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INTERIM REPORT II
CURRENT ACCOUNTS AND RELATED SERVICES

Sector Inquiry under Article 17 Regulation 1/2003 on retail banking

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EXECUTIVE SUMMARY

A. Introduction

Competitive financial services markets that serve European consumers and businesses efficiently contribute to economic growth and, therefore, to the achievement of the Lisbon goals. Against this background the Commission in June 2005 decided to open sector inquiries into two important areas of the financial services sector: retail banking and business insurance.

The instrument of sector inquiries has its legal basis in Article 17 (1) of Regulation 1/2003, according to which the Commission may decide to conduct an inquiry into a particular sector of the economy or into particular types of agreements across various sectors, where the trend of trade between Member States, the rigidity of prices or other circumstances suggest that competition may be restricted or distorted within the common market. Sector inquiries represent an important element in the Commission's modernised approach to competition policy which abolished the notification system and opted for a more pro-active antitrust practice.

The *retail banking* inquiry in particular will also make significant contributions to the Commission's future strategy recently set out in its White Paper *Financial services policy 2005-2010*[1] which named the extension of better regulation principles into all policy making and the strengthening of competition among providers as two of the main priorities.

The Commission's inquiries into financial services

The aim of the sector inquiries is to identify competition concerns that may require investigation and remedy under the European competition rules. In this context the Commission intends to provide a sound basis for a coherent approach to antitrust practice carried out by the National Competition Authorities (NCAs) and the Commission. Should there be evidence, after further investigation, that particular practices or arrangements violate Community or national competition law in an individual case, these practices or arrangements can be addressed by antitrust action. With the inquiry the Commission, however, is giving all stakeholders concrete information about potential market failures and, therefore, the opportunity to resolve problems within their remit.

In its inquiry into retail banking the Commission is looking at two complementary aspects. These two aspects are firstly, the inquiry into the European payment cards markets where the interim report was published on 12 April 2006; and secondly, the inquiry into the markets for current accounts and related services that is the subject of this preliminary report. The findings from both parts aspects of the inquiry will be considered together, allowing the Commission to broaden and deepen its understanding of competition in EU retail banking. A final report of the sector inquiry into retail banking, covering current accounts and related services and payment cards will be published by the end of 2006.

This part of the inquiry concerns current accounts and related services and analyses issues such as:

- current market structures (product markets, regional and national)
- conduct of market players (including cross-selling and tying)
- pricing (interest rates and fees)
- payment systems (fees, domestic and international infrastructures)

[1] Available at http://europa.eu.int/comm/internal_market/finances/docs/white_paper/white_paper_en.pdf

- consumer behaviour and mobility
- cross-border activities, market entry and entry barriers

These issues are examined by means of questionnaires to a sample of retail banks[2] and by further questionnaires to bank associations, payment networks, banking regulators and central banks. Furthermore, the Commission looked into the practice of national competition authorities (NCAs) with the help of an inquiry carried out by NCAs. Finally, surveys and studies carried out by other institutions were included to complement the Commission's own analysis.

The economic significance of the retail banking sector

Despite growth and diversification in the financial services sector, retail banking – banking services to consumers and small firms – remains the most important sub-sector of banking, representing over 50% of total banking activity in Western Europe[3]. The Commission estimates that in 2004 retail banking activity in the European Union generated gross income of 250-275 € billion, equivalent to approximately 2.5% of total EU GDP. As a whole the banking sector in the European Union directly provides over three million jobs.

In essence retail banks provide three basic services to consumers and small businesses: saving; borrowing; and services related to current accounts such as transferring and receiving payments. Retail banking is carried out by a wide range of providers. These range from very small banks that supply only retail services to medium-sized or very large banks that may operate in a range of banking activities (e.g. private or corporate banking). There is also a growing trend in Europe, particularly among large banks, to operate as a financial conglomerate in a range of financial services markets such as life insurance or asset management. Alongside differences in the scale and scope of banks' activities there are also other important variations. While most of the large banks are commercial institutions or groups, some Member States (e.g. in Germany and Austria) still have significant proportions of state owned and/or co-operative banks that are more community-based and – partly – have explicit social objectives.

European retail banking markets are characterised by the following main features:

- a high degree of international and national regulation
- a traditionally high level of co-operation among banks (e.g. payment infrastructures),
- significant market fragmentation and differences regarding market structures,
- entry barriers due to regulatory or behavioural causes,
- a fragmented demand side (individuals, small enterprises) characterised by information asymmetry, customer immobility and very limited bargaining power.

These market characteristics may give rise to competition concerns such as the creation of artificial entry barriers; for instance, through access conditions and fee structures of payments systems or the organisation and management of credit databases by incumbents.

However, the competition issues evident in retail banking are not straightforward, as the inquiry's preliminary findings show. Whether or not certain practices require antitrust action can only be verified on a case-by-case basis.

[2] The sample of around 240 European retail banks was compiled on a per-country basis.
[3] This estimate across is based on market data gathered by the sector inquiry. A similar estimate was made by McKinsey in a 2003 study on European banking.

B. Factual findings

Market structures and concentration

Country comparisons show that market structures differ considerably across the EU. This applies to the degree of market concentration as well as to the identity of main players. The sector inquiry was not able to survey the entire retail banking sector in the EU. However the sample coverage was sufficiently large to present a good picture of differing market structures across the Member States. Due to the lack of other sound retail banking statistics covering the EU25 and taking account of consolidated group data, this probably is the first comprehensive survey of European retail banking that has been able to – at least roughly – evaluate market structures and concentration at national and even regional level. The main preliminary findings are:

- In most countries retail markets seem to be characterised by a 'mild' concentration that materialises at national and regional level: the Member States with the highest concentration include countries such as The Netherlands, Belgium or Sweden and, to a lesser extent, Finland. The least concentrated countries seem to be Italy, Spain and, in particular, Germany.

- However, in view of the importance of local branch networks, national markets may be too large for analysing competition for core retail banking products. The inquiry, therefore, has also examined concentration at the regional level and found, at least in some Member States and predominantly in Germany, far higher regional concentration ratios than the national figures suggest.

- In most of the new Member States, subsidiaries of foreign banks have a major market presence.

Financial performance of retail banks

Using OECD data, the inquiry has analysed long-term trends in the profitability of European banks, for *all banking activities* including retail. Based on operating profits as a share of gross income from all banking activity, banks in almost every Member State have become more profitable since the 1980s. The conjunction of rising pre-tax profits and falling effective tax rates implies that on average the post-tax profitability of European banks has increased significantly.

The profitability of *retail banking* activity varies widely across the EU. The inquiry's market survey found that average pre-tax profits in retail banking in 2004 were around 29% of banks' gross income across the EU25. However there were wide variations at country level. Banks in Austria and Germany generated pre-tax profits of 11% and 17% respectively; among the lowest in Europe. Banks in several Members States including Ireland, Spain and Finland were far more profitable, with pre-tax profits of over 40% of gross retail income.

The inquiry estimated banks' gross income per consumer for particular product lines. In 2004, for personal current accounts, banks in Luxembourg and Italy reported the highest gross income per customer (265€ and 204€ respectively), whereas banks in Lithuania and Sweden had the lowest figures (15€ and 22€ respectively).

Based on operating costs as a share of total retail income, the inquiry found a wide dispersion across Member States in banks' cost bases. On average banks' operating costs in 2004 amounted to 63% of total retail income. Banks in Spain and Ireland had the lowest cost ratios (45-50% on average), while banks in Germany, Austria and the Netherlands had the highest ratios (75-80% on average).

Customer choice and mobility

Customers tend to have fairly long relationships with their bank, especially in the EU15. Consumers in the EU15 tend to hold their personal current account for roughly ten years on average, whereas SMEs hold their current account for just under nine years. Patterns of customer mobility in the new Member States are still quite different. The average age of current accounts is markedly lower at six years for consumer and five years for SMES.

The level of customer mobility in the current account market appears fairly low. Adjusting for market growth, only an estimated 7.8 per cent of EU consumers and 12.6 per cent of SMEs moved their current account in 2005.

Cross-selling by banks is a popular practice across the EU, though less established in the new Member States. On average, consumers holding a current account with a given bank buy an additional 1.1 products from that bank, while mortgage customers buy an additional 2.0 products.

Pricing and customers' use of banks accounts

Data gathered by the inquiry shows that there is high variation in prices for payment services across the EU25. The large dispersion in prices suggests that greater cross-border competition could bring down prices, particularly in those countries where payments prices are still relatively high.

Fees for current account services can be charged in different ways. Banks in some Member States charge low fees both for account management and payment fees per transaction. However, the Member State reporting the highest account management fees also reported relatively high fees per transaction for selected payment services. Meanwhile, banks in some Member States reported higher account management fees on average but lower average fees per payment.

C. Potential market barriers

European retail banking markets are still extremely fragmented and characterised by a range of entry barriers that need further exploration. Some of these barriers may be explained by 'natural effects' resulting from economies of scale, consumption externalities and standardisation requirements with respect to networks such as payment systems. Others are of an artificial nature resulting from specific regulation or conduct of firms and concern, for instance, access to networks or discriminatory fee structures. The main preliminary findings can be summarised as follows:

Payment systems

The inquiry has found a highly fragmented market for payment systems in the EU. In some Member States, clearing infrastructures are the legacy of non-profit systems owned by the national central bank and run on a non profit basis. In other Member States the payment infrastructure is operated by a joint venture of banks and may be on a for-profit basis. Corresponding banks still play a major role, particularly for cross border transactions.

The inquiry has shown that fee structures – particularly high joining fees and volume discount fees – and membership rules in some Member States may deter new entrants from membership of a payment system, which in turn weakens their ability to offer a competitive range of retail banking services. For potential new entrants, the alternative may be indirect participation in the payment system through a local intermediary bank, which is likely to be a (large) domestic competitor in the downstream retail banking market.

The creation of a Single Euro Payment Area (SEPA) should change the competitive landscape. Some national payment systems expect that SEPA will generate new opportunities for growth, while it may threaten the established business model of sole others. Certain aspects in the design and governance of SEPA may merit close competition scrutiny because decisions being taken now will shape the landscape of the European payments industry – and the wider retail banking sector – over the long term.

Credit databases

In general, access to credit databases has received relatively little attention as a competition issue in retail banking. Banks need data in order to assess the creditworthiness of borrowers and price accurately for risk. However, the way credit databases are organised and gather information can provide an obstacle for newcomers. In particular, credit databases that are owned and managed by a joint venture or co-operation of the incumbent banks may result in entry barriers for potential entrants.

Factors which may reduce customer mobility

The evidence suggests at first sight that some patterns in banking customers' behaviour may be intrinsic, such as the wish to maintain a long-term relationship with their bank. However it may also suggest that there are some common structural factors that customers face across Europe which may unnecessarily raise the costs of switching bank and so reduce their mobility. This effect may in turn weaken the incentives on banks to compete to retain their existing customers and to attract consumers to switch bank. The inquiry has shown that banks' profitability tends to be lower in markets where customers are more mobile.

Cross-selling is widely practiced and, in addition to having commercial advantages for banks, may have some benefits for customers. However, some aspects of the way in which retail banking products are bought and sold may reduce the intensity of competition among banks for new business. For example, 47 per cent of banks' mortgage customers were required to take out a current account, whereas 58 per cent of SMEs taking out a loan also had to accept a current account. This practice increases the breadth of a consumer's relationship with one bank and hence increases the costs involved in moving their business to an alternative provider.

Regulation and state intervention

Retail banking markets remain fragmented. The incidence of cross-border banking mergers and acquisitions remains fairly low in the EU. A range of policy measures could help provide a more supportive environment, including more streamlined and effective banking supervision, and the removal of obstacles to cross-border activities and market integration.

While the scope of direct state intervention in the retail banking sector has narrowed, Member States continue to intervene in banking markets in several ways. This ranges from the promotion or preferential treatment of certain bank products, the protection of certain bank types or the prevention of cross-border market entry.

D. Issues for consultation

The Commission identifies the following sets of issues for consultation on its interim report on current accounts and related services. These issues are:

- Market structure and fragmentation
- Banks' financial performance and pricing
- Entry barriers in retail banking
- Customer choice and mobility
- Development of payment infrastructures in the context of the Single Euro Payment Area

A list with detailed questions as well as information on the next steps in the retail banking sector inquiry can be found in Chapter 10.

1. INTRODUCTION – PURPOSE, DEFINITIONS AND METHODOLOGY

This chapter explains the purpose of the sector inquiry and sets out the definitions and methodology used by the Commission for the analysis of European retail markets. The chapter discusses:

- the purpose and legal basis of the sector inquiry
- why the Commission launched its sector inquiry into retail banking
- the definition of retail banking used in the inquiry
- the products and services in the scope of analysis
- the method used to identify players in the EU retail banking sector, create a representative sample and measure concentration
- the structure of the preliminary report

1.1. Purpose and legal basis of the sector inquiry

Well functioning, integrated and competitive financial markets are essential for an efficient and dynamic development of the European economy. A number of indicators such as market fragmentation and entry barriers as well as a limited choice of retail banking customers, however, suggest that not all financial markets are truly integrated. Furthermore these patterns may suggest that competition may be restricted or distorted within the common market, in particular with respect to the provision of retail banking products and services to consumers and small and medium sized enterprises.

The Commission, therefore, on 13 June 2005 initiated inquiries into the financial services sector, specifically into retail banking and business insurance. The instrument of sector inquiries has its legal basis in Article 17 (1) of Regulation (EC) No 1/2003. Accordingly, the Commission may decide to conduct an inquiry into a particular sector of the economy or into particular types of agreements across various sectors, where the trend of trade between Member States, the rigidity of prices or other circumstances suggest that competition may be restricted or distorted within the common market.

The sector inquiries allow the Commission to use its powers of investigation with respect to financial institutions, providers of infrastructure and upstream services, financial services intermediaries, users of financial services and Member States authorities. Sector inquiries represent an important element in the Commission's modernised approach to competition policy which abolished the notification system and opted for a more pro-active antitrust practice. Inquiries, furthermore, help the Commission to gain market knowledge and, by sharing the results, also to support national competition authorities in their work.

Should the inquiry confirm the existence of anticompetitive agreements or practices or abuses of a dominant position, the Commission or, where appropriate, the national competition authorities could envisage using the information collected in order to take the appropriate measures to restore competition in the relevant markets. Such measures might include addressing individual decisions to the entities concerned based on Article 81 and Article 82, on their own or, for the Commission, in conjunction with Article 86 of the EC Treaty.

The primary aim of these inquiries is, therefore, to identify issues that require investigation and possibly remedy under the European competition rules. The inquiries will, however, also play an important role in the context of the Commission's agenda following the Financial Services Action Plan (FSAP), which has been set out in the recent *White Paper Financial Services Policy 2005-2010.* [4] In addition, all stakeholders will receive valuable information

[4] Available at: http://europa.eu.int/comm/internal_market/finances/docs/white_paper/white_paper_en.pdf

and data resulting from the Commission's inquiry, which will help shed light on potential market failures and appropriate means for addressing them.

1.2. Why the Commission launched its sector inquiry into retail banking

Retail banking activity in the EU is carried out by a variety of providers. These range from very small banks which supply only retail services to medium-sized or very large banks which may operate in a range of banking activities (e.g. private or corporate banking). Some retail banks have specialised origins, for instance, as mortgage or online banks and, therefore, only offer a limited range of retail banking products and services. However, there is also a growing trend in Europe, particularly among large banks, to operate as a financial conglomerate in a range of financial services markets such as life insurance or asset management. Alongside differences in the scale and scope of banks' activities there are also important variations in the constitutions of retail banks. While some banks are fully commercial institutions, some banks in some countries have significant levels of public ownership and board representation or are cooperatives.

Retail banking is an important industry for the European economy. Despite growth and diversification in the financial services sector as a whole, retail banking remains the most important sub-sector of banking, representing over 50% of total banking activity in Europe. The Commission estimates that in 2004 retail banking activity in the European Union generated gross income of 250-275 € billion, equivalent to approximately 2.5% of total EU GDP. As a whole the banking sector in the European Union directly provides over three million jobs. The performance and development of this sector is, therefore, significant, also in the context of the Lisbon strategy.

However, competition does not always seem to work properly in the markets for retail banking services and products. For instance, antitrust practice in Europe and elsewhere has provided evidence for competition problems in the field of payments cards. The first strand of the retail banking inquiries, therefore, concerns the payment card business. On this part the interim report was published on 12 April 2006.

The second strand of the inquiry is subject of this report and concerns core retail banking products such as current accounts, savings deposits, loans and payment systems other than payment cards. Antitrust enforcement practice is limited with respect to core retail banking products, at least at Commission level. One reason could be that retail banking markets still appear to be very fragmented. Therefore, the issue of potential entry barriers is a primary reason for carrying out this second strand of the inquiries.

The findings from both aspects will be considered together, and a final report of the sector inquiries into core retail banking and the payment cards business will be published by the end of 2006.

1.3. Defining retail banking activity

Retail banking activity is commonly understood to comprise:

- banking services for consumers (individuals/private households) and
- banking services for small and medium sized enterprises (SMEs).

The delineation of each of these two segments, however, is not standardised by, for instance, a nomenclature for central banks' statistics or other official databases. The inclusion or exclusion of customer categories from these segments depends to a large part on cultural habits, market developments or the individual business strategies of banks.

In some countries or specialised banks, for example, services for wealthy individuals and households fall under the so-called segment of private banking. Moreover, whether a certain size category of SMEs belongs to the segment of retail banking or the segment of corporate banking varies from bank to bank. Normally, however, banks do not classify enterprises with an annual turnover higher than EUR 10 million in their retail operations. Most banks treat only companies with an annual turnover below EUR 5 million or even 2 million as customers of the retail segment. Finally, some retail banks have specialised origins, for instance, as mortgage or online banks and, therefore, only offer a limited range of retail banking products and services.

In order to reduce this complexity, the Commission has for the purposes of the sector inquiry defined:

- personal banking as banking products and services for consumers including current accounts (and related services such as ATM, direct debit and credit transfers), sight deposits and other savings accounts, credit lines/overdrafts (no limits on individual asset size) and consumer loans;
- business banking as banking services for enterprises up to a maximum turnover of EUR 10 million annually and including services such as current accounts, term loans and credit lines. Though the Commission defines these size categories as micro and small enterprises, and not as medium sized enterprises,[5] this report, in following industry and literature habits, will also use the term 'SME banking' or 'SME customers' for this sub-segment.

In carrying out the inquiry and, for instance, addressing comprehensive questionnaires to European banks, the Commission has not applied a rigid definition within these general parameters. This approach has allowed for individually flexible definitions (e.g. by accepting banks' own definition of SME business even where they may be narrower; and by including in the analysis banks offering some but not all retail banking services).

1.4. Retail banking products and services

The Commission took an open approach with no limitations or exclusion of services so that its analysis gathered information on principally all retail services individually offered by market players. This approach enables the inquiry first to determine main characteristics and structures of European retail banking markets; and secondly, to analyse patterns of market conduct and performance such as cross-selling or pricing.

For the purpose of an in-depth and partly quantitative analysis the Commission focuses on the following main products within the two segments:

- Within the segment of banking services for consumers three sets of retail banking products form the core of the sector inquiry:
    - Current accounts – the bank account which individuals use for most of their household transactions such as receiving wages or paying bills.
    - Deposit accounts – an account which individuals use for saving. The accounts provide instant ('sight deposits') or time-limited ('time deposits') access to funds.
    - Consumer term loans – a loan account operating for a specified time period, which is used to fund personal or household consumption.

[5] See Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, OJ L 124 of 20.05.2003, p. 36-41.

In addition to these three sets of products, the sector inquiry has also taken some account of other retail banking products for individuals such as payment cards[6], mortgages[7] and investment funds[8].

- The analysis of banking services for small enterprises (SMEs) focuses on:
    - Current accounts – the bank account which SMEs use for the bulk of the payments they make and receive.
    - Term loans - a loan account operating for a specified time period, which an SME uses to finance its business expenditure.
    - Credit lines – an open-ended facility which incorporates the credit element of a loan – enabling SMEs to draw down finance – and the flexibility of a current account for making and receiving payments.

In addition to these three sets of products, the sector inquiry has also taken some account of other products for SMEs such as leasing (which involves a bank's paying for part or all of the cost of a capital asset for an SME, and the bank then hires this asset to the SME).

Together with the retail banking products specified above, the sector inquiry also analyses payments systems, since they form the core of money transmission services in personal and SME banking, and are significant structures within the retail banking sector as a whole.

The analysis of whether retail banking as a whole, cluster of products or individual products form relevant product markets in the sense of antitrust case assessment was not the purpose of the sector inquiry (see also chapter 4 for further discussion).

1.5. Methodology of the sector inquiry

This preliminary report on the market for current accounts and related services analyses a range of issues that influence the level of competition:

- regulation of the retail banking sector;
- market structures and measures of concentration;
- financial performance of retail banks;
- customer behaviour and mobility;
- the structure of payment systems at European and national level; and
- conduct of market players, including price-setting and formal cooperation.

The inquiry has examined these issues using a range of tools; most notably an extensive market survey of around 250 European retail banks in the EU Member States. In order to provide a broad perspective on the market, further questionnaires were also sent to bank associations, payment networks, banking regulators and central banks. The Commission has also considered the work of national competition authorities (NCAs), building on an inquiry into retail banking conducted by the NCAs themselves. Finally, the Commission has complemented its own surveys and analysis by making use of studies by other institutions and the wider literature on retail banking and competition policy. Internal and external consultants supported the Commission in its analysis.

[6] The Commission's sector inquiry into retail banking has a separate strand which examines competition in the EU payment cards market. The interim report on payment cards is available at: http://europa.eu.int/comm/competition/antitrust/others/sector_inquiries/financial_services/interim_report_1.pdf

[7] Ordinarily mortgages should be included as a core product within the scope of a competition inquiry into retail banking. However, the European Commission (led by DG Internal Market and Services) is separately conducting extensive work on the European mortgage market and published a Green Paper in July 2005. Thus DG Competition has decided to put more emphasis on other retail banking products.

[8] Many retail banks supply investment funds and thus asset management could be seen as part of the retail banking family. However, DG Internal Market and Services is again looking in detail at the future of the European market and therefore the sector is not extensively covered in this sector inquiry.

One of the main tasks was to identify European retail banks to create a meaningful sample as addressees for the central questionnaire. There are more than 8000 credit institutions in the EU, some of them very small savings or co-operative banks. However, not all of them are active in the retail market and a substantial number are subsidiaries belonging to a single banking group. Out of this total the Commission aimed to create a sample of around 250 banks that covered each of the 25 Member States. The sampling approach, therefore, took country lists of consolidated banks or bank groups as a starting point[9].

The main purpose of the sample was to cover as much as possible of each country's retail banking total but in doing so, also allowing for smaller banks to be included, except extremely small ones – banks with less than 10 employees still exist – that were not burdened with a very comprehensive questionnaire. Finally, some account also had to be taken of the population size of a Member State though not by including a proportionate quota of banks. Due to the different concentration degrees of national markets, the aim to cover a large part of each market and the limited size of the sample, a proportionate representation of the large Member States was not feasible. Some of these large Member States' banking structures are characterised by an extremely high number of small but independent savings and co-operative banks. Germany, for instance, has more than 2000 credit institutions, with around 500 individual savings banks active in the retail banking market. For such a country it is impossible, even with a high number of banks included, to either cover a similarly large part of the market as in more concentrated countries.

Due to the fact that a standardised definition of retail banking does not exist and that, moreover, not all banks keep clearly separable accounts even for their individually defined retail segment, valid statistics and size indicators for retail activities of banks (e.g. consolidated retail assets, income, profitability etc.) are not available. Therefore, identifying the market players and sorting them on the basis of volume or performance indicators in order to pick roughly 250 European retail banks according to the criteria described above was not a straightforward process.

Consequently, the Commission had to choose an indicator suitable as a proxy for the volume of retail banking activities and market strength to identify the market participants within each Member State. Income on current accounts, savings deposits or consumer loans could function as such a proxy. However, respective data are only available for a rather limited number of banks, even in commercial databases which contain individual bank data and which the Commission, therefore, used to identify sorting criteria. The only proxy available for most of the EU retail banks was the customer (non-banks) deposits per bank.[10]

The Commission grouped banks (consolidated group data) per country, summed up the deposits per country and ranked the banks on the basis of the individual deposit volume. The aim was to at least cover 60-70% of each country (requiring a high number of banks in less concentrated countries such as Germany, Spain or Italy with a large number of independent savings and co-operative banks) but include up to 80-90% where this was feasible with a maximum number of 8 banks per country. Further modifications were carried out to account for population, in particular in order not to discriminate against large countries with a high concentration, and to include also some smaller banks.

The country lists that resulted from this exercise were further amended by, for instance, deleting banks that turned out not to be active in retail banking and adding others that were known to have significant retail activities. Further corrections had to be made following the submission of the questionnaire to market participants, when some banks notified only

[9] This means that, in the initial country lists, 2 banks located in the same country are not related to each other (but a bank appearing in one country list might be a subsidiary of another bank appearing in another country list).

[10] The sample was prepared by DG MARKT (based on data extraction from the *Bankscope* database) according to the criteria established by DG COMP.

insignificant retail activities or when a seemingly ‘consolidated’ group turned out to comprise independent banks or vice versa.

As a result, the estimated coverage rate of the inquiry of each Member State on the basis of the deposit volume per country is as follows:

Table 1: Country coverage rate

Country	Percent range of coverage of national deposits volume (%)*
Belgium	> 90
Greece	> 90
Finland	> 90
Malta	> 90
Netherlands	> 90
Sweden	> 90
Denmark	80-90
France	80-90
Hungary	80-90
Lithuania	80-90
Slovakia	80-90
United Kingdom	80-90
Slovenia	80-90
Cyprus	80-90
Portugal	80-90
Czech Republic	70-80
Estonia	70-80
Spain	70-80
Italy	70-80
Poland	70-80
Ireland	60-70
Austria	60-70
Germany	50-60
Latvia	50-60
Luxembourg	30-40

This table shows good coverage considering the difficulties described above and in view of the limited number of banks in the sample. The countries with a comparatively concentrated retail market (e.g. Belgium and the Netherlands) are naturally better covered than those, in particular large Member States, with a more fragmented structure. The specific case of Germany has already been explained above. The low coverage ratio of Luxembourg is mainly the result of a high proportion of banking activity carried out by subsidiaries of non-domestic parent companies that offer no retail banking services or only a limited range.

1.6. The structure of this report

The chapters of the interim report listed below are structured as follows:

- Chapter 2 sets out the main economic features of retail banking markets.
- Chapter 3 describes the regulatory framework for retail banking.
- Chapter 4 examines market structures and concentration in the EU25.
- Chapter 5 analyses the financial performance of retail banks.
- Chapter 6 deals with selective price comparisons.
- Chapter 7 examines customer mobility and choice.
- Chapter 8 analyses retail payment systems.
- Chapter 9 describes industry cooperation.
- Chapter 10 summarises the report's main conclusions.

2. MARKET FEATURES

This chapter sets out the main characteristics of retail banking markets. It looks into the main elements and aspects of market structures, conditions and legal frameworks of the supply side as well as of the demand side. Most of these features are general characteristics of retail banking markets; some can be described as specifically European. However, European banking markets and in particular European retail banking markets are still fragmented and show different characteristics from country to country and, in some respects, from region to region. Therefore, the chapter also describes main country differences within the EU. Subsequently, competition issues to be analysed by the inquiry will be discussed.

2.1. General characteristics of retail banking markets

The supply side of retail banking markets shows common features that are typical for banking markets in general. The main difference between retail banking and other banking fields is the fragmented demand side of the first, comprising individual consumers and small enterprises. The analysis of this sub-sector should, therefore, distinguish between supply and demand side characteristics.

2.1.1. Supply side

Retail banks offer savings and loans products as well as payment and other services of financial intermediation. Though technology has created new distribution channels such as Internet or phone banking, branch networks remain an important point of service for delivery for banks. Despite the steady drop in numbers, therefore, branch networks are unlikely to be replaced by remote channels, in particular with respect to more complex products and services such as mortgages.[11]

Table 2: Number of banks and branches in largest banking centres[12]

	Number of banks, 2004	Number of branches, 2004
US	7559	72822
Japan	129	12539
Germany	2171	47581
France	897	39825
Italy	778	30944
UK	405	14015

Retail banks collect and process large volumes of consumer money and information, decide on small business' access to finance and, in managing these functions, engage in co-operation and networks to develop standardised procedures such as payment systems or credit databases. Consequently, such an industry is characterised by networks, regulation, state intervention and other common features, which are described below.

High degree of international and national regulation

Handling consumers' and business' money, savings and loans involves risks, not only for the customers and the financial intermediaries, but also for the economy as whole. The fear that

[11] International Financial Services (March 2006): *Banking*, London, p.7.
[12] Source: European Banking Federation, US Federal Reserve, Insurance Information Institute.

failing banks could cause a systemic crisis has brought about a traditionally high degree of regulation with respect to the capital adequacy and governance of banks (prudential regulation).

Over the last two or three decades, however, the banking sector has seen substantial relaxation of wider regulation such as controls on interest rates, fees and commissions. Most of the OECD countries, for instance, have removed this type of regulation.[13] Restrictions on lines of business, ownership and portfolios have been also relaxed though some countries retain certain rules on specific aspects such as ownership or geographical location of the assets.[14]

On the other hand, prudential regulation over the same period has been strengthened – or at least harmonised at international level. These new and stricter rules primarily focus on capital or 'own funds' adequacy. And while monetary policy is now more centralised in the EU for those Member States that joined the Euro, financial supervision and stability remains in the national domain with a subordinate role for the European System of Central Banks (ESCB). Banking groups that carry out significant cross-border activities within the EU are, however, growing and can produce cross-border externalities.[15]

One tool of prudential regulation is entry regulation by means of bank license requirements. This is explainable by the rules on own funds adequacy. However, the promotion of stability and the avoidance of a systemic crisis cannot justify all occurring entry restrictions. Recent examples of governmental intervention against foreign entries or takeovers have shown that they can also be used or 'abused' by governments to impede effective competition (for further details see chapter 3). Another regulatory issue that also affects market entry concerns specific rules on the ownership and activity of certain types of banks such as savings banks and co-operative banks (for further details see point 2.2. below).

Traditionally high level of co-operation

Another outstanding characteristic of banking markets is the widespread co-operation between the market participants. Banks co-operate in a variety of areas, primarily regarding

- the interconnection and operation of payment systems
- the joint management of credit databases
- the joint development/promotion of new products and services.

Forms of co-operation and networks such as clearinghouses have developed over decades. Co-operative activities of banks can provide a means for limiting competition. This can materialise in restricted access to networks and systems, discriminatory fee structures or in higher fees for consumers.

Multi-market contacts

Retail banks normally offer a wide range of products, so that the industry is not only characterised by networks and co-operation, but also by multi-market contacts of suppliers. Though some suppliers are specialised and only offer one product or a very limited range of products (e.g. mortgages or online current account services), the major players normally offer the full range of retail products. In theory multi-market contacts may induce collusion behaviour because retaliation against cheating firms can take place on all shared markets. Whether or not multi-market contacts, however, may facilitate co-ordinated behaviour in retail banking markets, can only be established on a case-by-case basis.

[13] OECD paper (1998): *Enhancing the Role of Competition in the Regulation of Banks*, DAFFE/CLP (98)16, p. 7.
[14] OECD paper (1998): *Enhancing the Role of Competition in the Regulation of Banks*, DAFFE/CLP (98)16, p. 7.
[15] SCHOENMAKER, D. and OOSTERLOO, S. (2005): *Financial Supervision in an Integrating Europe: Measuring Cross-Border Externalities*, International Finance 8:1, 2005: pp. 1–27

Varying market structures

The European markets for retail banking do not present a uniform picture regarding concentration. National differences in concentration are still large with, for instance, Germany having one of the less concentrated national banking sectors while some of the smaller countries in Europe like the Netherlands, Finland and Belgium have rather high concentration with the 5-firm concentration ratio above 75%.[16] Moreover, even countries with a seemingly low concentration degree may look rather different when analysing the regional level where regional banks such as savings or co-operative banks can play a major role. Thus, there are significant differences between countries and, in some instances, between national and regional level. General conclusions on the concentration level of EU retail banking markets can hardly be drawn except the fact that some markets show oligopolistic structures with a limited number of major players (for further details, see next chapter 'Market structures').

Varying degrees of price transparency

The literature on retail banking cites examples where prices for particular products are transparent and relatively easy to compare.[17] This typically applies to products such as deposits or mortgages, where the interest rate is an accurate proxy for the 'price' though some hidden charges or fees also apply to mortgages, for instance. However, there are several products where prices are clearly not very transparent; for example, current accounts. The effective price charged by banks for providing current accounts may be reflected in the interest rates and fees applied to the account, and also in the level of charges for payment services. Thus it may be hard for consumers and SMEs to assess the effective 'price' of a particular current account, and harder still to compare products across several suppliers with differentiated products.

Significant barriers to entry

Prudential rules and supervisory regulation can be used to hinder entry, for instance, takeovers, mergers or entry by foreign banks. In addition, some EU countries restrict entry, mergers or takeovers regarding certain types of credit institutions (e.g. savings banks). However, prudential and supervisory regulation may not be the main reason for entry barriers but state ownership and governance of bank. Thus, a study carried out by the World Bank found positive links (correlation) between state ownerships and measures to reduce competition such as denied entry applications or restrictions on bank activities.[18] Moreover, state support in various forms and, in particular, the 'too big to fail' criterion seem to be a subtle but highly effective entry barrier in that it tends to prefer domestically owned banks and disadvantages smaller banks in general.[19]

Other entry barriers result from market structures and the conduct of participants, particularly with respect to co-operation agreements and the functioning of networks such as payments systems or credit bureaus. In the context of networks, natural, regulatory and behavioural barriers can be distinguished. Whereas natural barriers are the result of the 'inherent' economies of scale of networks such as payment systems, access to networks may be also rendered difficult by artificial barriers such as regulatory provisions or incumbents' behaviour. Fee structures that disadvantage smaller banks or newcomers may be the result of both, natural or artificial barriers. The ease of access to payment systems, however, differs

[16] CAMPA, J.M., HERNANDO, I. (2005): *M&A s Performance in the European Financial Industry*, CEPR Discussion Paper No 5204, p. 5; see also next chapter 'Market Structures'.
[17] See: OECD paper (2000): *Mergers in Financial Services* DAFFE/CLP (2000)17, p. 23
See also: Compecon Limited (2004): *Study of Economic Impact of Increased Competition in Irish Banking Services*, Report Prepared for the Bank of Scotland (Ireland), p. 23.
[18] BARTH, J. R., CAPRIO, G., and LEVINE, R. (2002): *Bank Regulation and Supervision: What works best?* World Bank Working Paper No 2725, pp. 22 and 38.
[19] OECD paper (2000): *Mergers in Financial Services* DAFFE/CLP (2000)17, p. 26.

significantly between the various country systems (for further details see chapter 'Payment Systems). The low price elasticity and mobility of demand, at least with respect to current accounts due to switching cost, also can provide a strategic barrier.[20]

2.1.2. Demand side

The demand side of retail banking is fragmented and comprises of individuals or households (consumers) on the one hand and small business on the other. Consequently, and, for instance, in contrast to the medium and large business customers of corporate banking, small enterprises and consumers do not only have limited bargaining or countervailing power but also an information deficit compared to the banks.

Information asymmetry

Consumers and small enterprises do not have the ability to obtain all relevant information from alternative banks to make their choices. This is partly due to their limited ability to process information and partly from the lack of effective information provided by banks. This makes the choice of provider and product more difficult for consumers and in turn reduces the pressure on banks to compete vigorously on price, at least for certain products, and/or on quality of service. Information asymmetries can drive high quality products or services out of the market or at least cause inefficiencies because customers are not able to recognise best quality and, therefore benefit low and high quality suppliers alike. There seem to be, however, varying degrees of information asymmetries depending on the type of product in question.

Inelastic demand for certain products and services

Retail banking is characterised by a rather price inelastic demand, at least with respect to certain core retail banking products such as current accounts[21] as low mobility of consumers suggests. As a bon mot says, consumers are more willing to change their spouse than their bank.

Lack of price transparency for some products and high levels of switching costs can explain inelastic demand. Switching costs comprise direct switching costs such as closing charges for current accounts as well as indirect costs resulting from the search for alternative suppliers and the necessity to inform all parties receiving money from or paying to the consumer. However, an inelastic demand, as other market features, does not seem to apply to all products in the same way. Consumers, for instance, seem to be well informed and more willing to invest time in market research regarding mortgages than regarding current accounts. This may be explainable by greater price transparency and by a higher cost proportion of mortgages in relation to the consumers' budget.

2.2. Fragmented retail banking markets within the EU

The most striking feature of European retail banking is the fragmentation of markets. There are still significant differences between countries with respect to some of the characteristics, mainly regulation, concentration and payment systems.

Regulation: Prudential rules have been largely harmonised at international level. Furthermore, regulation with respect to interest rates, fees and commissions and most of the regulation on the lines of business and portfolio have been removed within the EU, at least to a significant extent. On the other hand there are still significant differences regarding, for

[20] See also DG Competition's discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, Rn 40. Available at: http://europa.eu.int/comm/competition/antitrust/others/discpaper2005.pdf)

[21] OECD paper (2000): *Mergers in Financial Services* DAFFE/CLP (2000)17, p. 23.

instance, ownership structures and the scope of regional activities for certain banks (for further details see chapter 'Regulation').

Market structures and concentration: Significant country differences exist regarding market structures, as the next chapter will show. These differences are, however, partly explainable by specific regulation on ownership structures in some Member States.

Payment systems: The organisation and management of payment infrastructures varies significantly from country to country. Whereas payment systems are run by central banks on a non-profit basis in some Member Sates, others are operated by joint ventures of banks in various forms. Consequently, access conditions and fee structures differ considerably (for further detail see chapter 'Payment Systems').

Other country differences relate to customer behaviour and habits or historical reasons. Thus, for instance, consumers in the UK on average seem to have more than 2 current accounts per capita, whereas Italians have less than one per citizen[22].

2.3. Potential competition issues

The characteristics of the retail banking markets – high degree of regulation and of co-operation, network effects regarding payment systems, multi-market contacts, information asymmetries, a low price elasticity of demand and fragmented markets throughout Europe – raise the question of potential competition concerns and consumer harm.

Areas of potential competition concerns and consumer harm

- Risk of co-ordinated behaviour regarding pricing (interest rates and fees) of more standardised products or services such as saving accounts or cross-border credit transfers.
- Risk of co-ordination regarding non-price conditions such as time delays for payment transfers or access to payment networks or credit bureaus.
- Risk of raising or stabilising entry barriers by means of access conditions and/or fee structures of payments systems and/or credit bureaus organised by incumbents.
- Promotion of customers' immobility through non-transparent pricing of certain products, in particular current accounts, bundling of products (e.g. current accounts with mortgages or term loans for SMEs) and the charge of switching costs.
- State intervention, for instance, to promote certain types of products, to protect certain types of banks or to prevent cross-border market entry.

Some authors go as far as stating that the banking industry in most countries should be viewed as a cartel that implicitly co-ordinate their fees[23]. However, the market characteristics of retail banking as well as significant country differences do not permit easy conclusions. Market concentration, for instance, does not seem to be extremely high – at least not in all Member States or regions. Moreover, cross-border consolidation and market entry (for instance with respect to online and direct banking) has taken place, though on a limited scale, over the last decades despite rather high entry barriers. And though consumers seem

[22] According to calculations based on the data (number of current accounts per country) of the ECB 'Blue Book' the average is 2.4 for the UK and 0.6 for Italy. Though the data on number of current accounts raise questions for some countries, they in principle allow for a country comparison.
[23] SHY, O. (2001): *The Economics of Network Industries*, Cambridge University Press, p. 201.

to be rather immobile regarding products like current accounts, competition appears to be fiercer with respect to other ones such as mortgages.

Moreover, co-ordinated behaviour is not easy to detect which may explain why antitrust enforcement practice is rather limited in this area. The Commission over the last years only adopted two prohibition and fining decisions on price fixing agreements between banks: the first concerned the so-called *Lombard Club* of Austrian banks, a price fixing scheme on interest rates and fees covering basically all banking products in Austria and involving fines[24]; and the second a decision against German banks regarding charges for exchanging euro-zone currencies[25] which, however, was annulled by the Court of First Instance[26], then appealed by the Commission and is currently before the Court of Justice. National competition authorities (NCAs) have, if at all, also rarely enforced antitrust rules against banks.

Significantly more antitrust enforcement practice exists against payment card networks and other payment systems. For instance, the Commission in July 2002 exempted *Visa International* from the prohibition of Article 81 (1) EC-Treaty[27] following a complaint launched by an association of merchants and significant modifications of Visa's multilateral inter-bank fees. A similar procedure concerning *MasterCard* is currently open. Moreover, the Commission is currently investigating the tariff system of *Groupement des Cartes Bancaires,* the French payment system. A number of NCAs also took decisions regarding payment card networks, ATMs and other payment systems such as the Dutch competition authority finding that Interpay had abused its dominant position by charging excessive rates for the provision of network services for debit card transactions[28]. In December 2005, following the administrative appeal procedure, the NMa confirmed that the eight banks which established Interpay had infringed the prohibition on cartels, although the fines were reduced[29]. Others, such as the Swedish competition authority, carried out an inquiry on payment systems, in particular with respect to ATMs and price differentiation within the system.

In addition certain NCAs launched investigations or inquiries on issues such as switching barriers, bundling and tying and price transparency. In the UK, the main investigation on SME banking carried out by the Competition Commission between 2000 and 2002[30] showed a high concentration level, restricted price competition between suppliers and high barriers to expansion, such as the need of a branch infrastructure and high sunk costs. An investigation into payment systems also showed lack of price competition between the four major clearing banks, with excessive profits indicating this lack of price competition. In Ireland, the Banking Study[31] identified a number of competition issues concerning several aspects of retail banking, such as little price competition on interest rates paid on personal current accounts, the absence of clear procedures for evaluating and admitting new network members and the bilateral nature of the clearing system, barriers to SMEs to switching suppliers for term loans and high switching costs.

With its retail banking inquiry the Commission intends, first, to shed more light on those market characteristics that seem to differ significantly within the EU. This concerns market structures and concentration, regulation and payment infrastructures. Secondly, in analysing

[24] Commission decision of 11 June 2002; OJ L 56/1of 24 February 2004, appealed by the parties and currently before the Court of First Instance (see Case T-263/02 Österreichische Postsparkasse Aktiengesellschaft v Commission).
[25] Commission decision of 11 December 2001, OJ L 15 of 21 January 2003, p. 1-34.
[26] Judgment of the Court of First Instance T 56/02 of 14 October 2004.
[27] Commission decision of 24 July 2002, OJ L 318 of 22 November 2002, p. 17-36.
[28] Decision of the Director-General of the NMa in Case 2910 of 28 April 2004 (Interpay)
[29] Review on Fines imposed on Banks and Interpay in Case 2910 of 28 April 2004, Interpay, December 2005
[30] A copy of the Report can be obtained from the CC website www.competition-commission.org.uk under report reference Cm 5319
[31] Competition in the (non-investment) banking sector in Ireland. Available at: http://www.tca.ie/banking/banking_report_final.pdf

prices and bank performance indicators such as income and profitability, the Commission looks at empirical evidence on certain patterns and the issue of how these indicators might be influenced by specific market characteristics. Finally, the inquiry looks into cross-selling patterns of banks, customer mobility and SME's access to finance to detect country differences potentially affecting consumers and small enterprises.

3. REGULATORY FRAMEWORK FOR RETAIL BANKING

This chapter examines the regulatory frameworks for retail banking in the European Union. The chapter sets out the key aspects of regulatory policy and identifies where these may raise potential competition concerns. It is clear that effective regulation is fundamental to developing efficient financial services markets. Therefore this inquiry will not explore the bulk of national and European regulation which provides the essential market infrastructure across all Member States. Rather the scope of this investigation is the differential impact of regulatory and consumer protection provisions on markets in particular Member States.

The chapter is structured as follows:

- Section 1 examines the competition policy framework for retail banking in the EU
- Section 2 examines the framework for banking supervision and competition issues that it may raise
- Section 3 surveys non-supervisory aspects of retail banking regulation
- Section 4 looks at direct state intervention in the retail banking sector.

3.1. Competition policy framework for retail banking in the EU

This section examines the competition policy framework for retail banking in the European Union. The section considers:

- The changing role of competition policy in retail banking over time
- The application of competition policy in the EU and its Member States; and
- Best practice in applying competition policy in retail banking.

3.1.1. The changing role of competition policy in retail banking

It is taken for granted today in advanced economies that banks should be subject to a strong antitrust regime, as with other sectors of the economy. However this consensus has only developed within the last two to three decades. While the Treaty of Rome created powerful legal instruments for competition policy across the European Community, it was only in 1981 that it was confirmed by the European Court of Justice that Articles 81 and 82 of the Treaty were applicable to the banking sector. Moreover, because of the critical role of banks in supporting economic and financial stability it has been argued in the past that fierce competition among banks may lead to excessive risk-taking. The huge economic costs resulting from crises in relatively lightly regulated banking sectors such as in the 1930s United States informed the view that 'too much' competition among banks could be harmful, and therefore bank regulation should apply some limits to the extent of competition.

However since the 1980s there has been growing emphasis on competition in the banking sector. Competition among banks is seen as important for two reasons: to deliver value directly to banking consumers; and crucially to allocate capital efficiently to firms in order to support a strong and dynamic economy. Long-term economic trends are also enhancing the importance of competition among banks. Firstly, sound macroeconomic management and performance has helped to smooth shocks to the banking system. Second, banking supervision has made important advances and exerts greater pressure on banks to practice sound financial management; particularly risk management. Third, increasing banking sector profitability in advanced economies (discussed further in chapter 5) has ensured that banks are generally well capitalised and more financially robust.

Against this background of increasing stability in the banking sector, the orientation of policy in the European Union and other advanced economies is towards increasing competition in the banking sector. This is consistent with the general thrust of policy reform across the financial services sector, which relies on sound regulatory and supervisory frameworks to

underpin market functioning and on the competitive process to drive innovation and productivity growth.

3.1.2. Competition policy in banking in the European Union

In the past five years several of the national competition authorities (NCAs) have been highly active in the retail banking sector, recognising its direct contribution of a significant share of total output and its large indirect contribution to overall economic efficiency. Several NCAs have launched competition investigations into the banking sector. These competition investigations have in certain countries helped to develop a broad policy agenda for public authorities and the banking industry to take forward.

Two additional developments in Member States are also significant. Firstly special exclusions for the banking sector from full antitrust law have been removed. For example, such exclusions have been removed in Germany, France, Finland and Portugal.[32] A second important change at Member State level is the shift in institutional competence for merger approval in banking. Figure 3 below, taken from a forthcoming research paper[33], summarises the shift in competence for merger approval using 1992 and 2004 as the benchmarks for comparison.

Figure 3: Institutional responsibility for bank merger approval

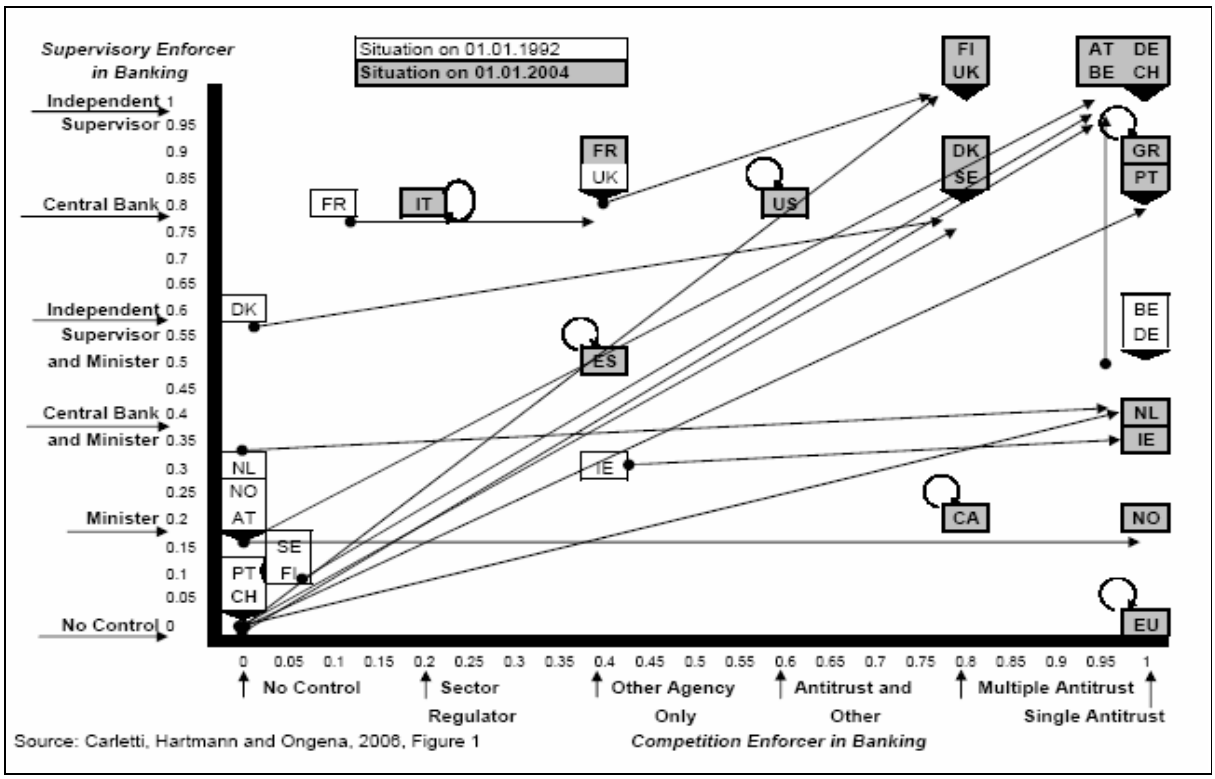


Figure 1 shows that the responsibilities of the competition authority in several European countries have significantly expanded between 1992 and 2004. In 1992, several countries – including all the Nordic countries – had little if any oversight of banking mergers. Germany and Belgium were the only European countries surveyed which granted full oversight of bank mergers to their competition authority. However, by 2004 a clear majority of the countries

[32] International Competition Network (2005): *An increasing role for competition in the regulation of banks*. Available at: http://www.internationalcompetitionnetwork.org/bonn/AERS_WG/SG1_Banking/Banking%20-%20An%20Increasing%20Role%20for%20Competition.pdf

[33] CARLETTI, E., HARTMANN, P. and ONGENA, S. (2006): *The economic impact of financial laws: The case of bank merger control*, Mimeo, Center for Financial Studies, European Central Bank and University of Tilburg.

surveyed had granted full scrutiny to the competition authority. Against this pattern, in 2004 banking merger control in France and Spain was in the hands of the Economy Ministry. The institutional arrangement in the United States is different to that of many EU countries: responsibility for bank mergers is shared between the Department of Justice as antitrust authority and the Federal Reserve, which approves prudential aspects of mergers. Finally, it should be noted that in 2005 the Italian government transferred merger control in the banking sector from the Banca d'Italia to the competition authority, Autorita Garante della Concorrenza e Mercato.

3.1.2.1. The spread of self-regulation in the banking sector

Alongside the increasing scope of antitrust enforcement over the banking sector in Europe, regulators at Member State and EU level increasingly encourage self-regulation to deliver efficient market outcomes. Self-regulation may require banks to commit to meet certain objectives – for example in terms of their conduct of business or supplying particular groups of consumers – which are seen as generally desirable and which may not efficiently be attained through legislation. Examples of self-regulation by banks include the switching codes applied in several Member States (including the Austria, Ireland, the Netherlands and the UK) which aim to make it easier for consumers to change their current account between banks.[34]

The Financial Services Action Plan successfully used legislation to help integrate and raise the competitiveness of European markets across a range of financial services. In its White Paper, *Financial services policy 2005-2010*[35], the European Commission emphasised the use of efficient alternatives to legislation, including greater use of competition enforcement and more reliance on self-regulation, where appropriate and proportionate. This policy approach builds on a growing consensus among policymakers, industry and consumer groups – notably reflected in the report of the Expert Group on Banking[36] – about the most appropriate ways to further advance the Single Market for financial services.

3.1.3. Best practice in applying competition policy in retail banking

This report has described above the evolution of antitrust enforcement in the banking sector. This evolution shows a clear direction and is based on two wider trends: the continuous learning and improvements being made in financial sector regulation; and the experience of governments and competition authorities in the field of antitrust policy.

Best practice in competition policy is shared through several bodies. Two of the most important of these are the Organisation for Economic Cooperation and Development (OECD) and the International Competition Network. The OECD has regular best practice roundtables on competition policy among its member countries, which have covered a range of policy issues (e.g. State aid, intellectual property or merger policy) and a range of sectors (e.g. transport, energy and pharmaceuticals).[37] In addition, the OECD also hosts an annual Global Forum on Competition which brings together competition authorities and policymakers from over 70 countries.

The International Competition Network (ICN) brings together competition authorities from over 80 jurisdictions from developed, emerging and poorer economies to share best practice and discuss policy priorities. In June 2005 a working group of the ICN met in Bonn to discuss

[34] These switching codes are discussed further in Chapter 7.
[35] See: http://europa.eu.int/comm/internal_market/finances/docs/white_paper/white_paper_en.pdf
[36] See: http://europa.eu.int/comm/internal_market/finances/docs/actionplan/stocktaking/report-bank_en.pdf
[37] See: http://www.oecd.org/document/38/0,2340,en_2649_37463_2474918_1_1_1_37463,00.html

best practice in competition policy in the banking sector and agree recommendations.[38] On the competition policy framework for retail banking, the ICN has made three recommendations:

1. *There should be no special rules for competition among banks*. General competition principles should be applied to the banking sector, as they are to all sectors within the scope of competition policy.
2. *Competition rules should apply fully to banking*. There should be no sectoral 'carve-outs' excluding the banking sector from the scope of competition law.
3. *Antitrust law should be enforced by the competition authority rather than by the banking regulator*. From the perspective of strengthening competition among banks it is preferable to place antitrust enforcement with an authority whose prime objective is to deliver competitive markets.

This final recommendation highlights an important tension in the regulatory framework for retail banking. On the one hand, governments will wish to see strong competition driving an efficient, innovative banking sector to deliver value for consumers and businesses. On the other hand, regulation of the banking sector – especially pro-competitive regulation – requires expert sectoral knowledge. This knowledge is likely to be deepest with the banking regulator. Therefore an institutional framework is required which creates incentives for the competition authority and banking regulators to cooperate and for banking regulators to promote competition.

3.2. The framework for banking supervision and competition issues

Banking sector supervision is fundamentally designed to correct two sets of market failures. These market failures are the inability of depositors to monitor the risk-taking and proprietary conduct of banks; and the systemic risk of a 'bank run' when specific problems with one or a small number of banks cause depositors to lose confidence in the banking system in general.[39] Thus financial supervisors have twin objectives of ensuring prudent financial management by banks and supporting public confidence in the banking sector.

In order to meet these twin objectives, modern banking supervisors can use a range of policy tools:

- Licensing enables supervisors to control entry to the banking sector – allowing them to refuse the entry of unsuitable or financially unsound players – and to exert continued pressure on incumbents to maintain high standards of business conduct.
- Solvency requirements require banks to hold a specified proportion of their total assets to provide a cushion against losses and shocks, and to ensure depositors can be paid on demand. Increasingly, solvency requirements are calibrated individually for banks according to their balance sheet and risk exposure.
- Deposit protection insurance provides a means of ensuring that when banks fail depositors can recover some of their money. *Ex post* this ensures that depositors, particularly the less affluent, have some financial protection. More importantly, it has the effect *ex ante* of reducing the incentive for depositors' to withdraw their money when their bank faces financial difficulty.

The legal framework for banking in the EU is based on the Second Banking Directive (2000/12/EC). The European Union adopted the First Banking Directive (77/780/EC) in 1977, which required Member States to establish systems for authorising and supervising credit institutions. This framework was expanded in 2000 by the Second Banking Directive, which

[38] See here for the report of the ICN working group:
http://www.internationalcompetitionnetwork.org/bonn/AERS_WG/SG1_Banking/Banking%20-%20An%20Increasing%20Role%20for%20Competition.pdf

[39] PADOA-SCHIOPPA, T. (2004): *Regulating Finance: Balancing Freedom and Risk*, Oxford University Press.

also consolidated seven previous directives affecting the banking sector. The key provisions of the Second Banking Directive[40] are:

- the mutual recognition principle, underpinning the passport arrangements, which states that approval from the supervisor in a bank's home country implies that the bank has supervisory approval in all other Member States

- the single European passport which enables banks which are licensed in one Member State to establish a branch operation in another Member State without requiring approval from the host country supervisor

- home country supervision, which formalises the responsibility of the supervisor in the country of where the bank was licensed to lead on its financial supervision, coordinating with other supervisors as necessary.

Several commentators have noted that by greatly reducing the regulatory hurdles banks face in establishing in other Member States – particularly through a branch operation – the provisions of the Second Banking Directive have helped to stimulate competition and greater integration in the European banking sector[41].

Two further EU directives affecting the retail banking sector were created as part of the Financial Services Action Plan (FSAP). The first of these, the 'e-money' directive (2000/46/EC) defines electronic money institutions and sets out provisions for their effective regulation. The second relevant directive is the financial conglomerates directive (2002/87/EC), which introduces prudential legislation for financial conglomerates – firms active in two or all three financial services sub-sectors (banking, insurance and securities). Therefore in the case of banking, the directive should ensure that the operations of banks active in the field of insurance or securities insurance are subject to the full scope of sectoral regulation, in order to protect consumers and businesses.

This section discusses:

- Impact of new capital adequacy framework
- Relationship between competition and financial stability
- Cross-border banking mergers

3.2.1. Impact of new capital adequacy framework

The cornerstone of banking sector supervision is the capital adequacy framework agreed internationally through the Basel Committee, which comprises senior officials from the Group of Ten[42] countries with formal responsibility for the prudential supervision of banks. The first Basel Capital Accord was proposed in 1988, creating a credit risk measurement framework with a minimum capital adequacy standard.[43] As a result a minimum capital ratio of 8% of risk-adjusted total assets came into force in all member countries at the end of 1992. In June 2004 the content of a revised framework, Basel II, was published by the Committee for implementation by the member countries.

[40] The Second Banking Direcctive is currently being recast and will be numbered Directive 2006/48/EC.
[41] See for example BARROS, P.P., BERGLÖF, E, FULGHIERE, P, GUAL, J., MAYER, C., and VIVES, X. (2005): *Integration of European Banking: The Way Forward*, CEPR and Fundación BBVA; and speech by TUMPEL-GUGERELL, G. (2005): *Regulation, Competition and Integration in EU banking: What Drives Performance? - Revisiting Freiburg* -, Albert-Ludwigs University of Freiburg, Faculty of Economics and Behavioural Sciences. Available at: http://www.ecb.int/press/key/date/2005/html/sp051021.en.html
[42] The Group of Ten comprises thirteen countries: Belgium, Canada, France, Japan, Germany, Italy, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States.
[43] Further information is available on the website of the Bank of International Settlements. See www.bis.org

The proposed capital framework is broader and more ambitious than Basel I, consisting of three 'pillars':

- Pillar 1: minimum capital requirements, refining and tailoring the standardised rules of Basel I;
- Pillar 2: internal assessment of a bank's compliance and capital adequacy, coupled with external supervisory review;
- Pillar 3: greater disclosure by banks to strengthen market discipline on their financial management.

In the European Union this new supervisory framework is being implemented in all Member States through the Capital Requirements Directive (CRD).[44] The CRD will make important improvements to the supervisory framework for banking in the EU, which in turn will generate wider economic benefits. Specifically, the improved risk-sensitivity in the capital requirements will enable banks to allocate capital more efficiently, which should contribute to economic flexibility and productivity growth. The CRD was formally adopted by the Council and the Parliament on 14 June 2006. Implementation of the CRD in all Member States is being phased in from 2007 to 2008.[45]

There is an open question on the effect of the CRD on competition among banks, in retail banking and other activities. An extensive impact assessment on the Basel II proposals (the basis of the CRD) suggested that the new framework would have no significant impact on the aggregate level of competition among banks within the EU[46]. However it was noted that differences in economic and financial structures between Member States – perhaps in terms of loan default rates – might lead to a differential impact in terms of capital requirements. In addition, differing levels of effort from national banking supervisors (through Pillar 2) in scrutinising compliance might favour some banks in some Member States, though this remains to be seen. Finally, it has been suggested that because the CRD encourages consolidated risk management across the whole balance sheet, banks may consolidate not only their risk management processes but their entire corporate structure. Such a trend would lead to greater consolidation within groups and might reduce the extent of product differentiation. However it is not clear that it would lead to a reduction in competition per se between rival banks. Taking all these potential issues together it still appears that the impact of the CRD on banking competition will be limited.

3.2.2. Relationship between competition and financial stability

As discussed above, some authorities have assumed that there is a trade-off between strong competition in the banking sector and the level of financial stability. More recently, a survey of the empirical evidence has concluded that competition should not be viewed as in any way dangerous to the stability of the banking sector.[47]

The last twenty years there have been significant advances in supervisory tools and in the quality of banks' own risk monitoring. It is likely that these new instruments have enhanced the stability of the banking system. For example, the risk-based capital requirements framework developed by the Basel Committee provides strong safeguards against excessive risk-taking by banks. A study by the Organisation of Cooperation and Development (OECD) suggests that: "*the OECD countries that are characterised by strong competition in banking activities have not been subject to instability in recent decades. One reason why stronger*

[44] The Capital Requirements Directive will be numbered Directive 2006/49/EC.
[45] See Commission press release IP/05/1250
[46] See: http://ec.europa.eu/internal_market/bank/docs/regcapital/studies/2004-04-basel-impact-study_en.pdf
[47] CARLETTI, E. and HARTMANN, P. (2002): *Competition and stability: what's special about banking?* ECB Working Paper No 146.

competition may not risk greater instability is that the authorities have developed tools to foster prudent behaviour without adverse impact on competition."[48]

Stronger supervisory architecture for banks has also been coupled with more stable long-term macroeconomic performance, with the EU and other economies appearing more resilient to major shocks than in previous decades. Against this background authorities should ensure that competition policy applies fully to the banking sector and take steps to create an environment that is favourable to tough competition among banks.

3.2.3. Cross-border banking mergers

Banks wishing to operate in another EU Member State have a number of routes open to them, in terms of mode of supply and means of market entry. There are several possible modes of supply:

- Branch operations allow banks to establish in another Member State, on the basis of the single 'passport'. The new operation remains part of the existing corporate structure and subject to the same supervision
- Subsidiary operations allow banks to establish a new and separate corporate entity that is subject to the legal, tax and supervisory rules of the host Member State
- Cross-border selling allows a bank to sell direct to consumers in another Member State without requiring a physical presence in the host Member State.

There are several options for the means of market entry:

- Greenfield investment describes an entrant bank's construction of a branch or subsidiary operation in the host Member State
- Joint ventures between incumbent banks and banks entering the host Member State allow the entrant to sell its own products while capitalising on the incumbent's brand name and distribution network
- Merger or acquisition gives an entrant bank a significant or controlling interest in another bank.

This section focuses on the barriers to cross-border mergers and acquisitions (M&A) in banking. There are three reasons for placing such emphasis on cross-border M&A. Firstly cross-border M&A is an important means for larger players to enter new markets and quickly acquire sufficient scale in their operations to launch a competitive challenge to domestic banks. Secondly there is clear evidence that in the banking sector, cross-border M&A – more than other means of market entry – tends to generate significant benefits for consumers in the host economy. Thirdly there remain significant barriers to cross-border M&A in banking, particularly arising from the current framework for banking supervision.

o Consumer benefits from cross-border banking M&A

Intuitively, cross-border M&A between banks has different effects to a merger between domestic banks. Whereas domestic M&A reduces the number of market players and increases market concentration, cross-border M&A introduces a new competitive force while maintaining the number of market players and the level of concentration.[49]

Supporting this intuitive approach there is empirical evidence showing that cross-border M&A provide a greater competitive impulse to national banking markets than purely domestic M&A and that on balance foreign bank entry tends to enhance consumer welfare.[50] For example,

[48] DE SERRES, A., KOBAYAKAWA, S., SLØK, T., and VARTIA, L. (2006, forthcoming): *Regulation of Financial Systems and Economic Growth*, OECD Economics Department Working Papers.
[49] BARROS, P.P., BERGLÖF, E, FULGHIERE, P, GUAL, J., MAYER, C., and VIVES, X. (2005): *Integration of European Banking: The Way Forward*, CEPR and Fundación BBVA
[50] WALKNER, C. and RAES, J. (2005): *Integration and consolidation in EU banking: an unfinished business*, European Commission Economic Paper No 226.

using 7900 observations from 80 countries for the 1988-1995 period, Claessens et al. (2001) observe that for most countries a larger foreign ownership share of banks is correlated with lower profitability and interest rate margins among domestically owned banks. Meanwhile Levine (2003) analyses the relationship between barriers to market entry by foreign banks and interest rate margins (which are a reasonable proxy for banking 'prices').[51] The dataset covers 47 countries at varying levels of economic development and their regulatory decisions concerning the entry of over 1100 banks. Using the share of foreign bank entry applications denied by the national regulator as a proxy for entry barriers, restrictions on foreign bank entry, Levine finds a strong positive correlation across countries between the proportion of foreign bank entry refusals and interest rate margins. Thus, the literature suggests that countries which maintain higher barriers to cross-border M&A tend to raise the costs of banking for businesses and consumers.

- Trends in EU cross-border banking M&A

Over the past two decades there have been clear and consistent patterns in M&A in the banking sector. Firstly the share of cross-border deals as a share of total M&A activity has remained low; typically at around 10-15 per cent of total M&A value. There have been some 'spikes' in cross-border activity, with cross-border deals reaching 30 per cent of total M&A in banking in the late 1980s in 1989 (prior to the Single Market programme) and in 1999-2000 (prior to the creation of the euro). However, throughout the period the vast majority of M&A deals in European banking have been between domestic banks. Secondly, cross-border deals in banking have tended to be lower in value than domestic deals.[52]

In view of the potential economic benefits arising from cross-border M&A between banks, European policymakers have been keen to understand the explanations for relatively low level of activity. The issue was discussed by EU Economic and Finance Ministers in September 2004, who asked the European Commission to examine the barriers to cross-border consolidation in the financial sector. The results of this study are discussed below in the box below.

Available at: http://ec.europa.eu/economy_finance/publications/economic_papers/2005/ecp226en.pdf

[51] LEVINE, R. (2003): *Denying Foreign Bank Entry: Implications For Bank Interest Margins*, Central Bank of Chile, Working Paper No 222.

[52] WALKNER, C. and RAES, J. (2005): *Integration and consolidation in EU banking: an unfinished business*, European Commission Economic Paper No 226
Available at: http://ec.europa.eu/economy_finance/publications/economic_papers/2005/ecp226en.pdf

Barriers to cross-border mergers and acquisitions in the financial sector

In 2005 the European Commission undertook a major survey of barriers to cross-border mergers and acquisitions (M&A) in the financial sector. A range of market participants, notably financial institutions, were asked to identify the key obstacles to M&A. The Commission published the results of this survey in November 2005.* The scope of the survey included all financial services activities, though the vast majority of respondents were banks. Financial institutions responding to the survey were placed into four size classes (small, medium, large and very large) according to their total assets.

This box summarises the major barriers to M&A that were highlighted by all financial institutions, including banks:

- Economic barriers. Almost all of the small, medium and large institutions responding cited basic economic factors as an explanation for low levels of cross-border M&A activity. Differing product mixes in Member States reduced economies of scope for new entrants, while there were few synergies in fixed costs such as information technology.

- Tax barriers were particularly significant for small and medium-sized institutions. Over 80 per cent of smaller banks highlighted preferential or discriminatory tax regimes and uncertainty over the VAT regime. Large institutions saw fewer barriers, though some drew attention to taxation on dividends.

- Supervisory requirements were seen as a barrier by all institutions. Multiple reporting to supervisors was seen as particular obstacle, raising the costs and risks of cross-border M&A. Just over half of the very large institutions highlighted misuse of supervisory powers or diverging supervisory practice as barriers.

- Legal barriers appeared to be less significant for all institutions. Around one quarter of the largest institutions saw inflexible employment legislation as a barrier to M&A, since it could reduce the scope for cost savings.

- Attitudinal barriers. Over 80 per cent of small to large institutions responding believed that employees were reluctance to accept new management, while over 90 per cent of small institutions cited consumer mistrust as a barrier. One third of the very largest institutions cited 'political interference' as a major obstacle.

* See: http://europa.eu.int/comm/internal_market/finances/docs/cross-sector/mergers/survey-results_en.pdf

The survey of market participants points to some economic barriers which are largely unavoidable when banks evaluate the case for making a cross-border acquisition. In many cases, cost savings will be relatively lower in a cross-border merger than in a domestic merger, since there will be little overlap in distribution networks and back office functions. Thus, regardless of any political dimension to a deal, the financial case for cross-border M&A in banking will tend to be less strong than for domestic M&A. Nonetheless, the Commission has identified three broad areas that can help build a more supportive environment for cross-border M&A in the banking sector.

First, the current arrangements for supervision of cross-border activities could be improved to make them more cost-efficient. One aspect of this work is to strengthen cooperation among supervisors in order to achieve efficient control over banks operating in several Member States. Another aspect is to improve the legal certainty, clarity and transparency of the supervisory approval process. The Commission is currently preparing measures to improve

the prudential assessment of cross-border acquisitions in the banking, insurance and securities sectors. The aim of these measures is to reach agreement on objective and transparent criteria for assessing cross-border mergers throughout the EU.

A second priority area is the Commission's work on further integration of retail financial markets, which was set out in its 2005 White Paper on financial services policy. By helping to unlock latent economies of scale, such integration can strengthen the economic case for cross-border M&A activity in the banking sector.

Thirdly, corporate expansion and reorganisation on a pan-European basis could be made easier, for instance through improved VAT rules for financial services, which currently hinder the exploitation of the opportunities offered by a Single Market.

3.3. Non-supervisory aspects of retail banking regulation and competition

This section discusses a range of policy tools, other than supervisory instruments, which regulators can use to restrict the activities of banks. The regulatory tools surveyed in this section are:

- Pricing regulation
- Licensing of cross-sectoral activities
- Geographical restrictions
- Consumer protection rules

This section surveys current practice in the EU Member States and where relevant, highlights some provisions which may have the effect of restricting competition in the retail banking sector.

3.3.1. Pricing regulation

National authorities typically resort to price regulation to ensure that a group of retail banking customers is able to obtain retail banking services at or below a certain price ceiling. Authorities may use price regulation for reasons of equity, for example to ensure that less affluent consumers can access basic banking services. Or price regulation may be used for reasons of economic efficiency. For example, authorities may believe that market failures in the supply of credit to small firms would unnecessarily raise their cost of financing; in turn reducing output and productivity growth. In such cases, authorities might regulate the interest rates and fees charged for loans or current accounts for small firms in order to improve their access to finance. This price regulation would reduce banks' income from providing that service to particular groups of customers. One knock-effect of price regulation may be that banks seek to cross-subsidise their activities by raising prices for other groups of consumers. However, such price ceilings could also contribute to an increased distribution of the relevant banking services which otherwise would not be supplied.

As part of the sector inquiry the Commission asked banking regulators in the Member States to describe any price regulations that were applied to four types of product: personal current accounts; personal loans other than mortgages; SME current accounts; SME loans. The results make clear that price regulations for retail banking services are in place in several Member States. In some Member States price restrictions such as maximum are applied directly by the regulator, whereas in other Member States implicit price ceilings are imposed by general consumer protection laws.

Regulators may also impose minimum levels on prices for particular banking services. The purpose of creating such price floors is to prevent excessive risk-taking by banks which would jeopardise their financial soundness. However, the use of price floors by regulators is rare in the EU retail banking sector.

3.3.2. Licensing of cross-sectoral activities

This section surveys the regulatory provisions in the Member States concerning banks' diversification into other areas of financial services business. Banks are typically authorised to conduct a particular type of regulated activity, such as accepting deposits. Therefore where banks wish to conduct a new activity, such as arranging a mortgage, they require a separate regulatory permission.

Similarly, where a bank wishes to undertake business in other areas of financial services such as insurance or securities, they require a separate regulatory permission. In some Member States the supervisor will consider the permission on the same grounds as a banking permission; namely whether the institution is competent, reputable and financially sound. However, some Member States still have barriers on banks' moving into other areas of financial services. Table 4 shows where, as of 2003, such barriers were still in place:

Table 4: Restrictions on banks wishing to conduct cross-sectoral activity

	Securities	Insurance
Austria	++	-
Belgium	++	-
Cyprus	++	-
Czech Rep	+	-
Denmark	+	+
Estonia	++	++
Finland	+	+
France	++	+
Germany	++	-
Greece	+	-
Hungary	+	-
Ireland	++	-
Italy	++	-
Latvia	+	+
Lithuania	+	+
Luxembourg	++	++
Malta	+	+
Netherlands	++	-
Poland	+	+
Portugal	++	-
Slovakia	++	-
Slovenia	+	-
Spain	++	-
Sweden	+	+
UK	++	+

Source: World Bank Regulation and Supervision database 2003[53]

++ = Unrestricted: full range of activities in the given category can be conducted directly in the bank
+ = Permitted: full range of activities permitted, but all or some must be through subsidiaries
- = Restricted: less than a full range of activities can be conducted in the bank or subsidiaries
-- = Prohibited: activity cannot be conducted in either the bank or its subsidiaries

While no Member State retains a complete ban on a bank *group* undertaking cross-sectoral activities, almost all stipulate that the bank itself cannot directly conduct insurance business and must operate a separate subsidiary operation. Only Luxembourg and Estonia place no restrictions on banks' conduct of insurance business. Meanwhile, in 2003 fourteen Member

[53] See: http://www.worldbank.org/research/projects/bank_regulation.htm

States including Germany, Italy and Spain restricted the insurance activities that a bank could conduct even through a subsidiary.

There are fewer restrictions for banks wishing to conduct business in the securities sector, such as asset management. Fourteen Member States have no restrictions on banks directly undertaking securities business, nor on the range of activities that the bank can conduct. Eleven countries, mostly new Member States, required banks to operate subsidiaries in order to conduct a full range of securities business.

3.3.3. Geographical restrictions

In some Member States there are restrictions on the regional scope of the activities of certain types of banks such as savings banks and/or co-operative banks. In Germany, the so-called regional principle still plays an important role with respect to Volksbanken and Sparkassen and is, regarding the latter, also ruled by the Sparkassen laws of the Länder. These laws – with a varying degree of strictness – regulate that the individual Sparkassen of a Land should limit or concentrate their activities to their given territory and, thereby, strengthen the status of the Sparkassen themselves. In its comments submitted in the context of this inquiry, the German supervisor BAFin, however, stipulates that compliance with the regional principle is not assured or enforced.

The United States also has a tradition of geographic restrictions on the activity of banks. Such geographic restrictions operated as both intrastate and interstate restrictions on banks' branch networks. Intrastate restrictions on branching were lifted state-by-state during the 1970s and 1980s and ceased to operate in 1994.[54] Interstate branching restrictions were generally tougher and the process of deregulation only began in 1978. Nevertheless, by 1994 such interstate branching restrictions were also completely removed and no regulatory permission was required for banks wishing to enter other states. This removal of geographic restrictions in the US retail banking sector has enabled a significant consolidation in the industry. Moreover, following the removal of barriers to the geographic expansion of banks, the US experienced substantial gains in terms of banking efficiency, employment growth, and economic growth.[55]

3.3.4. Consumer protection rules and banking competition

The existence of widely differing consumer protection regimes in EU Member States is often cited as a barrier to market integration in retail banking. It is argued that by forcing up industry costs, reducing economies of scale in product design and locking in artificially different consumer patterns, these divergences reduce foreign bank entry and the overall level of competition.

Until recently EU directives on consumer protection followed the so-called "minimum harmonisation approach", which allowed Member States to pass implementing measures that were more stringent than the relevant directives. However, this approach did not create a level playing field across the EU in terms of consumer protection. Therefore more recent directives have followed a full harmonisation approach. The Directive on Distance Marketing of Financial Services still contained a minimum harmonisation clause concerning pre-contractual information. The more recent proposal for a Consumer Credit Directive follows entirely the full harmonisation approach. The objective is to achieve, within the scope of the Directive, a genuine internal market for financial services where national consumer protection regimes only differ insofar as allowed by the Directive.

[54] Thus since 1994 the United States has had no regulatory barriers to expanding branch networks. A similar position was only reached in the EU in 2000, through the Single Passport enshrined in the Second Banking Directive.

[55] KROZNER, R.S. (2006): *The Effect of Removing Geographic Restrictions on Banking in the United States: Lessons for Europe*.

The box below summarises recent research on links between banking regulation, competition and economic growth.

Banking sector regulation and barriers to competition

Using its own research and the World Bank's database on bank regulation and supervision, the OECD has analysed the volume of bank regulation in its member countries, which include nineteen EU Member States.* The OECD identifies four categories of regulatory barriers to competition in banking:

- **Barriers to domestic entry**, specifically licensing requirements. Slovakia and Sweden report the highest barriers here, and France and Finland the lowest.
- **Barriers to activity** in other areas of financial services. Hungary, Greece and the Czech Republic have the highest cross-sectoral restrictions. France and the UK have minimal restrictions and Luxembourg has none.
- **Public ownership,** measured by the share of banks' assets owned by the state. Germany has the highest level of public ownership, followed by Poland, Portugal and Greece. Most EU Member States report no public ownership in banking.
- **Barriers to foreign entry**, specifically equity restrictions on foreigners; screening and approval procedures; and management restrictions. Poland is reported to have the highest barriers, followed by Portugal, Austria and Italy.

Based on countries' regulations across the four sets of barriers, the OECD has constructed a composite index of regulatory barriers to banking competition, where one denotes the highest possible barriers and zero denotes no regulatory barriers. According to this index, the EU Member States with the highest barriers are Slovakia (0,46), Ireland (0,43), Hungary (0,42) and Portugal (0,38). The lowest barriers to competition are reported in the UK, Luxembourg and Finland (all on 0,28).

Impact on economic performance

Overall the OECD finds that regulation of the banking sector can have a significant impact on output and productivity growth. The OECD estimates that if countries with the highest regulatory barriers reduced their barriers in banking to the OECD average, this would raise their economic growth rate by 0,25 to 0,5 per cent annually over several years. This prediction is supported by Barth et al (2001)**, who find that regulatory restrictions on banking activities and limitations on bank entry are welfare reducing. Examining a cross-country panel of 107 countries, Barth et al also find no evidence that granting greater powers to banking supervisors increases financial stability or improves the performance of the banking sector.

* OECD (2006) *Economic policy reforms: going for growth.*
** Barth, Caprio & Levine (2001), "Bank Regulation and Supervision: What Works Best?"

3.4. Direct state intervention in the retail banking sector

This section surveys the extent of state intervention in the EU retail banking sector and highlights areas where such state intervention may weaken competition. It is clear that the scope of state intervention in banking has narrowed since the 1970s, consistent with the broader trend in economic deregulation. For example, capital and foreign exchange controls are no longer used and price regulation is imposed only in narrow and specific areas of retail banking.

Nevertheless, governments continue to intervene in the banking sector through other means. Direct state intervention in providing advantages to certain financial institutions is tackled by the Commission through state aid control in order to ensure a level playing field for all market participants and to enhance effective competition. In particular, the Commission ensures that public and private institutions operate under similar conditions by removing unlimited state guarantees or fiscal advantages in favour of particular banks and in applying the so-called market economy investor test (MEIP). In addition, the Commission seeks to ensure that any compensation for public service obligations may not exceed what is necessary to carry out these services. In the case of rescue or restructuring aid the aid needs to be limited to the indispensable.

3.4.1. Abolition of unlimited state guarantees in favour of public banks

In removing unlimited state guarantees for public banks in Germany[56], Austria[57] and France[58] the Commission has put these banks on an equal footing for refinancing with their private competitors. The abolished State guarantees were unlimited in time and amount and allowed the public banks concerned a cheaper refinancing. In addition, the guarantees allowed these public banks to accept higher risks than other financial institution would reasonably want to accept.

The Commission proposed appropriate measures to abolish the guarantees after a phasing-out period that were accepted by the Member States concerned. In Germany the unlimited guarantees of Anstaltslast and Gewährträgerhaftung were terminated on 18 July 2005. In Austria, Ausfallhaftung will expire on 1 April 2007. France agreed to abolish the guarantee of CDC for CDC IXIS by 24 January 2007 at the latest. The Commission will safeguard that no new unlimited State guarantees are introduced for commercial activities of financial institutions. In this context, it has recently opened proceedings as regards the re-introduction of a State guarantee towards Dornbirner Sparkasse in Austria[59]

3.4.2. Remuneration for capital injections into financial institutions

The Commission constantly ensures that public bodies provide capital to financial institutions only on conditions complying with market rates. Most prominently, in 2004 the Commission adopted seven decisions concerning German Landesbanken by which it ordered the recovery of about € 3.4 billion including interest for the transferral of State owned assets to public banks under conditions which were found not to be market conform[60]. Apart from that, in 2005 the Commission assessed other capital injections into German Landesbanken to ensure that no unjust benefit for the financial institutions is involved[61].

[56] Removal of Anstaltslast and Gewährträgerhaftung following the proposal of appropriate measures of 8 May 2001 and of 27 March 2002 (SG (2002) D/1286).
[57] Removal of Ausfallhaftung following proposal of appropriate measures of 30 April 2003 C(2003) 1329fin.
[58] Removal of guarantee of CDC vis-à-vis its subsidiary CDC IXIS following the proposal of appropriate measures of 30 April 2003 C(2003)1328fin.
[59] OJ 2006 C 92 p.4.
[60] Decisions of 20 October 2004 concerning WestLB, BayernLB, NordLB, Berliner Bankgesellschaft, HSH Nordbank and Helaba; not yet published in the OJ.
[61] Decisions of 6 September 2005 concerning HSH Nordbank, BayernLB and Helaba.

3.4.3. *Equal tax treatment*

As with other financial services products, governments in several Member States have created tax preferences for some retail banking products. In particular governments may choose to exempt interest income from savings accounts from income taxation, in order to raise the aggregate level of saving in the economy. The sector inquiry has found that this policy is widespread in the EU. Moreover, the inquiry has found clear evidence of the extent to which tax preferences for some savings products influence the choices of consumers in the market for deposits and savings accounts.

Table 5 below shows the sample gathered by the Commission's market survey in this area, using data for 2005. Clearly the savings account market in Belgium is dominated by tax-preferred accounts, which represent over 90% of all savings accounts. France and Denmark also show very high shares of tax-preferred products. Several Member States show moderate shares for tax-preferred savings accounts. Meanwhile a group of around ten Member States shows little if any evidence of such products.

Table 5: Deposits and savings accounts with tax preferences, 2005

	Total deposits and savings accounts (million)	Total accounts with tax preferences (million)	Share of tax-preferred accounts
Belgium	11,7	11,0	93,6%
France	101,1	72,7	71,9%
Denmark	3,0	1,8	60,2%
Portugal	5,6	1,4	25,3%
UK	75,3	14,2	18,8%
Netherlands	21,0	2,6	12,3%
Poland	16,2	1,9	11,5%
Czech Rep	8,1	0,9	10,8%
Sweden	8,3	0,8	9,3%
Spain	10,1	0,9	9,0%
Ireland	2,4	0,2	7,2%
Slovenia	1,0	0,0	3,5%
Germany	52,7	1,8	3,3%
Greece	8,9	0,1	1,1%
Finland	5,5	0,0	0,1%
Latvia	0,1	0,0	0,0%
Slovakia	4,7	0,0	0,0%
Luxembourg	0,2	0,0	0,0%
Lithuania	0,6	0,0	0,0%
Malta	0,7	0,0	0,0%
Cyprus	0,8	0,0	0,0%
Hungary	2,8	0,0	0,0%
Italy	6,2	0,0	0,0%
Austria	8,3	0,0	0,0%
Estonia[62]			
EU25	**355,4**	**110,2**	**31,0%**

Source: Commission's "Retail Banking Survey", 2005-2006.

[62] Data for Estonia are omitted for confidentiality reasons and are not included in the EU25 totals.

From a competition viewpoint the Commission is particularly concerned about discriminatory fiscal privileges which favour specific banks. For instance, the Commission has recently adopted two decisions concerning the so-called Livrets A and bleu in France[63]. Under state aid rules, there is an extension of the formal investigation procedure into the fees paid by the State to Crédit Mutuel for distributing the 'livret bleu', to establish whether there has been overcompensation. The second decision is a letter of formal notice asking the French authorities to justify the necessity of the special rights granted to La Poste, the Caisses d'Épargne and Crédit Mutuel to distribute Livrets A and bleu. The Commission fears that these special rights may infringe the Treaty by raising obstacles to the freedom of establishment and freedom to provide services (Articles 43 and 49). Both decisions intend remove advantages to specific banks so to suppress barriers to entry on the French savings market and to widen the consumer's choice in the field of financial services.

3.4.4. Compensation for providing services of general economic interest

In so far as financial institutions provide services of general economic interest (SGEI), they may receive an appropriate compensation for these services. The Commission seeks to make sure that any compensation is not going beyond what is necessary in providing these services and that there is transparency of the financing of the SGEI to avoid any spill over to other activities.

3.4.5. Rescue and restructuring aid to financial institutions

In case of rescue or restructuring aid to financial institutions in difficulties the Commission requires a notification by the Member States in order to assess the appropriateness of the measures on competition terms. In order to be approved by the Commission, rescue aid in particular has to be restricted to the amount needed to keep the financial institution alive and cannot consist in structural financial measures related to the bank's own funds. With respect to restructuring aid, the aid must restore the long-term viability of the bank but avoiding any undue distortions of competition and being limited to the minimum to enable a restructuring. Also, the beneficiaries are expected to make significant contributions from their own resources to the restructuring, including the sale of assets. In the past rescue and restructuring cases in the financial sector in particular concerned the French Crédit Lyonnais[64], certain Italian banks[65] and the German Berliner Bankgesellschaft[66].

[63] Commission decisions of 7 June 2006 -SG(2006)D/2249 and C(2006)2061final. See IP/06/746.
[64] Crédit Lyonais, Commission decision of 20 May 1998 OJ 1998 L 221 p.28.
[65] Banco di Sicilia and Sicilcassa, Commission decision of 10 November 1999 OJ 2000 L 256 p. 21
[66] Bankgesellschaft Berlin AG, Commission decision of 18 February 2004 OJ 2005 L 116 p. 1.

Conclusions

Strong competition should be seen as entirely consistent with the stability of the banking sector. Authorities should ensure that competition policy applies fully to the banking sector and take steps to create an environment that is favourable to tough competition among banks.

Empirical evidence suggests that on balance foreign bank entry tends to enhance consumer welfare. Cross-border M&A activity provides a greater competitive impulse to national banking markets than purely domestic activity. However, the incidence of cross-border banking mergers and acquisitions (M&A) remains fairly low in the EU. A range of policy measures could help provide a more supportive environment for cross-border M&A, including more streamlined and effective banking supervision, and the removal of obstacles to corporate expansion and reorganisation on a pan-European basis.

Differing regulatory frameworks in EU Member States, particularly in the area of consumer protection and taxation, continue to hinder market entry in retail banking. Convergence among national consumer protection regimes should strengthen banking competition.

Studies suggest that excessive regulation of the banking sector appears to weaken financial sector performance. The OECD has identified large potential benefits for countries with restrictive banking regulations moving to more open regimes. Such reforms could increase economic growth in these countries by 0.25 to 0.5 per cent year over a significant period of time.

While the scope of direct state intervention in the retail banking sector has narrowed, Member States continue to distort banking markets in several ways. One of the most significant distortions results from tax preferences conferred on a limited number of banks for distributing savings products.

4. MARKET STRUCTURES AND CONCENTRATION

The European markets for retail banking as described in studies and literature do not present a uniform picture regarding concentration. National differences in banking concentration appear to be still large with some Member States, in particular bigger ones such as Germany, having by far less concentrated national banking sectors than some smaller countries such as the Netherlands, Finland and Belgium, where the concentration ratio reported in statistics and literature reach beyond 75% for the five leading firms (CR5).[67]

Such comparisons, however, must be handled with care. First, almost all statistics refer to the banking sector as a whole, not to retail banking for which data are hardly available. Thus, statistics do not take into account the relevant sub-sector or market. In this context it also to be taken into account that even within the sub-sector of retail banking, product and geographic market definition in the antitrust sense is not clear. Secondly, most of the studies quote statistics such as the ECB banking structures report, that contain data based on institution/individual bank level, not consolidated data so that banking groups are not visible which, however, is in particular important for concentration measures. Finally, this inquiry could not include all EU-retail banks but take a sample approach that had to be based on proxies for retail banking activity (see chapter 2, 'Methodology') because an official database covering EU retail banks at national and taking into account consolidated data for bank groups does not exist. Consequently, concentration ratios dealt with in the following chapter are approximations.

4.1. Market definition

Many competition authorities in the EU and elsewhere seem to apply an approach that is based on individual products or services such as SME loans, mortgages, or consumer deposits to define relevant product markets, whereas others including the US Federal Reserve appear to favour the so-called cluster approach that combines certain products such as SME banking[68]. The European Commission in its merger decisions so far mentioned retail banking as a whole. In view of the fact that retail banking activities have so far not raised competition concerns in the sense of market dominance, there has been no need for a more detailed analysis. In its antitrust practice the Commission took narrower markets into account in payment card cases. It is, however, not the aim of this sector inquiry (and the scope of the analysis) to decide whether individual retail products/services, personal or business banking or the whole retail banking are relevant product markets in the sense of an antitrust or merger assessment. The purpose of the inquiry is to present a picture of European retail banking and to analyse the main market characteristics and performances in the Member States. The inquiry will, therefore look into the market structures of retail banking as a whole.

With respect to the geographic market definition, the question of national or regional markets arises. Taking into account the selective product approach, at least some of the retail product markets (e.g. personal loans, small business banking[69]) appear to be regional or even local regarding their geographical dimension. Factors such as the general preference of banking

[67] CAMPA, J.M., HERNANDO, I. (2005): *M&A s Performance in the European Financial Industry*, CEPR Discussion Paper No 5204, p. 5

[68] See D.F. AMEL, D.F. and STARR-MCCLURE M. (2001): *Market Definition in Banking: Recent evidence*, Federal Reserve Board of Governors

[69] See OECD paper (2000): *Mergers in Financial Services* DAFFE/CLP (2000)17, p. 22; See also DoJ Banking Merging Policy, US Department of Justice (1996): *Consolidation in the Banking Industry: an Antitrust Overview*, available at: http://www.usdoj.gov/atr/public/speeches/0657.pdf

customers for local suppliers, the significance of a dense branch network and the need for the bank to be physically close to its customers[70] were mentioned by the Commission as criteria for defining the geographic scope of relevant banking markets in previous merger decisions. The Commission had none-the-less so far tended to assume that financial services markets such as retail banking were national in scope. This can be largely explained by the absence of competition concerns in merger decision, which made a thorough analysis of the retail banking market unnecessary. However, the Commission has left room for a regional definition in retail banking,[71] and a set of circumstances may indicate the relevance of regional markets:

- importance of a dense the branch network and local presence despite the growing importance of online banking,
- significantly different regional market structures
- regulatory barriers in some Member States (e.g. 'regional principle')
- switching behaviour of large customer groups (in case of switching still large tendency to switch to another locally represented credit institution).

There are, however, also indicators for the relevance of national markets, for instance, the increase of online banking as well and similar regional and national structures. As with product markets, however, it is not the aim of the sector inquiry to define the relevant geographic scope of retail banking markets. The inquiry bases its analysis mainly on country differences.

However, regarding certain features of markets structures and concentration, for instance, number of branches and current accounts, the inquiry looks into both national and regional retail banking structures.

4.2. Scope of the analysis, data and limitations

In view of the sample approach chosen by the Commission and described in chapter 2, 'Methodology', the analysis of market and concentrations has limitations. First of all, exact concentration ratios cannot be calculated because the inquiry does not cover 100% of the market volume indicator. Though the sample covers for the Member States, the majority of the volume, and for most countries even over 80% (see Table X in chapter 2), this does not allow for calculating exact market shares or concentration ratios.

Moreover, in view of the non-availability of data regarding volumes of retail banking activities, the estimation of the sample coverage had to be based on the deposit volume, which was the best proxy available for almost all of European banks. Though this proxy could be used to construct a meaningful sample (for further details see chapter 2), it is certainly not suitable for calculating market shares of individual banks. The Commission, however, gathered data on better indicators such as the gross income on retail banking per bank, the gross income on current accounts as well as the number of current accounts per country and even per region.

Regarding the use of these indicators to calculate market share and concentration ratios some difficulties arise: First, the responses to individual questions show variations regarding consistency. Therefore, the Commission had to exclude some data from the evaluation. Regarding the number of current accounts, the Commission, for instance, asked for this information in different contexts, amongst others regarding the regional distribution (NUTS2

[70] Commission decision of 11 March 1997 in Case IV/M.873 – Bank Austria/Creditanstalt, OJ C 160, 27.5.1997.
[71] Commission decision of 11 March 1997 in Case IV/M.873 – Bank Austria/Creditanstalt, OJ C 160, 27.5.1997; Commission decision of 25 September 1995 in Case IV/M.628 – Generale Bank/ Crédit Lyonnais Bank Nederland, OJ C 289, 31.10.1995.

level as defined by Eurostat[72]) of the number of current accounts in the given country. Theoretically, the sum of the current accounts per region should correspond to the number of current accounts in this country submitted by the banks on a separate sheet. However, some banks faced difficulties with this specific breakdown because their databases use different sorting criteria. To avoid data distortions the Commission consequently excluded some responses from the evaluation, which explains different coverage rates for individual questions.

Another difficulty is that the coverage rates for the respective questions refer to the total of deposit volumes of non-bank customers and not to the total volume of the indicator in question. For example, a coverage rate of 80% to the question on gross retail income means 80% coverage in relation to the total customer deposit volume of a country, but not 80% coverage of the gross retail income volume of a country.

To – at least partly - overcome this problem, the Commission opted for the following method: Regarding the number of current accounts it used the data from the official statistic on current accounts per country of the ECB's Blue Book to put the number per bank or group in relation to a country total to calculate 'market' shares. This has the disadvantage of, first, basing the calculation on volume figures, not on value figures that better reflect market strength. Secondly, the ECB data – as notified by individual banks to national central banks – do not always seem to be reliable as the table below shows (for Slovenia and Lithuania, for example, the coverage rate of the sample regarding the question on number of current accounts appears to be by far too high in relation to the ECB data, which cannot be the case in view of our sample coverage below 90%, whereas for the UK the number of current accounts as given by the ECB (over 144 million) seems to be exaggerated so that the coverage rate of the inquiry in that respect appears to be too low – and concentration degrees consequently too high). However, the ECB statistics are the best source for country totals in this respect. Moreover, the range of coverage rates based on deposit volume and based on number of current accounts are sufficiently comparable (they can never be similar considering the significant difference of the volume indicators) so that a rough pictures of 'market' structures can be painted.

Regarding the indicator of gross retail income and gross income on current accounts, no official statistics on country volumes exist. The Commission, for calculating 'market shares', therefore had to extrapolate country totals. It calculated, first, an intra-sample share and, secondly extrapolated this on the basis of the deposit volume. If, for example, the coverage rate regarding gross retail income was 80%, this meant 80% of the countries deposit volume was covered by the sample responses included in the evaluation. The intra-sample share of bank x was then calculated on the basis of the gross retail income total of all responding banks. If that share was, for example 20% this was multiplied by 0.8 (to extrapolate the deposit related coverage) resulting in a 16% share. This is not accurate but the only solution in view of the sample approach and the lack of reliable databases for retail related volume figures per country.

The different ranges of coverage rates – calculated as described above – are summarised in Table 6 below:

[72] For explanation see: http://ec.europa.eu/comm/eurostat/ramon/nuts/home_regions_de.html; and: http://ec.europa.eu/comm/eurostat/ramon/nuts/codelist_en.cfm?list=nuts.

Table 6: National coverage rates for the indicators: number of current account, gross retail income and gross income on current accounts**

	Number of current accounts per country (source question 1.4.)	Number of current accounts per region (source question 1.5.)	Gross retail income	Gross income on current accounts
Austria	60-70	40-50	60-70	60-70
Belgium	> 90	80-90	> 90	> 90
Czech Republic	70-80	> 90	70-80	70-80
Denmark	80-90	< 30	80-90	60-80
Finland	> 90	60-70	> 90	50-60
France	80-90	80-90	80-90	80-90
Germany	50-60	> 90	50-60	50-60
Greece	50-60	< 30	> 90	20-30
Hungary	80-90	70-80	80-90	80-90
Ireland	50-60	70-80	50-60	50-60
Italy	70-80	40-50	70-80	60-70
Latvia	50-60	40-50	50-60	30-40
Lithuania	80-90	> 90	80-90	70-80
Netherlands	> 90	80-90	> 90	> 90
Poland	70-80	60-70	70-80	70-80
Portugal	80-90	70-80	80-90	80-90
Slovakia	80-90	> 90	80-90	80-90
Slovenia	80-90	> 90	80-90	70-80
Spain	50-60	< 30	70-80	60-70
Sweden	> 90	70-80	70-80	70-80
United Kingdom	80-90	40-50	80-90	80-90

* Confidential information
**extrapolated on the basis of customer deposits total per country

As explained above different coverage rates with respect to certain indicators in some countries are partly due to unclear or inconsistent responses to specific questions, to unreliable ECB data on current accounts or other slight inaccuracies regarding extrapolation for income figures. In particular in very small countries responses tend to show variances. For these reasons Luxemburg, Malta, Cyprus and Estonia were excluded from the evaluation.

As has been pointed out already, exact or 'true' market shares and consequently concentration ratios cannot be calculated in view of the numerous methodological difficulties. However, this inquiry is not an antitrust or merger case analysis and cannot serve as substitute for case related fact finding. The coverage rates appear nevertheless high enough – and include the main players of each country – to allow for trend indications and rough pictures of market structures for national and regional retail banking activity. If in the following sub-chapters the terminology of 'market shares' and 'concentration ratios' are nevertheless sometimes used, this has to be interpreted with care taking into account all the above described limitations.

4.3. Concentration at the national level

Though there has been consolidation in the EU financial services sector over the last years, the proportion of cross-border consolidation is still low compared to other sectors. According to a recent staff working document of the Commission [73] the proportion of cross-border deals accounted for roughly 20% in the period 1999 - 2004 whereas the average proportion of cross-border transactions equaled 45% in other sectors.

Moreover, and in contrast to other sectors, domestic deals seem to be significantly larger than cross-border deals in the financial sector. In cross-border deals though, the acquiring company is much bigger than in domestic whereas there does not seem to be a difference regarding the target company. This results in a larger difference between acquiring company and target company in cross-border deals and means that acquirers often buy significantly smaller companies whereas in domestic transactions sizes are more equal. [74]

Many cross-border deals in the recent years concerned the creation of some regional clusters (Benelux and the Nordic countries) and the significant capital inflow directed at new Member States. Apart from theses phenomena, however, the overall proportion of cross-border deals remains low in the EU financial sector, in particular within the EU15, and in particular within the banking sector.

This is also reflected in very different market structures of the retail banking industry. First, the major players differ from Member Sates. Apart from some exceptional cases in, for instance, Belgium and the Netherlands, there is hardly one and the same bank among the first three of five leading companies in different Member States, at least not in the EU15. Secondly, market concentration varies significantly.

As explained before, the Commission has tried to estimate concentration based on different indicators and different measurements. Despite all the limitations described above, the inquiry has managed to deliver at least a rough picture of the retail banking structure in Europe which has rarely been undertaken before. Based on the indicators a) gross retail income (extrapolated on the basis of total customer deposits per country), b) gross income on current accounts (extrapolated on the basis of total customer deposits per country) and c) number of current accounts (extrapolated on the basis of ECB statistics per country and – to cross-check also on the basis of total customer deposits) the 'market' shares of the leading 3 and 5 banks (CR3 and CR5) – or where given bank groups – were calculated.

Each of the following 4 figures, therefore, is based on a different methodology to estimate market shares, that varies either according to the variable on which intra-sample market shares (total retail income, income from current accounts or number of current accounts) are estimated or according to the way the intra-sample shares are extrapolated to total market shares (using sample coverage ratios based on deposit market shares or using total number of current accounts in the country from the ECB).

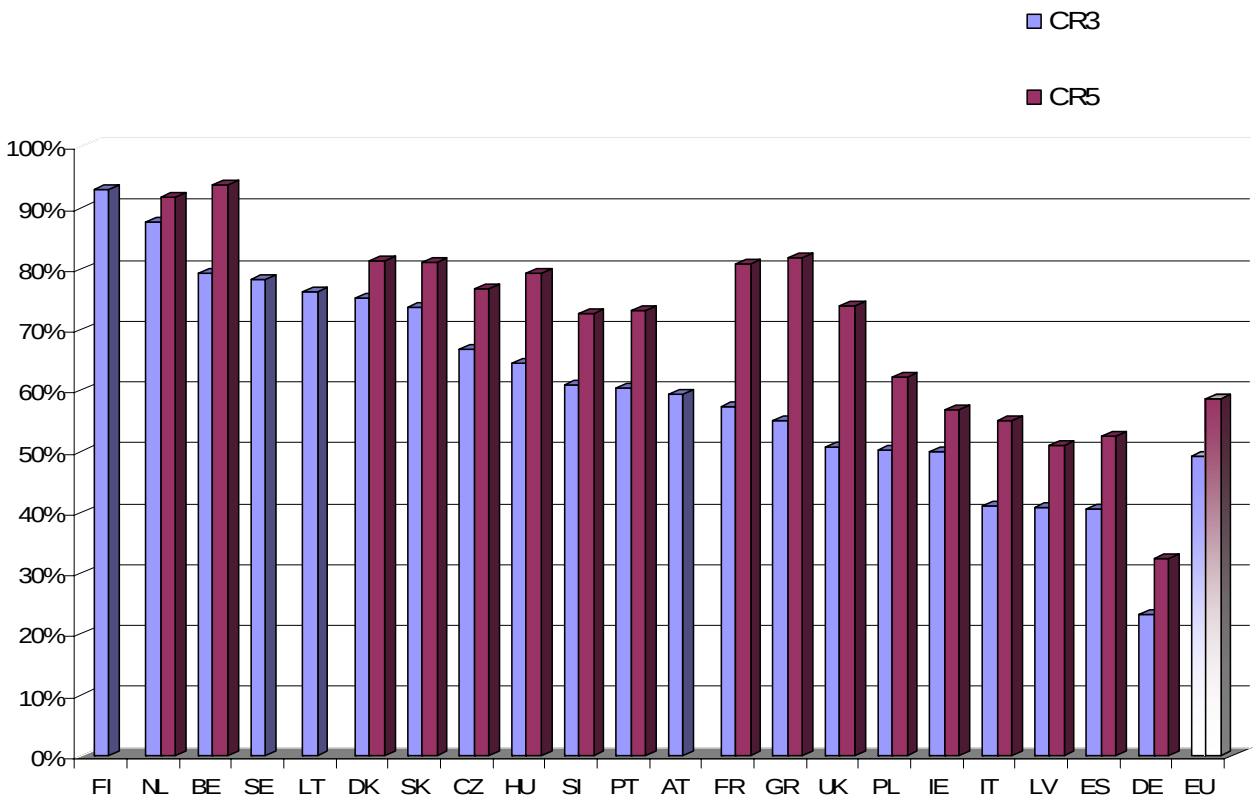
It has to be noted that there is a certain variability among the different estimates of the leading 3 (CR3) and the leading 5 (CR5) retail banks with a general tendency, so it seems, to overestimate the ratios (although not for all countries) relative to other concentration measures, for instant, those based on banks assets and reported by the ECB statistics. Reasons for these divergences may be, first, the fact that database used for creating the sample[75] do not provide a 100% coverage of each national banking industry; secondly, the fact that ECB data on assets refer to the overall banking activities and not specifically to retail

[73] Commission Staff Working Document - SEC(2005)1398: Cross-border consolidation in the EU financial sector. Available at:
http://ec.europa.eu/internal_market/finances/cross-sector/index_en.htm#obstacles
[74] See also previous footnote.
[75] See Chapter 1.

banking activities; thirdly, the fact that other statistics are not consolidated, i.e. that they are based on individual institutes and do not take into account bank groups and, finally, the fact that the replying banks may have more income from current accounts than the average bank in their country, or less deposits per current account.

The first measure of the CR3 and the CR5 uses (intra-sample) shares based on total retail income, which are then extrapolated to market size according to the sample coverage ratio estimated with deposit data. Countries are sorted in descending order of CR3.

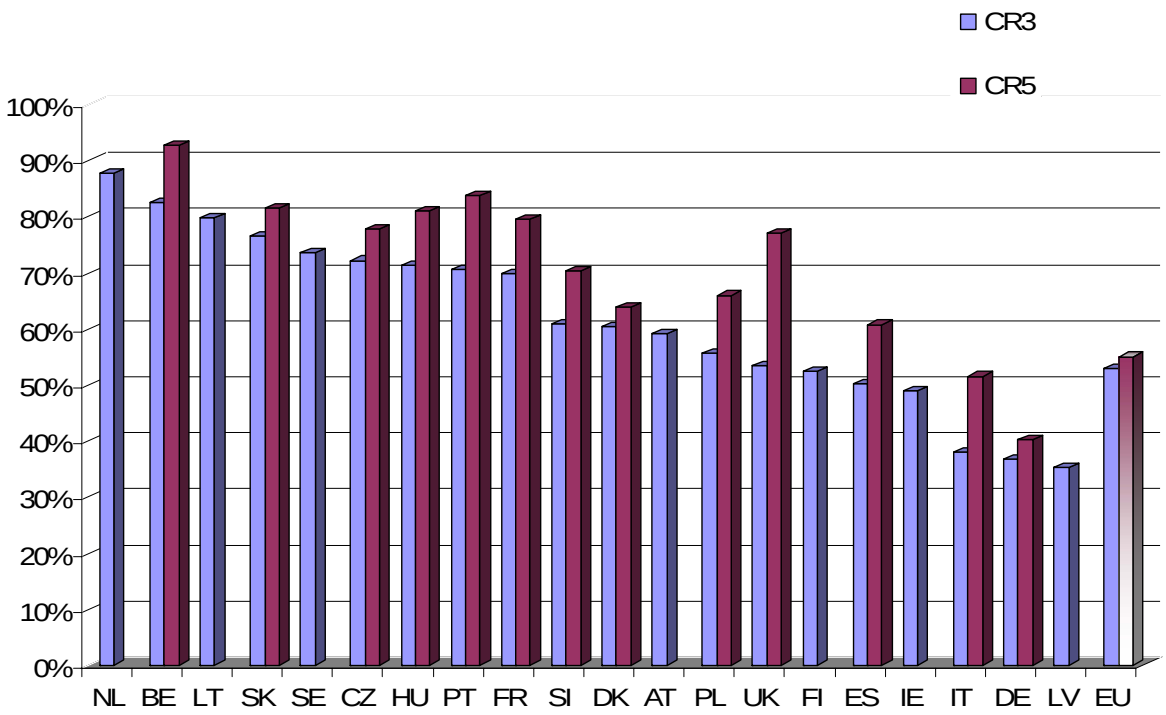
Figure 7: Concentration ratios: CR3 and CR5. Year 2004
Intra-sample share (retail income) extrapolated with deposits*



The average CR3 across the EU (weighted by population) is 49%, for EU-15 is 47% and for New Member States is 57%. The most concentrated countries, with CR3 larger than 80%, are here Finland and the Netherlands followed closely by Belgium and Sweden. The least concentrated countries, with CR3 at or lower than 50%, are Poland, Ireland, Italy, Latvia, Spain and Germany. CR5 ratios give a very similar concentration order if compared to CR3 ratios, except for France, Greece and the UK, which have a relatively lower CR3 than the CR5.

The second measure of concentration uses (intra-sample) market shares based on income from current accounts extrapolated to market size according to the sample coverage ratio estimated with deposit data. Countries are also sorted in descending order of CR3.

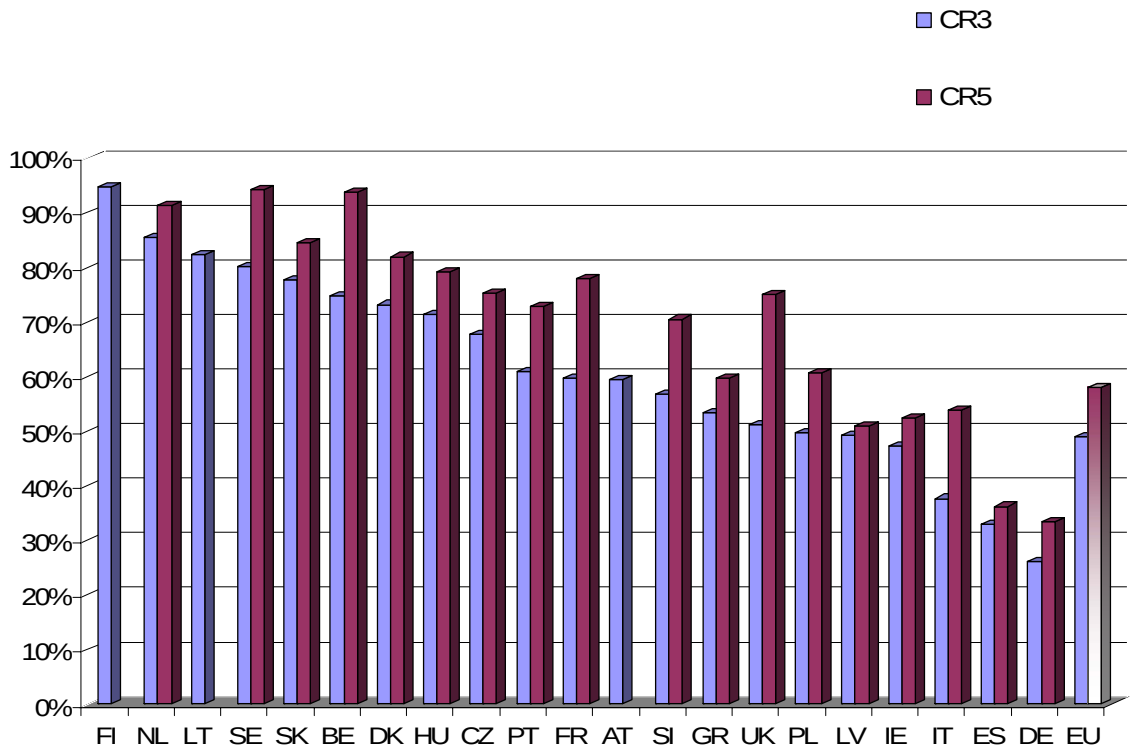
Figure 8: Concentration ratios: CR3 and CR5. Year 2004
Intra-sample share (c/acc income) extrapolated with deposits*



The average CR3 across the EU (weighted by population) is 53%, for EU-15 is 51% and for New Member States is 60%. The most concentrated countries, with CR3 larger than 80%, are the Netherlands and Belgium followed closely by Lithuania. The least concentrated countries, with CR3 at or lower than 50%, are Spain, Ireland, Italy, Germany and Latvia. CR5 ratios give a very similar concentration order except those of Portugal, France and the UK which have a relatively lower CR3 than the CR5.

The third measure uses (intra-sample) market shares based on the number of customers' current accounts per bank (as reported in the inquiry) and again extrapolated to market size according to the sample coverage ratio estimated with deposit data. The countries are also sorted in descending order of CR3.

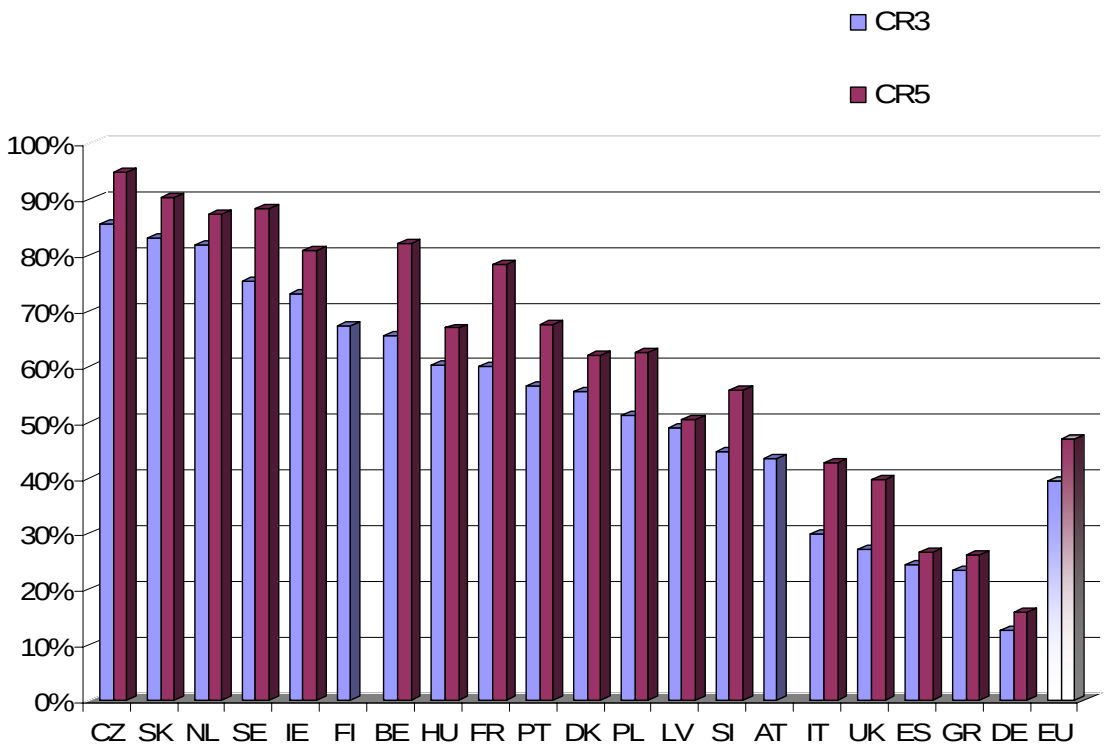
Figure 9: Concentration ratios: CR3 and CR5. Year 2004
Intra-sample share (number c/acc) extrapolated with deposits*



The average CR3 across the EU (weighted by population) is 49%, for EU-15 is 47% and for New Member States is 58%. The most concentrated countries, with CR3 larger than 80%, are Finland, the Netherlands, Lithuania and Sweden. The least concentrated countries, with CR3 at or lower than 50%, are Poland, Latvia, Ireland, Italy, Spain and Germany. CR5 ratios give a very similar concentration order except those of France and the UK which have a relatively lower CR3 than the CR5.

The fourth, and last, measure estimates bank's market share as the ratio of a bank's number of customer accounts (as reported in the inquiry) and the ECB estimate for total number of accounts at country level. Countries are again sorted in descending order of CR3.

Figure 10: Concentration ratios: CR3 and CR5. Year 2004
Market share (number c/acc, total market number of c/acc from ECB)*



The average CR3 across the EU (weighted by population) is 39%, for EU-15 is 36% and for New Member States is 55%. The most concentrated countries, with CR3 larger than 80%, are the Czech Republic, Slovakia and the Netherlands. The least concentrated countries, with CR3 at or lower than 50%, are Latvia, Slovenia, Austria, Italy, UK, Spain, Greece and Germany. CR5 ratios give a very similar concentration order except those of Belgium, France and Portugal which have a relatively lower CR3 than the CR5. It has to be noted, however, that the ECB statistics on number of current accounts per country do not seem totally reliable. Thus, the numbers appear to be underestimated in some of the New Member States (here the general coverage rates of the Commission's sample relative to the total of deposits in a country is in some cases significantly lower than the comparatively very high coverage rate of the sample on the basis of number of current accounts reported by banks in the inquiry relative to the ECB country statistics on number of current accounts), which may result in overestimated concentration ratios. Other countries such as the UK, In contrast, have according to ECB statistics such a high number of current accounts that the sample coverage rate and concentration ratio measured on that basis is much lower.

In conclusion, despite some variability across the measures, the following conclusions can be obtained about concentration in the EU: The average CR3 across all EU25 countries (weighted by population) is around 50% (40% using our last measure of concentration); across EU-15 is between 47% and 51% (36% using our last measure of concentration); and across New Member States concentration is always larger than across EU-15, and takes values of between 55% and 60%. The most concentrated countries are often the same ones, independently of our measure of concentration; and generally include the Netherlands, Lithuania, Belgium, Sweden and, to a lesser extent, Finland. The least concentrated countries also tend to be the same ones, independently of our concentration measure, and typically include Italy, Spain, Latvia and, in particular, Germany.

The average of EU-25's CR5 ratios are between 53% and 58% (47% using our last measure of concentration); average EU-15's CR5 ratios are between 53% and 57% (43% using our

last measure of concentration); and average MNS' CR5 are between 62% and 64%. CR5 gives a very similar concentration order if compared to CR3 ratios, except for a few countries, typically France and the UK, which have a relatively lower CR3 than the CR5.

4.4. Concentration at the regional level

The Commission also looked into regional concentration patterns of retail banking. In this respect, the banks included in the sample were asked for information regarding, amongst others, the regional distribution of the number of current accounts (consumers and SMEs) in the given country. The regions were set according to the NUTS of Eurostat, namely the medium level NUTS2 [76]).

To calculate shares at the regional level, the data given by the individual banks per region were put in relation to the estimated total. Lacking any regional ECB data on the number of current accounts, the Commission calculated the average number of current accounts per country (number of current accounts per country according to ECB divided by population) and multiplied this by the population number of each NUTS2 region.

This method also has its limitations because the number of current accounts per capita differs, of course, between regions and does not necessarily correspond to the country average. In urban areas, for instance, people tend to have a higher per capita average than in rural areas. However, this method was the best way to arrive at an acceptable estimate for a regional total.

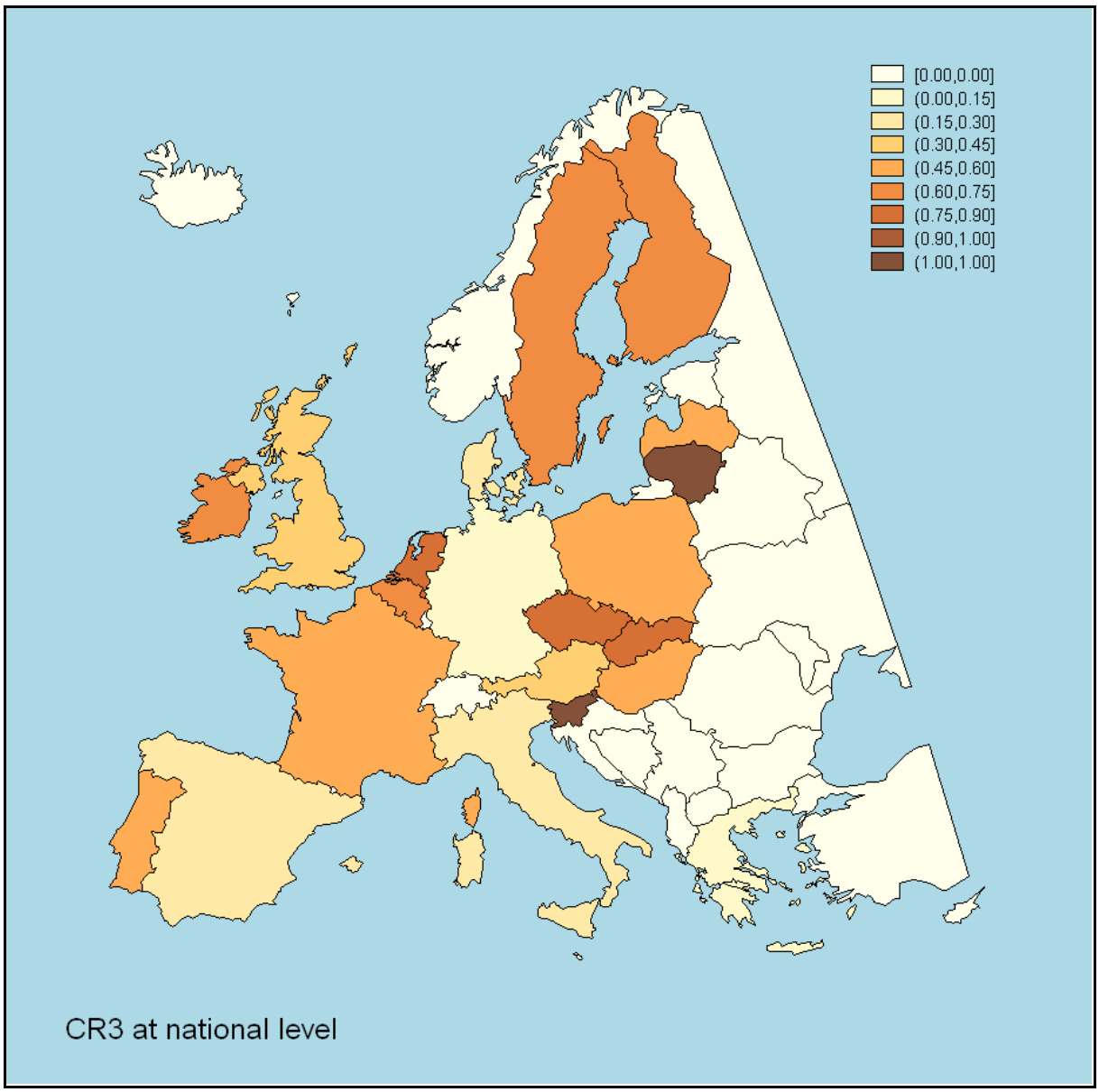
Germany is a special case. The coverage rate of the sample is low for this Member State due to its fragmented retail banking sector with about 500 Sparkassen and about 1600 co-operative banks (so that with roughly the 40 leading banks only about 60-70% of the national 'market' measured by means of the deposit total can be covered). However, the Commission tried to cover a larger part, at least for the regional data, by addressing the national associations of these two types of banks in addition. The coverage rate for Germany with respect to regional data on the number current accounts[77] finally turned out to be very high compared to the other German indicators but also compared to the other countries with respect to regional data.

Figures 11 and 12 present C3 and CR5 measures at country levels which are based on the sums of number of current accounts in all regions of a country and put in relation to the number of current accounts per country according to the ECB Blue Book:

[76] For explanation see: http://ec.europa.eu/comm/eurostat/ramon/nuts/home_regions_de.html; and: http://ec.europa.eu/comm/eurostat/ramon/nuts/codelist_en.cfm?list=nuts.

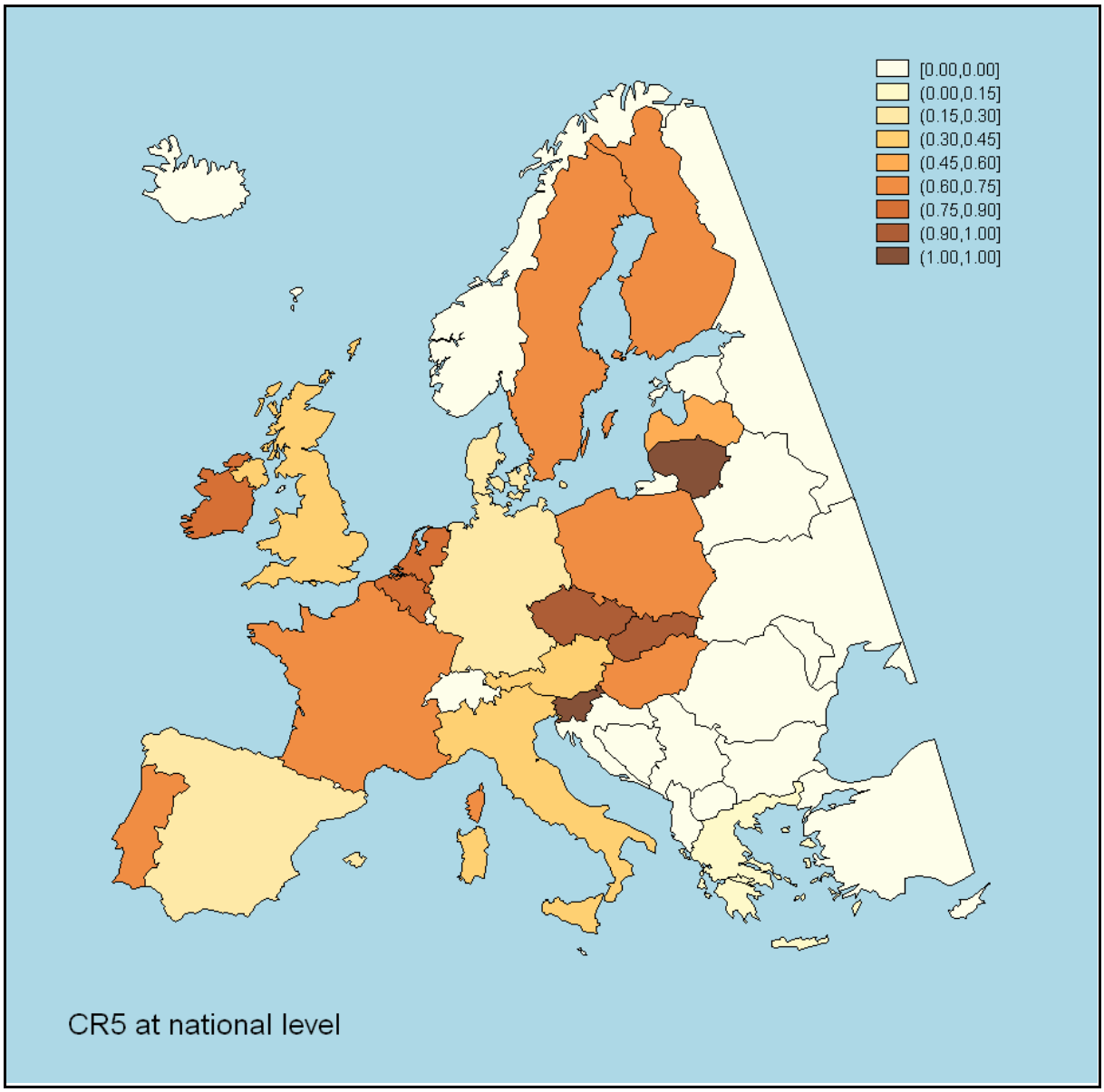
[77] The number of branches per region was also covered but is not included in this interim analysis.

Figure 11: The leading 3 banks per country (measured on the basis of number of current accounts as a sum of all regions per country)[78]



[78] In Lithuania and Slovenia the number of current accounts given by our sample banks was higher than the ECB figures of the countries, and the CRs > 100%; for the purpose of this illustration, they were therefore set at 100%. Luxemburg, Cyprus, Malta and Estonia have been excluded.

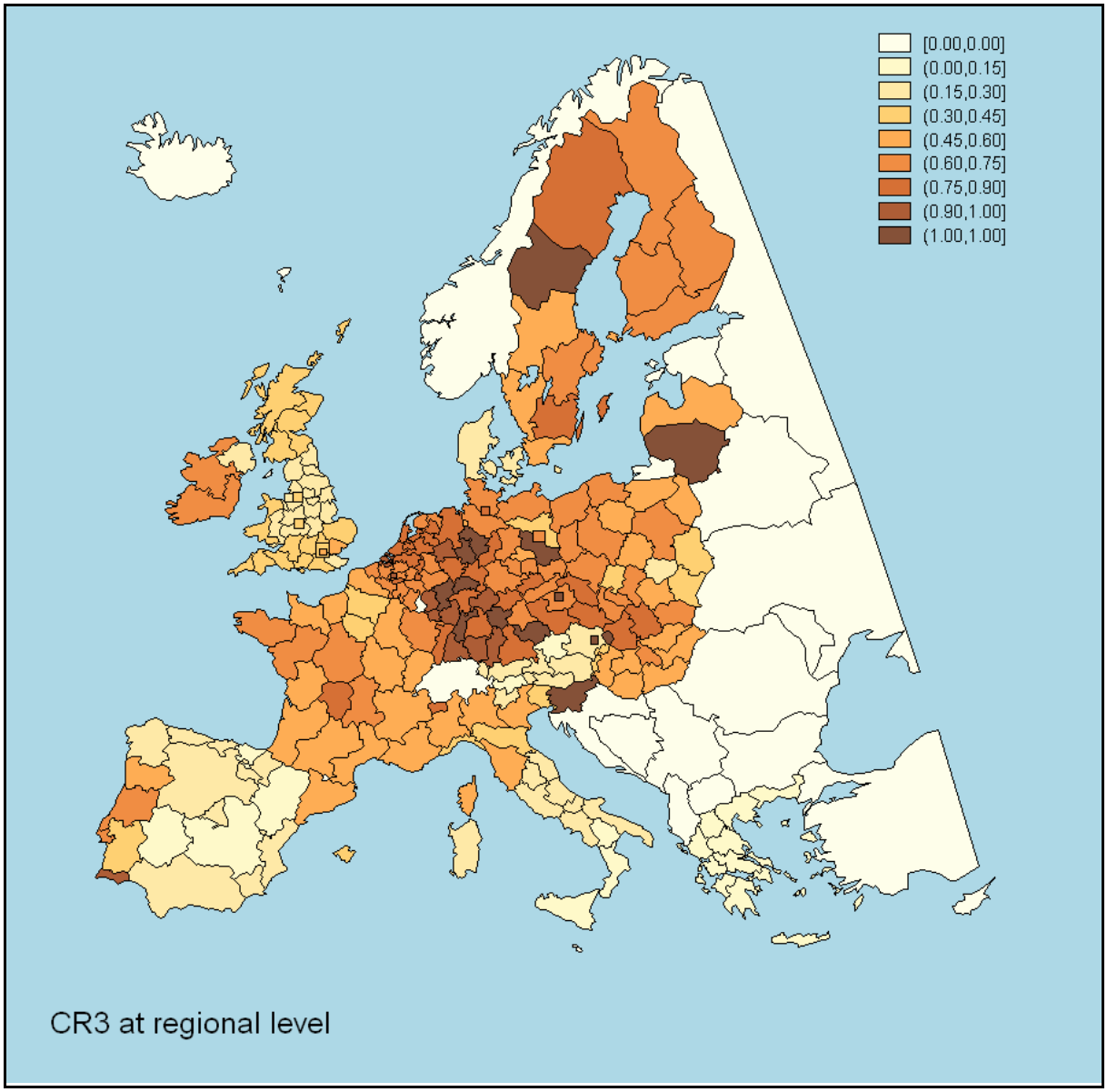
Figure 12: The leading 5 banks per country (measured on the basis of number of current accounts as a sum of all regions per country)[79]



[79] In Lithuania and Slovenia the ratios were set at 100%, and Luxemburg, Cyprus, Malta and Estonia excluded.

Figures 13 and 14 present C3 and CR5 at regional (NUTS2) level. They are based on the same data source, i.e. the number of current accounts per region, and put in relation to the number of current accounts per country according to the ECB Blue Book[80]:

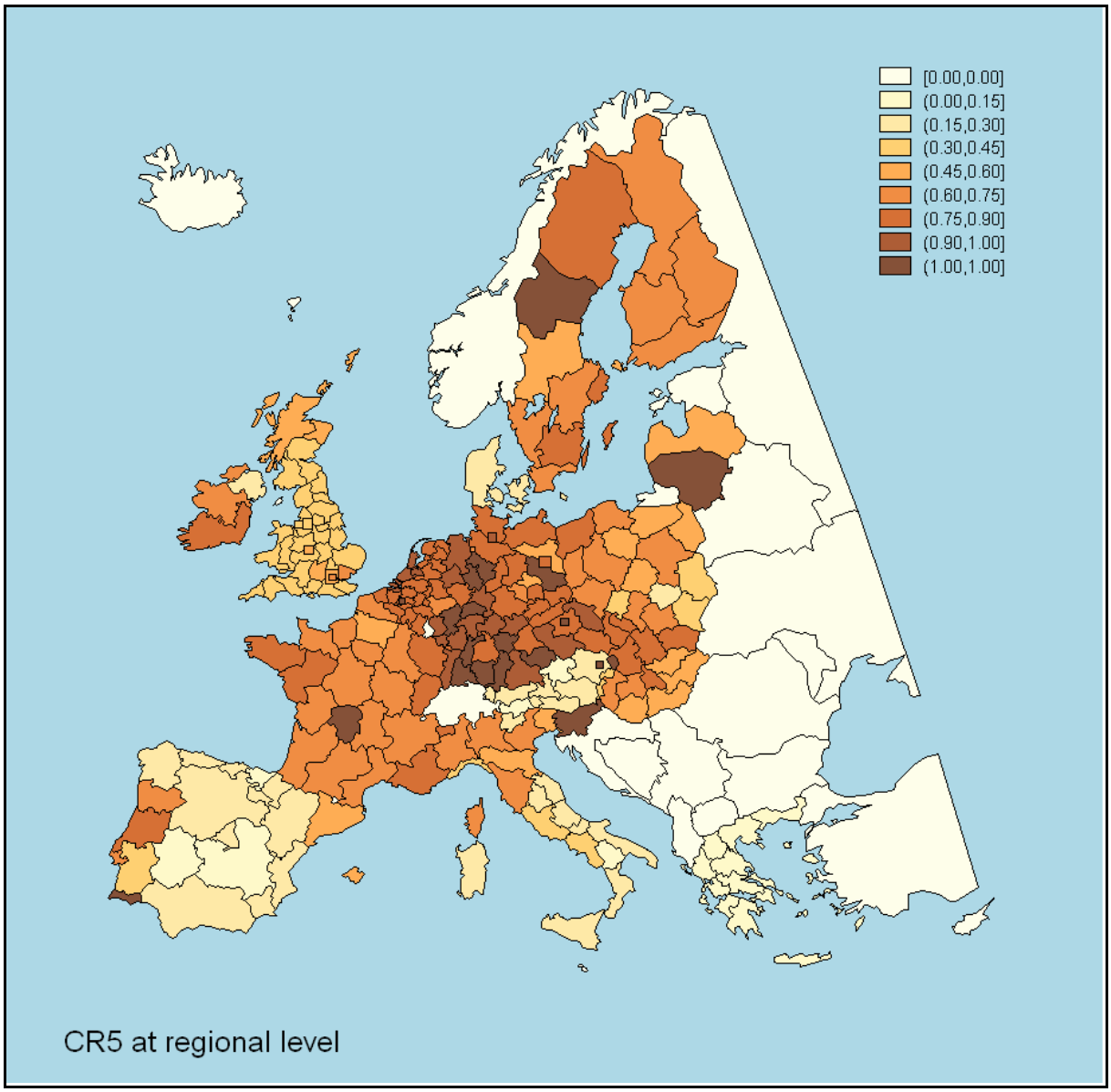
Figure 13: The leading 3 banks per country region (NUTS2 level) on the basis of number of current accounts[81]



[80] As explained further above, to achieve a total volume per region, the average number of current accounts per capita of a given country was multiplied by the population number of each NUTS2 region of that country.

[81] In Lithuania and Slovenia the number of current accounts given by our sample banks was higher than the ECB figures of the countries, and the CRs > 100%; for the purpose of this illustration, they were therefore set at 100%. Luxemburg, Cyprus, Malta and Estonia have been excluded.

Figure 14: The leading 5 banks per country region (NUTS2 level) on the basis of number of current accounts:[82]



These figures show that the picture can change when looking at regional levels. The difference is particularly striking in Germany. Concentration is extremely low at the national level due to the existence of the more than 2000 legally independent Sparkassen and Volksbanken.

In the last two figures those regions with the same 'concentration ratio' are highlighted in the same colour (therefore, regions sometimes appear larger than the defined NUTS2 area) though they were analysed separately and consequently count separately. Moreover, in each German NUTS2 region there may be more than one Sparkasse or Volksbank. However, for the purpose of this analysis the Sparkassen and Volksbanken were counted as one per region due to the so-called regional principle which normally only allows for one Sparkasse and Volksbank in a reserved (even though smaller) region. Therefore, banks of one type normally are not competitors in a given region - a fact which should be reflected in these

[82] In Lithuania and Slovenia the ratios were set at 100%, and Luxembourg, Cyprus, Malta and Estonia excluded.

figures and, therefore, is 'translated' in the NUTS2 regions though they are generally larger than the reserved territories for these banks.

The illustrations clearly demonstrate one phenomenon: the analysis of national market structures may lead to wrong conclusions for certain countries. Whereas in countries such as Belgium or the Netherlands regional and national market structures do not seem to differ dramatically, this is clearly the case in Germany which shows a high degree of regional concentration despite a totally fragmented national 'market'. This can be explained by the fact that retail banking in Germany to a large extent is the business of savings banks (Sparkassen) and co-operative banks which are legally independent but act as a kind of 'co-operative group' regarding certain aspects (label and brand name, clearing system) and have reserved territories according to the so-called regional principle which is – in the case of the savings banks - also fixed in the state laws concerning the Sparkassen.

Conclusions

Though we can only present rough pictures due to the described method limitations, the results of our different measurements all point all in the same directions. In conclusion, the average CR3 across all EU25 countries is around 50% with larger average concentration ratios in the New Member States than in the EU15. The countries with the highest national concentration ratio include the Netherlands, Belgium, Sweden, Lithuania and, to a somewhat lesser extent, Finland. The least concentrated countries seem to be Italy, Spain and, in particular, Germany.

In view of the still given importance of local branch networks, national markets may, however, be too large for analysing competition on main retail banking products. The Commission, therefore, also looked into regions and found, at least in some Member States and predominantly in Germany, much higher regional concentration ratios than the national figures suggest.

5. FINANCIAL PERFORMANCE OF RETAIL BANKS

This chapter examines the financial performance of EU retail banks. This analysis is based on two sets of data. Firstly, extended time-series OECD data are used to provide a long-term view of the financial performance of the whole EU banking sector. Secondly, the inquiry uses market data from retail banks across the EU to examine some key indicators: specifically gross income, costs and profitability in banks' retail operations. These market data, gathered by the sector inquiry, are used to compare the performance and structure of retail banks across the EU Member States.

The chapter is structured as follows:

- Section 1 examines long-term trends in the profitability of the EU banking sector
- Section 2 describes the market data on retail banking collected in the sector inquiry
- Section 3 compares EU retail banking gross income and banks' income per product
- Section 4 compares EU retail banks' profitability and costs
- Section 5 examines the relationship between market conditions and banks' financial performance.

5.1. Long-term trends in the profitability of the EU banking sector

Appendix I shows tables describing the relative profitability rates of banks in the OECD between 1981 and 2003. The data shown here are based on the OECD's database on bank profitability. Five points should be made in relation to this data. First, the variables in the OECD database are similar to those that the Commission has studied in its market survey. For example, retail banks were asked to calculate gross income, pre-tax profits and operating expenses all on the basis of the OECD's published methodology.[83] Second, although for complete consistency it would be preferable to use market data from banks, banks made clear that limitations in their IT systems prevent the extraction of reliable data on their retail banking operations further back than three to five years. This is why the inquiry has had to rely on OECD data to provide a longer-term perspective stretching over two decades. Third, there is a difference between the operational coverage of the two data-sets. The inquiry's market data capture only *retail banking activities*, whereas the OECD data cover *all banking activities* including investment and corporate banking. Since retail banking activity represents slightly more than fifty per cent of all banking activity in the EU, the reader should be aware that the OECD statistics describe bank profitability for activities of which retail is clearly the most significant, but certainly not the only element. Fourth, the geographic scope of the OECD and the inquiry market dataset are different. The OECD's statistics are reported at group level according to the domicile of the group. Thus the data cover larger corporate units than the sector inquiry market data, including income from banks' global operations rather than from an individual Member States. Finally, the OECD's data covers only 19 of the 25 EU Member States. Cyprus, Estonia, Latvia, Lithuania, Malta and Slovenia are not covered here.

In conclusion, although the two datasets are based on similar variables and methodologies, their results should be examined separately. The sector inquiry's market data should be used to understand the current financial performance of retail banking operations in particular Member States over a limited time period. The OECD database can be used to examine long-term trends in the profitability of EU banks across all their geographic and banking activities.

[83] The OECD's methodology for calculating bank income, cost and profitability variables is available at: http://www.oecd.org/dataoecd/50/44/2373422.pdf

5.1.1. Pre-tax profitability as a share of gross banking income

Table 1 in Appendix I shows the ratio of pre-tax profits to gross banking income[84] in the Member States in each year from 1981 to 2003. A general upward trend in the profitability ratio is observed for most Member States during the period. Of the nine European countries for which a full time series is available (Belgium, Denmark, Finland[85], Germany, Luxembourg, the Netherlands, Portugal, Spain and Sweden), only Germany has a lower profitability ratio in 2003 than in 1981. By contrast, significant increases in profitability are observed for the other eight Member States.

From the mid-1980s onwards, data are available for Austria, France, Italy, and the UK. During the period up to 2003, these Member States show diverging trends. Austria is the only country other than Germany where the ratio of profitability falls significantly. France, Italy and the UK all show clear increases in total banking sector profitability by 2003, compared to their mid-1980s performance.

OECD data for five Member States are only available from the early or mid-1990s to 2003. Of these, Ireland shows high profitability through this period. However, four of the new Member States (Czech Republic, Hungary, Poland and Slovak Republic) each show large swings in profitability performance over the period, which may be partly explained by the impact of structural reform of the banking sector or by the impact of banking crises.

Overall, however, the ratio of pre-tax profitability to gross income for European banks, for all banking activities is clearly upwards. By the end of the period, average profitability in most Member States was 20 to 40 per cent of gross banking income. Between 2000 and 2003, the profits of banks in Ireland, Finland and Luxembourg were consistently above 40 per cent of gross income, whereas banks in Germany, Austria and Poland were generally below 20 per cent. These ratios for each Member State are quite consistent with those observed – specifically for retail banking activities – by the Commission's market survey of banks (which is examined further below).

Table 2 in Appendix I reports the share of banks' operating profits that was paid in tax between 1981 and 2003. Of the Member States for which a full time series is available, only Denmark shows a higher level in 2003 than in 1981. Seven other Member States report stable or lower ratios.[86] This general trend of falling tax rates as a share of banks' operating profits is observed for the clear majority of Member States, and in some cases effectives rates have fallen dramatically (e.g. in Sweden, Finland, Belgium and Luxembourg). The conjunction of rising pre-tax profits and falling effective tax rates implies that on average the post-tax profitability of European banks has increased significantly since the 1980s.

5.1.2. Profitability measured by the rate of return on assets

Table 3 in Appendix I shows the ratio of pre-tax profits to banks' assets in the Member States in each year from 1992 to 2001. This time series is shorter because of the availability of data on banks' assets. Using 10 years of data rather than the 23 years studied above makes it more difficult to draw conclusions about the long-term trend of banks' profitability based on an assets measure. For example, the time series of several new Member States are dominated by large losses in the late 1990s. Overall, the trend in most Member States is a modestly rising rate of return on banks assets over the period. However a falling trend is also observed in some Member States, such as Germany, Spain and Ireland.

[84] Gross banking income is the sum of banks' net interest and net non-interest income from all banking activity.
[85] While the performance of Finland's banks was strong over the period 2000-2003, Finnish banks experienced very large losses between 1991 and 1995. Danish banks also made losses for several years from 1990 to 1994.
[86] By contrast, banks in the United States paid a higher share of their operating profits in tax in 2003 than in 1981.

By 2001 banks in most Member States reported rates of return on assets of between 0.5 to 1.5%. (Only banks in Finland reported profitability significantly above this level.) The overall level of banking profitability of European banks, based on rate of return on assets, was consistently lower than the level reported in the United States, which varied between 1.3 and 2.0% between 1992 and 2001. However over a longer time series, and based on profitability as a share of gross income, the relative profitability of European and US banks appears fairly similar.[87]

5.2. Market data on retail banks' financial performance

The Commission surveyed banks operating in the EU with significant retail operations in a particular Member State. The Commission asked banks to provide three sets of data to describe their financial performance globally and in terms of their retail operations in a specific Member State. All financial data were requested for the years 2001 to 2004[88], were denominated in euros and were not inflation-adjusted.

Firstly, *at the level of the overall group* and for all banking activities (including retail) in all countries, banks were asked to provide data according to a harmonised set of variables defined by the OECD[89]. These global group data are not reported here, but were used to cross-check other elements; particularly the reliability of retail banking-specific data provided by banks in the market survey.

Secondly, banks were asked according to their own *firm-specific definition of retail banking* to provide key performance data following the OECD methodology:

- gross income from all retail banking activity
- operating expenses
- net income
- profit before tax
- cost-income ratio (operating expenses as a percentage of retail banking income)
- cost ratio (staffing costs as a percentage of retail banking income)

Because the definition of 'retail banking' activities varies across banks there will be some differences in the coverage of banks' responses. For example, some banks include non-life insurance sold to consumers and SMEs within their retail banking division, while most do not. Nonetheless because there is a widely held interpretation of 'retail banking' services and products within the industry, the sector inquiry was able to gather reliable data to compare the size and performance of banks' retail activities. These data are described below.

Thirdly, for selected *products specified by the Commission within the field of retail banking* banks were asked to estimate their annual gross income for each product line. The Commission specified nine retail banking products:

1. personal current accounts;
2. deposits and savings accounts;
3. consumer loans;
4. mortgages;
5. credit cards[90];
6. SME current accounts;

[87] This finding may indicate that US banks generate more income from activities that are not linked to their asset base, such as intermediation, financial advice and securitization.
[88] Clearly a longer time-series would have been desirable but during the development of the market survey banks insisted that reliable data could not be provided more than three to five years prior.
[89] The OECD has specified a methodology and range of variables for measuring banks' performance, which the Commission has followed in its inquiry. See: http://www.oecd.org/dataoecd/50/44/2373422.pdf
[90] 'Credit cards' were specified rather than the wider definition of 'payment cards' (which includes debit cards) in order to limit the double counting of activity. For example, many current accounts have a debit card attached, which would generate income that could be classed under 'payment cards' and/or 'current accounts'.

7. SME loans;
8. SME credit lines; and
9. SME leasing.

In addition, banks were asked to provide the number of customers holding each of these retail banking products. These data are described below.

It is important to note that the second dataset – banks' definition of retail banking – contains more detailed financial information than the third dataset. During the development of the market survey, banks confirmed that profit and loss data could reliably be estimated at the level of the retail banking division. However banks equally insisted that such profit and loss calculations could not reliably be made at the level of the retail product line. This is mainly because of banks' inability to attribute shared costs (e.g. of branch staff or central IT services) consistently to particular products. Thus profit and loss calculations in this inquiry are made only on the basis of all retail banks' activities; not on a product basis.

5.2.1. Caveats on the market data

In examining the market data for evidence of such patterns, several important caveats should also be kept in mind. The data are likely to be influenced by the following factors:

- *Methodological limitations on the reliability of profitability data* for the retail banking sector. The most obvious question concerns different definitions of 'retail banking' across firms and countries. The Commission has attempted to control for this by requesting income data across a common list of 'retail' products.
- *Definitions of income and profitability may differ between banks and countries*. The Commission has assessed the extent and significance of such differences by cross-checking with a group of banks based in a range of Member States. This exercise has shown that in practice such definitional differences are limited and do not undermine the validity of the income and profitability data.
- *Different distribution models will imply different cost and pricing structures*. Member States where local branch banking is still clearly the dominant model will tend to be more costly, whereas distribution models based on greater use of phone and internet banking should have a lower cost base.
- *Banking sector income will be partly determined by income levels across Member States and regions*. For example Member States where GDP per capita is lower typically spend a larger proportion of income on retail banking services.[91]

5.3. Gross income from retail banking activity

This section uses the market data provided by banks on their overall retail banking division and on a product-line basis. Firstly, banks' data are used to generate an indicative measure of retail banking market size – using total gross income as a proxy – in the EU and its Member States. Secondly, the inquiry estimates the share of banks' gross retail income from particular product lines. Thirdly, some comparisons are made of the cost of particular retail banking products for consumers in each Member State.

5.3.1. Banks' total income from retail banking activity

The variable gross income captures all revenue that banks make on banking activity, covering interest and non-interest sources. Clearly not all gross income is paid directly from consumers to banks. A saver earning a high rate of interest may receive significant interest payments from their bank while the bank uses the saver's capital to earn higher returns elsewhere; for example by providing loans to other consumers or investing in securities.

[91] CapGemini (2005): *World Retail Banking Report 2006*.

Banks' total gross retail income in a particular Member State can be used as a proxy for the overall size of the market, measured by banks' revenue, and the effective costs paid by consumers. Table 15 below shows the estimated scale of retail banking activity in each Member State. The estimates are based on the gross retail income reported by banks in the market survey in each Member State (data not shown here) and the estimated sample coverage in each country, which is in the region of 75-85 per cent across all Member States.

Table 15: Estimated scale of retail banking activity in the EU25, measured by gross income

	Sample size as estimate of national total (%)	Estimated national market size (€ billion, 2004)
Austria	60-70	5-10
Belgium	> 90	6-8
Cyprus	80-90	0-2
Czech Rep	70-80	2-3
Denmark	80-90	3-5
Estonia[92]		
Finland	> 90	2-4
France	80-90	45-50
Germany	50-60	35-45
Greece	> 90	3-5
Hungary	80-90	1-3
Ireland	60-70	4-6
Italy	70-80	25-30
Latvia	50-60	0-2
Lithuania	80-90	0-2
Luxembourg	30-40	0-2
Malta	> 90	0-1
Netherlands	> 90	10-15
Poland	70-80	3-5
Portugal	80-90	5-7
Slovakia	80-90	0-2
Slovenia	80-90	0-2
Spain	70-80	25-30
Sweden	> 90	4-6
UK	80-90	45-55
EU-25	75-85	250-275

Note: Estimated sample coverage per country is taken from ratios presented in chapter 1. The estimated national market sizes are measured by gross retail banking income.
Source: Commission's "Retail Banking Survey", 2005-2006.

Two important caveats should be noted on these data. Firstly, total gross income is partly determined by the level of interest rates, which in turn determine the level of interest income. Other things being equal, banks' gross income will be lower in Member States where interest rates are lower; for example in countries in the euro area. However, such a lower lever of banks' gross income would reveal nothing about banks' relative efficiency or the level of competition in a particular Member State. Secondly, the gross income data should be viewed with caution where the estimated coverage of the national retail banking sector is smaller.

[92] Data for Estonia have been omitted for confidentiality reasons and are not included in the aggregate totals.

Nonetheless, some general conclusions are possible. Firstly, in view of the high level of coverage of most Member States, the EU-wide estimate of gross retail banking income is likely to be robust. Thus gross income is estimated at 250-275 € billion across the EU25 in 2004. This corresponds to around 550-600 € per person across the EU. Secondly, there is a reasonable degree of consistency in level of retail banking income per capita in each Member State. Within the EU15, twelve Member States report per capita gross income between 455 € and 870 €.[93] Thirdly, gross retail banking income is significantly lower in the new Member States (New Member States). Within the EU10, eight Member States report per capita gross income between 55€ and 265€.[94]

5.3.2. Banks' retail income by product line

his section examines the market data supplied by banks at two levels. First, the relative scale of retail banking activity for personal consumers and SMEs is considered at the aggregate level. Second, for both personal consumers and SMEs there is a more detailed analysis of banks' income for specific retail banking product lines.

The sector inquiry examined two groups of customers: personal consumers and SMEs. In the market survey banks were asked to describe the services supplied to both groups. Personal consumers were defined as private individuals including those holding joint accounts but excluding those holding business accounts or those consuming private banking services (i.e. high net worth individuals). SMEs in the scope of the survey were those with an annual turnover of up to 10 € million. In defining their SME customer base some banks had to impose a lower turnover threshold (e.g. 2 or 5 € million).

While banks in the market survey reported total gross retail income of over 200 € billion in 2004, not all retail activity corresponded to the product categories specified by the Commission. In all, banks reported around 160 € billion in 2004 according to the retail product lines specified by the Commission. Of this total, 79,5% related to retail banking products supplied to personal consumers and 20,5% related to products supplied to SMEs. This split was fairly consistent across Member States. The UK reported the lowest share of SME business in 2004 at around 10,8%[95] while Italy had the largest share at 42,1%.

5.3.2.1. Banks' share of gross retail income by product line: personal consumers

Table 16 below describes the share of banks' reported gross retail income from personal consumers according to the five product categories specified by the Commission. The data below cover 866 million individual accounts across all the product groups.

[93] The three outliers within the EU15 are Greece (359€ per capita), Ireland (1283€) and Luxembourg (2451€).
[94] The two outliers within the EU10 are Cyprus (480€) and Malta (529€).
[95] This figure may be artificially low because several large UK banks used a fairly low turnover threshold for their SME book, around 2 € million annually.

Table 16: Gross income share by consumer product line, weighted average, 2004

	Current accounts	Deposits and savings	Consumer loans	Mortgages	Credit cards	Total
Austria	34.96%	28.83%	15.88%	19.50%	0.82%	100%
Belgium	25.61%	51.99%	6.98%	14.51%	0.91%	100%
***Cyprus*[96]**						
Czech Republic	51.19%	17.37%	20.32%	9.94%	1.18%	100%
Denmark	21.90%	7.22%	47.78%	21.32%	1.78%	100%
Estonia						
Finland	5.30%	1.93%	28.96%	57.45%	6.35%	100%
France	34.98%	16.58%	14.89%	27.29%	6.26%	100%
Germany	23.83%	22.90%	23.37%	27.87%	2.03%	100%
Greece	4.18%	8.54%	27.81%	37.86%	21.61%	100%
Hungary	27.01%	27.18%	14.15%	30.54%	1.11%	100%
Ireland	23.65%	15.86%	26.31%	26.21%	7.96%	100%
Italy	43.28%	3.65%	11.59%	35.09%	6.39%	100%
Latvia	25.85%	15.48%	28.20%	22.24%	8.24%	100%
Lithuania	33.13%	5.52%	13.14%	26.70%	21.51%	100%
Luxembourg	40.65%	31.65%	7.76%	17.23%	2.72%	100%
Malta						
Netherlands	31.77%	20.82%	15.39%	30.43%	1.58%	100%
Poland	34.40%	26.59%	22.32%	11.58%	5.12%	100%
Portugal	16.79%	5.04%	11.38%	59.96%	6.84%	100%
Slovakia	39.41%	27.54%	15.44%	12.24%	5.37%	100%
Slovenia	19.10%	19.92%	44.72%	8.05%	8.21%	100%
Spain	12.39%	10.61%	11.96%	54.98%	10.07%	100%
Sweden	8.88%	8.16%	20.27%	61.68%	1.00%	100%
United Kingdom	23.77%	18.36%	15.89%	22.59%	19.39%	100%
EU-15 Average	26.50%	15.94%	17.05%	32.85%	7.66%	100%
NMS Average	34.95%	23.45%	20.85%	15.62%	5.13%	100%
EU-25 Average	27.87%	17.16%	17.66%	30.06%	7.25%	100%

Note: Country-level estimates are weighted averages across banks surveyed in the country.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.
Source: Commission's "Retail Banking Survey", 2005-2006.

Based on a weighted mean of all Member States, mortgages appear as the most significant source of income for retail banks in the EU, generating just over 30% of total gross income from personal customers. However the share of mortgage income in the New Member States was significantly lower at 16%. Current accounts generated more than one quarter of gross income for all Member States though generate more than one-third of gross income from personal consumers for banks in the New Member States. Across the EU25, savings accounts and consumer loans both generated around 17% and 18% of banks' gross income, respectively, with higher shares for both products in the New Member States. For banks in the EU15 credit cards generated around 8% of gross income; around 50% higher than the level in the New Member States.

[96] Data for Cyprus, Estonia and Malta have been omitted for confidentiality reasons.

Some interesting patterns can be seen at country level. Firstly there is an apparent similarity in the consumption patterns of consumers in France and Germany, whereas Italy and the UK have quite different characteristics. Current account income generated a far higher share in Italy (43,3%) than elsewhere in the EU15, except Luxembourg and the Czech Republic. Credit cards generated nearly 20% of gross income for banks in the UK. The Benelux countries and Germany and Austria all had high shares of gross income from deposit and savings accounts and low shares from credit cards; a pattern which is probably explained by high levels of per capita wealth and a high savings ratio.

5.3.2.2. Banks' share of gross retail income by product line: SMEs

Table 17 below describes the share of banks' reported gross retail income from SME consumers according to the four product categories specified by the Commission. The data below cover 35 million SME accounts across all the product groups, generating 32,7 € billion of gross income in 2004 for the banks in the market survey. While still large in absolute terms this is a smaller sample than was collected for personal consumers. And several other factors suggest that the data on SME retail banking are likely to be less reliable: differences in banks' definition of SMEs; greater overlap in the definitions of products (e.g. between current accounts and credit lines); and wide variations in the magnitude of banks' reported income data and customer numbers.

Table 17: Gross income share by SME product line, 2004, weighted average

	SME current accounts	SME term loans	SME credit lines	SME leasing	Total
Austria	45.88%	44.27%	8.33%	1.52%	100%
Belgium	34.72%	39.91%	22.77%	2.60%	100%
Cyprus[97]					
Czech Republic	64.78%	25.89%	9.33%	0.00%	100%
Denmark	39.33%	33.12%	24.78%	2.77%	100%
Estonia					
Finland	14.81%	71.30%	7.00%	6.89%	100%
France	57.56%	28.16%	8.82%	5.46%	100%
Germany	36.03%	55.22%	8.12%	0.62%	100%
Greece	4.80%	58.07%	26.70%	10.43%	100%
Hungary	68.37%	23.66%	5.49%	2.48%	100%
Ireland	30.94%	41.24%	22.56%	5.27%	100%
Italy	46.56%	19.81%	26.29%	7.34%	100%
Latvia					
Lithuania	24.11%	41.79%	16.10%	18.00%	100%
Luxembourg					
Malta					
Netherlands	30.51%	62.83%	6.02%	0.63%	100%
Poland	71.10%	18.63%	9.31%	0.96%	100%
Portugal	10.77%	43.51%	40.30%	5.42%	100%
Slovakia					
Slovenia					
Spain	8.64%	49.55%	31.79%	10.03%	100%
Sweden	15.20%	61.64%	16.91%	6.26%	100%
United Kingdom	50.48%	30.08%	16.34%	3.11%	100%
EU-15 Average	37.79%	40.43%	17.17%	4.61%	100%
NMS Average	63.91%	24.30%	9.72%	2.07%	100%
EU-25 Average	42.03%	37.82%	15.96%	4.20%	100%

Note: Country-level estimates are weighted averages across banks surveyed in the country. The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.
Source: Commission's "Retail Banking Survey", 2005-2006.

Several basic observations can be made at Member State level. The core product for central European Member States is clearly the current account. In Poland, Hungary and the Czech Republic, other financing products generate only around one third of banks gross income from SMEs. Meanwhile banks in Sweden and Finland (as well as Germany and the Netherlands) generate significantly more than half of their income from fixed term loans to SMEs. Finally, credit lines are particularly widely used in southern European Member States, generating over one quarter of banks' gross SME income in Italy, Spain and Portugal.

[97] Data for Cyprus, Estonia, Latvia, Luxembourg, Slovakia and Slovenia have been omitted for confidentiality reasons. However data for these countries has been included in the aggregate sums and averages.

5.3.2.3. Retail banks' income by product line: personal consumers

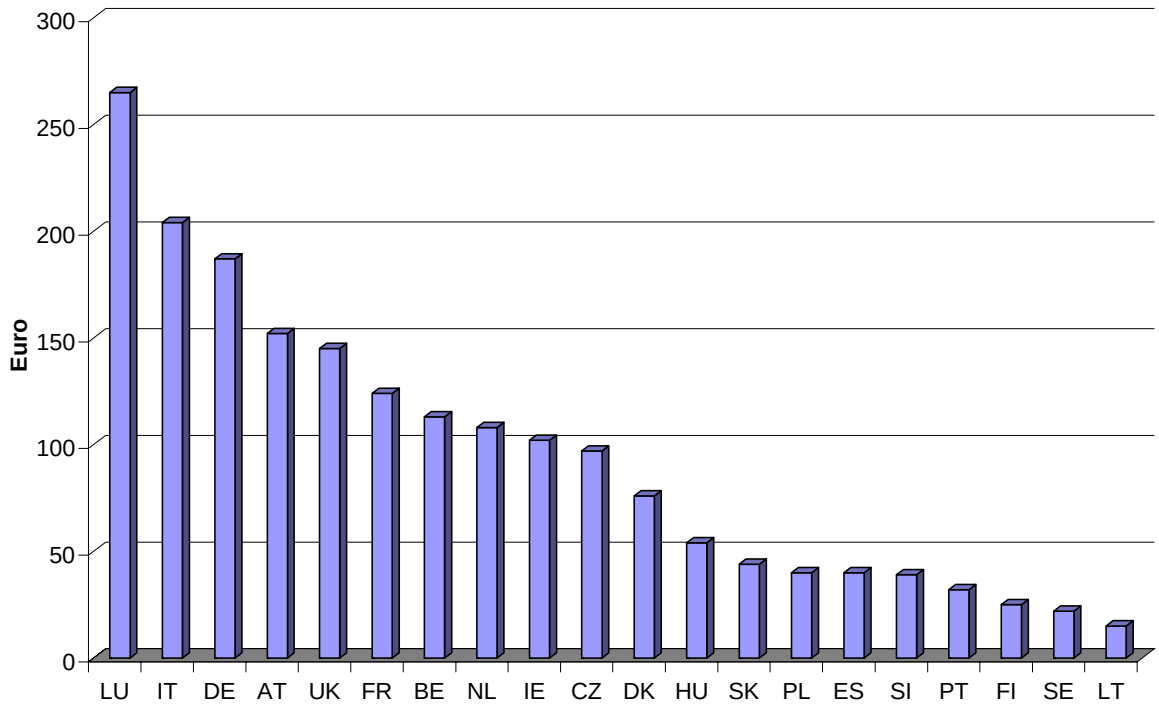
This section sets out some comparisons of banks' gross income per customer for five major retail banking products. The comparisons are generated by dividing banks' returns on gross income by retail product by the number of customers holding that product, all using 2004 data. This enables a 'back of the envelope' comparison of the average cost for consumers across the EU of using a particular retail banking product.

Before presenting the income comparisons, some points should be noted on interpreting the data provided. First, the price comparisons should not be confused with data on relative profitability of particular products. In the absence of reliable cost data, deductions about profit margins cannot be made. All that can be observed is the *scope* for banks to generate profits from a particular product line. Second, the costs of using a particular product for consumers will vary according to their pattern of consumption; e.g. how often consumers use a particular service and the size of their credit or debit balance. Third, each estimate of income per customer is biased downwards because it includes accounts which are dormant, thus generating little if any income. Fourth, the picture is complicated by consumers who are 'multi-banked'. Where there is a widespread pattern of consumers in one Member State holding similar products with more than one bank, the effective cost to consumers of these retail banking services will be correspondingly higher.

- Current accounts

Figure 18 shows the average income per customer for personal current accounts in the EU Member States[98]. These data are based on an EU-wide sample from 2004 of 264 million accounts.

Figure 18: Current account gross income per consumer, 2004, weighted average



Source: Commission's "Retail Banking Survey", 2005-2006.

[98] Data for Cyprus, Estonia, Greece, Latvia and Malta have been omitted for confidentiality reasons.

The figure shows that banks in Luxembourg generated the highest gross income per customer in 2004 (265 €) followed by Italy (204 €) while banks in Lithuania generated the lowest income (15 €), just ahead of Sweden and Finland. These figures are consistent with the shares of total gross income shown above in Table 16, where Italian banks derive 43,3 per cent of personal retail income from current accounts; five times the share in Finland. Three Member States report current account gross income between 180 and 300 € per customer: Luxembourg, Germany and Italy. Six Member States, all within the EU15, report gross income per customer between 100 and 155 € per customer. Eleven Member States report gross income of less than 100 € per customer. This group comprises five of the EU15 and six new Member States.

As mentioned above, consumers' practice of multi-banking complicates these results. Data published by the ECB[99] suggest that the number of current accounts per capita varies widely across Member States. For example, ECB data imply that banks in the UK operate more than two current accounts for each UK inhabitant. While the market data gathered by the sector inquiry suggest this ratio may be an overestimate, banks sampled in the UK did report 61 million active current accounts in 2005; a total greater than the UK population. Thus UK consumers are likely to pay considerably more annually for their current account services than the UK's observed 'per customer' average of 145€. Conversely, ECB data suggest that Italy has the lowest number of current accounts per capita (0,63) in the EU15. There is also a more widespread tradition of joint accounts in Italy, suggesting that the effective cost of a current account for Italian consumers may be lower than the 'per customer' average of 204€.

Table 19 below summarises the gross income per customer data for all the consumer retail banking products in the Commission's market survey. All figures below are in euros and based on 2004 gross income data and customer numbers. Where the number of observations in a particular Member State was too small to ensure confidentiality, the cell has been left empty for the product in question. However these data have been included in calculating EU averages. Finally, the reader should note the largest sample sizes (measured by number of individual accounts) were gathered for current accounts; deposit and savings accounts and credit cards. Thus data for these three consumer products should be regarded as the most reliable.

[99] Strictly the ECB's definition comprises bank accounts which enable electronic means of payment, which could be through payment card, internet banking or automated transfer. Such a definition closely resembles a typical current account.

Table 19: Gross income per customer by consumer product line, 2004, weighted average

Euros	Current accounts	Deposits and savings	Consumer loans	Mortgages	Credit cards
Austria	152	52	517	921	
Belgium	109	162	157	419	19
Cyprus			522		
Czech Republic	97	26	93	421	43
Denmark	76	66	728	410	67
Estonia					
Finland	25		279	1,335	105
France	124	36	410	1,077	45
Germany	186	67	504	1,319	50
Greece		31	233	1,102	126
Hungary	54	102	64	634	49
Ireland	102	86	668	1,079	105
Italy	204	67	337	1,083	41
Latvia					
Lithuania	15		94	321	
Luxembourg	265				
Malta			414	421	
Netherlands	108	64	705	617	
Poland	40	30	66	409	73
Portugal	32	29	435	1,130	71
Slovakia	44	32	71	433	30
Slovenia	39	74	308	333	40
Spain	40	101	363	1,787	50
Sweden	22		196	641	63
United Kingdom	145	93	430	896	137
EU-15 Average	133	69	421	1,126	64
NMS Average	48	41	88	442	66
EU-25 Average	119	64	367	1,015	65

Note: Country-level estimates are weighted averages across banks surveyed in the country.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

- Deposit and savings accounts

As might be expected in view of its high income per capita and large share of foreign clients, Luxembourg reports the highest income per customer for deposit and savings accounts. The figure for Luxembourg cannot be published for confidentiality reasons. This constraint also applies to banks in Cyprus, which report the second highest income per customer. Belgium reports the next highest figure (162€), which is more than twice the EU average. Average gross income per customer in the New Member States is low for savings and deposit accounts (41€). However this aggregate is based largely on low income figures for Poland, and conceals high levels of gross income from savers in Slovenia and Hungary.

- Consumer term loans

The data for term loans show a high degree of variability in the gross income per customer in each Member State. The highest gross income figure is found in Denmark (728€), followed by the Netherlands (705€) and Ireland (668€). Averages for the larger Member States in the EU15 are all in the range of 300 to 500€ per customer. Gross income per customer in most of the New Member States is generally very low compared to the EU average, particularly in Poland (66€) and Hungary (64€). One interesting general trend is that Member States reporting higher income figures per customer for term loans tend to report lower gross income from saving customers. Belgium and Denmark are good examples of this inverse relationship. As might be expected, this suggests that the overall propensity of consumers in a particular Member State to save and to borrow (or not) is a major determinant of banks' gross income per customer for savings products and consumer loans.

- Mortgages

Gross income per customer in the EU is highest in mortgage products; on average nearly three times the level of gross income per loan customer. It is this scale of transaction which explains why overall mortgages generate the largest share of income for retail banks in the EU. The gross income per customer data for mortgages show a lower variation between high and low values across Member States than is seen in the other consumer products. Gross income per customer is highest in Spain (1,787€), which is followed by Luxembourg and Cyprus[100]. Despite differences in long-term interest rates and housing market structures, there is little variation in income per customer among Germany, France, Italy and the UK. Average income per customer in most of the New Member States is around half of the EU average at around 450€, with Cyprus the only outlier.

- Credit cards

Banks' gross income from credit cards shows a high variation across Member States. Differing consumer behaviour across Member States, particularly concerning the extent of borrowing on credit cards, is likely to explain a significant part of this variation. Banks in the UK report the highest income per customer (137€), ahead of Finland and three southern European Member States; Cyprus, Greece and Portugal. Gross income per customer is strikingly low in Belgium (19€). With the exception of the UK, the large Member States in the EU15 all report income per customer of around 50€ per customer. Overall banks' income per customer for credit cards in the New Member States is close to the level observed in the EU15, but lower than the figure in Poland (73€). This suggests that the credit card market in the New Member States is structurally more similar to the EU15 than for other retail banking products.

5.3.2.4. Retail banks' income by product line: SME consumers

This section sets out some comparisons of banks' gross income per customer for the major SME retail banking products. Comparisons are not shown for all four SME products in the Commission's market survey. Two SME products – credit lines and leasing – have been excluded because the lower sample size and the high dispersion in the figures provided by banks limit their suitability for detailed analysis. Overall, the caveats set out above should be reiterated; in particular to emphasise that gross income per product does not equal relative profitability – only the scope for generating profits – and that banks' income for a particular product will depend greatly on how consumers use that product. In addition it is worth stating that the characteristics and risk profiles of consumers will differ across Member States. This comment applies particularly to SME consumers and, other things being equal, these

[100] For confidentiality reasons, precise income figures are not shown for Luxembourg and Cyprus.

differing characteristics may have a significant effect on the price of SME banking services across Member States.

Table 20 below summarises the levels of gross income per customer data for SME current accounts and term loans based on data from the Commission's market survey. All figures below are in euros and based on 2004 gross income data and customer numbers.

Table 20: Gross income per customer by SME product line, 2004, weighted average

Euros	SME current accounts	SME term loans
Austria	795	1,841
Belgium	380	738
Cyprus		
Czech Republic	337	3,104
Denmark	894	4,955
Estonia		
Finland	143	5,249
France	632	876
Germany	478	2,474
Greece		5,730
Hungary	679	1,833
Ireland	646	1,991
Italy	1,155	1,533
Latvia		
Lithuania		3,972
Luxembourg		
Malta		
Netherlands		5,471
Poland	300	1,182
Portugal	213	1,408
Slovakia	256	1,095
Slovenia	366	1,399
Spain	299	3,494
Sweden	156	2,936
United Kingdom	715	2,006
EU-15 Average	638	2,331
NMS Average	333	1,639
EU-25 Average	588	2,219

Note: Country-level estimates are weighted averages across banks surveyed in the country.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.
Source: Commission's "Retail Banking Survey", 2005-2006.

- SME current accounts

Gross income data for eight Member States, mostly from the New Member States, cannot be shown for confidentiality reasons. Weighted average income per SME current account of the EU15 (638 €) is nearly twice the level of the New Member States (333 €). However the lowest figures are reported for Sweden and Finland, which at around 150 € per customer are less than one quarter of the EU15 average. Income per SME appears highest in Italy (1,155

€). The average income per SME in Germany (478 €) is surprisingly low in view of the traditional picture of a large and well-established SME sector that tends to rely on banks for external financing.

- SME term loans

The data for gross income per SME term loan show fairly similar averages across the EU15 (2,331€) and the New Member States (1,639€). However, there is high variance in levels across Member States which is particularly apparent in the EU15. For example, gross income from SME loans is particularly high in Greece, the Netherlands, Finland and Denmark. The figures for the Netherlands and Finland are unsurprising since in both countries term loans generate two thirds of banks' retail income from SMEs. Gross income per SME is lowest in Belgium (738€) and France (876€).

5.4. Comparison of EU retail banks' profitability and costs

This section uses data gathered from the Commission's market survey to examine:

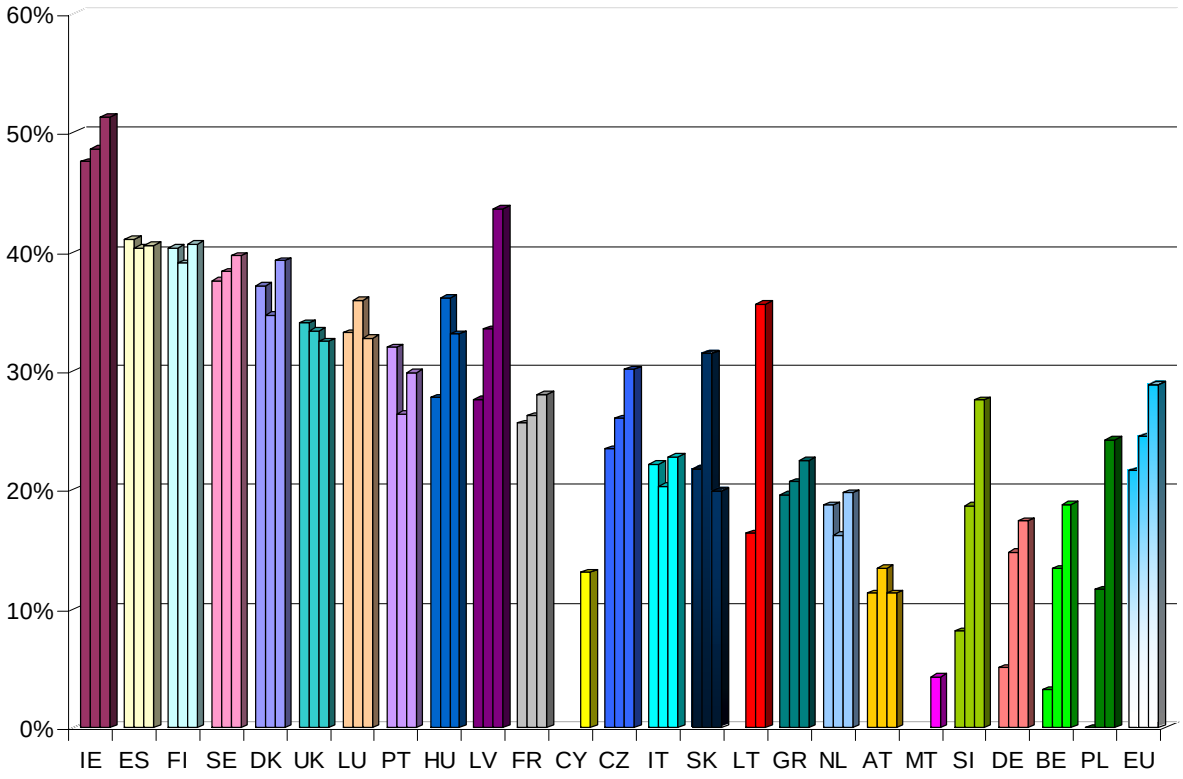
- profitability of retail banks in the EU
- cost bases of retail banks in the EU
- the relationship between retail banking profitability and costs

5.4.1. Profitability of retail banks in the EU

Figure 21 below plots the country level weighted averages of the ratio of pre-tax profit to gross income (for all retail banking activity) from 2002 to 2004.[101] The figure shows that the profitability of banks in most Member States has increased between 2002 and 2004. Of course over this relatively short observation period, clearly less than one business cycle, such data cannot be used to draw conclusions about longer term profitability.

[101] Readers should note the methodology ratio used in this report to estimate the profitability of retail banking activities is different to the methodology ratio used in the interim report on payment cards to estimate the profitability of card issuing and acquiring. This report uses pre-tax profits as the numerator and gross retail income as the denominator for calculating the profitability ratio. Meanwhile the payment cards report uses a profit-to-cost ratio, where the total pre-tax profits are divided by the total costs. Both measures were consistently applied to all respondents in the respective profitability analyses. This means that while a comparison between the profitability of retail banking activities and of card issuing and acquiring is not entirely meaningful, one can be confident about the reliability of the result showing country comparisons using the same profit ratios.

Figure 21: Profitability ratio, 2002-2004, weighted average
(Profit before tax as a share of total retail income)



Source: Commission's "Retail Banking Survey", 2005-2006

Most Member States show average profitability ratios close to the weighted EU average (around 25-30%). We can identify three groups of countries according to their sustained profit record during the period 2002-2004. A first group of six Member States (Ireland, Spain, Finland, Sweden, Denmark, and the UK) reported sustained pre-tax profitability ratios of about 40% and are always above the EU average. A second group of Member States (notably Germany, Austria, and Belgium) reported very low profitability ratios throughout. A third group covering the remaining Member States reported relatively stable profit ratios around the EU average. There has been a small trend towards convergence in the average level of profits across countries in the sample. Several countries which reported low levels of profitability in 2002 experienced substantial improvements in this ratio over the period.

Table 22 below shows weighted average pre-tax profitability ratios for the EU15, New Member States and the whole EU25. The data for the New Member States show a significant increase in retail banks' profitability between 2002 and 2003, with growth continuing into 2004. Observed pre-tax profitability across the EU15 grows moderately between 2002 and 2004. By 2004, retail banking profitability in the EU15 and the New Member States is very similar, and hence close to the EU25 average of 28.8%.

Table 22: Profitability ratio, 2002-2004, weighted average
(Profit before tax as a share of total retail income)

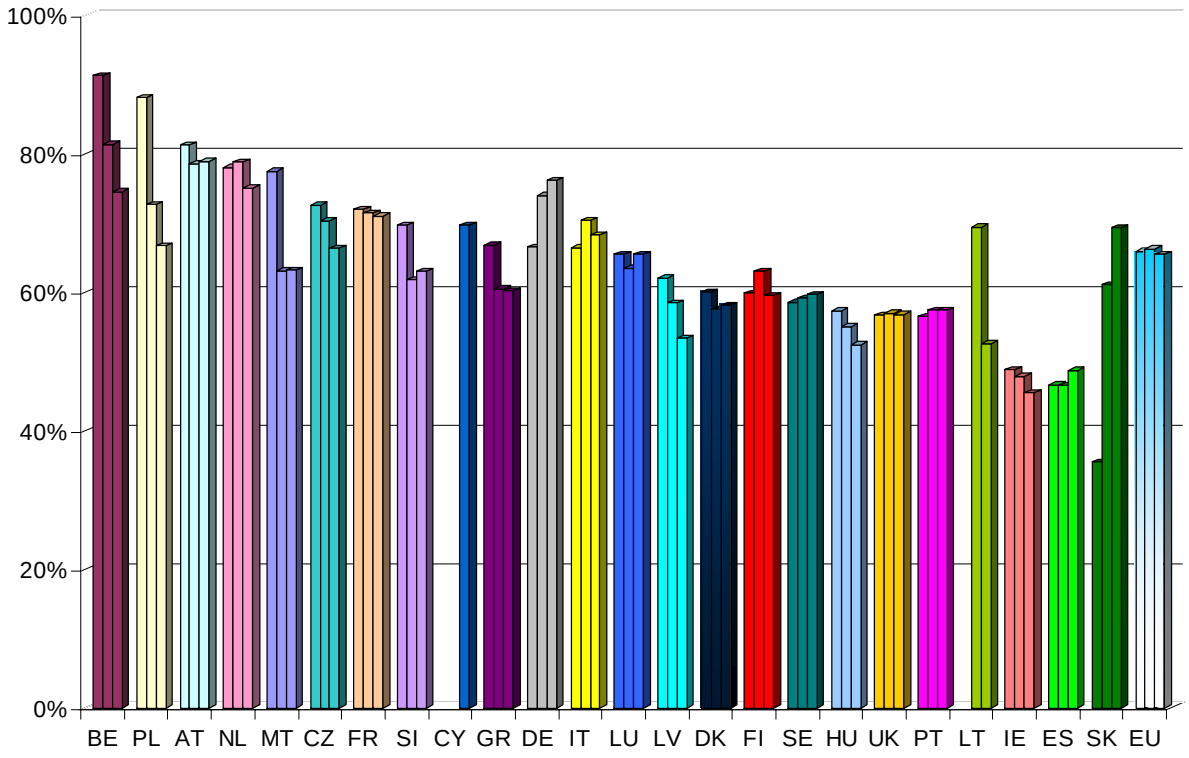
	2002	2003	2004
EU-15	23.3%	25.1%	28.9%
NMS	12.4%	21.0%	28.3%
EU-25	21.6%	24.5%	28.8%

Note: The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.
Source: Commission's "Retail Banking Survey", 2005-2006.

5.4.2. Cost bases of retail banks in the EU

Figure 23 shows the country level weighted average of the ratio of total operating expenses as a share of banks' gross retail income, the cost-income ratio. The chart shows a decrease in the value of this ratio over this three year period for most EU countries, and an almost constant average at EU25 level.

Figure 23: Cost-income ratio, 2002-2004, weighted average
(Operating costs as a share of total retail income)



Source: Commission's "Retail Banking Survey", 2005-2006

The figure shows that the average level of cost-income ratio varies substantially across Member States. Relatively affluent Member States such as Austria, Germany, Belgium and the Netherlands report among the highest cost-income ratios. Meanwhile New Member States and high growth countries within the euro area, such as Ireland and Spain, have among the lowest cost income ratios. The Member States with the lowest cost-income ratios, consistently reporting levels at or below 60%, were Spain, Ireland, Portugal, the UK, Hungary, Sweden, Finland, Denmark, Estonia and Latvia. Slovakia and, to a lesser extent, Germany are clear exceptions to the general trend of falling cost-income ratios across the

EU. Both of these countries show a rising trend, with Slovakia reporting its highest cost-income ratio by 2004.

Table 24 below shows weighted cost-income ratios for the EU15, New Member States and the whole EU25. The data for the New Member States show a significant fall from 74.1% in 2002 to 62.2% in 2004. Operating expenses in the EU15 represented around 65% of banks' gross retail income, with a modest rising trend. Overall at EU25 level, the average cost-income ratio fell from 65.8% to 62.6%, driven mostly by falling ratios in the New Member States.

Table 24: Cost-income ratio, 2002-2004, weighted average (Operating costs as a share of total retail income)

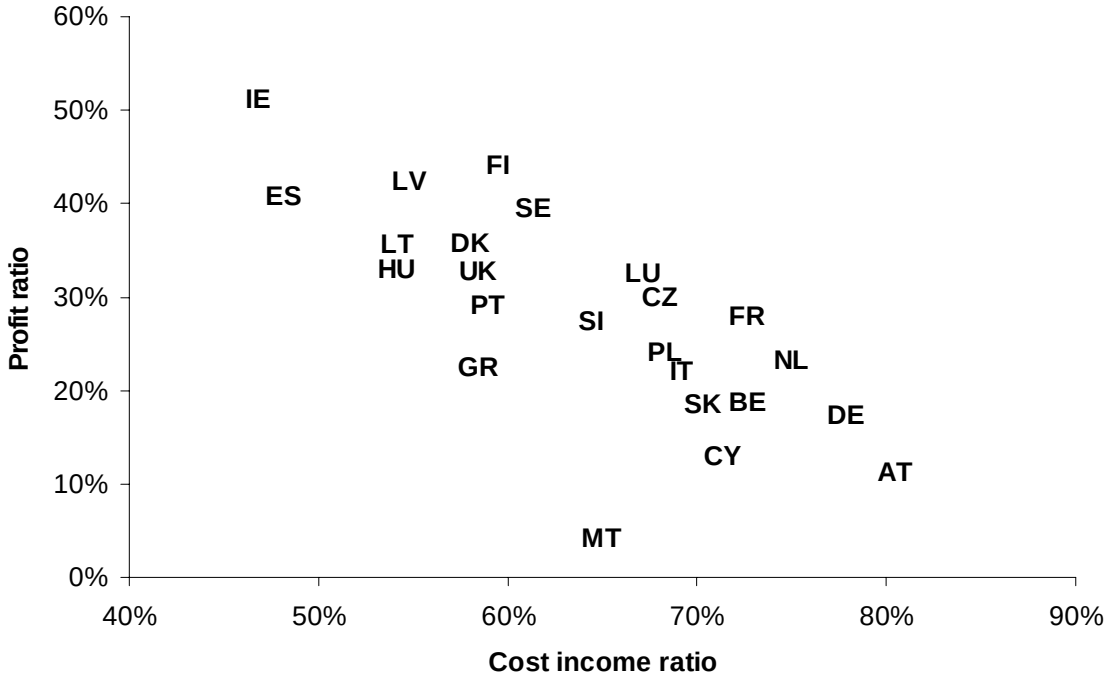
	2002	2003	2004
EU-15	64.2%	65.9%	65.8%
NMS	74.1%	67.7%	62.2%
EU-25	65.8%	66.2%	62.6%

Note: The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.
Source: Commission's "Retail Banking Survey", 2005-2006.

5.4.3. The relationship between retail banking profitability and costs

Figure 25 shows at country level the clear negative relationship between the cost-income ratio and the profitability ratio for retail banking sectors across the EU25. Member States where banks report higher cost-income ratios generally also show lower levels of profitability. This pattern might be interpreted as a direct indication of cost-efficiency yielding higher profits. Alternatively, and more neutrally, this pattern may be seen as a reflection of different consumption patterns across countries. For example, some Member States might show patterns of consumption particularly intensive in products that are both relatively profitable (for example, mortgages) and fairly cheap to supply; whereas other Member States might exhibit converse patterns of consumption. This explanation might have some validity in explaining why the countries showing the lowest profitability and highest cost-income ratios are mostly affluent members of the EU15.

Figure 25: Profitability and cost-income ratio, country level, 2004, weighted average
Profit ratio (profit before tax/total retail income) and
Cost income ratio (operating costs/total retail income)



Source: Commission's "Retail Banking Survey", 2005-2006

Examination of the main component of the cost-income ratio – staffing costs – also supports the negative relationship between profitability and the cost ratio. At the country level, we observe that richer countries and some very small Member States have higher staffing costs, while in general the New Member States have among the lowest cost ratios in the Union.

5.5. Relationship between market conditions and financial performance

One of the key determinants of the performance of retail banks in the different Member States is the market conditions in which they operate. To the extent that market structures across Member States differ due to their size, income level or intensity of competition, these structural characteristics may be important determinants of profitability in retail banking. Furthermore, the existence of cost structures that may generate economies of scale or of scope can result in a correlation between these structural characteristics and observed profitability behaviour. This section explores these potential dynamics by looking at the relationships between:

- bank size and profitability;
- market share and profitability;
- bank size and cost-income ratios; and
- market size and cost-income ratios.

Before presenting the results of the regression analyses, some limitations should be noted in terms of the methodology. Firstly, the regressions provide a snapshot of one year's data, for both the market structure variable (e.g. bank size or market share) and the financial performance variable (e.g. profitability or cost-income ratio). A longer time-frame should be used to allow the analysis to draw conclusions on enduring relationships. Secondly, the relationships tested here are on the basis of univariate correlations. In most cases the analysis has not controlled for the effects on banking sector performance of third variables

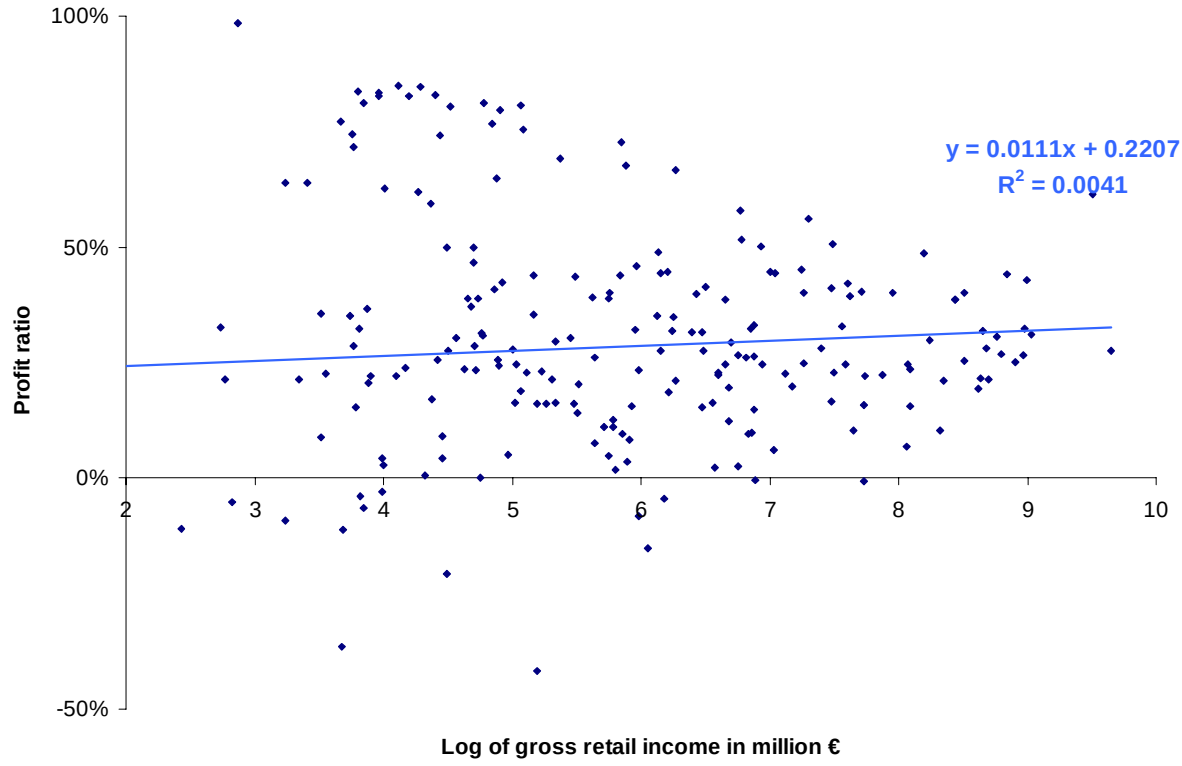
absent from the regression analysis. Thus the evidence provided here is suggestive of general patterns but is by no means conclusive. It is therefore desirable at a later stage to supplement the preliminary conclusions presented here with a multivariable analysis of the relationships between market conditions and financial performance.

5.5.1. Bank size and profitability

A positive correlation bank size and profitability would suggest that largest banks were able to exploit their size to generate higher profit margins than smaller banks. This ability to generate higher profits may be the result of larger economies of scale or larger market power by the largest banks. Conversely, it may that the banks that have grown more are those that have been able to command higher margins by offering better products or a different product mix.

Figure 26 below shows the relationship between bank size, measured by the log of gross retail income, and the profitability ratio across the sample of banks. The data shows a small positive relationship between these two variables.

Figure 26: Bank size and profitability, bank level, 2004
Log of gross retail income (€ million) and pre-tax profits as share of gross retail income



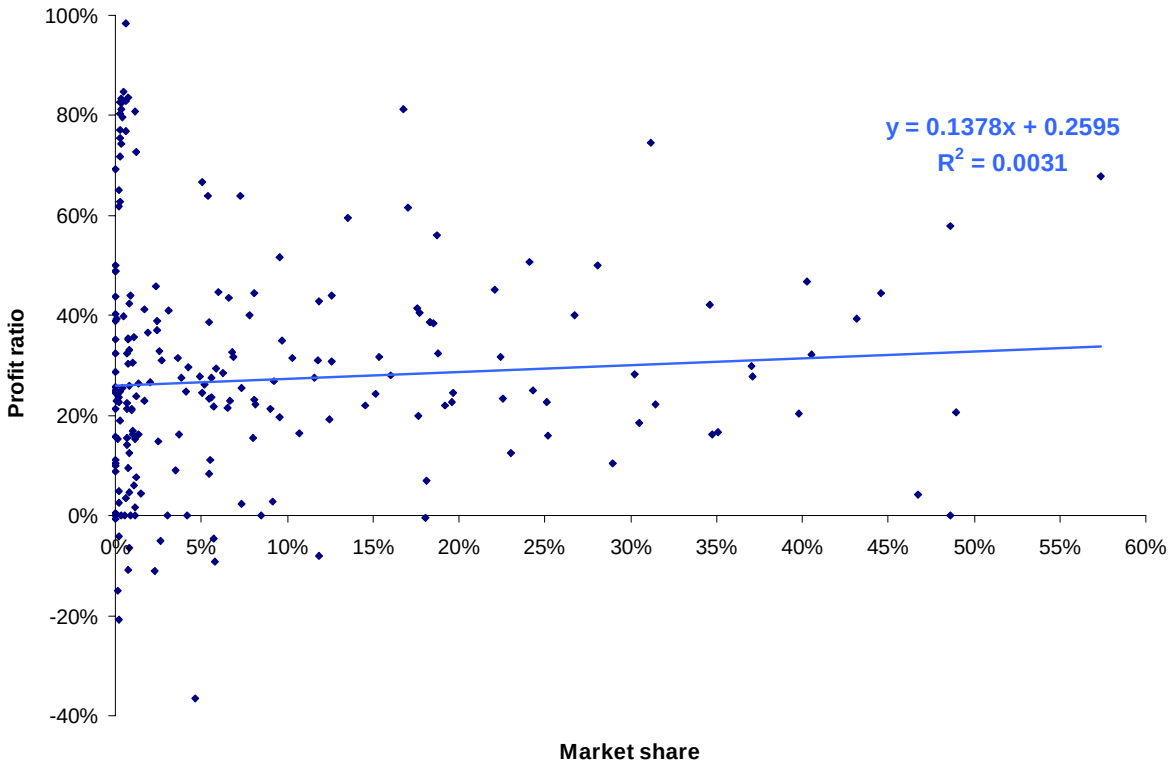
Source: Commission's "Retail Banking Survey", 2005-2006

5.5.2. Market share and profitability

The level of retail banks' profitability may be partly determined by their ability to exercise market power, in addition to the effect of economies of scale. Thus, we might also expect to observe a positive relationship between profitability and the market share of the banks in their national markets. However, Figure 27 below shows that there is not a clear relationship between profitability and banks' estimated shares of a national market. Moreover, a strong relationship does not appear even when only banks with the largest share or with market shares above a minimum threshold are considered. While it have been expected that the

largest players in each Member State would on average be more profitable than other banks in the sample, this hypothesis does not seem to be supported by the data.

Figure 27: Market share and profitability, bank level, 2004
Banks' estimated share of national market and pre-tax profits as share of gross retail income



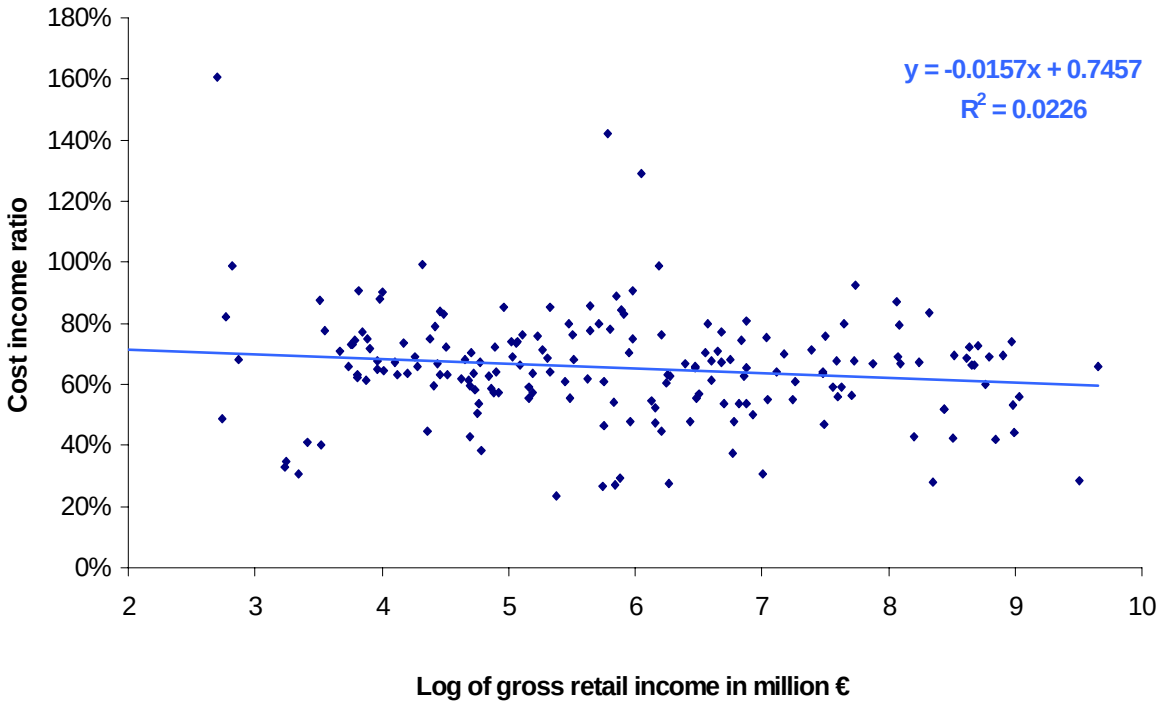
Note: Market share calculated as percentage of number of current accounts extrapolated with deposits
Source: Commission's "Retail Banking Survey", 2005-2006

5.5.3. Bank size and cost-income ratios

Bank size and the resulting economies of scale are one of the most commonly suggested explanations for differences in cost levels across banks. Bigger banks are believed to be better able to exploit economies of scale and so achieve a lower cost to income ratio. Figure 28 shows the relationship between the size of banks' retail operations (measured by the log of gross income) and the cost income ratio of banks. This relationship is negative. An estimate of the correlation coefficient of these variables yields a value of -0.14, statistically significant at the 5 percent level (t-student of -2.03). However, despite the negative correlation between these two variables, the absolute value of the slope coefficient is relatively small, suggesting that the cost advantages arising from greater bank size are moderate.[102]

[102] The data also support the observation, made in chapter 2, that as an industry retail banking is characterised by a fairly high level of variable costs and so larger scale tends not generate major cost advantages.

Figure 28: Bank size and cost ratios, bank level, 2004
Log of gross retail income (€ million) and cost-income ratio (all retail banking)



Source: Commission's "Retail Banking Survey", 2005-2006

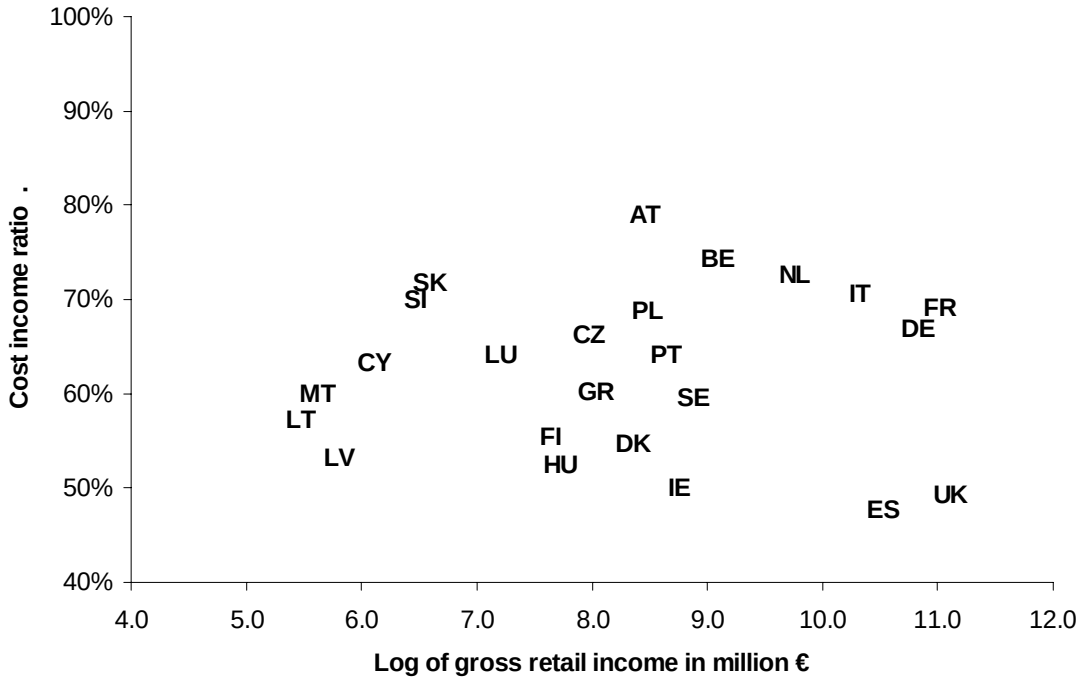
5.5.4. Market size and cost-income ratios

The observed negative relationship between bank size and cost-income ratios may also be partly explained by the size of the overall market. Larger markets offer the potential for larger market players, irrespective of the relative strength of economies of scale. A regression of bank size and cost-income ratios that also includes country dummies to control for differences in market size, generates a negative correlation although it is not statistically significant (see Table 30).

Figure 29 below shows the relationship between the size of each Member State's retail banking sector[103] and the weighted average cost-income ratio for banks in that Member State. Again we do not observe a clear relationship between market size and cost-income ratio in the different countries. This lack of correlation across Member States is consistent with interpretations that emphasise differing consumption patterns across Member States and the cost implications of differing distribution models (e.g. the density of branch networks, personalised service, and the uptake of internet services).

[103] Estimates of the size of each national retail banking sector are shown in Table 15 above.

Figure 29: Market size and cost-income ratios, country level, 2004
Log of gross retail income (€ million) and cost-income ratio (all retail banking)



Source: Commission's "Retail Banking Survey", 2005-2006

Finally, Table 30 below summarises bank-level regressions that capture the correlation between selected pairs of variables and also include 24 country dummies to control for some country effects. Estimates that are statistically significant at the 5 per cent level are in bold.

Table 30: Summary of estimates in regressions with 24 country dummies and intercept

Estimate (t-statistic)	Independent variables	
	Gross retail income (log)	Market share%
Profit ratio %	2.221 (1.77)	**0.004** (2.82)
Cost-income ratio %	-24.693 (-0.51)	-0.013 (-0.18)
Cost ratio[104] %	-0.318 (-0.6)	-0.001 (-0.98)

Note: Each cell contains the estimate of the reported independent variable in a regression with 24 additional country dummies as independent variables (not reported).
Source: Commission's "Retail Banking Survey", 2005-2006

The results suggest that the size of a bank, measured by its gross retail income, seems to be positively correlated with profits and negatively correlated with cost ratios (an indication of economies of scale). However, none of these relationships are statistically significant.

The relative size of a bank, measured by market share, has a statistically significant positive relationship with profit. Market share also has a negative but non-statistically significant relationship with the cost-income ratio. This could support the hypothesis that banks with

[104] The cost ratio is total staffing costs expressed as a share of banks' gross income.

larger market shares, although not necessarily more efficient, were able to obtain larger profits by exerting market power. However, as stated above, the analysis in this section – although illustrative of some broad relationships – cannot at this stage be used to reach strong conclusions about the impact of market conditions and market structure on banks' financial performance.

Conclusions

Using OECD data, the inquiry has analysed long-term trends in the profitability of European banks, for all banking activities including retail. Based on operating profits as a share of gross income from all banking activity, banks in almost every Member State have become more profitable since the 1980s. The conjunction of rising pre-tax profits and falling effective tax rates implies that on average the post-tax profitability of European banks has increased significantly.

Retail activity comprises more than half of all banking activity in Europe. Gross income for retail banking is estimated at 250-275 € billion across the EU25 in 2004, or around 2.5% of EU GDP. This corresponds to around 550-600 € per person across the EU.

The profitability of retail banking activity varies widely across the EU. Average pre-tax profits in retail banking in 2004 were around 29% of banks' gross income across the EU25. However there were wide variations at country level. Banks in Austria and Germany generated pre-tax profits of 11% and 17% respectively; among the lowest in Europe. Banks in several Members States including Ireland, Spain and Finland were far more profitable, with pre-tax profits of over 40% of gross retail income.

There are wide national variations in banks' income for specific product lines. The inquiry estimates that in 2004 for personal current accounts, banks in Luxembourg and Italy reported the highest income per customer (265€ and 204€ respectively). Banks in Lithuania and Sweden had the lowest income (15€ and 22€ respectively). Comparisons across a range of retail products show that banks' income per customer is around twice as high in the EU15 as it is in the new Member States.

Based on operating costs as a share of total retail income, the inquiry found a wide dispersion across Member States in banks' cost bases. On average banks' operating costs in 2004 comprised 63% of total retail income. Banks in Spain and Ireland had the lowest cost ratios (45-50% on average), while banks in Germany, Austria and the Netherlands had the highest ratios (75-80% on average).

Univariate analysis at bank level shows a small negative correlation between bank size and cost-income ratio, which may point to limited economies of scale in retail banking. A small and significant positive relationship is also observed between banks' market share and profitability. However the statistical relationships observed are generally weak and it is not possible to reach firm conclusions about the impact of market conditions and market structure on the financial performance of retail banks.

6. SELECTED COMPARISONS OF PRICES AND ACCOUNT USE

6.1. Introduction

The price setting behaviour of banks and the evolution of these prices over time are potential indicators of the degree of competition and integration in the sector. This chapter focuses on prices, looking specifically at (1) retail interest rates and (2) pricing of payments. Because of the inherent difficulties in adjusting for differences in product features this chapter does not consider another important dimension of banks' competitive strategy: the supply of products, including the variety of products offered.

Banks can develop their pricing strategy for retail products along different, but interrelated, channels: retail interest rates, payments fees and other fees charged for various retail services. Particularly for exception handling and mistake repair fees can be rather high.

Comparing prices across banks and Member States is difficult and could lead to misleading conclusions if not enough care is taken in considering the possible heterogeneity of the underlying services and the business approach used for cost recovery. For example, banks may opt for a strategy of offering high deposit rates on saving accounts while simultaneously charging substantial fees for the daily management of and operations on these accounts. The exact opposite strategy could also occur. Concerning fees, banks can opt for charging customers a "package" fee, which includes a number of services, or may decide to charge customers per individual service. There are also less transparent ways to cover cost of payment services, such as float and value dating which are practiced differently across member states. In some Member States there is legislation or self-regulation that forbids banks to charge for the use of particular sorts of payment instruments (cheques for instance).

The remainder of this chapter is organized as follows. Section 6.2 briefly reviews the main findings of a study on interest rate dispersion across and within euro area Member States on the basis of a harmonized database of monetary financial institution interest rate (MIR) statistics (referred to here as the 'MIR database') of retail rates for the euro area. A more detailed analysis of this study is added in Appendix II. Section 6.3 presents a comparison of account use and charges for making selected payment transactions.

6.2. Interest rate dispersion in the euro area

This section examines retail interest rates for a selected number of retail products in the euro area. The purpose is to identify possible differences within and across Member States (Member States). More details on the theoretical background, existing empirical evidence, methodology applied and results obtained can be found in Appendix II.

There are obvious reasons for first concentrating on the euro area. Although the euro area financial markets and banks are far from perfectly integrated, they share the same currency and face the same monetary policy. Therefore, they constitute a homogenous group in terms of money-market conditions, while underlying risk-free rates at longer maturities are highly convergent (i.e. yields on government benchmark bonds). Excluding this factor of differentiation simplifies the analysis of the other elements influencing the interest rates setting by banks.

In particular, the MIR database contains substantially harmonized retail interest rates for a wide range of retail banking products for the euro area according to the reporting framework

described in Regulation ECB/2001/18.[105] The analysis of this database is structured according to the level of aggregation of the data, going from the highest level of aggregation to the description of the bank-level information. The euro area average rates are weighted averages of the 12 national aggregates, which are themselves computed as weighted averages for a selection of banks active on the national markets[106].

Before setting out the MIR data some caveats should be stated. Comparing rates across Member States (and to some extent within Member States as well) is not straightforward and can lead to spurious conclusions because a large number of potential factors can account for the divergences possibly observed. The potential explanatory factors for divergence are various: (1) imperfect comparability of data; (2) business cycle and demand-side determinants; (3) institutional factors (regulation and taxation); (4) market environment (for example, the financial structure of the banks' clients and their risk profile); (5) degree of market integration; and (6) degree of competition in the relevant sector. It is very difficult to disentangle the individual effects of these specific characteristics. Therefore, the analysis in other chapters of this preliminary report - in particular, the interaction between interest rate setting and regulation, market concentration and integration, and cross-selling – provide complementary information that could help with interpreting interest rates differentials observed across Member States or even within Member States.

6.2.1. Evolution of the euro area aggregates

Although the highest level of aggregation (euro area aggregates) is not the most appropriate for identifying diverging trends across Member States, broad trends can be detected with a comparison of the rates applied for New Business (NB) and the rates prevailing for Outstanding Amount (OA) for a range of comparable products; and the evolution of the cross-country coefficient of variation for various product categories. The cross-country coefficient of variation is a measure of dispersion between the national aggregates composing the euro aggregates[107]. In both cases, households (HH) and non-financial corporations (NFC) are distinguished. It should be noted that the definition of 'households' used in reporting MIR data corresponds closely to the definition of personal consumers used in this sector inquiry. However, the MIR definition of non-financial corporations includes larger firms, while the inquiry focuses on banking services for small and medium enterprises.

Broad tendencies can be observed in interest rates on the basis of the euro area aggregates, in particular:

(i) a relatively higher variation is observed for deposits than for other banking products;
(ii) in general more dispersion is observed for HH products than for NFC products;
(iii) there is no clear pattern concerning the NB and OA differences; and
(iv) the lowest degree of dispersion is observed for the repurchase agreements, household mortgages and large loans to NFC. This relatively high degree of convergence among Member States might suggest either rather integrated and/or competitive market segments.

6.2.2. Differences among euro area Member States

Beyond the coefficient of dispersion, the assessment of cross-country dispersion in interest rates can be conducted on the basis of computed intermediation margins and spreads

[105] Regulation (EC) No 63/2002 of the European Central Bank of 20 December 2001, OJ L 10 of 12 January 2002, Page 24-46.
[106] The complete description of the database is available at: http://www.ecb.int/stats/money/interest/interest/html/index.en.html.
[107] For the statistical definition of the cross-country coefficient of variation, please refer to: http://www.ecb.int/stats/money/interest/coeff/html/index.en.html.

relative to market rates[108]. Overall, anecdotal and preliminary evidence would suggest a possible identification of country clusters where the margins and spreads are consistently larger than for other country clusters. The four countries demonstrating the highest margins or spreads are, in decreasing order: Greece, Portugal, Italy and Ireland. At the opposite end, displaying very narrow margins or spreads are the Benelux and in some cases Finland and Austria.

Nevertheless, the interpretation of these margins and spreads as indicators of efficiency and competition should be nuanced. First, this anecdotal evidence relies on strong assumptions in terms of aggregation methodologies (across a variety of MIR rates). Moreover, at least two categories of influencing factors could account for these differences[109], of which only the latter can be, to some extent, linked to efficiency gains:

- Cyclical determinants: economic cycle and evolution of deposit supply and credit demand. For example, Spanish banks recently increased the rates offered on the deposit segments in an effort to meet the booming private credit demand.
- Structural determinants: market environment, degree of access to direct financing, degree of competition, business model of the banks considered (including the type of bank, governance design, and specialisation on specific market segments).

6.2.3. Dispersion within euro area Member States

The purpose of this exercise is to examine whether a high degree of dispersion in MIR rates across euro area Member States is mirrored by a similar degree of dispersion within Member States. Alternatively one could expect to identify similar degrees of dispersion for the countries that were tentatively regrouped in clusters in the previous section. This analysis is based on confidential descriptive statistics (such as weighted mean, standard deviation and skewness) derived from the bank-level data that are used to compute the national aggregates for the MIR series.

Some broad conclusions on dispersion within euro area Member States can be drawn. The primary conclusion is that no clear pattern or robust clustering emerges. Observation of dispersion in MIR rates within Member States offers relatively inconclusive results. Moreover the results are in some respects even unexpected in view of the evidence on market structure and concentration at country level and the possible country clusters that were identified on the basis of spreads and margins analysis.

6.3. Selected comparisons of account use and charges for making payments

Banks can offer simultaneously different types of payment instruments to their customers. This section surveys account use and banks' pricing for payment services to customers. This analysis is useful firstly to describe the general trends in banks' practices. Secondly, the analysis may help to establish whether banks demonstrate any anticompetitive behaviour that could deter customers from choosing the most convenient and efficient means of payments. Factors such as interchange fees, opaque pricing, price bundling and in general cross-subsidization may in some cases impede the move towards more efficient means of payment.

It is also worth mentioning that the payment market is evolving rapidly. For example payment card companies are developing systems to offer an alternative to credit transfers (in particular P2P, which are payments from person to person). Also non bank operators such

[108] Confidential data.
[109] For a more complete review of the possible explanatory factors, please refer to the Appendix II.

as eBay-owned PayPal[110], and mobile payment operators are entering the market of retail payments. Furthermore, Money Remittance Offices, like Western Union, provide cross-border cash transfer services. It is difficult now to foresee the developments of such new competing initiatives which currently are still marginal in terms of volumes. However, from a competition perspective, these developments are likely to foster competition and, thereby, facilitate improvements in efficiency in the payment service industry.

6.3.1. Data sources

The following analysis reviews the use of current account to make payments in the EU and presents some initial comparison of banks' pricing, based on data from the Commission's market survey. In the questionnaire sent to sampled banks in November 2005, banks were asked to indicate the number of payment transactions per current account for a range of services (namely credit transfer, direct debit, standing orders and ATM withdrawals)[111]. Point of sale (POS) transactions were excluded. Banks were also requested to report total income coming from account management fees and fees charged for specific payment transactions.

6.3.2. The use of current accounts to make payments

It is first worth noting that the use of different cashless payment instruments varies across the 25 Member States. This pattern is supported by a range of sources including ECB statistics and the data gathered in the sector inquiry. In term of number of transactions, according to ECB statistics[112] for 2004, payment cards transactions represented 32% of total cash-less payments, followed by credit transfers (30%), direct debits (26%) and cheques (12%).

Data reported by banks show high variation across Member States in the average number of payment transactions per personal current account.[113] The figures reported are the average number of transactions *per account* rather than per customer. The two measures should not be confused since customers in some countries (such as the UK) have on average more than one current account each.

Figure 31 shows the average number of transactions made in 2004 per current account for ATM withdrawals, credit transfers (including standing orders), direct debits and cheques.[114]

[110] According to a study by RBR for DG Internal market, PayPal cross-border business in the EU in 2004 can be estimated at totalling 8.5 million purchase and remittance transactions.

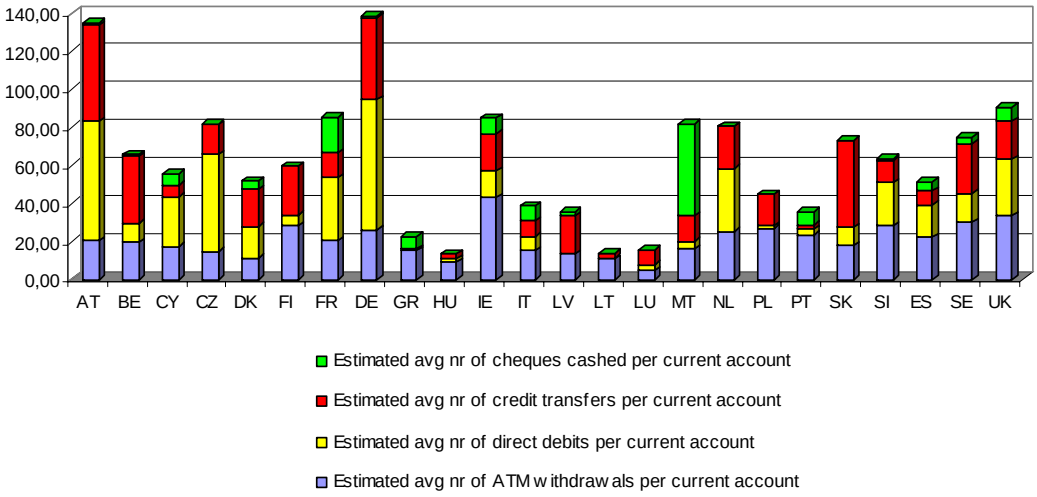
[111] With credit transfer we refer to a payment order (or sometimes a sequence of payment orders, which is referred to as standing orders) made for the purpose of placing funds at the disposal of the beneficiary.

[112] Source: ECB Blue Book (2006): *Payment and Securities Settlement Systems in the European Union and in the Acceding Countries – Addendum Incorporating 2004 data*. Available at: http://www.ecb.int/pub/pdf/other/bluebook2006addenden.pdf

[113] Throughout this chapter, data for countries with less than three valid observations are not shown separately but are included in the calculation of the EU average.

[114] POS (point of sale) operations and cash withdrawals over the counter are not included in this analysis.

Figure 31: Number of selected payment transactions per current account. Simple average. Year 2004.



Source: Commission's "Retail Banking Survey", 2005-2006.

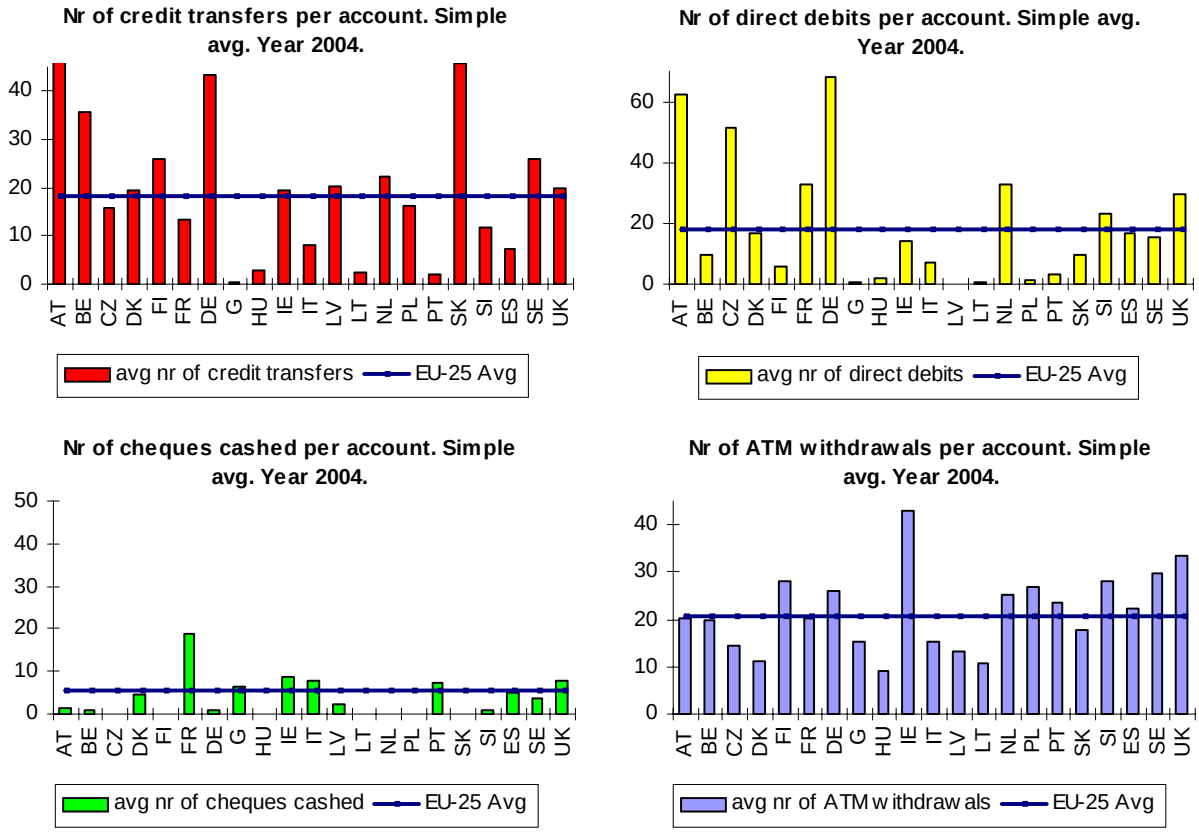
The average number of transactions per current account in EU is around 62 transactions (excluding POS transactions[115] and withdrawal of cash at the counter). However, the number of transactions per account varies widely across countries. In Greece, Hungary, Latvia, Lithuania, Luxembourg and Portugal the average number of transactions per current account is less than half the European average. Meanwhile some Member States, such as Austria and Germany, reported figures more than twice the (simple) EU average.

The distribution of the average number of transactions per account by type of transaction varies across countries. This can be explained by different payment habits as well as by difference in pricing. In most countries ATM withdrawals, direct debits and credit transfers, represent the vast majority of payment transactions per account, their relative weight varying with the country. However in a handful of Member States such as France, Greece and Italy, cheques are still used.

In order to compare in more detail the relative use of current accounts to make the different transactions types, Figure 32 illustrates the average number of transactions per current account by type of transaction as reported by the sampled banks.

[115] For POS transactions see Interim Report I on Payment Cards, available at: http://ec.europa.eu/comm/competition/antitrust/others/sector_inquiries/financial_services/interim_report_1.pdf

Figure 32: Average number of transactions on consumer current account, 2004



Source: Commission's "Retail Banking Survey", 2005-2006.

Average annual numbers of transaction per account show large variability across EU countries for all types of transactions. This variability reflects the different use of payment instruments and different prices in the Member States. In particular, we observe that:

- the average number of credit transfers (including periodical standing orders) per account in the EU is 18. The values across countries differ significantly. Banks in Greece, Hungary, Lithuania and Portugal report values below 5 transactions per account while banks in Austria, Germany or Slovakia reported more than 40 transactions per account;
- the average number of direct debits per current account in the EU is 18. In some Member States, the use of current account to make a direct debit is marginal, whereas in countries such as Austria, Czech Republic and Germany banks reported figures of more than 50 direct debits per account;
- the EU average number of ATM withdrawals per current account is 20. Banks in Ireland report a far higher average number of ATM withdrawals per current account. Overall, however, it appears that the average volume of ATM usage is more similar across Member States than it is for other payment means linked to the current account.

6.3.3. *Banks' income: account management fees and fees for selected payments transactions*

This section presents estimates of banks' income earned for account management and for selected payment transactions. Banks across the EU apply various pricing formulae for payments services, separately or in combination with other services. These formulae include explicit pricing for a single product, in the form of transaction related fees; fees for a package of products; charges for currency conversion; and other elements. In addition, there are some less visible prices – or costs for customers - including value dating (or 'float') practices and cross subsidisation with other products.

A recent study by McKinsey [116]compares different approaches to banks' pricing policy. Three broad approaches are illustrated: institutions which are "balance earners" (revenues are largely earned from the interest on credit card balances or from interest rate margins on current accounts); "fee-oriented" banks (that charge their customers for everything from transactions to account maintenance) and "efficiency focused" banks that charge lower fees and earn a lower income from account balances but also keep processing costs down.

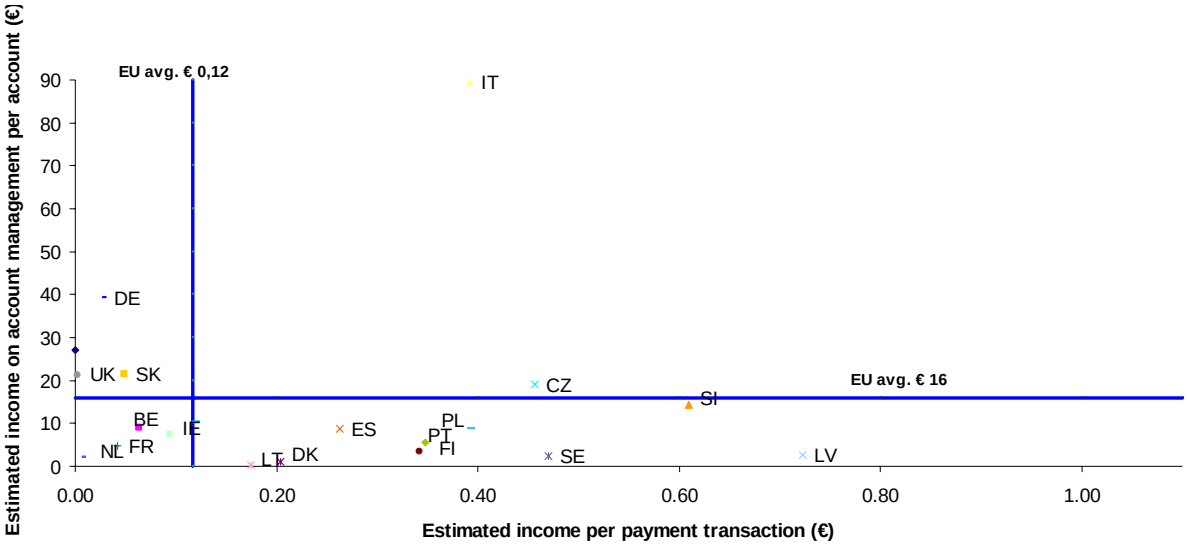
In their responses to the Commission's market survey, several banks indicated that transactions were not always charged separately, but were included in a package[117]. In order to enable comparisons between banks' revenues deriving from such packages and from per-transaction services, the inquiry examines banks' average gross fee income on an annual basis from current account management and fees charged for selected payment transactions. The estimates are generated by dividing the total income reported by banks for each type of payment by the total number of transactions made. This estimation is based on the banks' allocation of income across the different types of payments, which may vary according to banks' internal accounting systems. The data shown are therefore only indicative of the level of consumers' costs.

The analysis presented in this preliminary report is limited to a basic comparison of income data for account management fees and fees for selected payment transactions. Given the fact that patterns of use diverge between MS, it is difficult to compare costs without taking these differences into account. An interesting methodology is used by Capgemini in the World Retail Banking report[118]: cost comparison between countries is based on the calculation of an average instrument mix, both at domestic and European level.

Figure 33 below plots, at country level, the average account management fee and the average fee per payment transaction for the following categories of payments: credit transfers, direct debits and standing orders[119]. Income on payment cards transaction (POS and ATM) is excluded.

[116] The McKinsey Quarterly (2006): *How Europe's banks should prepare for payments reform* (February 2006)
[117] In case a bank has indicated that "total fee-income from other services" includes package-fees, the value has been summed to "total fee-income from account management".
[118] Capgemini (2006): *World Retail Banking Report 2006*.
[119] The average value has been obtained by weighting the relative importance of each transaction at a bank's level.

Figure 33: Estimated income on account management fees and on selected payment transactions (Weighted average. Year 2004)



Notes: The aggregate fee per transaction is obtained by weighting the relative importance of each type of transaction over the total number of transactions.
Source: Commission's "Retail Banking Survey", 2005-2006.

As can be observed, the pricing strategies followed by surveyed vary considerably across the Member States. The income data reported by the banks indicate that the level of account management fees varies significantly across Member States: fees appear particularly high in some countries[120] (up to € 90), whereas in several Member States banks reported account management fees close to zero. The income reported by banks for the selected payment transactions vary from values close to € 0 to a maximum of € 0,70.

This initial analysis shows that banks operating in some Member States earn low fees both on account management and on per transaction basis; conversely, in other countries, banks reported high income both for account management and per transaction fees.

The evidence presented above suggests that a simple analysis on the basis of individual prices for individual payment services could be misleading. In reality, some payment services that banks appear to be offer cheaply or at no cost may be charged in a different way, for example through higher account management fees.

[120] In these countries the annual fee for account management generally includes a packet of free of charge services.

Conclusions

Analysis of retail interest rates across the euro area

Based on a detailed comparison of harmonised retail rates, the inquiry has found indications of interest rate dispersion across and within euro area Member States. For example, in the euro area there appears to be more variation in rates for deposits than for loans; similarly, households seem to face more dispersed rates than non-financial corporations. Preliminary evidence also suggests that some euro area Member States would tend to cluster in groups displaying relatively high or low intermediation margins and spreads.

A range of factors may explain these patterns of price dispersion and it is not straightforward to isolate each of these effects and assess their relevance in specific cases (differences across country or products). Overall, very preliminary analysis suggests that a substantial part of the divergences would originate from national regulatory regimes and from other structural determinants.

Pricing of payment services and account use

There is high variation in prices for payment services across the EU25. The large dispersion in prices suggests that greater cross-border competition could bring down prices, particularly in those countries where payments prices are still relatively high.

Average annual numbers of transaction per account show large variability across EU countries for all types of transactions. The average number of credit transfers (including periodical standing orders) and direct debits per account in the EU is 18 for both transaction types. The EU average number of ATM withdrawals per current account is 20; it appears that the average volume of ATM usage is more similar across Member States than it is for other payment means linked to the current account.

Fees for payment services can be charged in different ways. For example, charges for payments are often part of a package and included in the account management fee. The income data reported by the banks indicate that the level of account management fees varies significantly across Member States: fees appear particularly high in some countries (up to € 90), whereas in several Member States banks reported account management fees close to zero. The income reported by banks for the selected payment transactions vary from values close to € 0 up to € 0,70. This pricing policy by banks may in some cases make it harder for consumers to identify and compare prices for single payment transactions.

7. CUSTOMER MOBILITY AND CHOICE

This chapter examines customer mobility and choice in the retail banking market. The possibility for customers to change banks is essential to help realise the benefits of a competitive banking market. In theory, customers should have the information they need to choose the best provider and product on the market, and the ability to switch providers when a better offer appears. This dynamic would place pressure on both existing and potential suppliers to continually improve their performance. Any obstacles that reduce consumers' ability to switch bank will correspondingly reduce the competitive pressure on banks to win and retain customers. Moreover, where banks are aware that customers are unlikely to switch provider, banks may be able to extract rent over the long-term from their existing customers. Thus the issue of customer mobility has profound implications for the intensity and nature of competition in the retail banking industry.

The inquiry does not view a high level of customer mobility as an end in itself, or as a simple measure of success. The inquiry is examining the issue of customer mobility solely with a view to identifying and providing evidence on the factors that may reduce consumer mobility. Helping to reduce obstacles to customer mobility should over time help to strengthen competition among banks to retain their existing customers and win new ones.

This chapter is structured as follows:

- Section 1 discusses the main factors that reduce customer mobility in retail banking
- Section 2 analyses the level of customer mobility in retail banking across the EU
- Section 3 examines the relationship between customer mobility patterns and other characteristics of retail banking sectors in the EU Member States
- Section 4 concludes by identifying possible measures to reduce obstacles to customer mobility and strengthen competition

7.1. Factors reducing customer mobility in retail banking

Retail banks typically compete on a range of product characteristics such as price (which comprises interest rates and fees for particular services), location, brand name (trust), selection and quality of services. When customers consider whether better offers are available in the retail banking market, they weigh all these characteristics to decide which bank has the most attractive offer. However, before deciding to switch their business to this bank the customer also has to decide whether the benefits of such a move outweigh the costs. In doing so, the customer will compare the financial and other benefits of moving with the costs of switching bank.

Switching costs are costs that existing customers have to incur when they change their suppliers. The literature on industrial organisation distinguishes several types of switching cost[121],[122]: transactional; informational; contractual; compatibility and psychological costs. While this general framework provides a helpful introduction to switching costs the present inquiry examines the issue from the specific perspective of the retail banking industry. The inquiry has identified five main factors that reduce customer mobility in retail banking:

1. Administrative burden
2. Information asymmetry and low price transparency
3. Cross-selling and bundling of banking products
4. Customer preferences and choice
5. Closing charges

[121] For further discussion see KLEMPERER, P. (1995): *Competition when consumers have switching costs*, Review of Economic Studies 62 (4): pp. 515-539.

[122] Office of Fair Trading (2003): *Switching costs, Economic discussion paper 5, Annexe A – Literature Review*, OFT-DTI report prepared by NERA, April 2003. Available at: http://www.oft.gov.uk/NR/rdonlyres/989EB3C9-38F6-446C-9563-471604D50D8F/0/oft655aAnnexeA.pdf

These five factors are each discussed below in more detail alongside some evidence on their contribution to the overall level of switching costs in the retail banking industry. As is shown below, these factors generate high levels of switching costs overall for retail banking customers. For example, the French consumer union recently published a study which estimated the costs of switching bank for an average French consumer with an average range of products amounting to around €300. [123]

High levels of switching costs in the retail banking industry may have three significant effects:

- Increase banks' market power. High levels of switching costs give banks a degree of market power. If suppliers can discriminate between new customers and repeat customers, they will charge lower prices to attract new customers. However once customers are locked in to a banking relationship, the supplier can charge higher prices, since customers will price their switching costs into any decision to switch supplier[124].
- Discourage new market entry. Switching costs serve as entry barriers as new entrants must offer price benefits that compensate customers for switching costs. Where switching costs are high, it is likely to be uneconomic for a new entrant to provide a sufficiently competitive offer to induce customers to switch. Moreover, incumbent banks which have large numbers of established customers should be relatively more profitable and so better able to withstand an extended period of price competition.
- Discourage product innovation. In a market with low switching costs, customers could quickly adopt a new product or service in large numbers, presenting a potentially large economic reward for innovators. However, where switching costs are high suppliers will be aware that new offers, even if successful, will attract relatively fewer new customers. Thus the rewards to innovation will generally be lower in markets with high switching costs. In such circumstances a rational strategy for most retail banks would be to focus product development efforts on satisfying the needs of existing customers and attempting to cross-sell other products to them.[125]

Low customer mobility may not imply the existence of high switching costs. Survey evidence consistently indicates that the main reason for not switching service providers is that customers are generally satisfied with their current bank. For example, a survey on twelve European countries (including nine EU Member States) based on some 200.000 interviews reported the highest customer satisfaction index for retail banking of four industries surveyed, ahead of property insurance, supermarkets and mobile telecom providers).[126],[127] A number of other surveys also place satisfaction with the current provider on the top of the reasons for not switching bank.[128] On the other hand, other polls (discussed below) have highlighted that many consumers face serious difficulties in switching bank, irrespective of their satisfaction or dissatisfaction with their current provider.

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[123] UFC – Que Choisir (2006) : *La mobilité bancaire impossible Identification et estimations des coûts de sortie*. Available at: http://www.quechoisir.org/Position.jsp;jsessionid=355BAF8378FFAB6A55496F02C5F834C2.tomcat-21?id=Ressources:Positions:941BD5192DEE2331C125719A00279408&catcss=FIN203&categorie=NoeudPClassement:A92F376FF716FB93C1256F0100349205

[124] KLEMPERER, P. (1995): *Competition when consumers have switching costs*, Review of Economic Studies 62 (4): 515-539.

[125] Surveys of the retail banking industry advocate this strategy when they discuss 'capturing a larger share of the [consumer's] wallet'.

[126] EPSI - European Performance Satisfaction Index (2006): *Pan European Customer Satisfaction 2005*, Compiled by Rating Editorial Board, Göteborg, Sweden.

[127] UK Competition Commission (2002): *The supply of banking services by clearing banks to small and medium-sized enterprises*. 84% of responding SMEs were satisfied or very satisfied with the quality of the service of their main bank, however, the satisfaction with the level of fees and charges were much lower, 52%.

[128] Irish Bankers Federation (2006): *The IBF Personal Account Switching Code: 12 months on*, About Banking, Edition 3, May 2006. This survey mentions 61%

The following paragraphs discuss in turn each of the five factors that may reduce customer mobility.

7.1.1. Administrative burden

Administrative burden is a transactional switching cost that occurs when the change of service provider is implemented. Switching banking providers requires work and effort from customers. The scale of the administrative effort required will vary according to the banking product in question. Switching current accounts is a complex operation because of the range of everyday functions that are conducted through the account. Filling in the necessary forms for opening the new account, closing the old one, transferring balances, transferring direct debits, setting up payment instructions, informing customers about the new account number requires time and effort on behalf of the customer switching. Moreover, a customer's ongoing reliance on a single account to receive wages and pay bills and make everyday transactions means that there may be greater risks to switching provider. In particular, switching current accounts will create an obligation to customers to transfer their payment arrangements from one bank to another. This complex operation may deter customers who would otherwise switch accounts.

In August 2005 the European Commission published an extensive Eurobarometer survey of public opinion on financial services[129], covering all EU Member States through a stratified sample of nearly 25 000 respondents. The Eurobarometer survey asked the respondents how easy they believed it was to change banks. The responses to this question suggested that overall European consumers believed that changing bank was fairly straightforward: 69% of respondents described the process as easy or fairly easy, while only 20% described it as difficult or fairly difficult. (11% of consumers said they did not know.)

The encouraging picture emerging from the Eurobarometer survey becomes more complicated when set alongside the findings of more detailed consumer surveys about changing banks. For example, a recent survey[130] based on a sample of over 3000 UK banking customers suggested that 23% of respondents were dissatisfied with their current account. Of this share, nearly three-quarters believed that changing banks was administratively too difficult. Nearly half of unsatisfied customers also believed that changing bank would make little difference to their standard of service. Another survey of the UK Consumers' Association of 12000 customers in 2005 found that 44% of those who switched current accounts experienced some inconvenience and 15% lost a payment. The French consumer union, UFC, identifies the administrative burden of transferring an account as one of the main reasons for low customer mobility and argues that there is currently no assistance available in this area for customers in France.[131] The Slovene consumer association also finds the administrative burden of transferring payment instructions to the new account "more serious" than the level of closing charges.[132] Lastly, evidence from the United States suggests that consumers there face similar difficulties.[133]

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[129] See: http://ec.europa.eu/comm/consumers/cons_int/fina_serv/cons_experiences/report_eurobarometer63-2_en.pdf

[130] Source: Abbey Press Release, 15 November 2005. Available at: http://www.aboutabbey.com/csgs/Satellite?c=GSNoticia&cid=1127562869631&idInfArchive=1077211222403&pagename=AboutAbbey/GSNoticia/PAAI_newComplet

[131] UFC – Que Choisir (2006) : *La mobilité bancaire impossible: Identification et estimations des coûts de sortie*. Availabe at : http://www.quechoisir.org/Position.jsp;jsessionid=355BAF8378FFAB6A55496F02C5F834C2.tomcat-21?id=Ressources:Positions:941BD5192DEE2331C125719A00279408&catcss=FIN203&categorie=NoeudPClassement:A92F376FF716FB93C1256F0100349205

[132] Response on the questionnaire sent to consumer associations

[133] A survey on 1500 US households asked the following from the respondents: "Have you stayed at your main bank so far because it would be too much trouble to close your account and open a new one elsewhere?" 34% of the responses were "yes". Household Switching Behavior at Depository Institutions: Evidence from Survey Data, Antitrust Bulletin, winter 2002, v. 47, iss. 4, pp. 619-40.

7.1.2. Information asymmetry and low price transparency

In retail banking, the relationship between bank and customer has economic as well as psychological value. A banking relationship often results in a better understanding by the bank of the credit quality of its customers. This information on credit quality may be lost when a customer switches banks. Low credit risk customers are pooled together with higher credit risk customers when changing bank and consequently charged higher interest rates. Therefore, one opportunity cost of switching bank is the foregone capitalised value of their previously established relationship.[134]

This information complexity and low transparency from the supply side can also reduce customer mobility. Complexity of the products offered by the financial system creates information asymmetry: the suppliers of complex products have often not ensured that the customer fully understands the product being bought.

The price information provided to retail banking customers on their current account and other products may be inadequate or complex – making it difficult to compare prices and choose between banks. Complexity forces customers to make a substantial investment of time in searching for the best supplier. There is a good reason to believe that a customer would search for an alternative supplier only if the expected gain would offset the (expected) search costs. (It should be noted that customers' decision to switch is often based on dissatisfaction with their current bank, e.g. poor service or high prices[135]).

7.1.2.1. Banks' pricing structures

Cross-country price structures vary substantially across national boundaries. If we look at four components of the annual price of a typical relationship in core retail banking (account management, payments, cash utilisation, exception handling) we see different pricing models[136]:

- in Sweden banks provide account management at no charge, and payments generate more than 90% of the fees;
- in Germany and in The Netherlands account management fees make up about 55% of retail banking prices (the rest is payments in the case of The Netherlands, and mostly payments in Germany as well);
- in Poland and in the Czech Republic cash utilisation makes up more than 40% of the retail prices (while the rest is split more or less evenly between account management and payment fees).

Pricing structures may change substantially over time even within the same country. In The Netherlands, payments' weight in the core banking fees decreased from 2004 to 2005 (from 78% to 42%), and account management provided 57% of core banking fees in 2005.[137]

Even if the customers have a clear picture of their pattern of use of core retail banking services, these varying price structures will make accurate price comparisons among providers difficult, particularly when considering cross-border suppliers.

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[134] KIM, M., KLIGER, D., and VALE, B. (2003): *Estimating switching costs: the case of banking*, Journal of Financial Intermediation, Volume 12, Issue 1, pp. 25-56.
[135] ECA Financial Services Subgroup (2005): *Comparative Study of Competition in Retail Banking and Payment Systems Markets*. Available at:
http://www.kkv.se/bestall/pdf/eca_report_retail_banking.pdf
[136] Capgemini (2006): *World Retail Banking Report 2006*
[137] Capgemini (2006): *World Retail Banking Report 2006*

7.1.2.2. Customer perceptions of pricing complexity

The Eurobarometer survey illustrated the extent of information asymmetry, 59% of EU consumers found it fairly or very difficult to "understand the information given by financial institutions about the way their mortgages work and the risks involved". In addition, 75% of EU consumers said they believe that it is difficult "to win in a dispute with a bank"; this view may be partly examined by consumers' perception that banks hold and informational advantage.

Moving into the field of price transparency, the Eurobarometer survey found that many consumers were confused by the pricing and product design of several retail banking products. For example, 50% of EU consumers said it was very or fairly difficult to "compare information from banks about bank account features and changes". Estonian consumers were most positive with only 14 % citing difficulties. French consumers were the least positive with 66% reporting difficulties. The Eurobarometer survey also asked EU consumers how easy or difficult they found it to work out the costs of borrowing money from a bank. 42% said estimating such costs was difficult rather than easy (for 48% it was easy). Respondents in the Benelux region were most positive with around two-thirds of consumers expressing no difficulties. However only 20% of consumers in Hungary said estimating borrowing costs was easy while 73% cited problems. EU consumers also expressed difficulties in comparing information about different mortgages: 54% said such comparisons were difficult.

As part of the sector inquiry, questionnaires were sent to a number of consumer associations in the EU to seek their views in relation to retail banking. Lack of price transparency was mentioned in most replies[138].

7.1.3. Cross-selling and bundling of banking products

7.1.3.1. Cross-selling of banking products

Cross-selling is the strategy to sell additional products or services to existing customers. Traditionally retail banks have provided customers with current accounts and associated payments services, savings accounts and loans. However, banks are developing a series of new products and services ranging from mortgages, credit cards and insurance to asset management and capital market products.

Banks have strong incentives to cross-sell additional products to customers. Cross-selling will typically increase banks' revenue while accruing only limited marginal costs from marketing and distribution. Thus cross-selling may offer an easier means of increasing profit than acquiring new customers. In addition, by widening the customer relationship, cross-selling increases the customer's reliance on its bank.

While cross-selling may suit the interests of banks, customers may also derive some benefits. Certainly an existing relationship with a bank means that customers can, should they wish, acquire additional services without an extensive search or much paperwork. There may also be an important financial aspect to customers' decisions. Having more information about the customer, the current bank should be able to price new products more accurately and thus, on balance, more cheaply than other banks.[139] Therefore, where customers have a longstanding relationship with their bank and trust it as an institution, cross-selling may be a rational strategy for both banks and customers.

[138] E.g. The Finnish Consumer Agency; Greece - KEPKA - Consumers' Protection Centre; Slovene Consumers' Association; France- UFC-Que Choisir; Federation of German Consumer Organisations, The Swedish Consumers' Banking & Finance Bureau, etc.

[139] This issue is discussed further in the section on information asymmetry.

7.1.3.2. Bundling and tying of banking products

Bundling is selling two or more products together in a package. These products may only be available as a bundle (pure bundling), or available separately but offered at a discount relative to their individual prices (mixed bundling). Tying is making the purchase of one product conditional to the purchase of another product. Tying and bundling are common practices that often have no anticompetitive consequences, enabling banks to offer a range of products that are better suited to customer needs, while generating savings in production, distribution and transaction costs that can be passed on to the customer in the form of lower prices.[140]

In some cases bundling might reduce price transparency. Since it offers a way to differentiate otherwise identical individual services (it is more difficult to copy a bundle by the other service providers), bundling may make it difficult for the customer to compare the prices of its current bank with those of the competitors. For this reason prices might be kept at a higher level than otherwise. When purchasing additional services, the customer becomes more familiar with the products and processes of the service provider, while the information asymmetry remains with respect to competitors. In addition to potential problems of price transparency, the more services are sold to the customer, the more their switching costs increase, making it more difficult to change service provider.

In imperfect markets market power might be leveraged to other markets.[141] If the service provider bundles the product with (monopolist) market power to a competitive product, or ties the latter to it, the effect might be the foreclosure of the other service providers on the competitive market. Such situations must be thoroughly analysed in order to assess if Article 82 applies. A decisive element in determining the consumer harm that may be caused by bundling would be a bank's dominance in the market for a given service to which additional services are attached.

Bundling and tying may not only be used to extend market power, but also to protect it by deterring entry. Many competitors choose to enter only some part of the market and sell products or services individually. Bundling and tying practises make it difficult for a single product service-provider to compete with a multi-product competitor.

7.1.4. Customer preferences and choice

There are certain special characteristics of retail banking that influence customer preferences when making their choice of a service provider. These are factors of a psychological nature which are difficult to quantify. Customer behaviour suggests that they place a premium on particular characteristics of suppliers, which in turn implies an additional opportunity cost type of switching cost when considering changing banks.

The complexity and long-term perspective of some products makes customers favour locally established service providers with whom they can develop a relationship. In this relationship trust and reliability is crucial[142]. Even though new efficient delivery channels (phone, internet, ATM, etc.) rapidly gain share in a multi-channel system[143], direct contact through a bank branch remains the main form for maintaining customer confidence and establishing new account relationships. Although growing rapidly as a distribution channel and possibly

[140] DG Competition's discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, Rn 40. Available at: http://europa.eu.int/comm/competition/antitrust/others/discpaper2005.pdf

[141] The Chicago School argument was very successful in discrediting this idea; however literature thereafter highlighted its several important limitations. See: NALEBUFF, B. (2003): *Bundling, Tying and Portfolio Effects*, DTI Economics Paper No1

[142] Financial Services Action Plan: Progress and prospects, Expert group on banking, 2004, p 18.

[143] Data in the CAP Gemini World Retail Banking Report (2006) show that the share of branch activity in day-to-day banking transactions decreased from 70% to 42% between 2000 and 2005.

offering a better deal, internet banking generally remains a compliment rather than a substitute to branch banking.[144] This pattern places some limits on the remote market entry possibilities for both local and cross-border banking activities.

European consumers weigh a range of non-monetary factors when choosing their retail bank.[145],[146] Evidence across the EU Member States shows that consumers have a range of personal reasons for choosing and staying with their bank. The most common reason consumers in the UK gave for choosing their bank was its proximity to the home or workplace.[147] Moreover over 60% of UK consumers did not consider any other service provider than the one they had chosen.[148] Evidence from Ireland suggests that proximity matters to consumers, as does a family history with a particular provider. Consumers in Sweden cited trust and family history as important factors in their choice, while Dutch consumers prioritised trust and service quality when choosing a service provider.[149] This behaviour also helps explain why consumers that switch banks tend to respond to 'push' factors such as poor service or refusal of a loan rather than the 'pull' of better interest rates or product range.[150]

The reluctance of customers to switch service provider even in the existence of price advantages is often described as customer inertia or passivity. However, it appears that there is no need to claim passivity if price benefits are simply overcome by preferences over other product attributes beyond price: location, family history, relationship, etc. These preferences together with other switching costs (e.g. search costs) often hinder switching. There is reason to believe that if switching costs are reduced mobility will increase. In case of consumer loans and mortgages, there is already much more shopping around done by customers than in the case of current accounts. The obvious reason is the extent of possible price advantages, which push customers over the inertia threshold.

7.1.5. Closing charges

Banks may charge customers for terminating various services. Banks may have various reasons for imposing such charges. In some cases they may be used to cover the administrative cost to the bank of filling in forms or providing certain documents, in other cases they may be used to compensate for interest rate risk exposure (e.g. where a term loan or deposit is closed early). There is also the possibility that banks might levy closing charges in order to deter customers from closing their account. Since closing charges are explicit financial charges, they are the easiest type of switching cost to quantify in retail banking. The sector inquiry has asked banks in its market survey to provide information on the typical level of closing charges applied to different retail banking products.

In most countries there is no closing charge for current accounts, but in some countries it is commonly used: in Italy these charges mostly fall in the 15 to 60 EUR range, in Austria in the 7,5 to 15 EUR range, in Portugal and Belgium every other bank applies them, and they amount to 7 to 15 EUR; in Slovakia and Slovenia they are also common and amount to 3 – 5 EUR.

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[144] Financial Services Action Plan: Progress and prospects, Expert group on banking, 2004, p 6.
[145] Also in the US, 46% of the customers names location as their primary reason to choose a bank. Deloitte – Consumer Bankers Association: Loyalty Quest – Enhancing the Retail Banking Experience to Drive Growth, 2006
[146] Another survey on 1500 US households found that the primary reason for changing bank is relocation for 51% (exclusive response), while 32% are still with their first ever bank. Also, 74% of households with bank accounts cite location as a primary reason for remaining with a bank (non-exclusive response). Household Switching Behavior at Depository Institutions: Evidence from Survey Data, Antitrust Bulletin, winter 2002, v. 47, iss. 4, pp. 619-40.
[147] Cruickshank report into retail banking competition in the UK, p 104.
[148] Cruickshank report into retail banking competition in the UK, p 108.
[149] ECA Financial Services Subgroup (2005): *Comparative study of competition in retail banking and payments systems markets*
[150] ECA Financial Services Subgroup (2005): *Comparative study of competition in retail banking and payments systems markets*

When replying to the question on closing charges on deposit accounts, banks in most cases differentiated between closing the account, which is mostly free of charge (with the exception of Italy where banks often charge), and breaking a time deposit, where penalty is imposed.

Early termination or partial repayment of consumer loans triggers varying levels of charges in Member States (e.g. in Belgium two to three months interest, in the UK one to two months interest, in Hungary a fixed charge of 50-140 EUR, in Italy around 1% of the repayment amount, and around 2% and 4% of the repayment amount in Portugal and Slovakia respectively). Meanwhile early termination or partial repayment of consumer loans is generally free in several other Member States, such as the Czech Republic, Denmark, France, Germany, Poland and Sweden.

In case of mortgages the picture appears more complicated due to long-term nature and varying legal requirements of mortgage products.[151] The product also has more variations in pricing. In the case of floating rate mortgages the early repayment fee is often zero, or less than with fixed rate mortgages, in accordance with remaining interest rate exposures and risks. In some countries, there is a high degree of variability in early repayment charges (0-3% of amount repaid in Austria, 0-2.5% in Poland). In other Member States, the charges are more uniform (e.g. three months interest in Belgium, six months interest with a maximum repayment of 3% in France). Such uniformities are often explained by regulations on early repayment fees. The issue of early repayment fees is one of the main topics of the ongoing consultation preceding the adoption of Commission White Paper on Mortgage Credit, which is expected in early 2007.

Closing charges are generally zero for custody services, but are often levied on mutual funds. Closing charges might be levied in case of other products as well: e.g. pension schemes, card accounts, long-term investment plans, building saving deposits, etc.

Banks apply very similar closing charges to consumers and to SMEs in the case of current accounts and deposit accounts. There are more varieties regarding SME loans, where the conditions applied are sometimes a mix of consumer loan and mortgage early termination conditions. Where the SME early termination fees are different, no clear pattern exists. Termination fees for SMEs could be either higher or lower than for consumers.

7.2. Analysis of customer mobility in retail banking across the EU

This section examines:

- customer mobility in the retail banking industry across the EU; and
- the extent of cross-selling and tying in retail banking

7.2.1. Customer mobility in the retail banking industry across the EU

The analysis of customer mobility relies on data on the current account market and looks separately at mobility for consumers and SMEs. The inquiry has chosen to look specifically at mobility related to current accounts for three reasons. First, current accounts are widely held and are probably the most frequently used banking product. Second, unlike some other products such as customer loans which expire after a set time-period, current accounts are open-ended. Third, and partly because of the open-ended nature of the current account relationship, current accounts play a gateway role: banks often use the current account as the basis for cross-selling other products to their customers.[152]

[151] The inquiry asked for the closing formula in case of mortgages terminated one year early assuming average size.

[152] This practice of cross-selling is examined further below.

Since most of the inquiry's data has been collected from banks and not customers, customer mobility is measured in an indirect way, based on the replies of banks on the inquiry.[153] Customer mobility in retail banking is illustrated with two different indicators. The first measure of mobility, which is referred to here as "churn", tries to capture the share of customers who change providers in a given year. Churn is defined here as the ratio of the sum of current accounts opened in a year plus current accounts closed in a year divided by two times the total number of accounts at the beginning of the year[154]. The second indicator, which may be called "longevity", is a measure of the average length of existing banking relationships, measured as the weighted average of the number of years that existing current accounts have been active at a given bank[155]. In requesting data from banks on the longevity of current account relationships, banks were asked to exclude all dormant accounts since they would be likely to bias the observed longevity of accounts significantly upwards.

Both measures described above are influenced by two factors other than mobility. The measures are affected by the general growth rate of the retail banking market, and natural demographic changes in the population. These demographic changes include, for consumers, the ratio of younger people entering the market and of mortality among older people; and for SMEs, the rate of formation of new firms and exit of established firms relative to the total stock of SMEs. Based on the results of the inquiry, the churn measure will be controlled for the industry growth rates in each country. However, some remaining differences in demography might still influence country comparison. In the case of longevity such correction was not possible.

7.2.2. Customer churn

Tables 34 and 35 contain, respectively, the country-level weighted average of churn and of growth of number of current accounts for consumers.

[153] Data for Estonia has been omitted from the presentation due to confidentiality reasons.

[154] Banks were asked to report figures net of any organisational changes, e.g. reorganisation of branches. A customer switching bank appears in the number of new accounts and in the number of closed accounts as well, hence dividing by two.

[155] This information is provided by banks as the number of accounts that have been active by a given range of years (i.e., less than one year, between 1 year and 5 years, etc). The weight for calculating average longevity is the median value of each range (half a year for less than one year range, 3 years for 1 to 5 years range, etc.).

Table 34: Customer mobility (churn). Weighted average. 2002-2005. Consumers

	2002	2003	2004	2005	Average
Austria	7.89%	7.77%	8.50%	7.13%	7.81%
Belgium	6.76%	7.74%	6,96%	6,96%	7,11%
Cyprus	7.62%	10.96%	11.96%	13.47%	11.20%
Czech Republic	8.48%	10.39%	10.01%	9.49%	9.72%
Denmark	10.14%	9.58%	10.23%	10.12%	10.02%
Estonia					
Finland	5.00%	3.12%	5.02%	4.57%	4.43%
France	7.35%	7.41%	7.67%	7.75%	7.58%
Germany	9.16%	10.83%	8.38%	9.73%	9.51%
Greece	14.86%	8.00%	12.60%	6.52%	9.49%
Hungary	16.36%	22.67%	13.54%	12.13%	13.82%
Ireland	8.42%	8.36%	7.51%	7.96%	8.05%
Italy	9.36%	9.74%	9.41%	8.45%	9.16%
Latvia	37.94%	16.92%	15.04%	11.16%	15.73%
Lithuania	20.10%	13.50%	9.34%	11.23%	11.79%
Luxembourg	13.08%	19.70%	7.97%	7.94%	10.01%
Malta	7,82%	8,65%	8,32%	9,92%	8,95%
Netherlands	5.32%	4.26%	4.28%	4.30%	4.54%
Poland	13.24%	12.45%	11.27%	11.27%	11.83%
Portugal	7.00%	8.36%	14,78%	12,89%	10,88%
Slovakia	17.89%	14.36%	14.99%	13.93%	14.80%
Slovenia	5.75%	17.13%	13.24%	6.48%	10.62%
Spain	14.98%	13.78%	13.49%	13.93%	14.02%
Sweden	5.94%	5.93%	6.75%	6.45%	6.27%
United Kingdom	7.71%	7.99%	7.31%	6.89%	7.46%
EU-15 Average	9,04%	9,18%	8,85%	8,72%	8,91%
NMS Average	14,01%	13,84%	11,63%	11,12%	11,96%
EU-25 Average	9,85%	9,94%	9,30%	9,11%	9,40%

Notes: Churn: (new currents accounts+closed current accounts)/(2* number of current accounts beginning of year).
Country-level estimates are averages across banks surveyed in the country weighted by number of current accounts at the beginning of the period.
The "Average" column is an average of country values across the period weighted by the beginning of the period number of accounts.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

Table 35: Customers growth rate. Weighted average. 2002-2005. Consumers

	2002	2003	2004	2005	Average
Austria	2.48%	1.31%	-0.07%	1.12%	1.02%
Belgium	2.26%	1.67%	1.71%	3.39%	2.18%
Cyprus	3.62%	3.73%	4.33%	6.28%	4.58%
Czech Republic	1.90%	3.25%	1.73%	1.76%	2.18%
Denmark	-1.12%	0.00%	-0.17%	-0.20%	-0.38%
Estonia					
Finland	-1.90%	-0.09%	-0.77%	0.67%	-0.53%
France	2.77%	3.23%	1.92%	1.82%	2.42%
Germany	1.89%	1.22%	1.09%	2.55%	1.69%
Greece	11.11%	9.34%	-2.25%	8.34%	6.35%
Hungary	2.21%	13.37%	2.59%	3.43%	5.25%
Ireland	5.33%	2.16%	5.15%	5.04%	4.42%
Italy	0.07%	-1.98%	-1.42%	-1.54%	-1.38%
Latvia	33.94%	22.39%	16.29%	8.82%	16.34%
Lithuania	36.08%	9.22%	11.33%	6.99%	10.60%
Luxembourg	-3.29%	-14.84%	-1.93%	-2.98%	-4.27%
Malta	8.64%	12.55%	8.89%	9.06%	9.74%
Netherlands	-2.21%	0.00%	-0.12%	0.24%	-0.53%
Poland	5.84%	2.57%	3.75%	4.30%	3.92%
Portugal	1.19%	-3.61%	-1.26%	2.02%	-0.19%
Slovakia	13.65%	5.75%	6.75%	6.26%	7.11%
Slovenia	4.12%	13.70%	-0.83%	1.02%	4.06%
Spain	3.96%	4.56%	3.91%	3.61%	4.00%
Sweden	0.80%	0.54%	0.30%	1.66%	0.83%
United Kingdom	5.68%	3.96%	4.27%	3.64%	4.35%
EU-15 Average	2.58%	1.85%	1.41%	2.08%	1.94%
NMS Average	7.62%	5.72%	4.21%	4.17%	4.85%
EU-25 Average	3.40%	2.48%	1.86%	2.42%	2.41%

Notes: Growth rate: number of current accounts end of year/number of current accounts beginning of year-1.
Country-level estimates are averages across banks surveyed in the country weighted by number of current accounts at the beginning of the period.
The "Average" column is an average of country values across the period weighted by the beginning of the period number of accounts.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

As indicated above, the churn measure should be adjusted for market growth. This is because growth of the banking sector, whether positive or negative, changes the number of new and closed accounts in the period and, unless controlled for, would feed into the indicator of customer churn. In order to control for country growth the absolute value of the country-level rate of growth of current accounts divided by two[156] is deducted from the churn indicator. Table 36 below shows the result of this correction for 2005 for consumers and SMEs respectively:

[156] Dividing by two in order to be consistent with the definition of churn in this chapter.

Table 36: Churn. Weighted average. Year 2005. Consumers and SMEs

	Churn before control		Growth		Churn after control	
	Consumer	SME	Consumer	SME	Consumer	SME
Austria	7.13%	11.17%	1.12%	-1.49%	6.57%	10.42%
Belgium	6.96%	9.73%	3.39%	-1.67%	5.27%	8.90%
Cyprus	13.47%	21.41%	6.28%	16.81%	10.33%	13.00%
Czech Republic	9.49%	10.74%	1.76%	-0.07%	8.61%	10.70%
Denmark	10.12%	17.28%	-0.20%	3.71%	10.02%	15.43%
Estonia						
Finland	4.57%	6.69%	0.67%	-0.84%	4.23%	6.27%
France	7.75%	13.42%	1.82%	2.31%	6.84%	12.26%
Germany	9.73%	15.16%	2.55%	0.01%	8.46%	15.15%
Greece	6.52%	9.93%	8.34%	12.75%	2.36%	3.55%
Hungary	12.13%	23.76%	3.43%	12.33%	10.41%	17.59%
Ireland	7.96%	8.99%	5.04%	4.08%	5.44%	6.95%
Italy	8.45%	11.95%	-1.54%	1.45%	7.68%	11.23%
Latvia	11.16%	10.29%	8.82%	6.31%	6.74%	7.13%
Lithuania	11.23%	7.85%	6.99%	9.02%	7.73%	3.34%
Luxembourg	7.94%	12.04%	-2.98%	1.50%	6.46%	11.29%
Malta	9,92%	8,95%	9.06%	4.93%	5,39%	6,49%
Netherlands	4.30%	9.74%	0.24%	1.72%	4.17%	8.88%
Poland	11.27%	17.55%	4.30%	1.09%	9.11%	17.00%
Portugal	12,89%	16.03%	2.02%	1.70%	11,88%	14.34%
Slovakia	13.93%	17.00%	6.26%	2.40%	10.81%	15.80%
Slovenia	6.48%	11.49%	1.02%	1.21%	5.97%	10.89%
Spain	13.93%	11.13%	3.61%	1.58%	12.12%	10.34%
Sweden	6.45%	9.58%	1.66%	1.55%	5.62%	8.80%
United Kingdom	6.89%	14.12%	3.64%	0.81%	5.07%	13.72%
EU-15 Average	8,72%	12.91%	2.08%	1.42%	7.55%	12.21%
NMS Average	11,12%	16.46%	4.17%	3.28%	9.02%	14.82%
EU-25 Average	9,11%	13.49%	2.42%	1.72%	7.78%	12.63%

Notes: Churn: (new currents accounts+closed current accounts)/(2* number of current accounts beginning of year).
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

This corrected measure of churn is in relative terms very similar to churn before correction, except for some countries with exceptional growth rates: Cyprus, Greece, and to a lesser extent, Latvia and Malta. New Member States still have after controlling for growth, on average, higher mobility ratios than EU-15. The countries with highest consumer churn are Cyprus, Denmark, Hungary, Poland, Slovakia and Spain, while the countries with the lowest consumer churn are Belgium, Finland, Ireland, Malta, The Netherlands, Slovenia, Sweden and the UK.

SMEs have higher churn ratios than consumers in most countries. This may simply be due to shorter SME lifetimes. However, it may also suggest that SMEs, which can devote greater resources than consumers to finding the right banking arrangements, are mobile customers for retail banking services. The countries with the highest SME churn are Cyprus, Denmark, France, Germany, Hungary, Poland, Portugal, Slovakia and the United Kingdom. The

countries with the lowest SME churn are Belgium, Finland, Greece, Latvia, Lithuania, Malta, The Netherlands and Sweden. There appears to be a positive relationship between the churn measure for SMEs and consumers across countries. Countries with high levels of churn for consumers also have higher values of this measure for SMEs.

7.2.3. Longevity of the banking relationship

Table 37 and Figure 38 illustrate the average age for current accounts for consumers and SMEs. On average EU consumers have maintained their current account with the same bank for around ten years.[157] Longevity is also much higher in the Nordic countries and in the Netherlands than in the other member states.

In the case of SMEs the average age of current accounts is lower than for consumers, at around 8 years, with the Nordic countries and Netherlands again reporting the highest figures. Again, this pattern may reflect the shorter lifetimes of SMEs compared to consumers but may also indicate the greater potential for SMEs to overcome the costs of switching bank.

There is a sharp difference in the average longevity between New Member States and the EU-15. In the new Member States banking relationships are much shorter; around six years on average for consumer and five years for SME current accounts, which, however, is partly explainable by a relatively large share of new relationships in these fast growing markets. As expected, there is a strong correlation between the two measures of mobility.

[157] A survey on 1500 respondents found the average age for consumer banking relations very similar in the US, 10 years. See KISER, E. K. (2002): *Household Switching Behavior at Depository Institutions: Evidence from Survey Data*, Antitrust Bulletin, winter 2002, Vol. 47, iss. 4, pp. 619-40.

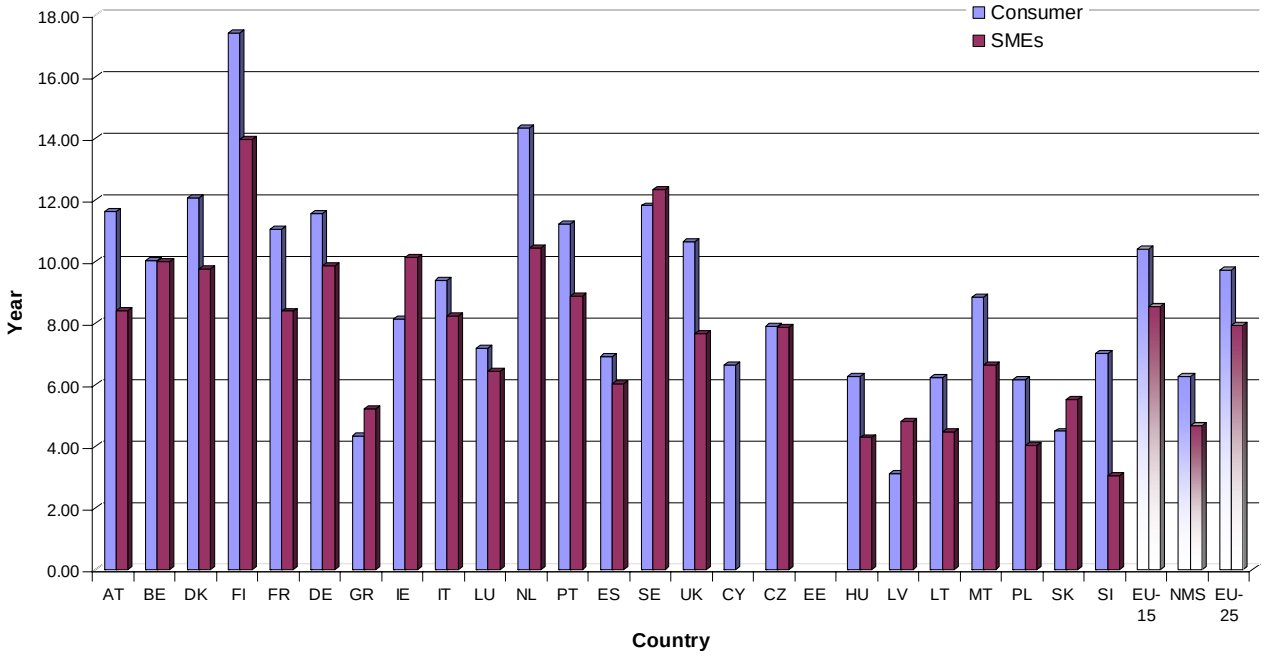
Table 37: Customer mobility (longevity). Weighted average. Year 2005.

	Consumer	SME
Austria	11.64	8.42
Belgium	10.04	9.99
Cyprus	6.65	4.63
Czech Republic	7.91	7.87
Denmark	12.06	9.75
Estonia		
Finland	17.44	13.98
France	11.06	8.39
Germany	11.55	9.85
Greece	4.34	5.23
Hungary	6.26	4.29
Ireland	8.13	10.14
Italy	9.39	8.23
Latvia	3.11	4.81
Lithuania	6.23	4.46
Luxembourg	7.20	6.45
Malta	8.83	6.64
Netherlands	14.33	10.45
Poland	6.18	4.04
Portugal	11.21	8.87
Slovakia	4.49	5.54
Slovenia	7.02	3.06
Spain	6.91	6.02
Sweden	11.82	12.33
United Kingdom	10.66	7.66
EU-15 Average	10.40	8.56
NMS Average	6.28	4.67
EU-25 Average	9.74	7.93

Notes: Country-level estimates are averages across banks surveyed in the country weighted by number of current accounts.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

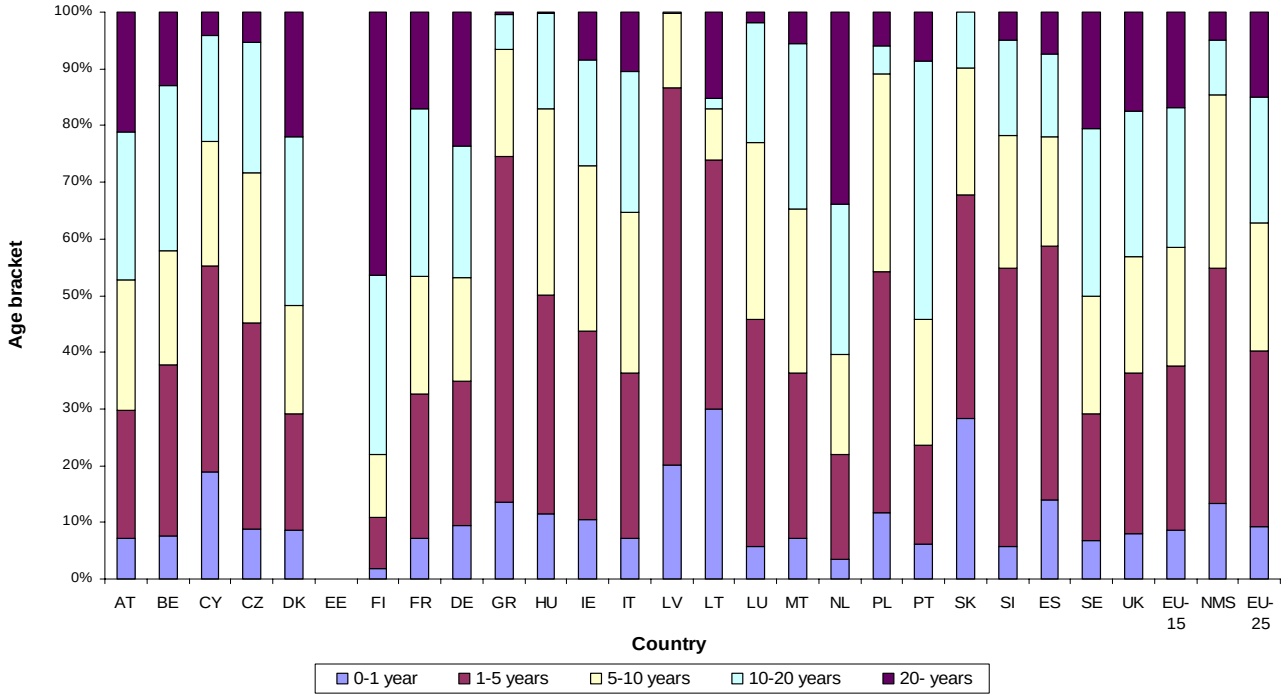
Figure 38: Customer mobility (longevity). Weighted average. Year 2005



Source: Commission's "Retail Banking Survey", 2005-2006.

Figure 39 below illustrates the distribution of active current accounts in age brackets for the length of the consumer's relationship. Not surprisingly, countries with a larger share of long relationships have higher longevity. In Finland 78% of current account relationships are longer than 10 years old. In the EU-15 43% of the relationships are longer than 10 years old, while the corresponding figure for New Member States is only 16%.

Figure 39: Age of current accounts. Year 2005. Consumers



Source: Commission's "Retail Banking Survey", 2005-2006.

7.2.4. The extent of cross-selling in retail banking

Cross-selling is measured as the average number of products that customers purchasing a specific product (referred to here as the "hook" product) are purchasing from the same bank.[158] This measure is calculated in reference to three hook products: current accounts, deposits and mortgages. Table 40 below shows the relative cross-selling ratios for each consumer banking product.

Table 40: Cross-selling ratio. Weighted average. Year 2005. Consumers

	Hook product: Current accounts	Hook product: Deposits accounts	Hook product: Mortgages	All hook products
Austria	2.25	2.16	3.29	2.27
Belgium	2.99	2.33	4.53	2.71
Cyprus	2.18	1.76	4.01	2.01
Czech Republic	1.48	1.46	1.91	1.49
Denmark	1.97	2.30	2.83	2.17
Estonia				
Finland	1.97	2.74	3.54	2.27
France	3.15	2.16	4.27	2.63
Germany	2.10	1.42	2.22	1.63
Greece	1.42	1.56	2.82	1.55
Hungary	1.70	1.99	2.30	1.81
Ireland	1.97	1.96	2.95	2.03
Italy	1.99	1.79	2.54	2.01
Latvia	1.41	2.22	3.01	1.55
Lithuania	1.71	2.09	2.58	1.87
Luxembourg	2.25	2.33	3.83	2.33
Malta	2.56	1.78	3.03	2.05
Netherlands	2.29	2.17	3.41	2.31
Poland	1.61	1.33	2.50	1.50
Portugal	1.81	2.21	3.42	2.03
Slovakia	1.68	1.41	2.68	1.56
Slovenia	1.79	1.81	1.92	1.80
Spain	1.89	1.98	3.63	2.07
Sweden	2.65	2.70	3.55	2.79
United Kingdom	2.08	1.70	2.65	1.94
EU-15 Average	2.24	1.86	3.07	2.07
NMS Average	1.62	1.54	2.45	1.58
EU-25 Average	2.14	1.81	2.97	1.99

Notes: Country-level estimates are averages across banks surveyed in the country weighted by the number of hook products sold.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

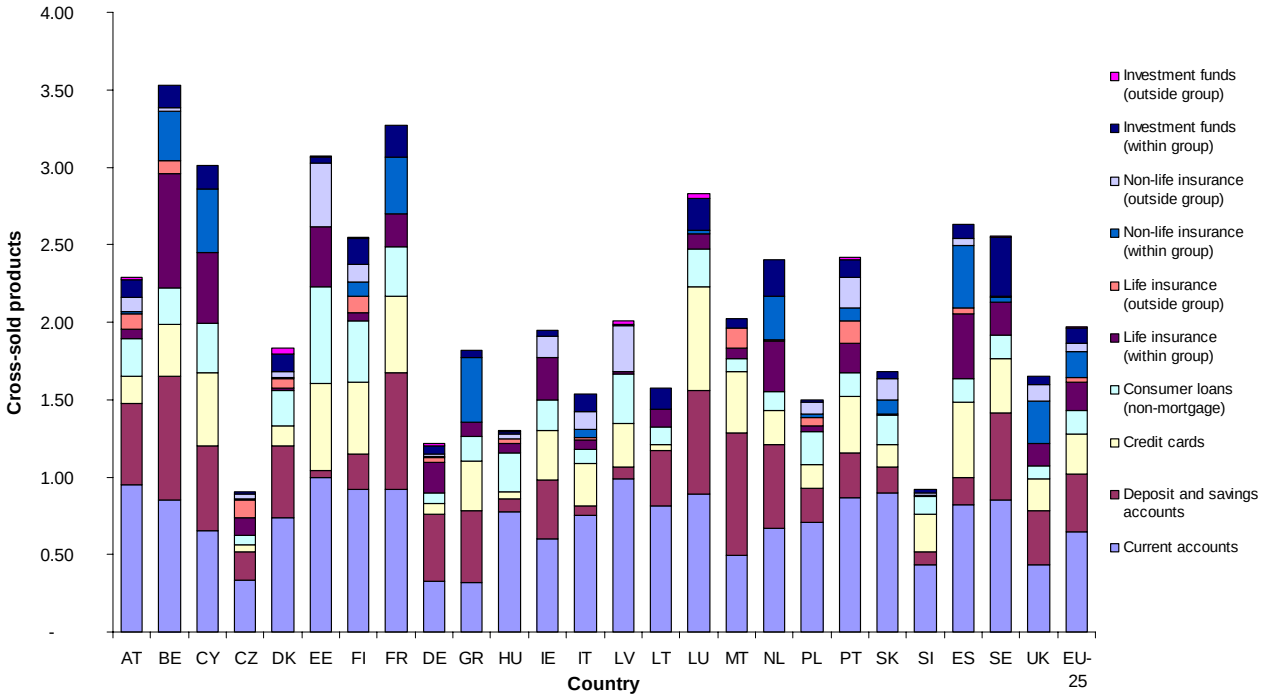
[158] In particular, it is measured as the ratio that in the numerator has the sum of all products purchased together with a specific product (referred to here as the "hook" product), including in the sum the number of purchased hook products, and in the denominator has the number of purchased hook products.

The consumer cross-selling ratios are highest with mortgages. On average consumers purchasing a mortgage buy a total of three products, including the mortgage, from the same supplier. This concentration of their banking activities with a single supplier may result from two explanations: firstly, mortgage customers are likely to be long-term customers and during this relationship they may purchase more services; and secondly, tying by banks (discussed below) may force the customers to purchase a product (e.g. a current account) which they would not otherwise have bought, and which may tie-in the customer further to their relationship with the bank. The evidence indicates that current accounts are by far the most common product consumed jointly with mortgages.

Deposit accounts have the lowest cross-selling ratios, possibly because for this product no current account is tied, and banks compete more effectively on interest rates, targeting each other's customers.

New Member States show a lower degree of cross-selling across all hook products. There is also a strong empirical relationship between longevity and cross-selling (discussed in the following section and in Figure 47). Given that New Member States have lower measures of longevity this may explain in part the observed lower level of New Member States cross-selling.

Figure 41: Mortgage cross-selling. Year 2005. Consumers



Source: Commission's "Retail Banking Survey", 2005-2006.

In the case of SMEs cross-selling seems to increase with the risk level of the product. Loans are very often tied in with current accounts (EU average 58%). Cross-selling levels are again generally higher in the EU15. This is in line with the maturity of the EU15 retail banking markets and the strong relationship between cross-selling levels and longevity of the relationship (longevity is much higher in EU15).

Table 42: Cross-selling ratio. Weighted average. Year 2005. SMEs

	Hook product: Current accounts	Hook product: Loans	Hook product: Credit lines / overdrafts	All hook products
Austria	2.18	2.85	2.97	2.52
Belgium	2.10	2.72	2.77	2.33
Cyprus	1.78	3.29	2.60	2.22
Czech Republic	1.33	2.52	2.63	1.45
Denmark	1.53	2.48	2.06	1.74
Estonia				
Finland	1.91	3.05	3.65	2.15
France	2.43	3.04	3.35	2.71
Germany	2.13	2.02	3.05	2.28
Greece	1.99	2.51	2.54	2.25
Hungary	1.33	2.50	2.44	1.53
Ireland	2.24	2.92	3.21	2.59
Italy	2.35	3.13	2.91	2.62
Latvia	1.22	2.63	2.76	1.39
Lithuania	1.12	1.78	2.25	1.20
Luxembourg	1.76	2.87	2.61	2.03
Malta	2.13	2.76	2.38	2.29
Netherlands	1.90	3.15	2.62	2.18
Poland	1.39	2.52	2.72	1.58
Portugal	2.01	2.47	3.35	2.31
Slovakia	1.15	2.22	1.78	1.22
Slovenia	1.42	2.13	2.60	1.59
Spain	2.09	3.13	3.14	2.42
Sweden	1.59	2.62	2.55	1.86
United Kingdom	2.02	3.61	3.58	2.38
EU-15 Average	2.15	2.88	3.12	2.42
NMS Average	1.34	2.46	2.59	1.51
EU-25 Average	2.02	2.81	3.03	2.27

Notes: Country-level estimates are averages across banks surveyed in the country weighted by the number of hook products sold.
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

7.2.5. The extent of banks' practice of tying products

The levels of cross-selling observed above can be due both to the customer initiative to purchase additional products from the same bank, or due to the supplier requiring the customer to take joint consumption of more than on product. In retail banking, competition is apparently stronger in certain products (mortgage, loans, credit cards) and banks often require a customer that buys one of these products to purchase other, arguably less competitive products. To the extent that this tying is widespread, competition could be harmed. Tying is rather common between mortgages (47%) or loans (43%) and current accounts (consumer), and between loans (58%) and current accounts (SMEs). Despite a

lower degree of cross-selling in New Member States we observe that tying by banks is more common in New Member States than in EU-15.

Table 43: Tying. Percentage of tying. Year 2005. Customers

	Mortgages + current accounts[1]	Mortgages + salary into current account[2]	Mortgage + life insurance[3]	Loans + current accounts[4]	Loans + salary into current accounts[5]
Austria	0%	0%	0%	0%	0%
Belgium	33%	0%	0%	0%	0%
Cyprus	67%	33%	33%	67%	33%
Czech Republic	67%	0%	0%	67%	0%
Denmark	63%	38%	0%	50%	50%
Estonia					
Finland	75%	50%	0%	75%	50%
France	70%	21%	9%	64%	15%
Germany	11%	9%	0%	14%	11%
Greece	83%	0%	33%	67%	17%
Hungary	100%	0%	0%	88%	0%
Ireland	14%	14%	14%	14%	14%
Italy	69%	19%	6%	63%	19%
Latvia	100%	0%	0%	100%	0%
Lithuania	100%	0%	0%	100%	33%
Luxembourg	50%	25%	0%	50%	0%
Malta	67%	67%	0%	67%	33%
Netherlands	0%	0%	20%	40%	20%
Poland	50%	10%	30%	30%	20%
Portugal	100%	14%	43%	100%	0%
Slovakia	100%	14%	14%	100%	14%
Slovenia	25%	25%	13%	13%	13%
Spain	86%	14%	7%	71%	14%
Sweden	20%	0%	0%	40%	0%
United Kingdom	8%	8%	0%	8%	0%
EU-15 Average	43%	13%	6%	41%	12%
NMS Average	67%	8%	17%	55%	14%
EU-25 Average	47%	12%	8%	43%	12%

Notes:
[1] Percentage of banks requiring mortgages customers to open a current account
[2] Percentage of banks requiring mortgages customers to pay this salary into this current account
[3] Percentage of banks requiring mortgages customers to take out a life insurance policy through your bank
[4] Percentage of banks requiring loan customers to open a current account
[5] Percentage of banks requiring loan customers to pay their salary into this current account
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

Table 44: Tying. Percentage of tying. Year 2005. SMEs

	Loans+ current accounts[1]	Loans+ invoices to current accounts[2]
Austria	50%	25%
Belgium	60%	20%
Cyprus	100%	50%
Czech Republic	100%	20%
Denmark	50%	17%
Estonia		
Finland	75%	0%
France	75%	3%
Germany	25%	8%
Greece	50%	33%
Hungary	100%	63%
Ireland	0%	0%
Italy	77%	23%
Latvia	100%	50%
Lithuania	100%	0%
Luxembourg	100%	33%
Malta	67%	67%
Netherlands	75%	0%
Poland	89%	22%
Portugal	100%	57%
Slovakia	100%	29%
Slovenia	100%	33%
Spain	75%	0%
Sweden	25%	0%
United Kingdom	11%	0%
EU-15 Average	51%	10%
NMS Average	94%	30%
EU-25 Average	58%	13%

Notes:
[1] Percentage of banks requiring SME loan customer to open a current account
[2] Percentage of banks requiring SME loan customers to pay all invoices to this current account
The estimates for EU-15, New Member States and EU-25 are country-level averages weighted by population.

Source: Commission's "Retail Banking Survey", 2005-2006.

7.3. The relationship between customer mobility and market performance

Customer mobility can be an indicator of the existence of competitive market discipline. When customers switch suppliers or have the ability to switch them with lower switching costs we would expect that competition in that industry is likely to be high.[159] Therefore, one

[159] Under perfect competition no switching could be observed even in the absence of switching costs, as there is one market price and no product differentiation for each service offered by banks. However, under imperfect

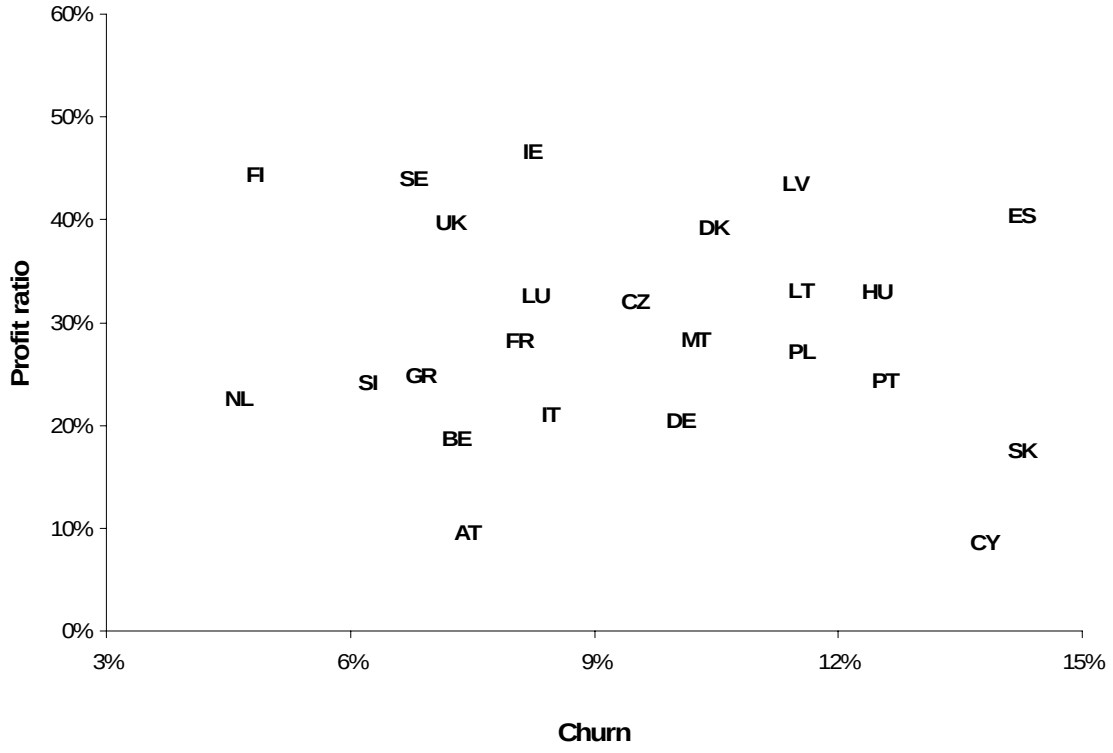
would expect a negative correlation[160] between customer mobility and indicators of competitive structure in an industry (such as profitability and concentration) and between customer mobility and cross-selling. In this section we provide some evidence linking these two phenomena.

The two mobility measures (churn corrected for growth and longevity) are correlated with three indicators of competitive structure in an industry: average profitability, concentration ratios, and the degree of cross-selling. Due to a lack of available data we use market indicators from the year 2004 and mobility indicators from the year 2005.

7.3.1. Customer mobility and retail banking profitability

Figure 45 plots the relationship between the corrected measure of consumer churn and industry profitability for all EU countries. Profitability is measured as profit before tax to total income in retail banking activities. We do not observe a clear pattern in this relationship across countries.

Figure 45: Profit ratio vs Mobility. Country level. Weighted average. Consumers
Profit before tax/total retail income (year 2004) vs Churn (year 2005)



Source: Commission's "Retail Banking Survey", 2005-2006.

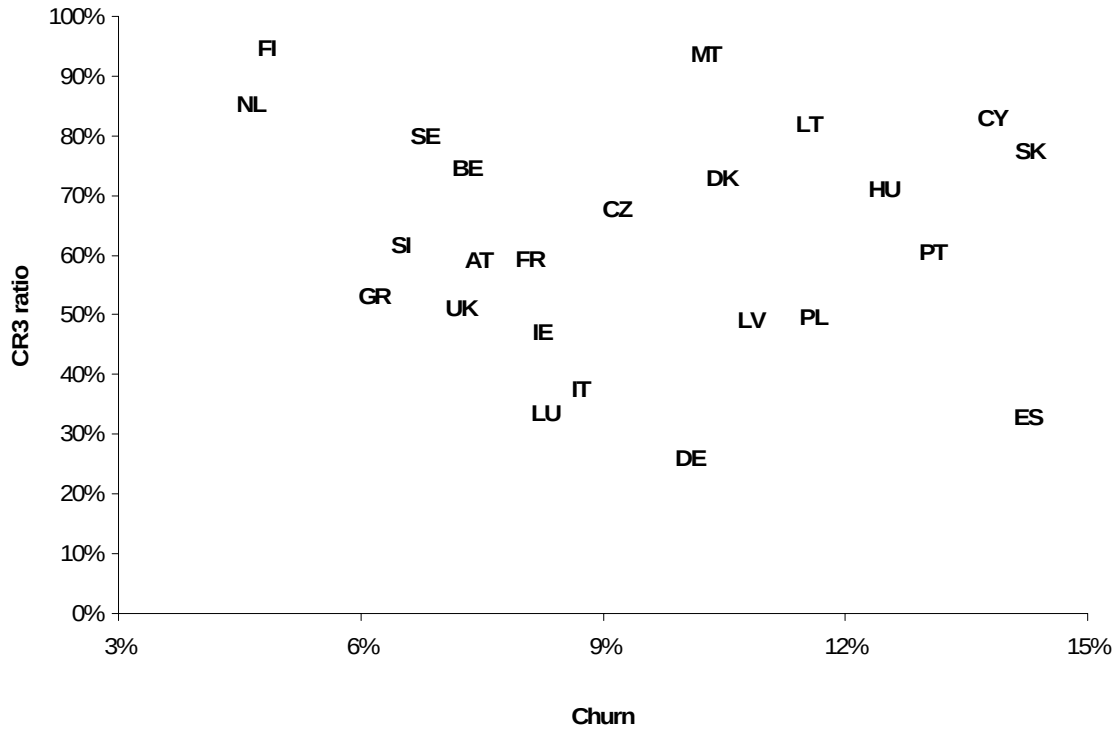
competition like in the existence of switching costs or market concentration this may be a useful empirical approximation that could be analysed.

[160] In particular, higher mobility (higher churn and lower longevity) is related with lower indicators of competitive structure (lower profitability and lower concentration) and lower levels of cross-selling.

7.3.2. Customer mobility and banking market concentration

There seems to be a negative, however not strong relationship between concentration and customer mobility for most of our measures. As an example we report below the negative relationship between our measure of CR3[161] and churn for consumers.

Figure 46: Concentration vs Mobility. Country level. Weighted average. Consumers CR3 (year 2004) vs Churn (year 2005)



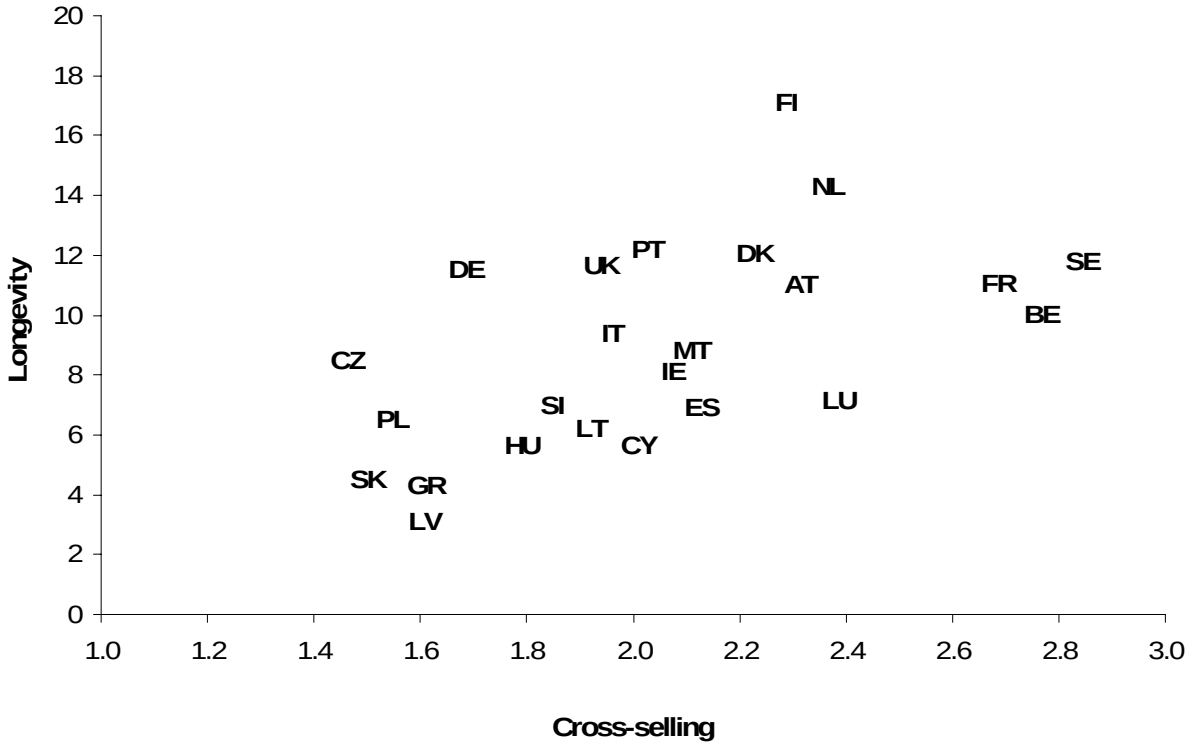
Source: Commission's "Retail Banking Survey", 2005-2006.

7.3.3. Customer mobility and patterns of cross-selling

We observe a clear negative relationship between mobility and cross-selling. Higher average longevities seem to be correlated with higher levels of cross-selling, both for consumers and SMEs (not shown here).

[161] CR3 is the sum of the 3 largest market shares. Intra-sample market shares are calculated as the ratio of a bank's number of current accounts to total market number of current accounts. These market shares are then extrapolated to "population value" by using the sample coverage ratios (obtained, in turn, from deposit ratios from Bankscope).

Figure 47: Mobility vs Cross-selling. Country level. Weighted average. Year 2005. Consumers. Longevity vs Cross-selling



Source: Commission's "Retail Banking Survey", 2005-2006.

7.3.4. Analysis of customer mobility at bank level

One may think that the inter-country variations described above may not have a lot to do with competitive structure but with other industry characteristics such as size of the market, growth, etc, for which we have not controlled in our analysis. In order to control for these country level effects, we also report results at bank level. Table 48 below contains the correlation estimates for our indicators of mobility and market structure, controlling for country effects (estimates for country dummies are not reported in the table).[162] The numbers reported in bold indicate that the coefficient is statistically significant (different from zero) at 5%.

[162] The interpretation of these estimates is as follows: the estimate is the variation of one variable when the other variable changes in one unit. For the purposes of correlation estimates we have measured the relevant variables in the following units:
- churn in percentages
- profits in percentages
- market share in percentages
- longevity, in number of years
- cross-selling in ratios

Table 48: Correlation estimates for mobility and market structure

Estimate (t-statistic)		Profit ratio	Market share
Churn	**Consumer**	**-1.05**	**-0.44**
		(-3.07)	(-3.46)
	SME	-0.04	**-0.24**
		(-0.18)	(-2.43)
Longevity	**Consumer**	1.64	**1.24**
		(1.81)	(3.97)
	SME	**3.00**	**1.93**
		(2.37)	(4.43)

Source: Commission's "Retail Banking Survey", 2005-2006.

As expected, bank-level analysis shows a negative relationship between mobility and profits both for consumers and SMEs using churn for consumers and longevity for SMEs. The estimates are significant at reasonable degrees (less than 5%) except for the estimates between longevity and profit ratio for consumers (significant at 10%, which is a below-standard level of significance but still reasonable) and between churn and profits for SMEs. The analysis shows also a negative relationship between mobility and market share both for consumer and SMEs. In this case, all estimates are significant at a reasonable level.

The overall picture from these estimates is that indeed customer mobility is negatively correlated with profit ratios and market share, and that these correlations tend to be statistically more significant when longevity is used instead of churn as a measure of mobility.

7.3.5. Cross-selling and banking sector performance

The degree of cross-selling in an industry is also often perceived as an indicator of the competitive structure in a market. Customers can very well be purchasing multiple products from a single provider due to the existence of economies of scope that allow the customer to reach a higher level of satisfaction from concentrating its purchases. However, the observation of a large degree of cross-selling may also indicate that switching suppliers is very costly and that a single provider for many products has a higher likelihood of rent extraction from the customer. One way to discriminate between these two views is to correlate the observed degree of cross-selling in an industry with observable indicators of competitive structure in the industry. In this section we provide some evidence linking these two phenomena.

In what follows, we use the indicator of total cross-selling, the ratio of the sum of all sold hook products plus the products sold together with them to the sum of all sold hook products. We correlate the measure of cross-selling with two indicators of competitive structure in an industry: average profitability and concentration ratios. Due to a lack of available data we use market indicators from the year 2004 and cross-selling indicators from the year 2005.

7.3.5.1. Cross-selling and retail banking profitability

In view of the potential market power that banks gain through cross-selling, one would expect to observe a positive relationship between the degree of cross-selling in a particular Member State and the level of banks' profitability. However, we do not observe a positive correlation on the data between profitability and cross-selling either for consumers or SMEs at country level (evidence not shown here).

7.3.5.2. Cross-selling and market concentration

Our indicator of cross-selling seems to be positively correlated at country level (evidence not shown here) with concentration for consumers but negatively correlated for SMEs, however none of these relationships are strong.

As a conclusion, country level analysis shows that different levels of cross-selling activity are not strongly correlated with profitability and concentration levels in the country. These results suggest that differences across countries are probably more associated to different competitive strategies across countries than to the indicators commonly used as measures of market power.

7.3.5.3. Analysis at bank level of relationships to cross-selling

Table 49 below reports the correlations between our indicators of cross-selling and market structure, controlling for country effects (estimates for country dummies not reported in the table).

Table 49: Correlation estimates for cross-selling and market structure

Estimate (t-statistic)		Profit ratio	Market share
Cross-selling	**Consumer**	4.51	**5.46**
		(0.89)	(2.95)
	SME	6.83	3.45
		(1.36)	(1.78)

Source: Commission's "Retail Banking Survey", 2005-2006.

Bank-level analysis shows a small positive relationship between cross-selling and profits both for consumers and SMEs but with significance below acceptable levels.

Bank-level data shows a positive and significant relationship between cross-selling and market share for consumers, and a positive and strong relationship between cross-selling and market share for SMEs, however with a smaller level of significance, at about 10%. Banks with a larger market share in their national markets are more likely to cross-sell products.

7.3.6. Conclusions of correlation analysis

Bank level data show that mobility seems to be correlated with typical market power indicators, as more concentrated and more profitable markets also seem to show lower levels of mobility.

Cross-selling shows less clear correlation patterns than those of mobility. Although correlations between cross-selling and market shares using bank level data show a positive relationship, they do not indicate a positive relationship between cross-selling and profits.

However, the inquiry would not draw the immediate conclusion that low mobility indicators signal that highly profitable and concentrated markets in Europe are solely the result of a lack of competition. The evidence provided here is suggestive, but the analysis has not controlled for the effects on mobility of third variables absent in the analysis. This, therefore, advises complementing our preliminary conclusions with multivariable correlation analysis at a later stage.

7.4. Possible measures to reduce obstacles to customer mobility and strengthen competition

This chapter has set out the main factors that reduce customer mobility in the retail banking market and has shown that the scale of these obstacles largely explains the low level of mobility between European customers. The analysis has also shown that mobility seems to be correlated to a certain extent with typical market power indicators, as more concentrated and more profitable markets also seem to show lower levels of mobility. It is clear that customer mobility is an important determinant of the overall intensity of competition in retail banking. The concluding section of this chapter looks at possible measures, which could help to increase the customer mobility and thereby strengthen competition.

As a follow-up action to the White Paper on Financial Services Policy 2005-2010, the Commission has decided to set up an Expert Group on Customer Mobility in relation to Bank Accounts in May 2006, which will further work on identifying barriers to customer mobility at national and EU level and advising the Commission on how these barriers could be addressed.

The measures considered here refer to the five main factors that reduce customer mobility identified above:

1. Administrative burden
2. Information asymmetry and low price transparency
3. Cross-selling and tying of banking products
4. Customer preferences and choice
5. Closing charges

7.4.1. Administrative burden

Switching bank accounts implies transactional costs, including but by no means exclusively the procedure of filling in forms. This administrative burden can be particularly heavy for switching current accounts owing to the range of operations conducted; for example transferring direct debits and payment orders, informing employers or customers of new bank details, etc. Transition between accounts also creates potential risks since payments could fail to be made or received. Altogether these administrative costs create significant inconvenience for customers and may deter them altogether from switching banks.

This administrative burden might be reduced by the following measures:

- switching regulations are provisions which would require banks to observe certain procedures and deadlines when transferring a customer's account details to a new bank;
- switching codes are undertakings between banks which have similar features to switching standards, though are delivered through industry self-regulation rather than rules set by the regulator.

In addition to framework issues, the scope of switching arrangements should also be considered. As the basic banking product, but also one of the most complex to transfer, current accounts should be a priority. However, such external assistance might be considered for other products, e.g. mortgages as well. An additional question on the scope of switching arrangements is which customers should be eligible for assistance. Clearly, consumers should be a priority for any such assistance. However, small firms may also face similar problems when switching banks and be no better equipped to deal with them.

A final set of issues when designing switching arrangements concerns their operation. These issues range from the instruments to be used in the service; roles and responsibilities when customers switch banks; and acceptable deadlines for each stage of the process.

Consideration should also be given to how to raise customer awareness of such switching arrangements, and ensuring that procedures are in place for reviewing the content of the arrangements and handling complaints.

The Commission is keen to hear the views of market participants on whether there is a case for considering switching arrangements in retail banking, and whether they have had a beneficial impact thus far.

The box below provides examples of switching arrangements in four Member States, though similar arrangements may also operate in other Member States.

Examples of switching arrangements in Member States

In The Netherlands, the Netherlands Banking Association introduced a self-regulatory code (called "service") between banks in 2004 to facilitate current account switching. Banks take on a substantial part of administration for 13 months in order to ensure the continuity of the customer's payments. The service was launched with a focus on consumers, although within a year it was adapted for SMEs as well. In the first two years the total number of users was 115.000 (out of which 5.000 were SMEs). A dedicated website was launched to provide information to the public. Brand awareness among Dutch is 49%, and among those who consider switching is 74%.

In Ireland the Irish Bankers Federation introduced its Personal Account Switching Code in February 2005. The old and new bank operate together to complete the transfer within 10 working days. The banks prepared switching packs (forms), and distributed them to branches. In the first year of its operation some 17.000 accounts were switched under the Code, and customer awareness of it grew to 22%. Since the Code was introduced leading banks started switching campaigns with free offers on current account fees. A similar Business Account Switching Code for SMEs was launched on 1 July 2006.

Switching in the UK for consumers is covered by the Banking Code which was delivered by industry (e.g. British Bankers' Association) more than ten years ago, but monitored by the regulator and subject to periodic independent review. In response to the Cruickshank report (2000), and two follow-up inquiries by the UK government ("Julius report", "Kempson report"), the Code was amended to better facilitate switching accounts, e.g. to improve the speed and accuracy. The regulator reports very high levels of compliance with the code. Apart from banks' own websites promoting switching to them, a number of comparison sites exist and assist the customer in switching. The Business Banking Code covers the switching of accounts for SMEs.

In Austria the banking regulator reports that retail banks are subject to a self-binding code of conduct concerning the transferring of consumer current accounts between banks. Compliance with the code is verified by on-site inspections performed by the regulator.

7.4.2. Information asymmetry and low price transparency

Information asymmetries reduce customer mobility in retail banking markets in two ways. Firstly, comparing complex prices across providers may make it difficult for customers to weigh the offer provided by the current bank against others in the market. Several possibilities exist to enable customers to compare suppliers more efficiently:

1. Providing transparent comparable information *ex ante* on prices of banking products would enable customers to quickly and easily compare offers between several providers. Greater transparency should help to exert competitive pressure on banks and enable customers to switch banks more easily. For example, the EU proposal for a Consumer Credit Directive specifies pre-contractual information requirements. Another example of pre-contractual comparative information is ESIS (European Single Information Sheet) which is applicable to home loans.

2. Disclosure of the prices and charges applied *ex post* by banks for particular products would also help to increase transparency and consumers' price awareness. For example, banks in Belgium are obliged (under Royal Order of the 23rd of March 1995 concerning the information about the price of financial homogeneous services, Article 7§2 and Article 10) to provide customers with two sets of financial information at least once per year. One set of information describes the schedule of interest rates and fees in force for a particular banking product. A second set of information provides the customer with a summary of the interest and charges applied to their account in the previous twelve months. Two particular benefits of this approach are that it informs customers how much they pay in practice for the banking services they consume; and it provides a better basis for selecting the most appropriate provider, should consumers wish to switch bank.

3. Financial awareness and product knowledge of customers. Some Member States have instituted programmes to enhance consumers' understanding of financial services products and help them make appropriate choices. Similar programmes also operate on a limited scale in the United States. [163]

Second issue of information asymmetry faced by banks seeking to price competitively for new customers is pertinent for both consumers and SMEs. Given the reliance of many SMEs on bank financing it is crucial that these firms can switch banks when necessary without incurring a large increase in loan repayments or facing continued problems obtaining additional finance. Credit registers where banks share customer data may help to address these asymmetries, although their success in doing so depends mainly on the specificity of the data collected and the terms of access to the database. Where this form of information asymmetry is considered a significant obstacle to mobility, a second possible solution is a portable credit record or credit history. The Irish Competition Authority in its 2005 Final Report on Competition in the (non-investment) banking sector in Ireland[164] recommended that consumers be provided with a free 12-month account record, and business customers be provided with a free 36-month account record on request. However, these recommendations were made in an advisory capacity.

The Commission is keen to hear the views of market participants on the appropriate tools to address information asymmetry and price transparency – particularly for consumers – in the retail banking industry. Where relevant, the Commission is also interested in the impact that such measures have had in particular Member States. We welcome the views of all market participants on this issue during the public consultation on this report.

7.4.3. Cross-selling and tying of banking products

Banks still cross-sell widely to customers throughout the EU and customers still have strong incentives to buy more products from their current bank. Moreover, despite significant advances in telecommunications reducing costs and the enabling of banking across a range of distribution channels, most banks entering other Member States still place most emphasis on establishing or acquiring a branch network.

The inquiry has shown that tying is a widespread practice in retail banking across the EU. For example the majority of banks in the market survey tied a current account to a loan to SME customers and nearly half of all banks tied a current account to a mortgage to

[163] A US survey on 46 banks in 2005 concluded the following results: the average annual financial literacy budget of responding banks were USD 5.4 million (4.2 million of this amount was spent on homeownership literacy programs); they reach annually on average 10243 consumers through their Mortgage/ Homeownership Counselling Programs, and 58344 students through their college student-based financial education programs. Consumer Bankers Association: 2005 Survey of Bank-Sponsored Financial Literacy Programs

[164] See: http://www.tca.ie/banking.html

consumers. The Commission is keen to have the views of stakeholders during the public consultation on the potential competition problems that may arise from product tying.

7.4.4. Customer preferences and choice

Some customer preferences are influenced by the way retail banking has traditionally been conducted. For example it is likely that, over time, the increasing use by customers of internet and phone banking services will reduce their attachment to local providers and branch networks. Large numbers of SMEs already use electronic banking for the bulk of their business transactions for reasons of convenience and lower costs.

7.4.5. Closing charges

Closing charges for retail banking services raise two separate issues. Firstly there is a question about whether it is appropriate for banks to levy closing charges on particular products. For current accounts and deposit accounts, the case for closing charges or early repayment fees is far less convincing than it may possibly be for other products. Where high closing charges are imposed on e.g. current accounts it may be the case that their specific aim is to discourage customers from switching bank.

The second issue raised by closing charges is, where they are in place, whether such charges are set at an appropriate level. This is a difficult judgment. In several Member States local regulations cover closing charges and early repayment fees. Responses from banks to the Commission's market survey did not highlight many outliers in the level of closing fees, although early repayment fees for closing consumer loans in some Member States appear high.

The Commission is keen to hear the views of market participants on closing charges and on the practice in Member States.

Conclusions

The inquiry has identified five factors that may reduce customer mobility in the retail banking market:

- Administrative burden: switching financial service provider is sometimes perceived as a complex administrative operation; its implementation requires time and effort and may risk disruption to customers' financial affairs.

- Information asymmetry and price transparency: the information provided to retail banking customers for current accounts and other products may be inadequate or complex, making it difficult to compare banks prices and products.

- Cross-selling and bundling of banking products: Cross-selling and bundling are common strategies for retail banks. While they may benefit consumers in some respects, these practices tend to reduce price transparency and may tie customers into long relationships.

- Customer preferences and choice: customers value established relationships and trust with their bank and the bank's location is also important. These preferences may reduce consumers' willingness to switch bank.

- Closing charges: banks' practices vary according to the specific product and Member State. Local regulations may limit the scope and level of closing charges. Charges for closing current accounts are applied in a few Member States, with banks in Italy reporting the highest levels.

The analysis of data on customer mobility enables some interesting preliminary findings:

- Customer mobility in retail banking appears fairly low and banking relationships are long. Consumers hold their current accounts with the same bank for an average of 9.7 years, compared to 7.9 years for SMEs.

- Banks cross-sell most products to consumers with mortgages and to SMEs with credit lines (on average 3.0 products in both cases). There is a clear positive relationship between the length of customer relationship and level of cross-selling.

- Tying is a fairly common practice across the EU. Banks reported tying a consumer current account to mortgages and term loans in 47% and 43% of cases respectively. 58% of banks reported tying an SME current account to an SME term loan.

- Mobility patterns in the new Member States are quite different to the EU15. The average age of current accounts is markedly lower (6 years for consumer and 5 years for SMES) and cross-selling levels are also lower. Tying of products is widespread. 67% of consumer mortgages and 94% of SME loans were tied to a current account.

- Bank level data show that customer mobility is negatively correlated with typical indicators of market power. Customer mobility tends to be lower in Member States where banks are more concentrated and more profitable.

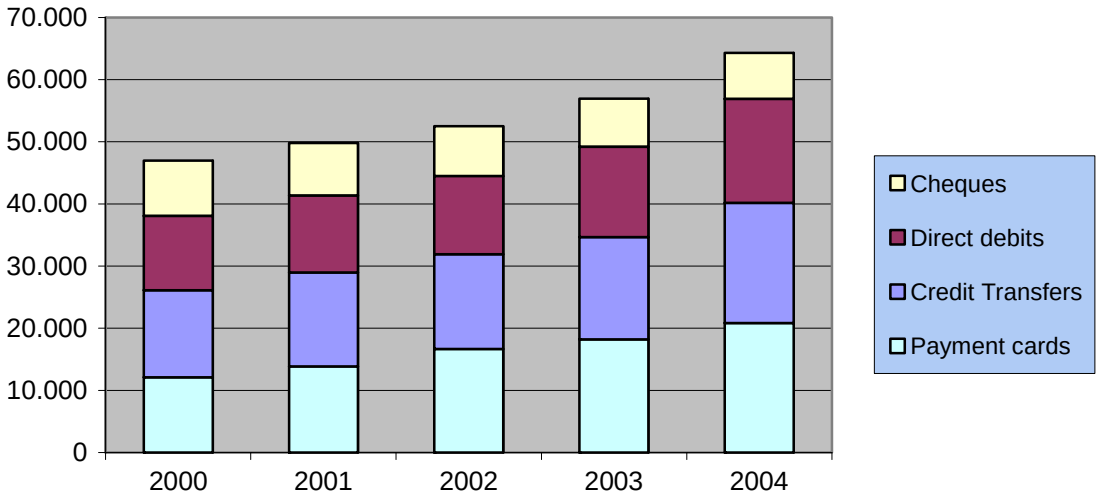
8. RETAIL PAYMENTS - CLEARING ARRANGEMENTS AND INTERCHANGE FEES

The analysis presented in this chapter covers retail payment systems[165], excluding payment cards, and focuses on clearing[166] agreements and on specific financial aspects of the organisation of payment systems, namely inter-bank agreements on interchange fees. The final section is devoted to a preliminary assessment of competition issues resulting from the investigation.

8.1. Cashless payment transactions in the EU

Cashless payment transactions in the EU amounted to 60.3 billion transactions in 2004[167]. Considering the importance of payments for all economic sectors, for consumers and SMEs, effective competition between banks and between payment systems has an important role to play in improving the efficiency of services, reducing prices for consumers and enhancing the competitiveness of the whole economy.

Figure 50: Number of cashless payments in the EU (million)



The growth of cashless payment instruments shows a similar trend in the USA, where payments traditionally made with paper instruments – cheques and cash – are being replaced by electronic payments. Nevertheless in the USA, of the total 80.9 billion cash-less payments in 2003[168], cheques continue to represent the largest share of payments (45,5%), while in Europe they represented in 2004 only a share of 12%, which is decreasing over time.

[165] Retail payments are payments which are not included in the definition of large-value payments. Retail payments are mainly consumer payments of relatively low value and urgency. Large payments are payments, generally of very large amounts, which are mainly exchanged between banks or between participants in the financial markets and usually require urgent and timely settlement. Source: ECB glossary.

[166] Clearing is the process of transmitting, reconciling and, in some cases, confirming payment orders prior to settlement, possibly including the netting of instructions and the establishment of final positions for settlement. Source: ECB Glossary.

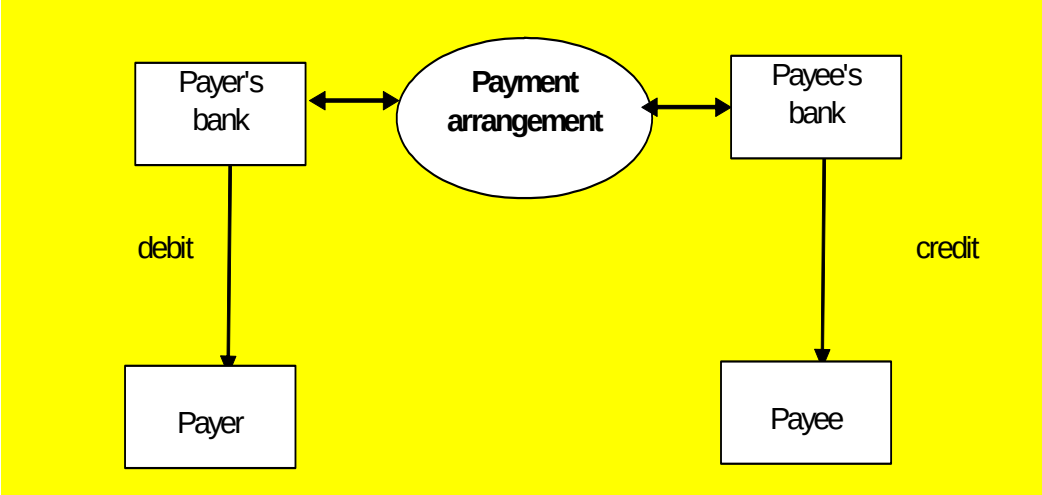
[167] Source: ECB Blue Book (2006): *Payment and Securities Settlement Systems in the European Union and in the Acceding Countries – Addendum Incorporating 2004 data*. Available at: http://www.ecb.int/pub/pdf/other/bluebook2006addenden.pdf

[168] Source: Federal Reserve Bulletin (2005): *Trends in the Use of Payment Instruments in the United States*, Spring 2005.

8.1.1. Retail payment systems: background

In principle, a retail bank payment involves five different parties: the payer; the payee; two banks providing customers with transaction facilities; and some inter-bank payment arrangement (which can be referred to as payment system) for effecting the transactions between the two banks.[169] Figure 51 provides a simple illustration of these arrangements.

Figure 51: Simple model of payment arrangements



To make payment services available to consumers, banks and other payment service providers have to have access to facilities to conclude the payment transaction. The way a payment is executed between two banks ("Payment arrangements") requires a number of supporting activities. Two activities are particularly important:

- payment transmission, clearing and settlement of payments (normally referred to as "payment infrastructures"); and
- an agreement to fix standards covering technical, operational and sometimes commercial aspects as well as financial aspects of the inter-bank relations (normally referred to as "payment scheme").[170]

When the payer and the payee have an account at the same bank, the exchange of information and balance calculation occur normally within the institution. These transactions are referred to in this report as "on us" payments. When the payer and payee are customers of a different bank, some kind of inter-bank arrangement is required. These arrangements may be bilateral or multilateral in nature.[171] A *bilateral arrangement* is used when the sorting and processing of payments takes place directly between two banks. A very common arrangement is when a third institution known as a correspondent provides payment arrangements to other banks according to contracts that are negotiated bilaterally. *Multilateral arrangements* can be either based on "clubs" of particular types of institutions or can take the form of multilateral open arrangements. Frequently these arrangements are organised in an automated clearing house (ACH), where financial institutions present and exchange data and/or documents relating to funds transfers to other financial institutions under a common set of rules. Alternatively, multilateral arrangements may be based on a clearing association that organises and facilitates bilateral clearing among institutions.

[169] A comprehensive description of payment clearing and settlement systems in the EU, including a detailed report of the main retail payment systems of the Member States, is provided in the ECB Blue Book. See http://www.ecb.int/paym/pol/payover/retail/html/index.en.html

[170] In some Member States, whilst schemes are defined at inter-bank level, a separate company is responsible for the processing of payments under those schemes.

[171] For more details see paper from BIS (2000): *Clearing And Settlement Arrangements For Retail Payments In Selected Countries*

In relation to cross border payments in the EU, some banks can make use of their own network of branches and subsidiaries as well as of their correspondent network. Another possibility is for a bank to seek directly to participate in an ACH or other clearing systems located in another Member State. According to a study conducted by the RBR[172] for the Commission, 80% of cross border bank-to-bank credit transfers are still made through correspondent arrangements or intra-bank transactions.

The choice of the payment arrangement depends on various economic and historical factors. The volume (i.e. the number) of payments to be cleared as well as the number of financial institutions involved represent the major factors in determining the relative convenience of the various types of clearing arrangements.

8.1.2. Retail payments: a network industry

In general, payment systems have been recognised by many authors[173] as a network industry. A central feature of networks is that network goods/services exhibit network externalities (also called network effects). In a nutshell, this means that adding another customer increases value to the existing customers of the network. For example, McAndrews[174] analyses network effects in payment systems and identifies two main characteristics in the provision of retail payment services. Firstly, the more widely a payment instrument is accepted, the more benefits it brings to a consumer using it (*demand side externality*). Secondly, the technique chosen to carry out the payment will depend on the technique chosen by other firms; in turn economies of scale foster the industry's willingness for cooperation (common standards, sometimes joint ownership of infrastructures) in providing these services (*supply side externality*).

At the national level, it is common for only one major retail payment system to exist or alternatively two or more systems may exist in parallel but they are often dedicated to different payment instruments The existence of one "dominant" system can be explained by the economies of scale as well as positive demand side externalities, but it could also be seen as reflecting the historical development of payment services by the banking community and thus not necessarily imply a "natural monopoly" situation.

8.1.3. Selected studies by National Competition Authorities on competition in payment systems

Competition issues in payment systems have been the object of increasing attention in the last decade. In the UK, the Cruickshank report[175] highlighted a lack of competition in payment systems. According to the review, this was caused by the underlying economic characteristics of the industry, where network effects place a "natural" limit on the level of competition. More recently the OFT conducted a study[176] on clearing systems concluding that there could be incentives for the members (the banks that own the system) of the Clearing Houses to operate anti-competitively vis-à-vis the indirect members (the banks that depend on other banks to have access), with whom they compete at the retail level. However, given that charges from the Clearing Houses amount to only 4% of the total cost incurred by banks to provide end-to-end payments services, anticompetitive behaviour at the Clearing House level would, according to the study, have "small" effect at the retail level.

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[172] *Regulation 2560/2001 Study of Competition for Cross-Border Payment Services*. Available at http://europa.eu.int/comm/internal_market/payments/docs/reg-2001-2560/impact_en.pdf

[173] For a review of the main literature, see also KEMPPAINEN, K. (2003): *Competition and regulation in European retail payment systems,* Bank Of Finland Discussion Papers.

[174] MCANDREWS, J. (1997): *Network Issues and Payment Systems,* Federal Reserve Bank of Philadelphia Business Review, December 1997, pp. 15-25.

[175] Review of Banking Services in the UK (2000)

[176] OFT Market Study into the UK Payment system (2003). Available at: http://www.oft.gov.uk/Business/Market+studies/paysys.htm

The Irish Competition Authority's 2005 report on Competition in the non-investment banking sector examined, among other issues, competition conditions in payment clearing systems. The report highlights competition concerns in relation to difficulties the new banks would encounter in joining the clearing system as full members. Also, the corporate governance structure of the payment system raised the concern that participating institutions, by developing a joint strategy for the system, may in some way coordinate their competitive behaviour.

Earlier in 2006, the Swedish Competition Authority published a report: *Terms of Access to Payment Systems: the Different Positions of Small and Large Banks*. The Authority was concerned that small banks may encounter difficulties, both in terms of pricing and other requirements, particularly those of a technical nature. The conclusion of the study was that in specific segments of the payment service market, particularly concerning the provision of ATM services, the terms of access to payment system infrastructure could impede competitive growth.

8.1.4. The European context: towards a single market

Following the successful introduction of the Euro first in scriptural form and then in notes and coins, the fragmentation of Europe's payment systems has come to look like an anachronism. Whilst consumers using cash had the advantage of a borderless currency experience within the euro-zone, those using more advanced electronic means of payment had more limited options, some of which were quite expensive. This situation continued to distort cross-border trade, as well. In the absence of industry measures, Regulation 2560/2001 imposed the principle that the price for cross-border Euro payments within the EU could not be higher than applied to domestic payments. However, the costs of such payments to banks seem to remain high.

The European Payments Council (EPC) is the decision-making and coordination body of the European banking industry in relation to payments. It was created just after the adoption of Regulation 2560/2001. The declared purpose is to support and promote the creation of the Single Euro Payments Area (SEPA). The basic idea is that any payment instrument in euro can be used anywhere in the EU. The SEPA aims to become an integrated market for euro payment services which is subject to effective competition and where there is no distinction between cross-border and national euro payments within the EU. European banks set out their commitment to realizing this vision in the so-called Crowne Plaza declaration by the European Payments Council, in March 2005.

The Commission has also adopted in December 2005 a proposal for a Directive for a New Legal Framework (NLF) for Payments in the Internal Market. [177] The aim of this proposal is to establish rules for being a payment service provider and to harmonise legal rules regarding the provision of payment services (e.g. who pays for payment transactions, transparency in pricing, execution times, liability in case of default, consumer information and rules on revocability of payment orders). The proposal also contains an article (art. 23) on non discriminatory access to payment infrastructures.

In the field of clearing and settlement infrastructures, the objective of SEPA is for retail payment systems to be able to process "SEPA compliant" payments and to be fully interoperable for basic services. The prospect of the transformation from domestic clearers to one or several pan-European automated clearing houses - (PE-ACH) is seen by some as offering new growth opportunities, while for others it threatens their longstanding business model[178]. It is also expected that existing market infrastructures will consolidate in order to

[177] See: http://europa.eu.int/comm/internal_market/payments/docs/framework/com_2005_603_en.pdf
[178] SIBOS issues (2005): *Looking beyond the boundaries – transformation of domestic ACHs*, 5 September 2005.

exploit economies of scale: therefore both the number of retail payment clearing and settlement infrastructures and the costs related to their services are expected to decrease[179].

8.2. The Commission's inquiry into clearing infrastructures

8.2.1. Methodology and limitations as to scope

The scope of the analysis contained in this chapter is limited to non-card payment systems and their associated inter-bank clearing arrangements. This does not exhaust the range of possible issues in this space, which in a customer-to-customer view involves a range of protocols and technologies, and also features an important role for internal clearing and settlement engines (for on-us transactions). Also for cross-border payments, dependence on correspondent banking arrangements remains significant.

The analysis does not include:

- Data on arrangements and the relative costs of internal clearing and bilateral correspondent banking arrangements
- Data on payment systems with targeted membership[180], such as TIPANET (co-operative banks), IBOS; Eurogiro (which was originally designed for national postal organisations) at the European level and similar networks at the national level;
- Costs banks have pay to other parties (such as processors and SWIFT) that provide services in relation to the execution of payments. [181]

8.2.2. Overview of the surveyed infrastructures

Over the last years, banks and payment systems in the Member States have been evolving to a large extent independently of each other and within the scope of their national boundaries. In most cases, payment systems have selected and implemented their own technologies, formats and service levels, as well as governance models. Banks have implemented those specific technologies and clearing practices on a per country basis.

A questionnaire was sent to clearing infrastructures that operate in the EU-25 Member States. The addressees were selected from the list of payment system infrastructures provided to the Commission by National Central Banks (NCB). Table 52 below provides the list of the surveyed retail payment infrastructures in the European Union that are included in the analysis presented in this preliminary report.[182]

[179] ECB (2006): *Towards a Single Euro Payments Area – Objectives and deadlines*, Fourth Progress Report, February 2006

[180] An exception is the system KUBAS that clears only Credit Union transactions.

[181] Individual banks have in their reply indicated costs paid to Swift and to processors providing them access to the clearing system; however, the level of information was not of such a quality to provide a general picture at this stage of the investigation.

182 Domestic retail payments in Austria are processed on a bilateral basis between credit institutions; there is no multilateral clearing system in place yet. The reply form the Hungarian clearing system did not arrive in time to be included in this preliminary report.

Table 52: Payment infrastructures surveyed in the sector inquiry

Belgium	CEC
Cyprus	JCC TRANSFER
Czech Republic	CERTIS
Denmark	SUMCLEARINGEN
Estonia	ESTA
Finland	PMJ[183]
France	SIT
Germany	RPS
Greece	DIAS and ACH
Ireland	IRECC and IPCC
Italy	BI-COMP
Latvia	EKS
Lithuania	LITAS and KUBAS
Luxembourg	LIPS_NET and DOM-ELECTRONIQUES
Malta	MARIS and CHM
Netherlands	INTERPAY
Poland	ELIXIR
Portugal	SICOI
Slovakia	SIPS
Slovenia	GC
Spain	SNCE
Sweden	BGC
UK	BACS and C&CCC
Europe	EBA CLEARING: STEP2

Depending on the country and on the payment instrument, the clearing and settlement processes entail a number of detailed steps and involve different parties: e.g. a number of different service providers and different clearing systems. There are a number of countries where schemes with targeted membership exist in addition to the open national systems. For example, in Germany, commercial banks, savings banks, co-operative banks and Deutsche Postbank AG operate their own giro networks; in addition, the Deutsche Bundesbank runs its own payment systems (RPS). Also, in Italy, as well as the National Central Bank's system BI-COMP, there are also three private inter-bank payment systems which settle retail payments for specific institutions (e.g. saving banks).

8.2.3. Type and volume of transactions treated by the surveyed infrastructures

In most EU Member States there is only one open clearing infrastructure for domestic retail payments[184]. Where there is more than one, such as in Greece, Ireland, Lithuania, Luxembourg, Malta, or the UK, they are usually not in direct competition; rather they are complementary. For example, the two surveyed retail payment systems in UK, namely C&CCC and BACS[185], process different types of transactions, the former handling exclusively paper credit transfers and cheques, the latter handling the remaining retail

[183] In Finland, there is not a separate centralised clearinghouse for payment transactions. The payment system PMJ is developed, maintained and operated by participating banks and is based on direct bilateral data exchange between banks.

[184] Among the surveyed infrastructures, the Czech one (CERTIS), the Estonian one (ESTA), the Lithuanian (LITAS), the Maltese (MARIS) and the Slovakian (SIPS), are both large-value and retail payment systems.

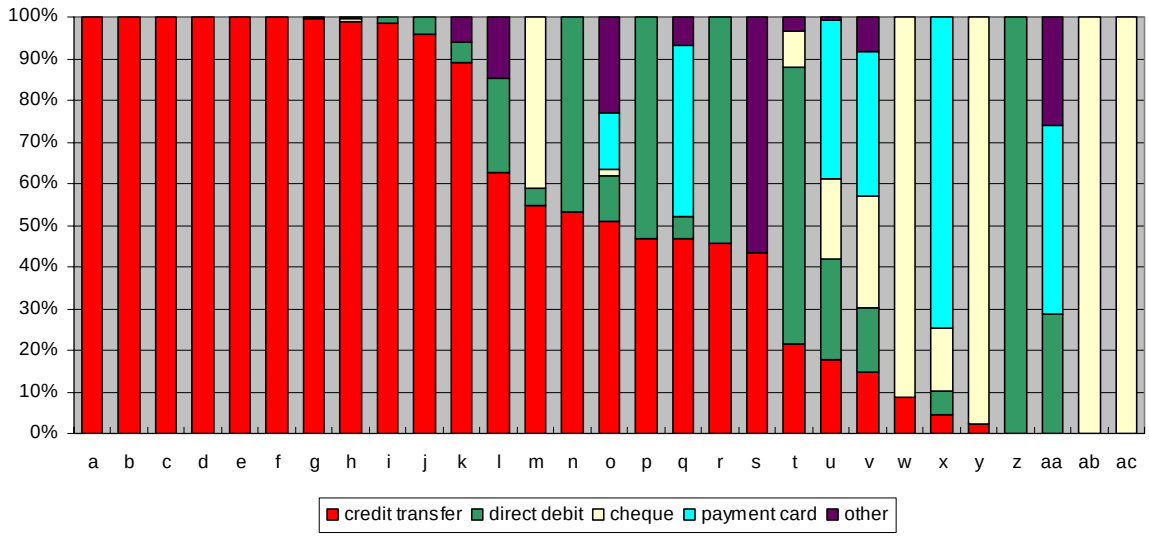
185 The UK system CHAPS is not included in the survey. Although CHAPS is primarily used for large-value payments, it is also used for a growing number of retail payments, where there is a particular need for same-day finality. Source: ECB Blue Book, 2001.

payments. In Lithuania, the two payment systems, namely LITAS and KUBAS, process payment orders from different types of customers, credit institutions and credit unions respectively.

Most surveyed systems service the majority of their country's domestic credit transfers and direct debits[186], with the exception of intra-bank transactions (on-us transactions). In 2004, the surveyed domestic infrastructures had a coverage in terms of number of transactions cleared over the total number of cash-less payments of the country that varies from 14.9% of the Czech system (Certis) to 99% of the Estonian (Esta) and the Finnish System (source: ECB Blue Book Addendum, March 2006).

Figure 53 reports the distribution of the relative share of each transaction type cleared by the payment systems that were surveyed.[187]

Figure 53: Share of cleared transactions by type of instrument



Source: Commission's "Retail Banking Survey", 2005-2006.

The European system: STEP 2

EBA CLEARING started operations of EURO1 in 1999 and one year later the STEP1 system was launched. Both EURO1 and STEP1 are designed for same day processing of single payments and provide real time finality of payment messages upon processing.

In April 2003, the STEP2 system was launched to respond to the needs of banks in Europe for processing retail payments in SEPA. EURO1 and STEP1 provide settlement services for the STEP2 system.

In its first phases of operation, STEP2 offers the processing of the CREDEURO transfer[188].

[186] With credit transfer we refer to a payment order (or sometimes a sequence of payment orders, which is referred to as standing orders) made for the purpose of placing funds at the disposal of the beneficiary.
With direct debit we refer to a pre-authorised debit on the payer's bank account initiated by the payee.

[187] With respect to card payments, only six systems offer clearing services. Among these, four of them process more than 50% of the total number of card payments made by national customers. In the remaining Member States this service is generally offered by other operators specialized on card payment operations.

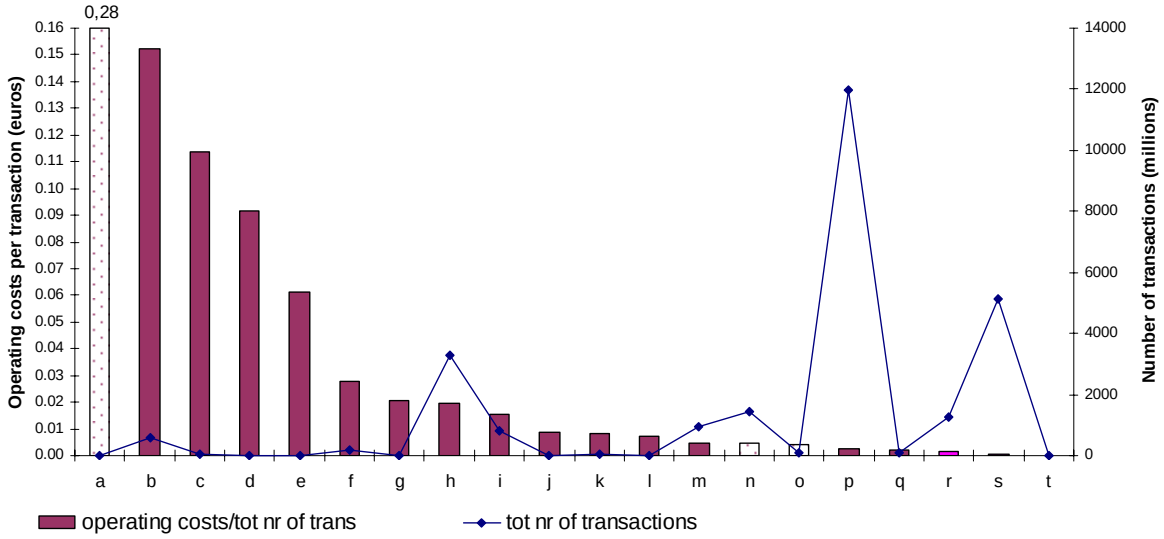
[188] An EPC initiative to build a solution for the processing of direct debits was launched in January 2006 in order to offer banks in Europe SEPA direct debit processing services.

8.2.4. *Costs for running the infrastructure*

Total operational costs of payment systems are normally related to both the number and type of transactions handled. Paper-based transactions, such as cheques, are more expensive than electronic ones, as responses to our survey to payment systems confirm.

The ratio of operating costs[189] to total number of transactions by payment system has been calculated for each system that provided operations costs data; around half of the surveyed institutions. Figure 54 shows the results of this comparison.

Figure 54: Operating costs and transaction volumes of payment systems



Source: Commission's "Retail Banking Survey", 2005-2006.

The cost data show significant variability across schemes, taking values ranging from 0.1 cent to 28 cent. The variability across countries could be explained partially by the fact that each scheme is organized differently and handles different types of transactions, implying different costs. The data show that systems with the highest operating cost ratio generally handle a lower number of transactions than systems with the lowest operating cost ratio. The variability of this cost indicator across countries could also be explained in terms of economies of scale. Moreover, in countries which still have both paper and non-paper clearing systems, purely paper-based clearing houses (shown in dotted background in the figure) report a ratio of operational costs to total number of transactions more than three times that of non-paper clearing systems.

8.2.5. *Management of clearing infrastructures*

Traditionally, clearing infrastructures were created on a non-profit basis, often with the involvement of National Central Banks. Ownership of the system by central banks had the explicit objective of fostering financial stability and promoting the soundness of payment and settlement systems. This ownership arrangement has evolved over time and, currently, some systems are moving towards a profit-oriented organisational structure. Currently only eight of

[189] It should be noted that many payment systems reported their value of "total costs" rather than "operational costs". We do not however expect these two values to differ significantly.

the surveyed domestic payment systems and the European STEP2 are operated on a for-profit basis.

The surveyed payment systems are owned and managed by the NCB in eight Member States. The remaining systems have opted for a so called "mutual governance model", i.e. a system owned and or managed by all (or the most important) users of the system. The Spanish retail payment system scheme (SNCE) was managed by the central bank and as of 2005 is under the responsibility of SESP (which is owned by 24 banks, that are the direct participants in the SNCE).

In some Member States the operation of the system is conducted, partially or totally, by third companies (also called service providers):

- In Portugal, the National Central Bank has delegated the operation of the domestic clearing system (SICOI) to SIBS.
- In the UK, the BACS system is operated by Voca Limited and members of the scheme have a legal agreement directly with Voca for the provision of clearing and settlement services.
- In Italy, even though formally the payment system BICOMP is managed by the National Central Bank, a crucial role in payment processing is played by the RNI (Rete Nazionale Interbancaria) which is managed by SIA. The RNI provides the technical infrastructure for the exchange of accounting information. Additionally, clearing of transactions is managed by service providers (currently there are three) which are owned by banks and carry out a number of activities before transmitting net balances to BI-COMP. Charges reported in the following analysis for the BI-COMP system do not include charges levied by the service providers.
- In relation to STEP2, SWIFT is the supplier of secure messaging services and interface software to EBA CLEARING and the participant banks; certain services are also provided by SIA. Transaction/processing costs are paid by the participants to SWIFT or SIA directly, for usage of the network: these costs are directly billed by SWIFT or SIA, as applicable.

8.2.6. Classes of membership

The concept of membership in payment systems is typically applied to open clearing systems. It essentially means that banks wishing to make use of a clearing infrastructure have to obtain membership of the organisation that provides the clearing services.

Twelve of the payment systems that were surveyed have only one membership class. However, many other systems choose to distinguish members according to classes of membership. The most common distinction is between direct[190] and indirect participants. Direct members have the exclusive benefit of direct contact with the clearing operator. Indirect members, on the other hand, access the clearing system in general through a bilateral agency agreement with a direct participant and settle their positions in the Real Time Gross Settlement system[191] (RTGS) account held at the NCB by the latter. Normally, the indirect member does not get involved in collective decision-making process of the system, which exclusively involves direct members. Some systems have additional membership categories. For example, STEP 2 also distinguishes between primary direct members and secondary direct members.

[190] Some systems use different terms to indicate direct members, such as participants, settlement members; and indirect members, ancillary members, sub-participants.

[191] A real-time gross settlement (RTGS) system is a settlement system in which processing and settlement take place on an order-by-order basis (without netting) in real time (continuously).

A number of systems define participation in terms of scheme ownership, i.e., shareholder banks, that vote on the shareholder board and have certain control rights, as opposed to user banks which simply use the system's services without becoming a shareholder.

The Dutch Interpay scheme has recently adopted a for providing payment services. In 2005 Interpay replaced its membership scheme with bilateral contracts. Accordingly, the concept of 'membership' no longer applies and Interpay works nowadays with 'clients'. In the Netherlands, a separate entity is in charge scheme management. [192]

8.2.7. Eligibility criteria for direct membership

In all surveyed clearing systems participation is limited to banks or, in some systems, to non-bank financial institutions (for example to payment card companies). The requirements that only banks are allowed to be direct participants in certain clearing infrastructures (in particular reference was made to the European STEP 2 clearing system) was signaled as possibly "*impeding competition*" in the infrastructure market. In particular, domestic clearing houses, that do not hold a banking license, are not admitted as direct participants to STEP 2.

Additional requirements are imposed by the rules governing the infrastructure on direct participants. One is the obligation to have an account with the Central Banks and/or being a member of the Real Time Gross Settlement System. These requirements seem to be linked to the settlement of transactions. However, the provision of settlement services was not specifically addressed at this stage of the investigation.

Although the inquiry has not collected evidence on membership rules specifically for RTGS systems[193], some respondents have nevertheless identified specific requirements to participate in the RTGS system in so far as the participation in the RTGS system is a precondition to becoming a direct member.

Some of the eligibility criteria applied by payment schemes may, in certain cases, make it more difficult for a new entrant to join the system as a direct member. Examples of such criteria include:

- *Need to have minimum level of activity, expressed either as share of total number of transactions on the total (e.g. 0.20%- 0.50%) or an absolute number of transactions.* This is the case in France, Greece , Ireland and Spain;

- *Need to become a shareholder of the owner of the infrastructure* (in Sweden and in the UK);

- *Need to be member of the national banking association* (in Finland);

- *Need to be operating in the country for a certain period* (in Greece and in Poland).

8.2.8. Decision making bodies

When the infrastructures are directly operated by the national central bank, the decision making bodies of the central bank takes the most important decisions in terms of pricing and access issues to the clearing system. When the system is operated by a joint venture of banks, factors such as the operating volume (e.g. in Belgium, the UK and Spain) play an important role and determine the number of votes for decisions concerning fees and access

[192] These changes are also the result of the intervention of the Dutch National Competition Authority. For more information see: http://www.nmanet.nl/engels/home/Index.asp

[193] Czech Republic (CERTIS), Lithuania (LITAS), Malta (MARIS), Slovakia (SIPS) are both retail and RTGS systems.

rules. For example, in one surveyed system, each member institution has a minimum of one vote plus one additional vote for each whole percentage point as calculated on the basis of the membership fees paid in the previous year. In the case of the French GSIT system, the decision making body (*Comité de Direction*) is composed of the 12 founding members and two "observers". The founding members represent also other members that have decided to "link" their participation to one of them.

8.2.9. Fees charged to users of clearing infrastructures

Fees charged to banks for the use of the payment infrastructure could be an important determinant of the overall cost of certain retail financial services. Not only the size of the fees per transaction but also the structure of the fee schedule in the payment systems may imply significant cost differentials depending on individual bank characteristics. Fees charged can generally be divided into two categories: joining fees and clearing fees.[194]

- Joining fees

Depending on the level of the joining fee, the systems which were surveyed can be divided into infrastructures charging: no joining fee; a one-off joining fee which is equal for all members; or different joining fees for direct and indirect members.[195] In most EU systems indirect participants do not pay to join the scheme, or pay a lower fee. In two systems, direct and indirect members have to pay the same joining fee.

In systems where there is a joining fee, it is typically a one-off payment which can be fixed or, alternatively, can be linked to different parameters. In the latter case, the value of the fee:

- can vary according to the characteristics of the bank's technical infrastructure,
- can depend on costs incurred by existing members to accommodate the new entry,
- can be indirectly linked to bank size,
- can depend on the package of services bought.

In one system the joining fee payable by new participants is calculated on the basis of a formula which is linked to a scheme which provides for the reimbursement of costs incurred by the founding members at the time the system was created. The highest joining fee charged by surveyed systems to new members amounts to 2 million €. The second highest fee is 200.000 €.

- Clearing fees

According to the result of the survey, infrastructures charge a periodical (annual or monthly) fee and/or a fee per transaction. These fees can be either fixed or linked to parameters such as: the bank's transaction volume; the bank's type of technical connection to the network; the time at which the transaction enters the system; or the type of transaction.

Periodical fees charged by surveyed clearing systems range from 0 to 216.300 € per year. Per transaction fees range from zero to a maximum of 0,23 €. However, the fees charged by some clearing systems in the survey covered both clearing and settlement services, while other systems covered only clearing services.

Some systems have chosen to charge high "fixed" fees (including both one-off joining fees and periodical fees) and zero or lower than average per transaction fees. On the contrary, other systems have decided to charge per transaction fees and no fixed fees. Few systems charge both relatively high fixed fee and per transaction fees.

[194] It is interesting to note that two of the payment systems surveyed also apply exit charges. However these charges are not examined in detail in this section.

[195] It should be noted that charges between direct and indirect members, as a result of their own private agreements, are not included in the present analysis.

8.2.10. Economies of scale due to fee structure

With regard to the economies of scale created by the fee structure, it can be observed that all but five systems show some type of "regressive" fee structure. Fee structures could be regressive in several ways:

(i) a fixed membership fee

(ii) a periodical (annual or monthly) fee

(iii) volume-discounts, offered through regressive fees per transaction.

The effects of these regressive fee structures are illustrated in simulation exercise in the box below. The simulation exercise analyses how much total fees per transaction vary according to the bank's profile, measured in terms of the bank's annual number of transactions.

Case study: How much does it cost to join a payment system?

The following exercise estimates banks' cost per transaction paid to the clearing system including: membership fees, periodical fees and transaction-specific fees.

The results of the simulation should be interpreted with caution. Almost all payment systems across the EU vary in several important respects, including a profit or non-profit orientation, different degree of economies of scale, and different types of transaction. These differences are difficult to take into account in this limited exercise and can make direct comparison of actual applied fees difficult. For example, in some systems participants also pay a separate processing fee to a service provider and/or an additional fee for settlement services; in other systems fees cover not only access to the retail but also to the large-value payment system; the level of service[196] provided by the systems may vary and include certain provisions that in other systems are not included; etc.). Therefore the simulation should only be taken as an illustrative exercise.

The exercise has been conducted for a standard domestic credit transfer. Accordingly, all domestic systems which do not process credit transfers have been excluded from the simulation[197]. Additionally, the analysis has been limited to prices charged to direct participants, as those charged to indirect members would also have required additional data for the payments from indirect members to direct members, which are the result of private bilateral agreements. An amortisation horizon for the joining fee of 5 years has also been assumed (that is, joining fees have been equally distributed across all transactions by an amount equal to the ratio of the joining fee over the expected number of transaction over 5 years). Exit fees are not considered.

Total payments per transaction have been estimated for 11 bank size scenarios, defined in terms of hypothetical monthly number of transactions per bank (each scenario defines a different number of transactions per bank, which we assume to be the average value of the scenario range). For each system, we have removed non-realistic scenarios (i.e. unreasonable numbers of transactions). The exercise is independent from the transaction value because the size of the transaction has in all surveyed system no effect on any of the fees charged to banks.

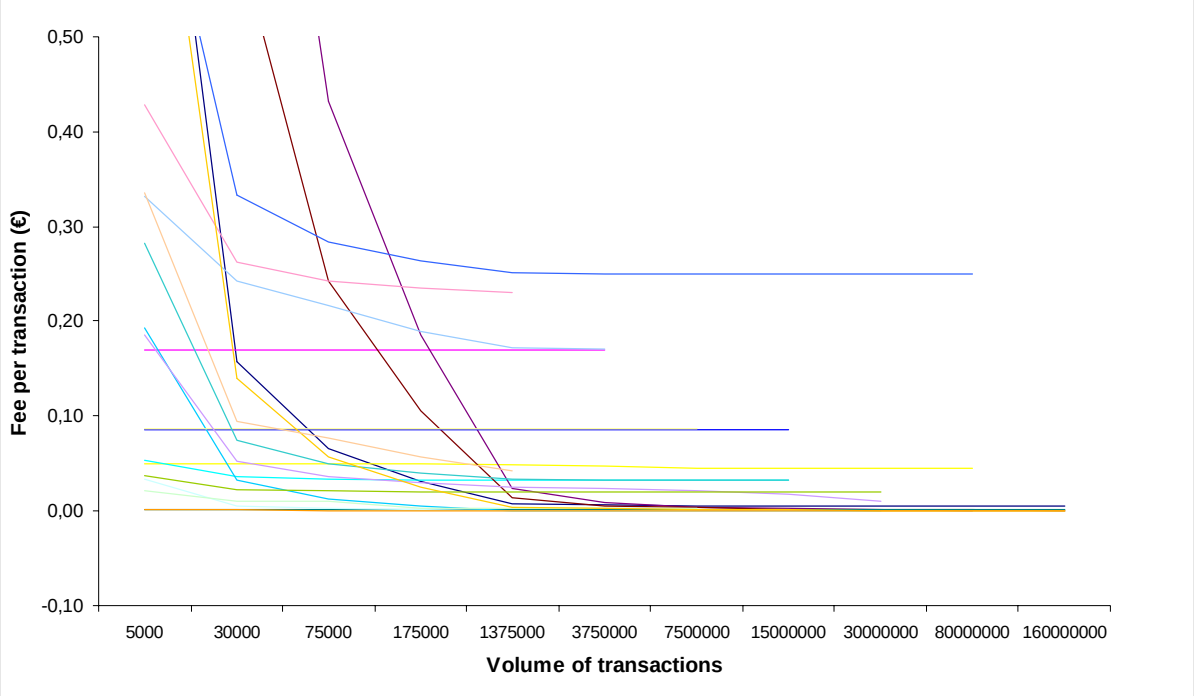
[196] For example the UK BACS is a three day cycle. For more urgent payment, a different system (CHAPS) has to be used.

[197] The Dutch system has been excluded from the simulation as fees are negotiated by Interpay and its clients on a case-by-case basis. The Swedish system has been excluded as available data are not sufficient to calculate clearing prices charged to credit institutions.

Figure 55 below summarizes the results of this exercise. The price per transaction in all retail payment systems decreases with bank size in all systems but five. These "economies of scale" are due to fixed membership fee, a periodical (annual or monthly) fee and or volume-discounts, offered through regressive fees per transaction.

This price structure implies that cost per transaction for a small bank may vary significantly across countries. For example, if a bank with 5.000 monthly transactions is considered, total fees per transaction vary from 0.15 € cents to 6.48 €.

Figure 55: Fees charged by payment systems, results of the simulation exercise[198]



Source: Commission's "Retail Banking Survey", 2005-2006

This simulation exercise of the level fees paid by different user profiles illustrates that for certain systems, banks with low transaction volume, typical of new entrants or niche players, could incur relatively much higher unit costs than incumbents.

8.3. Multilaterally agreed Inter-bank fees

In addition to information regarding clearing infrastructures, the Commission's inquiry has collected basic data on interchange fees. Interchange fees are inter-bank fees paid between the payers and the payees banks for the conclusion of a payment transaction and/or for the provision of services in relation to a given payment. For "on-us" transaction, there is no payment of interchange fees. These inter-bank fees can be agreed bilaterally between the banks or can be the subject of multilateral agreements among banks participating to a certain payment scheme.

8.3.1. Who fixes the interchange fees?

Interchange fees are normally fixed by the banking communities. In general, surveyed infrastructures are not part of the agreement and normally only have the function of settling the fees. However in some countries, where the management of the infrastructure is not

[198] Vertical axes truncated at € 0.50.

clearly separate from the management of the scheme, it is the board of the infrastructure that fixes the fee. Interestingly, in Italy the interchange fees are agreed by the Italian Banking Association (ABI) according to a cost based methodology agreed with the Bank of Italy. A former exemption has now elapsed and proceedings have been opened by the Italian antitrust Authority.

8.3.2. The level of interchange fees

The interchange fee patterns in the national schemes are quite different and diverse, both in terms of fee structure and level of fees. According to data collected from clearing systems and National Banking Associations, a multilateral interchange fee has been agreed upon in eight countries for direct debit transactions and in six countries for credit transfers. None of the surveyed systems in the new Member States reports the existence of multilaterally agreed interchange fees for credit transfers or direct debits.

In all the systems where a multilateral fee does exist, the fee is always "per transaction", but the level and variety of fees differ between systems. For credit transfers, the fee charging option (Shared, Our, Beneficiary)[199] seems to influence the fee level in some countries. The fee charging option determines the way bank's costs are charged between the payer and the payee. For example, the cross border payment "CREDEURO[200]" is a "Share" payment and no interchange fee is paid between payer's and payee's bank. The CREDEURO Convention was established in November 2002 as a standard for the execution of a "basic" (meaning no added-value services) bank-to-bank pan-European credit transfer. In addition, types of payment, i.e. paper form, electronic form or the classification of transaction in STP[201] and non-STP payments, can also affect the level of fees in some instances.

According to the instruments, the following fees have been reported:

- For direct debit transactions, the sending participant has to pay to the receiving participant a fixed fee for every direct debit sent. There is currently an interchange fee for this transaction type in 8 Member States. The fees vary from 0,02 to more than 2 €. In some countries the fee is fixed while in others it depends on the type of payment (e.g. STP-non STP). France has various fee levels according to transaction type.[202]
- For credit transfers**,** in 6 Member States there are multilateral interchange fees for specific transactions, namely;
    - for paper transactions or for non STP transactions,
    - for transactions with specific fee- payment option (e.g. for "our" payments)
    - for specific services rendered by the payer's bank to the payee's bank .

  In one Member State, interchange fees up to € 15 apply for certain payments and an additional charge of € 5 is charged for non STP transactions. It is interesting to notice that the fees can go from the payer's bank to the payee's bank, but also in the opposite direction.

[199] The banking industry uses the following three standardised fees payment option: shared (SHA), our(OUR) and beneficiary (BEN):
"SHA" - the bank fees shall be shared and paid both by the payer and the payee,
"OUR" - all bank fees shall be paid by the payer,
"BEN" - all bank fees shall be paid by the payee.
[200] The CREDEURO convention considers as basic EU payment a transfer in € <= € 50.000, with indication of IBAN/BIC and with charges allocated as 'shared charges' (SHARE).
[201] STP- for Straight through processing- payments do not need manual intervention and can be executed automatically form end to end.
[202] Additional fees, often higher than the above mentioned fees, are charged for returned payments.

- For cheques, there is a multilaterally agreed interchange fee in 5 Member States: These fees cover both “normal” transactions as well as additional services provided between banks.

In Germany there is an agreement for a maximum fee of 3 € for returned direct debit between all German credit sector associations (“CCC”) and the central bank. Within this range every debtor's credit institution may decide bilaterally on a different fee. In one country where currently there are no interchange fees, there are discussions to introduce a multilateral interchange fee (MIF) for certain types of payments (namely e-payments and direct debits).

In all cases except one, interchange fees function as default, and bilateral arrangements are possible. The exception is the multilateral interchange fees fixed in one country, where it appears that at present there is no possibility of regulating the fees via bilateral agreements.

Except for Italy and the Netherlands, where the fees have been under the scrutiny of the National Competition Authorities, the fees are reported as being “stable” over the last five years. Discussions are underway to introduce an interchange fee for the forthcoming European direct debit scheme.

8.3.3. Industry explanations

The Commission asked respondents to explain the economic function that interchange fees fulfilled in their systems. The main justifications can be regrouped as follows:

- The fees are a mechanism to have the maximum number of participants on board and to maximise network externalities
- The fee is a mechanism to “incentivise” banks to switch to more efficient payment instruments, in particular paper less and STP transactions (e.g. by introducing an interchange fee payment for banks starting a paper transaction)
- The fee is a cost recovery mechanism, to compensate for costs incurred by the bank of the beneficiary that are not recuperated via charging the customers. This either because of a bank agreement on cost sharing arrangement (e.g. in case of “OUR” transfer) or because the bank of the payer chooses not to charge or to charge only to a limited extent (e.g. for collection of direct debits)

In particular for direct debit transactions, one of the explanations given for the existence of an interchange fee is that “*the paying bank receives compensation for its costs per transaction from the receiving bank since it is the receiving bank customer which is charged for the service”.*

One system indicates that “*the historic reason of the interchange fees is that incentives had to be created to exchange payment messages between the banks in an electronic mode. However, the costs related to data to be encoded is at charge of the sending participant. Therefore an interchange fee arrangement was introduced in order to avoid the use of inefficient paper-based instrument. In the arrangement the participant making the effort to convert paper based instruments into an electronic format is rewarded by his counterpart participant*”.

8.4. Competition analysis

Access to payment systems is necessary for any bank considering entering a retail banking market and intending to offer customers core banking services, such as current accounts or

payment cards. The analysis in this chapter is therefore relevant not only to the payment service markets themselves, but also to wider issues of competition between banks.

A report by the Bank of International Settlements[203] raises a number of policy questions concerning competition in payment systems, which could be summarised as:

- Do markets achieve an adequate balance between competition and cooperation to benefit market users?
- Are markets transparent enough to promote competition and contestability?
- Does the pricing structure encourage an efficient allocation of resources and payment risks?

On the first issue, if markets are insufficiently competitive or contestable, efficiency benefits from innovation, consolidation, exploitation of economies of scope and scale may fail to be realized or to be passed on to consumers. In particular, established networks are potentially in a position to create entry barriers that impede competition and innovation. Entry barriers can be created either directly by imposing access restrictions or by more indirect means, for example, by a choice of standards and rules that are inappropriate, or difficult to adopt.

A separate issue is whether banks can use infrastructure arrangements to raise rivals' costs, or indeed to exclude them entirely. A variety of mechanisms would in principle be available to support such a strategy, ranging from ownership of infrastructure through control of technical standards, IPR etc.

The next section raises a number of competition issues that might be further addressed.

8.4.1. Operation of the clearing infrastructure and lack of inter-system competition

In most countries there is one clearing infrastructure, which is operated either by the National Central Bank or by a membership associations controlled by (the main) banks operating in the country. It has long been assumed that the various functions involved in the organisation of payment arrangements enjoyed some kind of "natural monopoly". This however underestimates the potential role of competition in achieving lower prices and a greater range of services. In themselves, economies of scale and network effects tend to give rise to strong conglomeration effects. Entry barriers faced by a potential new network are normally high. There are risks associated with this situation, such as lack of innovation and or adaptation to end users' needs, possible anticompetitive restrictions on access, poor transparency and anti-competitive pricing.[204] The Cruickshank report[205] considers this point and stated that *"the challenge for policy makers is to obtain the benefits of network effects while simultaneously benefiting form innovation and low prices delivered from competitive markets*".

An important issue to consider is the fact that the same banks are often members of different payment systems (e.g. card and non-card systems, national and cross border systems). This can result in a conflict of interests for members and impact in a negative way on the level of inter-system competition, as a bank that is a member of a payment system may have less incentive to promote a strategy of intense competition with another network it participates in. An example is that major payment card schemes have a proper clearing system which is not "in competition" with other clearing systems (see also Interim Report I on Payment Cards). In principle, a domestic system does not yet seem to be considered a competitor to an international system. At the same time some systems are potentially confined to the clearing

[203] BIS (March 2003): *Policy issues for central banks in retail payments*
[204] Cruickshank report (2000): *Review of Banking Services in the UK*, p. 68.
[205] Cruickshank report (2000): *Review of Banking Services in the UK*, p. 68.

of specific transactions (e.g. cards transactions) and others are confined to other transaction types.

As concerns the management of clearing infrastructures by the National Central Banks (NCBs), it is important to mention that in August 2005 the European Central Bank published a policy statement[206] regarding central banks' provision of retail payment services in euro to credit institutions. This statement mentions the problem of possible competition problems and recognises the importance of avoiding competitive distortions or crowding-out of market initiatives when NCBs provide retail payment services to credit institutions.

8.4.2. Need to adapt to different national standards

Member banks normally have to respect certain technical specifications, and a testing and certification procedure. In some systems this can take between 6 - 12 months. Banks that operate in different Member States need to adapt to some 25 different procedures and technical standards.

8.4.3. Different classes of membership and special requirements for direct members

Various clearing system distinguish between different classes of membership, although to varying degrees. From a competition point of view, only arrangements that pose some risk of distorting the conditions under which the individual member institutions concerned compete with each other or under which potential new members can compete with the incumbent ones appear relevant.

The distinction between "direct" and "indirect" ("ancillary", "affiliate" or others) members, in combination with a different participation in decision making and participation rights, requires further assessment. Firstly, an indirect member will depend on the "good will" of a direct member (a competitor in the downstream market) with whom the indirect member will have to negotiate an agency contract. This also adds an additional layer of intermediation to the system and possibly lead to an increase in total costs. At the same time, the possibility of joining a clearing system as indirect member could be seen as increasing choice for smaller banks and niche players, who can benefit from not having to comply with the requirements linked to settlement and direct membership. Conditions of these contracts are not included in this preliminary report.

Secondly, indirect members normally do not fully participate in the decision making process (determining prices, deciding on membership application, on technical standards and other rules). In practice, direct members might in some way decide the costs that all banks will have to bear to use the infrastructure. As an example, in France only the 12 founding members participate in the main decisions concerning the system.

Thirdly, direct members get better information than indirect, both concerning the systems as a whole and the data they receive from indirect members. On this point, the collection of business-sensitive data through direct member banks as "agent" leads to a one-sided information exchange, as indirect members have to share their list of payments with principal members. The information collecting bank may therefore gain a competitive advantage over the direct member. As the information collecting bank typically is a bank with voting rights on the scheme's Board, such one-sided exchange of information may reinforce the concern that decisions might be taken that limit competition.

[206] See: http://www.ecb.int/pub/pdf/other/policystatementretailpaymentservicesen.pdf

Concerning the possibility of becoming direct member, the investigation has shown that there are a number of requirements that banks have to meet in certain systems: such as a minimum level of activity, the need to become a shareholder of the owner of the infrastructure, the need to be member of the national banking association or the need to be operating in the country for a certain period of time. These rules are fixed by incumbents and may be difficult to meet by new entrants.

8.4.4. The "need to be a bank" requirement

All surveyed systems require members to be regulated financial institutions. Some of these schemes also require banks to be supervised by the National Central Bank, or require a physical presence in the Member State. According to respondents, these restrictions address the need to ensure that a system is financially secure, that systemic risk is minimised and that new members are able to interact properly from a technical and operational perspective. However, while the oversight by National Central Banks may be an efficient tool to guarantee the financial reliability of players acting in payment systems, it could be worthwhile to explore other ways to achieve financial stability within these systems. The proposal for a Directive for a New Legal Framework (NLF)[207] for Payments in the Internal Market is also meant to open up EU payment systems to non banks.

The exclusion of non-banks means that non-bank enterprises cannot be direct members of the clearing system. This also means that non financial institutions (such as some processors or some customers) are not involved in a network's decision making and thus a network may develop in ways that do not meet the needs of a significant sector of users. Concern has also been expressed that the inability of corporate clients to access clearing systems directly might tie them unduly into their current banking arrangements.

It is worth noting that in STEP 2, currently the sole pan-European clearing system, only banks can be direct members. This requirement has been criticized by one clearing infrastructure as restrictive. Linkages between clearing houses could possibly expand the availability of their services to a wider group of financial institutions and their customers.

8.4.5. Fees and fees structure

In certain Member States the way in which the fee system is structured could potentially be considered a barrier to entry for new or small players. The joining, annual and transaction fees of the multilateral bank cross-border credit transfer networks are generally set by boards made up of representatives of their shareholders, who are also (some of) the network's members. Fees paid by the new members in some cases cover initial members' costs for developing the scheme.

However, the question arises as to whether joining fees charged hamper effective competition by dissuading entrants or raising their cost significantly. In one country, one bank withdrew its request to participate in the system allegedly due to the high entry fee. One bank asserts that the fee system in one clearing house, by offering large volume discounts, creates a competitive advantage for the largest entities. Regressive fees on the basis of volume do apply in other systems. As has been shown in the simulation exercise above, volume discounts or fixed periodic fees may influence banks with low transaction volume, typically new entrants or niche players, in their choice to enter a market.

[207] See: http://europa.eu.int/comm/internal_market/payments/docs/framework/com_2005_603_en.pdf

8.4.6. Existence of an interchange fee

In several Member States banks have agreed upon an inter-bank payment for direct debit and for certain types of credit transfer. These fees are fixed by banks or bank associations; i.e. by likely competitors in the downstream retail banking market. According to respondents, inter-bank fees have multiple purposes, including maximising network externalities; promoting certain type of payments (e.g., electronic payments); or "covering" costs for services provided from one bank to another. The scale and nature of these costs was not clearly justified by the surveyed institutions. It is worth noting here that interchange fees for credit transfers can go from payer's bank to payee's bank, or in the opposite direction.

In practice, the interchange fee creates a multilateral transfer between banks, which by being multilaterally fixed, does not take into account specificities in banks and the relationship of a bank with its customers. The existence of an interchange fee may distort competition between means of payment as well as competition within banks to provide payment services to the customers. Competition between means of payment may be artificially distorted in so far as banks have an incentive to promote the use of payment means that have high interchange fees. The existence of interchange fee may also render in-transparent to consumers the cost for providing the service: as an example, customers who chose to use direct debits for recurrent payments to utilities may consider that these are offered for free, but in fact costs are simply shifted from the payer to the payee.

Competition between banks in the downstream market could also be affected. In those countries where an interchange fee for certain types of credit transfer is applied, this may affect final prices to consumers. Some banks indicated explicitly that the price charged to consumers for a credit transfer is a function of the interchange fee to be paid.

Conclusions

Most Member States have only one national clearing infrastructure, which is operated either by the central bank or by a membership association controlled by (the main) banks operating in the country. Alternatively two or more systems may exist in parallel but they are not in competition but rather complementary as they clear different payment instruments.

The main findings at this stage of the investigation can be summarised as follows:

- Payment systems in the EU are not yet integrated. They are organised differently and they entail different costs for participants. This means that a bank operating in different Member States has to join the various national systems, adapt to different standards and face different costs.
- The corporate governance of the payment systems (particularly membership rules) and the way fee systems are structured may raise barriers to entry for new or small players.
- The existence of a multilaterally agreed interchange fee for certain transactions may affect both competition between payment instruments and competition between banks.

9. FORMAL INDUSTRY COOPERATION

Formal cooperation between banks can lead to substantial economic benefits where it enables more efficient sharing of risk, making cost savings, pooling know-how and launching innovations faster. This chapter sets out several examples of such formal cooperation and the benefits it creates for banks and for customers. On the other hand, cooperation between competitors may in certain cases cause negative market effects with respect to prices, output, innovation or the variety and quality of products.

Banks cooperate formally in several areas of retail banking activity, including ownership and management of payment systems, data sharing through credit registers, and commercial joint ventures

9.1. Ownership and management of payment systems

A payment system comprises the procedures and associated computer networks used to transfer funds between financial institutions. A cross-border credit transfer is a credit transfer by an originator via bank or its branch in one Member State to a beneficiary at a bank or its branch in another Member State. European Competition law only applies where there may be an effect on trade between Member States. Cross-border credit transfer systems, precisely because they carry cross-border credit transfers, will be capable of having such an effect on trade.[208]

As discussed in the previous chapter, payment systems across the EU are characterised by their heterogeneity, in aspects such as infrastructure, governance, access, pricing and transparency traditions, as well as to legislation and even payment habits among consumers of different Member States. This fragmentation of retail payment infrastructures in the EU raises the costs of cross-border banking in Europe and may deter banks from providing services in other Member States.

9.1.1. Possible competition Issues

Access to payment systems is necessary for any bank considering entering a retail banking market and be able to offer customers core banking services, such as current accounts, cards or consumer credits.

One special characteristic of retail payment systems is that they are normally provided by different service providers. An account-based payment may involve up to five different parties. It results from this that, by its nature, the operation of an interbank payment system may require cooperation among banks. Such cooperation may on occasions enable incumbent banks to create barriers to fair competition, through:

- Information sharing: banks' co-operation in the management and operation of the infrastructures may create opportunities to share information of commercial relevance (prices and other conditions) which can harm the competitive process.

- Access to the system: Retail payment systems may jointly be owned by a group of banks or be in public ownership (central bank). Where exclusivity restrictions are applied by the owners of the system, restrictive access conditions may act as a barrier to enter the market.

- Interchange fees: As discussed in chapter 8, the way the fee system is structured could in certain cases be considered a barrier to entry for new or small players. As in

[208] Case 172/80 *Züchner v. Bayerische Vereinsbank* [1981] ECR 2021, paragraph 18.

the case of access to the system, the ownership structure of the system plays an important role here. Fee levels are generally set by Boards composed of representatives of their shareholders, who are at the same time (some of) the network's members.

9.1.2. Competition barriers identified by market participants

Some banks have identified access to clearing and settlement as an important barrier in several Member States. For example in Spain market participants highlighted two problems concerning access to clearing and settlement facilities. Firstly, on customer charges for payments, market participants alleged that Spanish banks are alone in the EU in charging payment fees as a percentage of the value of the transaction. They alleged that the fees charged were not proportionate to transaction costs and created uncertainty about the level of payment fees. Market participants also alleged that the recently privatized clearing system was seeking to set up a shared commissions system among banks which would allow them to charge customers on received transfers. Concerns were expressed that this arrangement would suppress price competition for clearing services and harm consumers. A second concern was expressed regarding clearing and settlement fees in Spain. Market participants believed that the inter-bank fees applied to larger transactions (over 3.000 €) were disproportionate to the processing costs and ultimately pushed up prices for consumers.

Barriers to access to clearing and settlement facilities in were also highlighted in Poland and Hungary. One market participant alleged that in Italy the direct debits clearing system used to transfer money from current accounts to savings accounts in another bank was subject to preferential pricing for some intermediaries. One market participant which had entered the UK market reported that although access to the domestic payment system was generally available, the cost of entry was prohibitive.

9.2. Data sharing through credit registers

Credit bureaus and credit registers are established mainly at a national level. Credit bureaus collect various kinds of financial information on individuals. This data is provided by lenders and, together with data from other sources (such as courts or tax authorities), will be used by central banks, private companies or professional associations.

These forms of credit data sharing can have some positive effects. First, they reduce the information asymmetry between a bank and its potential customer, which is likely to result in lower default rates.[209] Second, credit data sharing acts as a borrower discipline device: borrowers know that if they default, their reputation with other lenders is affected; this could make more expensive or even impossible for the customer to obtain credit. Third, credit reporting assists eliminating or diminishing the effects of the adverse selection[210], ensuring more credit under better conditions. Finally, data sharing is also linked to consumer mobility: it has been argued that banking markets where databases are more active show more consumer mobility. [211]

Credit and finance companies need to have access to this information in order to assess the creditworthiness of borrowers prior to granting the credit; therefore, access to such databases on a cross-border basis is essential where new incumbents want to enter the market. It is possible that credit information sharing could also lead to foreclosure problems

[209] OXERA (2005): *Accentuating the positive: sharing financial data between banks*. Available at: http://www.oxera.com/cmsDocuments/Agenda_Dec%2005/Accentuating%20the%20positive.pdf

[210] The adverse selection problem signals that when lenders cannot distinguish "good" from "bad" borrowers, all borrowers are charged a higher average interest rate that reflects the higher risk the bank is running when granting credit.

[211] JAPPELLI, T. and PAGANO, M. (2005): *Role and Effects of Credit Information Sharing*, Dipartimento di Scienze Economiche – Università degli Studi di Salerno, Working Paper No 136.

in the market, for example when members of a credit bureau refuse to admit potential entrants, or where such an entry is granted on a discriminatory basis. In general, access to credit databases has received relatively little attention as a competition issue in retail banking. This may be because in practice competition barriers are limited. It may also be because informal rules and conditions regarding access to credit data, particularly for foreign banks, have not had sufficient competition scrutiny.

The following section examines several issues related to access to credit databases:

- differences in credit registers in the Member States;
- cross-border agreements on the exchange of credit data; and
- Current stage of EU legislation on this issue;

9.2.1. Differences in credit registers in the Member States

In all 25 Member States lenders can access information in databases to help them assess the credit worthiness of a credit applicant. Differences among credit bureaus across EU countries are evident in four areas:

- Ownership and governance structure
- Type and quality of data held
- Costs of access
- Data protection rules

9.2.1.1. Ownership and governance structure

There are private credit reference agencies (owned and run by the credit industry or by commercial companies rather than by the government or the central bank) in 18 of the 25 EU Member States[212]. Credit bureaus have developed very differently across the EU. In some states, such as the UK, they are commercially owned and face competition from other databases. In others such as Germany, there has, until recently, effectively been a monopolistic supplier owned by its member banks. In France, there is a single bureau operated by the Central Bank. Table 56 summarises the status of private credit registers in the Member States.

[212] Austria, Belgium, Czech Republic, Denmark, Finland, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

Table 56: Private credit reference agencies in the EU

	Name of credit reference agency
Austria	KSV
Belgium	UPC
Cyprus	None identified
Czech Republic	Czech Credit Bureau
Denmark	RKI
Estonia	None identified
Finland	Suomen Asiakastieto
France	Public Credit Register only
Germany	Experian, Schufa, CEG, InFoScore
Greece	Tiresias
Hungary	Bisz Ltd. (formerly IIS)
Ireland	Experian, ICB
Italy	Experian, CRIF, CTC
Latvia	None identified
Lithuania	None identified
Luxemburg	See France, Germany, Luxembourg
Malta	None identified
Netherlands	Experian, BKR
Poland	Biuro Informacji Kreditowej
Portugal	ASFAC
Slovakia	Slovak Credit Bureau
Slovenia	Bank Ass. Of Slovenia – Sisbon
Spain	Experian Bureau Credito
Sweden	UC AB
United Kingdom	Experian, Equifax, Callcredit

Source: Commission's "Retail Banking Survey", 2005-2006.

The central banks of thirteen members of the EU also operate central credit registers to which financial institutions in those countries are required to subscribe. The way in which these registers operate differs significantly from country to country. In four countries their primary purpose is to provide the relevant supervisory authorities with information to help them monitor the stability of the financial system. Public registers may collect only negative information, as in the case of Denmark and France, but also credit exposure to borrowers, as is the case of the registry held by the Central Bank of Spain. Financial institutions are legally required to report public registers. The information collected is available on a reciprocal basis to institutions contributing information to the registry. Table 57 summarises the provision of public credit registers in the Member States.

Table 56: Public credit registers in the EU

	Name of public credit register	Operated by national central bank?
Austria	Grosskreditevidenz	Yes
Belgium	Commission Bancaire et Financière	Yes
Cyprus	Central Information Register for Issuers of Dishonoured Cheques	Yes
Czech Republic	Central Register of Credits	Yes
Denmark	Non identified	
Estonia	Non identified	
Finland	Non identified	
France	Service Centrale de Risque	Yes
Denmark	Evidenzzentrale fur Millionenkredite	Yes
Greece	Non identified	
Hungary	Non identified	
Ireland	Non identified	
Italy	Centrale di Rischi	Yes
Latvia	Register of Debtors	Yes
Lithuania	Loan Risk Database	Yes
Luxemburg	Non identified	
Malta	Non identified	
Netherlands	Non identified	
Poland	Non identified	
Portugal	Servicio de Centralisaçao de Riscos de Credito	Yes
Slovakia	Register of Bank Loans and Guarantees	Yes
Slovenia	Register of Transaction Accounts	Yes
Spain	Central de Información de Riesgos	Yes
Sweden	Non identified	
United kingdom	Non identified	

Source: Commission's "Retail Banking Survey", 2005-2006.

As in payment systems, the ownership and management of profit-oriented credit databases can create barriers to competition. Where a credit bureau is owned and operated by the lenders, there are risks of foreclosure of the market. From the point of view of banks considering entering a Member State, there is a risk that they would not be granted equal and non discriminatory access to the data of the credit bureau. From the point of view of credit data providers wishing to enter a new Member State, this may be made more difficult where the data on customers has to be provided by lenders that already own and operate a credit database.

9.2.1.2. Type and quality of data held

The range and depth of data and services offered by the bureaus differs significantly. Credit bureaus collecting negative or "black" information only gather data on subjects that have previously defaulted on payments (delinquencies, arrears, bankruptcies, etc.). On the other hand, positive or "white" information contains other elements of the financial standing of the individual that would allow for a more precise assessment of the ability to repay, such as total amount and type of loans, accounts currently open and active, balances or credit limits.

There is a debate about the extent to which openness of national markets is likely to depend on the type and range of data that is shared. It has been argued that negative data does not fully allow lenders to make an accurate picture of the creditworthiness of a borrower. Some market players outline that more detailed databases produce better credit market outcomes.

There is empirical evidence to support this view. The World Bank has published principles and guidelines[213] on the design of credit information systems (databases). Their analysis suggests combining positive and negative credit histories permits more accurate risk assessment; and that certain restrictions on the type of information held in credit databases potentially reduce some of the beneficial competition that results from increased access to credit information. Barron and Staten (2003) also show that combined use of positive and negative databases not only leads to lower credit default rates - allowing better risk pricing and increasing banks' efficiency - but also to greater credit availability, ensuring more borrowers have access to finance.

Concerning the type of data held in credit databases in different Member States, the UK and France represent opposite extremes. The UK has three credit bureaus offering identity verification, court judgment, bankruptcy and full customer performance data and which compete to offer a wide range of analytical, marketing, customer management, fraud and collection and operational products and services. In contrast, France has one publicly owned database which simply provides information on defaults, and records must be deleted from the register once a default is satisfied.

Most countries have a credit bureau which has the ability to share both negative and positive data, although there are exceptions (e.g. France and Finland). However, in most countries where a credit bureau offers the infrastructure for sharing positive data, credit providers (particularly larger incumbents) often provide only negative data. Some market players assert that sharing positive data would make entry into markets by foreign credit providers easier, as it would enable them to access customer data on an equal basis with local incumbent providers.

9.2.1.3. Costs of access

Table 58 below compares indicative prices for credit providers for accessing a database in a particular Member State.

[213] See: http://www1.worldbank.org/finance/html/creditreporting/documents/Principles%20and%20Guidelines%20for%20Credit%20Reporting%20Systems%2011-30.doc

Table 58: Sample prices of credit bureaus in Europe

	Providing negative information	Providing positive information
Austria	Average €0.5/report Plus fixed fee €200-€600	Between €1.08 and €2.76/report Plus fixed fee €200-€600
Belgium	Approx. €0.10/report depending on volume €0.45/report (NBB)	
Denmark	€537.52 to €2418.87/year plus €1.34/report	
Finland	Annual fee €50 €0.60/report	
Germany	Between €0.5 to €3 depending on the type of information "Black" or "White"	
Ireland		€1.86 to €2.22/report, depending on volume
Italy	€18,000/year (depending on the number of members)	€2.3/report
The Netherlands		€0.453/report
Portugal	Average €0.70-€0.80/report	Average €0.50-€0.60
Sweden	Between €2 and €6/report depending on the type of information, "Black" or "White"	
United Kingdom	Between €0.5 and €3/report depending on the type of information, "Black" or "White"	

Source: RIESTRA, A. SAN JOSÉ (2002): *Credit Bureaus in Today's Credit Markets*, ECRI Research Report No 4

The table shows a variety of pricing policies across Member States, including fixed membership fees and fees per report. However, due to the variety of information that can be provided and the practice of discussing the price individually with credit institutions, it is difficult to compare prices across the EU.

9.2.1.4. Data protection rules

Customers wishing to obtain a credit are required to reveal some information related to their financial history. Personal data protection rules are designed to ensure that the information provided by customers is used only for this purpose. Privacy laws affect a wide range of consumer guarantees, such as limits on access to files by potential users, bans on positive data (e.g. in Finland), compulsory elimination of individual files after a set time, bans of gathering certain kinds of information (e.g. race, religion, political) and rights of access for customers to check and correct their own files[214].

Provisions to protect confidential information on borrowers differ widely within Europe. In this aspect, France appears to have the strictest rules concerning privacy protection. Directive 95/46/EC on data protection aims to harmonise national provisions on data protection. The Directive establishes common rules that firms must observe when collecting, holding or transmitting personal credit data. Borrowers, in turn, are guaranteed several rights, such as the right to access and eventually correct their personal data, the right to now where the data was originated, or the right to refuse use of their data for activities such as direct marketing.

[214] JAPPELLI, T. and PAGANO, M. (2005): *Role and Effects of Credit Information Sharing*, Dipartimento di Scienze Economiche – Università degli Studi di Salerno, Working Paper No 136.

9.2.2. *Agreements*

In order to facilitate cross-border access to credit databases within the EU, some agreements have been made at national level:

- Multilateral agreement: In 2002, seven Public Credit Registers signed a Memorandum of Understanding (MoU) in the framework of the European System of Central Banks.
- Bilateral agreements: Several bilateral agreements have also been signed in the private sector among some Member States.

9.2.2.1. Multilateral agreement

In 2003, seven Member States (Austria, Belgium, France, Germany, Italy, Portugal and Spain) signed a MoU on the Exchange of Information among National Central Credit Registers for the Purpose of passing it on to Reporting Institutions[215].

The concept of cross-border exchange of information between the existing public credit registers was initiated by the Working Group on Credit Registers (WGCR), a working group of the Banking Supervision Committees (BSC) of the European System of Central Banks. The agreed MoU established a technical transition phase of up to 24 months from its signature and has been implemented since May 2005. Its provisions are not legally binding on the Parties and therefore no legal claim by any Party or third party may arise in the course of its practical implementation.

The purpose of establishing the MoU was to allow the lending institutions to obtain a better overview of the aggregate indebtedness of their corporate customers by allowing information available in national CCRs to be supplemented with information from other CCRs operating in the European Union. The MoU provides a framework for the regular exchange of information among national CCRs as well as for the handling of ad hoc requests from reporting institutions. The parties agree to provide each other with information stored on a given borrower if the borrower's indebtedness exceeds €25,000. Information on borrowers that are residents to a receiving CCR shall be transmitted on a regular basis. In addition to this regular exchange of data, information on all borrowers, irrespective of whether they are residents or non-residents to the receiving CCR, shall be provided in response to ad hoc requests from reporting institutions. Such ad hoc requests shall be transmitted through the CCR of the country in which the reporting institution resides. The CCR is responsible for checking compliance of the request with its national rules and regulations before transmitting it to a foreign CCR.

Data protection, confidentiality and professional secrecy rules apply to the information exchanged under the MoU. Parties may use information received under the MoU for supervisory purposes and for internal statistical and research purposes. In the case of statistical and research purposes, data must be used in an aggregate or anonymous form. Confidentiality and professional secrecy provisions applicable to the supervisory authority in the Party's country shall govern such use of the information.

9.2.2.2. Bilateral

Some initiatives related to private sector registers are running without any intervention at EU or Member State level, for example in the framework of ACCIS. ACCIS is an Association that brings together 26 consumer credit reference agencies in 19 European countries and

[215] ECB (2002): *Memorandum of Understanding on the Exchange of Information among National Central Credit Registers for the Purpose of Passing it on to Reporting Institutions*. Available at: http://www.ecb.int/pub/pdf/other/moucreditregistersen.pdf

associate members from all other continents.[216] In addition, voluntary and bilateral contracts between national credit bureaus are common practice; for example Germany has bilateral agreements with Italy, Austria, the Netherlands and Slovakia. Italy also has bilateral agreements with Ireland, Austria, Denmark and the Netherlands. The Netherlands also has agreements with Austria and with Belgium.

In order to support its members in the provision of pan-European credit information services to their clients, the ACCIS membership has developed a Cross Border Data Exchange Model Contract, established on a bilateral basis, which permits each individual credit bureau to decide whether to engage in cross-border data exchange and which partner credit bureaus it chooses to do so. The Model Contract is based upon the principle of reciprocity.

9.2.3. EU Legislation

The EU has passed directives in the areas of consumer credit and data protection. The Consumer Credit Directive 93/13/EC is currently being subject of a reform procedure. In the area of credit registers, the Commission's most recent proposal[217]aims to guarantee mutual access to existing private and public databases on a non-discriminatory basis. The relevant new provisions are the following:

> Whereas (21) "*To prevent any distortion of competition among creditors, it should be ensured that creditors have access to private or public databases concerning consumers in a Member State where they are not established under non-discriminatory conditions compared to creditors in that Member State*".
>
> Article 8(1) "*In the case of cross-border credit, each Member State shall ensure access for creditors from other Member States to databases in that Member State under non-discriminatory conditions*".

9.3. Commercial joint ventures

As discussed above, joint ventures among banks in ownership and management of payment systems are widespread. The inquiry has found that Member States clearing systems are either owned by the national central banks or by a joint venture among banks. In eight Member States (Czech Republic, Estonia, Germany, Italy, Latvia, Lithuania, Portugal and Slovenia) the national payment system is owned and managed by the National Central Bank. The remaining Member States have opted for a so called "mutual governance model"; i.e. a system owned and managed by an organisation composed of all (the most important) participants of the system.

In payment systems, cooperation often occurs in the establishment of infrastructures, where joint ventures and shared networks have become common. In the first place, joint ventures make it easier to achieve the essential critical mass of users when a network is established. Secondly, joint ventures facilitate utilisation of the potential economies of scale in production.

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[216] Full Members of ACCIS include: Kreditschutzverband Von 1870 (Austria), Banque Nationale De Belgique (Belgium), Czech Credit Bureau, RKI Kredit Information A/S (Denmark), Irish Credit Bureau, Suomen Asiakastieto Oy (Finland), Schufa Holding Ag (Germany), CEG Gmbh (Germany), Infoscore (Germany), Tiresias (Greece), Bisz Iis Ltd (Hungary), Creditinfo Group (Iceland), CRIF (Italy), CTC (Italy), Experian (Italy), Bureau Krediet Registraties, BKR (The Netherlands), Experian Nederland (The Netherlands), Biuro Informacji Kreditowej (Poland), Biroul De Credit (Romania), Equifax Ibérica (Spain), Experian (Spain), Upplysnings Centralen Ucab (Sweden), ZEK (Switzerland), Kredi Kayit Bürosu (Turkey), Experian (UK) and Equifax (UK).

[217] See: http://ec.europa.eu/consumers/cons_int/fina_serv/cons_directive/2ndproposal_en.pdf
To see the evolution of the proposal, visit the following site of the Commission:
http://ec.europa.eu/consumers/cons_int/fina_serv/cons_directive/ccd_devlp_en.htm

And thirdly, joint ventures allow the investment costs for establishing the network to be shared[218].

However, joint ventures in payment networks may also pose certain threats to competition.

- They may enhance the ability to exercise market power by the owners of the network (abuses of dominant position)
- They may lead to collusive actions from participating banks (e.g. in the pricing of services) that allow their members to exercise market power
- Such networks may act as a barrier for new entrants where access to them is not granted on an equal and non discriminatory basis (e.g. through discriminatory fees for newcomers or exclusive conditions of access to joint networks)

In this context, non-discriminatory and publicly disclosed participation criteria are essential to ensuring the contestability of the market.

In some Member States, savings banks and co-operative banks have set up jointly owned enterprises that provide specialised financial services such as asset management, stock-broking and settlement activities as well as insurance, all of which are sold to or distributed by the member institutions of the sector. An example would be the jointly owned investment management firm of the savings bank sector in a country. In economic terms, such jointly owned enterprises provide equal opportunities of marketing and servicing as financial conglomerates. The development of such enterprises as well as co-operation agreements is common, e.g. in countries such as Austria and Germany, with specific sub-sectors of the banking industry involved, e.g. savings banks and co-operative banks. Also, banks and insurance companies may decide to establish joint ventures to provide insurance products through the distribution network of the bank and, most commonly, under a name associated with the bank[219].

Some banks also cooperate in the payment cards business, e.g. in collectively providing acquiring services to retailers. Such joint ventures may cover both *technical* services and/or *financial* services. Joint ventures to provide technical services, such as processing, routing and switching are said to generate scale effects by allowing the banks to share the costs of research and the costs of a strong IT platform for managing electronic data transfers. To the extent that such scale effects are passed on to consumers through lower prices, the co-operation between banks in the technical area may be overall efficiency enhancing. Joint ventures to cover financial services, such as the settlement guarantee that acquiring banks provide to retailers, are more likely to raise competition concerns because shareholder banks usually are able to offer these services alone, in a competitive manner. Indeed, the Commission's preliminary report into the payment cards market has found that such joint ventures for financial acquiring services operate in at least eight EU Member States.[220]

[218] KEMPPAINEN, K. (2004): Regulating Cross-border Retail Payment Systems – A Network Industry Problem, Bank of Finland, Financial Markets Department. Available at: http://www.bof.fi/eng/7_tutkimus/KemppainenBackgroundOfPaper.pdf

[219] ECB (2000): *Mergers and Acquisitions Involving the EU Banking Industry – Facts and Implications*. Available at: http://www.ecb.int/pub/pdf/other/eubkmergersen.pdf

[220] See page 91 of the Commission's preliminary report on payment cards, available at http://ec.europa.eu/comm/competition/antitrust/others/sector_inquiries/financial_services/interim_report_1.pdf

Conclusions

Banks cooperate formally in several areas of retail banking activity, including ownership and management of payment systems, data sharing through credit registers, and commercial joint ventures. Such formal cooperation between banks can lead to substantial economic benefits. However, these forms of cooperation between competitors may also create competition problems, including potentially foreclosing entry to the retail banking market.

Ownership and management of payment systems

Because of the high costs of setting up and operating a payment system, such systems are often owned and managed by a joint venture of banks in a Member State. However, cooperation among incumbent banks which own and operate the payment system may give rise to certain types of anticompetitive behaviour. For example, incumbents may impose discriminatory access conditions to the payment system or set preferential interchange fees among themselves, placing new entrants at a competitive disadvantage.

Data sharing through credit registers

In order to minimise lending risks, banks agree to share certain data on their customers through the establishment of credit databases. Credit data sharing can have some positive effects and empirical evidence suggests that greater availability of credit data can improve the performance of the retail banking market.

In general, access to credit databases has received relatively little attention as a competition issue in retail banking. However, credit information sharing can also lead to foreclosure problems in the market, for example when members of a credit bureau refuse to admit potential entrants, or where such an entry is granted on a discriminatory basis.

10. CONCLUSIONS AND ISSUES FOR CONSULTATION

Preliminary findings can be separated into factual findings on the operation of the market; and potential barriers to competition.

10.1. Factual findings

Market structure

The first and most general finding is that retail banking markets tend to be fragmented along national lines. Several factors may explain this market fragmentation.

The countries with the highest concentration ratios at national level include countries such as The Netherlands, Belgium or Sweden and, to a lesser extent, Finland. The least concentrated countries seem to be Italy, Spain and, in particular, Germany. However, in view of the importance of local branch networks, national markets may be too large for analysing competition for core retail banking products. The inquiry has also examined concentration at the regional level and found, at least in some Member States and predominantly in Germany, far higher regional concentration ratios than the national figures suggest.

Financial performance of retail banks

Using OECD data, the inquiry has analysed long-term trends in the profitability of European banks, for *all banking activities* including retail. Based on operating profits as a share of gross income from all banking activity, banks in almost every Member State have become more profitable since the 1980s. The conjunction of rising pre-tax profits and falling effective tax rates implies that on average the post-tax profitability of European banks has increased significantly.

The profitability of *retail banking* activity varies widely across the EU. The inquiry's market survey found that average pre-tax profits in retail banking in 2004 were around 29% of banks' gross income across the EU25. However there were wide variations at country level. Banks in Austria and Germany generated pre-tax profits of 11% and 17% respectively; among the lowest in Europe. Banks in several Members States including Ireland, Spain and Finland were far more profitable, with pre-tax profits of over 40% of gross retail income.

The inquiry estimated banks' gross income per consumer for particular product lines. In 2004, for personal current accounts, banks in Luxembourg and Italy reported the highest gross income per customer (265€ and 204€ respectively), whereas banks in Lithuania and Sweden had the lowest figures (15€ and 22€ respectively).

Customer choice and mobility

Customers tend to have fairly long relationships with their bank, especially in the EU15. Consumers in the EU15 tend to hold their personal current account for roughly ten years on average, whereas SMEs hold their current account for just under nine years. Patterns of customer mobility in the new Member States are still quite different. The average age of current accounts is markedly lower at six years for consumer and five years for SMES.

The level of customer mobility in the current account market appears fairly low. Adjusting for market growth, only an estimated 7.8 per cent of EU consumers and 12.6 per cent of SMEs moved their personal current account in 2005.

Cross-selling by banks is a popular practice across the EU, though less established in the new Member States. On average, consumers holding a current account with a given bank

buy an additional 1.1 products from that ban, while mortgage customers buy an additional 2.0 products.

Comparisons of pricing and customers' use of banks accounts

Data gathered by the inquiry shows that there is high variation in prices for payment services across the EU25. The large dispersion in prices suggests that greater cross-border competition could bring down prices, particularly in those countries where payments prices are still relatively high.

Fees for current account services can be charged in different ways. Banks in some Member States such as France and The Netherlands earned low fees both for account management and payment fees per transaction. Italian banks reported the highest charges for account management fees and relatively high fees per transaction for selected payment services. Meanwhile, banks in Germany and the UK reported higher account management fees on average but lower average fees per payment.

10.2. Potential market barriers

European retail banking markets are still extremely fragmented and characterised by a range of entry barriers that need further exploration. Some of these barriers may be explained by 'natural effects' resulting from economies of scale, consumption externalities and standardisation requirements with respect to networks such as payment systems. Others are of an artificial nature resulting from specific regulation or conduct of firms and concern, for instance, access to networks or discriminatory fee structures. The main preliminary findings can be summarised as follows:

Payment systems

The inquiry has found a highly fragmented market for payment systems in the EU. In some Member States, multilateral clearing infrastructures are the legacy of non-profit systems owned by the national central bank and run on a non profit basis. In other Member States the payment infrastructure is operated by a joint venture of banks and may be on a for-profit basis. Corresponding banks still play a major role, particularly for cross border transactions.

The inquiry has shown that fee structures – particularly high joining fees and volume discount fees – and membership rules in some Member States may deter new entrants from membership of a payment system, which in turn weakens their ability to offer a competitive range of retail banking services. For potential new entrants, the alternative may be indirect participation in the payment system through a local intermediary bank, which is likely to be a (large) domestic competitor in the downstream retail banking market.

The creation of a Single Euro Payment Area (SEPA) should change the competitive landscape. Some national payment systems expect that SEPA will generate new opportunities for growth, while it may threaten the established business model of sole others. Certain aspects in the design and governance of SEPA may merit close competition scrutiny because decisions being taken now will shape the landscape of the European payments industry – and the wider retail banking sector – over the long term.

Credit databases

Banks need data in order to assess the creditworthiness of borrowers and price accurately for risk. However, the way credit databases are organised and gather information, can provide an obstacle for newcomers. In particular, credit databases that are owned and managed by a joint venture or co-operation of the incumbent banks can result in entry barriers for banks established in other Member States.

Factors which may reduce customer mobility

The evidence suggests at first sight that some patterns in banking customers' behaviour may be intrinsic, such as the wish to maintain a long-term relationship with their bank. However it may also suggest that there are some common structural factors that customers face across Europe which may unnecessarily raise the costs of switching bank and so reduce their mobility. This effect may in turn weaken the incentives on banks to compete to retain their existing customers and to attract consumers to switch bank. The inquiry has shown that banks' profitability tends to be lower in markets where customers are more mobile.

Cross-selling is widely practiced and, in addition to having commercial advantages for banks, may have some benefits for customers. However, some aspects of the way in which retail banking products are bought and sold may reduce the intensity of competition among banks for new business. For example, 47 per cent of banks' mortgages customers were required to take out a current account, whereas 58 per cent of SMEs taking out a loan also had to accept a current account. This practice increases the breadth of a consumer's relationship with one bank and hence increases the costs involved in moving their business to an alternative provider.

10.3. Issues for consultation

The Commission is keen to engage in dialogue with market participants and authorities about the report's preliminary findings and appropriate ways forward. Therefore the Commission highlights a set of issues for consultation, and welcomes the views and perspectives of all stakeholders on this interim report. This will enable stakeholders to put forward their views on the key questions and appropriate ways forward.

In view of the sensitive nature of such evidence, market participants may wish to provide submissions to the Commission on an informal and confidential basis. The Commission will assume responsibility for preserving the confidentiality of any material provided.

As set out in the executive summary, the Commission has identified five sets of issues for consultation on its interim report on current accounts and related services. These issues are:

- Market structure and fragmentation
- Banks' financial performance and pricing
- Entry barriers in retail banking
- Customer choice and mobility
- Development of payment infrastructures in the context of the Single Euro Payment Area

Market structure and fragmentation

Q1. What are the main reasons for market fragmentation in Europe's retail banking sector? Please identify whether they are mainly of regulatory, structural or behavioural nature.

Q2. What are the main causes and implications of the different level of concentration in the EU retail banking markets?

Banks' financial performance and pricing

Q3. What are the main reasons for the varying rates of profitability and income in retail banking across the Member States?

Entry barriers in retail banking

Q4. Are there other types of entry barriers in retail banking that have not been identified in the preliminary report?

Q5. Where does competition law have a role in tackling entry barriers in retail banking?

Q6. Access to credit databases and payment infrastructures are sometimes cited as a barrier to entry in retail banking markets. Are there significant barriers to access which merit further investigation?

Customer choice and mobility

Q7. What are the main reasons for the low mobility of retail banking customers?

Development of payment infrastructures in the context of the Single Euro Payment Area

Q8. Are there features of the payment industry that limit competition either at the level of provision of clearing and settlement services or the provision of retail banking services? Please indicate areas that merit further investigation.

Q9. Are interchange fees necessary for the development of payment instruments (credit transfers and direct debits) in the EU?

Q10. Are there issues related to industry initiatives in the context of SEPA that should be assessed form a competition view point?

Other issues

Q11. Please provide comments on any other competition-related issues in relation to retail banking markets.

10.4. Next steps in the retail banking sector inquiry

The European Commission is holding a public consultation on this Interim Report. The non-confidential version of this report is available on the website of the Directorate General for Competition. The consultation will be open for 12 weeks and will close on **9 October 2006**.

The Commission invites industry participants, consumers of retail services and other interested parties to submit their views and comments on a number of questions that are raised in the interim report. In addition, stakeholders are welcome to contact the Commission directly to discuss any competition related issues in retail banking.

Respondents to the consultation are asked to provide their contribution by completing a designated feedback form. This feedback form may be found on the Commission's website: http://ec.europa.eu/comm/competition/antitrust/others/sector_inquiries/financial_services.

The completed form should be sent to the email address: comp-bank-inquiry-feedback@cec.eu.int. Respondents are requested to follow the suggested lay-out of the feedback form. Respondents are highly encouraged to provide comments of not more than **20 pages** to allow for efficient treatment of the feedback by the Commission. There shall be only one submission of comments per undertaking. Respondents are advised that their contributions may be published on the Commission's website. In case your comments contain confidential information, please provide a non confidential version.

The final report of the sector enquiry into retail banking will be published by the end of 2006.

APPENDIX I: LONG-TERM PROFITABILITY OF THE EU BANKING SECTOR

Table 1: Pre-tax profit as share of gross banking income (%), 1981-2003

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Austria							30	32	18	16	15	12	17	16	14	15	16	18	18	21	22	14	18
Belgium	12	14	15	16	17	18	16	15	10	16	13	12	19	20	19	22	22	24	25	34	30	25	34
Czech Rep													6	5	3	-4	-2	-6	-12	0	20	36	42
Denmark	17	20	53	3	52	-17	10	22	8	-9	0	-38	13	0	30	31	31	30	29	32	35	36	38
Finland	7	7	7	8	9	10	8	13	8	11	-23	-88	-36	-39	-12	12	26	14	28	40	60	35	46
France								19	18	16	18	12	5	1	7	10	15	20	26	26	27	27	27
Germany	20	23	24	25	24	23	21	24	18	18	22	21	21	19	22	22	21	29	18	16	11	7	0
Greece									15	24	34	31	28	31	30	19	22	28	47	38	33	20	24
Hungary														25	49	38	19	-63	12	25	29	3	33
Ireland															35	39	41	48	47	47	37	43	45
Italy				19	22	26	21	23	22	24	23	19	21	9	12	15	11	26	28	34	27	24	23
Luxembourg	29	21	17	22	23	23	25	32	29	19	23	27	41	48	47	51	47	46	44	44	44	41	47
Netherlands	7	8	19	17	25	23	26	26	28	22	21	22	25	26	27	27	25	21	27	25	23	17	25
Poland													17	18	46	47	41	25	23	20	20	13	17
Portugal	19	17	13	11	11	8	14	17	21	24	26	21	23	21	22	23	27	26	27	37	29	27	26
Slovak Rep																	0	-6		16	27	27	25
Spain	17	14	13	15	18	18	22	22	28	27	28	24	8	20	23	24	26	27	29	28	25	26	28
Sweden	13	12	14	11	11	25	21	17	16	8		7	3	24	32	36	20	28	31	39	41	25	32
UK				19	23	24	5	29	4	15	8	7	17	28	29	32	34	36	39	38	35	28	33
United States	*25*	*21*	*20*	*19*	*19*	*17*	*5*	*21*	*15*	*14*	*14*	*22*	*29*	*30*	*31*	*31*	*32*	*30*	*33*	*30*	*29*	*32*	*35*

Source: derived from OECD Bank Profitability database
Notes: pre-tax profit is measured by the OECD variable 'income before tax'. Gross banking income is the sum of net interest and net non-interest income for all banking activities.

Table 2: Share of banks' profits paid in income tax (%), 1981-2003

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Austria							13	12	19	19	17	17	13	12	21	21	18	11	12	14	10	16	14
Belgium	49	49	51	43	43	43	41	29	38	24	29	38	29	31	37	33	34	34	19	23	18	29	14
Czech Rep													49	48	61	-18	-14	-14	-3	*	25	29	27
Denmark	25	28	39	87	47	9	37	31	19	8		-2	35	*	17	16	9	16	18	19	25	29	31
Finland	44	45	38	31	32	23	23	15	33	34	-8	-1	-2	-2	-14	18	14	-10	14	26	3	22	-5
France								26	26	24	24	38	84	*	65	49	31	17	26	20	19	16	20
Germany	61	65	67	64	64	62	62	62	56	54	58	62	55	49	52	53	51	49	44	36	27	41	
Greece									12	21	16	32	33	28	29	38	30	37	21	26	28	28	27
Hungary														44	22	21	32	-10	35	20	18	*	18
Ireland															29	29	27	26	23	24	15	18	20
Italy				50	49	47	42	44	46	40	42	50	64	72	79	57	75	47	40	38	40	38	30
Luxembourg	54	53	51	48	47	45	42	38	31	29	29	37	32	30	33	35	34	23	30	28	23	20	20
Netherlands							27	27	24	26	27	28	30	29	30	27	27	29	27	28	22	25	27
Poland													*	90	39	31	32	61	38	32	27	39	42
Portugal	12	11	9	9	10	10	5	7	24	24	26	22	21	21	20	21	20	20	15	12	14	12	12
Slovak Rep																			-3	15	3	3	0
Spain	19	22	23	20	21	23	23	26	28	27	24	24	66	24	23	22	21	20	21	15	12	9	20
Sweden	68	62	89	71	51	*	52	*	22	33	42	20	*	19	24	30	43	20	29	32	22	40	37
UK				54	45	36	78	36	66	46	42	55	37	34	34	35	31	29	30	30	31	34	29
United States	*24*	*20*	*21*	*23*	*24*	*24*	*70*	*31*	*39*	*33*	*32*	*32*	*32*	*34*	*35*	*35*	*35*	*34*	*36*	*35*	*33*	*33*	*33*

Source: derived from OECD Bank Profitability database

Notes: the figures shown are the ratio of the OECD variable 'income tax' to the variable 'income before tax'.

Table 3: Banking profitability measured by rate of (pre-tax) return on assets (%), 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Austria	0,33	0,44	0,41	0,38	0,42	0,42	0,45	0,43	0,50	0,53
Belgium	0,23	0,36	0,34	0,33	0,39	0,39	0,45	0,45	0,72	0,56
Czech Rep		0,58	0,47	0,30	-0,40	-0,24	-0,78	-1,50	0,01	0,83
Denmark	-1,24	0,58	0,00	1,28	1,11	0,99	0,92	0,86	1,02	1,02
Finland	-2,61	-1,43	-1,26	-0,38	0,42	0,83	0,54	0,84	1,29	2,75
France	0,28	0,13	0,02	0,16	0,20	0,31	0,41	0,50	0,55	0,56
Germany	0,54	0,54	0,50	0,53	0,50	0,44	0,68	0,37	0,32	0,21
Greece	1,07	0,98	1,26	1,18	0,74	0,91	1,16	2,73	1,72	1,33
Hungary			0,66	1,39	1,68	0,82	-1,95	0,49	1,13	1,52
Ireland				1,36	1,34	1,08	1,30	1,09	1,13	0,81
Italy	0,67	0,80	0,30	0,40	0,52	0,36	0,89	0,95	1,19	0,95
Luxembourg	0,31	0,50	0,50	0,50	0,55	0,52	0,59	0,49	0,54	0,50
Netherlands	0,56	0,65	0,70	0,72	0,73	0,66	0,55	0,74	0,69	0,59
Poland		1,12	1,10	3,14	3,25	2,69	1,46	1,40	1,31	1,23
Portugal	0,96	0,88	0,66	0,63	0,71	0,81	0,78	0,74	1,00	0,75
Slovak Rep						0,01	-0,23	-3,73	0,61	1,00
Spain	1,03	0,33	0,76	0,79	0,84	0,91	0,92	0,91	0,91	0,82
Sweden	0,26	0,15	1,01	1,30	1,26	0,59	0,87	0,87	1,04	1,10
UK	0,28	0,73	1,12	1,11	1,10	1,09	1,20	1,28	1,11	1,03
United States	*1,31*	*1,70*	*1,68*	*1,75*	*1,78*	*1,83*	*1,73*	*1,94*	*1,73*	*1,71*

Source: derived from OECD Bank Profitability database
Notes: the figures shown are the ratio of the OECD variable 'income before tax' to total banking assets.

APPENDIX II: INTEREST RATE DISPERSION IN THE EURO AREA

Introduction

The study examines retail interest rates of selected European banks in order to identify possible differences within and across Member States. Comparing rates across Member States (and to some extent within Member States as well) is not straightforward and can lead to spurious conclusions because a large number of potential factors can account for the divergences possibly observed. These potential explanatory factors for divergence are various: (1) imperfect comparability of data; (2) business cycle and demand-side determinants; (3) institutional factors (regulation and taxation); (4) market environment (for example, the financial structure of the banks' clients and their risk profile); (5) degree of market integration; and (6) degree of competition in the relevant sector. It is very difficult to disentangle the individual effects of these specific characteristics. Therefore, the analysis in other chapters of this preliminary report provides complementary information that could help with interpreting interest rates differentials observed across Member States or even within Member States. The next section presents the methodological approach adopted in this exercise. Section 3 investigates interest rates differentials within the euro area and within the euro area Member States. This examination is conducted on the basis of a harmonized database of retail rates for the euro area. Finally, section 4 concludes by summarizing the main findings and reviewing possibilities for further investigation.

Review of existing empirical evidence for Europe

Numerous studies seek empirical evidence of market power and concentration on the basis of observed pricing behaviour, i.e. identification of diverging patterns in prices across products, across Member States and through time.

Corvoisier and Gropp (2002) find that bank concentration exhibits substantial differences across and within Member States of the euro area and that increasing concentration may have led to coordination of pricing and higher interest margins for loans and demand deposits. Surprisingly, this finding does not hold for savings and time deposits markets possibly because the degree of contestability of the markets has increased concurrently with the increase in concentration.

Another example is the abundant literature[221] investigating the pass-through from the policy rate to the retail rates, which provides useful insights on the speed and extent of adjustments of retail rates and how these may reflect the state of competition in the market.

The most recent study conducted at the EMU level is Kok, Sorensen and Werner (2006). They find that there is a large degree of heterogeneity across the euro area Member States with respect to both the long-run equilibrium pass-through and the speed of adjustment to the long-run equilibrium. They suggest the origin of these differences is the lack of integration of the retail banking sector rather than sectoral inefficiencies. From a product-specific perspective, bank rates on corporate loans

[221] For example: Cottarelli and Kourelis (1994), Borio and Fritz (1995) and Mojon (2000) who initiated this wave of pass-through studies. De Bondt, Mojon and Valla (2005) provide a comprehensive review of existing studies for the euro area.

appear to adjust most quickly, followed by the rates on mortgages and the time deposit rates. The adjustment of rates on consumer loans and current account deposits seems to be slower. They also investigated the underlying factors responsible for this heterogeneity such as concentration, market power, credit risk, bank's excess liquidity and capital, loan demand (among others). In particular, the different degrees of competition appear to be a plausible factor; however, current data limitations do not allow conclusive evidence.

Previous work by ECB staff (de Bondt, Mojon and Valla, 2005) explored similar issues. They show that retail bank interest rates adjust to both short-term and long-term market interest rates as opposed to only short-term policy/market rates. Moreover, the transmission of changes in short-term market interest rates along the yield curve is found to be a key factor explaining the sluggishness of retail bank interest rates. They also find evidence that the adjustment of retail rates has accelerated since the introduction of the euro. They also provide a comprehensive overview of existing evidence about interest rate pass-through for individual euro area Member States.

Another group of studies investigates more disaggregated data by focusing on national markets and looking into bank-level data. For example, De Graeve, De Jonghe and Vander Vennet (2004); Martin-Oliver, Salas-Fumas and Saurina (2005a, 2005b); and Columbo and Turati (2006) adopt this national approach[222] for, respectively, Belgium, Spain and Italy. For the Belgian market, De Graeve *et al* find that interest rates on corporate loans adjust more quickly to money market changes than rates on consumer loans. They also observe two distinct segments for the saving markets: on the one hand demand and saving deposits displaying a sluggish response; on the other, time deposits and savings bonds demonstrating a quick transmission. Besides an aggregation and heterogeneity bias, they also identify some bank-specific determinants in the estimation of the adjustment speed. They observe that well-capitalized and relatively liquid banks tend to be particularly slow in their adjustments. Furthermore, banks with large market shares seem to set prices less competitively. For the Spanish market, Martin-Oliver *et al* use a unique database (a very large sample of Spanish banks for a broad range of products over almost 15 years) in order to investigate the role of information differentiation (implying search costs for the clients) to explain persistent price dispersion across banks. For instance, they provide evidence that banks randomize their pricing strategies across products in order to hinder clients in finding banks that offer systematically worse or systematically better conditions. Past regulatory initiatives aimed at increasing transparency (and decreasing search costs) and more recently internet banking seem to have been effective in reducing dispersion. Another finding highlights the importance of inflation (above changes in market rates) in explaining interest rate dispersion. In addition, when explaining the differences in loan rate levels, they find that different credit risk across banks and loan products is an important source of dispersion in the short and long run, and which may limit banking integration. Finally, Columbo and Turati have collected recent evidence for the Italian market. Several indicators are used (market concentration, profit indicators, interest rate margins), which are also considered by regions. Some clear geographical patterns emerge; however, preliminary contrasting indications coming from concentration and

[222] Beyond the policy implications highlighted in this chapter, these authors have also made interesting methodological contributions that are not developed here.

profitability indicators call for further investigation. Nevertheless, preliminary conclusions seem to indicate a deficit of competition in the Italian banking industry.

This review of euro area and national evidence reveals clear indications of diverging pricing behaviour by banks across and within Member States. Whether market structures cause this divergence is, however, not clear.

Methodological approach for the analysis of retail rates

While most of the existing studies reported in the previous section rely on time series analysis (at least in the case of pass-through analysis), the approach chosen in this exercise is mainly cross-sectional. By looking at cross section data, either across Member States on the basis of national averages or within Member States on the basis of firm-level data, it is possible to examine the relative dispersion of the retail rates. Nevertheless, it should be highlighted that the various dispersion indicators must be interpreted with caution.

Beyond the variety of factors interplaying and determining the level of the rates, it is not clear whether or not a high or low degree of dispersion should be considered as worrisome or desirable. Two theoretical scenarios within one country show why this analysis may be inconclusive:

(i) Very low degree of dispersion or perfect convergence. All banks set (approximately) the same rate. This pattern could indicate a high level of competition and a convergence to a "perfect competition equilibrium", or indicate coordination of prices at a level that could be different from the competitive price.

(ii) Very high degree of dispersion, no sign of convergence. When banks set very different prices, it does not necessarily indicate a lack of competition but could reflect different business models with banks specialising in some segments of the markets rather than others.

At this juncture, the dispersion in interest rates is explored on the basis of the MIR database: harmonized retail rates (loans and deposits) of Monetary Financial Institutions (MFI) for households and non-financial corporations resident (MFI interest rates or MIR database). These rates are collected on a monthly basis since January 2003 for the euro area and some non-euro area Member States by the national central banks (NCBs). In total, 45 banking products are available and classified following different criteria: outstanding amount/new business, households/non-financial corporations, type of products, duration.

Future work could be conducted on the basis of the firm-level data collected for this inquiry by means of the questionnaire (sent to roughly 250 European banks). There is no direct correspondence between the two datasets in terms of the definitions of the products or in terms of the definition of the corporate sector for which the data were collected. However, a parallel examination of the two datasets would allow different but complementary perspectives combining a macro and micro approach.

Analysis of the MIR database for the euro area

There are obvious reasons for first concentrating on the euro area. Although the euro area financial markets and banks are far from perfectly integrated, they share the

same currency and face the same monetary policy. Therefore, they constitute a homogenous group in terms of money-market conditions while underlying risk-free rates at longer maturities are highly convergent (i.e. yields on government benchmark bonds). Excluding this factor of differentiation facilitates the analysis of the other elements influencing the interest rates setting by banks.

In particular, the MIR database contains substantially harmonized retail interest rates for the euro area according to the reporting framework described in Regulation ECB/2001/18. The analysis of this database is structured according to the level of aggregation of the data, going from the highest level of aggregation to the description of the bank-level information. The euro area average rates are weighted averages of the 12 national aggregates, which are themselves computed as weighted averages for a selection of banks active on the national markets[223].

This section first investigates the level and the degree of dispersion of the rates for the euro area aggregate and the national aggregates of the euro area Member States. Secondly, it examines descriptive statistics related to the underlying firm-level data, which compose the national aggregates of the MIR database.

The sample considers monthly data ranging from January 2003 until February 2006 (except when mentioned otherwise).

Differences observed in the euro area

This sub-section first reviews the differences observed on the basis of euro area interest rate aggregates and coefficient of variations for a broad range of banking products. Secondly, it explores the differences across Member States in terms of margins and spreads. Finally, it lists the various explanatory factors possibly accounting for those differences.

Evolution of the euro area aggregates

Before comparing Member States within the euro area, broad tendencies can be observed on the basis of the euro area aggregates.

Two types of figures (See Annex 1) are examined: first, a comparison of the rates applied for New Business (NB) and the rates prevailing for Outstanding Amount (OA) for a range of comparable products; second, the evolution of the cross-country coefficient of variation for various product categories. The cross-country coefficient of variation is a measure of dispersion between the national aggregates composing the euro aggregates[224]. In both cases, households (HH) and non-financial corporations (NFC) will be distinguished.

New business and outstanding amounts are defined as follows[225]: **New business** is defined as any new agreement between the household or non-financial corporation and the credit or other institution agreed in the reference month. New agreements

[223] For a complete description of the database see: http://www.ecb.int/stats/money/interest/interest/html/index.en.html.

[224] For the statistical definition of the cross-country coefficient of variation, please refer to: http://www.ecb.int/stats/money/interest/coeff/html/index.en.html.

[225] ECB definitions available on the website. See also ECB Monthly Bulletin, July 2005, available at: http://www.ecb.int/pub/pdf/mobu/mb200507en.pdf

comprise all financial contracts, the terms and conditions of which specify for the first time the interest rate on the deposit or loan, and all new negotiations of existing deposits and loans. **Outstanding amounts** are defined as the stock of all deposits placed by HH and NFC with credit or other institutions and the stock of all loans granted by credit or other institutions to HH and NFC. They include all open contracts agreed in the past. The former category reflects demand and supply conditions of the reference month and is therefore useful for analyzing interest rates applied by banks (among other things). The latter category reflects past decisions and indicates "historical level" of interest rates and long-term average margins applied by banks.

Although, the highest level of aggregation (euro aggregates) is not the most appropriate, broad tendencies can be observed in interest rates on the basis of the euro area aggregates, in particular:

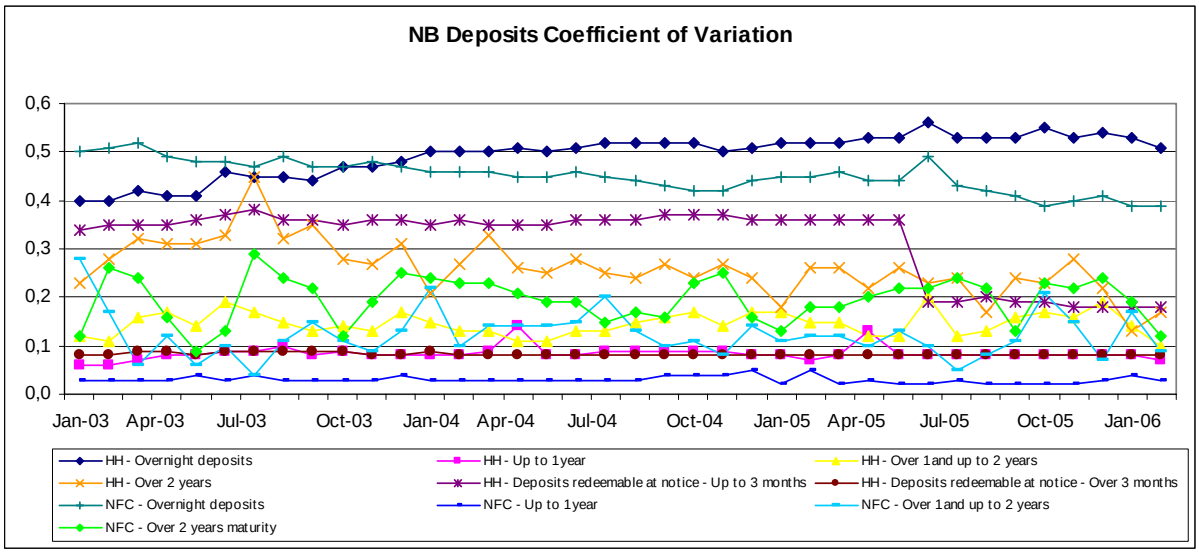
(v) a relatively higher variation is observed for deposits than for other banking products;

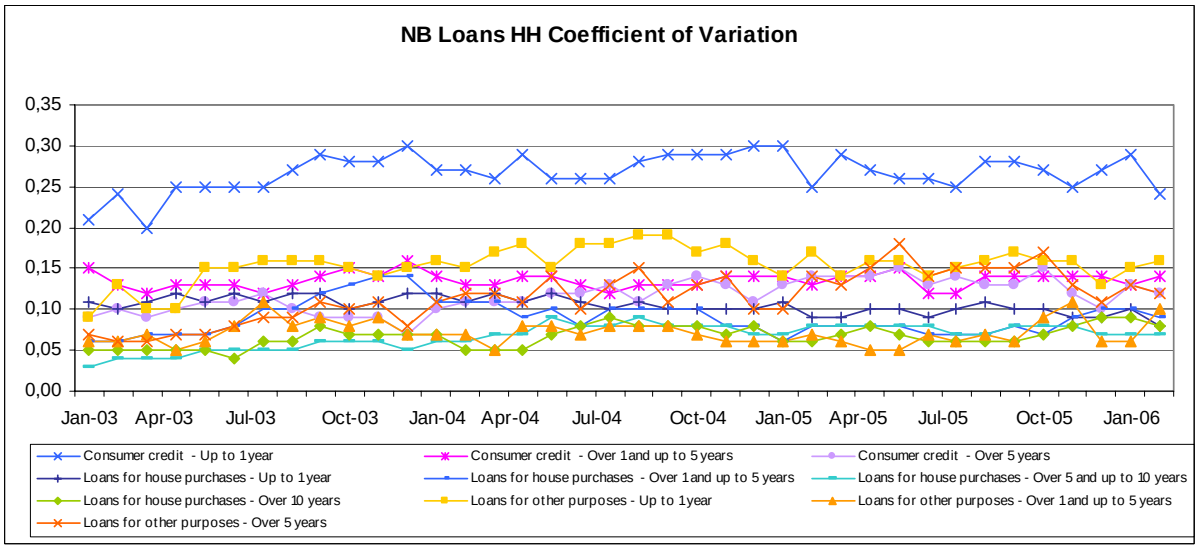
(vi) in general more dispersion is observed for HH products than for NFC products;

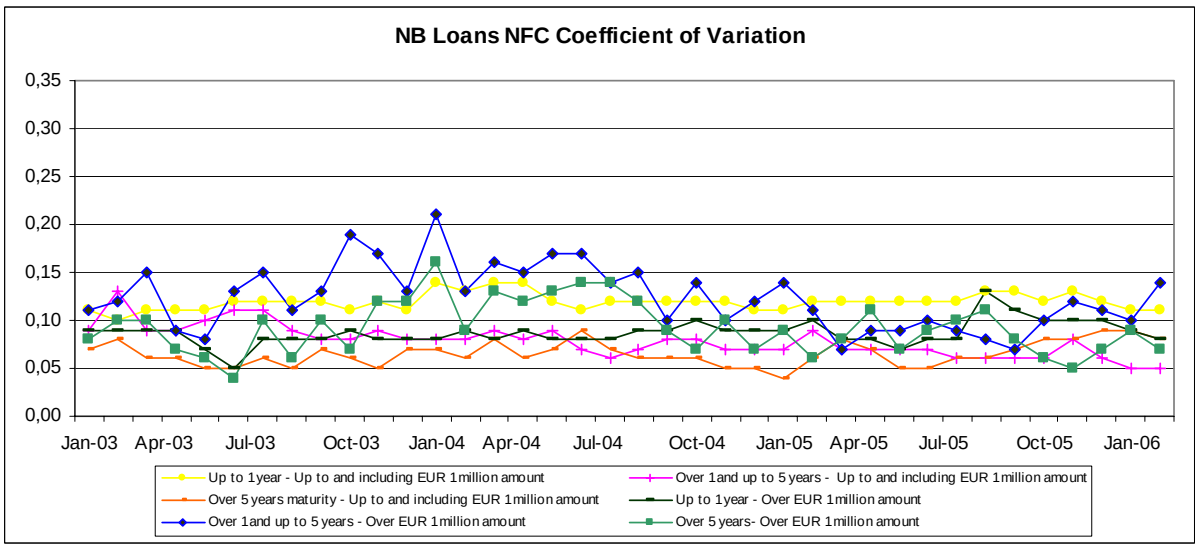
(vii) there is no clear pattern concerning the NB and OA differences; and

(viii) the lowest degree of dispersion is observed for the repurchase agreements, household mortgages and large loans to NFC. This relatively high degree of convergence among Member States might suggest either rather integrated and/or competitive market segments.

Some of these findings are illustrated by the following figures (also reported in Annex 1).







Source: ECB, MIR statistics.

More particularly, referring to the figures in Annex 1, the following observations have been made:

- The evolution through time of the interest rates for the Repo on NB and OA is very similar and unsurprisingly follows closely the money market rate. The cross-country coefficient of variation is among the lowest and demonstrates a downward trend toward the end of the period (See Figures 1 and 2 in Annex 1).

- The deposit rates for HH and NFC present similar patterns through time. However, the level of deposit rates is slightly higher for NFC than for HH. The differences observed between the rates on NB and OA are typically smaller for shorter maturities than for longer maturities (over 2 years). This is probably explained by the more rapid turnover in OA at shorter maturities. Overall, the cross-county coefficient of variation is higher for the NB deposits than for other banking products. In particular, the dispersion across country is the highest for the overnight rates, followed by the long-term rates for the HH and the long-term rates for the NFC. The short-term maturities (up to 1 year) and the deposits redeemable at notice demonstrate the lowest variations. Finally, it is worthwhile noting that, although lower in absolute terms than for the NB data, the coefficient of variation on the OA data have increased towards the end of the period considered (except for the up to 2 years maturity for NFC). (See Figures 3, 4, 5 and 6)

- As far as the loans to HH are concerned, no clear pattern emerges from the NB and OA comparison. The HH loans for house purchases demonstrate a downward sloping trend except for the few last observations on the NB (due to recent monetary tightening). In general, the levels of the rates on the OA data are slightly higher than the NB data. These divergences between NB and OA data are more limited for the longer maturities than for the shorter ones. Compared to their historical level, NB rates on short maturities seem to have decreased relatively more than the ones on longer maturities, which could indicate more downward pressure on interest rates at short maturities over the recent period. However, the opposite pattern is observed for the NB and OA comparison on the loans to HH for consumption. The coefficient of variation between Member States on NB data seems rather stable over time. In general, the dispersion is more important for the consumer credit than for mortgages. The highest degree of dispersion is reported for the consumer credit up to 1 year. However, the coefficient of variation on the OA loan rates data displays a rather unexpected increasing pattern pointing at increasing divergence across Member States. (See Figures 7, 8, 9 and 10)

- The pattern for loans to NFC over 1 million euros is comparable to the pattern for HH mortgages in terms of the level of rates and differences between OA and NB data. However, the picture is unclear for the loans up to and including 1 million euros. In general, the coefficient of variations for the loans to NFC rates are rather low and stable over time (both in the NB and OA categories). (See Figures 11, 12, 13 and 14)

- The level of the rates for bank overdrafts for HH is much higher than the one for NFC. They display the same trend over time. Nevertheless, the cross-country variation of the former seems lower (although slightly increasing over time) than for the latter. (See Figures 15 and 16)

These findings are confirmed by an ECB study (Monthly Bulletin, July 2005). They conclude that the relative dispersion of the MIR levels is generally higher for deposits than for loans. In particular, overnight deposits and deposits redeemable at notice tend to display the highest variation across Member States, followed by deposits from HH and from NFC with agreed maturity over 2 years. Turning to the loans, the largest cross-country differences have been found for consumer loans to HH and to a lesser extent for short-term loans to NFC. Bank overdrafts for both HH and NFC show relatively high coefficients of variation, while mortgage rates present a relatively low dispersion. Finally, the differences have remained broadly unchanged over time.

To complement the analysis in levels, a similar analysis can be conducted on the basis of the differences in the changes/adjustments, i.e. degree to which changes in the market interest rates are transmitted to the MIR interest rates (a comparable approach to the pass-through literature). Preliminary examination of these differences points to similar cross-country dispersion patterns for the changes than for the levels of the different interest rates categories. Therefore, it seems that the factors that possibly cause cross-country differences in interest-rate levels also lead to dispersion in the adjustment path of these rates.

Differences among euro area Member States

Overall, anecdotal and preliminary evidence would suggest a possible identification of country clusters where the margins and spreads are consistently smaller (larger) than for other country clusters.

The intermediation margin is used as a proxy for the profit margin of the banking sector. It is defined as the difference between an average lending rate and an average deposit rate. These averages are defined as weighted averages across different product categories (loans and deposit respectively). Country rankings can be established according to the level of average lending rate, the level of average deposit rate of their difference (intermediation margin). For example, Member States can be ranked in descending order where the highest rank is given to the country displaying the highest level of the variables mentioned above. Eventually, it is possible to compare the rankings for the lending, deposit and intermediation margins and test whether or not they correspond.

Another possible indicator is the spread in retail bank rates relative to corresponding rates in the financial markets. More specifically, this spread is defined as the difference between the retail rates (calculated using the same averaging methodologies as above) and the references rates on the market, which can be interpreted as the opportunity costs for banks[226]. Intuitively, one could expect these spreads to narrow in a competitive and efficient environment. Indeed, banks would tend to slightly undercut the reference rates when setting deposit rates in order to attract a large supply of deposits and compete on lending rates, although at a higher rate than the references rates. Country rankings can also be established according to the level of the spreads calculated.

The computations of these margins, spreads and rankings are confidential. Nevertheless, some inference can already be made and several features highlighted.

[226] Banks are assumed to be price takers on the inter-bank money and long-term debt market.

- First, there seems to exist a positive correlation between rankings based on OA deposit rates and rankings based on OA lending rates, which could be interpreted as a long-term equilibrium[227] where the retail rates are in the long run fundamentally determined by the level of the policy rate and by the intermediation nature of the banking sector where a balance between the assets and liabilities side of their balance sheet should prevail.

- In contrast, the corresponding correlation coefficient for the NB appears to be negative, meaning that the Member States showing the highest interest rates for loans do not necessarily coincide with the ones offering highest interest rates for deposits. While it could be considered as unexpected in view of the OA result, this negative correlation coefficient is not necessarily counter-intuitive. It could be interpreted as a sign of changing cyclical development, framework conditions or relative efficiency/competitive pressure on the new businesses over the recent years. In a relatively efficient and competitive environment, one could expect upward pressure on deposit rates and downward pressure on lending rates, which would lead to a narrowing of the intermediation margin.

- Examining the product segments, rankings are relatively similar between OA and NB categories In particular, the rankings for loans and intermediation margins based on OA and NB data are positively and highly correlated. This correlation between OA and NB ranking is weaker for the loans, which could be explained in view of the composition of the "loan basket" in OA where some very old contracts might still be included, while the NB series would give a better idea of the recent trends.

- In the case of NB, prima facie evidence seems to indicate a high and positive correlation between the country rankings based on the intermediation margin and the ones for the market spreads, in particular for lending rates where the coefficient of correlation reaches 90%.

- When comparing the ranking based on the intermediation margin for NB and the one on the market spread for lending, it is possible to identify rather robust clusters of countries. The four countries demonstrating the highest margins or spreads are, in decreasing order: Greece, Portugal, Italy and Ireland. At the opposite end, displaying very narrow margins or spreads are the Benelux and in some cases Finland and Austria.

Nevertheless, the interpretation of these margins and spread as efficiency and competition indicator should be nuanced. First, this anecdotal evidence relies on strong assumptions in terms of aggregation methodologies (across a variety of MIR rates). Moreover, at least two categories of influencing factors could be accounting for these differences, of which only the latter can be, to some extent, linked to efficiency gains.

[227] The averages for outstanding amounts are computed on the basis of a broad range of products held in portfolio at the time of data collection (stock definition). These include in some cases "old contracts" with long maturities for which contract have been fixed more than 10 years before the collation of the data and under totally different economic and framework conditions.

- Cyclical determinants: economic cycle and evolution of the deposit supply and credit demand. For example, Spanish banks recently increased the rates offered on the deposit segments in an effort to meet the booming private credit demand.

- Structural determinants: market environment, degree of access to direct financing, degree of competition, business model of the banks considered (including the type of bank, governance design, and specialisation on specific market segments).

In the next section, the potential explanatory factors for the cross-country differences are developed in further detail.

Explaining the difference observed across Member States within the euro area

This section reviews potential explanatory factors for the cross-country differences observed in the MFI interest rates. These factors can be classified in four groups[228]: statistical design, regulatory and fiscal determinants, other structural determinants and cyclical determinants.

Statistical design

This category regroups various factors having an impact on the statistical series analysed here. First, the selection of the reporting banks, whether by sampling or census approach, in each of the euro area Member States was left to the discretion of the NCBs. Second, despite careful scrutiny by ECB, possible misclassification of the banking products or heterogeneity within a product segment could still occur (for example the treatment of credit cards or loans to HH for other purposes). Other factors of this type could include: aggregation methods and calculation methods at the different reporting levels. Finally, the regrouping of various durations (according to the fixation period or contract maturity) under the same product denomination could heterogeneity within product categories (for example mortgages over 5 years initial rate fixation could include contracts of 10, 15, 20 or more years).

Regulatory and fiscal determinants

Regulatory and fiscal determinants are national competences and may therefore account for differences across Member States. Examples of these "institutional" determinants include: consumer protection rules, regulation related to the remuneration of deposits, existence of cap on usury rate for consumer credit, switching costs for mortgage renegotiation or early repayments, free access to credit registers, tax treatment of income from deposits, possible deduction of mortgage interest payments, and the treatment of the collaterals.

Structural determinants

This very broad family corresponds to other main features of the national banking sector, such as: the financial market environment and financing conditions (including access to direct financing); technological changes; the risk profile of the borrowers; bank governance and business model (capitalisation and liquidity, possible

[228] See also ECB Monthly Bulletin, July 2005. Available at: http://www.ecb.int/pub/pdf/mobu/mb200507en.pdf

specialisation, fee strategy/non-interest income and diversification of banking activity); the degree of integration and competition in the sector ; the cost of switching bank; and market contestability and possible barriers to entry,. In particular, various studies point to the heterogeneity and complexity of the pricing strategies in terms of fee income versus interest income (See CRA study).

Cyclical determinants

Despite the common monetary policy, euro area Member States still face economic cycle differences and European banks are confronted with different "demand side" characteristics, for example: existence of attractive investment projects, evolution of housing markets, demand for credit and deposit supply.

It is not straightforward to isolate each of these effects and assess their relevance in specific cases (differences across country or products). Overall, very preliminary analysis would indicate that the impact of statistical design, although perfectible, accounts for a marginal part of the differences observed. A substantial part of the divergences would, unsurprisingly, originate from "national regulatory factors" and from other structural determinants. However, specific and conclusive evidence on competition and concentration issues is currently lacking and would require further analytical work.

Dispersion within euro area Member States

After having described the dispersion at the euro area level and the differences across euro area Member States, this section investigates the dispersion within these Member States. The purpose is to check whether a high degree of dispersion across euro area Member States will be mirrored by a similar degree of dispersion within Member States. One might expect to identify similar degrees of dispersion for the countries that were tentatively regrouped in clusters in the previous section.

Some broad conclusions on dispersion within euro area Member States can be drawn. The primary conclusion is that no clear pattern or robust clustering emerges. Observation of dispersion in MIR rates within Member States offers relatively inconclusive results. Moreover the results are in some respects even unexpected in view of the evidence on market structure and concentration at country level and the possible country clusters that were identified on the basis of spreads and margins analysis.

This analysis is based on confidential descriptive statistics (such as weighted mean, standard deviation and skewness) related to the bank-level data that are used to compute the national aggregates for the MIR series. These statistics are used as indicators for the dispersion among the bank-level data. These data were provided by the NCBs for 3 dates: December 2003, 2004 and 2005[229]. The focus is placed on the NB banking products with highest coefficient of variation across Member States in the euro area (See Section 4.1.1) and additionally, as a benchmark, some other products with low coefficient such as the mortgages.

Although these descriptive statistics cannot be disclosed, a few features can be highlighted.

[229] There are some data limitations. The Commission is not responsible for the quality of the statistics delivered.

- A high coefficient of variation across euro area Member States is often observed simultaneously with big differences in the mean values of France and Germany. This is a logical consequence of the methodology applied for the computation of the euro area aggregates and its corresponding coefficient of variation. Indeed, the weights applied for the computation of these indicators acknowledge the importance of the French and German economy (France and Germany are the two largest Member States for the attribution of the weights). Beyond this "endogenous feature", there is no clear correlation between the dispersion observed across Member States (on the basis of the coefficient of variation) and within Member States (on the basis of the standard deviation and other statistics) of the euro area.

- A closer look at the descriptive statistics by Member States reveals, in general, a positive and relatively high skewness for the deposit rates, possibly indicating an asymmetry in the rates distribution towards higher values. In some cases, the weighted average appears to be higher than the third quartile, which could indicate that the largest banks (substantial weight in the national weighing scheme) tend to offer substantial higher rates than the "median bank". This issue should be further investigated.

- Nevertheless, the picture is less clear for loan products. While in general positive, for some loans products and Member States, the skewness is negative, which points to asymmetries towards lower rates. In particular, The Netherlands, Ireland, Greece and Germany present regularly negative skewnesses. In terms of product types, the negative skewness occurs most often for bank overdraft to HH, mortgage rates with short initial period of rate fixation and loans for consumption over 1 and up to 5 years. The intuition behind this result is not clear and calls for further analytical investigation.

Table 1 presents for 12 NB interest rates, country rankings computed on the basis the standard deviations reported by the NCBs after averaging across the 3 data points available (December 2003, 2004 and 2005). The rankings are presented in descending order for the standard deviation (the corresponding ranking for the mean is also reported for completeness).

This cross-section approach by products and across Member States does not allow the identification of any robust cluster of countries. No clear pattern emerges from the rankings; in some cases the results of the ranking could even be considered as unexpected and counter-intuitive. For example, Belgium and The Netherlands while sharing a rather similar and concentrated market structure display significantly different level of dispersion within the country. This observation is confirmed below on the basis of graphical presentations.

Figures by country provide an alternative presentation of the different products within the national markets (3 observations for each product). There seems to be a slight positive correlation between the level of the mean and the level of standard deviation. Lending rates (by definition superior to deposit rates in level) demonstrate higher standard deviation than deposits. In particular, bank overdrafts for HH and NFC and loans for consumption demonstrate consistently higher standard deviation. Nevertheless for some Member States, this positive correlation is very weak as they display a rather constant and (in general) low level of standard deviation across

products (for example The Netherlands and Austria). Rescaled figures displaying all products for each country individually are proposed in Annex 2[230].

Table 1 Dispersion within Member States

Countries sorted by standard deviation

	NB1			NB5			NB7	
	STD	Mean		STD	Mean		STD	Mean
DE	1	1	IT	1	7	IE	1	6
BE	2	5	DE	2	3	BE	2	5
NL	3	4	FR	3	2	IT	3	4
IE	4	6	IE	4	5	DE	4	3
ES	5	8	ES	5	8	GR	5	8
IT	6	7	BE	6	4	NL	6	1
GR	7	3	NL	7	1	FR	7	10
AT	8	2	PT	8	6	PT	8	9
FR	9	9				ES	9	7
PT	10	10				AT	10	2

	NB12			NB13			NB14	
	STD	Mean		STD	Mean		STD	Mean
PT	1	5	ES	1	2	BE	1	4
BE	2	6	BE	2	5	IE	2	6
IE	3	3	IE	3	6	PT	3	1
FR	4	8	DE	4	8	NL	4	3
ES	5	2	PT	5	3	GR	5	5
DE	6	4	GR	6	1	ES	6	2
IT	7	7	NL	7	4	DE	7	7
AT	8	9	FR	8	9	FR	8	8
GR	9	1	AT	9	7	AT	9	9

	NB16			NB18			NB19	
	STD	Mean		STD	Mean		STD	Mean
IE	1	1	PT	1	1	PT	1	3
DE	2	2	GR	2	3	AT	2	1
GR	3	4	AT	3	4	GR	3	2
BE	4	6	ES	4	2	ES	4	9
AT	5	3	IE	5	5	BE	5	4
FR	6	5	FR	6	9	IE	6	7
ES	7	9	BE	7	8	FR	7	8
NL	8	8	DE	8	6	DE	8	6
PT	9	7	NL	9	7	NL	9	5

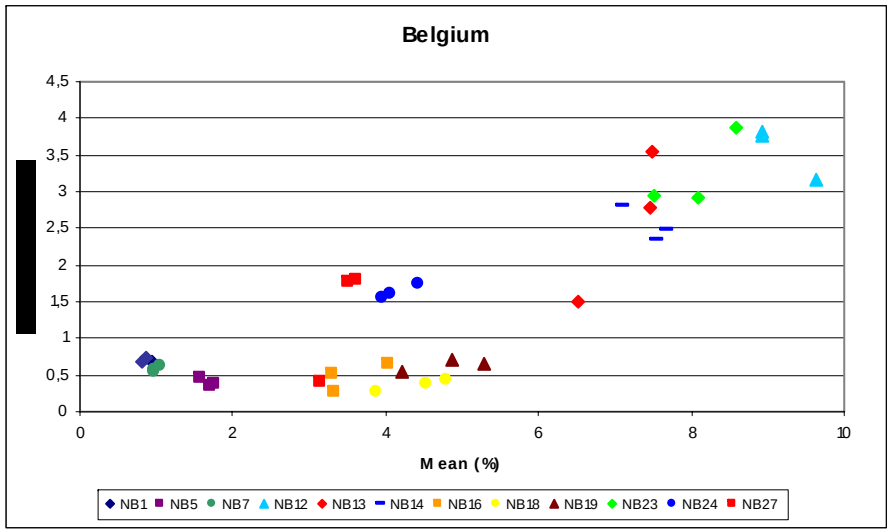
	NB23			NB24			NB27	
	STD	Mean		STD	Mean		STD	Mean
ES	1	1	BE	1	5	BE	1	4
BE	2	2	GR	2	2	IE	2	1
IE	3	4	DE	3	3	GR	3	2
FR	4	7	PT	4	1	NL	4	7
DE	5	5	NL	5	9	FR	5	6
IT	6	6	FR	6	8	PT	6	3
GR	7	3	IE	7	4	DE	7	5
PT	8	9	ES	8	6	ES	8	9
AT	9	8	AT	9	7	AT	9	8

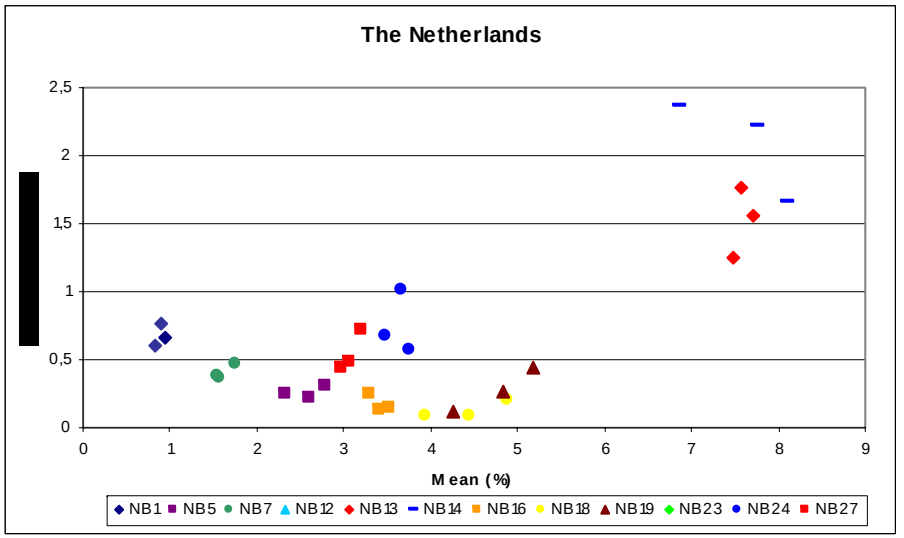
Source: NCBs (confidential data), Commission calculations.
Legend: MIR codes for 12 NB banking products
NB1: Deposits overnight for households
NB5: Deposits redeemable at notice up to 3 months for households
NB7: Deposits overnight for non-financial corporations
NB12: Bank overdrafts for households
NB13: Loans for consumption, floating rate and up to 1 year initial rate fixation for households

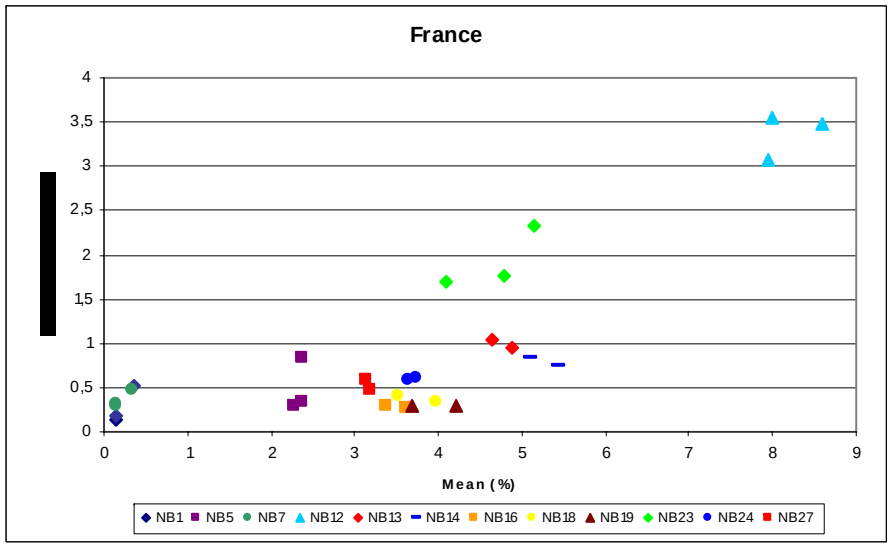
[230] In order to allow for this rescaling some products with very high mean or standard deviation have been dropped from the figures.

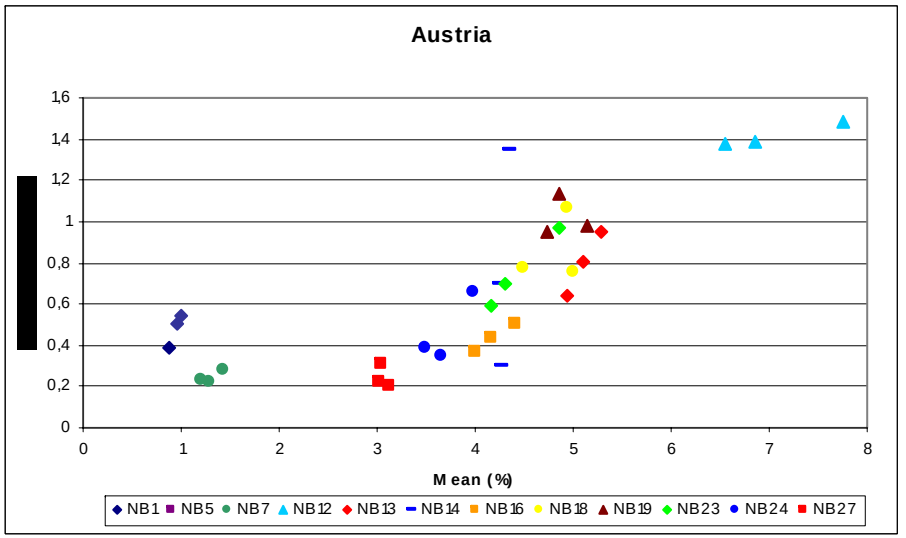
NB14: Loans for consumption, over 1 and up to 5 years initial rate fixation for households
NB16: Loans for house purchase, floating rate and up to 1 year initial rate fixation for households
NB18: Loans for house purchase, over 5 and up to 10 years initial rate fixation for households
NB19: Loans for house purchase, over 10 years initial rate fixation for households
NB23: Bank overdrafts for non-financial corporations
NB24: Other loans up to EUR 1 mio, floating rate and up to 1 year initial rate fixation for non-financial corporations
NB27: Other loans over EUR 1 mio, floating rate and up to 1 year initial rate fixation for non-financial corporations

Selection of figures by Member States (without rescaling)









Summary of main findings

This study has found indicative evidence of interest rate dispersion across and within euro area Member States on the basis of harmonised retail rates (MIR database). A range of factors may explain these patterns of price dispersion and it is not straightforward to isolate each of these effects and assess their relevance in specific cases (differences across country or products). Overall, very preliminary analysis would indicate that a substantial part of the divergences would, unsurprisingly, originate from "national regulatory factors" and from other structural determinants. However, specific and conclusive evidence on competition and concentration issues is currently lacking and would require further analytical work.

In addition, future work could attempt to extend this approach to non-euro area Member States despite data limitations (imperfect comparability of product definitions) and diverging monetary policy.

Annexes

List of acronyms

OA: Outstanding amounts
NB: New businesses
NFC: Non-financial corporations
HH: Households

MIR codes for a selection of New Businesses banking products

NB1: Deposits overnight for households
NB5: Deposits redeemable at notice up to 3 months for households
NB7: Deposits overnight for non-financial corporations
NB12: Bank overdrafts for households
NB13: Loans for consumption, floating rate and up to 1 year initial rate fixation for households
NB14: Loans for consumption, over 1 and up to 5 years initial rate fixation for households
NB16: Loans for house purchase, floating rate and up to 1 year initial rate fixation for households
NB18: Loans for house purchase, over 5 and up to 10 years initial rate fixation for households
NB19: Loans for house purchase, over 10 years initial rate fixation for households
NB23: Bank overdrafts for non-financial corporations
NB24: Other loans up to EUR 1 mio, floating rate and up to 1 year initial rate fixation for non-financial corporations
NB27: Other loans over EUR 1 mio, floating rate and up to 1 year initial rate fixation for non-financial corporations

Annex 1[231]

Figure 1

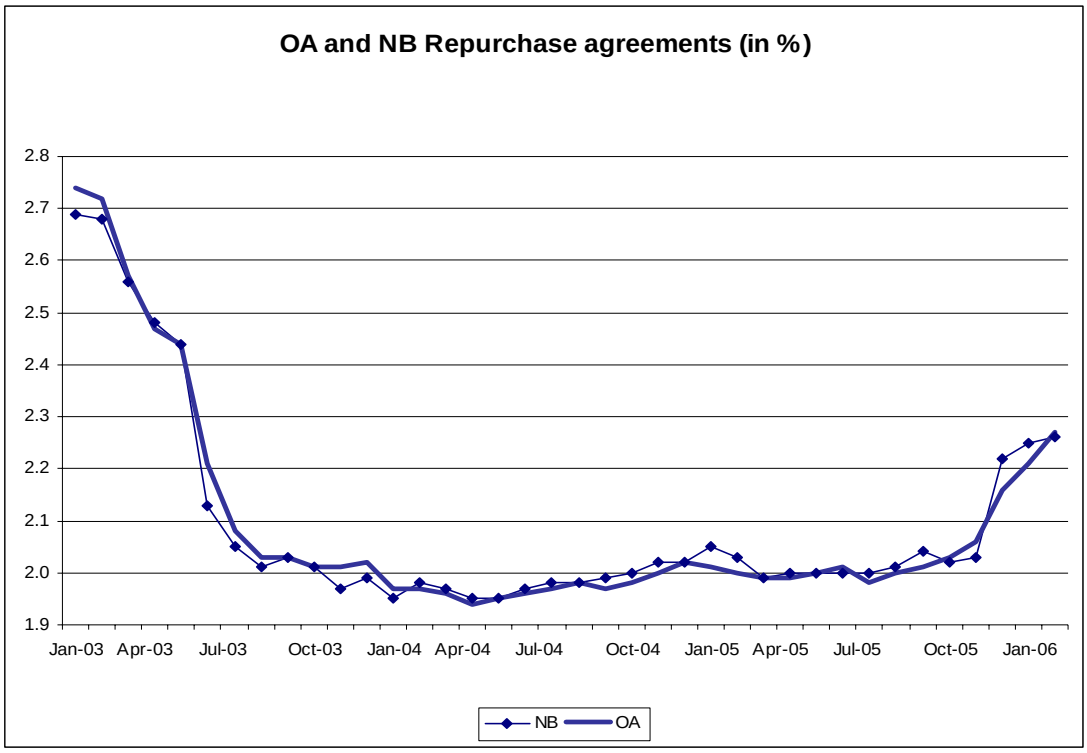
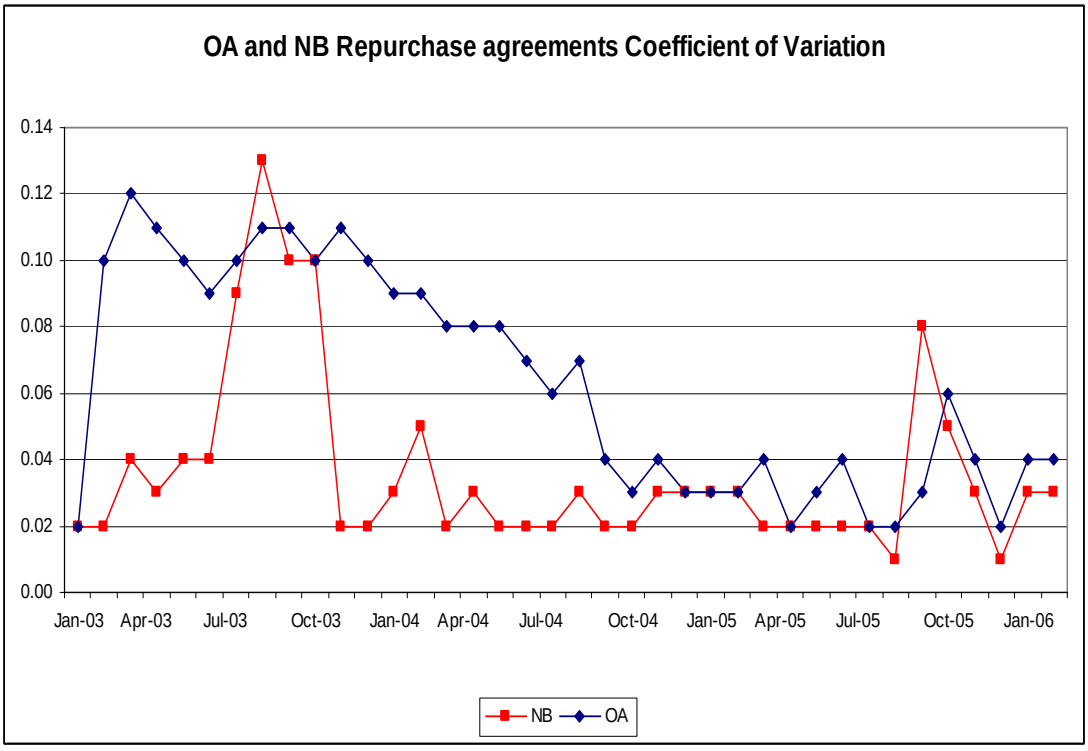


Figure 2



[231] All figures presented in Annex 1 are based on data publicly available on the ECB website.

Figure 3

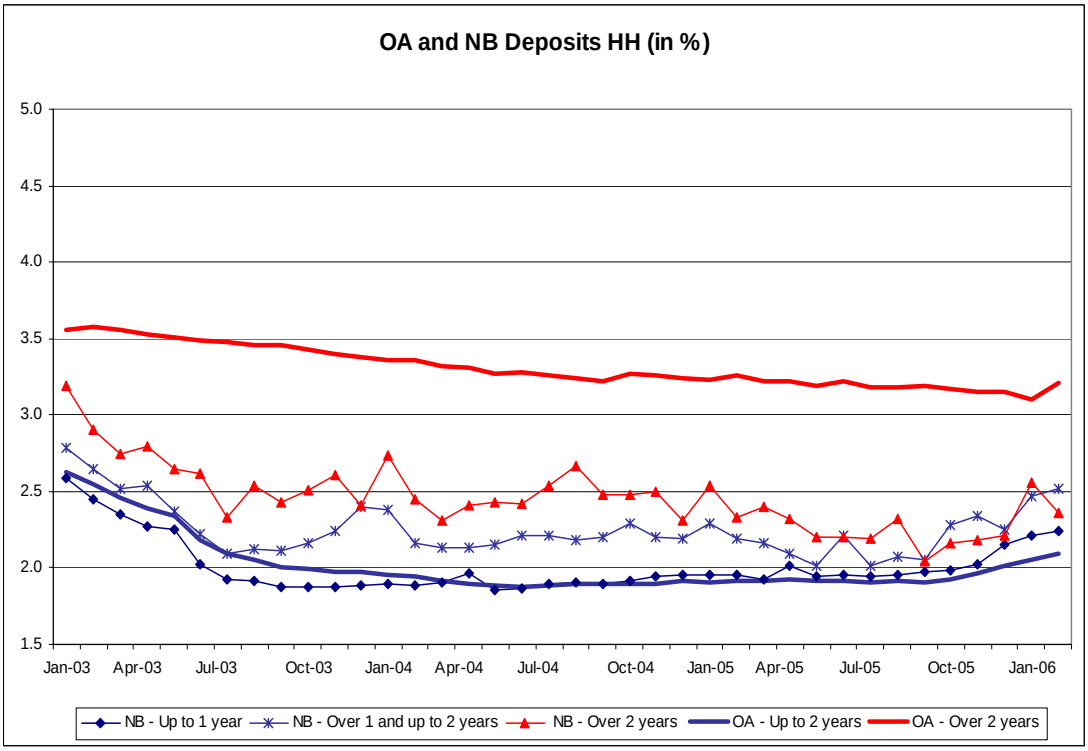


Figure 4

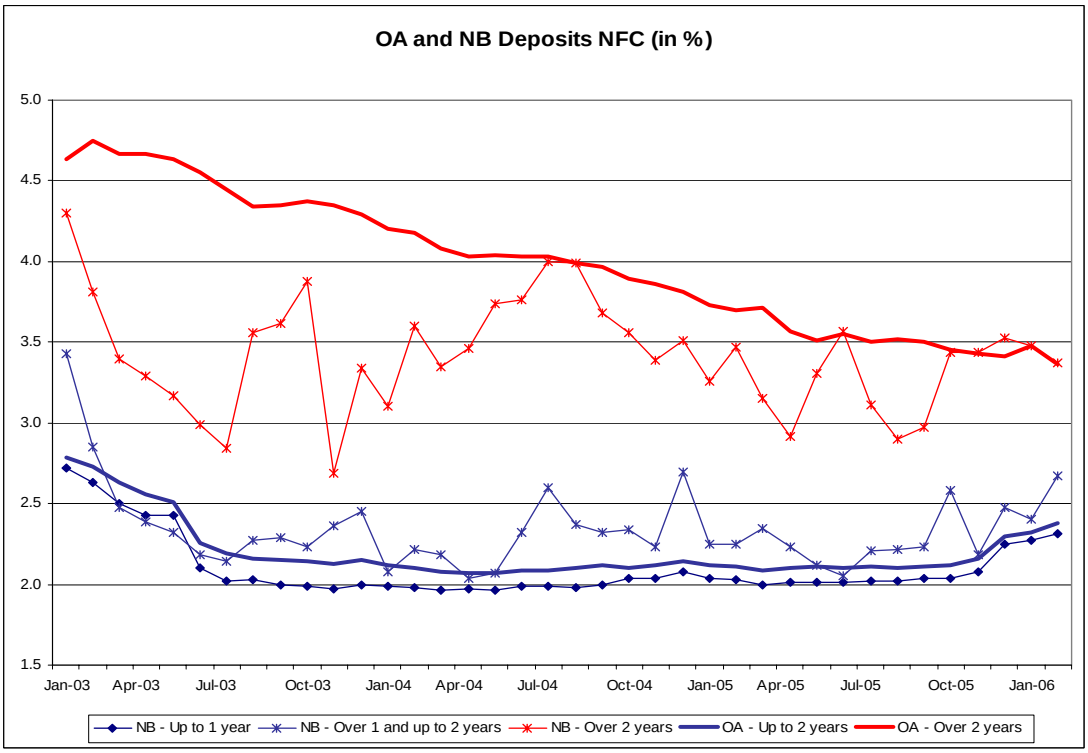


Figure 5

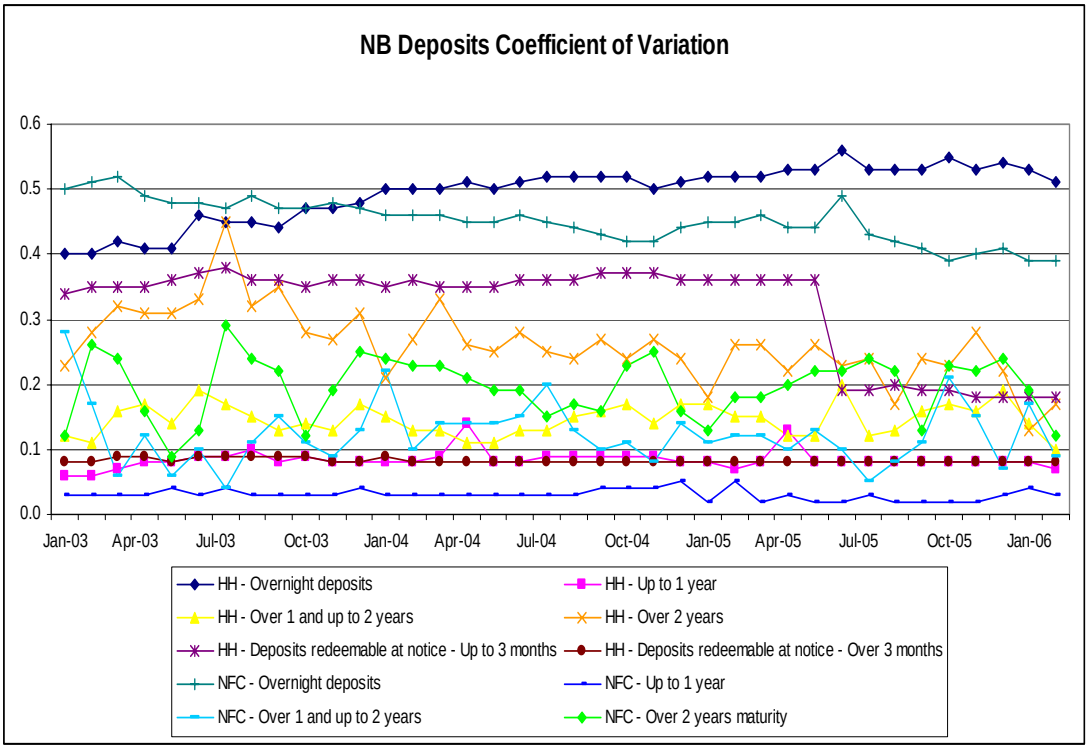


Figure 6

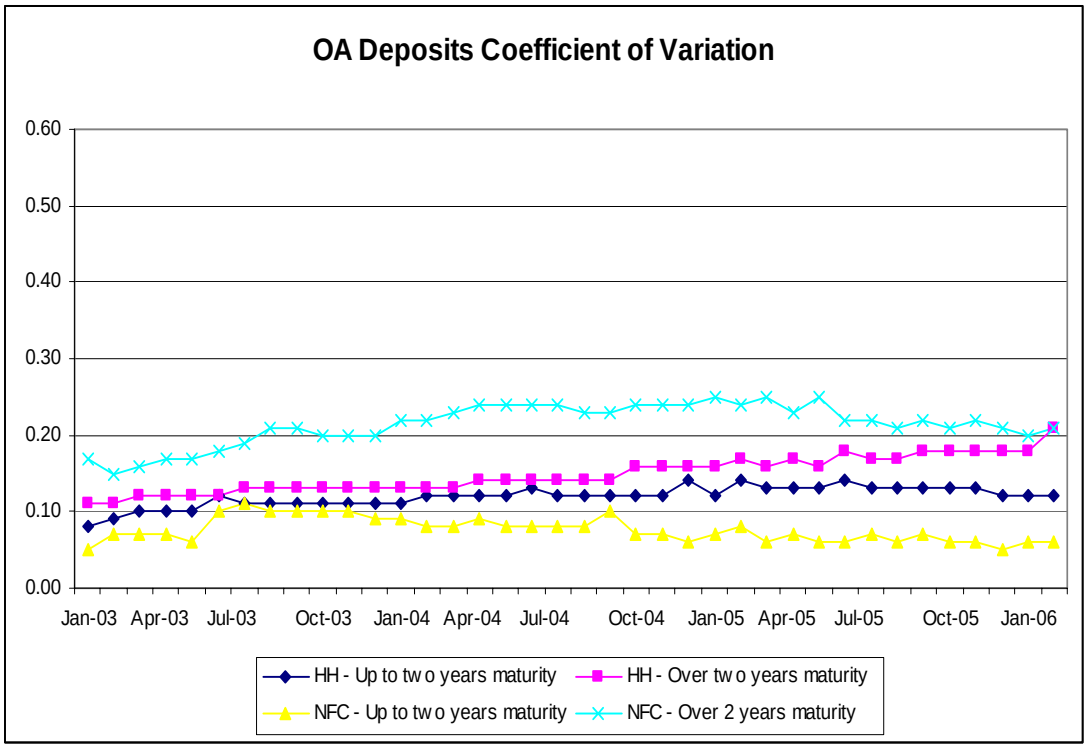


Figure 7

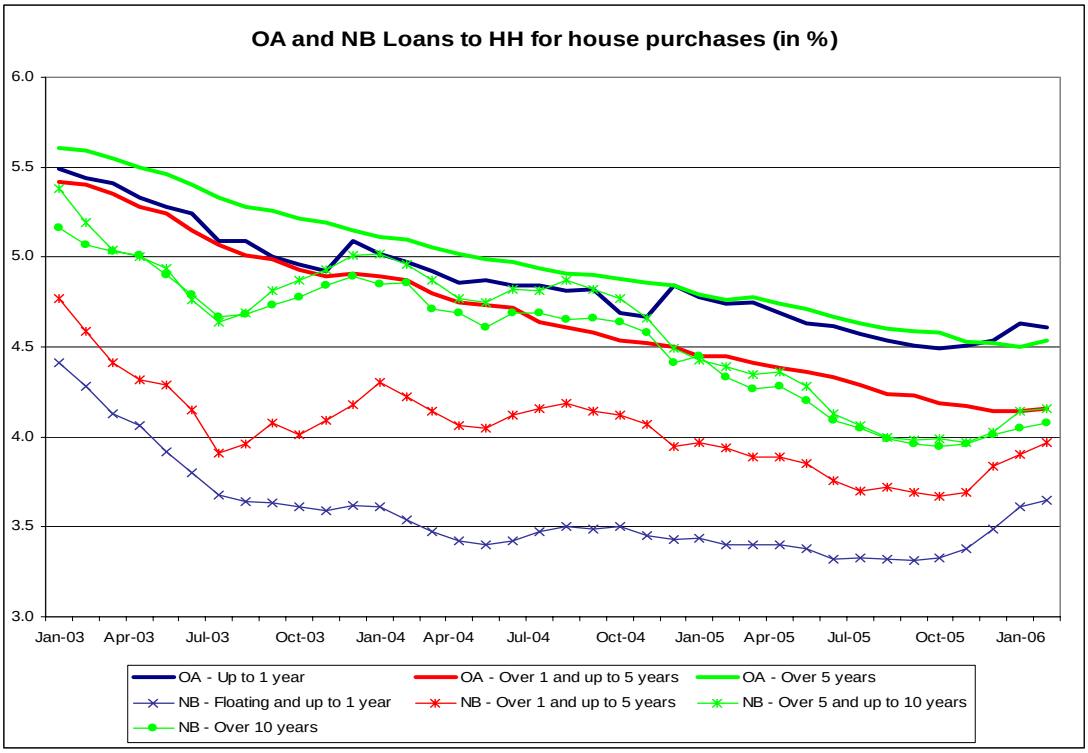


Figure 8

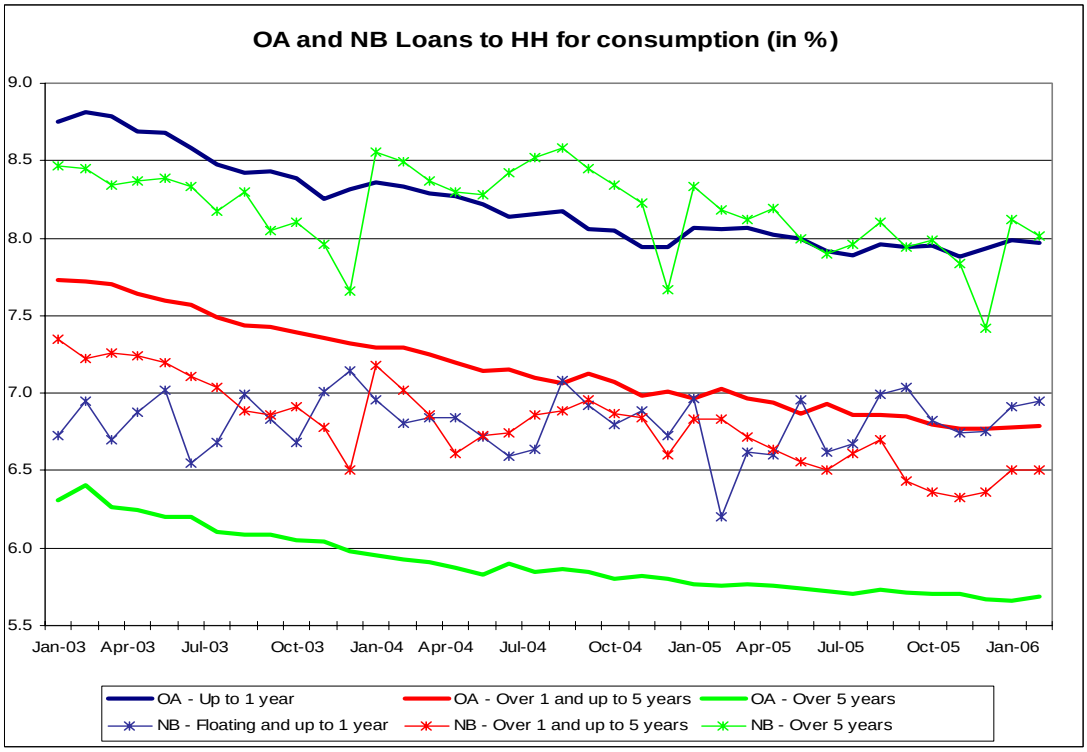


Figure 9

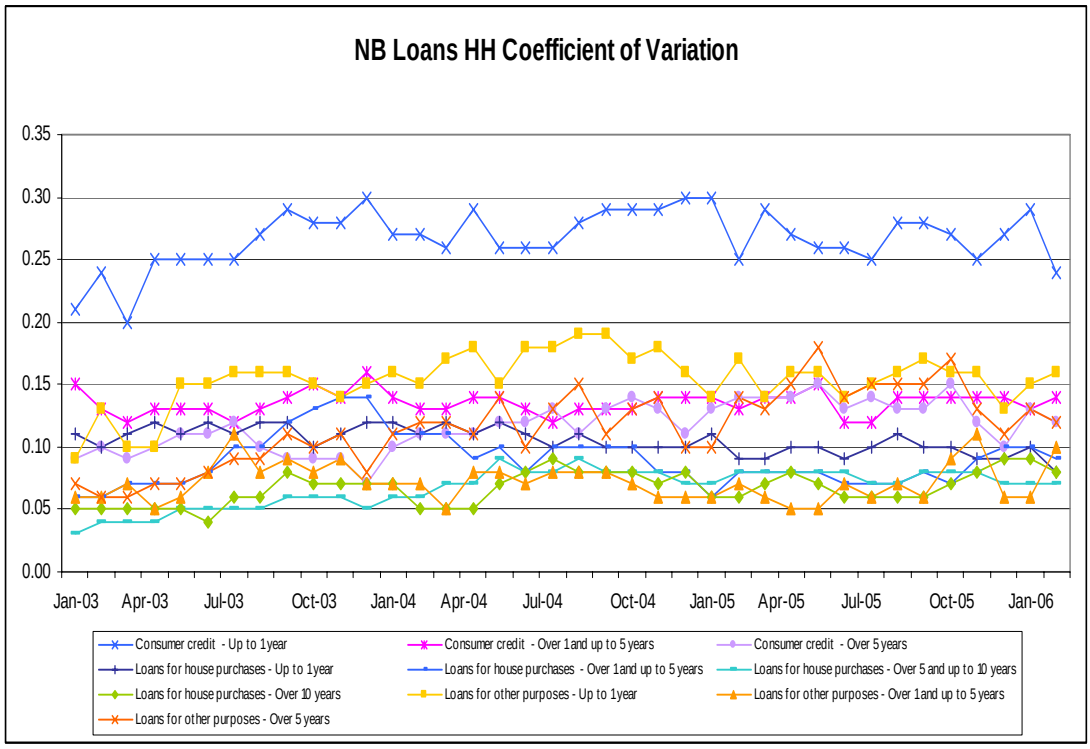


Figure 10

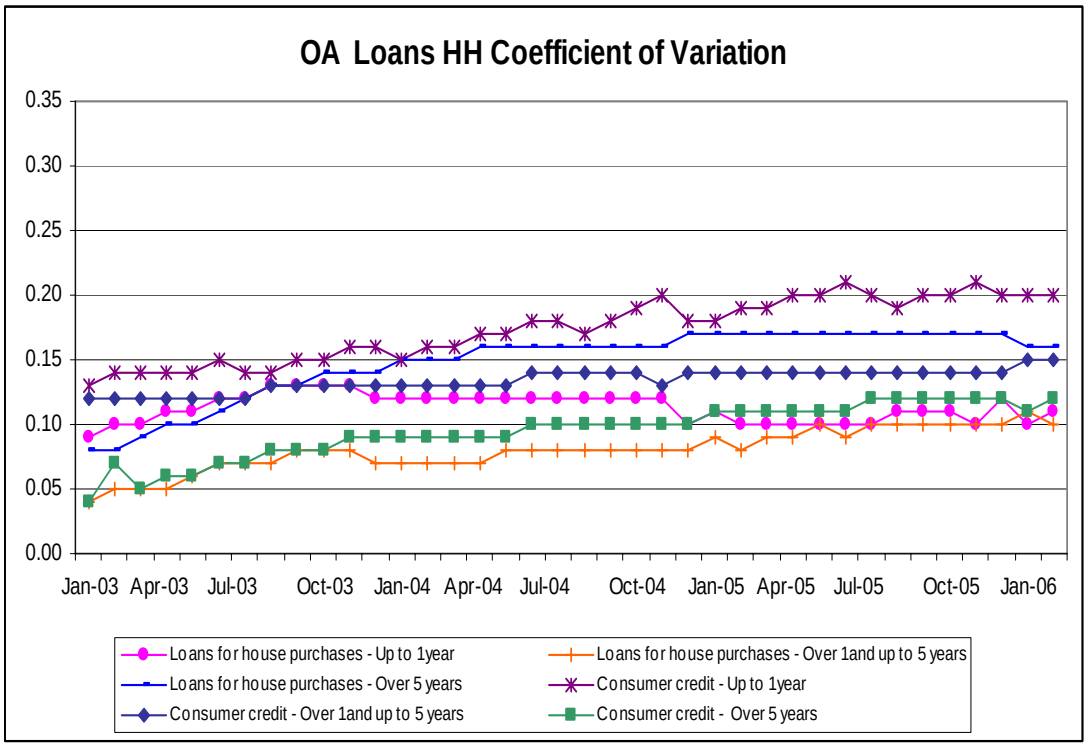


Figure 11

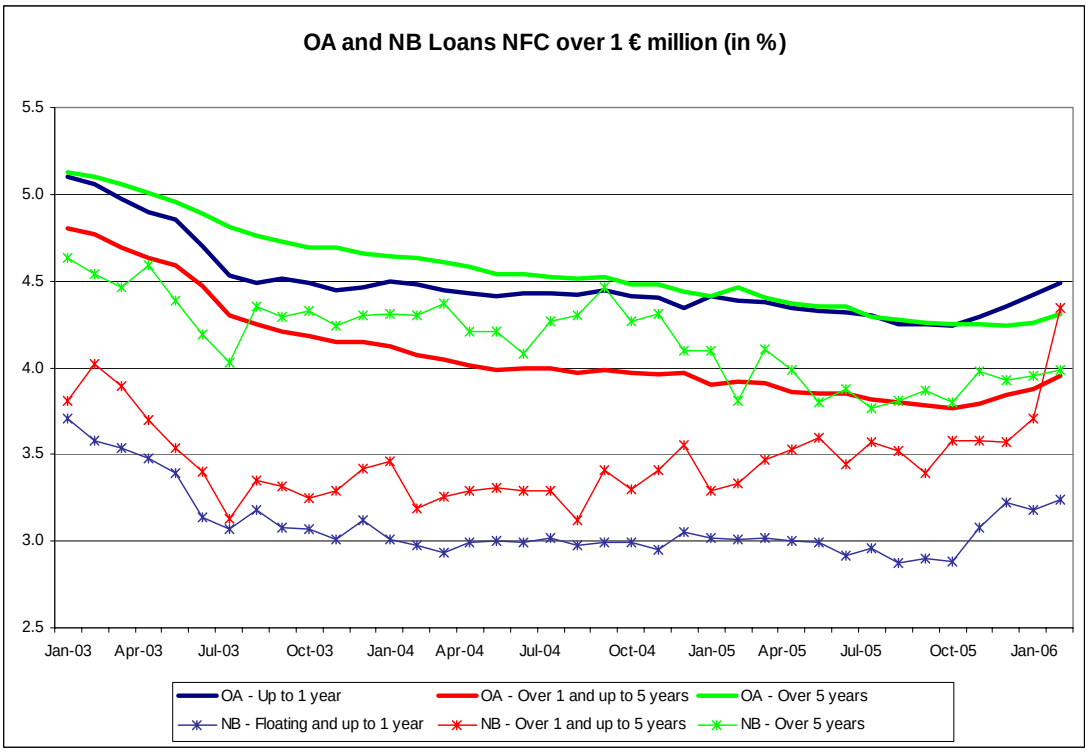


Figure 12

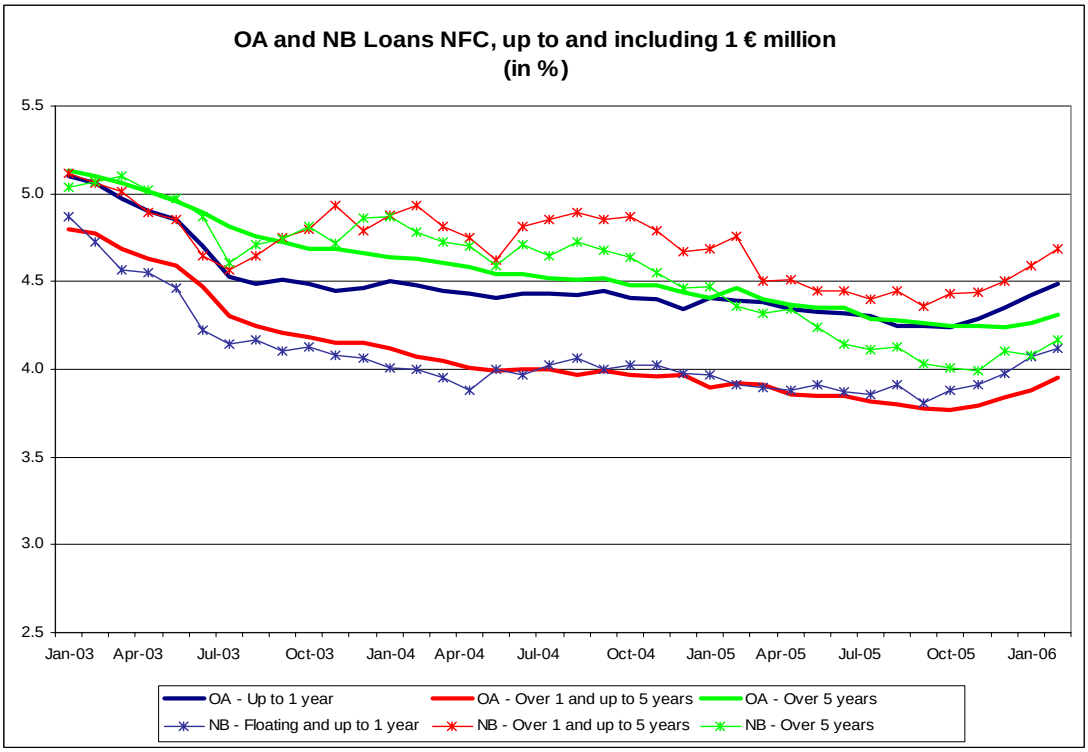


Figure 13

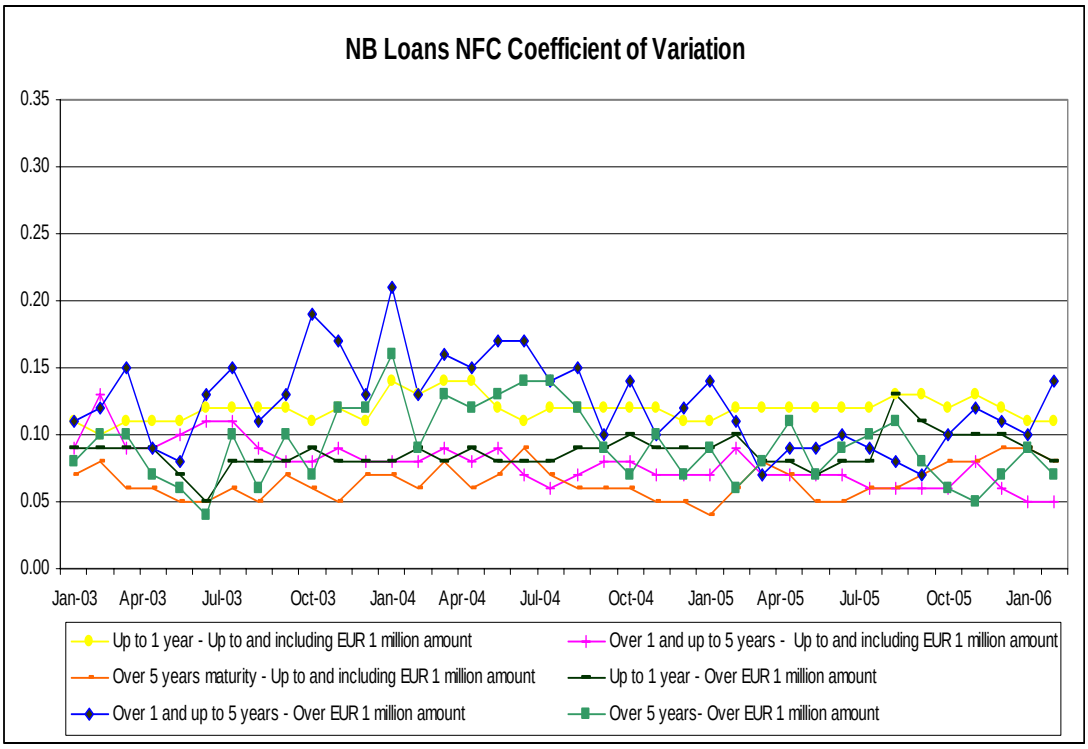


Figure 14

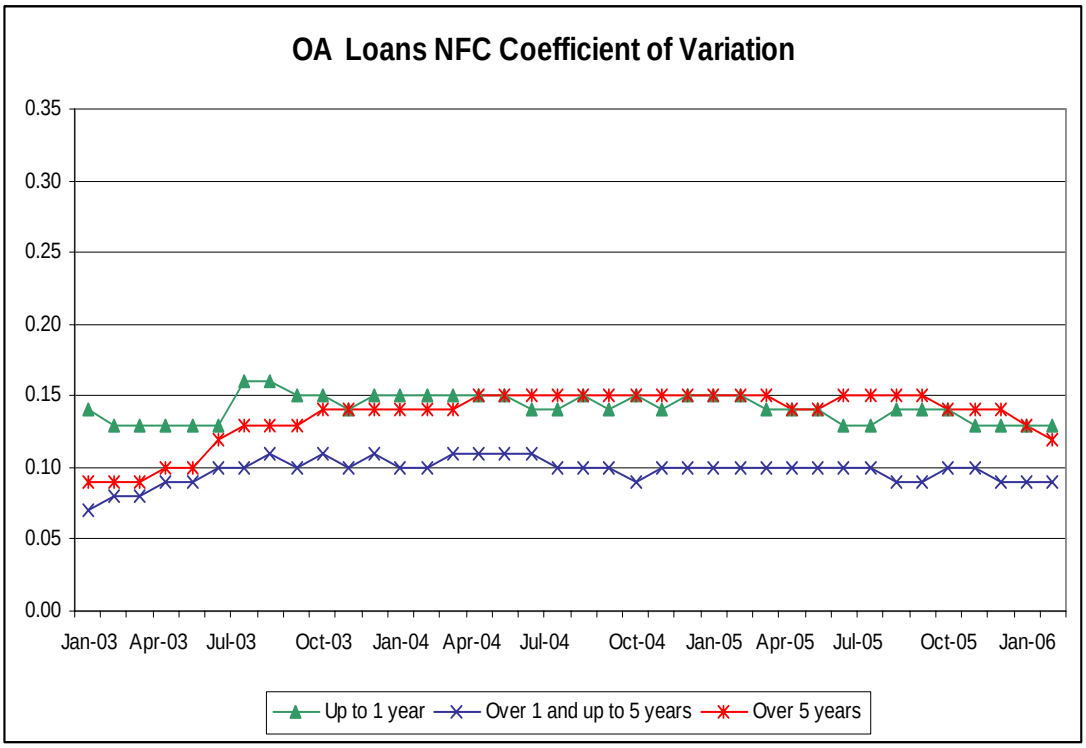


Figure 15

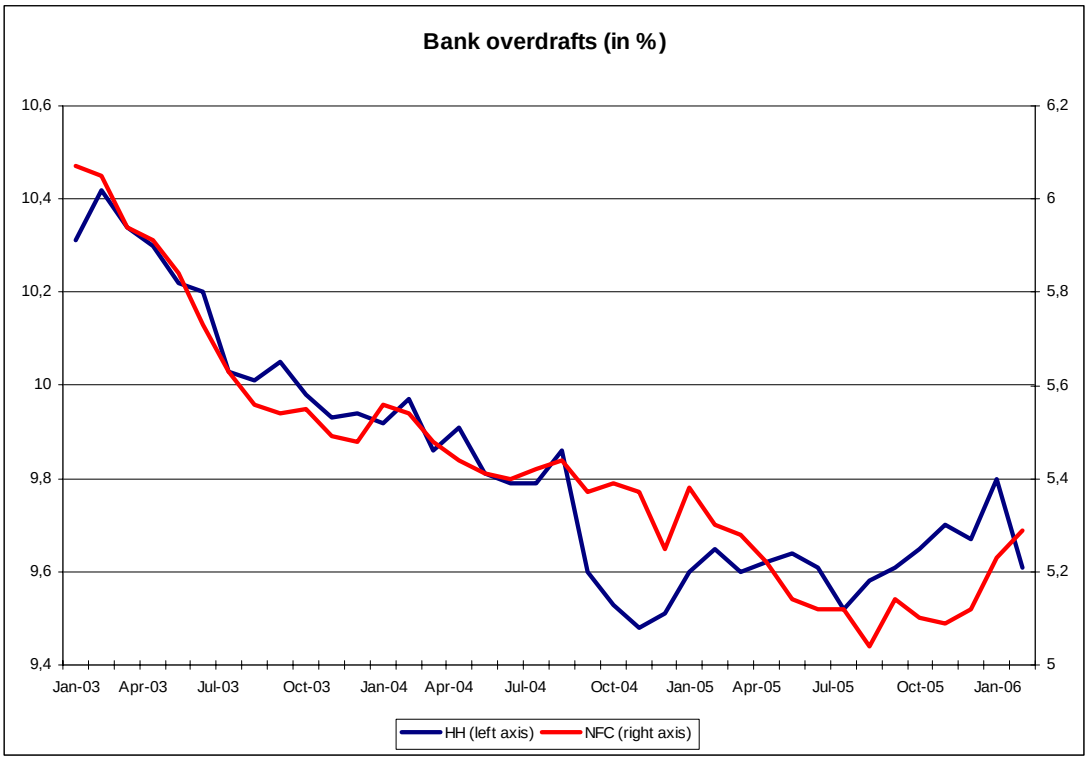
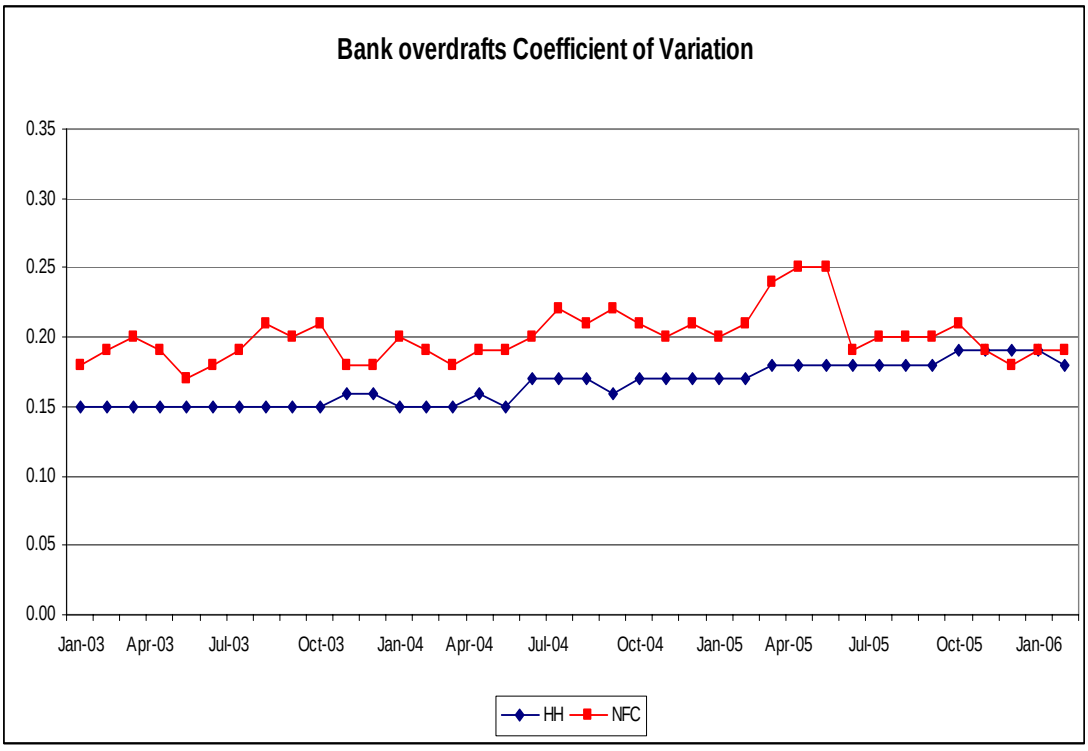
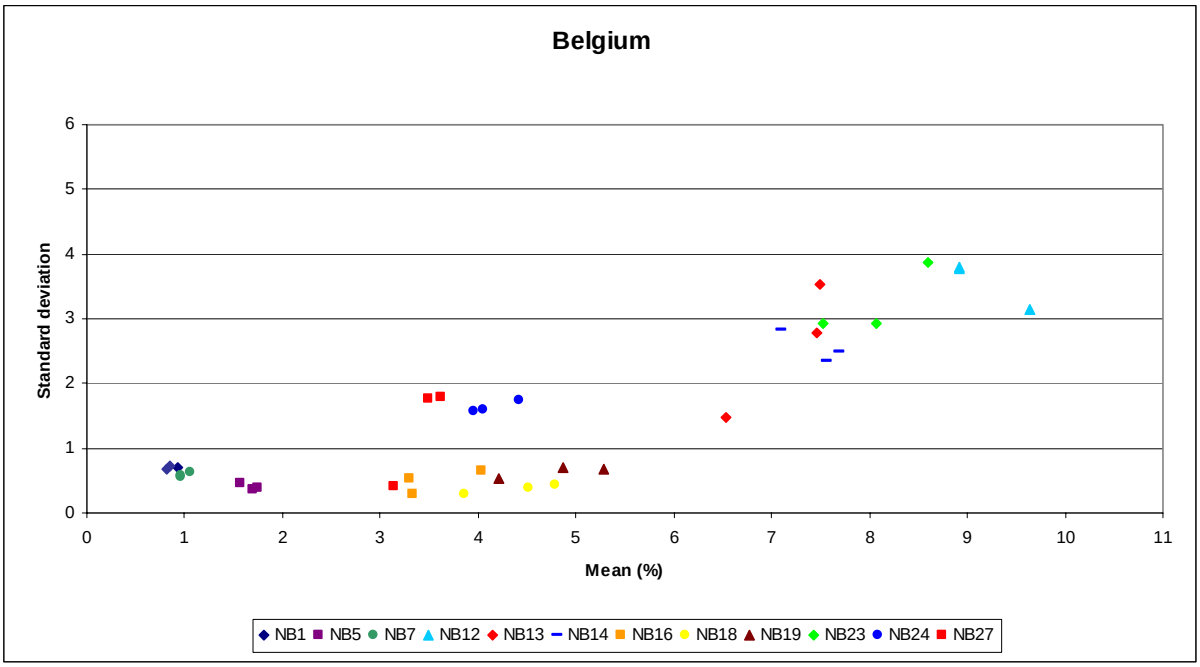


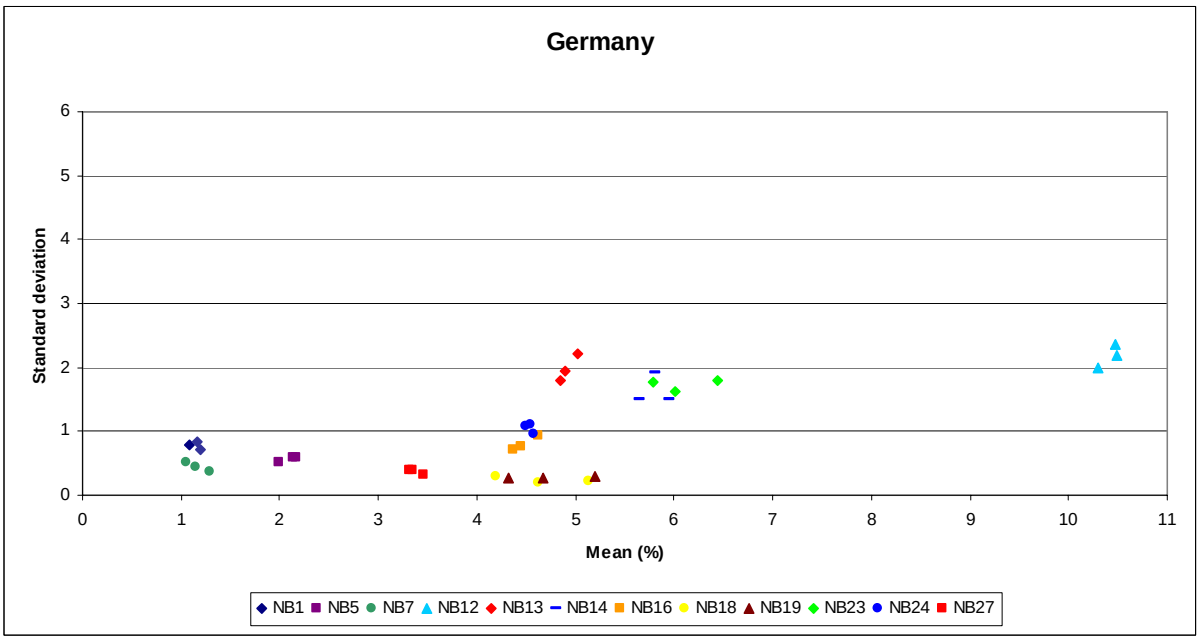
Figure 16

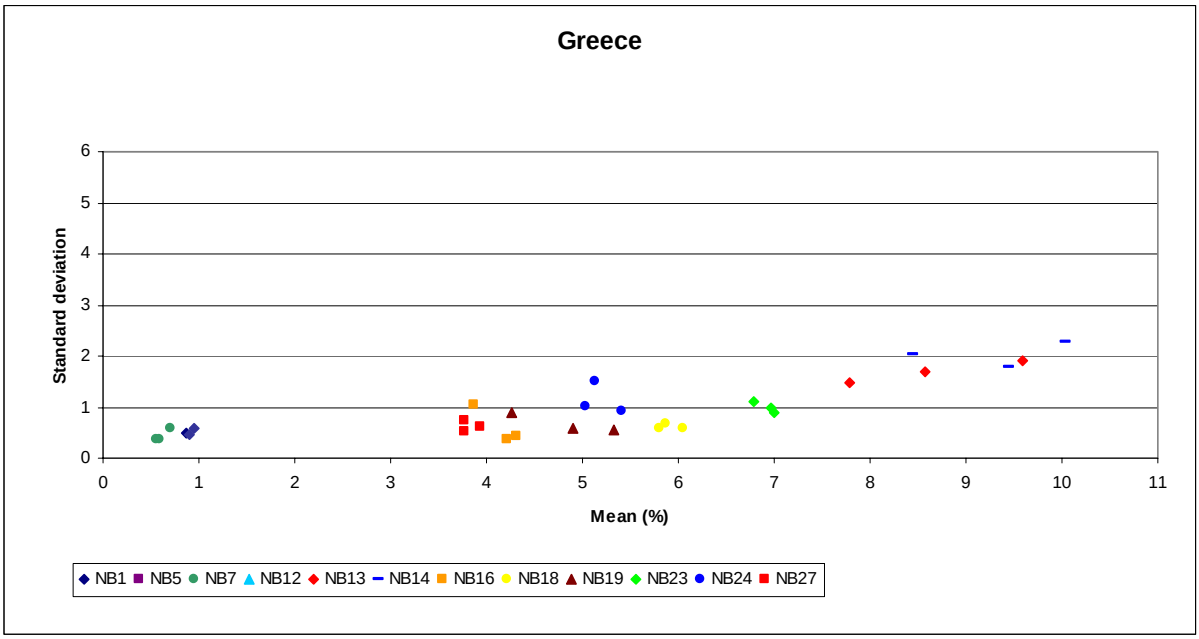


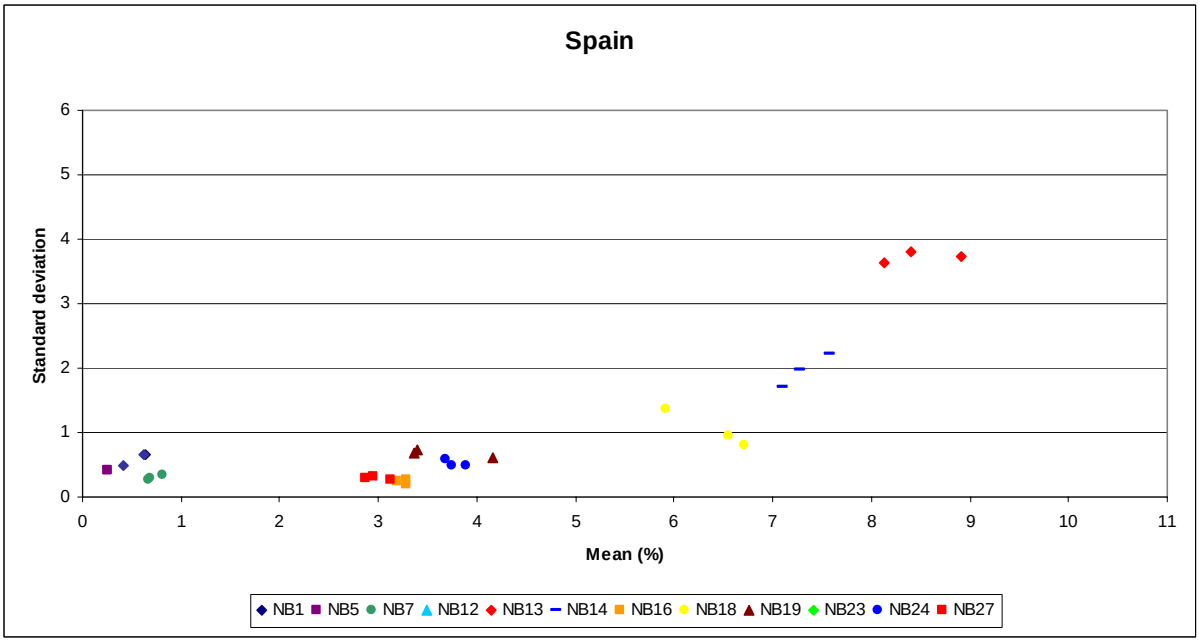
Annex 2: Figures rescaled

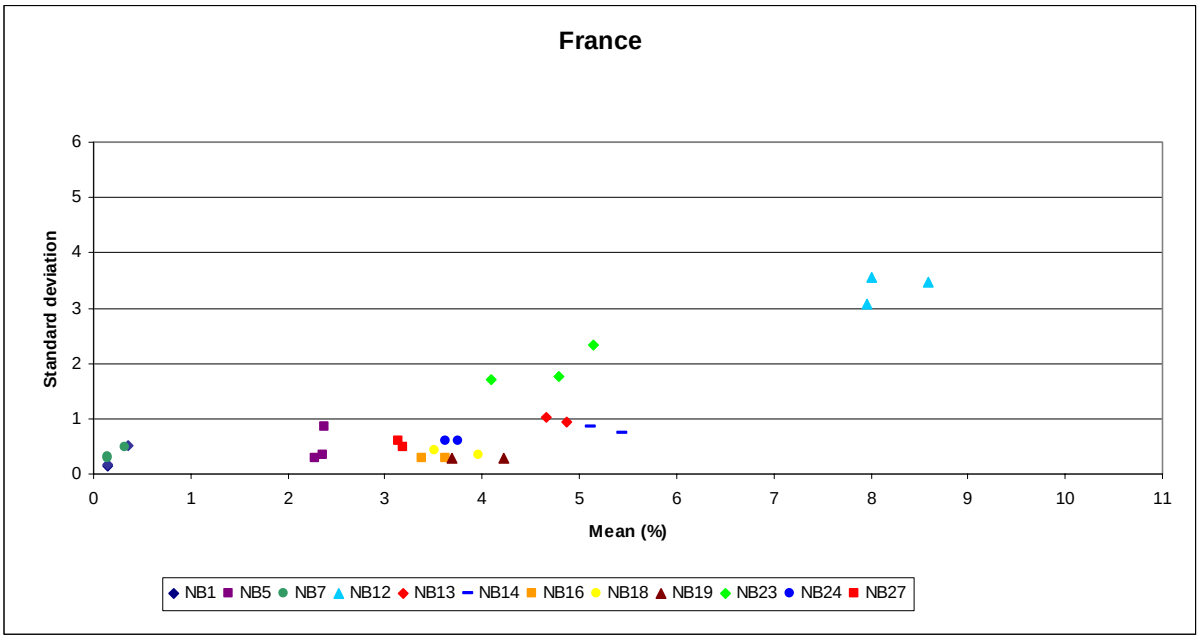
Figures presented below are derived from descriptive statistics provided by the national central banks.

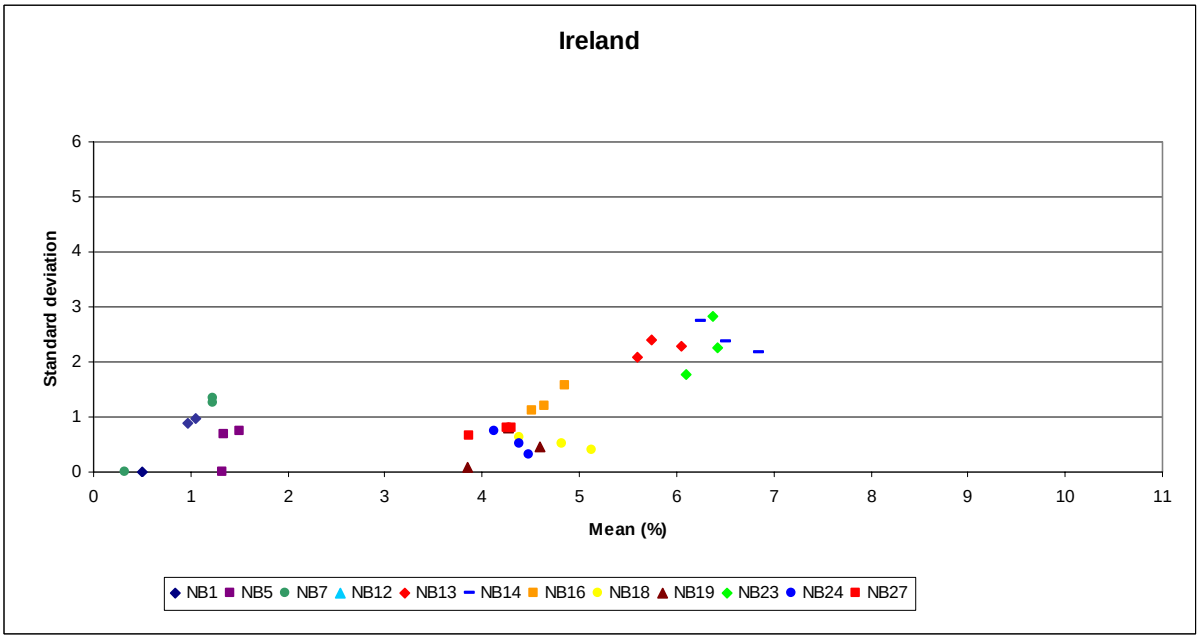


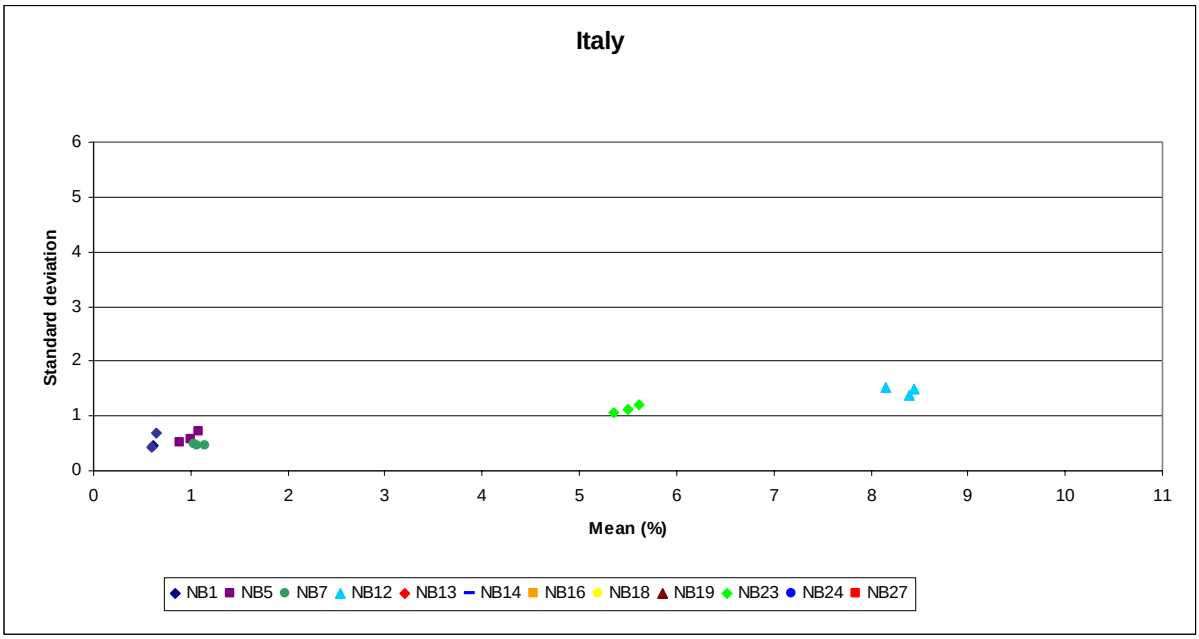


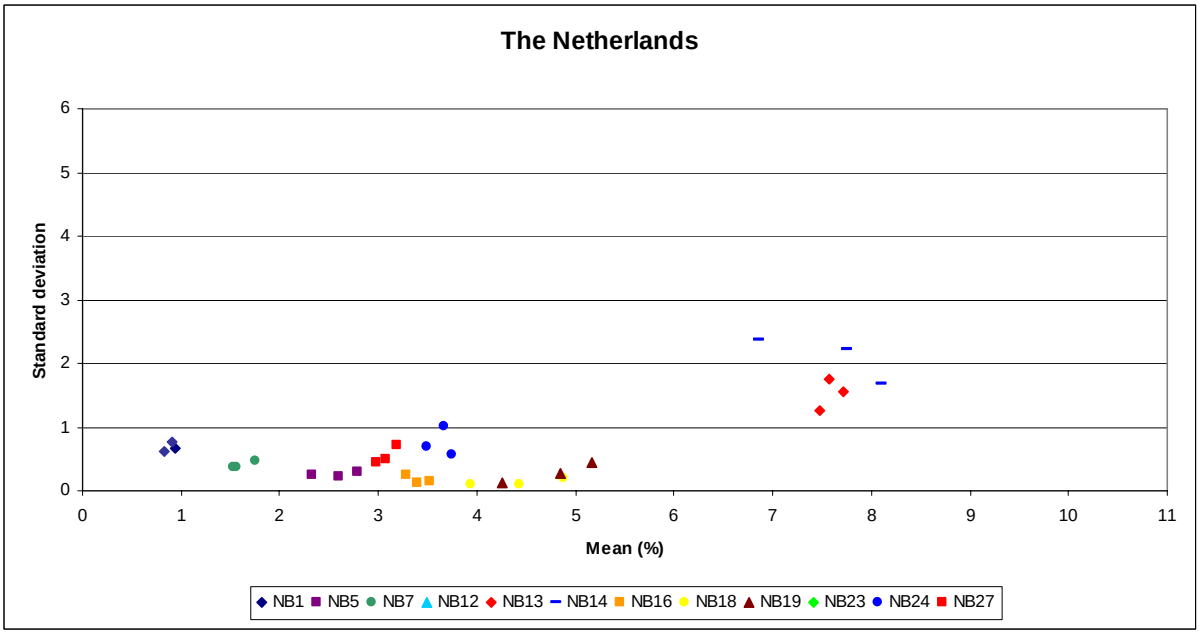

Greece
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27

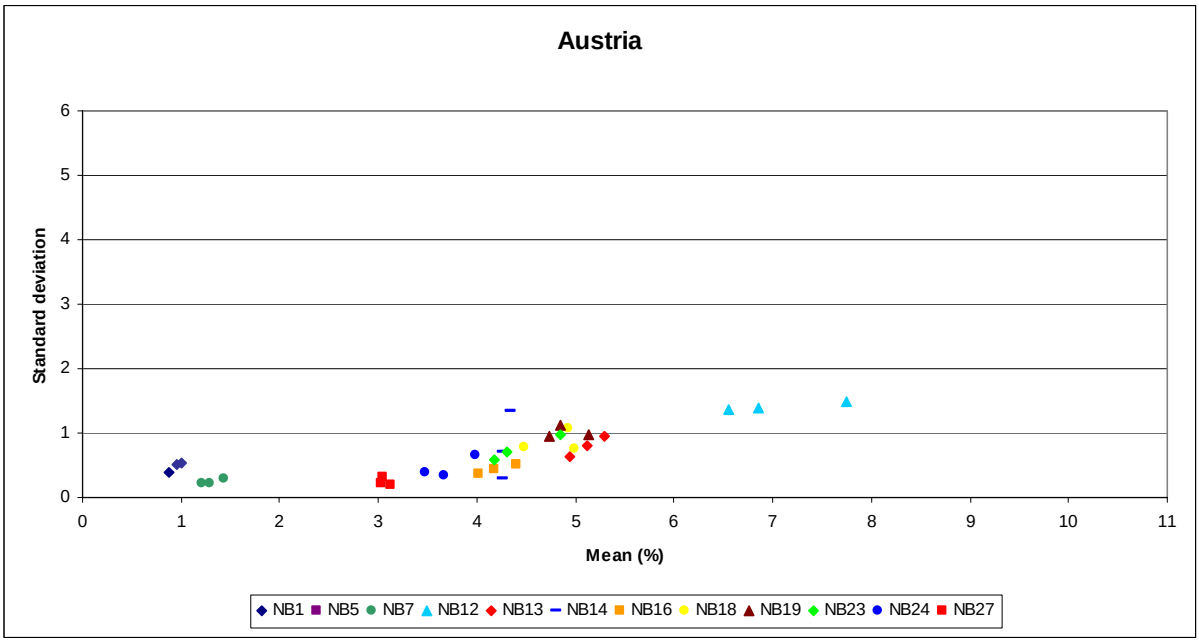

Spain
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27

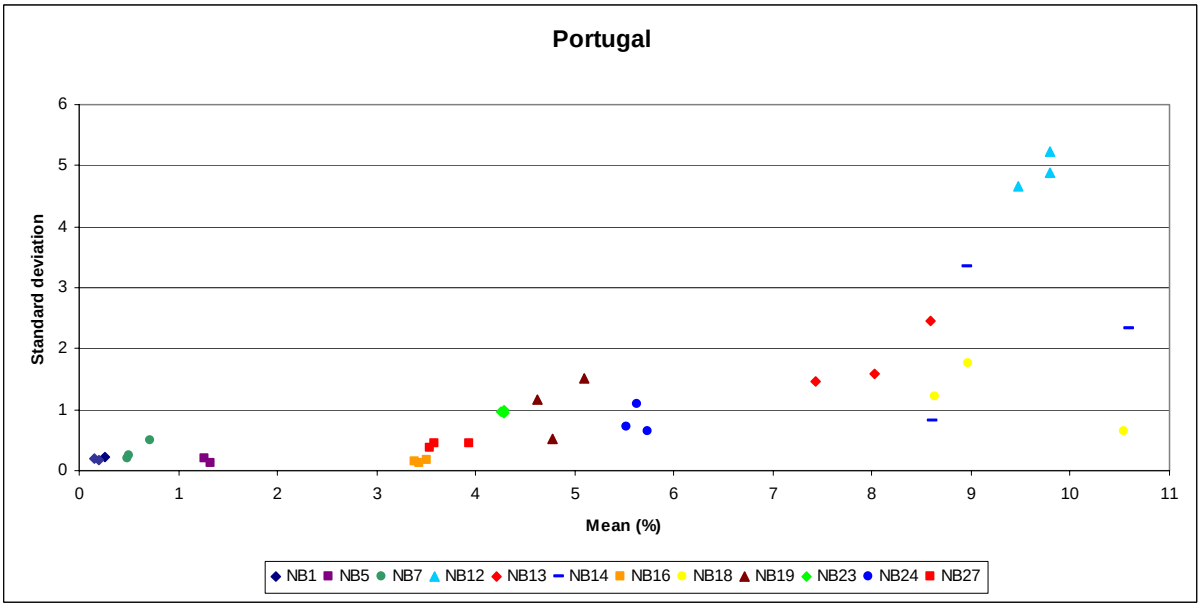

France
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27


Ireland
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27


Italy
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27


The Netherlands
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27


Austria
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27


Portugal
Standard deviation
Mean (%)
NB1 NB5 NB7 NB12 NB13 NB14 NB16 NB18 NB19 NB23 NB24 NB27

BIBLIOGRAPHY

AMEL, D.F. and STARR-MCCLURE M. (2001): *Market Definition in Banking: Recent evidence* Federal Reserve Board of Governors

BALTO, D.A. (1995): *Payment Systems and Antitrust: Can the Opportunities for Network Competition Be Recognised*, Review of the Federal Reserve Bank of St Louis

BARROS, P.P., BERGLÖF, E, FULGHIERE, P, GUAL, J., MAYER, C., and VIVES, X. (2005): *Integration of European Banking: The Way Forward*, CEPR and Fundación BBVA

BARTH, J. R., CAPRIO, G., and LEVINE, R. (2002): *Bank Regulation and Supervision: What works best?* World Bank Working Paper No 2725

BECK, T., DEMIRGÜÇ-KUNT, A., and LEVINE, R. (2005): *Bank Concentration and Fragility: Impact and Mechanics*, NBER Working Paper No. 11500

BECK, T., DEMIRGÜÇ-KUNT, A., and MAKSIMOVIC, V. (2003): *Bank Competition, Financing Obstacles, and Access to Credit*, World Bank, Policy Research Working Paper No 2996

BERGER et al. (2004): *Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small Banks*, NBER Working Paper No 8752

BERGER et al. (2004): *Further evidence on the link between finance and growth: An international analysis of community banking and economic performance*, Bank of Finland Discussion Papers

BERGER et al. (2004): *Bank Concentration and Competition: An Evolution in the Making,* Journal of Money, Credit and Banking, Vol. 36, pp. 433-451

BERGER, A. and HANNAN, T. (1989): *The price-concentration relationship in banking*, Review of Economics and Statistics, Vol. 71, N°2, pp. 291-299

BIS (2000): *Clearing and Settlement Arrangements for Retail Payments in Selected Countries*

BIS (2003): *Policy issues for central banks in retail payments*

BORIO, C.E.V. and FRITZ, W. (1995): *The response of short-term bank lending rates to policy rates: a cross-country perspective*, BIS Working Paper No 27

BUCH, C.M. and HEINRICH, R.P. (2002): *Financial Integration in Europe and Banking Sector Performance*, Kiel Institute of World Economics

CAMPA, J.M., HERNANDO, I. (2005): *M&A s Performance in the European Financial Industry*, CEPR Discussion Paper No 5204

Capgemini (2006): *World Retail Banking Report 2006*

Capgemini (2005): *World Retail Banking Report 2005*

CARLETTI, E., HARTMANN, P. and ONGENA, S. (2006): *The economic impact of financial laws: The case of bank merger control*, Mimeo, Center for Financial Studies, European Central Bank and University of Tilburg.

CARLETTI, E. and HARTMANN, P. (2002): *Competition and stability: what's special about banking?* ECB Working Paper No 146

CETORELLI, N., and STRAHAN, P.E. (2004): *Finance as a Barrier to Entry: Bank Competition and Industry Structure in Local U.S. Markets*, NBER Working Paper No 10832

CETORELLI, N. (2004): *Real Effects of Bank Competition*, Journal of Money, Credit and Banking, Volume 36, pp. 559-562

CETORELLI, N., and GAMBERA, M., (2001): *Banking Market Structure, Financial Dependence and Growth: International Evidence from Industry Data,* The Journal of Finance, Volume 56, Number 2, April 2001, pp. 617-648(32)

CLAEYS, S., and VANDER VENNET, R. (2003): *Determinants of bank interest margins in Central and Eastern Europe. Convergence to the West?* Working Paper of the Faculty of Economics and Business Administration, Ghent University, Belgium, No 03/203

COLE et al. (2001): *Cookie-cutter versus character: the micro structure of small business lending by large and small banks*

COLOMBO, L. AND G. TURATI (2006): *Measuring banking industry competition: the Italian case*, Banking and Finance Monitor, UniCredit group, N°1, March 2006.

Compecon Limited (2004): *Study of Economic Impact of Increased Competition in Irish Banking Services,* Report Prepared For the Bank of Scotland (Ireland)

Consumer Bankers Association (2005): *Survey of Bank-Sponsored Financial Literacy Programs*

CORVOISIER, S., and GROPP, R. (2002): *Bank concentration and retail interest rates*, Journal of Banking and Finance, Vol.26, pp. 2155-2189.

COTTARELLI, C., and KOURELIS, A. (1994): *Financial structure, bank lending rates, and the transmission mechanism of monetary policy*, IMF Staff Papers, 41(4), pp. 587-623.

CRA International (2005): *Retail banking sectoral inquiry* Competition Policy Discussion Paper, September 2005.

CRUICKSHANK, D. (2000): *Competition in UK Banking: A Report to the Chancellor of the Exchequer*

DE BONDT, G., MOJON, B., and VALLA, N. (2005): *Term structure and the sluggishness of retail bank interest rates in euro area countries*, European Central Bank, Working Paper No 518, September 2005

DE GRAEVE, F., DE JONGHE, O. and VANDER VENNET, R. (2004): *The determinants of pass-through of market conditions to bank retail interest rates in Belgium*, National Bank of Belgium, Working Paper No 47, May 2004

DEGRYSE, H. and ONGENA, S. (2005): *Distance, Lending Relationships and Competition*, Journal of Finance, 60:1, pp. 231-266

DEGRYSE, H., and ONGENA, S., (2005): *Competition and Regulation in the Banking Sector: A Review of the Empirical Evidence on the Sources of Bank Rents*, Tilburg University

Deloitte – Consumer Bankers Association (2006): *Loyalty Quest – Enhancing the Retail Banking Experience to Drive Growth, 2006*

DE SERRES, A., KOBAYAKAWA, S., SLØK, T., and VARTIA, L. (2006, forthcoming): *Regulation of Financial Systems and Economic Growth*, OECD Economics Department Working Papers

ECA Financial Services Subgroup (2005): *Comparative Study of Competition in Retail Banking and Payment Systems Markets*

EDWARDS, C., (1955): *Conglomerate bigness as a source of power*, in the National Bureau of Economics Research Conference Report, Business Concentration and Price Policy, Princeton, NJ: Princeton University Press

EPSI - European Performance Satisfaction Index (2006): *Pan European Customer Satisfaction 2005*, Compiled by Rating Editorial Board, Göteborg, Sweden

European Central Bank (2006): *Payment and Securities Settlement Systems in the European Union and in the Acceding Countries – Addendum Incorporating 2004 data*, Blue Book March 2004

European Central Bank (2006): *Towards a Single Euro Payments Area – Objectives and deadlines*, Fourth Progress Report

European Central Bank (2005): *Monthly Bulletin, July 2005*

European Central Bank (2005): *Payment and securities settlement systems in the European Union - Addendum incorporating 2003 figures*, ECB Blue Book

European Central Bank (2005): *The use of harmonised MFI interest rate statistics*, Monthly Bulletin - July 2005

European Central Bank (2002): *Memorandum of Understanding on the Exchange of Information among National Central Credit Registers for the Purpose of Passing it on to Reporting Institutions*

European Central Bank (2000): *Mergers and Acquisitions Involving the EU Banking Industry – Facts and Implications, December 2000*

European Commission (2005): *DG Competition's discussion paper on the Application of Article 82 of the Treaty to exclusionary abuses*

European Commission (2005): *Financial Integration Monitor 2005*

European Commission (2004): *Financial Services Action Plan: Progress and prospects*, Expert group on banking

European Commission (2006): *Interim Report I. Payment Cards*

European Commission (2005): *White Paper on Financial services policy 2005-2010*

European Commission Staff Working Document - SEC(2005)1398: *Cross-border consolidation in the EU financial sector*

GEOFFREY R. GERDES, JACK K. WALTON II, MAY X. LIU, and DARREL W. PARKE (2005): *Trends in the Use of Payment Instruments in the United States*, Federal Reserve Bulletin – 2005

GONDAT-LARRALDE C., NIER E. (2006): *Switching costs in the market for personal current accounts: some evidence for the United Kingdom*, Bank of England Working Paper No. 292

GUISO, L., JAPPELLI, T., PADULA, M., PAGANO, M. (2004): *Financial Market Integration and Economic Growth in the EU*, Economic Policy, Vol. 19, p. 523, October 2004

HEINEMANN F., and JOPP, J. (2002): *The Benefits of a Working EU Market for Financial Services*, Report to the European financial services Round Table, Institut für Europäische Politik, Berlin

International Competition Network (2005): *An increasing role for competition in the regulation of banks*

Irish Bankers Federation (2006): *The IBF Personal Account Switching Code: 12 months on*, About Banking, Edition 3, May 2006

Irish Competition Authority (2005): *Final Report on Competition in the (non-investment) banking sector in Ireland*

JAPPELLI, T. and PAGANO, M. (2000): *Information Sharing in Credit Markets: the European Experience, Centre for Studies in Economics and Finance*, Working Paper No 35, Salerno

JAPPELLI, T. and PAGANO, M. (2005): *Role and Effects of Credit Information Sharing,* Working Paper No 136, Salerno

KEMPPAINEN, K. (2004): *Regulating Cross-border Retail Payment Systems – A Network Industry Problem*, Bank of Finland, Financial Markets Department

KEMPPAINEN, K. (2003): *Competition and regulation in European retail payment systems* Bank of Finland Discussion Papers, 16/2003

KIM, M., KLIGER, D., and VALE, B. (2003): *Estimating switching costs: the case of banking,* Journal of Financial Intermediation, Vol. 12, issue 1, pp. 25-56

KISER, E. K. (2002): *Household Switching Behavior at Depository Institutions: Evidence from Survey Data*, Antitrust Bulletin, Vol. 47, issue. 4, pp. 619-40

KLEIN, M. (1971): *A theory of the banking firm*, Journal of Money Credit and Banking, Vol.3, pp. 205-218.

KLEMPERER, P. (1995): *Competition when consumers have switching costs*, Review of Economic Studies 62 (4): 515-539

KOK SORENSEN, C. and WERNER, T. (2006): *Bank interest rate pass-through in the euro area*, European Central Bank, Working Paper 580, January 2006

KRAHNEN, J. P. and SCHMIDT, R. H. (eds.) (2004): *The German Financial System*, Oxford University Press

KROZNER, R.S. (2006): *The Effect of Removing Geographic Restrictions on Banking in the United States: Lessons for Europe*

KROZNER, R.S., and STRAHAN, P.E. (2005): *Regulation and deregulation of the US banking industry: causes, consequences and implications for the future*

LEVINE, R. (2003): *Denying Foreign Bank Entry: Implications For Bank Interest Margins*, Central Bank of Chile, Working Paper No 222

MANKILA, M. (1999): *Bundling in Swedish and Finnish retail banking*, FE-rapport 1999-367

MARTIN-OLIVER, A., SALAS-FUMAS, V. and SAURINA, J. (2005): *Interest rate dispersion in deposit and loan markets*, Banco de España, Documentos de Trabajo, No 0506

MARTIN-OLIVER, A., SALAS-FUMAS, V. and SAURINA, J. (2005): *A test of the law of one price in retail banking*, Banco de España, Documentos de Trabajo, No 0530

MCANDREWS, J. (1997): *Network Issues and Payment Systems,* Federal Reserve Bank of Philadelphia Business Review, December 1997

McKinsey & Co. (2003): *Eastern European banking matures,* The McKinsey Quarterly, 2003 Number 2

MOJON, B. (2000): *Financial structure and the interest rate channel of ECB monetary policy*, European Central Bank, Working Paper No 40

MONTI, M., (1972): *Deposit, credit and interest rate determination under alternative bank objectives*, edited by G. P. Szego and K. Shell, in Mathematical Methods in Investment and Finance, Amsterdam, North-Holland

NALEBUFF, B. (2003): *Bundling, Tying and Portfolio Effects*, DTI Economics Paper No1

Nederlandse Vereniging van Banken (2006): *Background paper on the Dutch Interbank Switch Support Service* (Overstapservice)

NMa (2004): *Financial Sector Monitor 2004 - Views of NMa on competition in the financial sector*

Organisation for Economic Co-operation and Development - OECD (1998): *Enhancing the Role of Competition in the Regulation of Banks*, DAFFE/CLP (98)16

Organisation for Economic Co-operation and Development - OECD (2000): *Mergers in Financial Services*, DAFFE/CLP (2000)17

OECD dataset (2002): *Bank Profitability - Financial Statements of Banks, 2002*

Office of Fair Trading (2003): *UK Payment Systems - An OFT market study of clearing systems and review of plastic card networks*

Office of Fair Trading (2003): *Switching costs, Economic discussion paper 5, Annexe A – Literature Review*, OFT-DTI report prepared by NERA, April 2003

PADOA-SCHIOPPA, T. (2004): *Regulating Finance: Balancing Freedom and Risk*, Oxford University Press

PILLOFF, S. (1999): *Multimarket contact in banking*, Review of Industrial Organization, Vol.14, pp. 163-182

RIESTRA, A. SAN JOSÉ (2002): *Credit Bureaus in Today's Credit Markets*, ECRI Research Report No 4

SCHOENMAKER, D. and OOSTERLOO, S. (2005): *Financial Supervision in an Integrating Europe: Measuring Cross-Border Externalities*, International Finance 8:1, 2005: pp. 1–27

SHY, O. (2001): *The Economics of Network Industries*, Cambridge University Press

SIBOS (2005): *Looking beyond the boundaries – transformation of domestic ACHs*, SIBOS Issues, 9 September 2005

Sveriges Riksbank (October 2004): *Do Prices Reflect Costs? A study of the price- and cost structure of retail payment services in the Swedish banking sector 2002*

The McKinsey Quarterly (2006): *How Europe's banks should prepare for payments reform* (February 2006)

TUMPEL-GUGERELL, G. (2005): *Regulation, Competition and Integration in EU banking: What Drives Performance? - Revisiting Freiburg* -, Albert-Ludwigs University of Freiburg, Faculty of Economics and Behavioural Sciences

UFC-Que Choisir (2006) : *La mobilité bancaire impossible: Identification et estimations des coûts de sortie*

UFC-Que Choisir (2004): *Etude sur le coût des services bancaires*

UK Competition Commission (2002): *The supply of banking services by clearing banks to small and medium-sized enterprises*

US Department of Justice (1996): *Consolidation in the Banking Industry: an Antitrust Overview*

WALKNER, C. and RAES, J. (2005): *Integration and consolidation in EU banking: an unfinished business*, European Commission Economic Paper No 226