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EU BANKING STRUCTURES

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ABBREVIATIONS

COUNTRIES

BE	Belgium	LT	Lithuania *
BG	Bulgaria *	LU	Luxembourg
CZ	Czech Republic *	HU	Hungary *
DK	Denmark	MT	Malta *
DE	Germany	NL	Netherlands
EE	Estonia *	AT	Austria
IE	Ireland	PL	Poland *
GR	Greece	PT	Portugal
ES	Spain	RO	Romania *
FR	France	SI	Slovenia *
IT	Italy	SK	Slovakia *
CY	Cyprus *	FI	Finland
LV	Latvia *	SE	Sweden
		UK	United Kingdom

OTHERS

EU (EU27)	European Union (27 countries after enlargements in 2004 and 2007)
EU15	European Union (15 countries before enlargement on 1 May 2004)
MU16	Monetary Union (16 countries participating in the euro area as at 31 December 2009)
NMS	New Member States (12 countries, marked above with *)
RoW	Rest of the world (non-EU27 countries)



EXECUTIVE SUMMARY

This report analyses the structural developments that took place in the EU banking sector in the period from 2008 to 2009, as well as pertinent regulatory changes. The analysis is based on a wide range of indicators and has benefited from the exchange and assessment of qualitative information within 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 overview chapter starts with a section on regulatory developments focusing on the common global approach taken in response to the financial crisis. The planned reforms aim to strengthen the institutional framework for financial stability and enhance the macro-prudential approach to supervision, while improving the prudential regulation of banks. In the EU, the reform of the financial supervisory architecture will have a significant impact on banking supervision and coordination between the national authorities. The amendments that will be made to the Capital Requirements Directive (CRD) will also restrict risk exposures and improve the supervision of cross-border banks.

With regard to the structural trends of 2008-09, longer-term growth in bank intermediation was disrupted as the financial crisis intensified. Central banks and governments reacted promptly to support the functioning of their financial systems and these actions helped to revive confidence in the markets in the course of 2009. The recovery of lending has, however, been uneven across banks. A number of uncertainties still prevail in the markets, and have even heightened in the course of 2010 with regard to sovereign credit risk. Although some institutions have started to reimburse or have already fully reimbursed the capital support granted by the public authorities, others are continuing to receive public support. The strategies guiding the gradual exit and the related restructuring plans will continue to have an impact on their activities in the future.

Consolidation in the banking sector and a more efficient use of resources, as measured by selected capacity indicators, has continued. Market concentration has remained at the level attained in previous years, with small countries typically having more concentrated markets than large ones. Domestic banks continue to dominate the markets in EU Member States and have marginally increased their share at the expense of foreign branches. Significant differences between countries continue to exist, with subsidiaries with a euro area parent being prevalent in the New Member States (NMS).

The financial crisis has had a significant effect on cross-border activities, including intermediation and merger and acquisition (M&A) activity. The decline nevertheless came to a halt in 2009, and there is reason to believe that these activities will pick up again quickly once economic growth resumes.

The second chapter of the report discusses the future evolution of the EU banking sector in the aftermath of the recent financial crisis. This special feature is based on interviews held in workshops with relevant interlocutors in EU banks and other financial firms, banking and financial market associations, rating agencies and consulting companies, and with experts from academia.

The first section of Chapter 2 examines the future of banking activities, business models and strategies. The diversified banking model has shown to have acted as a shock absorber in times of stress, and market participants expect it to increase in importance at the cost of specialised banking models. At the same time, owing to the drop in profitability, banks are likely to search for additional profits and economies of scale in selected areas by focusing on their core markets, activities and clients.

The second section takes a closer look at the future of bank capital and funding structures. The regulatory reform will inevitably result in funding structures moving from volatile and

short-term sources towards more stable and long-term sources, such as capital and deposits. However, the crisis has also increased investors' awareness of banks' capital endowments. It is thus likely that market participants will end up requesting additional buffers on top of the minimum regulatory requirements. The limited funding resources together with the increased demand are likely to result in increased competition and funding costs in the medium term.

The special feature concludes that the consequences of the expected developments for financial stability are expected to be beneficial, although a number of uncertainties, in particular as to regulatory developments, may have an impact on the process. For example, the implementation of the new regulatory framework is expected to increase the resilience of the funding structures of European banks, but rising funding costs may also encourage risk-taking behaviour by banks seeking to restore profitability. Finally, diversified banks appear to be individually more resilient, yet a wide spectrum of business models may make the system as a whole more stable.

I OVERVIEW OF DEVELOPMENTS IN EU BANKING STRUCTURES

This chapter analyses major structural and regulatory developments in the EU banking sector in the period from 2008 to 2009.¹ The bankruptcy of Lehman Brothers in autumn 2008 triggered a general loss of confidence in financial markets and institutions and was followed by concerted action by governments and central banks at the international level to support the financial system. The tension began to decrease gradually in 2009. Banks took recourse to government measures and, in some Member States, exit from them has already started. The recovery has, however, been uneven across banks and Member States. Uncertainties still prevail in the markets and concerns about sovereign credit risk exacerbated this in the first half of 2010.

Adapting the banking system structure in line with the new business and regulatory environment is a lengthy process.² In terms of banking structures, the financial crisis seems to have had a clear impact on the aggregate level of assets and on cross-border activities, where long-term growth trends have been interrupted. As early as 2009, however, the first indications of a reversal towards the trend seen prior to the crisis were emerging. The trend towards higher consolidation and operational efficiency continued to prevail, while market concentration remained roughly at levels reached in previous years.

The chapter starts by briefly describing the regulatory developments both at the EU and international level. It then analyses the latest structural developments in the banking sector in terms of intermediation. The next two sections move from describing the size of activities to the notion of sectoral efficiency, which is influenced by consolidation and M&A activity and expresses itself in the resulting degrees of concentration, competition and operational efficiency. A section on cross-border activities focuses on financial integration in the EU. The final section concludes and provides a brief outlook for the future.

It should be noted that the EU banking structures report 2010 was finalised before the agreement

on the Basel III framework. Consequently, these regulatory developments are not discussed in the report.

1.1 REGULATORY INITIATIVES

To address the shortcomings revealed by the crisis, the G20 Heads of State committed to enhancing regulation and supervision in a globally consistent way. The need to strengthen the institutional framework led to the expansion of the memberships of the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS). In addition, the G20 leaders committed themselves to enhancing the macro-prudential approach to supervision through the extension of the scope of regulation and oversight to all systemically important financial institutions, markets and instruments. In the EU, a profound change in the architecture of financial supervision will take place through the establishment of: (i) a European Systemic Risk Board (ESRB) to oversee the stability of the financial system as a whole; and (ii) a European System of Financial Supervisors (ESFS) to increase supervisory convergence and cooperation in the supervision of individual institutions.³

As regards banking regulation, the G20 leaders have agreed to enhance the quantity and quality of capital, and to mitigate the pro-cyclicality

1 While the chapter focuses on the period from 2008 to 2009, in certain cases (i.e. regulatory developments and M&As) the analysis covers the period up to mid-2010.

2 The statistical data used for the structural analysis of the banking sector mainly draws from on-balance sheet information (assets and liabilities) and not income statements. The effect of exchange rate movements during the period of observation on nominal data equally needs to be disentangled from changes in structural trends. In particular, the pound sterling, the Polish zloty and the Swedish krona decreased significantly between the data points in 2007 and 2008, which decreases the nominal euro value of the balance sheet data items for the UK, PL and SE for 2008. This movement was partially offset in the data for 2009.

3 See the European Commission's proposal for a Regulation on Community macro prudential oversight of the financial system and establishing a European Systemic Risk Board (COM(2009) 499 final) and the proposals for a Regulation on establishing a European Banking Authority (COM(2009) 501 final), a European Insurance and Occupational Pensions Authority (COM(2009) 502 final) and a European Securities and Markets Authority (COM(2009) 503 final).

of capital requirements. Furthermore, they committed to discouraging excessive leverage so as to contain unsustainable balance sheet growth, and to developing a global framework for liquidity risk requirements. They also decided to refine the incentives for the management of securitisation risks and to reform compensation practices to curb excessive risk-taking. Finally, they agreed that cross-border resolution of and the moral hazard risks posed by systemically important financial institutions should be addressed.⁴ In the process of putting these commitments into practice, in July 2009 the BCBS published a set of enhancements to the Basel II capital framework, enhancing the coverage of risks such as market risk, incremental default risk in the trading book and risks relating to certain types of securitisation. Supervisory review processes and disclosure requirements were also addressed.⁵ Furthermore, in December 2009 the BCBS published consultation documents on the quality of capital, the leverage ratio, and frameworks for liquidity risk and counter-cyclical capital buffers. In July 2010 the Governors and Heads of Supervision reached broad agreement on the overall design of the capital and liquidity reform package. In particular, this includes the definition of capital, the treatment of counterparty credit risk, the leverage ratio, and the global liquidity standard.⁶ The general framework will be further detailed and finalised by the end of the year.

In the EU, the European Commission is incorporating the BCBS enhancements into Community Law by amending the Capital Requirements Directive (CRD). The amendment in May 2009 already addressed large exposures, hybrid capital, management of risks related to liquidity and to securitisation exposures, and supervisory cooperation, among other things. The European Commission's proposal of July 2009 for further amendments to the CRD includes higher capital requirements for the trading book and re-securitisations, remuneration policies and the disclosure of securitisation. In addition, the Commission conducted a public consultation in the first quarter of 2010 on possible amendments related

to liquidity standards, the definition of capital, the leverage ratio, counterparty credit risk, countercyclical measures, systemically important financial institutions, and a single rule book in banking. Based on the feedback received from stakeholders and depending on the discussions at the international level, a legislative proposal is expected in the second half of 2010.

Finally, 2008 and 2009 also saw important developments in the areas of crisis management and resolution in the EU. With regard to the former, a Memorandum of Understanding on cross-border financial stability among EU supervisory authorities, finance ministries and central banks entered into force in June 2008.⁷ As to the latter, the Directive on the deposit guarantee schemes was amended in March 2009, following a commitment made by the EU Finance Ministers in October 2008. Among other things, the amendment increased the minimum level of coverage to €50,000 as a first step, to be further increased to €100,000 by the end of 2010.⁸ The financial crisis also gave new impetus to the work on cross-border crisis management and resolution. In this regard, in autumn 2009 the European Commission consulted the market on a new EU framework for crisis management in the banking sector that would comprise tools for early intervention, bank resolution measures and insolvency procedures in a cross-border context, and published its proposal on an EU network of bank resolution funds in May 2010.

1.2 BANK INTERMEDIATION

The growth trend of the total assets of credit institutions, insurance corporations, investment and pension funds was interrupted in the second

4 See, in particular, the leaders' statements at the Pittsburgh and Toronto Summits on 24-25 September 2009 and 26-27 June 2010 respectively.

5 Additional adjustments to Basel II were presented in June 2010.

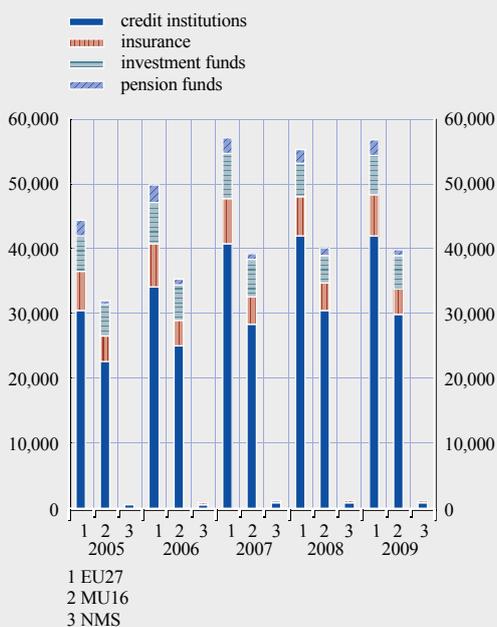
6 See <http://www.bis.org/press/p100726.htm>.

7 See <http://www.ecb.europa.eu/pub/pdf/other/mou-financialstability2008en.pdf>.

8 This further increase was confirmed in the European Commission's proposal of July 2010 for a thorough revision of the Directive on deposit guarantee schemes.

Chart 1 Total assets of credit institutions, insurance corporations, pension funds and investment funds

(EUR billions)

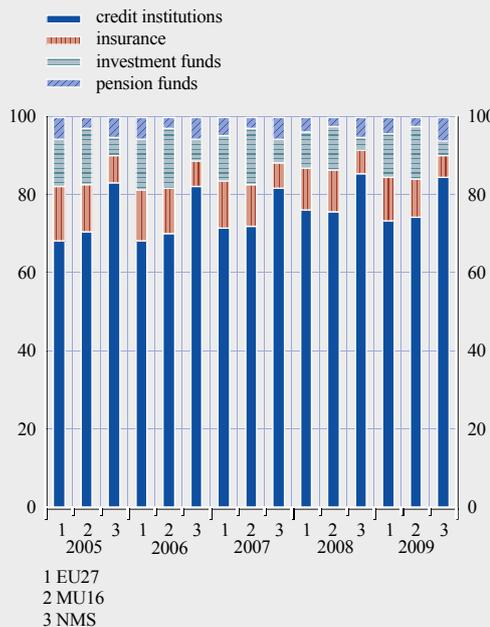


Source: ECB.

Note: Investment funds comprise bond, equity, mixed, real estate and other funds, but do not include money market funds.

Chart 2 Distribution of assets for credit institutions, insurance corporations, pension funds and investment funds

(percentages)



Source: ECB.

Note: Investment funds comprise bond, equity, mixed, real estate and other funds, but do not include money market funds.

half of 2008 (see Chart 1).⁹ Bank assets still continued to grow in 2008, but the trend halted in many countries in the course of 2009, with the exception of assets in the NMS which continued to grow throughout the period. In contrast, the assets of insurance, pension and especially investment funds began to decrease in 2008 as a consequence of declining asset prices and de-leveraging induced by the financial crisis, falling to levels seen in 2006. Following the recovery in bond and stock markets in the second quarter of 2009, the assets of these institutions began to increase again in almost all countries.¹⁰ Although the share of banks within the EU aggregate declined in 2009, they clearly remained the dominant suppliers of financing among this category of institutions, their assets representing 75% of the combined assets of banks, insurance corporations and pension and investment funds in the EU (see Chart 2).¹¹

Despite the financial crisis and the stagnating assets in nominal terms, bank intermediation in relation to GDP continued to increase on average in the EU, mainly reflecting the decline experienced in GDP (see Chart 3). Asset growth remained strong in relative terms in the NMS,¹² but also in Denmark, Ireland, Portugal, Finland, Sweden and the United Kingdom. Many banks

9 These assets cover the assets of credit institutions, insurance corporations, investment and pension funds established in the EU, as reported in Tables 2, 8 and 9 in the Annex.

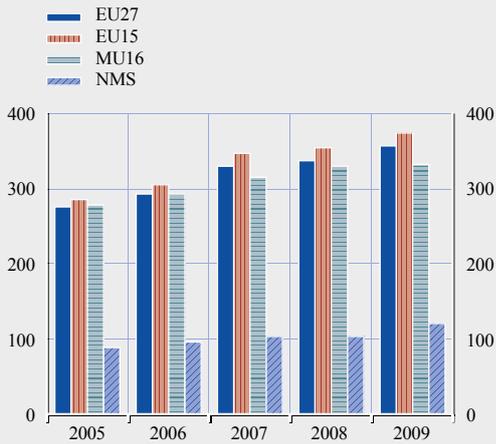
10 For a discussion on developments in the bond and stock markets in 2009, see, for example, *Financial Stability Review*, ECB, December 2009, p. 69 onwards.

11 Another way to consider the importance of banks as suppliers of finance is to compare the supply of credit with the size of capital markets. In this regard, bank credit comprises half of the sum of credit, stock market capitalisation and outstanding debt securities in the EU. The corresponding figure for the United States is around one quarter (see, for example, *Statistics Pocket Book*, ECB, July 2010).

12 An exception was Slovakia, where the ratio of assets to GDP declined by around a fifth between 2007 and 2009.

Chart 3 Total assets of credit institutions

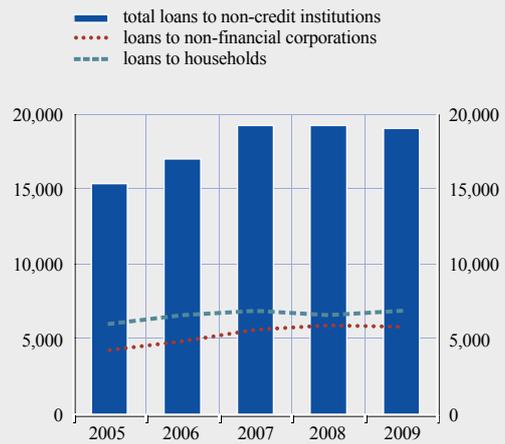
(as a percentage of GDP)



Source: ECB.

Chart 4 Total loans to non-credit institutions in the EU

(EUR billions)



Source: ECB.

in the NMS in particular had limited exposures to foreign structured financial products, which originally left them relatively isolated from the problems associated with these products. The ongoing catch-up process following accession to the EU, visible in significantly lower asset-to-GDP ratios than the EU average, also contributed to the strong and persistent growth in bank assets in many of the NMS.¹³

The stock of total loans to non-credit institutions in the EU stagnated in 2008 and decreased slightly in 2009 (see Chart 4).¹⁴ Loans to non-financial corporations, however, continued to grow in 2008 in the EU, while lending to households decreased. In 2009 the roles reversed with lending to households resuming and growing by almost 5%, while corporate lending decreased slightly. The contribution of the NMS to total loan growth was again significant (see Chart 5). Loan growth in the NMS was strongest in the household sector, standing at 22% in 2008 and 8% in 2009. Growth in loans to non-financial corporations also began to decline in the NMS in 2009.

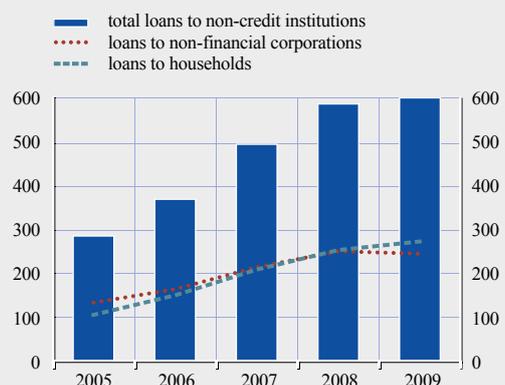
According to the ECB's Bank Lending Survey, the reduction in corporate lending in MU16 is mainly attributable to a low demand for loans.

In particular, the negative influence of weak fixed investment, scarce M&A activity and the availability of alternative sources of financing¹⁵ on the demand for corporate loans has been

- 13 The EU27 and NMS averages for 2009 amounted to around 360% and 120% respectively. Among the EU15, Greece, Finland and Italy have banking sectors that are less than three times their respective GDP.
- 14 By contrast, loan-to-GDP ratios resumed growth in 2009, reflecting the decline in GDP.
- 15 Internal financing, loans from non-banks, issuance of debt securities and issuance of equity.

Chart 5 Total loans to non-credit institutions in the NMS

(EUR billions)



Source: ECB.

stronger than the increasingly positive impact of debt restructuring needs. In addition to demand-related factors, credit standards for non-financial corporations tightened during 2008 and 2009. However, the pace of tightening has diminished since the first quarter of 2009, nearing a reversal to net easing by the end of the year.¹⁶

In the category of lending to households, loans for housing purchase were severely affected in 2008, with Belgium and Ireland recording the most significant declines in 2008.¹⁷ This decrease can be attributed to a tightening of the credit standards on the supply side, but also to deteriorated housing market conditions and consumer confidence. Altogether, lower demand rather than supply seems to have been the main factor behind the decline in loans to households and specifically for housing purchase. Housing market prospects turned positive in 2009 and the tightening of credit standards started to decline in the second half of 2009, largely owing to banks' improved access to finance outweighing the increased cost of capital. Loans for housing purchase seem to have revived during 2009, although the recovery has been uneven across countries. Loans still continued to decline in Belgium, Ireland and in the Baltic countries. By contrast, a significant increase took place in

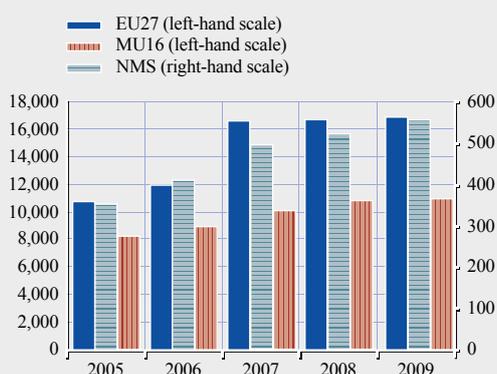
the United Kingdom, despite the total amount still being below the level of 2007.

On the liabilities side, total deposits of banks continued to increase in 2008 and 2009, although at a lower pace (see Chart 6).¹⁸ In the MU16, only Luxembourg and Ireland reported a decline in 2008. In 2009 there was greater heterogeneity, with deposits also declining in Belgium, Ireland, Greece and the Netherlands. Of these, Greece and the Netherlands had recorded strong deposit growth alongside Spain, Portugal and Finland in 2008.

The increase in deposits was partly a consequence of an active effort by banks to increase the share of more stable funding and reduce their dependence on wholesale markets (see Section 2.2 of the special feature). The elevated interest rates in relation to other investment opportunities have indeed attracted depositors in some Member States.¹⁹ In some countries, banks also profited to a large extent from the increased risk awareness of households that shifted funds from non-banking institutions to banks in the perceived absence of alternative, secure investment opportunities. On the other

Chart 6 Total deposits to credit institutions from non-credit institutions

(EUR billions)



Source: ECB.

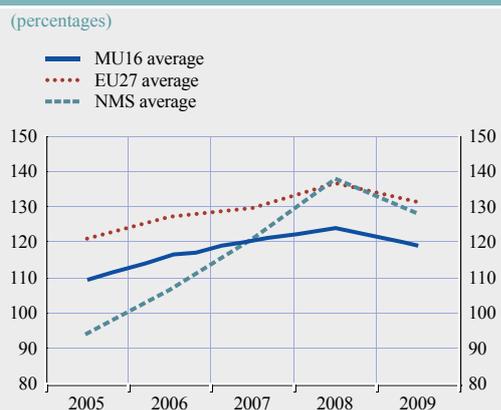
16 The Bank Lending Survey reports the responses of senior loan officers in a sample of euro area banks. A net tightening of credit standards or an increase in loan demand means that the proportion of all respondents that indicated a tightening or an increase would take place is higher than the proportion of those who indicated an easing or a decrease. A diminishing pace refers to a lower proportion of respondents indicating increasing dynamics. See *Euro area bank lending survey*, ECB, published quarterly and available at <http://www.ecb.europa.eu/stats/money/surveys/lend/html/index.en.html>.

17 Looking at the nominal values, housing loans in the United Kingdom seem to have declined the most in 2008. It should, however, be noted that this figure is affected by exchange rate effects which were significant in 2008. For that year, the decline for the United Kingdom stood at 29% in nominal terms, and 7% in real terms. Conversely, the growth in loans in some of the NMS in particular may be attributable to the combination of a depreciation and foreign currency nominated loans. This is the case for Poland in 2008, for example.

18 Some of the declines in the data on individual countries in the Annex were attributable to exchange rate effects. For example, the United Kingdom and Sweden recorded declines in total deposits of credit institutions from non-credit institutions of 12% and 3% in euro terms in 2008 respectively, but in local currency they increased by 14% in the United Kingdom and by 12% in Sweden.

19 See also Section 1.4 on concentration, competition and capacity indicators.

Chart 7 Historical development of loan-to-deposit ratios



Source: ECB.

hand, signs of returning risk appetite are already visible in many Member States and have contributed to the easing of non-deposit funding conditions. Finally, as customer confidence has already started to increase in some countries and may continue to rise in the near future, deposit growth can be expected to level off again in the future.²⁰

Loan-to-deposit ratios that were increasing steeply until 2008 declined in 2009, owing to decreasing loans, increasing deposits and conscious efforts to limit liquidity risk, a trend

which was partly reinforced by slower balance sheet growth (see Chart 7).²¹ Loan-to-deposit ratios differ to a large extent between Member States, with Denmark and Sweden displaying the highest ratios (see Chart 8).²² Loan-to-deposit ratios decreased in almost all of the NMS in the course of 2009, which contributed to reducing the dependence on foreign funding substantially, together with the initiatives of authorities to limit loans in foreign currencies. However, significant differences as to access to funding may persist for some time, not only across Member States, but also across banks, particularly as some might need to continue to rely on public support measures and problems will be revealed when these measures are no longer available. For some of these banks, fundamental restructuring and possibly also a

20 Shifts from deposits to other investment products owing to increased customer confidence have been already observed, for instance in Finland in the last quarter of 2009. See the manager survey by the Federation of Finnish Financial Services, dated 5 October 2009 (Pankkibarometri 3/2009, in Finnish).

21 A possible additional effect arose from banks paying more attention to internal pricing policies. Misaligned internal pricing of funding costs during the crisis seem to have contributed to the incentives of business units to leverage and maximise volumes. See *EU banks' funding structures and policies*, ECB, May 2009.

22 Note that the high loan-to-deposit ratio in Denmark is attributable to the inclusion of mortgage-credit loans which are financed by issuance of mortgage-credit bonds. In Denmark, mortgage-credit institutions do not receive deposits.

Chart 8 Loan-to-deposit ratios in EU Member States, 2009



Source: ECB.

downsizing of balance sheets may be necessary before long-term viability is restored again.²³

In conjunction with the G20 objectives, credit institutions are expected to strengthen their capital bases in terms of quality and level. This development will enhance the sustainability of bank activities, but will also exert downward pressure on performance measures such as

return on equity (RoE). Box 1 discusses the problems related to RoE as a measure of sustainable bank performance and alternative approaches to it.

²³ For more information on the use of government support measures, see Box 12 entitled “Government measures to support banking systems in the euro area” in *Financial Stability Review*, ECB, June 2010.

Box 1

PERFORMANCE MEASURES FOR BANKS

Recent events have proven that the most common measure of a bank’s performance, i.e. return on equity (RoE), is only one part of the story since a good level of RoE may reflect either high profitability or more limited equity capital. In addition, the “traditional” decomposition of RoE (i.e. looking at banks’ operational performance, risk profile and leverage) may have been useful to assess banks’ performance during benign times. This approach has clearly not proven adequate in an environment with much higher volatility, such as during the global financial crisis, where operational performance is at the root of all of the fluctuation in RoE and it does not help to provide an understanding of the potential trade-off between risk and return in performance. This may actually explain why some firms with high RoE performed particularly poorly during the crisis, held back by rapid leverage adjustment.

The BSC has recently examined: (i) why the commonly used RoE measure may not be sufficient to characterise banks’ performance; (ii) what may be missing in this type of approach; and (iii) potentially complementary approaches to RoE. For its analysis, the BSC used the capacity to generate sustainable profitability as a definition for describing banks’ performance. A bank must be able to generate such profits in order for it to continue operating and for investors to obtain fair returns, but it is also important for supervisors as it guarantees more resilient solvency ratios, even in a context of a riskier business environment. Indeed, retained earnings appear to belong to the most important drivers of Tier 1 ratios.

The main drivers of banks’ profitability remain earnings, efficiency, risk-taking and leverage. In this respect, RoE has a number of limitations. First, RoE is not risk-sensitive. A decomposition of RoE shows that a risk component represented by leverage can boost RoE substantially. By contrast, other risk elements are missing in RoE (such as the proportion of risky assets and the level of solvency). RoE is thus not a stand-alone performance measure and decomposition or further information is necessary in order to identify the origin of developments and possible distortions across time. RoE has proven to be a point-in-time measurement without signalling power or a forward-looking perspective. Indeed, the crisis demonstrated that RoE fails to distinguish the best performing banks from others in terms of the sustainability of their results. RoE is a short-term indicator and must be interpreted as a snapshot of the current health of institutions.

Finally, RoE measures can be misleading or manipulated and can provide wrong incentives since data are not always reliable, given that they are influenced by quite strong seasonal factors. RoE measures can also expose banks to higher unexpected risk levels.

RoE must thus be refined in order to provide a more “informed” assessment of banks’ performance. In particular, measures of banks’ performance should ideally be forward-looking and comparable, and should also measure stability across time.

Alternative approaches to measuring banks’ performance may require looking in more depth at how banks run their business, making use of their stress test results, and further enhancing high-level discussions with supervisors on the consistency between performance and business strategy. This may require greater transparency from banks with regard to their profitability structure, and some adjustment in the governance process as suggested in the proposals for enhancing Basel II. Among others, these measures comprise a reassessment of the independence of the risk management function with respect to the bank in question, the available tools and an adequate level of risk awareness at the top-tier management level. As a result, they may present an opportunity for regulators to address these issues with bank managers.

As a conclusion, the main messages stemming from this analytical work may be summed up as follows.

1. RoE may be less of a performance benchmark than a communication tool in the relationship between banks and markets.
2. A comprehensive performance analysis framework needs to go beyond this kind of indicator – though not excluding it - and provide for a more “informed” assessment using banks’ business-based data and qualitative information.
3. The consistency of risk appetite with the business structure and strategy appears to be one of the most crucial elements in assessing an institution’s capacity to perform well in the future. Against this backdrop, sustainable indicators constructed on the basis of economic capital models and financial planning frameworks inside the banks may become even more relevant. For instance, risk-adjusted types of indicator for returns, such as the “risk-adjusted return on capital” indicator, may benefit from higher disclosure and explanation to the markets, or at least to the supervisors.
4. Measures of banks’ performance should ideally encompass more aspects of the performance than just profitability as is the case for a purely market-oriented indicator such as RoE. In particular, it may be useful to take into account the quality of assets, funding capacity and the risk associated with the production of value. In that context, a good performance measurement framework should incorporate more forward-looking indicators and be less prone to manipulation from the markets.
5. In the context of achieving a comprehensive analysis for all business areas, data availability and comparability are key factors. This may call for enhanced disclosure (both to the supervisors and, where possible, to the public) and improved market discipline.
6. As regards governance, the adoption of a more comprehensive and more forward-looking assessment of performance may represent a first step towards intensifying the dialogue with banks’ top-tier management, related to the coherence between economic performance, the respective business model and supervisory and financial stability issues.

The full analysis is presented in the Appendix: Beyond RoE – How to measure bank performance, September 2010, available at <http://www.ecb.europa.eu>.

1.3 CONSOLIDATION AND M&A ACTIVITY

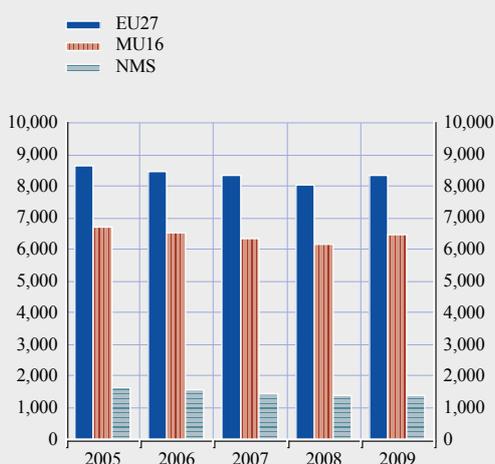
Consolidation of the EU banking sector continued in 2008 and 2009. Excluding the effect of a reclassification in Ireland in 2009, the number of credit institutions has declined at a steady pace (see Chart 9).²⁴ The decline was particularly marked in Cyprus, as a consequence of the consolidation of its credit cooperatives sector, but pronounced declines also took place in Denmark, Germany, France, the Netherlands and Sweden. Notable exceptions to this trend were the Baltic countries, which saw an increase in both domestic and foreign banks, indicating that there was still room for new service providers in these markets.²⁵

The number of M&As in the EU dropped by a quarter in 2008, bringing the total number to the lowest point throughout the period under observation (see Chart 10). In terms of the total value of transactions, and leaving aside the special effect of the acquisition of ABN Amro by the consortium of Royal Bank of Scotland,

Fortis and Santander in 2008, the M&A data revealed a significant decline, with EU cross-border and outward transactions being most affected (see Chart 11).²⁶ M&A activity started to pick up in 2009, with the clearest increase taking place in the sub-category of domestic deals.²⁷ The values of the deals have remained modest, however, indicating a clear

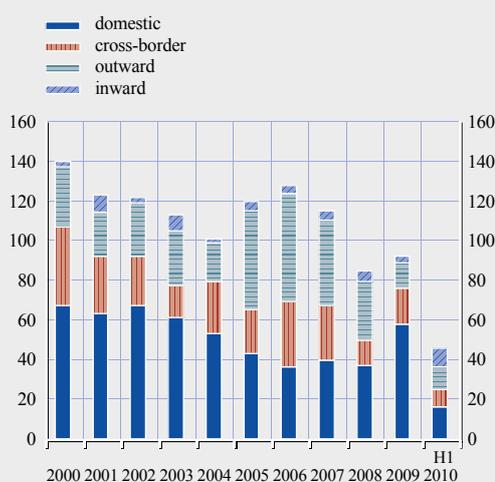
- 24 This reclassification of 419 credit unions as credit institutions in Ireland resulted in a slight increase in the overall number of credit institutions in the EU in 2009. More details on the reclassification can be found on the ECB's website at <http://www.ecb.europa.eu/press/pr/date/2009/html/pr090113.en.html>.
- 25 In Estonia, this included the establishment of the domestic AS LHV Bank and a branch of Bank Snoras, a first foreign branch of the Lithuanian bank. New banking licenses were granted to the Latvia Post Bank and a branch of Balti Investeeringute Grupi Pank in Latvia, and, in Lithuania, to the domestic bank Finasta as well as to SEB and to Handelsbanken branches.
- 26 The ABN Amro deal represented 90% of the total value of cross-border transactions in 2008. Other large cross-border transactions in 2008 include the acquisition of Citibank Privatkunden by Banque Fédérative du Crédit Mutuel, as well as the acquisition of Alliance and Leicester and Bradford and Bingley by Banco Santander Central Hispano.
- 27 Domestic deals denote deals that take place within national borders. In this report, EU-wide deals are referred to as cross-border M&A (see also the notes for Charts 10 and 11).

Chart 9 Number of credit institutions



Source: ECB.

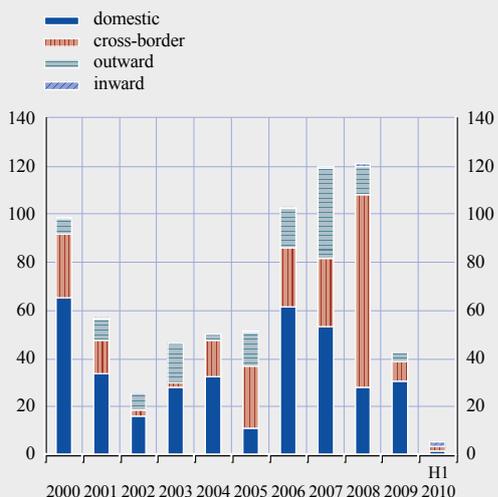
Chart 10 Bank M&As – number of transactions



Source: Zephyr, Bureau Van Dijk.
Notes: M&As include both controlling and minority stakes. Cross-border M&As refers to intra-EU27 transactions involving a non-domestic acquirer. Inward refers to M&As by non-EU27 banks in the EU27 and outward indicates M&As by EU27 banks outside the EU27.

Chart 11 Bank M&As – value of transactions

(EUR billions)



Source: Zephyr, Bureau Van Dijk.

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

tendency towards smaller deals.²⁸ Important deals in 2009 and early 2010 include the acquisitions of Dresdner Bank by Commerzbank and HBOS by Lloyds TSB as domestic deals, but also Fortis by BNP Paribas as an example of a cross-border deal²⁹ and Mellon United National Bank by Banco Sabadell as an example of an outward deal. Most of these deals were accelerated or induced by the financial crisis.

Two factors have contributed to the decline of the non-domestic component of M&A in particular. First, strategic expansion was not considered a high priority during the crisis by banks that were facing significant losses and write-downs and focused on repairing their balance sheets. Efforts to boost their capital positions and cash reserves led to the spin-off of certain non-core activities (see also Section 2.1.3), either in terms of business or geographical location.³⁰ The uncertainties related to economic prospects and forthcoming regulatory changes further have continued to act as deterrents of non-domestic M&A activity. Second, although

the data assessed in this section do not include the participation of governments in credit institutions, a significant shift in the ownership structure in this direction has occurred in some major EU banks. The European Commission's conditions for state aid have furthermore led to divestment of activities and markets, partly in order to avoid distortions in competition.³¹

There is, however, reason to believe that the observed decline in cross-border and outward M&A is only temporary. First, the number of cross-border deals has already picked up since early 2009. In this regard, the acquisitions of Fortis by BNP Paribas and of UK banks by Santander are examples of strategic cross-border acquisitions by institutions that were in a position to profit from the opportunities that arose during the crisis. Second, the limited duration of government recapitalisation measures may offer M&A opportunities in Europe in the near future. Indeed, exit from recapitalisation measures has already begun.³² Third, an ESCB survey conducted in May 2009 revealed that, rather

28 It should also be noted that the value of the deals is not reported in the data for all M&As. However, the average M&A values for the available data have also decreased since 2008.

29 BNP Paribas acquired 75% of Fortis Bank from the Belgian State.

30 In this context, reference can be made to the acquisition of the German retail banking activity of Citigroup by Crédit Mutuel and to the acquisition of HSBC Merchant Services by Global Payments Inc.

31 The former has been the case, for example, for ING which is divesting its insurance operations, for Dexia which will reduce its balance sheet by 35% by 2014, largely via divestment of its Slovakian operations, and for KBC, which will run down its non-core activities in particular in Central and Eastern Europe. Examples of the latter include the newly created Lloyds Banking Group as a result of the acquisition of HBOS by Lloyds TSB, which is to divest its core UK retail banking business. Also ING and KBC will divest some core units in their home markets to spur competition. See also the European Commission's Communication on the return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State Aid rules (OJ L 195 of 19.8.2009, pp. 9-20).

32 It should also be noted that most capital injections were made through the acquisition of preference shares without voting rights, with the aim of improving the capital position of banks and ensuring the priority of public sector claims, but leaving their ownership in the private sector. See also "Measures taken by euro area governments in support of the financial sector", *Monthly Bulletin*, ECB, April 2010, pp. 75-90. For a discussion of the development of M&As in the financial sector, see also *Back to the 'domestic' future*, PriceWaterhouseCoopers, March 2009. For cross-border M&As see Special Feature A, "Banking integration and supervision in the EU", in the ECB report on *Financial Integration in Europe*, April 2010, pp. 31-44.

than revising their internationalisation strategies, banks have temporarily stopped or delayed their plans (see Box 2). High growth potential still remains by far the most important driver for expansion abroad. Given the opportunities arising from the exit from government measures

and based on the survey results, cross-border M&A activity is expected to pick up quickly once the economic cycle turns.

Section 1.5 contains more information on the cross-border activities of EU banks.

Box 2

THE EFFECT OF THE FINANCIAL CRISIS ON THE INTERNATIONALISATION STRATEGIES OF LARGE EUROPEAN BANKING GROUPS

In the first half of 2009, the ESCB conducted a survey on the internationalisation plans of major cross-border banking groups in the EU.¹ The survey was sent to 43 major banking groups with significant cross-border banking activities and head offices in EU Member States. The results were compared with those of a similar exercise in 2006. As the survey was conducted using a sample, its results were intended to be purely indicative of the trends in internationalisation and, in particular, to offer qualitative background information on the motives behind the decisions taken.

The survey was conducted in the middle of the financial crisis, and therefore the entire effect of the crisis could not be deduced from the answers at that point in time. Some indication could, however, be obtained on future developments in the field of internationalisation plans. It was remarkable that high growth potential remained the main driver for expansion abroad, with over 90% of the banks in the sample stating it as a key factor. The next two most common reasons, namely following clients and limited growth potential in the home country, were cited by around two-thirds of the respondents. When asked about the impact of the financial crisis, more than half of the respondents stated that they had amended their internationalisation strategies as a consequence. The crisis induced banks to refocus on core business activities and to slow down, temporarily stop or delay cross-border activities. Rather than radical changes of strategy, these replies thus point towards a temporary prudent attitude taken by banks.

Finally, the crisis changed the respondents' risk perceptions for country, exchange rate and reputational risks. Country risk was perceived to have increased in emerging and developing countries and exchange rate volatility was expected to increase. The crisis also heightened the awareness of reputational risk and the need to manage it. However, the ranking of these risks in terms of their importance did not change.

In conclusion, the effect of the crisis seems to be of a temporary nature, and banks do not seem to consider the crisis a reason to change the fundamentals of their internationalisation strategies. It is thus likely that cross-border M&A activity will pick up quickly once economic conditions improve, both within the EU and in emerging markets in particular.

¹ More precisely, the qualitative questions of the survey were answered in May 2009.

1.4 CONCENTRATION, COMPETITION AND CAPACITY INDICATORS

Market concentration, as measured with the Herfindahl index and with the share of total assets held by the five largest institutions, increased over the aggregate period 2008-09, in line with the increased consolidation in the EU banking sector.³³ Both indices peaked in 2008 and decreased slightly in 2009, although remaining well above the 2007 levels. With regard to individual Member States, the picture remains largely unchanged, with larger countries, such as Germany, Italy and the United Kingdom, but also Austria, having more fragmented markets, and smaller countries, especially some of the NMS, being characterised by more concentrated banking sectors.

Banks' increased need for stable funding, as discussed in Section 1.2, also intensified the competition on deposits in the EU during the financial crisis. In addition, competition from outside the EU increased temporarily, owing to the entrance of a group of Icelandic banks in some Member States in 2007 and 2008, with interest rate offers for deposits that exceeded the market average sometimes by several percentage points.³⁴ Fierce competition on deposits and high interest rates continued to prevail in some Member States in 2008 and 2009.³⁵ In some countries, this led to an increased competitive advantage for the established brands, since they are often able to offer higher rates and since depositors' perceptions seem to have changed in the direction of valuing large, well-known and highly diversified banks. Competition on deposits was also high in some NMS such as Bulgaria, Hungary, Lithuania and Slovenia, partly owing to the ongoing catch-up process following accession to the EU and the related mismatch of available domestic savings and investment opportunities in the country. Deposit rates started to decline in many countries in the course of 2009, possibly also signalling a slight easing of competitive conditions in some of them, but also related to other factors such as decreasing central bank rates. Competition

on the credit side has, by contrast, been low, partly owing to the difficulties in accessing wholesale funding, the increased cost of funding and the impaired macroeconomic conditions. Signs of competition picking up in the credit markets have, however, recently emerged in the MU16.³⁶

Measured in terms of bank assets per employee, the EU banking system continued to become more efficient over the period from 2007 to 2009 (see Chart 12).³⁷ Selected capacity indicators for EU Member States are presented in Table 1. Overall, these indicators continue to vary across the EU, on account of the different business strategies followed by banks, but also owing to factors like population density.³⁸ The sharp increase in the indicators related to the number

33 As a general rule, a Herfindahl index below 1,000 signals low concentration, while an index above 1,800 signals high concentration. For values between 1,000 and 1,800, an industry is considered to be moderately concentrated. Note that these indicators are calculated on a non-consolidated basis, meaning that banking subsidiaries and foreign branches are considered to be separate credit institutions. For more information, see the methodological note in Annex II.

34 Following a major disturbance to the Icelandic financial system in Autumn 2008, these banks subsequently disappeared from the EU market in the course of the second half of 2008 and the first half of 2009. See *Financial Stability Report*, Central Bank of Iceland, 2009, for more information.

35 This is also evident in the negative deposit margins for euro area monetary and financial institutions. See Chart S98 in *Financial Stability Review*, ECB, June 2010.

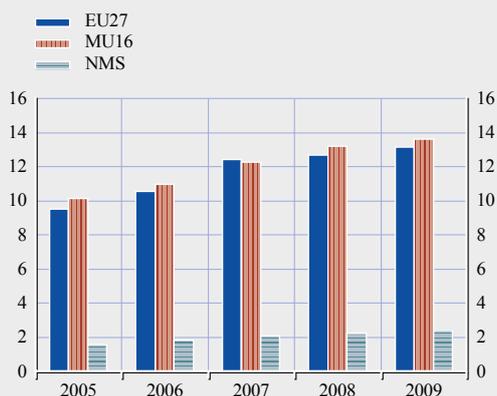
36 The ECB's Euro area bank lending survey of April 2010 reports that competition has had a dampening effect on credit standards in both the household and enterprise sectors, and in the former sector, this impact has gradually increased. Besides banks, competition from non-banks and especially market financing seems to have dampened the rise of credit standards for corporate loans for particularly large enterprises. However, this effect disappeared in the second quarter of 2010. Section 2.1.4. of the special feature further discusses the potential effect of regulation on competition arising from non-banks.

37 The term efficiency in this context refers to the operational efficiency of the use of resources (e.g. personnel) with regard to some measure of output that can be associated with the amount of services provided (e.g. assets). Note that the MU16 aggregate decreased somewhat from 2008 to 2009; this effect may however also be related to the employee data that is not available for a large number of countries.

38 For example, Belgium, which is densely populated, has a below average figure for population per ATM, whereas the densely populated Netherlands has high figures for both population per ATM and per branch. At the other end of the scale, scarcely populated Sweden, for example, also has high figures for both population per branch and per ATM, whereas e.g. Cyprus has below average figures for population per branch.

Chart 12 Assets per employee

(in EUR millions)



Source: ECB.

Note: Data not available for BE, DE or FR.

of employees during 2009 may partly be related to ad hoc measures taken during the crisis and should thus be interpreted with caution.³⁹ By contrast, the number of automated teller machines (ATMs) continued to increase in the large majority of Member States, mainly reflecting the substitution of employees with ATMs. Branch networks in Poland, Hungary and Portugal continued to grow. By contrast, the high growth in branch networks in Romania witnessed in previous years levelled off in 2009.

³⁹ Note that the increase in Bulgarian employee data in Table 2 in the Annex is related to the fact that average numbers are used; a year-end figure would show a clear decline in the number of employees in Bulgaria.

Table 1 EU banking sector capacity indicators in 2009

Country	Population per CI	Population per branch	Population per ATM ¹⁾	Population per employee	Assets per employee	Population density
BE	103,750	n.a.	692	n.a.	n.a.	326
BG	252,133	1,253	1,489	221	1,107	68
CZ	187,336	5,251	3,059	273	4,173	133
DK	33,671	2,767	1,783	110	22,046	128
DE	42,030	2,077	1,033	n.a.	n.a.	229
EE	74,467	6,293	1,442	235	3,748	30
IE	8,962	3,634	1,307	117	34,669	64
GR	170,612	2,761	1,446	171	7,463	85
ES	130,482	1,034	739	173	12,840	91
FR	90,581	1,676	1,203	n.a.	n.a.	117
IT	75,235	1,771	1,093	187	11,445	200
CY	5,148	858	1,300	64	11,138	87
LV	60,943	3,614	1,784	182	2,420	35
LT	39,755	3,436	2,284	306	2,401	51
LU	3,385	n.a.	1,062	19	30,206	192
HU	52,748	2,822	2,173	235	2,961	108
MT	17,207	3,562	2,425	108	10,757	1,291
NL	56,023	5,268	1,901	150	20,155	405
AT	10,586	2,007	1,090	108	13,419	100
PL	53,675	2,867	2,809	208	1,498	118
PT	64,051	1,654	629	171	8,360	116
RO	510,984	3,340	2,325	316	1,272	90
SI	81,661	2,892	1,169	168	4,382	101
SK	208,375	4,405	2,403	289	2,905	111
FI	15,298	3,471	1,655	215	15,581	16
SE	51,894	4,351	3,294	190	19,045	21
UK	158,784	4,997	960	131	19,998	252
MU16	50,959	1,766	1,033	165	13,616	127
EU27	59,860	2,131	1,168	171	13,156	115

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

Notes: CI stands for credit institution. Assets per employee are measured in EUR thousands. Population density is expressed as inhabitants per square kilometre. MU16 and EU27 averages exclude Member States with incomplete data.

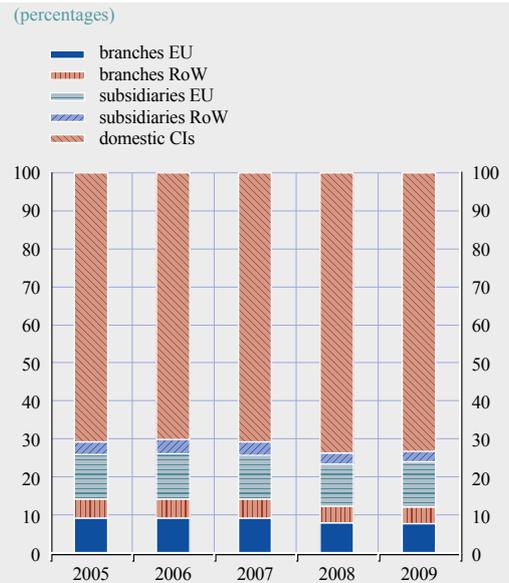
1) 2008 data.

1.5 CROSS-BORDER INTERMEDIATION

Domestic credit institutions increased their share in the EU banking sector in 2008, but their share decreased again in 2009. By the end of 2009, 73% of total assets were owned by domestic institutions, marginally up from 71% in 2007 (see Chart 13). The overall decline in the share of foreign banks was almost entirely attributable to a decline in the share of branches from 15% to 12%. Foreign subsidiaries increased their presence slightly in 2009 to 15%. The decline in the market share of foreign branches was almost entirely attributable to institutions domiciled in the EU. In contrast, the United Kingdom and Belgium in particular substantially increased their foreign share in 2009, mainly because of the acquisitions by Santander and the acquisition of Fortis Bank by BNP Paribas.

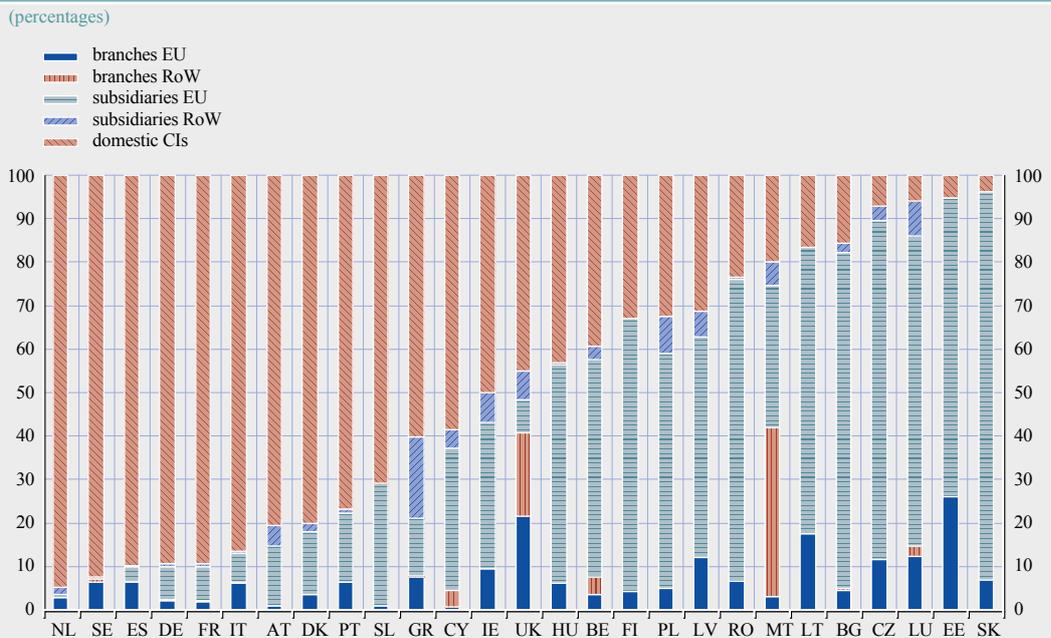
Chart 14 shows that foreign banks continued to be more prevalent in the NMS, although their

Chart 13 Market share of foreign bank branches and subsidiaries in terms of total assets, EU average



Source: ECB.

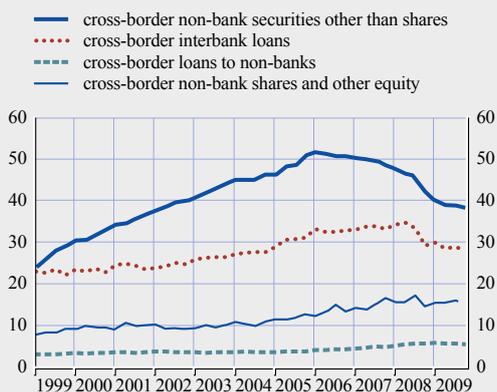
Chart 14 Market share of foreign bank branches in EU Member States in 2009



Source: ECB.

Chart 15 Cross-border provision of financial services in the euro area – assets

(percentages)

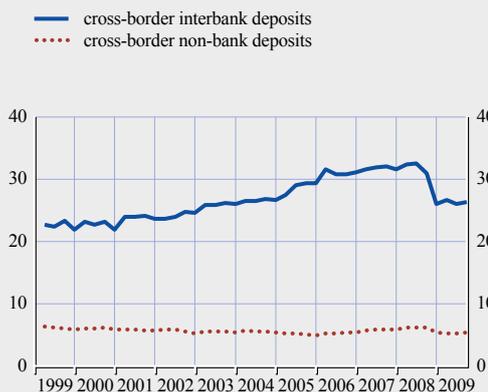


Source: ECB.

Note: Cross-border activity is expressed as a percentage of the total euro area provision of financial services of each financial service or instrument in question.

Chart 16 Cross-border provision of financial services in the euro area – liabilities

(percentages)



Source: ECB.

Note: Cross-border activity is expressed as a percentage of the total euro area provision of financial services of each financial service or instrument in question.

aggregate share dropped from 72% to 69% in 2009. Unlike for the EU aggregate in which subsidiaries seemed to gain in importance, the decline was relatively even across branches and subsidiaries in the NMS. The majority of banking assets in the NMS were held by foreign subsidiaries (61%), with those with an EU parent accounting for 57% of the market. By comparison, only 26% of banking assets in the EU15 were held by foreign entities, split fairly evenly between branches and subsidiaries.

The marked decrease in cross-border assets observed in wholesale and securities-related activities⁴⁰ in 2008 levelled off during 2009 (see Chart 15). Integration in the retail banking segment, having generally lagged behind that in the other banking segments, seems to have been affected by the financial crisis to a lesser extent. These developments are also reflected in cross-border liabilities (see Chart 16). In all, banks have clearly relied on their domestic counterparties rather than on their international peers during the financial crisis. However, these developments are expected to be only temporary and the increasing trend of financial integration in the banking markets is expected to resume soon. Integration of the up to now fragmented

retail markets is also expected to get new impetus from the advancing integration of the related market infrastructures, and in particular from the wide-ranging application of the Single Euro Payments Area (SEPA) in the coming years.⁴¹

1.6 CONCLUSION AND OUTLOOK

After the exceptional events of 2008, during which the global banking system suffered from a general loss of confidence and erosion of value as a result of the financial crisis, the year 2009 marked the start of a gradual recovery in the EU financial sector.

The main structural developments in the EU continued in line with trends observed in the years leading up to the financial crisis. Consolidation of the banking sector and a more efficient use of resources, as measured by capacity indicators, continued over the medium

⁴⁰ The category “shares and other equity” includes holdings of securities which represent property rights in corporations or quasi-corporations and mutual fund shares.

⁴¹ See also the ECB report entitled “Financial Integration in Europe”, published in April 2010 and available at <http://www.ecb.europa.eu/pub/pdf/other/financialintegrationineurope201004en.pdf>.

term, and concentration remained roughly at the level attained in previous years. Growth in bank assets stagnated, however, and loans for housing purchase declined for the first time during the period under examination owing to a number of factors affecting both the demand and the supply side. Nevertheless, first signs of a return to growth were already visible at the end of 2009.

A decline followed by a gradual return to pre-crisis trends was also witnessed in the cross-border activities of EU banks. Foreign branches lost market share to domestic institutions, and there was a pronounced decline in cross-border M&As as banks shifted their focus from pursuing growth opportunities to repairing their balance sheets.

Although the next chapter will take a closer look at the future of the EU banking system, in particular as regards the evolution of business models and funding structures, some general expectations can already be stated. Owing to the ongoing regulatory initiatives, EU banks are expected to hold a higher level and quality of capital and more liquid assets, and to improve their credit and liquidity risk management. Although banks have improved the share of stable funding in the course of 2009, the cost of funding is expected to increase in the medium term, as banks will need to close the gap between their current stable funding and that required in the future. As the economy recovers and market functioning is restored, cross-border and outward M&A activity is likely to resume quickly, as those banks dealing more effectively with the challenges of the crisis will seek to take advantage of profit and growth opportunities abroad. Given that the government recapitalisation measures are transitional, they may also offer opportunities for accelerated M&A activity in the future; indeed, exit from these measures has already begun.

However, the return to normality may be prolonged by concerns regarding the sovereign sector and the potential impact of fiscal consolidation. The funding requirements that

governments will face in the near future are expected, in particular, to add additional pressure on funding costs for banks. In addition, the recovery may be highly uneven across individual institutions. The government measures and the related restructuring plans may have a particular impact on asset growth for those banks that are still receiving support.

2 SPECIAL FEATURE ON THE FUTURE EVOLUTION OF THE EU BANKING SECTOR

This special feature summarises the key thoughts and discussions on the future evolution of the EU banking sector among national central banks and supervisors. It focuses on two major aspects of the future EU banking landscape, namely banks' future business models and the evolution of their funding policies. The time period under consideration is the medium term, which is defined as the next three to five years.

This assessment is based in particular on the results of structured interviews with representatives from EU financial institutions, banking and financial market associations, rating agencies and consulting companies, and experts from academia. The information gathered in the interviews has been complemented by the expertise of European central banks and supervisors.

The financial crisis and its structural consequences have started to change the EU banking sector significantly. The global overhaul of banking regulation and supervision that has been brought about by the crisis is identified as the main factor shaping the banking industry in the medium term. In addition, the impaired macroeconomic environment and the ongoing deleveraging process will impact on the profitability of the sector, and investors and customers will have to adjust their behaviour to the new economic situation. These factors have been recognised by market participants as the most fundamental drivers impacting the future of the EU banking sector in the medium term, and they will therefore feature prominently in the following sections.

2.1 ACTIVITIES, BUSINESS MODELS AND STRATEGIES

This section looks at the main trends that have been observed in terms of business models since the beginning of the financial turmoil and discusses some potential developments for the medium term. After presenting the main characteristics of the “diversified banking” and “specialised” business models, the section

describes the central scenario, namely a migration towards diversified, safer and more rational models and risk practices. In this scenario, financial institutions are expected to reassess and adjust their business lines. Finally, as the future financial regulatory framework is still under discussion, it is possible that other developments will be observed. Thus, some alternative scenarios are briefly mentioned.

2.1.1 DIVERSIFIED VERSUS SPECIALISED BUSINESS MODELS

DEFINITIONS OF DIVERSIFIED AND SPECIALISED BANKS

Academics often describe the “universal banking model” as a combination of activities and a source of synergies, such as the shared use of infrastructure, shared balance sheet use and customer overlap. Rather than considering the universal business model in a strict sense – which is mainly theoretical as only a few European banks can really conduct the whole range of banking activities – this special feature discusses the “diversified business model”, defined as a combination of different banking activities (for instance, a bank combining investment banking and corporate activities).

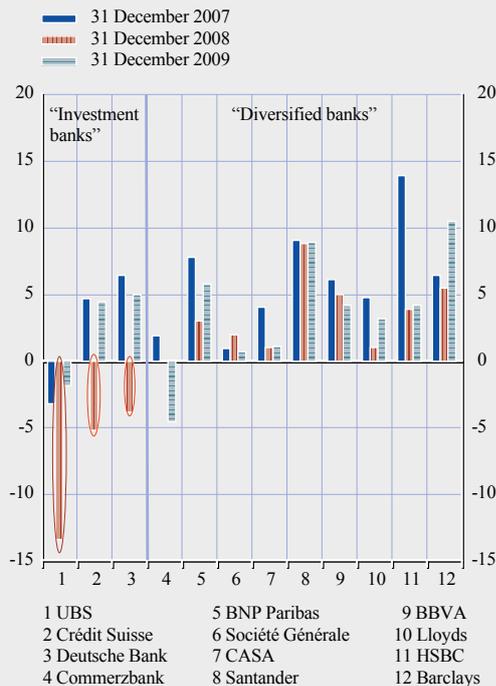
In contrast to diversified banks, “specialised banks” restrict themselves to one or a few activities. They focus on specific market segments to gain comparative advantages, notably in terms of costs or skills (e.g. entities such as pure investment banks, automotive financing companies, building societies and mortgage banks).

THE DIVERSIFIED MODEL HAS BEEN LESS AFFECTED BY THE CRISIS THAN THE SPECIALISED MODEL

Although both diversified and specialised banks (especially pure investment banks) experienced a decrease in net income or even losses, write-downs and recapitalisations during the crisis, diversified institutions have proven to be more resilient, as losses in some segments were recouped through alternative sources of revenue. In particular, European investment banks recorded greater losses in 2008 (see Chart 17) and, at the height of the

Chart 17 Net income: European investment versus diversified banks

(in EUR billions)



Source: Bloomberg.
 Notes: For this chart, “investment banks” comprise UBS, Crédit Suisse and Deutsche Bank. “Diversified banks” comprise BNPP, Société Générale, Crédit Agricole, Santander, BBVA, Lloyds, HSBC, Barclays and Commerzbank. See footnote 43 for the definition of investment banks.

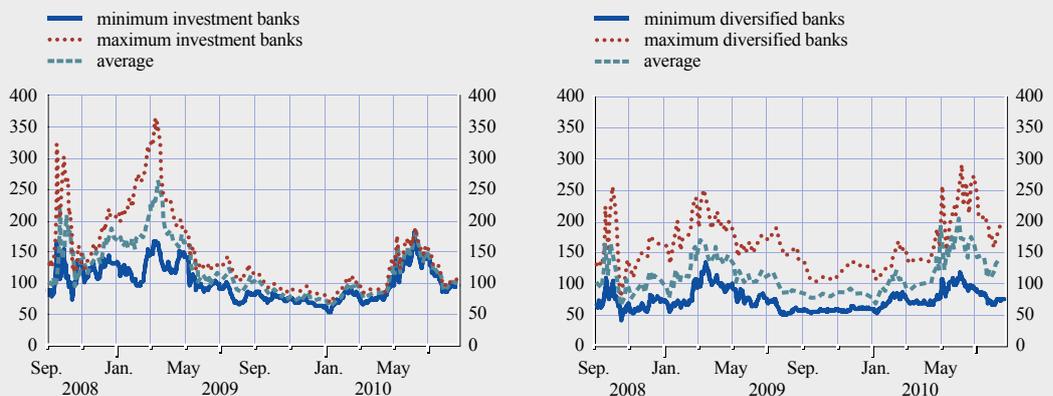
crisis in 2008, their credit default swap (CDS) premia were generally higher than those of diversified banks in Europe (see Chart 18), indicating that markets had greater fears about the former.

The severity of the impact of the crisis has varied among institutions, depending on their business models and exposure to certain risk-taking practices:

- A selective extinction occurred, generally hitting specialised players. These include specialised lenders (consumer finance, automotive finance, real estate banks, etc.) and pure investment banks (mainly in the United States). The investment banking industry has been strongly affected, owing to its high reliance on wholesale and capital markets for funding. This may be explained by the focus of investment banks on originate-to-distribute activities and engagement in arbitrage or other complex financial transactions.
- Irrespective of the activities of the institution and the risks taken, all banks, including diversified banks, may face severe difficulties as long as risk management is inadequate.

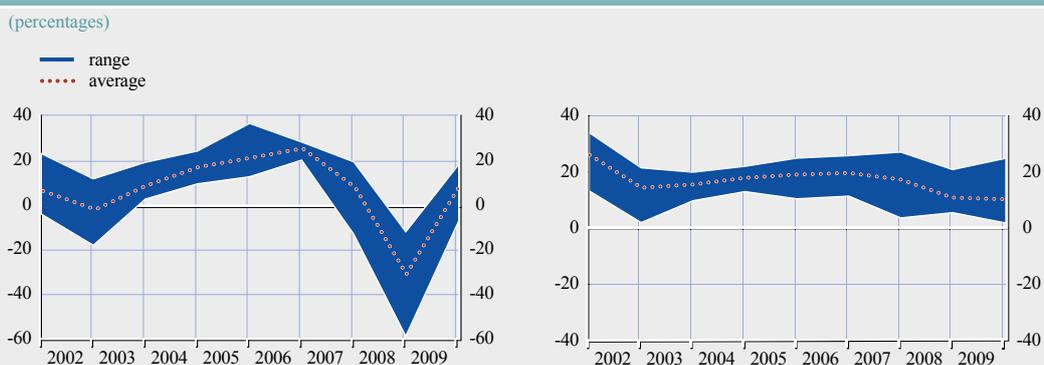
Chart 18 CDS premia: European investment versus diversified banks

(in basis points)



Source: Bloomberg.
 Note: For these charts, “investment banks” comprise UBS, Crédit Suisse and Deutsche Bank. “Diversified banks” comprise BNPP, Société Générale, Crédit Agricole, Santander, BBVA, Lloyds, HSBC, Barclays and Commerzbank. See footnote 43 for the definition of investment banks.

Chart 19 Return on equity of investment and diversified banks from 31 December 2001 to 31 December 2009



Sources: Bloomberg and Banque de France calculations.

Note: Investment banks: Deutsche Bank, UBS, Crédit Suisse. Diversified banks: BBVA, Banco Santander, Barclays, BNPP, HSBC, Intesa San Paolo, Société Générale, UniCredit.

The greater resilience of diversified banks is based on clear synergies between private banking, retail and corporate banking and investment banking.⁴² In this model, one activity supports another, so that the decisive fundamentals of funding, revenue and customers are secured:

- Diversified banks are built on strong customer relationships and more stable funding sources, such as deposits, which make them less reliant on wholesale funding and on average more resilient to liquidity shocks.
- They can count on balanced sources of revenue that result from the cross-selling of products, which helps to maintain profitability (see Chart 19).
- Diversified banks take advantage of the scale economies that result from cost-sharing across geographical areas and businesses, which is essential in order to capture a greater share of customers and processing as well as of high-volume activities.

THE DIVERSIFIED MODEL HAS BEEN LESS VOLATILE THAN THE SPECIALISED MODEL

The performance of diversified institutions is also less volatile than that of specialist banks in normal times. On a worldwide scale, the

investment banks in the sample⁴³ report an average long-term profitability (1997-2006) of 14.8%, surpassing the 13.1% recorded by diversified banks.⁴⁴ But their performance is more volatile and more vulnerable to financial distress. The trend is quite similar at the European level (see Chart 19): the profitability of the “investment-oriented” European banks reached 25% in 2006, then fell to -31% in 2008, before rallying sharply in 2009 to 8.5%. This nonetheless remains substantially below the long-term average profitability of 13% (from 2001 to 2006). By comparison, European diversified banks had an average profitability of 19% (from 2001 to 2006), which has declined less steeply since 2008 to reach about 10%.

42 More specifically, retail and corporate activities share branches and back-office infrastructures, and retail savings provide an important source of funding for corporate lending. Likewise, investment banking activities can share some of their products and risk management skills with corporate banking activities. Private banking can expand upon relationships with customers from other banking channels and share some of the basic banking infrastructure. Conversely, the combined bank can benefit from funding obtained from private banking customers' savings. See, for example, De Nederlandsche Bank NV, *The Dutch financial system: an investigation of current and future trends*, 2009.

43 Banks considered as investment banks in this special feature are those for which the financial and investment business have accounted for over 50% of their average income over the last three years (Morgan Stanley, Goldman Sachs, Credit Suisse, UBS and Deutsche Bank). These banks are assumed to be investment banks for the entire period of observation for the sake of simplicity.

44 A sample of 12 banks are considered as diversified banks for the purposes of this special feature: HSBC, C.A.S.A., Société Générale, BNP Paribas, Santander, UniCredit, Barclays, RBS, JP Morgan, Citigroup, Bank of America and Wells Fargo.

2.1.2 IN THE MEDIUM TERM: TOWARDS DIVERSIFIED, SAFER AND MORE RATIONAL MODELS AND RISK PRACTICES

Many of the shortcomings revealed by the crisis (such as too cheap and abundant liquidity, too lax risk management practices, misaligned compensation frameworks) are being addressed through regulatory reforms. However, the industry has a role to play in re-examining its business models.

DIVERSIFIED BANKS: COMBINATION OF DIVERSIFICATION AND FOCUS ON CORE CLIENTS AND MARKETS

Banks' return on equity⁴⁵ is likely to decrease under the influence of several drivers, especially given that banks are expected to continue to deleverage. This means that they will have to discover new ways to generate revenue. One possibility may be for banks to maintain a diversified profile, while at the same time concentrating on their core markets, activities and clients, thus ensuring guaranteed revenues. Banks may attempt to increase their shares in market segments where high volumes are essential for profitability (consumer lending, global custody, asset management, payments and systems, brokerage). Several factors suggest that such developments are likely:

- Most banks cannot afford to continue funding unprofitable businesses, which may curb cross-subsidisation among activities, at least in the coming months.
- A broad spectrum of businesses can be difficult to control. Furthermore, the recent crisis showed that, whatever activities banks conduct, they often deal with similar products.
- There are far too many interconnections in the global economy for business and geographic diversification to provide a reliable defence against a breakdown of business fundamentals.

SPECIALISED BANKS: SAFER AND MORE RATIONAL RISK PRACTICES

Over the short and medium term, the main difficulty facing specialised banks will be access to funding sources. The cost of funding is likely to rise with the phasing-out of quantitative easing measures and the potential increase in interest rates, and the securitisation market still suffers from uncertainty.⁴⁶ These factors may tempt specialised banks to transfer the additional cost to their clients. This would compress their net interest margins, since specialised banks have smaller liquidity or funding cushions than diversified banks engaged in deposit-taking activities.

Some specialised players may choose to diversify. In the United States and Europe, this was already observed to a certain extent in the early stages of the crisis, when a number of investment banking operators either teamed up with more diversified operators⁴⁷ or were forced to adjust.⁴⁸

However, there is still room for niche activities, since these market players genuinely have the potential to create value added in their segments. In the coming years, the specialised banking industry is likely to be divided into two clusters of businesses:

- Large players with large market shares: in some specific segments, only large players with high skills and market power will operate. Their leading positions will help drive scale benefits and will allow them to keep their cost-to-income ratios low.
- Niche and high-growth players requiring low capital: these players will need

45 See also Box 1 in the overview chapter for a discussion of return on equity as a performance measure.

46 See also Section 2.2 on funding patterns.

47 Examples include the deals between Merrill Lynch and Bank of America and between Bear Stearns and JP Morgan, and the acquisition of 30% of Deutsche Postbank by Deutsche Bank.

48 Examples include the conversion of Goldman Sachs and Morgan Stanley into bank holding companies in September 2008.

either scale economies coupled with high technology (e.g. prime brokerage) or expertise and strong relationships (e.g. advisory businesses).

2.1.3 ADJUSTMENT OF BUSINESS LINES WITHIN BANKS

The adverse environment has already led banks to rethink their business mix. According to market participants, different business lines – such as investment banking, asset management and retail activities – have experienced different trends since 2007. In particular, the contribution of investment banking to total revenue has been highly volatile and subject to a strong overall reduction. Revenue from retail activities has remained steady, whereas that from asset management business temporarily decreased at the height of the crisis. Finally, the overall contribution of specialised financial services seems to have increased slightly.

These developments lend support to the view that banks are likely to review the content and structure of their business lines in the near future. They can adjust their operations through two main channels: by developing a profitable cross-selling mix of products (probably more basic than before the crisis) and by streamlining the costs in each business (reaping more economies of scale, dedicating more capital to low-risk activities, ending the cross-subsidisation of unprofitable activities, and improving distribution channels and the productivity of the sales force). While every business line is likely to experience such deep changes, these adjustments would probably not fundamentally call into question some specific sectors such as the asset management and the bank-insurance models. For example, asset management activities are likely to increase, with the size criterion being the most important driving factor.⁴⁹

2.1.4 OTHER POSSIBLE DEVELOPMENTS

The development of diversified banking models appears to be the most plausible scenario, considering the different factors of influence.

However, this may not be the case if some features that are assumed to be minor in this baseline scenario gain in importance. While the short memory of investors may result in high performance expectations in the wake of the next boom in the long term, certain proposals in the new regulatory framework have the potential to set an alternative direction for business models already in the medium term.

SOME REGULATORY PROPOSALS: POSSIBLE CURB ON THE DEVELOPMENT OF THE DIVERSIFIED MODEL

Current proposals of the Basel Committee on Banking Supervision (BCBS) on the deduction of holdings in financial institutions could have an impact on the diversified business model. The Basel III framework aims to strengthen the quantity and quality of own funds. In particular, it will require banking institutions to deduct their banking and insurance equity holdings from their core Tier 1 capital. The impact could be significant on large financial groups offering a combination of banking and insurance activities, and in particular on banking groups implementing a bank-insurance development strategy. If the two activities are fully integrated, it would be difficult to separate them in practice (e.g. same distribution networks or information technology structures). This impact could weaken these financial groups which benefit from more diversified revenues (e.g. cross-selling) and funding sources and could call into question the diversified business model.

In a similar vein, regulatory initiatives concerning systemically important institutions may put a brake on diversification, in particular if the proposals related to limiting the scope of activities or narrow banking are integrated into legislation.⁵⁰ Given that these initiatives have still not been fully detailed, it is not yet possible to estimate their full effect on the industry.

⁴⁹ Examples of recent acquisitions in this field include the acquisition of Barclays Global Investors by Black Rock and the merger between SG Asset Management and CA Asset Management in 2009.

⁵⁰ The same argument would apply to the possible implementation of a surcharge for institutions that are considered systemically important.

ROLE FOR LIGHTLY REGULATED ACTORS IN SPECIFIC MARKET SEGMENTS AND REGULATORY ARBITRAGE

The scope of regulation and supervision will further determine the attractiveness of the universal banking model in the future. Academics have pointed out that the enhancement of the regulatory framework could lead to a shift of financial activities from the regulated to the non-regulated, or lightly regulated, sector, and thus to an unlevel playing field between the two sectors.⁵¹ Others have argued that the “shadow” banking sector should be recognised and proper regulation and supervision put in place.⁵²

Of course, the impact of the new regulatory framework will depend on its details. For instance, if the investment activities of deposit banks are to be more heavily regulated, then, through competition, these activities will partly shift to the less regulated sector (e.g. hedge funds and private equity funds), which may be able to conduct certain activities at a lower cost than banks. This will make it difficult for diversified banks to compete in this specific market. Hence, the benefits of a diversified banking model will be limited as a result of the increased competition in some market segments. Supervisory arbitrage could also occur in cases where legislation is not implemented effectively and consistently among the major financial areas.

A regulatory disparity between banks and the rest of the financial sector may not only mean that some activities, which are usually carried out by banks, move to a different sector, it could also deeply change the content of those activities. Indeed, the lightly regulated entities have a significant indirect impact on the regulated entities, as was demonstrated by the pressure that hedge funds were able to exert on the remuneration schemes of banks. An expansion of the lightly regulated sector could lead to an increase in risk-taking by both regulated and lightly regulated institutions. This could challenge the diversified business model as banks will find it more profitable to focus on certain business lines.

However, market participants cite three factors that counteract the regulatory arbitrage motive for non-regulated entities to take over banking activities: first, regulation guarantees the banking monopoly in traditional banking activities such as deposit collection; second, most non-regulated entities do not aim to provide market-making facilities; and, third, the provision of banking services is not currently a particular aim of non-banking entities. A gradual movement limited to specific market segments is therefore more likely than a general and abrupt shift.

2.2 FUNDING AND CAPITAL STRUCTURES

The financial crisis highlighted the weaknesses of the internal funding policies of the financial industry. Drawing on the lessons of 2008 and 2009, banks and public authorities will reshape the funding characteristics of the sector.⁵³ Banks will be forced to improve their funding and capital structures in terms of quality and reliability. Nevertheless, this structural adjustment will also translate into higher funding costs.

2.2.1 SEARCH FOR MORE AND HIGHER-QUALITY CAPITAL

The amount of capital that banks have to hold will increase, whether as a result of regulatory reforms or of capital markets' demands:

- On the one hand, regulatory reforms aim to increase the amount and quality of capital that banks have to hold; on the

51 See Kashyap, Rajan and Stein (2008), “Rethinking capital regulation”, paper prepared for Federal Reserve Bank of Kansas City symposium on “Maintaining Stability in a Changing Financial System”, Jackson Hole, Wyoming, 21-23 August; and Brunnermeier, Crocket, Goodhart, Persaud and Shin (2009), “The fundamental principles of financial regulation”, Geneva Reports of the World Economy, Vol. 11, International Center for Monetary and Banking Studies, Geneva, and Centre for Economic Policy Research, London.

52 See Gorton, G. (2009), “Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007”, prepared for the Federal Reserve Bank of Atlanta’s 2009 Financial Market Conference: Financial Innovation and Crisis, May 11-13.

53 For an early analysis of the impact of the crisis on bank funding, see ECB (2009), *EU banks’ funding structures and policies*, May.

other, the crisis has increased investors' awareness of banks' capital endowments. Greater awareness is to be found not only among equity investors, but also among debt holders, as higher capital buffers also reduce the risk of a bank defaulting on its debts. Whatever the effect of the regulatory reforms on capital requirements, market participants may demand "buffers on the regulatory capital buffers".

- Both regulatory developments and the current economic and financial environment will affect the capital structures of banks. The expected increase in the cost of risk will continue to consume bank capital in the near future, and the supervisory requirements relating to risk weights on a wider range of asset classes will probably be permanently higher for the foreseeable future.

EU banks have already raised their Tier 1 and capital adequacy ratios by roughly 2 percentage points (see Chart 20). However, future developments are likely to be affected by two

factors: first, the ability to tap markets will differ between banks, and, second, governments are now important shareholders in the banking sector of some EU countries.⁵⁴

2.2.2 SEARCH FOR STABLE SOURCES OF FUNDING

In the period preceding the crisis, the funding of banks was characterised by low interest rates, low risk premia and thus an inadequate pricing of the cost of risk. Wholesale and interbank sources of funding had continuously grown in importance, whereas funding through deposits was considered unattractive.

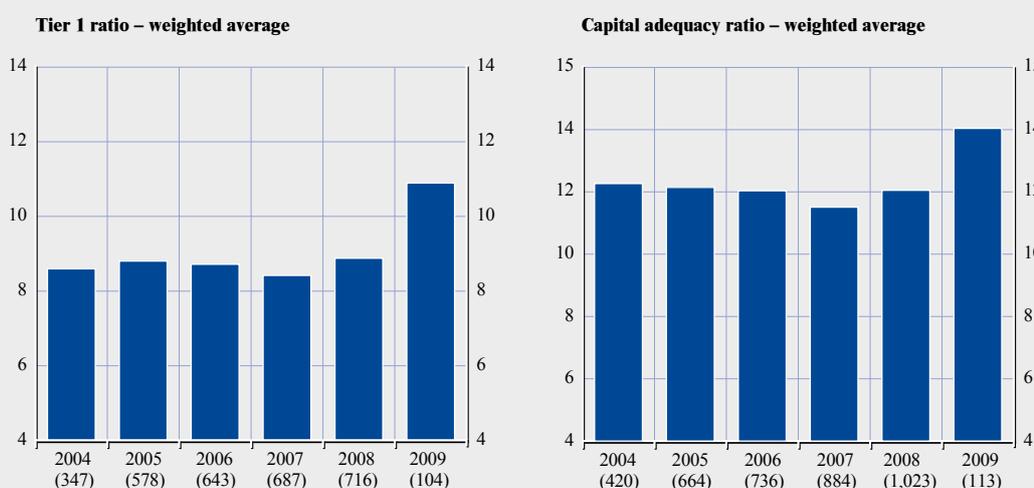
THE RACE FOR DEPOSITS

Since 2009, a growing interest in deposits has been observed, reflected in a rise in deposit supply by the non-financial corporation sector

54 A mitigating factor may emerge if banks succeed in increasing their profitability, which would enable them to generate capital internally and attract new investors. However, as argued in Section 1.2.1, this is not a likely development in the short term.

Chart 20 Capital ratios of EU banks

(as a percentage of risk-weighted assets)

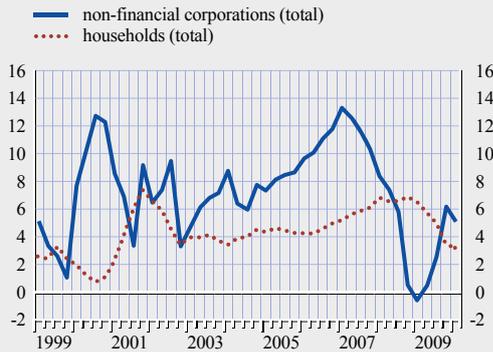


Source: Bankscope.

Note: Figures in brackets indicate number of observations. Fixing the sample with available 2009 observations does not alter the results substantially.

Chart 21 Total deposits by sector

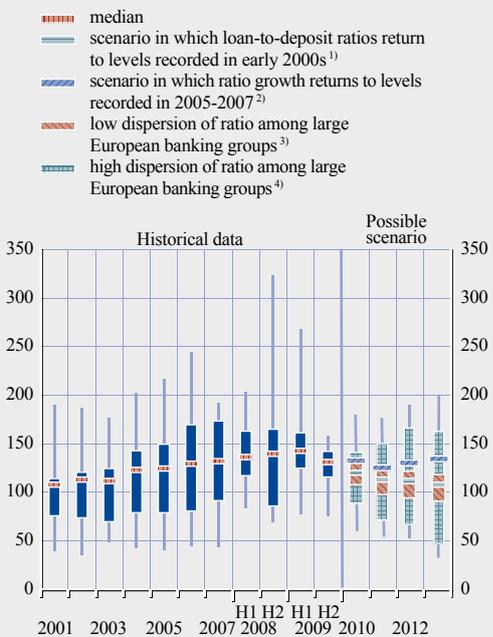
(annual growth rates as percentages)



Source: ECB.

Chart 22 Loan-to-deposit ratios of 17 large European banks, 10 for H1 2009

(annual growth rates as percentages; maximum, minimum and inter-quartile distribution)



Source: Bloomberg.

Note: Future dispersions are calculated from historical data by duplicating strong and weak past dispersions and adding a dynamic.

- 1) this may be due to weak economic growth and banks' willingness to adjust their loans to their deposits
- 2) this may be due to aggressive strategies by banks with easier access to wholesale funding
- 3) all banks demonstrate the same behaviour owing to harsh market conditions
- 4) banks may follow different strategies owing to differences in their access to wholesale funding, risk appetite or banking model

(see Chart 21). Since the crisis, the interest rates offered by banks on customer deposits have steeply increased in comparison with interbank rates, and the deposit margins for banks have declined.

Deposit funding is part of the current “back to basics” policy implemented by numerous banks. It will continue to be a heavily demanded source of funding in the medium term. As for other sources of funding, the crisis has resulted in an increased awareness of differences between banks, with banks with established brands gaining a competitive advantage vis-à-vis their weaker competitors.

This increase in deposits has put the funding situation of banks on a more stable footing since the crisis: loan-to-deposit ratios decreased in the course of the second half of 2009 (see Chart 22), not only owing to increased deposit supply but also as a result of a reduction in lending activity. However, the competition for deposits between banks can be expected to continue for two reasons:

- First, the saving capacity of depositors and therefore the deposit supply are finite, and investment funds, stocks and bonds will probably increase again in attractiveness as substitutes for deposits for investors in the near future.
- Second, the ongoing initiative to harmonise deposit guarantee schemes in the European Union is likely to increase the attractiveness of cross-border deposits for customers. Thus, competition for deposits will increase. Moreover, the cross-border provision of deposits may gain some additional impetus from the spread of internet banking. Integration in retail banking is also expected to gain pace with the wide-ranging application of the Single Euro Payments Area in the medium term.

This increased competition will probably influence the usually low sensitivity of deposits, making deposits a less “sticky” source of funding.

WHOLESALE FUNDING

Before the crisis, some banks were becoming increasingly reliant on cheaper short-term interbank and wholesale funding, increasing the maturity mismatches in the balance sheet. In a crisis and post-crisis environment, where banks are likely to look for safety, funding sources such as repo funding, simple forms of securitisation and covered bonds may become the preferred choices.

Preference for secured and simple funding sources

A shift towards secured funding has been observed since 2000 and may become a persistent trend in the medium term. Over the coming five years, lenders to banks will attempt to limit credit and funding risks and therefore demand greater security and be more aware of the liquidity of collateral provided.

Therefore, although the crisis highlighted the flaws of securitisation, analysts and market participants agree that *securitisation* will again need to become a part of the financial landscape, but the exact nature and size of the market is as yet undetermined. There are currently some signs of the reopening of the primary and secondary securitisation markets, even if most of the issuance is in fact retained for repo operations. Owing to the existence of a large number of uncertainties,⁵⁵ the future state of the securitisation market is still unclear. One probable trend is the development of a more standardised market, in terms of both instruments and documentation.

The *covered bond* market as an alternative funding source has proved to be less fragile, given also the support from the Eurosystem's covered bond purchase programme. It is expected that, as in the case of other instruments, the market will call for increased transparency and standardisation for covered bonds.

Adaptation to new regulatory rules on liquidity

The regulatory proposals on liquidity requirements may have an impact on the role of the interbank markets as a funding source

for banks. The recent regulatory proposals on liquidity require banks to hold highly liquid assets and an amount of stable funding. Market participants in their interviews raised the following points:

- In order to meet the net stable funding ratio requirements, banks would have to increase the duration of their funding. This in turn would lead to an increased multi-year demand for term liabilities for the banking system. Given that banks have to fund themselves at longer maturities, market participants see potential difficulties in finding providers of this medium-term funding, as even banks with a liquidity surplus under the current regime would have an incentive to invest these funds in highly liquid assets rather than in interbank assets.⁵⁶
- Regarding the liquidity coverage ratio, market participants find the definition of the high-quality liquid assets (e.g. liquidity buffer) in the BCBS proposal restrictive. As such, banks may be tempted to use the less liquid assets as collateral for operations with central banks and to keep other assets (eligible for the buffer) to meet the supervisory requirements. The assets pledged to central banks would not be used as collateral in the secured funding markets. This could also weaken repo markets for covered bonds (and corporate bonds as well).
- In order to integrate the risk posed by over-reliance from the short-term wholesale market, the regulatory proposals

⁵⁵ These include uncertainties regarding the timing of the unwinding of central bank facilities and the extent to which existing asset-backed security instruments can be successfully placed with market participants as funding sources.

⁵⁶ Securities issued by banking institutions are excluded from the numerator of the liquidity coverage ratio (the liquid assets buffer) for the holding bank, whereas they could be sold or used as collateral on the market. At the same time, securities issued with a contractual maturity of more than one year are assigned a 100% required factor in the net stable funding ratio. This means that a bank which holds a security issued by another bank is required to have long-term funding for such an asset.

include a 0% roll-over assumption for interbank funds for the 30-day liquidity coverage ratio. Market participants expressed concern that interbank funding may become an unattractive funding source for a bank, especially in shorter tenors. Moreover, the issuing of short-term paper may not represent a better alternative given that issues from financial institutions would not qualify as liquid assets and consequently could not be used by other banks to comply with the liquidity coverage ratio.

All in all, the new regulatory proposals are creating a feeling among market participants that there might not be enough term liquidity for all institutions, which could have an impact on the funding costs for banks and may generate tensions in term money markets. It is important to take into account the impact of the new liquidity measures, given the fact that, in the European economy, the role of intermediation of the banking sector is essential for financing the real economy.⁵⁷ This role could be affected in favour of less regulated institutions or markets.

Need for new and longer issuance

EU banks will face significant amounts of maturing debt from 2010 to 2012, including a large portion of debt securities that were issued in benign market conditions up to 2007. Meanwhile, government guarantees have already been or will soon be phased out, as will be the unconventional measures of the central banks once the economic situation normalises. According to Moody's,⁵⁸ an amount of USD 3.5 trillion of Moody's rated debt will become due in the euro area and USD 0.7 trillion in the United Kingdom between 2010 and 2015. The same source confirms the fall in maturities over the past decade: the average maturity for Moody's rated new debt fell from just below eight years in 2003 to about five years in 2009 for the euro area, and from about 11 years in 2001 to just over four years in 2009 for the United Kingdom.

2.2.3 BANKS' LIABILITY STRUCTURES: TOWARDS MORE STABILITY AND HIGHER COSTS

To sum up, funding will not be as easily accessible as before the crisis and it will be more expensive. Funding structures will move towards stable and long-term sources, such as capital and deposits, and away from more volatile and short-term sources in the interbank and money markets. Banks will also have to increase their capital. As a consequence, not only the median costs of capital and bond issues but also the dispersion between banks will increase: investors will discriminate more between solid and less solid banks.

The price of all sources of funding, including capital, is likely to increase:

- Deposits are being rediscovered as a funding source. This will result in higher costs of deposit funding owing to increased competition spilling into higher interest rates offered, extended points of contact for depositors and the need to establish branches, as these are considered essential for attracting depositors.
- Funding on interbank and money markets will be more expensive owing to higher requirements regarding the quality of collateral and the pricing of liquidity risks. Generally, risk premia will be more sensitive to the idiosyncratic risks of banks. The Basel III proposals for improvements in capital and liquidity endowments, the withdrawal of state support and the expiry of unconventional central bank policy measures will create additional pressure on banks' funding.

⁵⁷ In the European Union, bank loans account for almost half of the financial markets, whereas they only account for slightly over a quarter in the United States. Financial markets are defined here as the sum of total bank credit, outstanding debt securities and stock market capitalisation. See, for example, *Statistics Pocket Book*, ECB, 2010 (year 2009 data, latest update July 2010).

⁵⁸ Moody's Special Comment, November 2009, *Banks' Wholesale Debt Maturity Profiles Shorten, Exposing Many Banks to Refinancing Risks*.

- Many banks will have to issue securities to offset their maturing debt. They will probably try to replace some maturing debt with new longer-term debt, which exposes them to increases in interest rates and funding costs.⁵⁹ This could be the main concern in the near future, with a possible steepening of yield curves. Wholesale funding costs are also likely to increase as a result of a possible congestion of the market.

2.3 CONCLUSION

Although it is highly difficult to be fully conclusive, it is clear that the EU banking landscape will be transformed over the medium term. The diversified business model is expected to gain in importance and banks are expected to conduct safer funding policies, as a result of several factors:

- First, diversified banks have appeared to be individually more resilient during the crisis.
- Second, the new regulatory framework, by implementing stricter capital and liquidity requirements, is expected to encourage safer practices and funding policies and more resilient business models. Banks are likely to have recourse to larger capital buffers of higher quality, increased reliance on more stable sources of funding and lower maturity mismatches.
- Third, the current climate of increased investor risk aversion may foster monitoring and market discipline, which may curb risk-taking by banks, in terms of both activities and funding practices.

All these changes should be beneficial for the stability of the overall banking system.

However, the current environment is subject to many uncertainties, which may have an impact on the evolution of the EU banking sector.

The new regulatory framework is still under discussion and a number of issues will need to be resolved in terms of the scope, calibration and timing of the new regulatory requirements.

Moreover, funding sources that are deemed stable, such as deposits, are of limited availability and could become more volatile and expensive, owing to increased competition for funding and a likely revival of investors' search for yield in the medium to long term.

Finally, even if the diversified banking model is in itself more resilient and favourable to financial stability, diversity in business models at the macroeconomic level can also offer benefits in terms of enhanced financial stability: if all banks in the system were to have similar business models, their assets would be more likely to be invested in similar activities and, as a consequence, characterised by a larger degree of commonality. Therefore, a stable banking system generally needs both individual diversification within banks and diversification across banks at the global level in terms of business lines, geographical exposure and risk appetite.

⁵⁹ Note that the new rule of the US Securities and Exchange Commission for money market funds that requires the latter to shorten the maturity of assets removes an important source of long-term funding for banks.

ANNEXES

I STRUCTURAL INDICATORS FOR THE EU BANKING SYSTEM

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

	Number of credit institutions					Number of local units (branches)				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	100	105	110	105	104	4,564	4,574	4,425	4,316	n.a.
Bulgaria	34	32	29	30	30	5,629	5,569	5,827	6,080	6,038
Czech Republic	56	57	56	54	56	1,825	1,877	1,862	1,993	1,998
Denmark	197	191	189	171	164	2,122	2,152	2,194	2,192	1,996
Germany	2,089	2,050	2,026	1,989	1,948	44,044	40,282	39,777	39,531	39,411
Estonia	11	14	15	17	18	230	245	266	257	213
Ireland	78	78	81	82	498	910	935	1,158	895	1,228
Greece	62	62	63	66	66	3,543	3,699	3,850	4,098	4,078
Spain	348	352	357	362	352	41,979	43,691	45,500	46,065	44,431
France	854	829	808	728	712	27,075	40,013	39,560	39,634	38,479
Italy	792	807	821	818	801	31,504	32,334	33,230	34,168	34,035
Cyprus	391	336	215	163	155	951	941	921	923	930
Latvia	25	28	31	34	37	586	610	682	658	624
Lithuania	78	78	80	84	84	822	892	970	973	972
Luxembourg	155	156	156	152	147	246	234	229	229	n.a.
Hungary	214	212	206	197	190	3,125	3,243	3,387	3,515	3,551
Malta	19	18	22	23	24	109	110	104	111	116
Netherlands	401	345	341	302	295	3,748	3,456	3,604	3,421	3,137
Austria	818	809	803	803	790	4,300	4,258	4,266	4,243	4,167
Poland	730	723	718	712	710	10,074	10,934	11,607	12,914	13,292
Portugal	186	178	175	175	166	5,422	5,618	6,055	6,417	6,430
Romania	40	39	42	43	42	3,533	4,470	6,340	7,375	6,425
Slovenia	25	25	27	24	25	693	696	711	698	706
Slovakia	23	24	26	26	26	1,142	1,175	1,169	1,258	1,230
Finland	363	361	360	357	349	1,616	1,756	1,693	1,672	1,538
Sweden	200	204	201	182	180	2,003	2,004	1,988	2,025	2,147
United Kingdom	394	394	396	391	389	13,130	12,880	12,425	12,360	12,360
MU16	6,704	6,535	6,391	6,175	6,458	171,846	183,772	186,252	187,679	179,916
EU27	8,683	8,507	8,354	8,090	8,358	214,925	228,648	233,800	238,021	229,532

Notes: For PL, the data on the number of credit institutions includes credit unions. MU16 and EU27 totals exclude countries for which data are not available. The jump in the number of credit institutions and local units in IE in 2009 is attributable to a reclassification of 419 credit unions as credit institutions.

Table 2 Number of employees and total assets of credit institutions

	Number of employees of credit institutions					Total assets of credit institutions (EUR millions)				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	69,481	67,957	67,080	65,985	n.a.	1,055,270	1,121,904	1,297,788	1,270,766	1,155,506
Bulgaria	23,636	25,633	30,953	33,258	34,290	17,447	22,302	31,238	36,825	37,950
Czech Republic	37,943	37,825	40,037	39,882	38,394	100,902	114,878	140,168	155,005	160,219
Denmark	47,579	46,394	49,644	52,830	50,101	746,589	820,893	978,264	1,091,809	1,104,536
Germany	705,000	692,500	691,300	685,550	n.a.	6,826,564	7,121,041	7,562,432	7,875,401	7,423,967
Estonia	5,029	5,681	6,319	6,144	5,693	11,876	15,379	20,603	22,066	21,340
Ireland	37,702	39,154	41,865	40,507	38,178	941,908	1,178,127	1,337,356	1,412,198	1,323,584
Greece	61,295	62,171	64,713	66,163	65,673	281,067	315,081	383,295	461,981	490,134
Spain	252,831	261,890	275,506	276,497	267,383	2,152,833	2,526,764	3,005,274	3,381,187	3,433,283
France	442,230	484,557	497,384	492,367	n.a.	5,073,388	5,728,126	6,682,335	7,225,140	7,155,460
Italy	335,726	339,091	340,443	337,962	322,575	2,509,436	2,793,244	3,331,829	3,634,559	3,691,965
Cyprus	10,799	10,845	11,286	12,554	12,513	62,553	76,623	92,897	118,142	139,372
Latvia	10,477	11,656	12,826	13,905	12,365	15,727	22,694	30,816	32,249	29,924
Lithuania	7,637	8,624	10,303	11,080	10,902	13,162	17,347	23,817	26,542	26,180
Luxembourg	23,224	24,752	26,128	27,208	26,416	792,417	839,563	915,446	931,563	797,460
Hungary	37,527	39,302	41,905	43,620	42,607	78,289	93,679	108,504	124,672	126,160
Malta	3,383	3,515	3,756	3,906	3,834	27,195	30,034	37,807	42,283	41,242
Netherlands	120,165	116,500	114,424	116,000	110,000	1,697,781	1,843,176	2,168,280	2,231,514	2,217,008
Austria	75,303	76,323	77,731	78,754	77,246	721,159	789,770	890,747	1,068,196	1,036,597
Poland	158,130	162,125	173,955	188,969	183,064	163,421	189,739	233,938	262,591	274,212
Portugal	54,035	58,213	60,979	62,377	62,221	360,185	397,111	439,459	482,126	520,188
Romania	52,452	58,536	66,039	71,622	67,898	35,400	51,911	72,095	84,541	86,386
Slovenia	11,726	11,838	12,051	12,284	12,188	30,135	34,841	43,493	49,010	53,404
Slovakia	19,850	19,525	19,779	20,598	18,750	37,834	49,151	58,053	65,509	54,473
Finland	23,644	24,769	25,025	25,699	24,879	234,519	255,055	287,716	383,908	387,630
Sweden	44,943	47,069	48,457	50,115	49,071	659,286	781,961	854,947	907,536	934,534
United Kingdom	534,482	521,476	505,661	495,493	471,095	5,897,712	7,060,884	10,094,508	8,840,240	9,420,998
MU16	2,246,394	2,293,600	2,329,450	2,324,411	1,041,856	22,804,244	25,099,611	28,534,207	30,633,483	29,921,272
EU27	3,206,229	3,257,921	3,315,549	3,331,329	2,007,336	30,544,055	34,291,278	41,123,104	42,217,558	42,143,710

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 into two of the main Portuguese banks. The number of employees in IE excludes employees in credit unions (only applicable from 2009 on). MU16 and EU27 totals exclude countries for which data are not available.

Table 3 Herfindahl index for credit institutions and share of total assets of the five largest credit institutions

(index ranging from 0 to 10,000 and share of the five largest credit institutions in percent)

	Herfindahl Index for credit institutions					Share of total assets of the five largest credit institutions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	2,112	2,041	2,079	1,881	1,622	85.3	84.4	83.4	80.8	77.1
Bulgaria	698	707	833	834	846	50.8	50.3	56.7	57.3	58.3
Czech Republic	1,155	1,104	1,100	1,014	1,032	65.5	64.1	65.7	62.1	62.4
Denmark	1,115	1,071	1,120	1,229	1,042	66.3	64.7	64.2	66.0	64.0
Germany	174	178	183	191	206	21.6	22.0	22.0	22.7	25.0
Estonia	4,039	3,593	3,410	3,120	3,090	98.1	97.1	95.7	94.8	93.4
Ireland	644	649	690	794	881	47.8	49.0	50.4	55.3	58.8
Greece	1,096	1,101	1,096	1,172	1,184	65.6	66.3	67.7	69.5	69.2
Spain	487	442	459	497	507	42.0	40.4	41.0	42.4	43.3
France	727	726	679	681	605	51.9	52.3	51.8	51.2	47.2
Italy	230	220	328	344	353	26.8	26.2	33.1	33.0	34.0
Cyprus	1,029	1,056	1,089	1,019	1,086	59.8	63.9	64.9	63.8	65.0
Latvia	1,176	1,271	1,158	1,205	1,181	67.3	69.2	67.2	70.2	69.3
Lithuania	1,838	1,913	1,827	1,714	1,693	80.6	82.5	80.9	81.3	80.5
Luxembourg	312	294	276	278	288	30.7	29.1	27.9	27.3	27.8
Hungary	795	823	840	819	861	53.2	53.5	54.1	54.4	55.2
Malta	1,330	1,171	1,177	1,236	1,246	75.3	70.9	70.2	72.8	72.7
Netherlands	1,796	1,822	1,928	2,168	2,032	84.5	85.1	86.3	86.8	85.0
Austria	560	534	527	454	414	45.0	43.8	42.8	39.0	37.2
Poland	650	599	640	562	574	48.5	46.1	46.6	44.2	43.9
Portugal	1,154	1,134	1,098	1,114	1,150	68.8	67.9	67.8	69.1	70.1
Romania	1,115	1,165	1,041	922	857	59.4	60.1	56.3	54.0	52.4
Slovenia	1,369	1,300	1,282	1,268	1,256	63.0	62.0	59.5	59.1	59.7
Slovakia	1,076	1,131	1,082	1,197	1,273	67.7	66.9	68.2	71.6	72.1
Finland	2,730	2,560	2,540	3,160	3,120	82.9	82.3	81.2	82.8	82.6
Sweden	845	856	934	953	899	57.3	57.8	61.0	61.9	60.7
United Kingdom	399	394	449	412	467	36.3	35.9	40.7	36.5	40.8
MU16	640	634	659	687	663	42.8	43.1	44.4	44.7	44.6
unweighted average	1,052	1,022	1,032	1,091	1,076	56.7	56.4	56.7	57.0	57.0
EU27	614	592	596	665	632	42.6	41.5	41.5	45.2	44.3
unweighted average	1,135	1,106	1,106	1,120	1,102	59.3	59.0	59.5	59.6	59.5

Table 4 Loans from credit institutions to non-financial corporations and loans from credit institutions for housing purchase

(EUR millions)

	Loans from credit institutions to non-financial corporations					Loans from credit institutions for housing purchase				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	90,624	97,180	109,633	122,488	111,690	94,732	107,378	113,746	86,346	79,342
Bulgaria	5,735	6,814	11,784	15,572	15,931	n.a.	1,751	2,876	3,976	4,308
Czech Republic	18,844	23,908	29,242	33,595	31,621	9,737	13,639	19,375	23,072	26,264
Denmark	102,350	119,004	139,671	156,758	151,682	193,713	217,629	239,264	253,168	266,890
Germany	774,105	800,306	859,447	947,472	901,749	961,186	976,123	967,492	959,840	962,332
Estonia	3,212	5,177	6,860	7,321	6,944	2,602	4,248	5,590	6,228	6,116
Ireland	107,078	143,603	175,163	184,948	164,503	94,776	111,403	124,019	115,233	110,307
Greece	69,140	73,830	86,638	101,347	92,812	43,001	52,313	63,385	65,267	67,703
Spain	579,687	760,329	907,541	969,429	933,197	450,982	551,506	626,573	658,094	657,191
France	610,934	670,150	764,658	845,577	827,622	495,105	569,975	643,142	691,182	716,448
Italy	647,458	728,275	823,632	880,288	860,859	217,221	244,409	265,560	264,414	280,482
Cyprus	10,875	12,349	16,046	22,058	23,338	4,140	5,450	6,989	8,584	10,492
Latvia	4,346	6,601	9,042	10,665	10,011	2,524	4,699	6,785	7,157	6,825
Lithuania	4,636	6,545	8,947	10,411	9,450	1,874	3,002	4,859	6,069	6,039
Luxembourg	37,277	41,682	51,086	65,695	59,209	10,586	12,018	14,676	15,940	17,077
Hungary	23,062	26,161	29,015	31,126	29,661	9,029	10,728	12,410	14,720	14,735
Malta	3,345	3,949	4,297	5,121	5,317	1,522	1,775	2,021	2,228	2,472
Netherlands	238,303	255,773	298,550	325,906	342,185	361,198	369,642	379,015	375,656	378,418
Austria	121,566	129,406	139,337	156,514	155,496	53,835	60,737	65,107	71,346	72,618
Poland	32,247	36,907	49,143	55,128	53,739	13,181	20,505	32,783	46,610	52,599
Portugal	88,049	94,598	105,469	120,176	122,238	79,488	91,916	101,106	105,222	110,693
Romania	9,445	14,702	20,209	23,515	22,853	766	2,176	3,932	5,199	5,718
Slovenia	10,510	12,958	17,522	20,744	21,036	1,368	1,956	2,670	3,398	3,933
Slovakia	5,890	7,181	13,470	15,478	14,941	3,137	5,209	6,773	8,536	9,469
Finland	41,181	44,833	51,076	60,392	56,106	48,490	55,307	62,173	67,633	71,861
Sweden	138,456	155,015	175,952	174,126	173,368	106,757	125,746	133,807	128,484	151,835
United Kingdom	528,493	616,079	678,652	599,095	588,444	1,065,249	1,152,822	1,100,195	787,213	991,663
MU16	3,436,022	3,876,402	4,423,565	4,843,633	4,692,298	2,920,767	3,217,118	3,444,448	3,498,920	3,550,837
EU27	4,306,848	4,893,314	5,582,082	5,960,945	5,786,003	4,326,198	4,774,062	5,006,323	4,780,815	5,083,829

Note: Outstanding amounts vis-à-vis domestic and other euro area counterparties. MU16 and EU27 totals exclude countries for which data are not available.

Table 5 Loans from credit institutions for consumer credit and other household lending from credit institutions

(EUR millions)

	Loans from credit institutions for consumer credit					Other household lending from credit institutions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	8,533	8,861	9,462	9,243	8,897	18,218	18,768	18,937	19,451	16,477
Bulgaria	n.a.	2,400	3,576	4,649	4,943	n.a.	477	605	648	558
Czech Republic	3,089	4,007	5,218	6,344	7,137	1,591	2,048	2,737	3,404	4,009
Denmark	14,782	16,513	19,686	19,854	17,511	19,126	22,773	26,870	27,892	27,342
Germany	171,048	167,605	168,986	173,289	178,998	307,830	296,289	284,800	278,515	273,779
Estonia	280	530	785	844	754	285	381	531	594	581
Ireland	17,509	19,996	21,039	21,942	24,006	7,127	8,525	10,658	10,897	8,701
Greece	20,821	25,544	27,518	28,333	26,963	1,649	2,135	2,810	3,070	3,034
Spain	77,235	92,213	103,506	102,458	92,513	93,207	106,455	113,896	123,431	127,024
France	141,976	148,748	156,270	156,336	155,205	73,640	73,023	76,666	78,597	81,748
Italy	44,335	49,878	52,665	54,707	57,373	130,894	136,799	146,586	150,041	158,778
Cyprus	2,577	2,848	3,118	4,261	4,770	5,645	5,676	6,111	6,366	5,600
Latvia	521	852	1,035	1,120	1,011	487	650	813	786	767
Lithuania	441	742	1,061	1,266	1,028	398	849	1,342	1,423	1,311
Luxembourg	1,289	1,290	1,395	1,523	1,518	12,936	12,556	12,005	10,892	11,559
Hungary	4,766	6,891	9,635	12,913	12,977	1,261	1,373	1,392	1,482	1,473
Malta	213	252	288	330	375	439	524	597	660	670
Netherlands	24,662	25,365	24,786	25,357	25,058	20,838	26,233	23,634	22,496	21,335
Austria	27,878	25,125	25,353	24,820	23,687	28,067	28,387	30,604	31,949	32,071
Poland	13,875	16,239	22,082	24,532	31,216	9,805	12,768	18,053	20,084	19,590
Portugal	9,427	11,416	13,820	15,495	15,779	11,261	12,058	12,969	12,748	12,495
Romania	4,910	9,239	15,265	18,333	17,173	131	204	612	1,147	746
Slovenia	1,968	2,287	2,743	2,885	2,901	946	1,138	1,408	1,548	1,586
Slovakia	653	1,191	1,379	1,694	1,910	988	1,501	1,949	2,382	2,570
Finland	9,401	10,422	11,237	12,068	12,385	11,158	12,227	13,171	13,726	14,154
Sweden	11,364	13,457	14,513	13,597	15,280	50,118	56,803	59,898	54,785	60,985
United Kingdom	209,207	213,566	198,207	145,398	148,532	51,416	61,063	61,811	52,029	54,964
MU16	559,526	593,040	623,566	634,742	632,338	724,844	742,295	756,800	766,769	771,580
EU27	822,761	877,477	914,629	883,593	889,898	859,462	901,683	931,463	931,043	943,906

Note: Outstanding amounts vis-à-vis domestic and other euro area counterparties. MU16 and EU27 totals exclude countries for which data are not available.

Table 6 Total loans and total deposits

(EUR millions)										
	Total loans from credit institutions to non-credit institutions					Total deposits from non-credit institutions to credit institutions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	362,765	388,551	417,040	401,882	371,961	458,099	461,327	506,332	540,138	538,250
Bulgaria	9,415	11,701	19,389	25,517	26,470	11,210	14,875	20,520	22,302	22,859
Czech Republic	40,959	51,623	67,287	77,487	79,777	67,514	77,514	92,985	100,020	106,121
Denmark	389,843	447,033	503,747	554,403	549,839	143,245	154,404	180,586	191,331	190,797
Germany	3,023,001	3,053,147	3,142,365	3,228,963	3,162,908	2,593,143	2,704,740	2,882,321	3,067,485	3,078,922
Estonia	7,820	11,373	15,321	16,635	15,651	5,221	7,833	9,090	9,507	10,077
Ireland	333,378	404,307	480,985	480,830	441,254	228,505	282,491	316,208	306,655	290,514
Greece	147,764	167,359	199,347	220,596	214,542	188,387	211,432	249,637	281,037	278,847
Spain	1,277,919	1,602,078	1,860,284	1,985,816	1,969,459	1,071,420	1,315,163	1,550,855	1,749,372	1,782,552
France	1,700,679	1,887,444	2,157,291	2,289,794	2,318,625	1,363,396	1,413,544	1,570,449	1,669,986	1,767,320
Italy	1,280,350	1,423,557	1,724,275	1,809,262	1,847,956	845,125	906,551	1,099,327	1,189,244	1,267,386
Cyprus	28,062	31,417	41,021	54,442	57,874	38,073	43,099	52,516	56,008	58,154
Latvia	10,007	15,442	20,787	22,949	21,166	8,913	11,054	14,380	13,328	12,951
Lithuania	8,801	12,306	17,650	21,085	19,302	7,797	9,548	11,644	11,222	12,152
Luxembourg	144,882	159,420	191,830	202,862	186,331	239,907	285,385	292,494	263,366	252,358
Hungary	45,980	56,298	65,565	76,473	73,087	38,480	47,129	51,150	55,152	56,326
Malta	11,013	14,102	20,239	24,968	21,348	11,235	11,059	14,014	15,336	16,772
Netherlands	926,035	1,005,685	1,066,898	1,101,689	1,156,106	693,558	798,555	891,849	981,360	965,443
Austria	327,594	349,415	377,153	420,031	414,631	248,655	264,321	295,265	314,502	318,383
Poland	77,995	96,470	133,590	158,173	175,453	105,818	121,634	147,294	153,789	171,412
Portugal	209,241	230,918	257,763	281,751	291,070	161,650	174,382	189,300	211,101	224,105
Romania	16,583	27,928	42,056	50,823	49,811	21,623	30,175	37,779	40,248	41,331
Slovenia	16,882	21,389	29,226	34,544	35,406	16,388	17,934	19,838	21,116	24,218
Slovakia	14,609	21,518	26,547	30,752	31,109	21,889	19,525	21,831	22,626	21,961
Finland	117,289	131,397	147,894	165,459	165,848	85,267	88,142	99,843	113,002	115,049
Sweden	325,113	404,203	443,526	424,955	458,909	143,451	182,526	189,744	183,447	194,666
United Kingdom	4,550,257	5,090,013	5,814,703	5,117,581	4,979,894	1,956,377	2,353,353	5,865,320	5,159,840	5,069,019
MU16	9,921,463	10,891,704	12,140,159	12,733,641	12,686,427	8,264,697	8,997,649	10,052,079	10,802,334	11,000,234
EU27	15,404,236	17,116,095	19,283,779	19,279,722	19,135,788	10,774,346	12,007,694	16,672,571	16,742,519	16,887,947

Note: Outstanding amounts vis-à-vis domestic, other euro area and rest of the world counterparties.

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

(EUR millions)

	Gross issues of long-term debt securities by non-financial companies in all currencies					Gross issues of short-term debt securities by non-financial companies in all currencies				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	3,495	6,189	11,701	3,863	9,029	48,853	42,725	73,472	81,557	112,557
Bulgaria	105	155	162	75	57	n.a.	n.a.	n.a.	n.a.	7
Czech Republic	221	436	1,057	119	2,062	0	0	0	0	0
Denmark	1,663	3,679	2,285	424	5,351	2,083	3,181	3,848	2,397	1,483
Germany	22,769	15,969	6,068	10,362	32,066	219,474	184,345	248,624	361,343	131,823
Estonia	70	163	296	99	67	27	62	102	67	35
Ireland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	4,571	4,513	3,325	5,837	1,228	0	0	7	10	3
Spain	1,061	341	2,757	2,301	4,567	6,963	7,785	6,453	7,108	6,552
France	31,338	38,931	35,366	48,328	90,447	475,838	514,033	660,262	325,562	300,735
Italy	6,118	6,271	14,183	3,931	15,594	1	8	0	37	0
Cyprus	0	0	0	10	5	0	0	0	0	0
Latvia	4	25	11	6	6	0	0	6	4	0
Lithuania	13	25	31	17	8	0	0	0	11	1
Luxembourg	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	101	0	13	20	38	0	0	8	17	0
Malta	0	2	14	32	215	0	0	0	0	0
Netherlands	5,264	8,266	11,629	12,098	22,304	86,628	152,033	102,047	68,724	12,196
Austria	7,657	4,266	8,496	5,544	9,689	796	516	503	670	906
Poland	492	1,112	3,423	1,160	1,195	9,306	11,241	13,646	23,867	18,695
Portugal	2,676	3,169	3,356	2,194	5,228	98,211	105,084	126,612	232,223	225,487
Romania	292.08	86.94	2.34	n.a.	n.a.	221.37	606.2	n.a.	n.a.	n.a.
Slovenia	205	12	34	20	409	0	0	0	0	0
Slovakia	44	40	71	60	87	0	0	0	0	0
Finland	1,604	3,983	2,025	427	7,004	90,545	100,548	94,455	92,675	42,531
Sweden	3,340	3,292	5,764	3,343	4,582	n.a.	n.a.	n.a.	n.a.	n.a.
United Kingdom	35,417	53,623	46,692	42,392	57,383	61,868	96,744	81,078	76,399	43,791

Notes: Statistics on issues of securities are compiled according to Annex III of the ECB's Statistical Guideline ECB/2007/9 (as amended) and comprise all issues by euro area residents in any currency. Long-term debt securities have an original maturity exceeding one year, short-term debt securities have an original maturity of less than one year.

Issuers are divided into sectors in line with the ESA 95 classification. Gross issues are converted into euro using the average exchange rate across the period.

For SE, the data refer only to gross issues of long-term debt securities by non-financial companies denominated in Swedish kronor and issued on the Swedish market.

For PL, the data concern private and public domestic issues in all currencies.

For the CZ, the data up to and including 2006 include some inseparable non-banking financial institutions and also only include issues with an international securities identification number (ISIN), but, as of 2007, the data now cover non-financial companies and all issues, including those without an ISIN.

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				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	182,018	198,951	217,284	220,335	n.a.	110,049	124,087	118,075	86,088	93,856
Bulgaria	399	564	1,108	1,336	2,006	n.a.	n.a.	459	146	162
Czech Republic	9,739	10,717	11,801	12,506	13,785	5,055	2,916	4,268	3,359	3,765
Denmark	146,128	152,715	163,040	170,698	183,091	106,525	124,016	136,859	103,793	116,298
Germany	1,138,556	1,023,248	1,108,788	1,113,700	1,118,977	975,443	1,028,641	1,053,561	934,521	1,060,036
Estonia	451	604	827	715	776	0	982	1,288	528	564
Ireland	121,278	147,597	163,380	174,424	n.a.	393,525	482,316	516,344	349,927	458,627
Greece	15,496	17,591	19,639	15,058	15,476	23,289	18,357	14,459	7,262	7,547
Spain	233,251	241,565	242,976	245,425	263,134	239,726	305,716	298,487	184,733	193,475
France	1,136,131	1,261,317	1,374,016	1,376,540	1,451,467	943,590	1,155,578	1,200,624	878,807	1,012,956
Italy	507,541	574,150	540,179	450,642	525,547	349,934	340,691	290,859	227,918	225,136
Cyprus	4,650	n.a.	n.a.	n.a.	n.a.	692	1,005	1,190	1,272	1,422
Latvia	264	343	468	551	494	87	80	222	107	131
Lithuania	587	803	995	1,059	967	107	230	343	103	112
Luxembourg	44,261	53,839	60,496	57,261	n.a.	1,425,804	1,725,809	1,933,406	1,418,777	1,643,281
Hungary	6,199	7,398	8,500	7,992	8,545	5,273	7,370	9,446	6,821	7,701
Malta	981	1,167	1,353	1,362	1,606	1,334	1,421	1,159	8,216	6,482
Netherlands	345,297	331,923	361,491	356,500	368,709	105,241	113,842	100,116	179,506	446,185
Austria	76,760	82,522	88,005	92,580	97,520	153,342	165,686	161,298	129,233	141,149
Poland	21,322	26,167	32,624	30,327	30,891	15,951	25,887	37,356	17,659	22,686
Portugal	43,290	49,306	53,007	51,675	53,682	36,694	40,566	39,606	29,419	33,275
Romania	991	1,459	1,708	2,034	n.a.	1,513	2,652	3,500	1,735	2,285
Slovenia	2,707	3,293	4,332	4,320	5,359	2,220	2,943	4,140	1,894	2,218
Slovakia	2,944	4,214	4,853	5,661	6,141	1,512	1,759	2,107	1,688	1,656
Finland	49,401	53,202	53,326	47,073	51,575	32,981	45,850	49,245	29,731	43,273
Sweden	239,974	267,355	276,341	212,801	259,587	145,302	161,072	156,120	91,697	140,960
United Kingdom	1,904,831	2,146,037	2,098,182	1,413,650	1,922,611	507,626	601,470	684,169	430,537	626,678
MU16	3,904,562	4,043,886	4,293,125	4,212,556	3,959,193	4,795,376	5,554,268	5,784,676	4,468,991	5,370,574
EU27	6,235,448	6,658,049	6,888,720	6,066,224	6,381,947	5,582,814	6,480,943	6,818,705	5,125,478	6,291,915

Notes: Total assets under management by investment funds exclude money market funds, except for in the 2005 data for the CZ. For RO, investment funds include funds, closed-end funds and financial investment companies for the whole period. For GR, investment funds include only open-end funds. MU16 and EU27 totals exclude countries for which data are not available.

Table 9 Total assets under management by pension funds

(EUR millions)

	2005	2006	2007	2008	2009
Belgium	13,395	14,300	14,433	12,245	n.a.
Bulgaria	571	778	1,190	1,178	1,622
Czech Republic	4,256	5,308	6,279	7,133	8,155
Denmark	56,664	59,486	60,912	57,418	65,161
Germany	330	512	641	63,519	843
Estonia	329	531	781	801	1,022
Ireland	77,933	87,744	86,602	63,519	n.a.
Greece	0	0	0	0	0
Spain	74,687	82,553	87,916	79,575	86,077
France	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	18,987	20,909	25,931	25,101	23,261
Cyprus	n.a.	n.a.	n.a.	n.a.	n.a.
Latvia	53	76	102	116	137
Lithuania	128	283	519	670	989
Luxembourg	321	355	370	378	450
Hungary	7,682	9,551	11,427	10,793	13,724
Malta	0	0	0	0	0
Netherlands	621,829	696,271	763,167	697,103	743,198
Austria	11,549	12,497	12,917	11,936	13,808
Poland	22,303	30,429	39,093	33,288	43,893
Portugal	19,317	21,185	22,356	20,240	21,555
Romania	n.a.	n.a.	4	230	612
Slovenia	728	961	1,087	1,129	1,390
Slovakia	240	812	2,287	3,176	3,952
Finland	0	0	0	0	0
Sweden	83,080	91,257	28,597	23,827	28,098
United Kingdom	1,411,525	1,614,722	1,488,044	959,669	1,305,181
MU16	839,316	938,098	1,017,707	977,921	894,534
EU27	2,425,908	2,750,520	2,654,657	2,073,043	2,363,128

Note: For SE total assets under management by pension funds include estimates of the occupational pensions managed by life insurance companies for 2005 and 2006. MU16 and EU27 totals exclude countries for which data are not available.

Table 10 Number of branches of credit institutions from EU countries and third countries

	Number of branches of credit institutions from EU countries					Number of branches of credit institutions from third countries				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	41	46	49	47	46	9	8	9	9	9
Bulgaria	4	2	3	4	4	2	2	2	2	2
Czech Republic	12	13	14	15	18	0	0	0	1	0
Denmark	17	17	18	16	17	2	3	4	3	2
Germany	69	68	66	83	85	20	18	18	20	19
Estonia	6	7	8	11	10	0	0	0	0	0
Ireland	31	31	31	31	32	1	1	1	1	1
Greece	19	20	22	24	24	4	4	5	6	5
Spain	57	62	71	78	81	8	7	9	9	8
France	55	59	64	70	70	26	25	24	23	23
Italy	58	65	71	75	72	10	9	10	11	10
Cyprus	4	4	9	8	9	18	17	16	15	16
Latvia	1	3	2	6	6	0	0	0	0	0
Lithuania	2	2	3	7	7	0	0	0	0	0
Luxembourg	36	34	35	33	32	8	8	8	8	8
Hungary	3	4	6	10	11	0	0	0	0	0
Malta	0	0	1	1	1	2	2	2	2	2
Netherlands	22	16	28	30	27	6	5	5	5	5
Austria	25	25	26	30	29	1	1	1	0	0
Poland	7	12	14	18	18	0	0	0	0	0
Portugal	24	23	23	25	25	1	1	1	3	2
Romania	5	6	10	10	10	1	1	0	0	0
Slovenia	3	2	3	3	3	0	0	0	0	0
Slovakia	5	7	10	9	11	0	0	0	0	0
Finland	19	22	21	20	21	1	1	4	2	1
Sweden	18	21	20	22	20	2	2	4	4	2
United Kingdom	81	83	81	81	77	89	89	93	91	91
MU16	468	484	530	567	568	115	107	113	114	109
EU27	624	654	709	767	766	211	204	216	215	206

Table II Total assets of branches of credit institutions from EU and third countries

(EUR millions)

	Total assets of branches of credit institutions from EU countries					Total assets of branches of credit institutions from third countries				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	29,348	32,080	40,456	45,378	41,219	20,235	30,103	49,320	62,038	46,520
Bulgaria	736	*	1,237	1,741	1,668	*	*	*	*	*
Czech Republic	9,694	10,658	12,419	21,146	18,756	0	0	0	*	0
Denmark	34,932	40,554	44,553	35,079	39,398	*	148	1,429	706	*
Germany	79,512	105,634	137,189	157,326	153,089	23,834	23,228	24,402	39,888	29,136
Estonia	1,161	1,522	2,303	5,740	5,556	0	0	0	0	0
Ireland	94,974	123,447	136,942	134,506	125,237	*	*	*	*	*
Greece	28,089	31,287	36,200	38,740	37,409	400	471	643	697	851
Spain	154,914	183,879	223,568	230,146	221,158	4,304	5,068	5,750	6,768	6,370
France	133,932	118,653	132,949	138,772	129,961	12,025	12,523	15,277	21,342	15,682
Italy	132,828	166,511	307,182	265,454	229,752	6,139	6,853	8,764	10,072	6,682
Cyprus	1,044	733	5,088	4,135	1,122	3,275	3,284	5,632	5,529	5,271
Latvia	*	1,398	*	3,774	3,649	0	0	0	0	0
Lithuania	*	*	1,904	4,682	4,603	0	0	0	0	0
Luxembourg	128,504	111,420	125,036	132,883	97,325	16,973	19,721	20,287	41,976	18,978
Hungary	112	1,210	1,729	4,903	7,813	0	0	0	0	0
Malta	0	0	*	*	*	*	*	*	*	*
Netherlands	33,248	44,040	57,591	67,553	61,906	1,274	946	1,081	1,212	1,197
Austria	6,340	8,285	10,339	11,408	10,874	*	*	*	0	0
Poland	1,419	5,527	9,626	13,706	13,775	0	0	0	0	0
Portugal	19,542	24,170	29,755	28,122	33,261	*	*	*	243	*
Romania	2,560	2,910	3,478	4,415	5,707	*	*	n.a.	0	0
Slovenia	522	*	242	474	501	0	0	0	0	0
Slovakia	8,059	6,284	9,852	4,233	3,774	0	0	0	0	0
Finland	12,668	13,611	14,941	18,960	16,889	*	*	343	*	*
Sweden	55,034	67,861	75,659	73,796	59,671	*	*	4,205	7,058	*
United Kingdom	1,810,942	2,026,621	2,392,061	1,871,722	1,913,337	1,447,318	1,620,137	1,874,677	1,652,396	1,694,992
MU16	904,867	1,016,952	1,310,804	1,320,930	1,211,278	121,439	148,047	180,744	219,496	173,960
EU27	2,780,114	3,128,295	3,812,300	3,318,795	3,237,410	1,535,777	1,722,482	2,011,810	1,849,925	1,825,679

* Where number of branches is less than three, the underlying data are not disclosed for confidentiality reasons. MU16 and EU27 totals exclude countries for which data are not available.

Table 12 Number of subsidiaries of credit institutions from EU and third countries

	Number of subsidiaries of credit institutions from EU countries					Number of subsidiaries of credit institutions from third countries				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	23	20	21	22	21	5	5	6	6	7
Bulgaria	14	16	13	13	13	4	3	3	3	3
Czech Republic	17	18	18	16	16	3	3	2	1	2
Denmark	7	6	6	6	6	3	3	5	5	5
Germany	22	22	21	29	31	19	19	18	16	17
Estonia	4	4	5	4	4	0	0	0	0	0
Ireland	22	21	24	23	22	10	10	13	15	15
Greece	5	10	7	7	7	0	0	1	1	1
Spain	41	41	37	35	33	8	7	10	10	10
France	107	100	97	83	66	52	53	54	54	55
Italy	10	13	15	15	16	3	3	4	6	6
Cyprus	9	8	7	8	8	1	1	1	1	1
Latvia	6	6	6	6	7	3	4	5	6	7
Lithuania	5	5	5	4	4	0	0	0	0	0
Luxembourg	75	75	74	73	73	32	34	34	33	32
Hungary	20	20	21	19	18	3	3	3	3	2
Malta	9	9	10	10	11	2	1	3	3	4
Netherlands	12	12	11	10	11	16	16	14	15	14
Austria	14	15	15	13	13	9	8	11	12	11
Poland	33	31	32	34	31	9	9	8	8	8
Portugal	9	10	11	11	11	4	3	3	3	4
Romania	18	22	22	23	22	2	2	2	2	1
Slovenia	6	8	8	8	8	0	0	0	0	0
Slovakia	15	14	14	14	13	1	1	1	1	0
Finland	5	5	6	7	7	1	1	2	1	0
Sweden	11	8	7	6	7	3	2	1	2	1
United Kingdom	17	19	16	16	16	69	69	74	82	78
MU16	384	383	378	368	351	163	162	175	177	177
EU27	536	538	529	515	495	262	260	278	289	284

Table 13 Total assets of subsidiaries of credit institutions from EU countries and third countries

(EUR millions)										
	Total assets of subsidiaries of credit institutions from EU countries					Total assets of subsidiaries of credit institutions from third countries				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	191,698	212,622	227,327	228,933	578,136	3,809	4,159	4,741	4,484	35,784
Bulgaria	12,124	16,772	23,588	28,176	29,277	335	445	668	794	820
Czech Republic	83,406	94,202	115,743	119,607	124,918	4,930	6,428	*	*	*
Denmark	103,034	110,920	122,973	133,699	157,939	11,276	14,027	21,221	23,288	22,739
Germany	549,261	556,579	591,518	623,549	563,202	74,233	106,216	84,880	87,088	53,062
Estonia	10,573	13,620	17,951	15,697	14,689	0	0	0	0	0
Ireland	234,560	264,732	488,002	535,135	445,123	79,533	123,771	160,656	117,720	90,368
Greece	49,401	85,950	52,052	62,941	65,162	0	0	*	*	*
Spain	82,473	91,240	102,580	111,506	112,271	4,851	5,684	9,613	11,290	9,706
France	394,293	439,467	575,786	644,303	569,865	51,031	57,035	59,355	65,484	54,491
Italy	96,287	210,779	257,318	237,507	245,411	3,096	3,975	6,412	15,874	14,669
Cyprus	12,338	18,533	18,562	35,361	45,522	*	*	*	*	*
Latvia	7,795	12,248	15,661	16,174	15,145	481	1,056	2,209	1,909	1,800
Lithuania	9,797	13,304	18,034	17,837	17,227	0	0	0	0	0
Luxembourg	563,136	615,839	653,366	635,044	570,013	40,565	47,501	71,215	77,405	63,382
Hungary	41,628	48,783	57,214	66,702	63,227	2,230	2,800	3,285	3,619	*
Malta	8,803	11,405	14,090	15,449	13,434	*	*	2,003	1,779	2,241
Netherlands	176,777	205,408	285,112	15,275	13,958	23,345	26,256	31,081	43,096	40,971
Austria	133,849	141,832	181,486	189,559	141,601	3,880	4,098	47,785	49,352	48,665
Poland	93,445	109,537	136,960	153,329	147,959	14,118	15,930	19,911	21,543	23,675
Portugal	58,962	62,029	70,742	76,373	82,111	3,047	3,139	3,208	4,922	4,844
Romania	17,690	40,931	55,754	62,733	59,989	*	*	*	*	*
Slovenia	6,230	10,075	12,155	14,611	15,055	0	0	0	0	0
Slovakia	27,244	32,212	38,384	56,539	48,588	*	*	*	*	0
Finland	124,034	130,436	172,567	248,033	243,191	*	*	*	*	0
Sweden	2,906	3,536	3,848	3,509	4,380	1,666	*	*	*	*
United Kingdom	458,382	544,672	423,533	364,012	673,044	734,355	842,324	807,339	626,367	570,625
MU16	2,709,345	3,089,138	3,741,047	3,730,118	3,752,643	287,390	381,834	480,949	478,494	418,183
EU27	3,550,126	4,097,662	4,732,306	4,711,594	5,060,437	1,056,782	1,264,843	1,335,583	1,156,013	1,037,842

* Where number of subsidiaries is less than three, the underlying data are not disclosed for confidentiality reasons. MU16 and EU27 totals exclude countries for which data are not available.

Table 14 Population and GDP at market price

	Population					Gross domestic product at market price				
	(thousands; average figure for the period)					(EUR millions)				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Belgium	10,474	10,543	10,622	10,708	10,790	302,845	318,193	334,948	344,676	337,284
Bulgaria	7,719	7,679	7,640	7,607	7,564	21,882	25,238	28,899	34,118	33,877
Czech Republic	10,234	10,267	10,323	10,430	10,491	100,190	113,696	127,331	147,879	137,245
Denmark	5,419	5,437	5,460	5,492	5,522	207,367	218,747	227,025	233,027	222,893
Germany	82,464	82,366	82,263	82,120	81,874	2,242,200	2,325,100	2,428,200	2,495,800	2,409,100
Estonia	1,348	1,345	1,342	1,341	1,340	11,182	13,229	15,627	16,073	13,730
Ireland	4,149	4,253	4,357	4,443	4,463	162,091	176,759	189,751	181,816	163,543
Greece	11,104	11,149	11,193	11,237	11,260	195,366	210,459	226,437	239,141	237,494
Spain	43,398	44,068	44,874	45,593	45,930	908,792	984,284	1,052,730	1,088,502	1,051,151
France	62,959	63,394	63,781	64,141	64,494	1,726,068	1,806,430	1,895,284	1,948,511	1,907,145
Italy	58,607	58,942	59,375	59,832	60,263	1,429,479	1,485,377	1,546,177	1,567,851	1,520,870
Cyprus	758	773	784	793	798	13,659	14,673	15,951	17,248	16,946
Latvia	2,301	2,288	2,276	2,266	2,255	13,012	16,047	21,111	23,037	18,539
Lithuania	3,414	3,394	3,376	3,358	3,339	20,870	23,978	28,577	32,203	26,650
Luxembourg	465	473	480	489	498	30,282	34,150	37,466	39,348	37,645
Hungary	10,087	10,071	10,056	10,038	10,022	88,646	89,894	101,086	105,536	93,086
Malta	403	406	409	412	413	4,784	5,114	5,463	5,678	5,720
Netherlands	16,317	16,341	16,378	16,440	16,527	513,407	540,216	568,664	595,883	570,208
Austria	8,225	8,268	8,301	8,337	8,363	243,585	256,951	272,010	283,085	274,320
Poland	38,161	38,132	38,116	38,116	38,110	244,420	272,089	311,002	362,415	310,075
Portugal	10,549	10,584	10,608	10,622	10,632	153,729	160,273	168,737	171,920	167,633
Romania	21,624	21,584	21,538	21,504	21,461	79,802	97,751	124,728	139,753	115,869
Slovenia	2,001	2,008	2,019	2,022	2,042	28,758	31,056	34,568	37,135	34,894
Slovakia	5,387	5,391	5,397	5,406	5,418	38,462	44,537	54,898	64,778	63,332
Finland	5,245	5,266	5,289	5,313	5,339	157,307	165,643	179,702	184,649	171,315
Sweden	9,030	9,081	9,148	9,256	9,341	298,353	318,171	337,944	334,227	292,680
United Kingdom	60,238	60,587	60,975	61,383	61,767	1,833,954	1,948,518	2,052,847	1,815,417	1,563,186
MU16	322,506	324,224	326,129	327,909	329,103	8,150,815	8,559,217	9,010,986	9,266,023	8,968,600
EU27	492,080	494,090	496,379	498,700	500,316	11,070,494	11,696,576	12,387,162	12,509,708	11,796,430

2 METHODOLOGICAL NOTE ON THE STRUCTURAL INDICATORS

The data included in Annex 1 are derived from a variety of sources using different statistical concepts, collection techniques, etc. This makes it difficult to compare series across indicators, across countries and even, although perhaps to a lesser extent, over time. The reader should bear this in mind when interpreting and possibly using the data. The exchange rates applied for the conversion of data from non-euro area countries are the official exchange rates on the last day of trading for each of the reported years. The 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 III of Statistical Guideline ECB/2007/9 (as amended).

NUMBER OF CREDIT INSTITUTIONS (TABLE 1)

Credit institutions are a sub-set of monetary financial institutions (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 jurisdiction of that country, regardless of whether or not they are subsidiaries of foreign banks, as well as 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 cooperative 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 residence basis, meaning that for each Member State, the credit institutions under the jurisdiction of that Member State are included, regardless of whether or not they are a subsidiary of a foreign bank. However, the activities of foreign branches of these credit institutions are not included as such activities are reported by the host countries. For additional information, please consult the aforementioned ECB Guideline.

NUMBER OF EMPLOYEES OF CREDIT INSTITUTIONS (TABLE 2)

This 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 that are not

credit institutions are excluded, even if these institutions belong to the same group as a credit institution.

CR5 (TABLE 3)

The CR5 of a Member State is the percentage share of the sum of the assets of all the credit institutions in that particular Member State held by the five largest credit institutions, ranked according to 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 set of the five largest credit institutions may vary over time.

The ratio is calculated on the basis of a sub-set of the ECB's list of MFIs 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 are considered to be separate credit institutions. Domestic branches and subsidiaries resident outside the EU are not captured, while EU-resident branches and subsidiaries of third-country credit institutions 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 index is calculated on the basis of a sub-set of the ECB's list of MFIs 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 are considered to be separate credit institutions. Domestic branches and subsidiaries resident outside the EU are not captured, while

EU-resident branches and subsidiaries of third-country credit institutions 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, either as a branch (which is not considered to be a separate legal entity) or as a subsidiary (which is considered to be a 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, either EU or third country.

The figures for a particular Member State only include the non-domestic component, so the branches and subsidiaries of credit institutions under the jurisdiction of the Member State itself are not included.

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

