	189	28,889	2,489	1,758	110	127	19,700
DE	2,026	40,603	2,068	1,528	119	230	10,946
EE	15	89,493	5,047	1,465	212	30	3,261
IE	81	53,613	3,750	1,287	104	62	31,945
GR	63	177,329	2,902	1,654	173	85	5,923
ES	357	125,696	986	754	163	89	10,690
FR	808	78,679	1,607	1,322	133	115	13,962
IT	821	72,252	1,785	1,349	174	197	9,755
CY	215	3,663	855	1,474	70	85	8,076
LV	31	73,402	3,336	2,403	177	35	2,403
LT	80	42,194	3,480	2,962	328	52	2,312
LU	156	3,079	2,044	1,086	18	186	35,022
HU	206	48,814	2,969	2,643	240	108	2,589
MT	22	18,603	3,935	2,607	109	1,279	10,066
NL	341	48,026	4,544	2,014	143	401	19,183
AT	803	10,356	1,949	1,037	107	99	11,459
PL	718	53,086	3,284	3,837	219	118	1,357
PT	175	60,619	1,759	721	174	115	7,218
RO	42	512,201	3,393	3,575	326	91	1,092
SI	27	75,032	2,849	1,321	168	100	3,609
SK	26	207,560	4,616	2,702	273	110	2,544
FI	360	14,689	3,228	1,606	211	16	11,497
SE	201	45,512	4,956	3,235	208	20	19,202
UK	390	155,854	4,892	1,002	134*	248	21,783*
MU13	6,128	52,098	1,735	1,203	140	126	12,437
EU27	8,348	59,401	2,123	1,362	153	114	12,676

* 2006 data.

Sources: Computations based on figures in Annex II, on the ECB Blue Book and on United Nations data.

Note: Population density is expressed as inhabitants per square kilometre. Assets per employee are measured in EUR thousands.

institutions. Banking sectors in larger countries, such as DE, ES, IT and UK, are more fragmented, for reasons similar to those mentioned for AT and LU.

Regarding the NMS, recent developments in financial intermediation, such as rapid credit expansion and intensifying competition, exerted a downward pressure on concentration indicators, although they remain significantly above the EU average. However, the banking sectors of BG, CY, HU and PL were characterised by opposite developments. In these countries both measures of concentration increased. The reason for this process was, inter alia, the ongoing consolidation process in the cooperative credit institution sector and the increased domestic M&A activity among subsidiaries of foreign banks.

With respect to EU banking sector capacity, the number of branches continued to increase in the EU, despite the continuing downsizing of branch networks in BE, DE, FR and UK in 2007. This was offset by the significant increase in the number of branches in ES and in the majority of the NMS; especially noteworthy was the expansion of the branch network in RO, which was the highest among the EU countries and equal to 29.5% of its total branch network in 2007. This trend is in line with the continued retail expansion and associated deepening of financial intermediation observed in these countries for years.

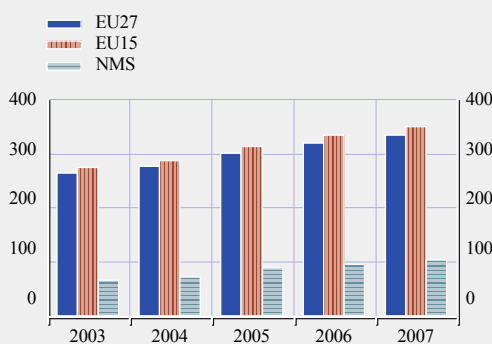
Along with the expanding branch networks of EU banks in 2007, the number of bank employees also increased.¹² At the same time, the efficiency of the EU banking system, as indicated by the ratio of assets per employee, improved in comparison to the previous year.

1.5 DEVELOPMENTS IN INTERMEDIATION

Despite the turmoil in the financial markets that affected the banking sectors of (mainly) mature economies in 2007, intermediation continued to strengthen in the EU countries, although at a

Chart 9 Total assets of credit institutions

(in percentage of GDP)



Source: ECB.

declining rate for the second consecutive year. The ratio of total assets to GDP grew from 319% to 334% over the past twelve months.¹³ In keeping with the general catching up process, growth of banking assets in the NMS remained particularly buoyant; total assets of the banking sector in the NMS marked a 25% increase over the last year, their total assets to GDP ratio reaching 103%, while the corresponding figures for the EU15 were 10.4% and 351.4% in 2007 respectively. As regards the banking sectors of the EU15, on average those in the euro area grew faster, mainly as a consequence of the slowdown in the UK.

Measuring changes in the depth of financial intermediation in terms of total loans to non-credit institutions,¹⁴ a somewhat different trend emerges. While the growth rate of total assets in the EU level declined, total loans to non-CIs grew by 12.6% in 2007 compared with 11% in the previous year, indicating that the turmoil did not have a significant impact on the overall lending activity of banks by end-2007.

It is worth mentioning, however, that credit growth in the euro area countries (11.2%) lagged

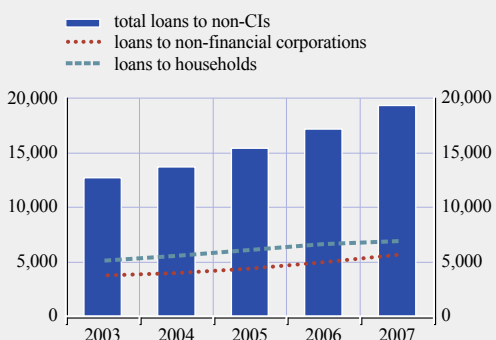
¹² For EU with the exception of UK, for which the number of employees in 2007 is not available.

¹³ Please see footnote 2.

¹⁴ Total loans to non-credit institutions make up approximately 47% of the total banking assets in the EU.

Chart 10 Total loans to non-CIs in EU27

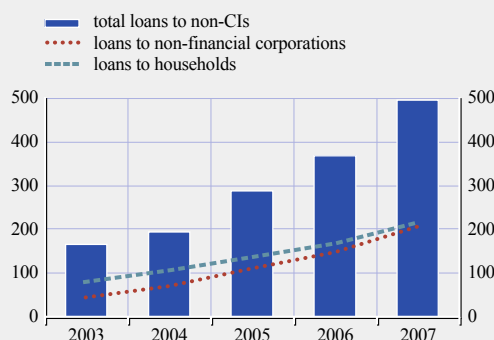
(in EUR billions)



Source: ECB.

Chart 11 Total loans to non-CIs in NMS

(in EUR billions)



Source: ECB.

behind the non-euro area EU15 countries (13.8%); in addition, the high level of credit growth in the NMS (34.5%) reflected the sustained economic convergence of NMS, which is partly fuelled by the lending expansion of credit institutions.

As regards developments in lending to different market segments in 2007, the gap between the growth rate of corporate (14%) and household (4.5%) credit in the EU continued to expand for the third consecutive year. However, diverse developments were observed in the NMS and in EU15 countries. In most of the NMS the rapid growth of household lending continued, at 39.6% in 2007. The high rate of credit expansion in household lending in NMS has been prevalent throughout the period under examination, resulting in a higher basis for the calculation of growth rates. In this context, exceptionally strong growth in the lending activity of credit institutions was reported from BG, LT, PL and RO, approximating or even exceeding the rate of 50%. At the other extreme, certain EU15 countries marked a decline in various segments of household lending. In this context, a drop in the outstanding amount of loans for housing purchase in DE and UK, as well as a decrease in consumer credit in NL and UK should be highlighted.

As for corporate lending, despite the less favourable economic environment and the

tightening of credit standards in the second half of 2007, a slowdown in lending activity has not yet been reflected in aggregate figures; on the contrary, the gap between the outstanding stock of household and corporate loans has narrowed. In addition, data from capital markets reveals that gross issues of short-term corporate debt, which makes up 90% of total debt issuance, increased significantly, by 28.6% compared with last year. However, at the same time, a moderate decline was observed in certain countries (for instance DE, FR and UK) in the gross issuance of long-term debt securities by non-financial companies.

1.6 CONCLUSIONS AND OUTLOOK

In 2007, structural developments were in line with the trends observed in previous years: the consolidation process in the EU (as evidenced by the declining number of credit institutions) continued, although at a slower rate, while banking intermediation grew further, mainly due to the sustained credit expansion. Concentration at the EU level slightly increased, while no major changes were observed in the cross-border banking landscape.

However, as the stress in the financial markets unfolds, it would be reasonable to expect that it will eventually affect the structure of the EU

banking system. Regulation and arrangements for supervisory and central bank cooperation are expected to be further enhanced, incorporating the lessons from the turmoil and following the recommendation of major fora at both the international and EU levels.

Market consolidation and the cross-border banking landscape will largely depend on the domestic and international M&A activity respectively. Current market conditions are expected to adversely affect the internationalisation strategies of credit institutions that rely on wholesale funding and investment banking revenues, have a tight capital adequacy ratio and are significantly exposed to “stretched” property markets. On the other hand, the deterioration in the equity prices of certain banks coupled with the need for capital injections provide opportunities for M&A activity. The comparatively low value of transactions in the first half of 2008 (when the ABN Amro takeover is not taken into consideration) could signal a deceleration in the M&A activity. Still, a number of prospective deals, such as the acquisition of Alliance and Leicester by Banco Santander, as well as the spin-off of the ABN Amro takeover, are expected to affect the EU banking landscape.

Furthermore, developments in intermediation could be affected by a contraction in the extension of credit due to the tightening credit markets conditions and the possible efforts of banks to shrink their balance sheet following losses related to the turmoil and the changes in the functioning of the ‘originate and distribute’ model. Finally, it is expected that banks facing higher wholesale funding costs and a halt in global credit markets will attempt to pursue other sources of financing, such as soliciting deposits or issuing bonds, or, if they need to shore up their balance sheets, seeking funding from capital markets.

2 THE INCENTIVE STRUCTURE OF THE ‘ORIGINATE AND DISTRIBUTE’ MODEL

Since mid-2007 the financial system has been experiencing considerable turbulence triggered by rising delinquencies in US subprime mortgages, which has disrupted various segments of the money and credit markets at the international level. From the early stages of this turmoil, public authorities at the EU and international levels sought to identify the weaknesses in the financial system, draw policy lessons and develop policy responses in order to strengthen financial stability and avoid the recurrence of such events in the future. One of the issues that attracted attention was the incentive structure of the ‘originate and distribute’ model, i.e. the business model according to which banks do not hold the credit assets they originate until maturity, but they distribute them to different types of investors through the issuance of structured finance products.¹⁵

This chapter discusses the incentive structure of the ‘originate and distribute’ model and is structured as follows: the first section presents a brief overview of the development of the model, both during the pre-turmoil exuberance and after. The second section introduces the major actors in the structured finance market and discusses the possible misalignment of incentives and evidence of conflicts of interest. Finally, the third section discusses possible measures for mitigating the identified misalignment of incentives.

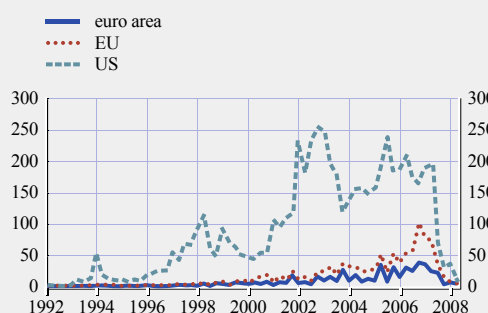
2.1 THE DEVELOPMENT OF THE ‘ORIGINATE AND DISTRIBUTE’ MODEL

2.1.1 THE STRUCTURED FINANCE MARKET IN EUROPE AND STRUCTURAL DIFFERENCES WITH THE UNITED STATES

In spite of its very dynamic development before the turmoil, issuance in the European structured finance market remained smaller than in the US. In 2007 total issuance volumes in the United States were five times higher than in Europe.¹⁶ In particular, the development of the Residential Mortgage-Backed Securities (RMBS) and ABS CDO¹⁷ markets, which are

Chart 12 RMBS issuance since 1992

(in EUR billions)



Source: Dealogic/DCM Analytics.

Note: Amounts were originally reported in USD. ECB average rates were used for their conversion to EUR.

among those most affected by the subprime crisis, underscores the differences between Europe and the United States.

Looking at the issuance volumes on the RMBS market since 1990, it could be observed that the activity of EU originators was very limited until 2002. At the same time, the RMBS issuance in the United States grew to reach USD 200 billion (approximately EUR 229.3 billion) in the first quarter of 2002. Although the European market expanded significantly until the beginning of 2007, the gap vis-à-vis the United States remained very large (see Chart 12). This difference is even larger in comparison with the euro area, which accounted for less than the half of European RMBS issuance in 2007.

On the ABS CDOs market, the transatlantic difference was even larger, as European issuance

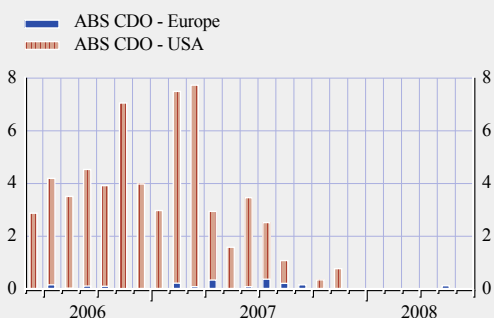
¹⁵ Additional weaknesses of the ‘originate and distribute’ model relate to the level of complexity and opaqueness of structured credit products, the role of credit rating agencies as well as issues relating to the prudential framework, such as the treatment of securitisation exposures and off-balance sheet exposures to non-consolidated vehicles. However, these issues are beyond the scope of this report.

¹⁶ According to the European Securitisation Forum ESF Securitisation Data Report – Q1:2008, published in June 2008, total issuance of Asset-Backed Securities (ABS), Residential and Commercial Mortgage-Backed Securities and Collateralised Debt Obligations (CDOs) stood at EUR453.7bn and EUR2,404.9bn for Europe and the US respectively.

¹⁷ Collateralised debt obligations with a pool of collateral that consists of ABS instruments.

Chart 13 ABS CDO issuance volumes since 2006

(in EUR billions)



Source: JP Morgan Global ABS/CDO Weekly Market Snapshot, 3 July 2008.

Note: Amounts were originally reported in USD. ECB average rates were used for their conversion to EUR.

of these products was close to zero, while monthly US issuance was significantly higher and exceeded USD 10 billion (EUR 7.7 billion) in March 2007 (see Chart 13).

Despite the relatively smaller size of the structured finance market in Europe, European actors are exposed to related risks since they invested in US structured finance products with underlying sub-prime assets. Compared with US transactions, where a third of the issuance remained on US banks' balance sheets, approximately 60% of the issuance in Europe remained in European hands.¹⁸ This explains why the recent events in the US have affected financial intermediaries in Europe, which would have appeared paradoxical if only issuance was considered (see section 2.1.3).

2.1.2 THE INCREASING COMPLEXITY OF STRUCTURED FINANCE MARKET AND ITS IMPACT ON THE ABILITY OF MARKET PARTICIPANTS TO PROPERLY ASSESS RISK

Since 2004, the market for structured finance products has developed rapidly both in the United States and in Europe. The level of complexity of structured finance products has increased substantially, with innovations blurring the distinction between market and credit risk. This trend was motivated by numerous factors. *The*

benign macroeconomic conditions prevalent in the market were characterised by low interest rates, ample liquidity and small differences in the yields of assets bearing different levels of risk. In this period of exuberance, market participants *searching for yield* became increasingly willing to invest in new/exotic instruments that offered a different risk/return profile than conventional assets/products.

New products were developed, enabling a wide range of investors to gain direct exposure to assets that were traditionally the preserve of banks and thus completing the market. For instance, dealers developed indexes,¹⁹ which gained wide market acceptance due to transparent rules, liquidity and operational efficiency and thus facilitated the development of specific securitisation structures.

Finally, complex structures, besides higher yields offered the opportunity of *increased revenues for various market participants*, such as banks and credit rating agencies (CRAs). However, while the aforementioned factors provided incentives for increased complexity, the *regulation* that existed at the time did not mitigate them by significantly differentiating the prudential treatment of complex instruments from that of more standardised products.²⁰

Many investors (including large global banks) did not fully take into account all types of risk inherent in structured finance products and relied too heavily on the assessment of other market participants, mainly CRAs. While in some cases this over-reliance could be attributed to loose diligence from the investors, the challenge of ongoing screening and monitoring of risks should not be underestimated, especially due to the insufficient information on the underlying assets through the life of the transaction. Nevertheless, even for transactions where information was available, some investors did

¹⁸ Basel Committee on Banking Supervision, The Joint Forum, "Credit Risk Transfer", April 2008.

¹⁹ For instance, CDS indexes, leveraged loan CDS indexes, indexes on ABS.

²⁰ However, the implementation and further improvement of the Basel II framework/Capital Requirements Directive will result in a different treatment of these instruments.

not conduct proper risk monitoring, since the return was not sufficient to compensate such an investment of time and resources.

The complexity of some multiple-layered, structured finance products, such as ABS CDO, also posed significant challenges regarding valuation. As recent events have indicated, the valuation of such products relied heavily on market prices, assuming smooth and liquid markets. However, substantial ratings downgrades²¹ cast significant doubts on the robustness of the ratings' methodology for these products and raised uncertainty concerning the quality of underlying assets, resulting in a loss in investor confidence. Moreover, under these conditions price discovery was virtually impossible, forcing banks to increasingly resort to models based on unobservable inputs. This becomes evident in the proportion of assets falling into Level 3 from Level 2²² in their last reporting periods.

2.1.3 THE CURRENT SITUATION IN THE STRUCTURED FINANCE MARKETS

In the wake of the turmoil, there has been a major reversal in the structured finance market.

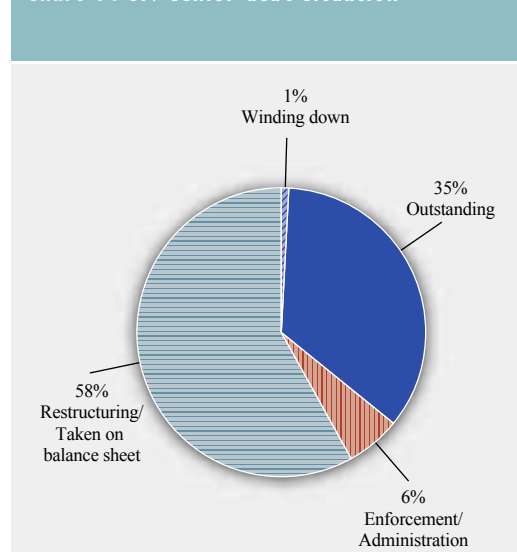
The sharp widening of credit spreads pushed many market value products to hit their triggers.²³ Some investors were forced to liquidate (forced sales), some were restructured, and others, especially ABCPs with full support, drew on their backup liquidity lines provided by their sponsoring bank. Consequently, some structured finance products had to be re-intermediated in banks' balance sheets. Moreover, a sudden and sharp loss of confidence on financial markets affected even structures that had very little or no exposure to US subprime, but which faced difficulties in rolling

21 In particular the avalanche of downgrades in July 2007, when Moody's downgraded 184 tranches of CDOs backed by RMBS on 11 July and S&P downgraded 562 classes of RMBS on 12 July and 93 tranches of CDOs on 19 July.

22 Financial Accounting Standards Board (FASB) has introduced a three level taxonomy to categorise marking to market. Level 1 is for assets that have observable market prices. Level 2 is for less frequently traded securities that can be priced by reference to similar assets. Level 3 is for assets with unobservable inputs where value is based on models.

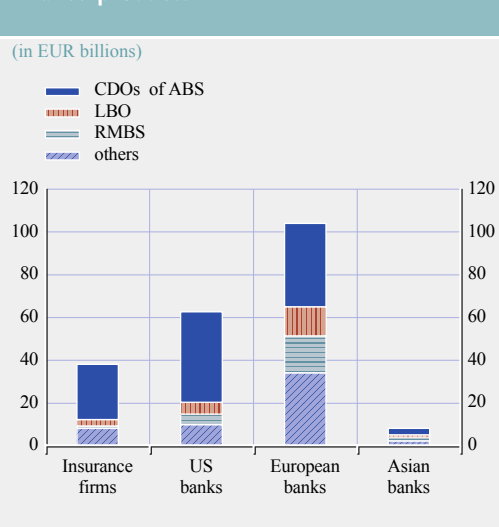
23 When the market value of the underlying portfolio falls below a trigger threshold, the trading strategy changes to one aimed at protecting senior liability holders, typically requiring a de-leveraging or liquidation of the portfolio. SIVs, CPDOs, CPPI, market value CDOs, and leveraged super-senior products are examples of market value products.

Chart 14 SIV senior debt situation



Source: Lehman Brothers, European Securitised Products Weekly, of 11 January 2008.
Notes: Data refer to fourth quarter of 2007. Values shown for SIVs indicate estimated total size of vehicle.

Chart 15 Write-downs from structured finance products



Source: Creditflux.
Notes: Data refer to May 2008. Amounts were originally reported in USD. ECB average rates were used for their conversion to EUR.

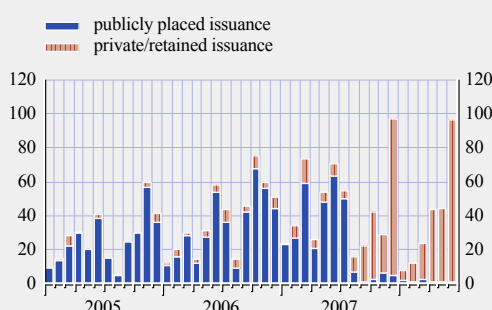
over debt and thus had to be integrated in banks' balance sheets (see Chart 14).

The aforementioned developments led to significant levels of write-downs related to structured finance products. In Europe, banks' write-downs were mainly due to their holdings of ABS CDOs and RMBS having US collateral (see Chart 15). In addition, while risks were geographically dispersed, a significant part remained in the banking sector. In May 2008 only a residual part of the write-downs was reported by insurance companies.²⁴ Nonetheless, one may argue that for some countries the latter were not subject to "fair value" valuation rules, which limited the continuous spiral of depreciation.

Furthermore, since August 2007, a substantial portion of new issuance has been retained by banks, whereas previously the majority of the issuance was publicly-placed (see Chart 16). Possible explanations include that banks have not been able to place these new transactions in public, or that they are using them mostly for funding purposes through the repo market or the central banks' discount window and, to a lesser extent, for credit risk transfer.

Chart 16 Publicly versus privately placed issuance of structured finance products

(in EUR billions)



Sources: Citi European Securitised Products Statistics, 8 July 2008. Secondary Source: Bloomberg, International Insider, Informa GM, IFR, Citi.

Notes: Publicly-placed issuance includes only deals that have been publicly marketed. Private/Retained issuance includes deals that have been privately-placed or retained by the originator. The Private/Retained issuance figures include all such deals to Citi's knowledge, but may not include such deals where there is no public information available. For some deals priced since August 2007 it has not been clear whether the deal has been fully placed.

2.2 ASSESSMENT OF MISALIGNMENT OF INCENTIVES IN THE 'ORIGINATE AND DISTRIBUTE' MODEL UNDER THE AGENCY THEORY

2.2.1 FUNDAMENTALS OF AGENCY PROBLEMS

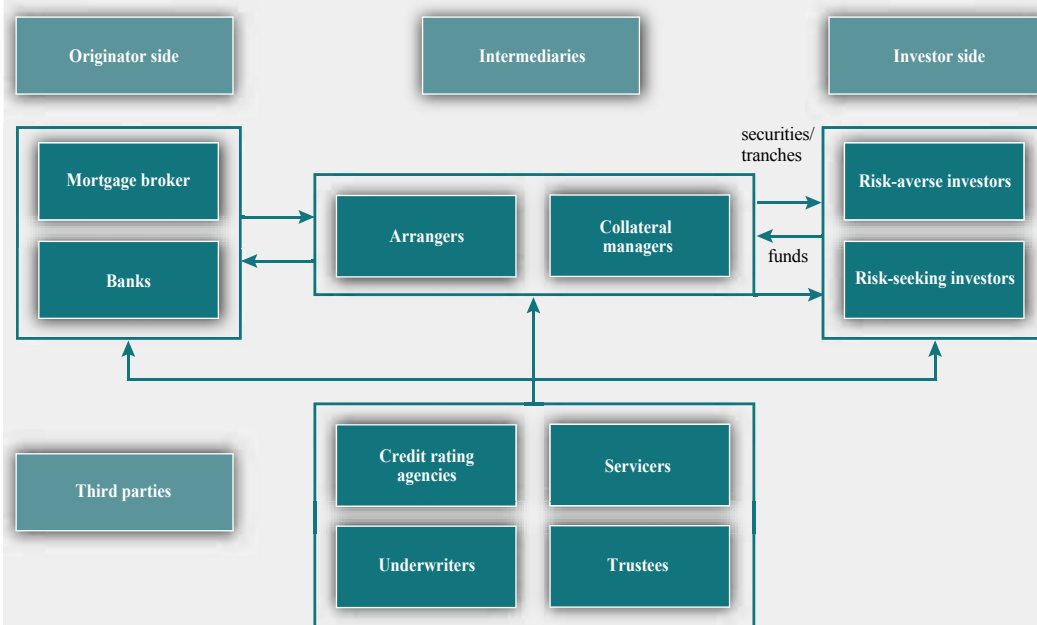
The 'originate and distribute' model involves transactions among participants dealing with each other at arm's length and according to market principles. Many of these relationships can be characterised as principal-agent relationships, where one actor (the agent) is supposed to act in the best interest of another actor (the principal). Such relationships are fundamentally vulnerable to certain inefficient and adverse behaviour. This is due to the fact that agents usually seek to maximise their own benefits even when they do not coincide with those of the principals. In addition, principals usually cannot perfectly observe and control the agents' actions. In other words, agency problems are caused by two factors: differences in the objectives (incentives) of the parties and differences in the information available to them. Agency problems are sometimes referred to as conflicts of interest or, when clearly unaddressed, a misalignment of incentives. A proper alignment of incentives and an adequate flow of information between the participants in the 'originate and distribute' model are crucial for the efficient performance of structured finance markets.

2.2.2 ACTORS IN THE 'ORIGINATE AND DISTRIBUTE' MODEL AND POSSIBLE MISALIGNMENT OF INCENTIVES

A broad categorisation of actors in the 'originate and distribute' model leads to the identification of four major groups (see Chart 17): originators, intermediaries, investors and third parties. Originators interact directly with borrowers and generate the assets that are subsequently sold to the intermediaries. The latter then sets up special purpose vehicles

²⁴ In particular, the large majority of write-downs for insurance companies (more than 90%) concern monoline insurers and one individual insurance company.

Chart 17 Major actors in the 'originate and distribute' model



Note: This is a simplified structure. In practice, the securitisation process may be even more complex and may involve additional actors.

(SPVs), which purchase the originated assets and issue securities backed by these assets. Investors buy the asset-backed securities issued by the SPVs according to their respective risk appetites. In addition, the 'originate and distribute' model involves a number of third-party service providers and external evaluators, such as CRAs, trustees, underwriters and servicers, who perform specific tasks for the various participants, but do not buy or sell assets themselves. It should be noted that participants in the securitisation process may serve multiple roles; for instance, an originator of residential mortgages may also serve as the arranger or servicer of the securitised assets.

The organisation of the 'originate and distribute' model thus implies that there are many bilateral relationships at work. The following section describes the possible conflicts of interest among actors in the 'originate and distribute model, between which agency problems may arise, and concludes with a discussion on investors as the ultimate principal of the securitisation process.

POSSIBLE CONFLICTS OF INTEREST BETWEEN ORIGINATORS AND INTERMEDIARIES AND/OR INVESTORS

The fundamental agency problem involving originators is a potentially reduced effort in screening and/or monitoring borrowers and in selecting assets when the originated assets are sold to intermediaries. Such conflicts may be muted for originators who hold a portion of assets on their balance sheet, act as intermediaries and/or perform other tasks of the 'originate and distribute' model. However, the 'originate and distribute' model implies that the originators most often seek to sell the originated assets to intermediaries. In this respect, to the extent that screening and monitoring deteriorate, investors will suffer from the lower quality and performance of the assets.

POSSIBLE CONFLICTS OF INTEREST BETWEEN INTERMEDIARIES AND INVESTORS

The agency problem between intermediaries and investors derives from the intermediaries' objective of maximising revenues from

providing services, which may conflict with investors' objectives of balancing the risk/return trade-off. Intermediaries may thus put together securitisation pools or structured finance transactions that are riskier than investors desire or realise. The conflict of interests between intermediaries and investors is made more complicated by the different claim structures of the tranches. Each tranche is characterised by a given priority in the payment "waterfall", which implies that the investors in the different tranches (i.e. the senior, mezzanine and equity) have differing, or even conflicting, objectives ("tranche warfare"). For example, equity tranche investors normally benefit from products composed of assets with high default correlations, as any default eats into their investment. By contrast, the senior tranche investors benefit more from assets with low default correlations, as the first few defaults are absorbed by equity investors. To the extent that intermediaries participate in the residual profits that accrue to equity tranche holders (e.g. by holding a portion of the equity tranche) a concern may then be that they may favour equity tranche holders over senior tranche holders.

POSSIBLE CONFLICTS OF INTEREST BETWEEN THIRD PARTIES AND INVESTORS/INTERMEDIARIES

In the case of CRAs, concerns have been raised that, since such a large percentage of their revenues can be attributed to structured finance transactions, they might be tempted to expand rating coverage to structured products that are exceedingly difficult to evaluate, such as highly innovative and complex structures, or to products containing assets for which very few historical data are available. The "issuer pays" model may also have led the CRAs to be too compliant with arrangers, potentially harming the interests of investors. In addition, there is a concern that CRAs have been reluctant to undertake timely downgrades of some structured products. Finally, the CRAs may not have adequately communicated information to investors regarding the likely differences in the rating performance of structured finance products and traditional bonds.

Where *servicers* are concerned, a conflict of interests between them and intermediaries or investors may arise when the servicers' remuneration scheme does not adequately reflect the different costs that they incur when they perform certain tasks, such as modifying loan terms or liquidating assets. Inefficient servicer decisions may reduce the value of a pool of assets and, in particular, the recovery rates of assets that ultimately default.

THE ROLE OF INVESTORS AS PRINCIPALS

Through their decisions, investors can potentially enforce considerable discipline on the various actors of the chain. This implies that they could also have an impact on the extent to which agency problems materialise. For example, by insisting on regular performance reports and thorough information on the transaction structure and underlying assets, investors can limit the scope for intermediaries to structure overly risky portfolios. This might also induce intermediaries to perform due diligence on originators more thoroughly. Thus, when assessing the conflicts of interest between the various parties, one must also take into account the extent to which investors fulfil their disciplining role. While asymmetric information between the various actors may constrain this disciplinary role, one should not neglect the impact of exuberant or lenient investor behaviour on the other actors in the 'originate and distribute' model.

Another potential problem affecting investors in structured products is excessive reliance on external ratings. This, combined with "euphoric behaviour" in boom periods, can undermine market discipline, as already mentioned in Section 2.1.2. Some evidence that investor behaviour may have changed in recent months comes from the ABCP market, to which some investors are returning but demanding greater clarity from issuers and CRAs, abstaining from ABCP programmes whose reporting is not sufficiently transparent and asking a higher premium for programmes with greater risk.²⁵

25 Standard & Poor's, "The U.S. Asset-Backed Commercial Paper Market May Be Down, But It's Not Out", 7 July 2008.

2.3 THE POSSIBLE IMPACT OF RECENT MARKET EVENTS AND POSSIBLE MEASURES BY MARKET PARTICIPANTS AND COMPETENT AUTHORITIES

The turmoil in the financial markets is likely to influence the behaviour of market participants.

For instance, in the future intermediaries may scrutinise originators more carefully and investors may rely less on external ratings and buy tranches of well-tested and conservative structures, possibly marking a trend towards standardisation. In addition, *reputation* may play a more important role in instilling discipline in the market, especially as, since the breakout of the turmoil, actors have tended to assess more carefully the track record of counterparties. However, it is difficult to assess the extent to which participants in the ‘originate and distribute’ model will consider reputational concerns when tempted by strategies that may promise high short-term profits, even with the risk of hurting the business in the long run.

Thus, restoring the functioning of the ‘originate and distribute’ model is expected to depend on more fundamental changes that could be implemented by market participants (since some had already been adopted in certain cases in the past) and by competent authorities.

Remuneration schemes play an important role in the ‘originate and distribute’ model; thus, *redesigning remuneration schemes* may be effective in addressing some conflicts of interest.

Retention of ownership proved effective in certain cases, such as the securitisation of credit cards. However, in other cases it could even foster adverse incentives; for instance, holding the equity tranche may encourage risky behaviour that is not in the interest of the senior tranche holders. In practice, enforcing such a requirement can be challenging, as market participants may hedge their exposures, offsetting the incentive effect. In addition, keeping part of the exposures may also affect both accounting²⁶ and prudential requirements.

In the consultation process to amend the Capital Requirements Directive, the European Commission suggested including a provision requiring that a small part of the credit risk should be retained by the originator. For the time being, the inclusion of this provision is still under consideration.

The legal documentation of securitisation transactions and the requirements set by CRAs often address conflicts of interest, in many cases by simply setting limits on certain actions. However, there may remain some unanticipated conflicts that arise in adverse market conditions or in situations where transaction documentation has not yet been “tested”, allowing room for further improvement.

Improving access to more detailed and standardised information at both the aggregate and individual levels would bring significant benefits to the market. Originators and/or servicers should publish periodic, accurate, and comprehensive information on each structured product and underlying assets. This could be implemented through a two-step approach: first, *defining information to be disclosed* and second, *ensuring centralisation and timely dissemination of this information*.

Requiring market participants to identify, address, and disclose the potential conflicts of interest they face and the ways in which they are addressing them could increase awareness among market participants and provide incentives for their efficient resolution. In the United States, investment banks are already required to disclose their equity analysts’ potential conflicts of interest, which is a practice that could be extended to structured finance markets.

Moreover, the *framework on CRAs* can be improved to address issues raised by the turmoil, including conflicts of interest. In this context, the International Organisation of Securities Commissions (IOSCO) updated its Code of

26 Notably IFRS 39 and SIC12.

Conduct and the SEC issued some guidance. Proposals include enhancing the information content of structured product ratings,²⁷ making a clear distinction between issuance and surveillance fees²⁸ or requiring CRAs to disclose all the credit ratings they assign, thus prohibiting “shadow ratings”.²⁹

Finally, authorities may also indirectly *improve investors’ scrutiny* by limiting the role of ratings in oversight regimes.³⁰ When investors cannot rely solely on ratings but must conduct their own credit analysis, they will scrutinise structured products more carefully, which will ultimately improve market discipline.

27 For instance, the Financial Stability Forum and the Committee on the Global Financial System proposed the introduction of a differentiated rating scale for structured products.

28 As suggested by the IOSCO code of conduct.

29 When an issuer asks several agencies to rate products and where only the best rating is disclosed/others ratings are not communicated to investors.

30 See the Wall Street Journal, “SEC Aims to Rein In The Role of Ratings”, 24 June 2008, available at http://online.wsj.com/article/SB121426503930698461.html?mod=hps_us_whats_news

3 EU BANK SURVEY ON MAJOR RISKS FOR THE YEAR AHEAD

Financial markets are experiencing a turmoil whose origin is ascribed to the problems of the US subprime market. The sharpness and speed of the contagion of that market's problems to unrelated market segments has been mainly attributed to four major factors that had reinforced one another in a previously unforeseen way: an abundance of liquidity that underpinned a build up of leverage in the financial system; an increasingly interwoven and complex financial system, the growth of which was fed by financial innovation; low interest rates; and some financial agents' incentives that were aligned against prudent practices. At the current juncture, banks have to operate in an uncertain and volatile environment, adjusting their risk management practices to the situation in the credit and capital markets, the creditworthiness of their counterparties and the stress in certain housing markets.

In this context the Banking Supervision Committee (BSC) collected the views of the senior management of EU banks on major potential risks that their institution might face over the coming year, to consider them in developing its own financial stability assessment. The BSC had already carried out similar surveys in 2004, 2005 and 2006 that had produced highly consistent results. In the light of the recent events in the financial markets, it was deemed important to revisit this issue in order to investigate the views of EU banks with regard to major risks following the ongoing market turbulence, as well as the policy actions they triggered.

The following chapter summarises the results of the survey carried out by the BSC in February-March 2008 and reflects the assessment of the selected EU banks over the one-year period to February-March 2009. Where useful, the results are compared with the (unpublished) results of the previous survey(s).

3.1 STRUCTURE OF THE SURVEY

The survey is anonymous and typically asks interviewed banks to provide an exclusive

ranking of the overall importance of five sources of risks (namely macro-economy, financial markets, banking sector, strategy of the bank and regulatory developments) from 1 (the least important category) to 5 (the most important). Rankings are assigned taking into consideration the expected negative financial impact (costs) over the following year, together with an assessment of the trend for each risk category. Rankings should be interpreted as being relative, indicating for instance that the source of risk assigned a rank of 1 is less important than the risk source assigned ranks of 2 to 5. Therefore, results do not imply that a risk source assigned a rank of 1 is of low importance.

Subsequently each bank is asked to identify, for each of the five sources of risk mentioned above, the three main risks in terms of expected negative financial impact on its financial results for the year ahead, together with a trend assessment. Interviewed banks were subsequently invited to explain their ranking through a qualitative assessment.

3.2 PARTICIPATING BANKS

GEOGRAPHIC DISTRIBUTION

The survey was conducted simultaneously in all EU Member States (see Table 2). Results were received from all member states. In total, 112 banks participated in the survey (compared with 108 banks in 2006). An effort was made to maintain the sample of banks participating in the survey stable, so that the findings indicate the evolution of their perception of risks and not the views of different institutions. Indeed, four

Table 2 Participating banks by Member State

Number of banks	Member States
6	IE
5	AT, CZ, DE, ES, UK, HU, LT, LV, MT, NL, PT, RO, SI
4	BE, BG, CY, PL, SE, SK
3	GR, IT, LU
2	DK, EE, FI, FR

out of five interviewed banks in the sample had already participated in the 2006 survey. Changes are mostly due to the inclusion of banks from BG and RO and, to a lesser extent, to the M&A activity of EU banks.

SIZE DISTRIBUTION

In terms of size of the whole sample, 36.6% of the participating banks were large, 55.4% medium-sized and 8% small (see Chart 18).³¹

As is evident from Chart 18, the composition of the sample in terms of size is broadly similar to the 2006 survey. Within the category of medium-sized banks, more interviewed banks originate from NMS. Similar to previous surveys, the sample of EU15 banks consisted only of medium-sized and large banks, whereas the sample from the NMS was dominated by small and medium-sized banks.

BUSINESS ACTIVITIES

Seventy banks, or 63% of the sample, use more than 75% of their total assets for domestic activities. Whereas 54% of the sub-sample of EU15 banks carries out both domestic and foreign activities, 81% of the banks in the NMS sub-sample carry out their activities mainly on a domestic basis. The bulk of foreign activities are carried out in other European (i.e. in both EU

Table 3 Business activities of participating banks

Business activities	#	%	L	M	S
Corporate Finance	59	53	28	28	3
Trading and Sales	86	77	34	47	5
Retail Banking	106	95	41	59	6
Commercial Banking	103	92	39	57	7
Payment and Settlement	82	73	30	46	6
Agency Services	55	49	20	32	3
Asset Management	70	63	32	35	3

Notes: #: number - %: percentage of sample – L, M and S: large, medium-sized and small banks.

and non-EU) countries, with the US constituting the most important host country outside Europe.

As in previous surveys, most of the banks in the sample were active in retail and commercial banking. Table 3 provides a description of the business activities that the banks participating in the survey carry out.

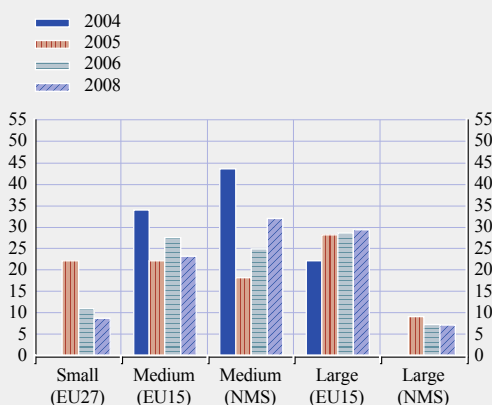
OWNERSHIP

The distribution of foreign- and domestically-owned banks is approximately even in the whole sample, whereas it is about 7:3 for the sample of NMS banks. Out of the 53 foreign-owned banks in the sample, 44 have an EU15 parent, whereas the remaining banks are equally owned by institutions originating from non-EU European, US and other countries. In NMS, EU15 parent companies predominate, owning 57% of the 37 banks in the sample, while between 3-4% have parents from other NMS, non-EU Europe, US and other countries.

Finally, 42% of the respondent banks operate as standalone banks, the remaining 58% are part of a wider financial group. This percentage is considerably higher for NMS, standing at 77%.

Chart 18 Size of banks in the sample

(percentages)



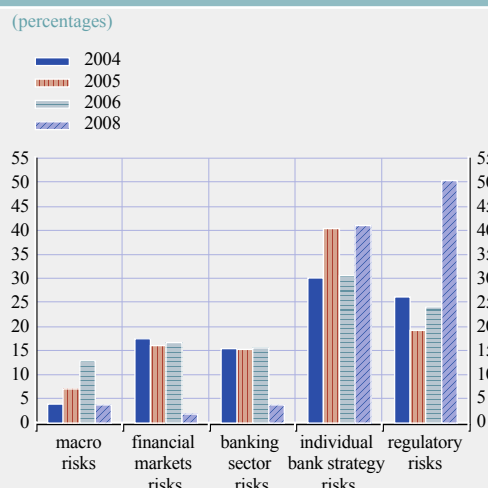
Source: BSC survey.

31 In line with the methodology used for the "EU Bank Stability Report", large domestic banks are defined as banks with total assets greater than 0.5% of the total consolidated assets of EU banks, while medium-sized banks have total assets of between 0.5% and 0.005% of those total consolidated assets and banks with total assets of less than 0.005% of those total consolidated assets are considered small. The threshold in terms of absolute amounts is defined on the basis of the total banking assets in the preceding year.

3.3 MAIN RISKS

In the 2008 risk survey EU banks assigned the first rank in importance to risks originating from the financial markets. They allocated a strong second rank to risks from macro-economic developments (Chart 19), i.e. to the category which had always been ranked as the most important source of risks over a one-year horizon in the first three surveys. As a matter of fact, financial market-related risks are viewed by around 49% of the banks as major source of risks for the year ahead (a considerable increase from 20% in the 2006 survey and a similar level in 2005), followed by risks related to the macro-economic environment, rated as the main risk source by around 39% of the banks (this factor had hovered around that level in the first two surveys and had increased to around 45% in the previous survey). The general uncertainty in the various segments of the credit markets and their spill-over effect on financial markets have a direct impact on banks' financial results and capital standing, while risks related the macro-economy currently appear more distant. The potential spill-over effects from the financial markets to the macro-economy could be seen as one of the reasons why banks consider the

Chart 20 Risk category identified as least important (#1) in EU27

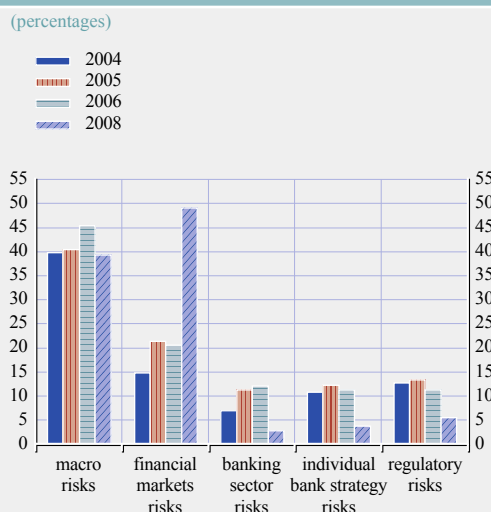


Source: BSC survey.

general economic developments as another important source of risks.

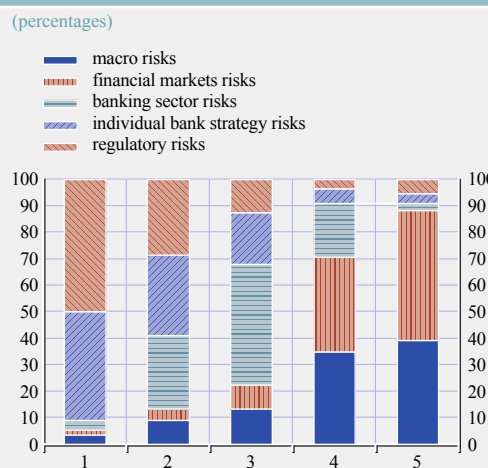
A large proportion of responding banks view risks from regulatory developments or from individual strategic developments as the least important (Chart 20). The percentage of banks viewing regulatory risks as least important

Chart 19 Risk category identified as most important (#5) in EU27



Source: BSC survey.

Chart 21 Distribution of risk categories by ranking in 2008 survey



Source: BSC survey.

broadly doubled from 24% in the previous survey to 50%, while the percentage of banks viewing strategy risks as the least important increased by more than 10 percentage points compared with the 2006 survey to reach 41.1%. Though competition remains fierce in most banking markets, banks see the possibility of a loss in market share or in efficiency as currently less decisive than other risk factors.

Chart 21 provides insight into the distribution of participating banks' risk categories according to their ranking. This chart clearly shows the high importance attributed to the macro-economy and financial market-related risk sources and the low concern stemming from the individual strategy and regulatory development-related risk sources.

The shift towards considering financial markets risks as prevalent is most striking for EU15 banks. Nearly 57.6% of respondents view this source of risks as most important compared with 21.3% in the 2006 report. Banks in NMS view risks from the economy as most important in 45.3% of the responses (a significant increase from 29.8% in the previous survey), followed by 39.6% of banks viewing financial markets risks as most significant. This could be attributed to economic growth as a result of a catching-up process in the NMS, including a possibility of overheating, or to NMS banks' lower direct exposure to the structured finance markets. On the other hand, it could also reflect concerns about the negative impact of a decline in the economic activity of developed economies on the economic activity in NMS and thus the profitability and quality of

Table 4 Analysis of average ratings by sub-samples

Sub-sample	Risk source	EU banks			EU15 banks			NMS banks		
		mean	median	standard deviation	mean	median	standard deviation	mean	median	standard deviation
Whole sample	<i>Replies</i>	112			59			53		
	Macro-economy	4.0	4.0	1.1	4.0	4.0	1.0	4.0	4.0	1.2
	Financial markets	4.3	4.0	0.9	4.4	5.0	0.9	4.1	4.0	1.0
	Banking sector	2.9	3.0	0.9	3.0	3.0	0.7	2.8	3.0	1.0
	Individual strategy	2.0	2.0	1.1	1.9	2.0	1.0	2.1	2.0	1.1
	Regulatory	1.9	1.5	1.1	1.7	1.0	1.0	2.0	2.0	1.2
Small banks	<i>Replies</i>	9.0			0.0			9.0		
	Macro-economy	3.8	4.0	1.4	-	-	-	3.8	4.0	1.4
	Financial markets	3.8	4.0	1.3	-	-	-	3.8	4.0	1.3
	Banking sector	2.8	3.0	1.3	-	-	-	2.8	3.0	1.3
	Individual strategy	2.4	2.0	1.1	-	-	-	2.4	2.0	1.1
	Regulatory	2.2	2.0	1.5	-	-	-	2.2	2.0	1.5
Medium banks	<i>Replies</i>	62			26			36		
	Macro-economy	3.8	4.0	1.2	3.8	4.0	1.1	3.9	4.0	1.2
	Financial markets	4.3	5.0	0.9	4.5	5.0	0.9	4.2	4.0	0.9
	Banking sector	3.0	3.0	0.9	3.2	3.0	0.8	2.8	3.0	0.9
	Individual strategy	2.0	1.5	1.2	1.9	1.5	1.1	2.1	1.5	1.2
	Regulatory	1.9	2.0	1.1	1.7	2.0	0.9	2.0	2.0	1.2
Large banks	<i>Replies</i>	41			33			8		
	Macro-economy	4.2	4.0	0.9	4.1	4.0	1.0	4.6	5.0	0.5
	Financial markets	4.3	4.0	0.9	4.4	5.0	0.9	4.0	4.0	0.9
	Banking sector	2.9	3.0	0.7	2.8	3.0	0.6	2.9	3.0	1.0
	Individual strategy	1.9	2.0	0.9	1.9	2.0	0.9	1.9	2.0	0.6
	Regulatory	1.7	1.0	1.1	1.8	1.0	1.1	1.6	1.0	1.1

Source: BSC survey.

NMS banks' portfolios. Still, the second-round effects of the turmoil led to a doubling of the percentage of NMS banks being most concerned with financial markets risks compared to the 2006 survey.

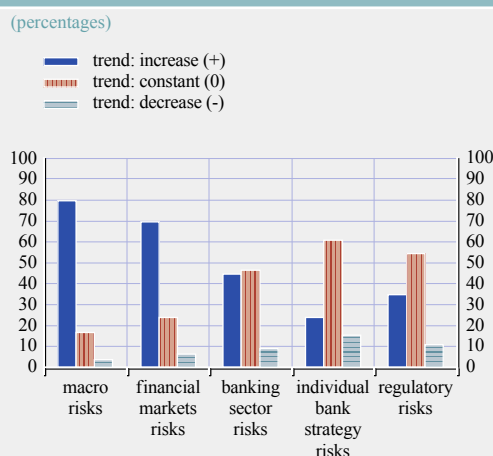
Table 4 summarises the survey results by presenting the average ratings according to size groups. Two elements of this analysis should be noted:

On the one hand, the analysis of average rankings by size groups points to the stability of the overall result as indicated by a broadly identical ranking over all sub-samples as well as low standard deviations.

On the other hand, medium banks tend to allocate the least important risk to individual strategy rather than to regulatory risks.

An analysis of the risk trend direction as identified by responding banks reveals that banks expect the risk categories they view as most important for the year ahead to further increase in importance, whereas they expect lower-ranked risk categories mostly to remain constant (Chart 22). No major differentiation in this pattern can be observed when looking at sub-samples.

Chart 22 Risk trend direction identified by responding banks in the EU



Source: BSC survey.

3.4 RISK CATEGORIES IN DETAIL

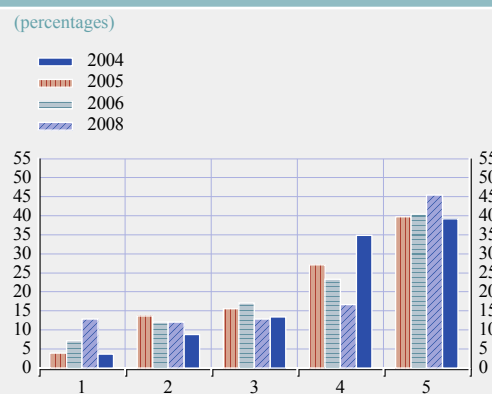
The following sections analyse the development of risk rankings by sources.

3.4.1 MACRO-ECONOMY

Macro-economic risks ranked first as the most important source of risks in the previous surveys. The reason for its displacement to second rank in the 2008 survey could be linked to the fact that the risks related to financial markets are more perceptible and have a more material impact on banks' near-term financial results and capital standing, thus obtaining increased prominence. Moreover, the current turmoil originated in financial markets and is still developing, whereas spill-over effects to the "real" economy remain still veiled.

The responding banks, though, still rank identified sources of macro risks similarly to the 2006 survey. As a matter of fact, banks view a spill-over of the effects of the turmoil to the real economy via a turn in the credit cycle and real estate price erosion as most prominent source of macro-economic risks. These risks could materialise in weakening borrower creditworthiness as well as in the deterioration of collateral quality

Chart 23 Distribution of macro-economic risks among different ranking classes



Source: BSC survey.

(e.g. reduction of real estate prices) and thus significantly affect banks' profit and loss results. Linked to this most important source of risks, banks identify risks stemming from a general decline in economic activity (the health of the US economy with its impact on the US dollar was mentioned in this context) and international developments such as high inflation and high energy prices.

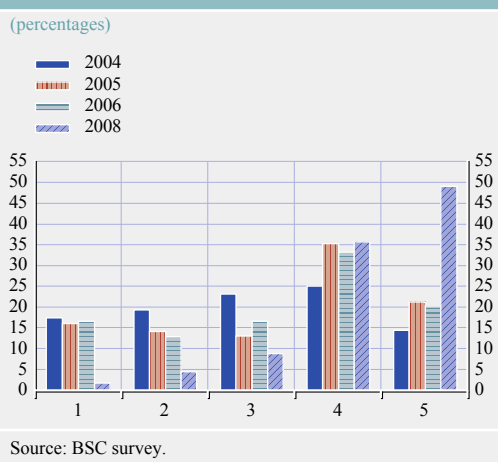
In addition to the aforementioned global factors, banks express concerns specific to the business environment in which they operate. Besides local or regional economic developments (e.g. economic development in the Baltic countries), the EU enlargement process and accession to the EUR were also mentioned in this respect.

3.4.2 FINANCIAL MARKETS

Compared with the previous surveys, the increase in banks viewing risks related to financial markets as most prominent is striking. Indeed, the share of banks considering this risk category as the most prevalent doubled from around 20% to 49%, whereas around one-third regard it as the second-most important source of risks (which remains broadly stable when compared with the 2006 survey).

Detailed replies indicate that the uncertainty of the future development of financial markets such as equity market or the different segments of credit markets are the most important source of risks over the coming year. Linked to this general uncertainty in financial markets are risks stemming from increased funding costs and illiquid markets. Interest rate developments continue to be an important source of uncertainty for banks, though they received only half as many replies when compared with the previous survey. Furthermore, the declining creditworthiness of counterparties remains a concern for banks as reflected in a high (and when compared with the 2006 survey, broadly constant) ranking allocated to credit events. Though decreasing by around 20% compared with the 2006

Chart 24 Distribution of financial markets risks among different ranking classes



survey, exchange rate developments remain a concern, in particular for NMS banks. Banks respond that nearly all of the indicated risk sources will increase in importance. With the possible exception of risks from other financial markets, banks appear to be well positioned to face these risks according to their indicated impact assessment

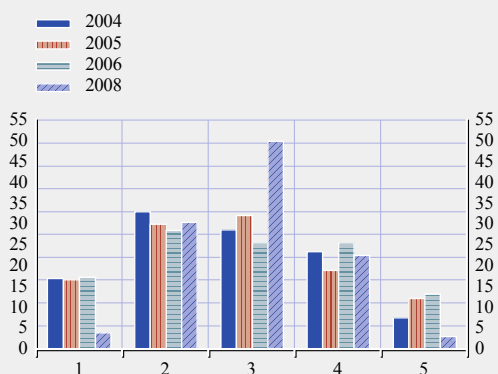
3.4.3 BANKING SECTOR

Competitive pressure, operational risks stemming from systems or infrastructure (particularly when such activities are outsourced), and increased cost or reduced access to interbank or wholesale credit markets were highlighted by respondent banks as the most prominent risk sources under the banking sector risk category. In particular, responding banks mentioned that the banking sector is experiencing excessive competition that materialises in rising deposit costs and tightening margins.

Additionally, surveyed banks foresee increased competitive pressure due to the possible emergence of new or aggressive market players with strong (capital) support from owners, as well as internationally active banks cherry-picking into profitable business activities. Banks are also concerned about market saturation,

Chart 25 Distribution of banking sector risks among different ranking classes

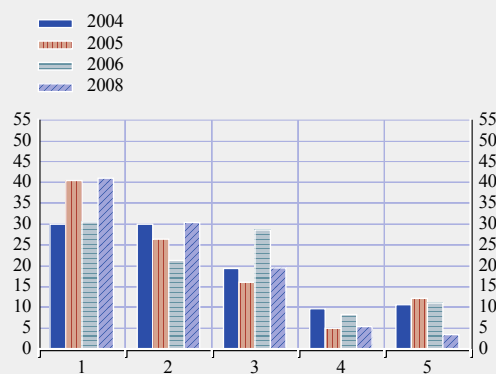
(percentages)



Source: BSC survey.

Chart 26 Distribution of risks associated with individual banking strategy among different ranking classes

(percentages)



Source: BSC survey.

bank failures, the prospect of disorderly market exits by distressed institutions, and the future of monoline insurance companies.

3.4.4 INTERNAL STRATEGY OF THE CREDIT INSTITUTION

Risks relating to the strategy of an individual bank are generally allocated a comparably lower rank. Though fluctuating, the four survey outcomes indicate that on average only 10-20% of respondent banks allocate this source of risks to categories 5 or 4 i.e. the top positions in importance in the ranking of given risk categories.

Factors influencing this source of risk are competitive pressures in the form of performance and efficiency strains, as well as the need to innovate. Compared with previous surveys, risks related to banks' performance and efficiency was still seen as the most important strategic risk, though declining to a rate of 42% (while standing at 64% in the 2006 and 78% in the 2005 survey). The general result of banks assigning comparable low importance to strategy risk is underlined by the fact that replies hardly refer to risks related to focusing on core activities or to the emergence of certain business models.

Examples of risks related to banks' strategic or firm-specific developments include the risks

resulting from expanding into new markets or rebuilding a market position, the risks from adapting the organisational structure, and operational risks, for instance in terms of flexibility and quality of services from outsourcing. Increased turnover of (critical) staff was a risk mentioned particularly by banks from NMS.

Overall these concerns echo those highlighted in section 3.4.3. From this it could be inferred that risks relating to the banking sector and to the individual strategy of banks are viewed as having similar origins.

3.4.5 REGULATORY DEVELOPMENTS

As in previous surveys, regulatory risks were generally seen as less relevant. However, it is interesting to note that the proportion of banks assigning this risk category the lowest ranking doubled compared with 2006. One factor contributing to this result might be the fact that the uncertainty stemming from key regulatory initiatives (such as the Capital Requirements Directive - CRD or the Markets in Financial Instruments Directive - MiFID) has considerably declined.

The individual risks quoted by banks highlight their concerns for the year ahead. Risks from compliance requirements and due to

Chart 27 Distribution of regulatory risks among different ranking classes



Source: BSC survey.

new or amended regulation remain the most important, as in the 2006 survey. The pace and scope of regulatory action following the market turbulence is also assigned particular importance. Unlike in the previous survey, in which implementation issues rather than the development of new regulation were viewed as a main risk source in this category, banks highlight the need to avoid too frequent and possible excessive changes to the regulatory framework as well as the risk of excessive compliance requirements in the form of increasing external controls, corporate governance requirements and reporting burden. Banks also express their concern that a side effect of regulatory action might be a lack of harmonisation and an unlevel playing field when the opposite is necessary.

Though slightly declining in importance relative to the 2006 survey, domestic operations (such as rate-capping legislation, restrictive liquidity ratio measures, minimum reserves, regulation on data protection or legislative changes to tax codes) remain a non-negligible source of risks. Finally, relative to the 2006 survey, banks assigned a slightly increasing importance to restrictions on foreign operations (such as those relating to M&A activities, minimum reserves of central banks and FX regulation).

3.5 CONCLUSIONS

The survey, reviewing the opinions of 112 EU banks, identifies risks from financial markets as the most important for the one-year period ending February-March 2009, followed by those originating in the macro-economy. The uncertainty of the future development of financial markets (particularly equity markets or the different segments of credit markets) appears to determine the relevance of this type of risk. Linked to the general uncertainty in financial markets are risks stemming from increased funding costs and illiquid markets. This is noteworthy given the results of previous surveys consistently designating macro-economic developments as the most important source of risk. On the opposite end of the spectrum, risks from regulatory developments are generally viewed as the least relevant category in the survey, possibly due to the fact that the uncertainty stemming from key regulatory initiatives (such as the CRD or MIFID) has considerably declined. Nevertheless, the survey only shows a relative ranking of risks. Thus, it should be noted that all of the risk categories under examination are important and have to be managed accordingly. Banks expect that the importance of the major risk categories, i.e. risks arising from the macro economy and financial markets will further increase in the period under investigation. Moreover, most of the identified risks are expected to have a medium to high negative impact if they materialise.

ANNEXES

I STRUCTURAL DEVELOPMENTS IN BULGARIA AND ROMANIA

As this is the first year that BG and RO are included in the EU banking structures report, this annex aims at providing information on the major structural trends that took place in their banking systems over the past years.

CONSOLIDATION AND MERGERS

With regard to the number of credit institutions, two divergent trends appear in BG and RO: while in the former the number of credit institutions has been declining during the period under investigation (from 32 to 29 in 2007), in the latter it has increased from 39 to 42. In line with most of the NMS, changes in the number of credit institutions in BG and RO have mainly been influenced by two major factors: the number of market participants has increased through the establishment of foreign branches and subsidiaries, while the ongoing process of domestic mergers and acquisitions has had a counterbalancing effect. Despite being present in both countries, the first phenomenon seems to have had a stronger impact on the market structure in RO, while M&A activity has had a more prominent role in the banking sector in BG over the past year.

INTERNATIONALISATION

Banking sectors in BG and RO are dominated by foreign credit institutions, which control 82.4% and 84.1% of credit institutions' total assets, respectively. The prevalent form of foreign presence is that of subsidiaries, although branches of foreign banks are also gaining ground. Credit institutions from GR play a dominant role in both markets, accompanied by a strong, though varying market presence of AT, IT and HU banks.

In the last few years foreign credit institutions entered the markets of these two NMS mainly through privatisation transactions. However, after the finalisation of the privatisation process in both countries, M&A activity continued take place, including both cross-border and domestic transactions. Furthermore, there are new ways to enter these markets: following the accession

to the EU and the adoption of the relevant European Community legislation in the field of financial services, credit institutions from the EU can provide cross-border services or establish branches. Both countries reported increased activity in this field; however, the market share of foreign branches and cross-border provision of banking services is still negligible.

MARKET STRUCTURE

Indices of market concentration are above the EU average in both BG and RO. The share of the five largest credit institutions makes up 56% of total assets in both countries, while the Herfindahl index for RO (1041) reveals a higher concentration than BG (833) for the entire market. As regards longer-term trends, concentration indices seem to be relatively stable in both countries, although market concentration declined in RO and increased in BG in 2007, in line with the moderate changes seen in the number of credit institutions.

However, despite the relative stability of the overall number of credit institutions, the increase in the number of local units (branches) has continued in both countries, especially in RO, which experienced a growth of 41.8% in 2007, when the corresponding figure for BG was 4.6%. As branch density still lags behind the EU average, this process is expected to continue, supported also by credit institutions' strategy of increasing activity in retail markets. In this context, dynamic growth is experienced also in the number of ATMs and POS terminals.

DEVELOPMENTS IN INTERMEDIATION

Following the trends characterising the banking sectors in the NMS, financial intermediation continued to strengthen in BG and RO, as total assets increased at a rapid pace in 2007, by nearly 40% in both countries. However, the ratio of total bank assets to GDP lags behind the EU average (334%); in BG, at 108%, it exceeds the NMS average (103%), while in RO it still remains at a comparatively lower level (59.4%).

Total loans of CIs to non-credit institutions grew by an exceptionally high rate of 64.4% and 51% in BG and RO, respectively. Growth in lending to households was a decisive factor behind credit expansion in both countries; still, the growth rate of corporate lending outpaced even that of household lending in BG. As regards loans to households, those for housing purchase marked the most significant increase, 64% in BG and 81% in RO. Similarly, consumer credit surged by 49% and 65% respectively.

2 STRUCTURAL INDICATORS OF THE EU BANKING SECTOR

Table 1 Number of credit institutions and of local units (branches)

	Number of credit institutions					Number of local units (branches)				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	108	104	100	105	110	4,989	4,837	4,564	4,574	4,425
Bulgaria	35	35	34	32	29	n.a.	5,606	5,629	5,569	5,827
Czech Republic	77	70	56	57	56	1,670	1,785	1,825	1,877	1,862
Denmark	203	202	197	191	189	2,118	2,119	2,122	2,152	2,194
Germany	2,225	2,148	2,089	2,050	2,026	47,244	45,331	44,044	40,282	39,777
Estonia	7	9	11	14	15	197	203	230	245	266
Ireland	80	80	78	78	81	924	909	910	935	1,158
Greece	59	62	62	62	63	3,300	3,403	3,543	3,699	3,850
Spain	348	346	348	352	357	39,750	40,603	41,979	43,691	45,500
France	939	897	854	829	808	25,789	26,370	27,075	40,013	39,560
Italy	801	787	792	807	821	30,501	30,950	31,504	32,334	33,227
Cyprus	408	405	391	336	215	983	977	951	941	921
Latvia	23	23	25	28	31	581	583	586	610	682
Lithuania	71	74	78	78	80	723	758	822	892	970
Luxembourg	169	162	155	156	156	269	253	246	234	235
Hungary	222	217	214	212	206	3,003	2,987	3,125	3,243	3,387
Malta	16	16	19	18	22	104	99	109	110	104
Netherlands	481	461	401	345	341	3,883	3,798	3,748	3,456	3,604
Austria	814	796	818	809	803	4,395	4,360	4,300	4,258	4,266
Poland	660	744	730	723	718	8,688	8,301	10,074	10,934	11,607
Portugal	200	197	186	178	175	5,397	5,371	5,422	5,618	6,030
Romania	39	40	40	39	42	3,387	3,031	3,533	4,470	6,340
Slovenia	33	24	25	25	27	725	706	693	696	711
Slovakia	22	21	23	24	26	1,057	1,113	1,142	1,175	1,169
Finland	366	363	363	361	360	1,564	1,585	1,616	1,709	1,638
Sweden	222	212	200	204	201	2,069	2,018	2,003	2,004	1,846
United Kingdom	426	413	400	401	390	13,646	13,386	13,130	12,880	12,425
MU13	6,623	6,427	6,271	6,157	6,128	168,730	168,476	169,644	181,499	183,981
EU27	9,054	8,908	8,689	8,514	8,348	206,956	211,442	214,925	228,601	233,581

Note: PL data for the number of credit institutions include credit unions since 2004, whereas previously it included only commercial and cooperative banks.

Table 2 Number of employees and total assets of CIs

	Number of employees of CIs					Total assets of CIs (EUR millions)				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	73,553	71,347	69,481	67,957	67,080	828,557	914,391	1,055,270	1,121,905	1,297,788
Bulgaria	n.a.	22,467	22,945	26,738	30,571	9,254	13,224	17,447	22,302	31,238
Czech Republic	39,658	38,666	37,943	37,825	40,037	78,004	87,104	100,902	114,878	140,004
Denmark	46,443	46,372	47,579	46,394	49,644	568,848	629,371	746,246	822,024	977,970
Germany	725,550	712,300	705,000	692,500	690,900	6,393,503	6,584,388	6,826,534	7,120,805	7,562,431
Estonia	4,280	4,455	5,029	5,681	6,319	6,314	8,586	11,876	15,326	20,603
Ireland	35,658	35,564	37,702	39,154	41,865	575,168	722,544	941,909	1,178,127	1,337,357
Greece	61,074	59,337	61,295	62,171	64,713	213,171	230,454	281,066	315,081	383,293
Spain	243,462	246,236	252,831	261,890	275,506	1,502,861	1,717,364	2,149,456	2,515,527	2,945,262
France	435,725	432,326	434,354	474,566	478,615	3,998,554	4,419,045	5,073,388	5,728,127	6,682,335
Italy	336,661	336,354	335,726	339,683	341,538	2,125,366	2,275,628	2,509,436	2,793,244	3,331,830
Cyprus	10,480	10,617	10,799	10,845	11,286	41,890	46,540	60,753	74,709	91,141
Latvia	8,903	9,655	10,477	11,656	12,826	8,482	11,167	15,727	22,694	30,816
Lithuania	7,557	7,266	7,637	8,624	10,303	6,453	8,553	13,162	17,347	23,817
Luxembourg	22,513	22,549	23,224	24,752	26,139	655,971	695,103	792,418	839,564	915,448
Hungary	35,725	35,558	37,527	39,302	41,905	n.a.	n.a.	78,289	93,679	108,504
Malta	3,416	3,371	3,383	3,515	3,756	17,901	20,838	27,195	30,034	37,808
Netherlands	120,539	118,032	120,165	116,500	114,424	1,473,939	1,677,583	1,695,325	1,873,129	2,195,020
Austria	73,308	72,858	75,303	76,323	77,731	586,459	635,348	721,159	789,770	890,747
Poland	154,569	150,037	158,130	162,125	173,955	112,174	141,571	163,421	189,739	236,008
Portugal	54,350	53,230	54,035	58,213	60,975	348,691	345,378	360,190	397,123	440,144
Romania	46,567	49,702	52,452	58,536	66,039	15,000	23,200	35,400	51,911	72,095
Slovenia	11,816	11,602	11,726	11,838	12,051	21,541	24,462	30,135	34,841	43,493
Slovakia	19,812	19,819	19,773	19,633	19,779	23,751	30,834	37,834	41,695	50,318
Finland	26,667	25,377	23,644	24,769	25,025	185,846	212,427	234,520	255,055	287,716
Sweden	44,389	44,242	44,943	47,069	44,056	519,259	599,682	653,176	773,736	845,958
United Kingdom	487,772	490,436	461,654	453,045	n.a.	6,288,193	7,085,205	8,526,509	9,868,683	10,093,134
MU13	2,220,876	2,197,112	2,204,486	2,250,316	2,276,562	18,909,627	20,454,115	22,670,806	24,962,298	28,312,864
EU27	3,130,447	3,129,775	3,124,757	3,181,304	2,787,038	26,605,149	29,159,989	33,158,743	37,101,055	41,072,276

Note: For PT the increase in the number of employees in 2006 was mainly due to the incorporation of back-office operations (and staff) previously organised through jointly controlled entities in two of the main Portuguese banks.

Table 3 Herfindahl index for CIs' and share of the 5 largest CIs in total assets

(index ranging from 0 to 10,000 and share of the 5 largest CIs in percent)

	Herfindahl index for CIs					Share of the 5 largest CIs in total assets				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	2,063	2,102	2,112	2,041	2,079	83.5	84.3	85.3	84.4	83.4
Bulgaria	n.a.	721	698	707	833	n.a.	52.3	50.8	50.3	56.7
Czech Republic	1,187	1,103	1,155	1,104	1,100	65.8	64.0	65.5	64.1	65.7
Denmark	1,114	1,146	1,115	1,071	1,120	66.6	67.0	66.3	64.7	64.2
Germany	173	178	174	178	183	21.6	22.1	21.6	22.0	22.0
Estonia	3,943	3,887	4,039	3,593	3,410	99.2	98.6	98.1	97.1	95.7
Ireland	500	500	600	600	600	44.4	43.9	45.7	44.8	46.1
Greece	1,130	1,070	1,096	1,101	1,096	66.9	65.0	65.6	66.3	67.7
Spain	506	482	487	442	459	43.1	41.9	42.0	40.4	41.0
France	597	623	758	726	679	46.7	49.2	51.9	52.3	51.8
Italy	240	230	230	220	330	27.5	26.4	26.8	26.2	33.1
Cyprus	946	940	1,029	1,056	1,082	57.2	57.3	59.8	63.9	64.8
Latvia	1,054	1,021	1,176	1,271	1,158	63.1	62.4	67.3	69.2	67.2
Lithuania	2,071	1,854	1,838	1,913	1,827	81.0	78.9	80.6	82.5	80.9
Luxembourg	315	304	312	294	276	31.8	29.7	30.7	29.1	27.9
Hungary	783	798	795	823	839	52.1	52.7	53.2	53.5	54.1
Malta	1,580	1,452	1,330	1,185	1,174	77.7	78.5	75.3	71.4	70.1
Netherlands	1,744	1,726	1,796	1,822	1,928	84.2	84.0	84.5	85.1	86.3
Austria	557	552	560	534	527	44.2	43.8	45.0	43.8	42.8
Poland	754	692	650	599	640	52.0	50.0	48.5	46.1	46.6
Portugal	1,043	1,093	1,154	1,134	1,097	62.7	66.5	68.8	67.9	67.8
Romania	1,251	1,111	1,115	1,165	1,041	55.2	59.5	59.4	60.1	56.3
Slovenia	1,496	1,425	1,369	1,300	1,282	66.4	64.6	63.0	62.0	59.5
Slovakia	1,191	1,154	1,076	1,131	1,082	67.5	66.5	67.7	66.9	68.2
Finland	2,420	2,680	2,730	2,560	2,540	81.2	82.7	82.9	82.3	81.2
Sweden	760	854	845	856	934	53.8	54.4	57.3	57.8	61.0
United Kingdom	347	376	399	394	449	32.8	34.5	36.3	35.9	40.7
MU13	579	599	642	630	654	40.5	41.6	42.6	42.8	44.1
unweighted avg.	983	997	1,029	996	1,006	54.2	54.2	54.9	54.4	54.7
EU27	545	567	600	588	628	39.7	40.9	42.1	42.1	44.4
unweighted avg.	1,145	1,114	1,135	1,104	1,102	58.8	58.5	59.3	58.9	59.4

Table 4 Loans of CIs to non-financial corporations and loans of CIs for housing purchase

(EUR millions)										
	Loans of CIs to non-financial corporations					Loans of CIs for housing purchase				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	86,850	86,459	90,624	97,180	109,633	71,710	80,440	94,732	107,378	113,746
Bulgaria	n.a.	4,666	5,735	6,814	11,784	n.a.	509	1,006	1,751	2,876
Czech Republic	13,750	15,454	18,844	23,908	29,242	4,793	6,890	9,737	13,639	19,375
Denmark	83,458	89,536	102,350	120,962	142,012	154,104	169,022	193,713	215,939	236,949
Germany	813,746	786,844	774,105	800,306	859,447	937,379	949,457	961,186	976,123	967,492
Estonia	1,490	2,005	3,212	5,177	6,860	954	1,495	2,602	4,248	5,590
Ireland	64,952	85,555	107,078	143,603	175,163	55,012	73,739	94,776	111,403	124,019
Greece	58,319	63,004	69,140	73,830	86,638	26,364	32,944	43,001	52,313	63,385
Spain	387,804	454,715	579,687	760,329	907,541	277,573	335,665	448,266	547,155	621,244
France	534,704	566,939	610,934	670,150	764,658	385,078	432,396	495,105	569,975	643,142
Italy	588,676	615,187	647,458	728,275	823,632	154,374	185,016	217,221	244,409	265,560
Cyprus	n.a.	n.a.	10,876	12,348	16,047	n.a.	n.a.	4,140	5,450	6,989
Latvia	2,241	2,933	4,346	6,601	9,042	727	1,325	2,524	4,699	6,785
Lithuania	2,811	3,243	4,636	6,545	8,947	553	999	1,874	3,002	4,859
Luxembourg	36,625	33,741	37,277	41,682	51,086	8,291	9,335	10,586	12,018	14,676
Hungary	17,732	20,805	23,062	26,161	29,015	5,745	7,765	9,029	10,728	12,410
Malta	2,999	3,171	3,345	3,949	4,297	1,061	1,246	1,522	1,775	2,021
Netherlands	214,011	223,999	241,969	260,304	296,811	302,392	331,742	368,612	383,338	392,584
Austria	131,263	114,015	121,566	129,406	140,042	39,746	48,078	53,835	60,737	65,070
Poland	25,845	30,856	32,247	36,907	49,135	8,258	8,779	13,181	20,505	32,783
Portugal	82,717	84,079	88,049	94,598	105,469	66,485	71,139	79,488	91,916	101,106
Romania	n.a.	6,658	9,445	14,702	20,291	n.a.	294	766	2,176	3,940
Slovenia	6,784	8,665	10,510	12,958	17,522	557	798	1,368	1,956	2,670
Slovakia	5,975	5,890	7,181	9,536	12,084	1,427	2,266	3,137	4,557	6,076
Finland	34,719	37,708	41,181	44,833	51,076	36,049	41,544	48,490	55,307	62,173
Sweden	124,953	128,340	138,456	155,015	175,952	84,129	97,897	106,757	125,746	133,807
United Kingdom	398,776	418,302	528,493	616,079	678,518	908,278	974,469	1,065,249	1,152,822	1,100,178
MU13	3,041,170	3,160,910	3,419,578	3,857,454	4,388,718	2,361,010	2,592,293	2,916,666	3,214,028	3,436,867
EU27	3,721,201	3,892,768	4,311,806	4,902,157	5,581,945	3,531,039	3,865,250	4,331,901	4,781,066	5,011,505

Table 5 Loans of CIs for consumer credit and other household lending from CIs

(EUR millions)

	Loans of CIs for consumer credit					Other household lending from CIs				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	8,648	8,013	8,533	8,861	9,462	15,524	17,201	18,218	18,768	18,937
Bulgaria	n.a.	1,431	2,147	2,400	3,576	n.a.	296	388	477	605
Czech Republic	1,679	2,243	3,089	4,007	5,218	859	1,222	1,591	2,048	2,737
Denmark	13,108	14,088	14,782	16,513	19,686	15,163	16,205	19,126	22,777	26,858
Germany	174,919	174,448	171,048	167,605	168,986	319,502	313,494	307,830	296,289	284,800
Estonia	75	95	280	530	785	181	203	285	381	531
Ireland	12,310	14,725	17,509	19,996	21,039	4,300	5,567	7,127	8,525	10,658
Greece	12,386	17,025	20,821	25,544	27,518	1,260	1,456	1,649	2,135	2,810
Spain	55,603	62,367	77,235	92,213	103,506	77,598	84,804	95,923	110,806	119,225
France	128,415	134,093	141,976	148,748	156,270	71,941	73,018	73,640	73,023	76,666
Italy	33,012	38,117	44,335	49,878	52,665	122,864	128,100	130,894	136,799	146,586
Cyprus	n.a.	n.a.	2,578	2,848	3,118	n.a.	n.a.	5,644	5,676	6,111
Latvia	207	305	521	852	1,035	202	284	487	650	813
Lithuania	n.a.	217	441	742	1,061	n.a.	235	398	849	1,342
Luxembourg	1,185	1,269	1,289	1,290	1,395	13,502	12,820	12,936	12,556	12,005
Hungary	2,116	2,956	4,766	6,891	9,635	1,160	1,526	1,261	1,373	1,392
Malta	113	n.a.	213	252	288	475	n.a.	439	524	597
Netherlands	20,442	23,480	24,625	25,417	23,773	22,641	22,505	22,908	26,857	23,598
Austria	21,525	24,769	27,878	25,125	25,442	7,015	21,270	28,067	28,387	30,551
Poland	9,066	11,176	13,875	16,239	22,082	5,372	8,536	9,805	12,768	18,047
Portugal	8,720	9,089	9,427	11,416	13,820	9,817	10,806	11,261	12,058	12,969
Romania	n.a.	2,644	4,910	9,239	15,278	n.a.	77	131	204	612
Slovenia	n.a.	1,838	1,968	2,287	2,743	n.a.	790	946	1,138	1,408
Slovakia	214	512	653	1,042	1,237	n.a.	538	988	1,313	1,748
Finland	7,324	8,047	9,401	10,422	11,237	9,666	10,433	11,158	12,227	13,171
Sweden	9,726	10,617	11,364	13,457	14,513	44,518	46,728	50,118	56,803	59,898
United Kingdom	176,219	196,180	209,207	213,566	198,173	65,087	69,576	51,416	61,063	61,805
MU13	484,489	517,280	556,045	588,802	617,856	675,630	702,264	722,557	739,568	753,384
EU27	697,012	759,744	824,872	877,380	913,542	808,648	847,689	864,635	906,475	936,479

Table 6 Total loans and total deposits of CIs to/from non-CIs

(EUR millions)										
	Total loans of CIs to non-CIs					Total deposits of CIs from non-CIs				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	287,359	304,112	362,765	388,551	417,040	371,244	409,187	462,586	466,168	513,128
Bulgaria	n.a.	7,128	9,415	11,701	19,235	n.a.	8,973	11,210	14,875	19,845
Czech Republic	31,324	33,452	40,959	51,623	67,293	52,644	58,919	67,514	77,514	92,985
Denmark	291,866	337,690	389,843	447,450	503,702	107,112	122,368	143,245	154,405	180,586
Germany	3,025,616	3,009,309	3,023,001	3,053,147	3,142,365	2,447,673	2,511,278	2,593,143	2,704,740	2,882,321
Estonia	3,194	5,810	8,020	11,373	15,321	3,415	3,577	6,044	n.a.	9,090
Ireland	207,917	261,797	333,378	404,307	480,985	164,240	186,766	235,966	290,207	327,918
Greece	110,018	127,637	147,764	167,359	199,347	140,040	159,861	187,596	211,069	248,530
Spain	862,851	1,010,453	1,277,919	1,602,078	1,860,284	818,322	887,324	1,084,081	1,320,297	1,507,402
France	1,431,727	1,531,434	1,700,679	1,887,444	2,157,291	1,198,491	1,270,370	1,367,367	1,419,514	1,579,181
Italy	1,128,503	1,188,949	1,280,350	1,423,557	1,724,275	768,127	807,109	872,933	931,398	1,122,393
Cyprus	21,804	24,769	28,062	31,417	41,020	28,155	30,062	38,073	43,099	52,514
Latvia	3,963	5,478	9,003	15,442	20,787	2,647	3,433	8,913	11,054	14,380
Lithuania	3,890	5,442	8,801	12,306	17,650	4,091	5,616	7,797	9,548	11,644
Luxembourg	118,528	119,919	144,882	159,420	191,830	207,247	221,952	241,440	288,128	295,787
Hungary	26,397	n.a.	47,277	56,298	65,565	31,208	n.a.	41,164	47,129	51,151
Malta	8,016	8,560	11,013	14,102	20,239	8,177	8,769	11,237	11,060	14,015
Netherlands	761,691	850,583	947,478	1,034,977	1,082,889	570,573	598,830	684,003	793,700	877,719
Austria	277,053	295,528	327,594	349,415	377,980	224,844	234,736	254,044	269,476	301,046
Poland	57,000	67,092	77,995	96,470	133,580	72,000	89,334	105,818	121,634	147,300
Portugal	185,829	194,798	209,241	230,918	257,814	139,138	147,755	164,029	177,098	192,622
Romania	n.a.	10,681	16,583	27,928	42,163	n.a.	15,053	21,623	20,175	38,674
Slovenia	10,461	14,390	16,882	21,389	29,226	13,910	14,154	16,046	17,555	19,838
Slovakia	n.a.	11,229	14,609	19,283	24,564	n.a.	19,659	21,889	26,967	31,459
Finland	94,137	103,944	117,289	131,397	147,894	76,801	80,829	86,412	89,165	101,154
Sweden	283,927	302,530	345,367	404,203	443,526	126,556	130,210	153,444	182,526	189,905
United Kingdom	3,439,955	3,846,086	4,550,509	5,090,013	5,814,984	3,394,740	3,815,204	4,581,326	5,155,527	5,857,150
MU13	8,501,690	9,012,853	9,889,222	10,853,959	12,069,220	7,140,650	7,530,151	8,249,646	8,978,515	9,969,039
EU27	12,673,025	13,678,797	15,446,679	17,143,568	19,298,850	10,971,394	11,841,328	13,468,942	14,854,027	16,679,738

Table 7 Long-term and short-term debt securities issued by non-financial companies in all currencies

(EUR millions)

	Long-term debt securities issued by non-financial companies in all currencies					Short-term debt securities issued by non-financial companies in all currencies				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	8,591	8,608	2,674	5,091	9,203	58,661	55,984	47,888	42,725	73,472
Bulgaria	n.a.	41	55	126	162	-	-	-	-	-
Czech Republic	389	250	221	436	1,057	0	0	0	0	0
Denmark	n.a.	n.a.	n.a.	6,780	1,518	n.a.	n.a.	n.a.	4,563	4,590
Germany	21,615	28,626	22,769	15,969	6,068	197,879	237,986	219,474	184,345	248,624
Estonia	16	48	70	163	296	8	10	27	62	102
Ireland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	452	1,162	4,571	4,513	3,325	0	24	n.a.	0	7
Spain	1,427	1,319	1,061	341	2,757	7,293	7,020	6,963	7,785	6,453
France	58,827	34,360	33,095	39,388	35,365	409,773	490,148	480,900	581,644	810,139
Italy	7,474	17,160	6,009	6,099	14,098	20	2	1	18	n.a.
Cyprus	28	3	2	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
Latvia	36	0	4	25	9	0	0	0	0	6
Lithuania	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0
Luxembourg	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	128	0	101	0	13	0	0	0	0	8
Malta	58	24	0	30	75	n.a.	n.a.	n.a.	n.a.	0
Netherlands	8,016	2,805	5,264	8,266	11,629	3,452	550	604	141	429
Austria	6,482	4,001	7,798	4,000	8,309	778	784	796	516	503
Poland	293	563	385	710	1,756	n.a.	10,030	9,306	11,241	13,646
Portugal	1,142	1,190	2,676	3,169	3,325	54,870	70,599	98,211	105,134	127,182
Romania	551	334	292	87	2	43	75	221	606	n.a.
Slovenia	17	130	205	25	34	n.a.	n.a.	n.a.	n.a.	n.a.
Slovakia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finland	2,109	2,343	1,604	3,983	2,025	63,028	68,261	90,545	100,548	94,455
Sweden	2,708	2,523	3,340	3,366	5,630	n.a.	n.a.	n.a.	n.a.	n.a.
United Kingdom	53,302	52,291	49,687	71,213	59,344	66,498	65,306	61,897	96,765	81,138

Note: For SE the data refer only to gross issues of long-term debt securities by non-financial companies denominated in SEK issued on the Swedish market. For CZ, until 2006 the data include some inseparable non-banking financial institutions and only issues having ISIN. For 2007 non-financial companies and all issues, i.e. including those not having ISIN, are covered.

Table 8 Total assets under management by insurance corporations and by investment funds

(EUR millions)

	Total assets under management by insurance corporations					Total assets under management by investment funds				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	140,040	163,653	184,976	201,867	n.a.	84,306	94,872	110,098	124,135	118,106
Bulgaria	n.a.	325	399	565	784	n.a.	n.a.	n.a.	n.a.	459
Czech Republic	6,856	8,499	9,739	10,717	11,801	3,431	3,699	5,055	2,916	4,268
Denmark	107,602	124,227	146,128	152,715	162,563	49,306	77,187	106,525	124,016	136,859
Germany	1,059,584	1,092,121	1,138,556	1,023,248	1,018,369	826,764	861,844	975,443	1,028,641	1,053,561
Estonia	233	311	451	604	827	158	313	615	982	1,286
Ireland	74,171	91,699	121,278	n.a.	n.a.	224,701	281,546	393,527	482,305	516,344
Greece	10,153	10,937	15,496	17,523	18,698	14,342	15,908	22,490	17,431	13,162
Spain	181,759	204,121	228,274	242,924	248,707	178,858	207,570	239,726	305,716	298,487
France	945,942	1,029,348	1,151,971	1,280,524	1,356,508	703,192	799,207	943,231	1,156,276	1,200,624
Italy	383,770	444,724	507,541	575,136	531,225	318,895	320,709	349,934	340,691	290,859
Cyprus	3,934	3,548	4,650	n.a.	n.a.	463	422	692	1,005	1,190
Latvia	211	219	264	343	468	39	52	87	80	222
Lithuania	378	438	536	750	922	0	35	107	230	343
Luxembourg	33,448	39,503	49,677	61,224	n.a.	818,462	974,685	1,425,804	1,725,809	1,933,406
Hungary	4,405	5,385	6,199	7,398	8,527	3,458	3,236	5,273	7,370	9,446
Malta	588	771	981	1,151	1,356	849	992	1,334	1,421	1,159
Netherlands	293,584	315,977	345,297	331,923	342,113	97,178	98,236	105,241	113,842	100,116
Austria	63,833	68,280	76,760	82,522	88,005	108,931	122,619	153,342	165,686	161,298
Poland	12,443	17,419	21,322	26,167	32,607	6,989	9,206	15,951	25,887	37,356
Portugal	32,471	36,024	43,290	49,242	52,880	28,456	31,261	36,694	40,566	39,606
Romania	463	611	991	1,459	1,646	634	920	1,513	2,652	3,500
Slovenia	2,036	2,345	2,707	3,293	4,332	1,294	1,986	2,220	2,943	4,140
Slovakia	1,954	2,449	2,944	4,214	4,853	n.a.	773	1,512	1,759	2,107
Finland	41,729	43,536	49,613	52,469	56,745	15,429	21,517	32,981	45,850	49,245
Sweden	195,044	213,955	239,974	267,355	276,341	92,638	117,402	145,302	161,067	165,057
United Kingdom	2,139,140	2,296,435	2,779,558	3,195,886	2,739,632	342,273	389,058	505,391	608,629	637,369
MU13	3,262,520	3,542,268	3,915,436	3,921,895	3,717,582	3,420,806	3,831,961	4,790,731	5,549,891	5,778,955
EU27	5,735,772	6,216,860	7,129,573	7,591,220	6,959,908	3,921,044	4,435,255	5,580,087	6,487,906	6,779,576

Note: For CZ, total assets under management by investment funds include money market funds for the period 2003 to 2005.

Table 9 Total assets under management by pension funds

(EUR millions)

	2003	2004	2005	2006	2007
Belgium	10,833	11,677	13,400	14,300	n.a.
Bulgaria	n.a.	406	571	778	1,190
Czech Republic	2,532	3,352	4,256	5,308	6,279
Denmark	45,682	50,868	56,664	59,486	60,665
Germany	142	260	330	512	602
Estonia	71	172	329	531	781
Ireland	55,451	62,334	74,681	0	0
Greece	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	56,997	63,787	74,687	82,661	88,050
France	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	17,171	17,957	18,987	20,909	25,987
Cyprus	n.a.	n.a.	n.a.	n.a.	n.a.
Latvia	28	37	53	76	102
Lithuania	0	40	128	283	452
Luxembourg	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	4,031	6,063	7,682	9,551	11,318
Malta	0	0	0	0	0
Netherlands	475,488	522,268	621,829	696,271	778,999
Austria	9,111	10,126	11,549	12,497	12,917
Poland	9,505	15,202	22,303	30,429	39,093
Portugal	16,264	16,224	19,317	21,185	22,371
Romania	n.a.	n.a.	n.a.	n.a.	4
Slovenia	348	535	728	961	1,087
Slovakia	n.a.	n.a.	240	812	2,287
Finland	0	0	0	0	0
Sweden	63,877	72,168	83,080	91,257	28,597
United Kingdom	1,450,265	1,605,100	2,059,718	2,404,650	2,061,355
MU13	641,805	705,168	835,508	849,296	930,013
EU27	2,217,796	2,458,576	3,070,533	3,452,456	3,142,137

Note: For SE total assets under management by pension funds include approximations about the occupational pensions managed by life insurance companies for the period 2003 to 2006.

Table 10 Number of branches of CIs from EU countries and third countries

	Number of branches of CIs from EU countries					Number of branches of CIs from third countries				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	38	36	41	46	49	10	9	9	8	9
Bulgaria	n.a.	4	4	2	3	n.a.	2	2	2	2
Czech Republic	8	9	12	13	14	1	0	0	0	0
Denmark	16	15	17	17	18	2	2	2	3	4
Germany	64	62	69	68	66	20	21	20	18	18
Estonia	1	3	6	7	8	0	0	0	0	0
Ireland	31	31	31	31	31	1	1	1	1	1
Greece	14	19	19	20	22	6	4	4	4	5
Spain	49	53	57	62	71	8	8	8	7	9
France	52	55	55	59	64	28	27	26	25	24
Italy	49	50	58	65	72	13	10	10	9	10
Cyprus	5	4	4	4	9	19	19	18	17	16
Latvia	1	1	1	3	2	0	0	0	0	0
Lithuania	2	2	2	2	3	1	0	0	0	0
Luxembourg	41	38	36	34	35	9	9	8	8	8
Hungary	0	0	3	4	6	0	0	0	0	0
Malta	0	0	0	0	1	2	2	2	2	2
Netherlands	20	22	22	16	18	8	7	6	5	5
Austria	18	18	25	25	26	0	0	1	1	1
Poland	0	3	7	12	14	0	0	0	0	0
Portugal	22	26	24	23	23	1	1	1	1	1
Romania	7	6	5	6	10	1	1	1	1	0
Slovenia	1	2	3	2	3	0	0	0	0	0
Slovakia	3	3	5	7	10	0	0	0	0	0
Finland	18	19	19	22	21	0	1	1	1	4
Sweden	15	17	18	16	13	3	3	2	3	3
United Kingdom	82	81	81	83	81	97	91	89	89	93
MU13	417	431	459	473	501	104	98	95	88	95
EU27	557	579	624	649	693	230	218	211	205	215

Table 11 Total assets of branches of CIs from EU and third countries

(EUR millions)

	Total assets of branches of CIs from EU countries					Total assets of branches of CIs from third countries				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	25,909	29,225	29,348	32,080	40,456	12,928	11,901	20,235	30,103	49,320
Bulgaria	n.a.	741	736	*	1,237	n.a.	*	*	*	*
Czech Republic	7,222	8,656	9,694	10,658	12,419	225	0	0	0	0
Denmark	24,575	26,533	34,932	40,554	47,235	*	*	*	148	1,429
Germany	67,391	69,962	79,512	105,634	137,189	20,464	23,257	23,834	23,228	24,402
Estonia	*	806	1,161	1,522	2,303	0	0	0	0	0
Ireland	69,773	80,804	94,974	123,447	136,942	*	*	*	*	*
Greece	12,769	22,634	28,089	31,287	36,200	6,383	394	400	471	643
Spain	85,608	121,770	154,914	183,879	223,568	2,885	3,253	4,304	5,068	5,750
France	99,927	110,545	133,932	118,653	132,949	11,351	13,196	12,025	12,523	15,277
Italy	84,187	105,320	132,828	166,511	307,178	9,731	6,357	6,139	6,853	8,764
Cyprus	929	476	1,044	733	5,089	2,602	2,798	3,275	3,284	5,632
Latvia	*	*	*	1,398	*	0	0	0	0	0
Lithuania	*	*	*	*	1,904	*	0	0	0	0
Luxembourg	89,884	108,821	128,504	111,420	125,036	5,116	5,902	16,973	19,721	20,287
Hungary	0	0	112	1,210	1,730	0	0	0	0	0
Malta	0	0	0	0	*	*	*	*	*	*
Netherlands	26,090	30,283	33,248	44,040	53,455	1,582	1,198	1,274	946	1,081
Austria	3,363	4,298	6,340	8,285	10,339	0	0	*	*	*
Poland	0	834	1,419	5,527	9,626	0	0	0	0	0
Portugal	16,923	20,340	19,542	24,170	29,755	*	*	*	*	*
Romania	1,098	1,900	2,560	2,910	3,475	*	*	*	*	0
Slovenia	*	*	522	*	242	0	0	0	0	0
Slovakia	3,057	3,989	8,059	6,284	9,852	0	0	0	0	0
Finland	13,030	14,364	12,668	13,611	14,941	0	*	*	*	343
Sweden	33,403	43,788	55,034	65,115	72,256	66	111	*	1,552	4,089
United Kingdom	1,344,239	1,542,638	1,810,942	2,026,621	2,392,061	1,121,055	1,156,323	1,447,318	1,620,137	1,874,677
MU13	595,062	718,681	854,421	963,127	1,248,250	70,738	65,764	85,558	99,251	126,152
EU27	2,010,932	2,350,438	2,782,159	3,127,403	3,810,592	1,199,802	1,231,576	1,547,483	1,734,366	2,025,848

* Where the number of branches is less than three, the underlying data are not disclosed for confidentiality reasons.

Table 12 Number of subsidiaries of CIs from EU and third countries

	Number of subsidiaries of CIs from EU countries					Number of subsidiaries of CIs from third countries				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	21	20	23	20	21	6	6	5	5	6
Bulgaria	n.a.	14	14	16	13	n.a.	5	4	3	3
Czech Republic	18	19	17	18	18	4	3	3	3	2
Denmark	10	8	7	6	6	1	3	3	3	3
Germany	20	21	22	22	21	25	21	19	19	18
Estonia	3	3	4	4	5	0	0	0	0	0
Ireland	20	21	22	21	24	11	11	10	10	13
Greece	3	5	5	10	7	1	0	0	0	1
Spain	43	42	41	41	37	11	9	8	7	10
France	126	108	107	100	97	58	58	52	53	54
Italy	7	6	10	13	14	2	3	3	3	3
Cyprus	9	9	9	8	7	2	1	1	1	1
Latvia	3	5	6	6	6	4	3	3	4	5
Lithuania	3	5	5	5	5	2	0	0	0	0
Luxembourg	80	79	75	75	74	35	32	32	34	34
Hungary	22	20	20	20	21	3	3	3	3	3
Malta	8	8	9	9	10	1	1	2	1	3
Netherlands	13	12	12	12	13	16	16	16	16	14
Austria	12	11	14	15	15	11	8	9	8	11
Poland	35	32	33	31	32	10	8	9	9	8
Portugal	11	9	9	9	9	4	4	4	3	3
Romania	13	16	18	22	22	2	2	2	2	2
Slovenia	5	5	6	8	8	0	0	0	0	0
Slovakia	14	15	15	14	14	1	1	1	1	1
Finland	3	5	5	5	6	0	0	1	1	2
Sweden	9	9	11	8	7	3	3	3	2	1
United Kingdom	14	19	17	19	16	75	70	69	69	74
MU13	364	344	351	351	346	180	168	159	159	169
EU27	525	526	536	537	528	288	271	262	260	275

Table 13 Total assets of subsidiaries of CIs from EU countries and third countries

(EUR millions)

	Total assets of subsidiaries of CIs from EU countries					Total assets of subsidiaries of CIs from third countries				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	150,464	167,047	191,698	212,622	227,327	6,887	3,835	3,809	4,159	4,741
Bulgaria	n.a.	9,763	12,124	16,772	23,588	n.a.	284	335	445	668
Czech Republic	63,122	70,019	83,406	94,202	115,743	4,265	4,497	4,930	6,428	*
Denmark	100,871	87,858	103,034	110,920	122,973	*	9,328	11,276	14,027	17,306
Germany	227,597	254,257	549,261	556,579	591,518	65,009	42,868	74,233	106,216	84,880
Estonia	5,622	7,557	10,573	13,620	18,047	0	0	0	0	0
Ireland	132,402	182,235	234,560	264,732	488,002	0	0	0	0	0
Greece	27,730	38,226	49,401	85,950	52,052	*	0	0	0	*
Spain	63,330	66,960	82,473	91,240	102,580	14,717	5,678	4,851	5,684	9,613
France	288,052	301,045	394,293	439,467	575,786	38,905	45,150	51,031	57,035	140,992
Italy	26,389	29,115	96,287	210,779	257,192	*	3,280	3,096	3,975	5,335
Cyprus	5,346	8,272	12,338	18,533	18,562	*	*	*	*	*
Latvia	1,857	4,432	7,795	12,248	15,661	1,694	459	481	1,056	2,209
Lithuania	3,300	6,309	9,797	13,304	18,034	*	0	0	0	0
Luxembourg	493,547	509,080	563,136	615,839	653,366	27,350	30,193	40,565	47,501	71,215
Hungary	29,400	36,287	41,628	48,783	57,216	1,641	2,027	2,230	2,800	3,285
Malta	6,959	7,854	8,803	11,400	14,090	*	*	*	*	2,003
Netherlands	126,420	150,844	176,777	205,408	292,890	18,874	19,733	23,345	26,256	39,886
Austria	107,734	116,465	133,849	141,832	181,486	4,108	2,603	3,880	4,098	47,785
Poland	64,995	81,190	93,445	109,537	136,960	10,518	12,714	14,118	15,930	19,911
Portugal	72,796	67,356	58,962	61,082	68,146	2,563	2,540	3,047	3,139	3,208
Romania	6,200	10,537	17,690	40,931	55,716	*	*	*	*	*
Slovenia	3,937	4,656	6,230	10,075	12,155	0	0	0	0	0
Slovakia	19,126	24,291	27,244	32,212	38,384	*	*	*	*	*
Finland	716	111,950	124,034	130,436	172,567	0	0	*	*	*
Sweden	1,109	1,561	2,011	2,500	2,653	909	974	1,666	*	*
United Kingdom	60,777	294,869	315,490	367,051	311,113	543,044	572,305	734,355	842,324	807,339
MU13	1,721,114	1,999,236	2,660,961	3,026,041	3,675,067	180,414	155,880	207,998	258,292	468,508
EU27	2,089,800	2,650,035	3,406,338	3,918,054	4,623,807	747,335	761,859	983,329	1,149,404	1,335,844

* Where the number of subsidiaries is less than three, the underlying data are not disclosed for confidentiality reasons.

Table 14 Population and GDP at market price

	Population (thousands, number end of period)					Gross domestic product at market price (EUR millions)				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	10,373	10,417	10,474	10,543	10,622	274,726	289,690	301,966	316,622	330,800
Bulgaria	7,801	7,761	7,719	7,699	7,640	17,767	19,875	21,882	25,238	28,899
Czech Republic	10,202	10,207	10,234	10,267	10,318	80,924	88,262	100,190	113,459	127,498
Denmark	5,390	5,403	5,419	5,437	5,460	188,500	197,070	207,756	220,069	227,665
Germany	82,520	82,501	82,464	82,366	82,262	2,163,800	2,210,900	2,243,200	2,321,500	2,422,900
Estonia	1,356	1,351	1,348	1,345	1,342	8,693	9,582	11,210	13,234	15,547
Ireland	3,991	4,059	4,149	4,253	4,343	139,413	148,502	161,498	174,705	187,097
Greece	11,024	11,062	11,104	11,149	11,172	171,258	185,225	198,609	213,985	228,949
Spain	42,005	42,692	43,398	44,068	44,874	782,929	841,042	908,450	980,954	1,049,848
France	62,042	62,445	62,818	63,195	63,573	1,594,814	1,660,189	1,726,068	1,807,462	1,892,241
Italy	57,605	58,175	58,607	58,942	59,319	1,335,354	1,391,530	1,428,375	1,479,981	1,535,540
Cyprus	723	740	758	773	788	11,761	12,654	13,462	14,394	15,490
Latvia	2,325	2,313	2,300	2,288	2,275	9,978	11,176	13,012	16,047	19,936
Lithuania	3,454	3,436	3,414	3,394	3,376	16,452	18,126	20,673	23,721	28,018
Luxembourg	452	458	465	473	480	25,726	27,439	30,032	33,854	36,137
Hungary	10,130	10,107	10,087	10,071	10,056	74,682	82,326	88,863	90,045	101,077
Malta	398	401	403	407	409	4,421	4,503	4,764	5,075	5,399
Netherlands	16,223	16,276	16,317	16,341	16,377	476,945	491,184	508,964	534,324	559,537
Austria	8,118	8,175	8,233	8,282	8,316	223,302	232,782	244,453	257,294	270,837
Poland	38,195	38,180	38,161	38,132	38,116	191,644	204,237	244,420	272,131	307,345
Portugal	10,441	10,502	10,549	10,584	10,608	138,582	144,128	149,123	155,446	162,756
Romania	21,734	21,673	21,624	21,577	21,512	52,613	60,842	79,587	97,718	121,431
Slovenia	1,996	1,998	2,003	2,010	2,026	24,716	26,677	28,243	30,448	33,542
Slovakia	5,379	5,382	5,387	5,391	5,397	29,465	34,023	38,480	44,571	54,827
Finland	5,213	5,227	5,245	5,266	5,288	145,938	152,345	157,335	167,041	179,734
Sweden	8,958	8,994	9,030	9,081	9,148	275,657	287,689	294,673	313,327	331,952
United Kingdom	59,554	59,834	60,218	60,587	60,783	1,615,984	1,745,051	1,804,586	1,912,656	2,018,828
MU13	312,002	313,986	315,827	317,473	319,259	7,497,503	7,801,633	8,086,317	8,473,617	8,889,919
EU27	487,601	489,769	491,930	493,921	495,879	10,076,044	10,577,049	11,029,876	11,635,302	12,293,830

3 METHODOLOGICAL NOTE ON THE STRUCTURAL INDICATORS

Data included in Annex II 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 exchange rates applied for the conversion of data from non-euro countries are the official exchange rates referring to the last day of trading for each of the reported years. 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; and
- other sources, such as commercial databases.

The ECB's Directorate General Statistics was entrusted with establishing 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 (as amended).

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) 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 or not they are subsidiaries of foreign banks, and 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 (as amended).

NUMBER OF BRANCHES OF CREDIT INSTITUTIONS (TABLE 1)

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 aforementioned ECB Regulation.

TOTAL ASSETS OF CREDIT INSTITUTIONS (TABLE 2)

The set of credit institutions considered in the calculation of this indicator is consistent with the definition of the indicator in Table 1.

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 (regardless 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 aforementioned ECB Regulation.

NUMBER OF EMPLOYEES OF CREDIT INSTITUTIONS (TABLE 2)

The indicator refers to the average number of staff employed during the reference year by the credit institutions mentioned in Table 1. Employees of financial institutions which are not themselves credit institutions are excluded, even if these institutions belong to the same group as the credit institution.

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 Table 1. The set of five largest credit institutions may vary over time.

The ratio is calculated on the basis of a sub-set of the ECB list of monetary financial institutions (MFI) used for monetary policy purposes. The sub-set of the MFI list concerns credit institutions only. This list follows a host country residence approach and is on a non-consolidated basis, meaning that banking subsidiaries and foreign branches of a particular credit institution are considered to be separate credit institutions resident in another EU Member State. Domestic banks' branches and subsidiaries resident outside the EU are not captured, while domestic branches and subsidiaries of credit institutions resident outside the EU are included.

HERFINDAHL INDEX (TABLE 3)

A Member State's Herfindahl index is calculated as the sum of the squares of all the credit institutions' market shares in terms of total assets. The set of credit institutions and the definition of assets used in the calculation are consistent with the definitions used for the indicators in Table 1.

The ratio is calculated on the basis of a sub-set of the ECB list of monetary financial institutions (MFI) used for monetary policy purposes. The sub-set of the MFI list concerns credit institutions only. This list follows a host country residence approach and is on a non-consolidated basis, meaning that banking subsidiaries and foreign branches of a particular credit institution are considered to be separate credit institutions resident in another EU Member State. Domestic banks' branches and subsidiaries resident outside the EU are not captured, while domestic

branches and subsidiaries of credit institutions resident outside the EU are included.

NUMBER OF BRANCHES/SUBSIDIARIES OF CREDIT INSTITUTIONS FROM EU/THIRD COUNTRIES (TABLES 10 TO 13)

Two distinctions are made in these tables. The first is made according to the form of presence 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 distinction is made according to the nationality of the foreign credit institution (i.e. either EU or third country).

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.

If less than three institutions are present, the underlying figures for total assets are not shown.

