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Responsible lending - Barriers to Competition

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ECONOMIC AND MONETARY AFFAIRS

Responsible Lending – Barriers to Competition

STUDY

Abstract

This study analyses the main barriers to effective competition in the provision of mortgage credit. The study considers and discusses barriers affecting both the supply (distance, information sharing, cross-selling practices, linkages between mortgage lenders and other market players) and the demand (switching and search costs) side of the market. Based on the available evidence it provides an assessment of the extent to which such barriers restrict competition in the mortgage market.

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DISCLAIMER

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LIST OF ABBREVIATIONS

ACCIS	Association for Consumer Credit Information Suppliers
AGCM	Italian Competition Authority
APR	Annual Percentage Rate
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities & Investments Commission
CB	Credit Bureau
CEPEJ	European Commission for the Efficiency of Justice
CEPS	Centre of European Policy Studies
CFC	Mexican Competition Authority
CNC	Spanish Competition Authority
CNIL	Commission Nationale de l'Informatique et des Libertés
CR	Concentration Ratios (e.g. CR3 for three largest providers)
DCA	Danish Competition Authority
EBIC	European Banking Industry Committee
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
ECJ	European Court of Justice
ECON	Committee on Economic and Monetary Affairs
ECRI	European Credit Research Institute
EE	Europe Economics
EFMA	European Financial Management & Marketing Association
EGCH	Expert Group on Credit Histories
EMF	European Mortgage Federation
EP	European Parliament
ESIS	European Standardised Information Sheet
FSA	Financial Services Authority
FSB	Financial Stability Board

FTC	Federal Trade Commission
GDP	Gross Domestic Product
GFE	Good Faith Estimate of Settlement Costs
GVH	Hungarian Competition Authority
HHI	Herfindahl-Hirschman Index
ICB	Independent Commission on Banking
IDD	Initial Disclosure Document
IMF	International Monetary Found
KFI	Key Fact Illustration
LTV	Loan to Value
MCOB	Mortgage Conduct of Business
ML	Mortgage Lenders
MOU	Memorandum of Understanding
MOW	Mercer Oliver and Wyman
M&A	Mergers and Aquisitions
NEET	Not in Education, Employment or Training
NMS	New Member State
OECD	Organisation for Economic Co-operation and Development
OFT	Office of Fair Trading
OMLs	Other Mortgage Lenders
PCR	Public Credit Register
PPI	Payment Protection Insurance
RMBS	Residential Mortgage Backed Securities
SGI	Service of General Interest
SME	Small and Medium Enterprise
TFEU	Treaty on the Functioning of the European Commission
TILA	Truth-in-Lending Statement

EU-12 includes: Belgium - France - Germany - Italy - Luxembourg - Netherlands - Denmark - Ireland - United Kingdom - Greece - Portugal - Spain

EU-15 includes: Belgium - France - Germany - Italy - Luxembourg - Netherlands - Denmark - Ireland - United Kingdom - Greece - Portugal - Spain - Austria - Finland - Sweden

EU-25 includes: Belgium - France - Germany - Italy - Luxembourg - Netherlands - Denmark - Ireland - United Kingdom - Greece - Portugal - Spain - Austria - Finland - Sweden - Cyprus - Estonia - Latvia - Lithuania - Malta - Poland - Czech Rep. - Slovakia - Slovenia - Hungary

EU-27 includes: Belgium - France - Germany - Italy - Luxembourg - Netherlands - Denmark - Ireland - United Kingdom - Greece - Portugal - Spain - Austria - Finland - Sweden - Cyprus - Estonia - Latvia - Lithuania - Malta - Poland - Czech Rep. - Slovakia - Slovenia - Hungary - Bulgaria – Romania

Country abbreviations Country abbreviations are used according to the Interinstitutional style guide (http://publications.europa.eu/code/en/en-000100.htm), i.e. the two-letter ISO code is used (ISO 3166 alpha-2), except for Greece and the United Kingdom.

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EXECUTIVE SUMMARY

This study aims at collecting and summarising the evidence on barriers to effective competition in the European mortgage market. It is based on several sources of information and evidence. First, we took stock of all the studies and reports produced by the European Commission or by external consultants appointed by the Commission within its review process of the credit mortgage sector, especially those produced after the 2007 European Commission White Paper. Second, we extensively reviewed documents and research published by (national and international) institutional bodies. Third, we collected and analysed studies and data released by mortgage lenders and consumers associations in order to account for the positions of both sides of the market. Finally, we considered and reviewed a large set of academic contributions that may be helpful to back any finding of the study.

Market structure

The study starts with a description of the supply side of the mortgage market and defines residential mortgages as "*loans for the purchase of a private property which can be secured or not secured on the residential property*", hence we focus on residential mortgages for households. We classify mortgage lenders (MLs) according to two dimensions: the main business of the lender and its nationality (domestic vs. foreign institutions). As for their main business, MLs can be divided into credit institutions and other mortgage lenders (OMLs). The latter include i.a. building societies and governmental mortgage suppliers. The penetration of OMLs varies across the countries, and their role has been significantly reduced by the recent financial crisis, since OMLs cannot rely on deposits to finance mortgages but on financial markets, which have shrunk because of the crisis. Penetration of foreign lenders is still a very limited phenomenon, especially for the old Member States and for large countries.

The main channels of distribution of mortgages in Europe are 1) the direct channel which is represented by mortgage sales through branches, telephone and the internet (the latter two are also referred to as "remote channels"), and 2) the indirect channel of distribution which is represented by the sales through intermediaries. The development of the indirect channel varies across countries, being particularly relevant in the UK, Ireland and the Netherlands. In terms of countries' mortgage indebtedness, the study provides data on the ratio of mortgage debt over GDP. When ranking countries according to this relative measure, we observe that on average mortgage debt weights 50% of GDP for EU-25, although there is great variability across Member States, ranging from more than 100% in The Netherlands to less than 20% in Eastern Europe Member States. In terms of dynamics, the relative measure of market size has been steadily expanding overtime from 1998 to 2009 at EU-27 level (with a slight decline after the financial crisis in 2008).

We then look at two potential proxies of the intensity of competition in European mortgage markets, namely supply side concentration and profitability. Using 2004 data, we observe that, on average at the EU level, the five largest mortgage lenders had an aggregated market share above 75%, although there was variation across countries. In Germany, Spain, Austria and Italy, the degree of concentration is below the average EU value, whereas in the Nordic countries and in most Eastern Europe Member States the degree of concentration is above the average value. Overall, the emerging picture is thus that of a fairly concentrated market. More recent data, together with data on banking, suggests that concentration has increased in the last few years, following the financial crisis. We also find evidence of an increase in the spreads between mortgage loans and deposit rates in the most recent years.

This evidence seems to point to a reduction in competition in the recent years, in line with the increase in concentration, although the increased spreads may also be due, at least partially, to greater credit risk.

Barriers to competition

Barriers to competition can be broadly classified in two categories: barriers that act directly on suppliers by limiting or preventing entry and expansion (barriers on the supply side), and barriers that act indirectly by creating constraints for customers' mobility and choice (barriers on the demand side).

Supply side barriers

On the supply side, the study considers as possible obstacles to competition: distance (both in a strict sense, i.e. "physical" distance, and in a broader sense, which includes legal, cultural, and institutional differences), lack of information sharing among lenders, cross-selling practices (combined sales of mortgages with other financial products) and linkages between lenders and other players (operating either in the same market or in adjacent markets, such as the housing market).

The first barrier we examine is "distance". We find that proximity between borrowers and lenders is still an important factor in the choice of the mortgage suppliers. However, it is not physical distance itself that represents the main obstacle to competition: a more significant role is played by "socio-cultural distance", stemming from cultural and institutional differences. In particular, differences in regulation and in the legal framework across countries are perceived as the most important factors limiting cross-border competition. Among the main obstacles for cross-border purchases, there are the uncertainty about the trial duration in case of disputes and the existence of different bankruptcy procedures in case of borrower's default and of inefficient systems dealing with mortgage foreclosures. Also cultural and language factors limit cross-border purchases of mortgage, while access to funding is not per se a barrier to cross-border lending for OMLs. A potentially positive role for fostering cross-border trade could be played by credit intermediaries, which could facilitate foreign penetration into national markets.

The second barrier we examine is "access to information". We find that limited access to information on borrowers history may reduce competition among existing mortgage lenders, disadvantage new entrants *vis-à-vis* incumbents and affect the mode of entry, favouring M&A over *de novo* entry. Equal access to both positive and negative information is important for effective competition in the marketplace; however, access to the former may be impeded by specific regulation or a too strict interpretation of personal data protection law.

Several factors might obstruct the spread of information included in private registers: first, the lack of information homogeneity across EU countries as far as information coverage, thresholds and data retention period; second, the existence of restrictions that limit access to credit institutions and/or to subjects who have a physical presence in the Member State. These factors, although deserving attention by policy makers, have overall a limited impact on cross-border competition as this is more likely to be affected by other barriers.

The pro-competitive effects of improved systems of information sharing, nonetheless, do not make any competition law concern unwarranted; lenders should be prevented from exchanging sensible information on their competitive strategies (interest rates, volume of trasanctions, etc.) in order to avoid any risk of collusion; existing competition law provides a sufficiently clear legal basis for intervention by national competition authorities or the European Commission when this risk arises

The third barrier we examine is “cross-selling”. We find that the sale of mortgages bundled with other (ancillary) services is indeed a widespread phenomenon. The practice of cross-selling may have anti-competitive effects by foreclosing rivals either in the mortgage market or in adjacent markets (of other financial services) and by reducing consumers’ mobility through higher switching costs and lower transparency. However, cross-sales may also generate efficiencies through reduced lender’s credit risk and economies of scope.

The assessment of the effects of cross-selling practices requires normally a thorough analysis of the market, that needs to be carried out case by case. The review of the existing evidence shows that only in very few cases national competition authorities formally investigated tying or bundling practices: in none of them a violation of the antitrust law was ascertained. Nonetheless, in some Member States, following antitrust investigations or sector inquiries, National Competition Authorities raised general concerns about the practice of tying mortgages with other financial services and called for regulatory interventions mainly on the ground that the practice did not seem to be justified by any relevant efficiency reasons.

The final barrier that we study on the supply side is the existing “*linkages between mortgage lenders and other players in the real estate (agents and property developers) and credit intermediation (residential mortgage intermediaries) markets*”. These linkages are considered under two perspectives: the first perspective is connected to the traditional antitrust concerns of the foreclosure effects associated to “vertical” agreements; the second perspective relates to the role of intermediaries and is connected to the phenomenon of misselling, i.e. the practice of selling products unsuitable to customers’ needs, due to existing conflicts of interests in the intermediation practice.

The existing literature shows that vertical agreements pose a challenge to competition when markets “upstream” (mortgage market) and “downstream” (real estate and credit intermediation) are strongly concentrated and such agreements entail exclusivity clauses. The available evidence suggests that the existing vertical agreements between market players do not pose serious competitive concerns, given the fragmentation of the markets and the general lack of exclusivity clauses in the stipulated agreements. We find evidence only of two cases that fell under scrutiny of national authorities, without raising serious competitive concerns. When analysing the role of credit intermediaries, it is important to stress that this is potentially pro-competitive: their activity can reduce search costs borne by consumers and facilitate cross-border trade. However, the existence of asymmetric information between intermediaries and customers, and, in particular, the misalignment of incentives between them, may be detrimental to borrowers.

The existing evidence shows that the phenomenon of misselling by intermediaries is indeed pervasive, and stems from behavioural biases and financial illiteracy of consumers. The correlation between misselling practices and intermediaries regulation appears overall weak. However, for specific forms of consumers' detriment, more strictly regulated markets might reduce the risk of misconduct. Several Member States and the European Commission are taking action against potential misselling by intermediaries, which shows that existing concerns are taken seriously. The main areas of interventions are the disclosure rules of intermediaries payment structures; the professional standards for performing the intermediation job; and the need to ensure that consumers are confronted with a sufficient number of available mortgage products.

Demand side barriers

On the demand side, we analyse barriers that may arise due to the presence of switching costs (monetary or tangible costs which consumers incur to change mortgage providers) and search costs (which refer to the time and effort that borrowers must exert in order to find and select the appropriate contract).

Switching costs are the costs that a consumer faces when changing supplier (contractual, transaction, search costs and costs due to the presence of combined products). Switching costs may constitute a severe obstacle to competition: they may limit entry by hampering the ability of new suppliers to attract customers and they may also allow existing players to exploit their customer base without fearing the competitive pressure of rivals.

In our study we present survey evidence that shows that borrowers consider switching costs in the EU mortgage markets as a relevant barrier to mobility. In particular, early repayment restrictions, contractually binding the customers, prevent or limit the ability to switch. Similarly, charges (penalties) to exercise the early repayment option may discourage switching. The evidence collected indicates that contractual restrictions appear to have a stronger impact on customer mobility than penalties (provided that the penalties do not exceed a fair value level). Changing supplier involves also transaction costs which include property valuation costs, solicitor/notary fees, mortgage registration costs, loan taxes, etc. Although these costs are relatively small compared to the value of the mortgage, they may nonetheless act as a relevant obstacle to consumers' mobility.

The second barrier on the demand side that we consider is "search costs". Contract complexity and the lack of clarity in the way the information about mortgage conditions is provided may significantly limit the ability of consumers to understand, compare and shop around in search for better deals. This may lower customers' mobility and create barriers to entry and expansion.

Several surveys conducted both at the EU level and at national level consistently indicate that consumers perceive difficulties in understanding contract conditions and in comparing offers across lenders as major obstacles to choose their mortgage provider. Information disclosure regulations have improved significantly consumers' ability to perform the search activity. It is still not clear, however, whether better pre-contractual information can actually lead to better market outcomes in terms of either lower borrowing rate or lower defaults. The decision-making process of consumers is largely affected by the presence of financial illiteracy and cognitive biases. These two factors can lead to poor financial choices even in presence of transparent and comparable information.

A cooling-off period may further contribute in reducing the search costs by giving additional time to seek advice, shop around for better deals or correct emotion-based decisions. However, the lack of evidence on the effects of such provision where it has been implemented makes it difficult to assess the extent to which cooling-off periods can promote competition in the mortgage market.

INTRODUCTION

This study provides in particular answers to six specific questions concerning:

(i) the lack of comparable pre-contractual information;

(ii) the lack of a cooling-off period;

(iii) the effects of penalties and restrictions on early redemption,

(iv) the effect of existence of ancillary services linked to the mortgage;

(v) the impact of linkages between lenders and property developers; and

(vi) the kind of discriminatory or predatory lending practices that are known in practice.

In the study we consider and investigate both barriers to competition that act directly on suppliers by limiting or preventing entry and expansion (barriers on the supply side), and barriers that act indirectly by constraining customers' mobility and choice (barriers on the demand side). For the scope of the study several sources of information and evidence have been considered: studies and reports produced by the European Commission and by external consultants appointed by the Commission, documents and researches published by (national and international) institutional bodies ranging from competition policy authorities to financial supervisory bodies, studies released by mortgage lenders and consumers associations, and a large set of academic contributions.

The study is structured as follows:

- As a general background, the first section will present some facts about the mortgage industry in the European Union, including evidence on the main features of the supply side, the market size, the degree of concentration and other measures of market power, the level of cross-border retail lending, etc.
- The second and the third section will focus on the barriers to competition that we mentioned above: Section 2 deals with obstacles from the supply side while Section 3 centres on the barriers from the demand side.

For each barrier the study will first, provide a general overview of the main issues at play and discuss relevant insights that can be drawn from the economic literature; second, present the evidence collected and assess the relevance of the barrier in the mortgage market (and, whenever appropriate, address the specific questions asked by the European Parliament); and, finally, summarise the main conclusions and findings of the research (key findings will be placed at the beginning of each subsection). All tables and figures are reported in the Annnex.

1. MORTGAGE INDUSTRY CHARACTERISTICS

This chapter describes the main characteristics of the EU mortgage industry with the aim to identify some structural and performance indicators that may point to the existence of barriers to effective competition. Section 1.1 contains the definition of mortgages that we will use throughout the report. Section 1.2 provides evidence of some structural and performance indicators. We classify in particular the type of firms that operate on the supply side of the market, assess their relative importance and describe to what extent firms operate outside their national markets; we illustrate the available distribution channels and their relative importance; we characterise the various national markets according to their size, and the existing degree of concentration, pointing also to the relation between these two structural characteristics; we discuss some performance indicators that may signal the existence of market power. In Section 1.3 we briefly discuss the relationship between market concentration and financial stability.

1.1. Mortgage definition

The study focuses on the market for *household residential mortgages*. Corporate mortgages are thus excluded from our analysis. The definition of residential mortgage adopted in this study is "*loans for the purchase of a private property which can be secured or not secured on the residential property*" (EMF 2010).[1]

The study focuses on the national mortgage industries in the 27 countries belonging to the European Union (EU-27).[2] In some cases, when information coverage is incomplete, we refer to the largest subset of countries for which information is available.

1.2. Structure of the markets

1.2.1. Suppliers

The nature of the suppliers providing mortgages may vary across countries. For the scope of the study we classify mortgage lenders (MLs) according to two dimensions: 1) the main business of the lender, and 2) its nationality (domestic vs. foreign institutions). These two dimensions of classification appear relevant for the present study for two main reasons: first, different types of lenders (whose main business varies) have different access to primary funding. As we will see, this might shape the evolution of the competitive interaction in the marketplace, especially in the light of the recent financial crisis. Second, access to foreign markets is still limited, although the penetration of foreign lenders is one of the main potential drivers of competition.

[1] It is worth noticing that different countries may rely on different definitions of residential mortgage. This implies that comparing statistics across countries requires some caution in the interpretation of the evidence as the figures could be based on slightly different concepts of mortgages. A detailed description of the various definitions used in all Member States can be found in London Economics (2005), in particular in Table A.1.2., and in the White Paper (European Commission 2007b).

[2] Our definition of residential mortgage as well as our focus on the situation of Member States (state level analysis) is motivated by way of illustration and does not imply the adoption of a specific definition of a "relevant market" in antitrust terms. In this we follow the approach adopted by the European Commission in its inquiry on the retail banking sector (2007a). The definition of an antitrust product and geographic market normally requires a complex assessment, which needs to be done on a case by case basis, and falls beyond the scope of the present study.

Main business of the lender

Following the classification adopted by London Economics (2008), residential mortgages can be sold on a commercial basis by *credit institutions* and *other mortgage lenders* (OMLs). Credit institutions include banks (commercial banks, saving banks or banks specialised in mortgages), while OMLs include building societies (cooperative companies providing mortgages, especially in the UK), government mortgage suppliers, pension funds and brokers (when acting also as suppliers). A further marginal player in the origination of mortgages is represented by insurance companies.[3] Table 1 provides a picture of the different types of suppliers in the mortgage market for different Member States.[4] As we can see, there are differences across Member States according to which type of supplier is prevalent. In countries like Denmark, France, Germany, Greece, Italy, Latvia, Poland, Portugal and Spain mortgage suppliers are mainly banks, while in the rest of the Member States there is a mix between banks and other institutions.

Figure 1 shows OMLs' market shares on total residential mortgages across countries. The countries where such share is relevant are Belgium, Finland, Netherlands, Romania and UK, where it reaches the maximum of 12%. The picture is however complicated by the different existing rules for licensing home finance providers across countries. In some countries all lenders, in order to be able to sell mortgages, need to obtain a banking license, thus qualifying as credit institutions. This is the case of Austria, France, Germany, Greece, Portugal and Slovakia. For this reason, these countries are not represented in Figure 1, since formally all mortgage providers are credit institutions. For these countries it is difficult to assess the role of OMLs in issuing mortgages. However, as we report in Table 1, we know that other mortgage lenders play a role in Austria and Greece, while they are substantially absent in France, Germany, Portugal and Slovakia.

The distinction between different types of MLs is important for several reasons, in particular as it affects the mode of funding. Indeed, only credit institutions are entitled to raise deposits from the retail market.[5] Other types of suppliers, among which OMLs, cannot access neither retail and wholesale deposit markets nor interbank markets, which implies that they need to fund mortgages through financial markets, by issuing covered bonds and securitisation. Another form of funding on which OMLs sometimes rely on is credit raised from parent credit institutions.

The report on housing finance by the ECB (2009) allows to derive information on the usage of alternative sources of mortgage funding for credit institutions for countries within the euro area (see Figure 2). There is considerable heterogeneity in funding structures across the euro area, with some countries where credit institutions rely on capital markets more than others: the amount of covered bonds and securitisation in 2007 reached 45% for Spain and it was above 25% in the Netherlands and Portugal, 20% in Ireland and Italy, with all the other countries well below this percentage.[6]

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[3] The role of insurance companies in supplying mortgages appears to be small. They are allowed to sell mortgages only in few European countries, where they exhibit extremely low market shares (for example 4% in Belgium, or o% in the UK).

[4] No data was available for Bulgaria, Denmark, Latvia, Lithuania, Poland and Slovenia.

[5] Credit institutions are defined in the Capital Requirements Directive 2006/48/EC as "*undertakings whose business is to receive deposits or other repayable funds from the public and to grant credit for its own account*". Thus only banks can raise deposits, in the retail or wholesale market, while other mortgage suppliers cannot.

[6] Credit institutions in some Member States outside the euro area, such as Denmark, also make significant use of covered bonds. According to EMF, in 2009 the amount of covered bonds was 100% in Denmark and it was about 57% in Sweden; (we have not found recent evidence on securitisation, but, according to London Economics (2005), there was no mortgage backed securities market in Denmark in 2003, while in Sweden the market was very small).

Regarding OMLs, we have survey information from London Economics (2008) showing that OMLs' main source of funding is credit from a parent credit institution; followed by issuing activity on financial markets (see Figure 3). It is worth pointing out that different ways of financing mortgages by different types of lenders has resulted in a differential impact of the recent financial crisis on mortgage suppliers, potentially shaping the nature of competitive interaction. The crisis has, in fact, largely reduced securitisation activities, which implies that MLs that do not rely on deposits, but on alternative sources of mortgage funding, have been severely penalised and their market shares have shrunk.

Nationality of the lender

The second dimension along which we distinguish MLs is whether they are domestic or foreign suppliers. This distinction relates to the nationality of MLs having offices or branches in a given country, that is we do not consider here the provision of cross-border mortgages of foreign operators. Figure 4 shows the share of foreign ownership of assets in each mortgage market for EU-27. As we can see, there is some degree of penetration by foreign suppliers. This penetration is large in Eastern European countries (above 90% in Estonia, Czech Republic and Slovakia), while it is a rather limited phenomenon in many 'old' Member States. The percentage of foreign mortgage lenders was on average 20% in the years 2007-2009, ranging from below 10% in Germany, Italy, Spain, Netherlands, France and Sweden to above 40% in Slovenia, Finland, Luxembourg and Malta.

1.2.2. Distribution channels

We now turn to a brief description of the different distribution channels available for mortgage suppliers. Distribution is likely to have an important impact on the competitive interaction in the market, as we describe in the following sections of this study.

Following the classification adopted by MOW and EFMA (2007) in their survey on the distribution of mortgages in Europe, we distinguish between "direct" and "indirect" channels. The direct channel is represented by mortgage sales through branches, telephone and internet. The indirect channel of distribution is represented by the sale through intermediaries. Intermediaries can be "tied" with MLs, thus having an agency relationship with them, or "untied", thus acting independently in the search for the best ML in the entire market.

Figure 5 ranks Member States according to the share of mortgage values distributed through intermediaries. In the UK, Ireland and Netherlands intermediaries have a large share over total sale of mortgages among Member States. In the UK 70% of mortgages are sold through intermediaries, followed by Ireland and the Netherlands with a share of 60% and 43%.

A more detailed description of the structure of the distribution channels can be found for some large EU mortgage markets: Figure 6 reports data for France, Germany, Spain, Sweden and UK, distinguishing between the different types of direct and indirect channels. The figure shows that sales through branches are still an important channel of distribution in many countries, however other channels, such as remote channels and intermediaries, do also play a significant role.[7]

[7] Strict underwriting rules may require that the mortgage has to be signed physically at a local branch. In this case a large branching network that guarantees physical proximity to dispersed borrowers can become a competitive advantage for some lenders compared to others that do not have a local presence or compared to remote channels. Credit intermediaries that are non-credit institutions and do not have widespread branching networks, may find the strict underwriting rules required by national regulators in relation to the supply of mortgages in several countries an obstacle.

This information is relevant to assess the importance of the physical presence of suppliers in the section on "distance". It is also evident that remote channels, such as telephone and the internet, have a smaller role compared to intermediaries in the distribution of mortgages, even if they are easily accessible by consumers.

1.2.3. Market size

In this section we provide information about the overall size of the market in Member States. Besides being a relevant information *per se*, the knowledge of the market size is important as it might be an important predictor for concentration of the mortgage industry: a large market size may in fact leave room for new entrants thus leading to a low level of concentration in the supply.

The relationship between market size and concentration might be extremely relevant, especially in the light of the existing efforts to promote greater integration between the different European markets. However, such relationship is far from unambiguous from a theoretical point of view. In his famous contribution, Sutton (1991) provides evidence that in industries where entry costs are constant, because the minimum efficient scale of production in the industry is fixed by technology, there is an inverse relation between the degree of concentration and market size. However, this negative relation may be reversed in industries where the size of entry costs can be affected by incumbent firms' behaviour, defining these "endogenous sunk costs" industries. The banking, and in particular the mortgage industry, might indeed be characterised by the presence of entry costs that are not fixed, but that can be affected by incumbent firms' behaviour as in the case of the choice of the size of their branching network. Similarly to banking, in the mortgage industry a larger branching network may give a strategic advantage over competitors. This implies that branching costs are at least in part endogenous, as MLs decide the size of their networks by taking into account the strategic response of their rivals.

Whether endogenous sunk costs are relevant and whether they imply a positive relationship between market size and concentration turns out to be an empirical issue. Without going into the complexity of econometric analysis, we show in Figure 7 the relation between total mortgage debt outstanding[8] (total values) and the concentration ratio CR3[9], that is the overall market share of the three largest mortgage lenders in the market. The data shows a negative relation between market size and concentration, implying that larger markets exhibit lower degrees of concentration.[10] Notice that UK, the largest mortgage market among EU-27, exhibits one of the lowest degrees of concentration. Overall, the data seems to support the idea that endogenous sunk cost of entry do not play a predominant role in the mortgage market, thus implying a negative relationship between market size and concentration. Turning to the cross-country comparison of market size, Figure 8 shows that the UK is by far the largest market among EU-27, closely followed by Germany, Netherlands, while France and Spain lag behind. Eastern European countries are by far the smallest.

[8] The total mortgage debt outstanding is the overall stock of mortgages in a given period. This measure simply reflects the overall level of activity in the mortgage market and, thus, represents a proxy for market size.

[9] CR3 refers to the concentration ratio computed through summing up the market share of the three largest suppliers in the market.

[10] Sutton (1991) states the empirical prediction in terms of a lower bound to the degree of concentration. Empirically this requires regressing a non-linear relation that encloses the data from below (Figure 7). This implies that even if the linear regression shows a weak correlation, the non-linear approach may indicate the existence of a negative relation between concentration and market size.

It is important to notice that large volumes of mortgage debt in absolute value do not imply over-indebtedness. For measuring the indebtedness of a country, we need a relative measure of market size, namely the ratio of mortgage debt over GDP. When ranking countries according to this relative measure (see Figure 9), we observe that on average mortgage debt weights 50% of GDP for EU-25, although there is great variability across Member States, ranging from more than 100% in the Netherlands to less than 20% in most Eastern Europe Member States. Again, it should be stressed that a high mortgage debt over GDP ratio should be considered together with several other factors in order to have a picture of the financial stability of the country, as we will briefly discuss in the "Concentration and financial stability" section (1.3).

In terms of dynamics, the relative measure of market size has been steadily expanding overtime from 1998 to 2009 at EU-27 level, even though there has been a slight decline after the financial crisis in 2008 (see Figure 10). It is hard to predict what will be the evolution of the market in the next years, and what implications such evolution will imply for the observed market structure. Many factors will, indeed, impact on the provision of mortgages, among which the evolution of the macroeconomic situation and the behaviour of the underlying asset market.

The relationship between indicators of mortgage market size and the house market is an interesting one. Is the market size of the mortgage market explained by differences across countries in the underlying asset used to secure house finance? Although we might expect that mortgage demand is larger in countries where there is a larger home-ownership rate, this intuition is apparently rejected by the data. In a brief report, Europe Economics (2010) summarises its findings: "*There does not, however, appear to be any established linkage between high rates of household ownership and mortgage debt as a proportion of total household liabilities. Southern European countries such as Spain, Italy and Greece for example, have high home ownership rates yet in comparison with countries like the UK, Denmark and the Netherlands (where mortgages are very widespread), far fewer of the households in the Southern European countries own their homes through a mortgage*." When comparing our measure of mortgage debt to GDP to the percentage of home owners we find indeed a negative relation (see Figure 11). This implies that a greater leaning towards mortgage debt is to be found in countries where the ownership rate is lower. Obviously, observing such negative correlation does not imply a negative causal link between the two variables.

Another determinant of mortgage market size may be the change in value of houses determined by their market price. To explore this issue we look at the correlation between new outstanding mortgages (newly issued loans) and house prices. We do find evidence, although weak given that it is based on average values across years, that the level of new mortgages moves in the same direction as house prices (see Figure 12). This evidence is confirmed by the ECB (2009):"*House prices and mortgage lending generally develop in line. Over the last decade, increases in both were especially high in Ireland, Greece, Spain and Italy, although it is difficult to determine causality, i.e. whether credit growth fuelled house prices, or vice versa. It is more plausible to assume a mutually reinforcing relationship*". We can conclude that if house prices do not increase at the same pace as in the past, mortgage markets might shrink in the future.

1.2.4. Market shares and concentration

We now turn to a description of the evolution of two commonly used proxies for competition in the market, namely measures of supply side concentration and indicators of profitability.

Concentration in Member States

Concentration is one of the most widely used proxies for competition in a market, although recent economic literature shows that a high level of concentration does not necessarily imply low competition. Indeed, other factors that are not correlated with supply side concentration may determine the intensity of competition, as, for example, the buying power or the switching behaviour adopted by consumers, or the potential competitive pressure exerted by foreign lenders, who might threaten to enter the market if monopolistic profits emerge. As we will see further on in the study, because cross-border lenders find it difficult to gain market share, borrowers may be limited in their ability to switch or search for the best contracts, as a consequence concentration measures may be indeed important to derive implications on competitive pressure in this industry.

One of the most commonly used indexes to measure supply concentration is the sum of the market share of the five largest firms in the market, i.e. the concentration ratio CR5.[11] To check the robustness of our results, we also add two other measures of concentration: the sum of the market share of the three largest firms in the market, i.e. the concentration ratio CR3 and the Herfindahl-Hirschman index (HHI).[12] In Figure 13, CR3 and CR5 are reported (left scale), as well as the Herfindahl-Hirschman index (right scale), for each of the EU-25 for the year 2004. We observe that on average at EU level, the three largest mortgage lenders had a share of 66%, although the index exhibits significant variation across countries. In various countries, among which Germany, Spain, Austria, Italy and the United Kingdom the degree of concentration is below the average EU value, whereas in the Nordic countries and in most Eastern European Member States the degree of concentration is above the average value. Overall, the emerging picture is thus that of a fairly concentrated market.

Unfortunately, 2004 is the most recent year for which an overall picture of the European market is available. However, according to the ECB (2010): "*With regard to individual Member States, the picture remains largely unchanged, with larger countries, such as Germany, Italy and the United Kingdom, but also Austria, having more fragmented markets, and smaller countries, especially some of the New Member States (NMS), being characterised by more concentrated banking sectors*."

More recent data, available just for a subset of countries, show that concentration is in fact increasing. In particular we computed the concentration ratio CR5 in 2009 compared to 2004 for Denmark (from 93% in 2004 to 100% in 2009), the UK (from 43% to 55.1%), Lithuania (from 79% to 77.3%), Poland (from 47% to 50%), Spain (from 31% to 37.1%) and in 2008 for Greece (from 52% to 68%). These figures, although partial, suggest an increase in the degree of concentration in the mortgage markets at national level.

A further benchmark to gauge the possible recent evolution of the mortgage market concentration is the evolution of the overall banking sector. The banking sector appears to be in principle a valid benchmark, since mortgages represent one of the main activities of retail banks and, as we noticed above, banks are the main mortgage suppliers across all Member States.

[11] This index varies between 100% (when only the first five firms serve the total market) to its lowest value of (5/n)*100% where n is the number of firms in the market: if in the market there are 100 firms the minimum value would be 5%.

[12] The index HHI is the sum of squared market share of all the firms in the market. This index uses the full information about market shares in the market. It varies between (1/n)*10,000 (when all firms have equal market share) and 10,000 (when the first largest firm owns 100% of the market). In the context of merger control, the European Commission considers HHI figures above 2,000 as a preliminary indication that the merger can (although not necessarily) give rise to anticompetitive concerns (European Commission "Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings", 2008/C 265/07).

Figure 14 corroborates this approach, as it shows similar degrees of concentration measured by CR3 for the two industries (banking vs. mortgage sector). Indeed, although in most countries the mortgage industry presents a lower degree of concentration, all observations are clustered around the 45% line, indicating similar degrees of concentration between the two industries.

Banking data, reported in Table 2, shows that concentration, as measured by the concentration ratio CR5, has risen for half of the countries, while decreased for the others. On average concentration has increased by +1.7% for EU-27. If we add to this analysis the consideration that the financial crisis has reduced the role for OMLs in the supply of mortgages (as sources of mortgage funding different from deposits have shrunk due to a fall in securitisation), the analysis of the banking sector seems to confirm the impression that concentration in the mortgage industry might have risen in the recent years.

Profitability

The analysis of concentration ratios shows indeed that the mortgage market is fairly concentrated, although at levels generally below those of the banking sector. Concentration is however, as we said, only an imperfect proxy for competition in the market, which might be only weakly correlated to the supply side structure of the market. Another indicator of competition in the market is represented by profitability indicators, that might reveal the existence of monopolistic rents. Again, measures of profitability might be affected by other factors than intensity of competition, hence one should be cautious in interpreting any results based on these indicators as evidence of the intensity of competition in the market. This is true in particular for the mortgage business (and in general the loan business), where profitability indicators, usually spreads between mortgage and deposit rates, might reflect the evolution of riskiness of borrowers (that is high spreads reflect higher risk premia).

In ECB (2009), we found evidence of a decline in the spreads (profit margin) in mortgage lending rates between 2003 and 2007, both for variable and fixed interest rates contracts. This can be taken as evidence that there has been an increase in competition in several EU mortgage markets up to 2007. However, when we look for more recent evidence, we do observe an increase in the spreads between mortgage loans and deposit rates (see Figure 15) especially after the financial crisis. This evidence, with the relevant caveat expressed above, seems to point to a recent reduction in competition in the mortgage sector, in line with the information that we retrieved for the concentration indexes.[13]

[13] It is very difficult to disentangle whether higher spreads reflect a reduction in competition intensity or a possible increase in credit risk. At the aggregate level, one may look in principle at the evolution of mortgage payment arrears (ex-post measure of credit risk) or at the evolution of lending standards adopted by lenders (ex-ante measure of credit risk), in order to gauge the variations in credit risk. While we do not have access to this data, we may refer to the consideration expressed in the report by the ECB (2009) on rising mortgage spreads after 2007: “While the default risk of borrowers should play a role in the size of spread, there is limited evidence, all in all, on the impact of the financial situation of households on the variation of spreads demanded by banks for taking up loans across euro area countries”. However, in order to be able to conclude without any reasonable doubt that the rise in the spreads is evidence of lack of competition, it would be necessary to analyse data at the individual level to control for the risk characteristics of the borrowers but this goes beyond the scope of this study.

1.3. Concentration and financial stability

The nexus between concentration in financial markets and financial stability is a complex one, and a thorough analysis of the theoretical arguments and empirical evidence on this issue is outside the scope of the present study. Overall, we could claim that the existing evidence does not demonstrate the existence of a robust relation between concentration and financial stability.[14]

On the one hand, greater concentration, as long as it translates in higher market power[15], may impair financial stability. Assume that MLs with greater market power set higher interest rates, thus increasing the risk of default on the single mortgage. When there is correlation between defaults, the percentage of mortgages defaulting in the portfolio of each single ML increases. If MLs are interconnected through credit relations, there may be contagion across MLs leading to greater financial fragility.

On the other hand, new entries in the market, though reducing the concentration in the market, may impair financial stability. There may be in fact an adverse selection effect due to the fact that new entrants may risk to attract residual borrowers that have been rationed by incumbent lenders, and this increases the default risk on their portfolio of mortgages. Moreover, greater competition might induce MLs to engage in riskier lending, thus posing a threat to financial stability.[16]

All this says that the relation between concentration and financial stability can be non monotonic. It is affected by the quality of the pool of borrowers facing suppliers, but also by strategic interactions among suppliers and by the quality of financial supervision. In the survey of the literature and empirical evidence, OECD (2010) stresses the importance of separating the notion of concentration from that of competition, concluding as follows: "*Cross country studies find that both concentration and competition have a positive effect on systemic banking stability. This suggests that concentration is not a good proxy for lack of competition, and that the positive effect of concentration on stability is more likely to occur because of better risk diversification opportunities rather than because of increased market power in concentrated banking systems*" (p. 31). This conclusion extends to the mortgage market as well.

Financial stability can be jeopardised more severely by some institutional characteristics of the mortgage market which are not necessarily related to the degree of concentration. For instance, the IMF (2011) explains how factors such as the percentage of mortgage debt over GDP, the LTV (Loan to value) ratio of mortgages, trends in house prices, sources of mortgage funding, the percentage of vulnerable borrowers, the percentage of fixed versus variable interest rate mortgages to cite only few, are more likely to increase the risk of financial instability. Understanding how these factors impact on financial stability would require a specific assessment which goes, however, beyond the scope of the present study.

[14] Canoy et al. (2001) and Carletti and Hartmann (2003) are excellent surveys of the literature on financial stability and competition. An accessible and complete summary of the theoretical arguments and empirical evidence for the banking industry can also be found in OECD (2010).

[15] The theoretical models and more in general the literature that examines the nexus between concentration and financial stability uses concentration as a proxy for incumbents' market power. As we have seen above, however, the relation between concentration and market power is far from unambiguous.

[16] Using data from 79 countries, Beck et al. (2003) find that crises are less likely in more concentrated banking systems. However, looking at the Italian experience, Guiso et al. (2006) find evidence that the proportion of bad loans is inversely related to the intensity of competition in the market.

2. BARRIERS TO COMPETITION ON THE SUPPLY SIDE

2.1. Distance

KEY FINDINGS

- Proximity between borrowers and lenders is still an important factor in the choice of the mortgage suppliers. However, the physical distance itself does not seem to be a main obstacle to competition.
- Social distance, stemming from cultural and institutional differences, play a much more significant role in segmenting markets.
- Cultural and language factors limit cross-border purchases of mortgages. However, differences in regulation and in the legal framework across countries are perceived as the most important factors limiting cross-border competition.
- Access to funding is not *per se* a barrier for OMLs to cross-border lending.

2.1.1. Introduction and insights from the literature

In this section we explore the role of potential barriers to competition of those factors that relate to the "distance" between lenders and borrowers. Distance may be interpreted in a strict sense, referring to the geographical space that separates the parties ("geographical" or "physical" distance), or, in a broader sense, referring to any cultural or institutional factor that depends on the physical location of the parties and that can affect their transaction ("social" distance).

Geographical distance affects competition in financial services whenever the parties need to move physically to complete their transaction. In these cases a party faces higher transaction costs (referred to as "transportation" costs) when dealing with a more distant party. Distance can also affect the ability of lenders to monitor and screen borrowers. Therefore, whenever lenders transact with such borrowers, they need to locate close to their clients to perform these activities efficiently (Peterson and Rajan 2002; Kim et al. 2003). If these are important factors, substantial transportation and information costs segment markets geographically, making entry by distant lenders much less likely or reducing their competitive pressure. As a consequence, local mortgage lenders enjoy a competitive advantage with respect to distant rivals, which may confer them market power. In this section, we discuss whether transportation costs may determine relevant barriers to competition in the mortgage industry; section 2.2 will deal with information costs.

Social distance includes cultural and institutional differences across areas. More specifically, cultural differences concern mainly:

a) the language;

b) the preferences of borrowers for different mortgage conditions (e.g. fixed rate vs. adjustable rate, or preferred level of loan-to-value).

Institutional differences concern:

a) the specific regulation of the mortgage industry;

b) other relevant legislation (e.g. property law, or personal data or consumer protection law);

c) the judicial system.

While physical distance does not depend on national borders, social distance is predominantly the result of differences across Member States (even if some cultural factors may also differentiate territories within a Member State). When these cultural and institutional factors make a transaction between socially distant lender and borrower more costly (or impede it), markets are segmented geographically (mostly along national borders) and market power may arise in some national markets or part of them. Finally, there are cultural and institutional factors that favour the development of the mortgage market and that, by increasing its size, allow the formation of a less concentrated market. Djankov et al. (2007) argue that the quality of the law and its enforcement is fundamental for private creditors to feel protected and for financial markets to develop (see also Bianco et al. 2005).

2.1.2. Evidence and relevance of distance factors as a barrier to competition

In this section we review the available evidence on the presence of barriers to competition in the mortgage industry stemming from the distance factors described above, and assess their relative importance.

Geographical distance: transportation costs

Transportation costs matter only if the parties of a financial contract need to meet physically to make their transaction. Remote distribution channels may overcome this problem as they make a face-to-face interaction largely unnecessary. We consider whether these remote distribution channels are *available* and to what extent they are actually *used*. The interpretation of the available evidence is the following: if the availability of remote channels is widespread, this indicates that transportation costs exist but can be greatly reduced. If, notwithstanding this diffusion of remote channels, they are rarely used, transportation costs are not a key factor in explaining geographic market segmentation. Evidence on market characteristics presented in Chapter 1 suggests that indeed a large fraction of borrowers have access to remote channels but their actual use is still limited. In their survey on European mortgage distribution MOW (2007) found that "*remote channels are typically used by consumers for market research or initial information provision and capture purposes with less than 5% of mortgage purchasing currently on-line across Europe (albeit over 10% in some countries)*" (MOW 2007, p. 18). Nonetheless, they identified a growing trend in the use of the internet for mortgage purchasing, expecting it to rise to 10% in 2010 and 20% in 2020. Recent evidence from Eurobarometer Flash (2011) seems to contradict this prediction, as there is a slight decline in the percentage of consumers who bought a (generic) financial product through the internet, falling from 11% in 2008 to 10% in 2010. These findings are backed up by a recent survey of UK customers (OFT 2010) which shows that consumers prefer purchasing from a bank that has a physical branch rather than dealing with banks through remote channels (see Figure 16). The survey asked whether they would consider using retail banking providers that had no branches for different financial services: 68% of respondent replied negatively for all type of loan products, compared to 77% of negative replies for current accounts.[17] Overall these results prove that the physical presence of lenders is still an important competitive factor.

[17] Note that, according to Figure 16, nearly one third (29%) said they *would* consider using a bank with no branches, which is twice as many as for a current account. So even if there is a majority of consumers who prefer having a lender with a physical branch, there may still be a sizeable market segment that does not.

However, this does not seem to depend on typical transportation costs. Social distance gives rise to more critical barriers to competition.

Social distance

The White Paper by the European Commission (2007b) discusses at length how culture shapes the variety of mortgage contracts in the market and the way this variety may limit cross-border lending. These national preferences and the linguistic problem may be a relevant factor in explaining a "home bias" in the consumers' purchasing behaviour. Eurobarometer Flash (2011) provides some information on consumers' attitude with regard to cross-border sale of financial services through the internet (see Figure 17). It reports that 90% of respondents in 2009 did not buy any product from the internet, 9% bought it from a seller located in the same country and only 1% did buy from a seller located in another Member State. The "cultural" explanation of this evidence is supported by the findings of a survey of lenders by London Economics (2005), whose conclusions are: "*Overall lenders rarely made loans to borrowers in a country where they had no presence. This type of lending seemed mainly to take place when the lender and borrower are from similar cultural backgrounds, for example Ireland and the UK, Germany and Austria, and within Scandinavia.*"

Even if consumers' preferences and language are clearly part of this cultural background, the most relevant barriers to cross-borders competition seem to derive from regulatory and other institutional differences. London Economics (2009) computes a Mortgage Market Index that summarises the institutional differences across EU-27 mortgage markets. The index aims at capturing differences in institutional aspects of mortgage markets such as different LTV ratios, average maturity, mortgage debt to GDP. The index measures how easy access to house financing is in a specific country. Its value ranges from the lowest level of 0.18 for Italy (difficult access) to the highest value of 0.85 for Denmark (easy acccess), denoting large institutional differences across EU-27. According to Europe Economics (2009): "*Differences between regulatory regimes can affect both the demand and supply sides of cross-border trade. On the demand side such differences restrict cross-border demand as consumers are not certain of their rights in other countries. Whilst this would be a concern for consumers if borrowing directly from a lender located in another Member State it could be amplified if obtaining credit through a non-domestic credit intermediary. This is because the consumer is likely to be uncertain of the responsibilities of two non-domestic organizations rather than one and because awareness of responsibilities of lenders is likely to be greater than that of intermediaries even within his home country*."

Differences in regulation may also affect the ability of MLs to access primary funding. The funding of mortgages occurs through retail deposits or other sources, such as covered bonds or securitisation by issuing Residential Mortgage Backed Securities (RMBS). If these alternative sources are limited, it is difficult for MLs without access to a deposit base to compete effectively in the mortgage market. An advantage of Credit Institutions over OMLs in the cross-border activity would signal that this problem is indeed relevant. However, London Economics (2009) finds that "*gaining credit institution status does not reduce the barriers to cross-border mortgage provision in the EU. Even with credit institution status, and therefore the benefit of the EU Banking Passport, the differences between Member States' credit institution authorisations (or licences) - and therefore the regulations and supervisions - make it very difficult to engage in cross-border trade*". Hence, differences in the access to funding do not seem to determine crucial barriers to cross-border competition.

Other institutional differences seem to play a major role, as recognised by London Economics (2009): "*the main issue for the cross border provision of mortgages for both credit and non-credit institutions is differences in the legal frameworks between Member States*". Through its survey, London Economics (2005) has identified, among the main obstacles for cross-border purchases, the uncertainty about the trial duration in case of disputes. This uncertainty may derive from (or can be combined with) different bankruptcy procedures in case of borrower's default and by inefficient systems dealing with mortgage foreclosures. Both factors are able to increase lenders' expected costs (since they anticipate long delays before recovering money in case of borrower's default) and may discourage mortgage suppliers to enter a foreign market. Indeed, there is clear evidence of substantial differences in the length of mortgage foreclosures across Member States (Figure 18). These differences are correlated with inefficiencies of the judicial system in general. For instance the CEPEJ Report on evaluation of judicial systems (CEPEJ 2010), ranks countries similarly with respect to the average length in divorce cases. This observation indicates that the presence of inefficient judicial systems is a major obstacle to the development of an integrated European market and that this factor is likely more important than the specific legislation applicable to foreclosures.

Finally differences in the legal requirements of a mortgage contract (how the contract is concluded, how mortgages are registered in a legally valid way, or how enforceable are property rights on the house as well as knowledge about the process and cost attached) may impair the sale of mortgages (as reported in the Thematic Review on Mortgage Underwriting and Origination Practices by FSB (2011)) and in particular cross-borders sales or entry by lenders from other Member States. Thus, MLs may be reluctant to offer mortgages cross-border even if approached directly by a potential client. Indirect distribution channels may limit the impact of these obstacles to competition. Intermediaries may have a role in reducing social distances, as reported by Europe Economics (2009): "*the linguistic skills and depth of knowledge of more than one market (in terms of the regulatory framework and market participants) are not cheaply acquired. […] The customer benefits from the intermediary's knowledge of the language and legal idiosyncrasies of the foreign market, and the intermediary is able to provide the lender with valuable advice regarding credit assessment of the foreign client.*" MOW (2007) provides evidence of an inverse relation between the physical presence of branches and the share of intermediaries in the mortgage market (see Figure 19). This means that intermediaries may help in overcoming the lack of branches and therefore may reduce entry costs in local markets, thus bypassing the need of a branching network for mortgage provision. However, Europe Economics (2009) reports that the use of intermediaries for cross-border lending is still limited and argues that "*This is, perhaps, suggestive of the cultural issues around language and trust that are also played out by consumers*". Further consideration on the role of intermediaries in making markets more or less competitive can be found in Section 2.4.

To conclude, we report the results of two surveys, one carried out by MOW (2007) and the other by Europe Economics (2009). The first survey is about lenders' perceived barrier to cross-border expansion in another Member State (see Figure 20). It shows that the largest perceived barrier to cross-border expansion stems from regulatory and tax differences, with a share of 49% of replies over a total 25 lenders in 13 countries surveyed. The second barrier is the limited access to distribution channels, with 24% of replies, the third barrier stems from language and cultural differences, with 17% of the responses; finally the smallest share of replies, 10%, refer to the limited access to information for lenders.

Similar results have been obtained by Europe Economics (2009). Figure 21 reports the opinions of lenders on which are the most important barriers to cross-border activity. Legal and regulatory constraints generate the most pernicious barriers to cross-border trade, followed by difficulties in promotion and distribution and lack of consumer confidence.

Limited access to market information is regarded as an important barrier but with a lower weight than the three just mentioned.

All these results give a clear indication that regulatory barriers to competition are among the most detrimental.

2.2. Access to information

KEY FINDINGS

- Limited access to information on borrowers' history may reduce competition among existing mortgage lenders, disadvantage new entrants vis-à-vis incumbents and affect the mode of entry, favouring M&A over *de novo* entry.
- Competition is significantly improved if incumbent lenders and potential entrants have equal access to both positive and negative information; access to the former may be impeded by specific regulation or a too-strict interpretation of personal data protection law.
- The corporate structure of private credit registers may create incentives for partial information sharing that protect incumbents; this effect may be exacerbated by fee structures that impose higher costs on new lenders with still a limited amount of activity.
- Relevant differences in the degree of information coverage, thresholds and data retention period exist among credit registers in EU; the lack of information homogeneity is an obstacle to the creation of an integrated European mortgage market.
- A further obstacle stems from restrictions that limit access to credit institutions and/or to subjects who have a physical presence in the Member State.
- These factors still have a limited impact on cross-border competition which is more likely to be affected by other barriers.
- The likely pro-competitive effects of improved systems of information sharing do not make any competition law concern unwarranted; lenders should be prevented from exchanging sensible information on their competitive strategies in order to avoid any risk of collusion; existing competition law provides a sufficiently clear legal basis for intervention by national competition authorities or the European Commission when this risk arises.

2.2.1. Introduction and insights from the literature

A crucial element for competing for customers and entering new mortgage markets is the availability of reliable information on borrowers' history through credit registers and similar information sources. Limited access to information tends to give rise to adverse selection effects. Adverse selection emerges because, while incumbent lenders obtain information about borrowers after lending to them and they are thus able to reject riskier borrowers when the latter ask for refinancing, potential entrants are unable to distinguish between new borrowers and old borrowers who have been rejected by their previous lenders.

As a consequence, entrants may tend to attract mainly riskier borrowers and, once anticipating that, they may prefer not to enter the market in the first place (see Dell'Ariccia, Friedman and Marquez 1999; Dell'Ariccia 2001).

In the theoretical and empirical literature there are no contributions that deal specifically with the mortgage industry. However, most of the results obtained for retail banking extend to the mortgage market, as the information problem that affect mortgages is essentially the same as the one that affects other loans provided by retail banks.[18]

Theoretical analyses highlight several ways in which information sharing may impact on the degree of competition in the credit market. The organisation of the credit reporting industry affects the availability, the quality and the costs of access to indispensable information to assess the creditworthiness of potential borrowers. In turn this may influence the intensity of competition in three ways:

1) It can determine barriers to entry if this information is not available or it is strategically disclosed by incumbent lenders (Claeys and Hainz 2007);
2) It can affect the mode of entry, encouraging potential competitors to enter through M&A rather than through greenfield investments which would increase competition more effectively (Jappelli and Pagano 1993);
3) It can reduce the intensity of competition among incumbent loan providers as the adverse selection effect of the lack of information makes it riskier for the existing firms to take clients from each other (Jappelli and Pagano 2002).

Public versus private credit register and their corporate structure

Public Credit Registers (PCRs) and private Credit Bureaus (CBs) are organisations which collect credit data on natural and/or legal persons. They reduce exogenous information asymmetries, increase borrower discipline and improve credit rationing (Jappelli and Pagano 1993; Padilla and Pagano 1997; Padilla and Pagano 2000). Recent evidence shows that CBs are associated with an increase in bank lending and credit availability, and a reduction in bank risk, and in the cost of credit for firms (Jappelli and Pagano 2002; Jentzsch 2007; Brown et al. 2009; Houston et al. 2010).

Not all information sharing arrangements have always positive effects on competition. PCRs normally do not pose any risk of being strategically misused to distort competition. Private CBs are usually for-profit organisations and do not have an incentive to make decisions in favour of some players, as this may affect their commercial reputation. However, the corporate structure of CBs can create incentives towards partial information sharing and, as a consequence, distort competition. Indeed, if banks can choose what information to disclose they can strategically disclose selected information to segment the local market, reduce the scale of entry and thereby soften competition (Bouckaert and Degryse 2004; 2006). Also the level and structure of the fees to access CBs may be strategically used to obstruct and discourage the entry of new suppliers (European Commission 2007a).

Tsai et al. (2010) show that entry in general is more likely to occur when information is available through private registers rather than through public registers. However, from their results it is not clear whether private registers facilitate entry through *de novo* investments and therefore are actually more effective in fostering competition. A recent contribution by Giannetti et al. (2010b) show that both public and private registers increase the share of entry through branches relative to M&As.

[18] Although the nature of the problem is common to other loans, its impact on consumers' welfare may be stronger in the mortgage market due to the large size of this market.

However, they find that public registers have a slightly stronger effect in reducing bank concentration and improve competition indicators.

Type of information available

PCRs and CBs collect two types of data: negative and positive information. Negative information is data about defaults on payments, delays, delinquencies, and bankruptcies. Positive information refers to data on the borrower's credit commitments, payments and other details which do not constitute a default or late payment. Both negative and positive information assists creditors in assessing the creditworthiness of the borrower.

The type of information available through the credit reporting system may affect the intensity of competition. Van Cayseele et al. (1995) analysed the equilibrium market structure with either positive or negative information sharing, finding that in the case of negative information sharing fewer banks tend to enter with more branches.

Possible competition law concerns

Taken together the available evidence from the academic literature suggests that information sharing does have predominantly positive effects. However, it is worth noting that this result does not make any competition law concern on information sharing unwarranted. While the exchange of information on borrowers credit assessment, through either public or private registers, is likely to have the pro-competitive effects highlighted so far, lenders should be prevented from exchanging sensitive information on their competitive strategies in order to avoid any risk of collusion, especially in concentrated markets.[19] The European Commission claims that "*information related to prices and quantities is the most strategic, followed by information about costs and demand*". In particular, information exchange regarding intended future prices or quantities are potentially those of greatest concern from a competition policy perspective and may be considered a restriction of competition by object.

[19] See European Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Official Journal C 011, 14.01.2011, p. 1 – 72, par. 55-110.

This means that exchanges of information in relation to the commercial strategies adopted by mortgage lenders[20], i.e. interest rates, contract features, volume of mortgage transactions, etc., especially if they reveal intentions on future behaviour, may give rise to competitive concerns and may, thus, constitute a competition law infringement.[21]

Moreover, as information is a fundamental input to the activity of lenders, access to it may be organised in a way to favour incumbents and foreclose new competitors. In these cases competition authorities may intervene prohibiting exclusionary behaviour either in the form of abuses of dominant position (art. 102 TFEU) or in the form of collective boycott (Art. 101 TFEU).

2.2.2. Evidence and relevance of information sharing issues as a barrier to competition

Credit registers, public or private, exist in almost every Member State. PCRs exist in 14 Member States and are typically operated by the Central Banks (Table 3). Central Banks use them for off-site bank supervision, whereas commercial banks may use them for monitoring borrowers. CBs exist in almost all Member States. The only exceptions are Belgium, France, Latvia and Luxembourg. CBs are used for commercial lending, creditworthiness and affordability tests as well as on-going borrower monitoring and have become an integral part of the lending process. There are 37 private credit bureaus in total, four are not for-profit organisations, while the remaining 33 are for-profit organisations.

Table 4 reports the type of data stored by PCRs and CBs, the monetary thresholds, were available, and the type of operations performed by CBs. It shows that in most Member States creditors have access to both negative and positive data either from PCRs or from CBs, the only exceptions being Denmark, Finland, France, Luxemburg and Malta. Thresholds vary considerably among Member States and tend to be higher for PCRs. This reduces data comparability and makes interpretation of foreign credit data more difficult.

[20] Even though not specifically concerning the mortgage sector, it may be worth mentioning the recent investigation carried out by the Israel Competition Authority in 2009 in relation to information exchanges among the Israel's five largest banks. The Authority found that bank executives exchanged information regarding current fees and tariffs as well as regarding future conduct concerning fees to be collected from the public. Moreover, detailed explanations were exchanged as to the manner in which certain fees were structured, their respective levels, the discounts granted to particular segments of the population, the scope and extent of the segments involved as well as the rational underlying certain pricing decisions. The Authority concluded that such practices were aimed at softening and mitigating competition thereby constituting a restrictive unlawful agreement (see Parizat S., 2009, "Facilitating Practices in the Israeli Retail Banking Sector", *Global Competition Policy*).

[21] Interestingly, the European Court of Justice's (ECJ) judgment in Asnef-Equifax v. Ausbanc (2006) provides further clarifications on the circumstances in which financial institutions may exchange information regarding the solvency and creditworthiness of their clients without infringing competition law. In particular, the judgment seems to indicate the importance in applying a rule of reason approach to an information exchange case: "*a restriction of competition within the meaning of Article 81(1) EC depends on the economic and legal context in which the register exists, and in particular on the economic conditions of the market as well as the particular characteristics of the register*" (par. 57). In assessing the potential effects of the information exchange, the ECJ considered several factors: the context of the agreement, the economic conditions in the relevant markets, the purpose of the system and associated conditions of access, the type of information exchanged, the intervals of exchange and importance of it in fixing prices, volumes or service conditions. The Court found that the information exchange was unlikely to restrict competition as the market was not highly concentrated, lenders were not individually identifiable, and access to the system and use of it were not discriminatory. Moreover, the ECJ claimed that information exchange was potentially efficient as it reduced the number of borrowers who would default on their repayments and, hence, improve and sustain the credit supply system as a whole. The Court concluded that, even if any restrictions on competition were found, those would have to be balanced against the beneficial effects.

The Expert Group on Credit Histories (EGCH) identified various potential obstacles to cross-border credit reporting. It argued that: "*standardisation of definitions, thresholds, types of credit reported, retention periods, and update frequency would be the ideal*" (EGCH, 2009, p. 46). Hence the Expert Group's recommendation is "*to seek some degree of convergence of the content of their databases at the appropriate time. In particular with reference to the concepts and definitions used (e.g. bad debt, arrears, default, loan types…), as well as to data retention periods*" (ibidem, p. 47). Table 5 reports the retention periods of negative information stored in the databases of CBs, as stated by the respondents to a survey carried out by their trade association (Association for Consumer Credit Information Suppliers - ACCIS). This table shows a significant heterogeneity among CBs in Europe, ranging from 15 years in Russia, and 10 years in Belgium and Greece to two years for some CBs in Denmark and Finland and three years in Italy.

Other elements of heterogeneity are the various laws and regulations that CBs have to comply with, in particular with respect to the legislation on the protection of personal data and consumer protection. Table 6 identifies at each national level the sources of the rules applicable to the activity of CB, as well as the supervisory authority.

Even if these rules derive mostly from the implementation of the EU Data Protection Directive 1995/46/EC, they still determine an uneven regulatory setting that may hinder the exchange of information both within a Member State and among Member States and create regulatory barriers to competition. In this respect, interesting cases are those of France and Spain as reported in the retail banking sector inquiry by the European Commission (2007a).

"*Entry into credit information markets can be explicitly foreclosed by specific regulations, or implicitly foreclosed by a particular interpretation of relevant laws. France is an example of the former case. France has established a public and centralised system of information sharing. All reporting institutions (banks), must contribute data on incidents to the register and only these institutions are able to access the register. Currently, there are no other credit registers active in the country. The interpretation of laws in the country by authorities such as the Commission Nationale de l'Informatique et des Libertés (CNIL) prevents sharing of positive information. This provides an advantage to incumbent banks, which are able to build accurate and efficient credit scoring models based on their existing client book. By contrast, new entrants are only able to access an adversely selected pool of borrowers for whom only negative information is available. This situation does not appear to constitute an infringement of competition law. However one effect is to maintain the information advantage of incumbent banks over smaller banks and new entrants.*" (p. 37).

"*In Spain the interpretation of existing laws has acted as a de facto entry barrier for some credit data providers. As discussed above, a recent ECJ ruling on the ASNEF-Equifax case appears to remove any legal obstacles to that player entering the Spanish credit data market. However the initial notification from ASNEF-Equifax of its intention to enter the market was made in 1999 and the company has been effectively foreclosed from the market since then*." (p. 37).

The European Commission (2007a) has also focused on the risks to competition posed by unfair and discriminatory access conditions to credit registers for new entrants or foreign lenders. These discriminatory conditions may stem from: (i) membership criteria for the credit register; (ii) fee structure (joining fees, membership fees and transaction fees).

The European Commission has pointed out that, according to the information provided by the respondents to its survey, access to credit databases is in general restricted to entities that meet some or all of the following criteria: undertaking credit granting activity; holding a banking license; having a physical presence in the Member State; compliance with reciprocity agreements; and compliance with data protection laws. These types of restriction are likely to be even more problematic in the mortgage market for OMLs.

As for the fee structure, the European Commission argued that competition may be distorted by high joining fees; discriminatory volume-based transaction fees; and high fixed transaction fees for access to the register. It noted that in general PCRs' fee structures do not pose competitive concerns. However, some CBs charge relatively high joining fees (up to EUR 75,000) and some charge high transaction fees or fees that vary significantly according to the volume of usage. These fee structures may be a way to extract rents from new entrants and to reduce the contestability of the market.

In its Impact Assessment, the European Commission (2011a) has considered the option of imposing measures to guarantee a non-discriminatory access to databases for creditors. It argued that this option would determine a more level playing field across the EU as well as increased opportunities for cross-border business and would entail one-off and recurring costs, estimated at between EUR 0.1-0.3 million and EUR 0.1-0.2 million respectively, in order for credit registers to adjust their systems and manage cross-border access.

A further issue is the existence of information sharing agreements among CBs or PCRs. Cross-border exchange of credit reports on individuals between credit registers is very limited among private credit bureaus. Figure 22 describes the formal cross-border data exchange agreements signed by CBs in Europe. It shows that large countries like France (where there are no private CBs) and the UK are still disconnected from the rest of Europe. Also a large portion of Eastern Europe is not yet covered by these exchange agreements. A system of exchange of information among some PCRs has been set up through a Memorandum of Understanding (MOU) signed in 2003 by the governors of all the EU central banks operating central credit registers in Austria, Belgium, France, Germany, Italy, Portugal and Spain. The Central Banks of Czech Republic and Romania joined the group in April 2010.

This still limited exchange of information among credit information systems appears to be a relevant obstacle to the development of a European competitive market. Indeed, the EGCH has argued that "*While the development of credit reporting systems in most European countries aim at addressing those problems at the national level, in a cross-border context the situation should be improved. Some European credit registers have set up mechanisms for cross-border credit data sharing. Nevertheless, creditors cannot easily 'export' their screening technologies, as different markets have different credit reporting systems. As a result, the content of the credit reports may differ across countries and the interpretation of the information contained might be problematic, as terminology varies across countries. A better-working cross-border credit reporting framework could provide greater business opportunities and benefits for credit providers, as well as, a greater choice of cheaper credit products for borrowers*" (Expert Group on Credit Histories 2009, p. 7). With respect to the option of setting up a single pan-European credit register the EGCH has expressed a negative opinion. The group believes that "*at least for the foreseeable future, this would not be a realistic option. Such a system would require mandatory regulations and would have a heavy impact on the creditors. It would not be proportionate to the current level of demand for cross-border credit data exchange, as creditors would also have to change their procedures, processes and IT system, which would be time-consuming and costly. Some experts also expressed serious concerns regarding the level of consumer data protection under such a scenario.*" (Expert Group on Credit Histories 2009, p. 25).

Finally we can report the conclusions of London Economics (2009) to which we adhere with just one caveat: "*Granting lenders access to consumer databases across borders should facilitate cross-border activity [...]. [In several Member States] certain restrictions apply in terms of access to credit register such as the requirement that a physical presence in the Member State is required and/or access is only available to credit institutions. The elimination of such restrictions [...] should facilitate market entry. However, in practical terms the effect is likely to be limited, at least over the short to medium term, as cross-border mortgage credit provision is still limited*" (London Economics 2009, p. 432). The only caveat that we need to add is that restrictions to borrowers information is one of the factors that explain this still limited level of cross-border activity (even though probably not the most important) and therefore the latter should not be a conclusive reason not to intervene.

2.3. Cross-selling conducts: mortgages and ancillary services

KEY FINDINGS

- Cross-selling of mortgages and other (ancillary) services is widespread in the European markets. Such practices may have anti-competitive effects by foreclosing rivals either in the mortgage market or in adjacent markets (of other financial services) and by reducing consumers' mobility through higher switching costs and lower transparency. However, cross-sales may also generate efficiencies through reduced lender's credit risk and economies of scope.
- The assessment of their impact requires normally a thorough analysis that needs to be carried out case by case. We found only very few cases in which competition authorities formally investigated tying or bundling practices and in none of them a violation of the antitrust law was ascertained.
- Nonetheless, in some Member States, following antitrust investigations or sector inquiries, National Competition Authorities raised general concerns about the practice of tying mortgages with other financial services and called for regulatory interventions mainly on the ground that the practice did not seem to be justified by relevant efficiency reasons.

2.3.1. Introduction and insights from the literature

According to the definition adopted in its recent proposal for a Directive on credit agreements relating to residential property (European Commission 2011b), the European Commission defines an ancillary service as "*a financial service offered to the consumer by the creditor or credit intermediary in conjunction with the credit agreement*" (Art. 3). Hereafter we will refer to the practice of selling services jointly with others as 'cross-selling'.

Cross-selling may take different forms: tying, pure bundling and mixed bundling (or multiple rebates).[22] Tying occurs when two or more products are sold together in a package and at least one of these products is not sold separately. Pure bundling occurs when none of the bundled products is available stand-alone, and the components are offered in fixed proportions. Mixed bundling occurs when two or more products are sold in bundle, but each of the products can also be purchased separately on the market. Typically mixed bundling is associated with a discount on the price of the bundled products which makes purchasing the bundle for customers cheaper than purchasing all products separately.

Tying and bundling are common practices in many sectors, including financial markets. In principle, cross-selling does not necessarily have anticompetitive consequences. It may indeed be justified by efficiency reasons. In relation to the retail banking (but the same largely applies also to mortgage market), the European Commission (2007a) identified at least three possible sources of efficiencies: reducing the lender's credit risk, creating economies of scope in production and distribution and the technical difficulty of product unbundling.

However, such practices may also weaken competition in several ways.[23] First, they can be a way to leverage market power (Whinston 1990; Carlton and Waldman 2002; Choi and Stefanadis 2001): when adopted by a dominant firm, tying and bundling can be means to leverage market power from the tying into the tied markets or to defend market power in the tying market. Second, cross-selling can be a way to foreclose existing competitors and deter the entry of new players in the relevant markets involved (Nalebuff 2004; Greenlee, Reitman and Sibley 2008): this can occur especially when competitors and potential entrants are mono-line and therefore may not be able to replicate the combined offer of the dominant firm. Third, tying and pure bundling can lead to higher switching costs and lower mobility: switching costs are likely to be higher when customers are bound in bundled contracts since switching implies to purchase all the products from a different supplier. Finally, cross-selling can reduce price transparency and the comparability of offers: sales in bundle can render it difficult for customers to single out the price of each product included in the package. This restricts consumers' ability to search for and compare products sold on a stand-alone basis by competing providers.

[22] Other cross-selling practices include also preferential or exclusive agreements. Such agreements refer to the cases in which a provider forces (either explicitly or by offering better financial conditions) customers to purchase additional products from a third party with which the provider has a preferential agreement. In these cases it is crucial to distinguish the conducts based on the nature of the cross-selling. In other words, when the mortgage supplier binds contractually its product with another sold by a specific provider (or offers better financial conditions if the customer chooses to purchase from its partner the ancillary service), with which it has an exclusive agreement, the potential competitive concerns raised by these practices are the same as that of a tie-in of products offered by a single provider. In contrast, when no contractual or economic bundling is made, agreements between mortgage suppliers and providers of other products may raise a different concern. Indeed, if mortgage suppliers are incentivised to distribute the partner's services (for example, with fees, commissions, etc.), this may give rise to aggressive commercial practices which are undertaken in order to generate extra commissions, without regard the consumers' financial needs. Although they do not directly affect competition, these practices may be detrimental for consumers as they may lead to inconvenient or unsuitable decisions (see Section 2.4).

[23] The effects (both positive and negative) that a mixed bundling practice may generate are broadly similar to the ones generated by tying or pure bundling practices. However, unlike tying and pure bundling, mixed bundling does not contain coercion and, thus, its risk to result in anticompetitive effects is normally lower.

2.3.2. Evidence and relevance of cross-selling practices as a barrier to competition

Incidence of mortgages sold together with other services

In its inquiry on retail banking, the European Commission (2007a) focused on the diffusion of tying practices in banking services. The study revealed that tying was rather common between mortgages and current accounts in most Member States. On average, in 2005, 47% of banks required mortgages customers to open a current account. The situation varied greatly across Member States: in some countries, such as Austria and Netherlands, no bank imposes tying mortgages with current accounts while 100% of banks in Hungary, Latvia, Lithuania, Portugal and Slovakia required to open a current account in order to have a mortgage loan (see Table 7). The incidence of tying practices between mortgages and life assurance was much lower (8% on average); most of the countries reported that banks do not require mortgages customers to take out life insurance policy through the same bank.

A more recent survey conducted by CEPS (2009) enlarged the scope of the analysis by including, among the cross-selling practices, also pure and mixed bundling. Mortgage stood out as the leading gateway product[24] (21% of the cross-selling practices reported had mortgages as gateway product). Life insurance was the product more often sold in bundle with house loans (over 25% of the reported cases), followed by current account (around 20%), home insurance (around 15%) and Payment Protection Insurance - PPI (around 10%) (see Figure 23).[25] Tying and pure bundling accounted for 47% of the cross-selling practices involving mortgages, while mixed bundling accounted for the remaining 53%.

Evidence of anticompetitive effects of cross-selling in the mortgage market

Whether the tying or bundling could have anticompetitive exclusionary effects depends on a number of specific conditions. In the case of tying or bundling the following conditions have to be fulfilled for a practice to be regarded as an exclusionary abuse of dominance according to European Commission (2009): first, the undertaking is dominant in the tying market; second, the tying and tied products are distinct products; and, third, the tying practice is likely to lead to anti-competitive foreclosure. Mixed bundling may be anti-competitive if the rebate granted by the dominant player *"it is so large that equally efficient competitors offering only some of the components cannot compete against the discounted bundle*".[26]

These standards of proof make it difficult to generalise conclusions about the effects of cross-selling as they strongly depend on specific conditions that need to be assessed on a case-by-case basis.

[24] The word "gateway" means that the product is used as the basis for cross-selling other services.

[25] This result is, to some extent, in line with the findings of the retail banking inquiry conducted by the European Commission (2007a), confirming the role of mortgage loans as leading gateway product. The European Commission found that on average consumer purchasing a mortgage bought a total of three products from the same supplier. However this result must be read cautiously because the figure elaborated in this study includes all products bought by a customer from the same supplier not necessarily as part of a tying or bundling sale. It may therefore overestimate the incidence of "proper" cross-selling practices.

[26] The negative effect on competition may be twofold: on the one hand, cross-selling practices may constrain competition in the mortgage market if lenders who sell in bundle cross-subsidise the sale of mortgages prices with income from products bundled with the mortgages, in this way limiting the ability of stand-alone mortgage providers to compete; on the other hand, cross-selling may restrict competition in the markets for ancillary products bundled with the mortgage as it may act as a barrier to expansion for stand-alone providers of the ancillary services.

This of course applies also to the financial products, including mortgages. Such line of reasoning was also recognised by the European Commission in the Report on the retail banking sector inquiry (European Commission 2007) where it stated that: "*Any specific assessment [in relation to tying, but this holds even more for softer practices such as mixed bundling] of a potential competition infringement could be made only following thorough investigation; including to define relevant product and geographic markets, market positions and the extent of competition, and beneficial and anticompetitive effects of conduct*".

As a part of the evidence concerning tying and bundling in the mortgage industry, we investigated whether there have been recently antitrust cases involving such practices. We found, however, only one formal investigation in the last three years.[27] It was carried out by the Spanish Competition Authority (CNC) and concerned an alleged violation of the Spanish competition law (No. 17/1989) by 21 Credit Institutions, consisting in conditioning the sale of a mortgage to the purchasing of life insurance from a company of the same group (Resolution 2789, Entitades de Crédito, 29 May 2009). The CNC ascertained that no violation of the applicable rules occurred because the majority of lenders did not impose any formal obligation on the prospective borrowers. The CNC also investigated whether the concerned strategy constituted a concerted practice under Art. 101 TFEU but it concluded that this was not the case as, firstly, the majority of customers who purchased a mortgage from the alleged credit institutions acquired the insurance life from suppliers not belonging to the same group of the mortgage supplier and, secondly, the commercial strategies of 21 credit institutions differed greatly among each other indicating no parallel conduct.

The very limited evidence we found suggests that tying and bundling practices in the mortgage market are unlikely to be motivated by exclusionary intents. Nonetheless, cross-selling, especially when largely adopted by market players, may distort competition by reducing customers' mobility and limiting the entry of lenders that supply mortgages or other services on a stand-alone basis.[28] We are aware of few attempts to assess the general impact of cross-selling in financial services. In this regard, the most representative studies are those produced by the European Commission and by external consultants appointed by the European Commission.

In its inquiry on retail banking the European Commission (2007a) examined, through a comparison across countries, whether higher presence of cross-selling was associated with a lower degree of competition.[29]

[27] We also found a case in Mexico which, however, dates back to 1997 and was reported by OECD in its report "Competition and Regulation in Retail Banking" (2006). In that case the Mexican Competition Authority - Comisión Federal de Competencia (CFC) – investigated financing contracts to purchase automobiles and real estate to assess whether there were anticompetitive practices in tying insurance sales with automobile and real estate loans. CFC found no antitrust violation since none of the parties had substantial market power in the relevant market, which is prerequisite for the detection of unilateral monopolistic conducts.

[28] It is worth mentioning that some Member States have policy initiatives in place, either legislative actions or sectoral regulations, that ban or limit tying and other cross-selling practices in the retail financial services sector. According to the survey conducted by CEPS (2009), twelve Member States, namely Belgium, Bulgaria, Cyprus, Denmark, Finland, France, Hungary, Ireland, Poland, Portugal, Romania and Slovakia, have enacted measures to specifically address some cross-selling practices. For example, in France, Ireland and Portugal consumer protection laws generally (although with some exceptions) prohibit tied sales of financial services, including mortgages. Other Member States (Belgium and Romania) have in place legislation that address cross-sales in their general consumer protection and civil laws, thereby covering all sectors of the economy, including the retail financial services one. In some other countries the prohibitions are narrower in scope or limited to very specific circumstances (for instance, in Cyprus tying and pure bundling involving mortgage loans are banned).

[29] It considered three possible indicators of competition, namely mobility (measured with the longevity of the relationship between consumers and banks), industry profitability (measured as profit before tax to total) and market concentration (measured as CR3, i.e. the sum of the three largest market shares).

However, the analysis produced mixed results: on the one hand, the Commission found a negative relationship between mobility and cross-selling across countries thereby suggesting a potential anticompetitive concern; on the other hand, it did not observe a positive correlation between profitability and cross-selling (and observed a positive correlation between concentration and cross-selling but such relationship did not appear strong) which indicated that wider usage of cross-selling was not necessarily linked with stronger market power of the lenders. Overall, the evidence did not allow to draw reliable conclusions on the general effect of cross-selling.

A different approach was followed by CEPS (2009). They developed a test to assess the competitive effects of cross-selling practices using a so called *scorecard methodology*. Based on the data collected and on the elaboration of proxies capturing negative (anti-competitive) factors and positive (efficiencies) factors, this methodology evaluates the likely impact of each reported practice in each country by attributing 'scores' or 'ranks'. High market concentration, profitability and barriers entered the test as negative factors, while potential production side efficiencies entered as positive factors.[30] They found that the most frequent combinations of products that include mortgages as a gateway product are unlikely to have anticompetitive effects. However, as recognised by the authors, the methodology can only provide "*a useful framework for comparing and ranking practices*", while "*expected effects have been drawn from a qualitative approach and have not been 'measured' in absolute terms*". In other words, the proposed approach appears useful just as a preliminary screening device, but it does not allow to draw general policy conclusions or to assess the likely impact of any specific practice.

Apart from this limited quantitative evidence, some anecdotal evidence on the effects of cross-selling can be found in investigations or inquiries conducted by national competition authorities. For example, in 2007 the Italian Competition Authority (AGCM) conducted a market inquiry on retail deposits[31] in the banking sector in which the cross-selling issue was examined. Tying and bundling were seen as distorting customer choice to switch, especially as they make prices more obscure and increase switching costs. Interestingly, the AGCM investigated the widespread practice of tying mortgage with current accounts (42% of banks required opening a current account when a costumer bought a mortgage). In particular, it focused on the potential economies that banks may create through tying sales but did not find any compelling evidence that such practice was justified by efficiency purposes.

The Hungarian Competition Authority (GVH) reached broadly similar conclusions following a sector inquiry into the mortgage market carried out in 2005.[32] The GVH found that the widespread use of tying in the Hungarian mortgage market was economically unjustified and argued that banks' motivation to tie was principally to raise profits.

[30] The potential production efficiencies were measured on the basis of the responses to a survey conducted by CEPS on financial institutions. The survey investigated the reasons claimed by lenders for the usage of cross-selling. Efficiency justifications, namely risk reduction (for example, requiring to hold a current account consents to better monitor borrowers) and cost efficiency (for example, thanks to economies of scope obtained by sharing administrative or other fixed costs on multiple products) scored relatively high as they were indicated as a reason to sell in bundle in, respectively, 37% and 31% of the cases (see Figure 24).

[31] AGCM (2007): "Prezzi alla clientela dei servizi bancari" (IC 32).

[32] Reported in the European Commission inquiry (2007a): As a part of the inquiry, the GVH also investigated the potential for abusive conducts by one bank which had a 52% share of the mortgage market. However in view of considerable market entry, intense competition and the leading Bank's declining market share, the GVH found that the bank did not have a dominant position within the Hungarian mortgage market. Thus the tying of current accounts to the banks mortgages could not be deemed to be an exclusionary abuse under Article 82 of the EC Treaty.

It also considered the countervailing argument that tying a current account to a mortgage might improve banks monitoring ability, but argued that a customer's ability to repay the credit was independent of whether or not they had a current account with the same bank. Overall the GVH concluded that this practice could have distorted and restricted competition and, thus, recommended to the Hungary's financial supervisor to prohibit it.[33]

2.4. Linkages between mortgage lenders and other market players

KEY FINDINGS

- Linkages between mortgage lenders and other players in the real estate (agents and property developers) and credit intermediation markets (residential mortgage intermediaries) might impair competition between incumbents and reduce entry.
- These linkages need to be studied under two perspectives: the first perspective is connected to the traditional antitrust concerns of the foreclosure effects associated to "vertical" agreements; the second perspective relates to the role of intermediaries and is connected to the phenomenon of misselling, i.e. the practice of selling products unsuitable to customers' needs.
- Vertical agreements pose a challenge to competition when markets are strongly concentrated and such agreements entail exclusivity clauses. However, the available evidence suggests that the existing vertical agreements between market players do not pose serious competitive concerns, given the fragmentation of the markets and the general lack of exclusivity clauses in the stipulated agreements.
- The role of credit intermediaries is potentially pro-competitive. They can reduce search costs borne by consumers and facilitate cross-border trade. However, the existence of asymmetric information between intermediaries and customers, and, in particular, the misalignment of incentives between them, may cause detriment to competition and to borrowers.
- The existing evidence based on surveys and anecdotes show that the phenomenon of misselling by intermediaries is indeed pervasive, and stems from behavioural biases and the financial illiteracy of consumers. The correlation between misselling practices and intermediaries' regulation appears overall weak. However, for specific forms of consumer detriment, more strictly regulated markets might reduce the risk of misconduct.

[33] Although the mortgage market was not directly concerned, the 2009 inquiry of UK Competition Commission on Payment Protection Insurance (PPI) contains several interesting analyses of the impact of bundled sales in financial services. The investigation highlighted that most PPIs were sold by distributors at the point of sale in combination with the credit (among them, also mortgages) and that distributors faced little competition for the sale of PPIs when they were sold in bundle with the credit they insure. Combined sales were found to act as barriers to search and switching and, as such, to distort competition by limiting the consumers' ability to make an effective choice and impeding PPI stand-alone suppliers to effectively compete for customers. This ultimately resulted in higher prices and less choice in PPI policies. To address the problem the Competition Commission decided to apply a remedies package, which included, among other things, a prohibition for distributors on selling PPIs at the same time as the credit product, nor within seven days of the conclusion of the credit sale period. "*As a limited exception to this point-of-sale prohibition, the distributor or intermediary arranging the credit (or any business covered by the prohibition) may sell PPI to the consumer over the internet or telephone 24 hours after conclusion of the credit sale period provided that the consumer has initiated the transaction and the consumer has confirmed that they have seen the personal PPI quote*", par. 79 of the Final Report.

- Several Member States and the European Commission are taking actions against potential misselling by intermediaries. The main areas of interventions are: rules requiring disclosure of intermediaries' payment structures; professional standards for performing the intermediation function; obligations to ensure that consumers are confronted with a sufficient number of available mortgage products.

2.4.1. Introduction and insights from the literature

A relevant area of investigation in order to assess the extent of existing barriers to competition in the mortgage market is represented by the potential anticompetitive implications of the existing linkages between mortgage lenders and other players in the real-estate market (real estate agents and property developers[34]) and in the market for financial advice (residential mortgage intermediaries[35]).

The implication of such linkages need to be studied under two different perspectives: the first perspective is more closely related to the traditional antitrust concerns surrounding "vertical" agreements, or more in general agreements between operators at different levels of a production process that might restrict competition between incumbents or prevent entry. The second perspective, which relates specifically to the role of residential mortgage intermediaries (and real estate agents when acting as intermediaries), is connected to the potential conflicts of interests experienced by intermediaries, which might give rise to the phenomenon of "misselling", potentially leading to a distortion of the competitive process and to consumer detriment. Detriment to competition arises because, when consumers' preferences are distorted through misselling, the most competitive offers might have difficulty in finding access to the market

The antitrust perspective: agreements between suppliers in the mortgage production chain and potential anticompetitive effects

The mortgage market and the real estate industry belong to two different stages in the same production chain of housing services. Hence "vertical" integration or "vertical" agreements between property developers and real estate agents, on one side, and mortgage suppliers, on the other side may occur.[36] Agreements may also take place between mortgage suppliers and credit intermediaries, which represent platforms connecting end consumers and mortgage suppliers. These agreements may take different forms: from pure contractual relationships whereby actors in the real estate and intermediation market "suggest" to buy a mortgage from a (set of) mortgage seller(s) in exchange of a fee, to pure mergers, whereby a mortgage lender enters directly the real estate or the credit intermediation business.

[34] Real estate agents are individuals who are licensed to negotiate and arrange real estate sales; they work for a real estate broker. Negotiate and arrange can include showing property, listing property, filling in contracts, listing agreement contracts and purchase contracts. Property developers are persons whose job involves buying and selling buildings and land, and arranging for new buildings to be built.

[35] Residential Mortgage Intermediaries (who belong to the wider category of credit intermediaries) advise clients (seeking to purchase a property) of their credit options and subsequently arrange credit for their clients with the appropriate credit provider. Such intermediaries may be tied-agents (i.e. the intermediary will recommend products offered by one or more specific credit providers) or intermediaries who are independent of any specific credit provider. The activities of the mortgage intermediary may also vary, from a comprehensive advisory offering to a more straightforward matching function (Europe Economics 2009).

[36] We employ the definition of "vertical" agreements even if we are not literally confronted with players (real estate agents, property developers and intermediaries) supplying an input for mortgage lenders. Such use is however justified since the analytical approach followed to examine the implications of such agreements is the one traditionally used to examine vertical arrangements.

Vertical agreements between property developers, real estate agents or credit intermediaries on one side, and mortgage suppliers on the other, may be set up for efficiency reasons or may pursue an anticompetitive goal. The literature on vertical agreements suggests three main pro-competitive motivations behind the adoption of vertical arrangements: reduction of transaction costs and contractual incompleteness[37]; elimination of double marginalisation[38] and horizontal externalities.[39]

With respect to the potential anticompetitive effects of vertical agreements, the academic literature has examined how vertical restraints can foreclose rivals in a market by raising their operating costs or, alternatively, limiting their access to consumers downstream (Salop and Scheffman 1983). A substantial body of economic literature has developed which analyses the conditions under which exclusive vertical arrangements may result in anticompetitive foreclosure[40] (Mathewson and Winter 1987; Bernheim and Whinston 1998; Rey 2003).

Considering the mortgage market, the existence of vertical arrangements between mortgage lenders on one side, property developers, real estate agents and credit intermediaries on the other, would be detrimental for a competitive mortgage market in the presence of exclusivity clauses and of particularly concentrated “upstream” (mortgage) and in particular “downstream” (property development, real estate intermediation and credit intermediation) markets. Exclusivity is a precondition for allowing existing incumbent mortgage retailers to foreclose entry (or expansion) into the market by potential competitors. At the same time, in presence of such exclusive arrangements, the (network of) downstream contractors involved by these arrangements should cover a large portion of demand, in order to produce a foreclosure effect.[41] In order to understand whether the existence of vertical agreements is indeed a source of competition concern, we must then investigate whether such agreements are in place, whether they contain exclusivity clauses, and whether they went under the scrutiny of competition authorities or financial regulators.

[37] Starting with the work of Williamson (1975; 1979; 1985), a potential motivation identified for vertical integration is the existence of transaction costs. Even simple negotiations can become costly if they are frequent enough and case-specific enough. Having constantly to negotiate the terms of a transaction can quickly become burdensome. Henceforth, setting up a vertical agreement might be a valid solution to reduce such costs.

[38] The existence of double marginalisation is the most widely cited motivation for vertical relationships and has become a core concept in this area of economic theory. Double marginalisation was introduced by Cournot (1838) and more recently by Spengler (1950) and can be understood as a vertical pricing externality. The principle of double marginalisation states that an independent retailer will have an incentive to raise prices compared with the retail price charged by a vertically integrated firm. Thus the price charged by the independent retailer is not the one that maximises profits for the vertically integrated firm. The result is higher prices and lower quantities at the retail level when the firm is not vertically integrated.

[39] Horizontal price and service externalities occur because of actions taken at a given stage in the vertical chain, but their effect can be felt by all players (see Winter 1993). Horizontal externalities are typical of manufacturers-retailers relationships, where the prices and services delivered by retailers might not be optimal in terms of profits and/or welfare. On the other hand, retailers may benefit more than the manufacturer from unilateral retailer price decreases if they increase their profits by attracting customers from competing retailers, a move that does not increase the manufacturer’s profits. The result might be excessive prices and suboptimal levels of services, which can be solved by means of vertical integration.

[40] The term foreclosure refers in the antitrust literature to the ability of dominant incumbents to impede the entry of new players or the expansion of existing competitors.

[41] These are the aspects that are traditionally considered by antitrust authorities when scrutinising vertical arrangements. The fact that such arrangements are not deemed to be anticompetitive does not imply that no consumer would suffer from them being in place. For example, suppose a consumer wants to buy a given house: if that house is sold exclusively by a single real estate agent, and this real estate agent is bound to an exclusive arrangement with a mortgage lender, this would imply that that consumer is obliged to accept the offer of that mortgage lender if he wants to buy that house. This is relevant for that specific consumer. However, in order to speak of anticompetitive effects, it is necessary to look at aggregate conditions of the market and to analyse whether a significant proportion of the market is affected by exclusive arrangements.

It must be borne in mind that there might be substantial cost savings in the agreements in place between real estate agents and mortgage suppliers to sell the mortgage together with the property. There are in fact cost savings in exploiting the branching network of the real estate brokerage network to reach potential mortgage buyers. There are economies of scope between mortgage lending and different types of real estate brokerage and property development activities (as shown by Lewis and Webb (2007) and argued by Zumpano (2002)). As long as these cost savings are determined by investments made by mortgage lenders in the activity of real estate agents (for example because mortgage lenders pay for the financial training of real estate agents, or invest in advertising), then these are sufficient reasons to justify the existence of exclusive arrangements between mortgage lenders (who need to protect their investments from the free riding of other mortgage lenders) and real estate agents.

Conflicts of interests and the phenomenon of misselling: the role of credit intermediaries and competition in the mortgage market

The mortgage market is one where advice is often crucial in determining the choice of products by consumers. If we consider the role of credit intermediaries in the context of the present analysis, that is in relation to the existing barriers to competition in the mortgage market, the potentially positive role played by credit intermediaries is evident: credit intermediaries might bridge the information gap between product providers and customers. They could help them in comparing the different offers in the market allowing to reduce search costs and overcome the obstacle of financial illiteracy. Moreover, they could play a relevant role in fostering cross-border trade, as acknowledged also in the recent proposal for a directive adopted by the European Commission (2011b).

However, the existence of asymmetric information between intermediaries and customers and in particular the mis-alignment of incentives between them may cause detriment to borrowers. The analysis of the role and incentives of credit intermediaries is mainly relevant from a consumer protection point of view: however, it also has implications for the intensity of competition in the mortgage market. Indeed, insofar as the demand for mortgages is mediated by intermediaries, competition between mortgage providers might shift from competing for final borrowers to competing for credit intermediaries. Then, if the incentives of credit intermediaries diverge from those of the final borrowers (as the former wants to maximise the fees they get from lenders), the ability of the competitive process to deliver beneficial outcomes for consumers might be impaired. Moreover, as long as there is asymmetric information between intermediaries and final consumers, and as long as final consumers choose to trust a credit intermediary whose incentives are mis-aligned with their own, the search activity to find the most suitable deal might actually be reduced compared to a situation in which intermediaries do not exist. This might in turn reduce competition between existing mortgage suppliers and restrain entry of new players.

Important contributions in the academic literature on this topic are Inderst and Ottaviani (2009; 2010a; 2010b) and Hacketal et al. (2010). Their analysis starts from the consideration that in presence of limited knowledge and financial capability of customers and because of the existence of behavioural biases in their decisions, the role of advice is a potential remedy. However, the misalignment of incentives between customers and intermediaries may allow the latter to exploit the former. It is common practice in the retail credit industry (and this in general holds for the mortgages sector) not to charge directly customers for advice: customers pay indirectly through fees and commissions that flow from product providers to financial advisors, and that might not be obvious to customers. In this context, the potentially beneficial value of advice may be compromised by advisors' private interest in eliciting purchases.

Findings in the academic literature support the view that some people are naïve about how the quality of advice is impacted by conflicts of interest (see, among others Malmendier and Shantikumar (2007) and Hacketal et al., (2010)). For example, studies of investors' reactions to analysts' recommendations suggest that a substantial part of investors are naïve about analysts' incentives. Experimental evidence shows as well that many subjects are willing to blindly follow advice. Interestingly, even when subjects are informed about the divergence of interests between them and their advisors, this knowledge does not seem to always make them sufficiently wary (see Cain et al. 2005).[42]

The academic literature pursued important reflections about what policies may make advice function properly in the interest of consumers. Following the example developed by Ottaviani and Inderst (2010b), there are three relevant areas of policy intervention: a) how to pay for advice, b) if and how disclosing commissions, c) how to oversee the market and impose adequate liability standards. In all these areas of policy intervention, the approach to be taken is less than clear-cut.

Regarding a) *how to pay for advice* (whether through direct up-front payment for the advice service or through indirect payment upon purchase), in general customers do not pay directly up-front fees for the advice service they receive when they are in the process of purchasing a mortgage. Customers pay the service through higher prices for the product they choose. This payment system (in which a fee is granted by the provider to the advisor upon a purchase decision) may lead to biased advice where the advisor distorts his recommendations towards products that guarantee higher commissions.

When customers ignore the existing conflict of interest, there is scope for policy interventions that stimulate the acquisition of customers' awareness about the advisors' conflicts of interest and about the way through which the advice is ultimately paid. However, the policy implications are less straightforward than one may think, as they depend crucially on the degree of unsophistication of customers. In fact, if consumers are sufficiently aware of the advisors' conflict of interests and of the fact that not paying up-front for advice does not mean not-paying at all, policy intervention that change this indirect payment system may be even detrimental. Indeed, the indirect payment system, by which commissions are paid to advisors upon purchase, might have an efficiency rationale, in that it promotes adequate effort on the part of advisors to collect information about the products sold so to propose to customers products that best suit their needs. Advisors who are paid only upon purchase are then properly incentivised to work hard if their commission depends on the final purchase decisions. This would not happen if they were paid a fixed fee (or by the hour), independently of the final decision.

[42] An important source of experimental evidence is the study by Decision Technology Ltd (2010). The authors conducted an online experiment with 6000 subjects in eight Member States, exploring (i) people's decision making capabilities in simple unadvised investment choices, (ii) people's response to the disclosure of conflict of interest in stylised advised investment choices and (iii) the impact of direct communication between advisor and advisee upon the efficacy of disclosing conflicts of interest and upon the trust people place in advice. Among the various experimental findings, three are particularly effective at hinting the (potential) scope of misselling practices. First, the evidence that investment decisions are prone to biases and framing effects, hence a mischievous intermediary could easily recommend inappropriate or non-competitive products exploiting the irrational behaviour of the borrowers. Second, that the impact of disclosing conflicts of interest is context-dependent, and an explicit "health warning" may be necessary for people to understand the implications of a conflict of interest. Third, that a significant minority of people (20-30% of the respondents) may be disproportionately averse to paying up-front fee for advice. This suggests that, while up-front fees might mitigate the problem of misaligned incentives between borrowers and intermediaries, they might face low acceptance by borrowers, determining an inefficient provision of advice.

Turning to the issue of if and how to disclose intermediaries commissions, a policy that favours a transparent disclosure might be beneficial both in the presence of simple-minded and wary customers.[43] However, even within this context the implications of an interventionist policy are not necessarily straightforward. Experimental studies (Lacko and Pappalardo 2007; Cain et al. 2005), show that disclosing information about commissions might indeed have unintended consequences: for instance, it might distract the attention of consumers from other more relevant pieces of information (that is, customers may end up making their purchase decision only on the basis of the commission information); or, it might generate mistrust towards the advisors, who in turn might feel morally free to think only about their own interest.

Finally, the necessity of a close oversight of the market of credit intermediaries is related to the existence of an "internal" agency problem between a product provider and the agent who is responsible for offering advice. The problem of unsuitable advice has much in common with that of the provision of faulty or inferior products, ("lemons"). Learning and reputational mechanisms, together with contractual provisions such as warranties, might help limiting the agency problem. However, outright unsuitability or inferiority of advice is likely to be much more difficult to establish than in the case of consumption goods. Ottaviani and Inderst (2010a) show that the agency problem becomes more severe when the same agent is responsible both for providing advice and for eliciting new sales, for example by prospecting for new customers. In economics terminology, the agency relationship then features "multiple-tasks" with possibly conflicting implications for the firm's incentive structure: high rewards for sales are needed to generate new prospective customers, but they lead to biased advice. A policy intervention would thus aim at separating the two tasks.

2.4.2. Evidence of competitive concerns associated to linkages between mortgage lenders and other market players

In the discussion above we highlighted two potential areas of concern: The first was related to the potential foreclosure effect of vertical agreements between credit intermediaries, real estate agents and property developers on one side and mortgage lenders on the other side. The second area of concern was related to the misalignment of incentives between credit intermediaries (and real estate agents when they act as intermediaries) and final borrowers. We now review the evidence that supports or discards the relevance of barriers to competition in the EU mortgage markets related to these two areas of concern.

Vertical agreements and potential foreclosure effects

After an in-depth analysis of available sources, we have found scant evidence of competition concerns in relation to the existence of vertical agreements between property developers/ real estate agents / credit intermediaries and mortgage lenders[44]. The fact that no real anticompetitive concern is raised by such linkages is confirmed by two cases of vertical arrangements of which we found evidence: one is a vertical agreement between real estate agents and banks in Denmark that was signed in 2002, and the second is a vertical merger between a Dutch bank and a German credit intermediation platform that took place in 2008.

[43] Indeed, even if customers are wary and if they are able to infer from the price of the product offered the structure and the level of the commission, lenders that want to push sales might provide advisors with secret kickbacks that might bias advice and might be able to lead to cheating also of wary customers.

[44] Our analysis has looked at the decisions taken by all EU competition authorities regarding the mortgage markets; we have also looked at the academic literature and at the reports and publications made by public authorities, both financial regulators and international organisations, such as the OECD and the IMF.

The first vertical arrangement is represented by two agreements notified to the Danish Competition Authority between Realkredit Denmark, a mortgage lender and local real estate agents. The agreement concerned the marketing of mortgage loans that the local real estate agents would have done in favour of the mortgage products offered by Realkredit Denmark. The Danish Competition Authority dismissed any competitive concern because first, the contracts signed did not entail an exclusive clause; second, the real estate channel distributed only a minor fraction of the total supplied mortgages and the market share covered by these agreements was significantly low. So the lack of exclusivity clauses and the fragmentation of the downstream market lead to disregarding any potential foreclosure effect associated to the vertical agreements under scrutiny.

The second case of vertical integration is the merger between a Dutch bank, ING DIRECT, and a large German credit intermediation platform, Interhyp. The merger took place in 2008 and was given regulatory approval by the Dutch Central Bank on 14 July. There are no publicly available documents which show the analysis conducted by the relevant competition authorities that lead to the clearance of the merger. However an interesting analysis was conducted by Europe Economics (2009) which highlights that Interhyp's activities had characteristics of two-sided platforms, i.e. platforms which connect two sides of the market, namely borrowers and lenders. These two-sided platforms are characterised by strong network externalities, so that the increase of the size of one side of the platform is beneficial to the other side. The more banks adhere to the credit intermediation platform, the better for borrowers, and vice-versa.

A potential negative consequence of the merger might be that the platform reduces the quality and increases the prices of the services offered to other lenders that want to access the platform. This would represent a detriment to competition caused by the vertical linkage. However, in the presence of strong network externalities, the success of this strategy by the merged entity depends on market conditions, in particular on the presence of alternative platforms or the costs associated to the creation of a new platform. In the end, the possibility of consumer welfare reduction is associated to Interhyp's market power, that is inversely proportional to its substitutability. Moreover, the entry of new operators might be more difficult than in ordinary one-sided markets, precisely because of the existence of network externalities and the necessity for an entrant to attract both sides of the market on the newly created platform.

Evidence of misselling in European mortgage markets

Prior to establishing whether credit intermediaries represent an opportunity or a threat to competition we verified the scope of the phenomenon of intermediated purchase of mortgages in Europe. Europe Economics (2009) provides an overview of the estimated shares of intermediated mortgages and other lending secured on property in the EU-27. Table 8 shows significant heterogeneity across countries (as already seen in the Section 1). The EU average is about 40%. A particularly high share is observed in the UK, Ireland and Netherlands, where the mortgage volume sold through credit intermediaries is above 45%. A similar picture is provided by Figure 25, showing how the intermediary penetration lies in the 5%-25% range for the majority of Member States.

The measurement of the real scope of the misselling phenomenon is not an easy task. The mis-alignment of incentives that is detrimental to consumers should be measured by the suitability of the mortgage product purchased by the consumer. Such measurement exercise is inherently difficult. However, evidence of the scope of misselling activities can be retrieved through two main sources: surveys of consumers' perceptions about the pervasiveness of misselling and anecdotal evidence.

A relevant survey that sheds lights on misconduct by credit intermediaries is contained in the report by Europe Economics (2009).[45] Although the study does not provide any data about the actual level of misconduct, it explores the relation between perceived consumer detriment and various specific aspects of the credit intermediary market.[46] First, the perceived significance of specific sources of consumer detriment in mortgage intermediation is compared to the level of explicit regulation;[47] second, it is compared to the industry structure. The analysis of the *regulation–perceived detriment* nexus shows overall a weak correlation between a higher level of regulation and a lower perceived significance of a particular form of consumer detriment (see Figure 26). However, the perceived significance of recommending a non-competitive product is strikingly high where regulatory intensity is low; at the same time, the risk of a direct fraud by an intermediary as well as the risk of overcharging by an intermediary get significantly low in presence of a highly regulated market. The analysis of the relation between *industry structure and the perceived detriment* shows how the latter changes with respect to the intermediaries' status. In particular, it shows that Member States where tied mortgage intermediaries are in the majority are perceived as having far more exposure to the recommendation of *non-competitive* products to consumers (see Figure 27).[48] The same applies to the overcharging of consumers. On the contrary, where independent mortgage intermediaries represent the majority of available intermediaries, the recommendation of *inappropriate* products is perceived as a greater concern.[49]

Along with the analysis of stakeholders' perceptions, anecdotal evidence might indicate the pervasiveness of misbehavior by credit intermediaries. Such evidence in regard to Member States is contained in the policy documents produced by the European Commission as well as in the cited study by Europe Economics (2009).

After the publication of the first Consumer Markets Scoreboard early in 2008, the Commission identified the issue of financial advice as problematic in the retail financial services market. In the Commission Staff Working Document on the follow up in retail financial services to the Consumer Markets Scoreboard (European Commission 2009), the Commission stresses that "*there is growing evidence, that consumers often do not obtain suitable advice on financial services*".[50]

[45] The survey aims at providing information on many different topics pertaining to the credit intermediary markets. Information includes a description of current market structures and expected future developments, regulation, known cases of fraud and consumer dissatisfaction, cross-border activity and impediments. The survey was conducted across the EU-27 countries on a number of stakeholders, including regulators and other public authorities; intermediaries and associations of intermediaries; lenders and association of lenders and consumer associations. The number of data points collected in reply to questions pertaining to the residential mortgages is 96.

[46] Four possible forms of consumer detriment associated to credit intermediation are identified in the report, namely direct fraud, recommendation of a non-competitive product, recommendation of a product inappropriate for the specific consumer, and overcharging by the intermediary.

[47] To ascertain the intensity of regulation, the authors of the report identified six key categories of regulatory intervention (the transparency of the credit intermediary's relationship with a lender, the transparency of the relationship with the consumer, prudential standards, professional standards applying to the entry into or the conduct of business by a credit intermediary, the scope of advice and the existence of formalised or streamlined system of redress) and assigned to each of these categories a score representing their value judgement. The aggregated scores were then used to further categorise intensity of the regulatory environment as a whole in low, medium and high. Figure 28 shows the overall level of regulation for the EU27 countries built upon this scoring system along the six areas of policy interventions.

[48] The authors of the report attribute this result to the limited market searching contribution of a tied intermediary when compared to an independent one.

[49] This could be due to the lower level of product education and training received from lenders. In addition, the widespread use of commissions, including amongst independent intermediaries, can create incentives that act against entirely impartial advice.

[50] European Commission (2009), pages 2-3.

The evidence reported relates e.g. to Germany, where consumers are said to terminate 50-80% of all long-term investments prematurely because of inadequate advice when buying the products.

This leads to estimated damages for consumers of EUR 20-30 billion p.a.[51] A further relevant document cited is a survey conducted by CFA Institute (2009) on (inter alia) retail investment products which reveals that 72% of the investment professionals surveyed consider the fee structures rather than the suitability of investment products for customers as the main driver for sales.

The European Economics study (2009) is also a relevant source of information for anecdotal evidence about credit intermediaries misconduct. The examples provided relate to a) *misleading advertising, b) misleading information about the benefit of remortgaging, and c) consumers deception about intermediaries fees structure*.

a) The cases of misleading advertising refer to Italy, Poland and Slovakia. The Italian Competition Authority (the AGCM), investigated a number of cases of unfair advertising practices undertaken by independent credit intermediaries.[52] The sanctioned credit intermediaries unrealistically promised to 'delete' credit histories or to provide access to credit within a very short time limit. In Poland, an intermediary advertised to arrange credit free of intermediation charges and at a zero interest rate but failed to inform potential customers about the necessity of an additional purchase of compulsory insurance which would lead to an effective interest rate of 5-7%. Similarly, in Slovakia consumer complained about a credit intermediary who was unable - or unwilling - to furnish them with a clear explanation of all charges and an indication of repayment plans.

b) The case referred to the UK Financial Ombudsman refers to a couple induced in remortgaging by their adviser who could then receive an additional commission from the new lender. The couple remortgaged in order to avoid an alleged future increase of the rate, but later discovered that the rate would not have increased if they had stayed with the initial lender, at least not in the way in which they had been led to believe it would.

c) An Italian consumers forum reported an interesting case of consumers deception[53]: A credit intermediary proposed to a consumer that he would find a residential mortgage of a pre-specified amount at (or below) a pre-agreed maximum interest for which the consumer should pay a 'commission' (of EUR 2 000, 1% of the loan) conditional on the intermediary's ability to secure such a loan and a penalty (EUR 1 600) if the consumer decided against obtaining the loan proposed by the intermediary. In this case the consumer deception lies in the payment structure envisaged by this agreement, whose real nature was hidden by the intermediary due to his superior knowledge of the market. In fact, while at first glance it could seem the intermediary is entitled to a commission upon successful search and credit procuration, actually - given the very high likelihood of finding a suitable mortgage - the intermediary enjoys a large fixed fee (EUR 1 600) plus a smaller success fee (EUR 400).

[51] The European Commission refers to a study by Evers and Jung (2008). In a survey by the Federation of German Consumer Organisations (Verbraucherzentrale Bundesverband, 2008), 25 German bank advisors were approached in a mystery shopping exercise, and 24 of these provided unsuitable advice.

[52] See the cases, "Provvedimenti" No. 16964, 16965, 16998, 17000, 17001, 17002, 17005, 1732, on the Italian Competition Authority website (www.agcom.it), under the "Pubblicità ingannevole e comparativa" (misleading advertising) section.

[53] Italian consumers' forum http://www.migliormutuo.it/forum/forum.asp?FORUM_ID=10.

In conclusion, the issue of misselling seems indeed relevant, as confirmed by the regulatory interventions at the EU level. The European Commission acknowledged the scope for potential misconduct by credit intermediaries already in the 2007 White Paper ('*irresponsible lending and misselling of mortgage loans by mortgage lenders or unscrupulous credit intermediaries can, as illustrated by the current sub-prime turmoil, have a negative impact on the economy at large*'). The focus at the time was more on the consequences of misselling for financial stability. Since the White Paper and the study by Europe Economics (2009), policy action culminated in the recent adoption of a proposal for a directive on credit agreements relating to residential property (COM(2011)142 of 31.3.2011), where the issue of misselling is dealt with by focusing on consumer protection and competition issues. Four issues are tackled in particular by the proposal: professional requirements, disclosure of conflicts of interest, availability of sufficient choice for consumers, and freedom of establishment.[54]

[54] See press release IP 11/383, http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/383&format=HTML&aged=0&language=EN&guiLanguage=en).

3. BARRIERS TO COMPETITION ON THE DEMAND SIDE

3.1. Switching costs

KEY FINDINGS

- Switching costs are the costs that a consumer faces when changing suppliers. They may take different forms: contractual, transaction, search costs and costs due to the presence of combined products. In this section we focus on contractual and transaction costs.
- Switching costs may constitute a severe obstacle to competition: they may limit entry by hampering the ability of new suppliers to attract customers and they may also induce existing players to exploit their customer base without fearing the competitive pressure of rivals.
- Survey evidence shows that borrowers consider switching costs in the EU mortgage markets as a relevant barrier to mobility.
- Contractual early repayment restrictions prevent or limit the ability to switch. Similarly, charges (penalties) on early repayment options may discourage switching. Evidence indicates that contractual restrictions appear to have a stronger impact on customer mobility than penalties (provided they do not exceed a fair value level).
- Changing supplier involves also transaction costs which include: property valuation costs, solicitor/notary fees, mortgage registration costs, loan taxes, etc. Although these costs are relatively small compared to the value of the mortgage, they may nonetheless act as a relevant obstacle to consumers' mobility.

3.1.1. Introduction and insights from the literature

Switching costs can be defined as a) real or b) perceived costs that are incurred when changing supplier but which are not incurred by remaining with the current supplier. These costs can take many forms, some of which are tangible and quantifiable, and others that may be less easy to observe and measure, but may nonetheless have similar effects.

a) Contractual and transaction costs are costs incurred by consumers to exit a contract, e.g. restrictions and/or penalties for early redemption of mortgage contracts. Transaction costs include expenses to finalise the switching process, e.g. ancillary costs for registering the new mortgage like notary and legal fees, taxes, cost of new property appraisal, etc.

b) Among the 'not-tangible' costs, search costs and the presence of bundled services are usually mentioned as relevant. Search costs refer to the time and effort spent to look for a new supplier; the presence of combined sales may represent a further obstacle if the change of supplier requires consumers to transfer other products to the new provider, too. Section 2.3 and 3.2 deal specifically with, respectively, bundled sales and search costs, we then refer to them for more details. This section will mainly focus on contractual and transaction costs and assess their relevance in the mortgage market.

Significant switching costs may have several detrimental effects on competition.[55] They may discourage entry (domestic and cross-border) by limiting the ability of new suppliers to attract customers; also, they may allow existing suppliers to exploit locked-in customers by charging higher prices (Klemperer 1988; Beggs and Klemperer 1991).

However, Pesic (2010) recently argued, somewhat counter-intuitively, that low switching costs may also negatively affect prices due to the presence of asymmetric information between lenders and borrowers. In fact, when switching costs decline, low-risk borrowers may have a greater incentive to stay with their provider than high-risk ones because their providers have information privileges (in relation to the risk profile) and will, on average, offer them better rates than entrants which are less able to distinguish high from low-risk borrowers. Instead, risky customers are more likely to approach new providers in search for better financing conditions, and, as the proportion of risky applicants increases, the adverse selection worsens and the entrants respond by increasing interest rate spreads.[56]

Even in the absence of asymmetric information, switching costs do not necessarily have negative implications for competition. In fact, the prospect of future gains once the customers are locked-in to a supplier by high switching costs may intensify competition for the acquisition of new clients. Intense competition at the first stage may outweigh the detrimental effect resulting from firms exploiting their customer base in the future. This mechanism, however, is unlikely to apply to mortgages as the price of the product (interest rate) and the contractual conditions are normally set once before entering the contract, thereby impeding lenders from charging discriminating prices over time or a higher rate once the customer is locked-in long-term. That said, anticipating that high switching costs may limit the ability to change supplier in the future may constitute a further incentive for consumers to intensify the searching activity in the first place, thus resulting in stronger competition between lenders for the acquisition of new clients. Yet, even this possibility is apparently limited in the mortgage market given that consumers are unlikely to make many repeat purchases from which to learn, and given that often their primary focus during the search will be on the house purchase rather than the mortgage selection.

3.1.2. Evidence and relevance of switching costs as a barrier to competition

According to a recent survey conducted in 2008 (Eurobarometer Flash 2009), on EU-27 average, 16% of mortgage consumers[57] tried to switch provider in the previous two years; of those 14% managed to switch while 2% gave up before completion. Most of the consumers switching provider or product found the process to be easy (11%), and 3% reported that this change was rather difficult (see Figure 29).

[55] Although not specific to mortgages, there exists a wide empirical literature that investigates the role played by switching costs in financial markets. For instance, Kim et al. (2003), using a panel of annual observations for the Norwegian banking industry, show that on average 23% of the customer's added value is attributed to the lock-in phenomenon generated by switching costs and around 35% of the average bank's market share is due to its established bank-borrower relationship. Also Degryse and Ongena (2008), Degryse et al. (2009) and Ioannidou and Ongena (2010) provide evidence of the empirical relevance of switching costs in the banking industry as a factor affecting entry barriers and interest rates.

[56] Pesic (2010) investigates empirically the relation between switching costs and the interest rate spreads. She finds that, although lower switching costs promote entry, and, thus, can be expected to increase price competition and lower industry profits, the adverse selection effect we described above dominates and causes overall an increase in the average spread. More generally, she claims that there exists a threshold below which the problem of adverse selection becomes prevalent and overcomes the competitive effect of entry (but she does not discuss the factors that affect the level of such a threshold). Her conclusions are that measures which lessen the informational asymmetry between incumbent and entrant lenders can improve the effectiveness of policies targeting a reduction in switching costs.

[57] The EU average is heavily influenced by the UK result. In fact, the switching rate of mortgages in the UK is significantly larger than in any other Member State (except for the Czech Republic) and, due to the size of the country, this has a considerable impact on the EU average.

These figures, however, vary greatly across countries. The UK and the Czech Republic show switching rates well above the EU average, respectively, of 28% and 23%. The proportion was relatively high also in Cyprus (14%), Ireland (13%), Finland and Austria (both 12%). On the other extreme of the distribution, Lithuania and Bulgaria (both 1%), Slovakia and Latvia (both 3%), Romania (4%) and Italy (5%) present very low rates of switching.

Compared to other products and services, mortgages show a relatively low rate of switching, e.g. lower than that observed for car insurance and TLC (term-loan credit) services. However, when compared to the rate of switching for other financial services (savings and investment, home insurance, long term loan and current account), the rate is in general higher (see Figure 30). This evidence is confirmed by a survey conducted more recently in the UK (ICB, 2011) on the retail banking sector, which found that mortgages had the largest switching rate - at least before the crisis - among financial services (10% of survey respondents switched mortgage in the previous 12 months).

Low switching rates are not *per se* evidence of the existence of switching costs as they may simply reflect the belief that taking a mortgage from a new provider would not be significantly more advantageous. It is therefore more relevant to investigate whether consumers that did not switch or tried but then gave up, mentioned switching costs as a major cause. Eurobarometer Flash (2009) found that 16% of those customers indicated difficulties and switching cost as the main reason to remain with their current suppliers (see Figure 31). However, this figure rises sharply to 27% if one excludes those customers who did not even consider the possibility to switch as they thought their current provider was offering them the best conditions. Overall, the evidence suggests that switching costs are usually perceived by mortgage customers as a significant obstacle to switch supplier.

Relevance of contractual and transaction costs

As stated by the European Commission (2011b) "*A consumer's ability to repay his credit prior to the expiry of his credit agreement may play an important role in promoting competition in the single market and the free movement of EU citizens*". Potential barriers to early repayment may come both from contractual restrictions and from compensation schemes adopted by lenders.

Member States have different provisions in place with respect to restrictions on early repayment rights ranging from stricter regimes that prohibit any restriction on the right to early repayment to countries that permit early repayment as a contractual option. According to the classification adopted by London Economics (2009), Member States fall in three categories: 1) early repayment is a universal unrestricted right; 2) it is a right conditional on some legal prerequisites (typically based on the type of rate and the degree of maturity of the mortgage); or 3) it is an unconditional contractual option that the parties may freely define (see Table 9).

Even when no legal or contractual restriction applies, early repayment prices may influence the extent to which the option is exercised. The exercise charges may normally take two forms: a variable compensation (determined *ex-post* and based on actual losses suffered by the lender) or a predetermined fee model (set *ex-ante* and unrelated to actual losses).[58] Member States also provide different rules governing compensation schemes: some countries[59] have no specific legislation in place while others[60] impose caps on the compensation and fee value.

[58] While the former is usually considered as providing a more fair treatment as the charges reflect and compensate the lender for its actual losses, predetermined fee models do not necessarily lead to higher prices for consumers as this depends on the interest rates.

[59] For example, in Czech Republic, Hungary and Lithuania.

London Economics (2009) explored the relationship between perceived easiness of switching[61] and the rules governing early repayment across countries. As for the contractual restrictions, they found that the number of people claiming difficulties in switching is lower the stricter the rules prohibiting restrictions on early redemption are. In contrast, limits on the compensation schemes (as long as early repayment fees do not exceed the fair value compensation level[62]) do not appear to affect the way consumers perceive the switching process. This seems to suggest that contractual restrictions raise greater competitive concerns than the level of the exercise charges (provided that a *fair value* principle is followed).

Moreover, it is worth stressing that, as compensation fees are intended to cover the cost of refinancing that lenders face when mortgages are repaid early, legal restrictions to an economically justified price for the exercise of the option may lead to a general increase in the interest rates (see Dübel 2005). That is because lenders may tend to compensate the higher costs due to unprofitable early repayments through an increase in the interest rate. Any intervention in this area should therefore cautiously account for this side effect.

In addition to costs of early exiting the mortgage, switching also involves costs for signing the contract mortgage with a new supplier (see above, 3.1.1). These costs have been estimated by EMF (2010b) to account for, on average (based on EU-15 data), 1,1% of the value of the house, and represent over 20% of the total transaction costs related to the purchase of a house. In monetary terms, considering an average property value of EUR 210 000 (see Annex 1 of EMF 2010b), transaction costs amount to over EUR 2 000. Taxes account for the biggest part of total mortgage transaction costs (5.7%), followed by solicitors'/notary fees (3.7%), property valuation (3.5%), mortgage registration (1.0%) and other expenses (5.7%). Most of these costs are incurred not only to take out an initial contract but also in case of switching mortgage[63], although some of them can be saved when the mortgage is refinanced internally (i.e. with the same lender).[64]

Not much evidence is available on the extent to which transaction costs affect the switching process in the mortgage market, nonetheless interesting anecdotal evidence reported by London Economics (2009) shows that mortgage refinancing occurs more often with the existing lender than with another lender if transaction costs for internal refinancing are lower than those incurred for external refinancing.[65] For instance, in Denmark, where switching lenders require a new property valuation, Nykredit, a national lender, reported that "*in normal years (i.e. years with low prepayment and refinancing activity) 60-70% of all refinancing are internal, while in high early repayment years 80% of all refinancing were internal*". Similarly, in Belgium where high notary fees determine higher costs for external refinancing, the majority of mortgage refinancing occurs with the existing suppliers.

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[60] For example, Spain, Greece and Netherlands.

[61] They made use of the results of survey conducted by the European Commission (Eurobarometer Flash, 2009) analysing the reasons why customers do not switch providers.

[62] A compensation for early repayment can be considered fair if it repays the lender for the costs of reinvestment.

[63] This holds true in the majority of Member States, with the notable exception of Italy, where the Bersani decree (2007) established the automatic inscription of the switching in the land registry (portability), thus lowering notary fees. Other exceptions can be found in Spain, where transaction fees are lower in case of switching, and in Ireland and Portugal where sometimes the new lenders take on the switching expenses (ECB 2009).

[64] When this is the case, internal refinancing can be less costly than external refinancing, and, as a consequence, the borrower's ability to negotiate with the existing lender can be reduced.

[65] This evidence, nonetheless, has to be considered cautiously as the choice between internal and external refinancing may also be affected by the strategic behaviour of the existing suppliers who can apply discounts on the early repayment compensation in order to retain the client.

This suggests that also transaction costs do play a role in conditioning the consumers' ability to switch mortgage supplier.[66]

Finally, it is worth pointing out that transaction costs and early repayment compensation are to some extent linked. As stated by London Economics (2009), "*historically, there has been a correlation between countries that severely capped early repayment compensation and high levels of legal/notary transaction costs in these countries*", e.g. countries as Spain and France which have capped early repayment fees to low levels, are among those with the highest transaction costs. Similarly, Kiff (2009) shows that early loan repayment is a free option in the US, whereas it is very expensive in Canada. However, transactions costs of mortgage refinancing are more expensive in the US than in Canada, which substantially offsets the cost of the early repayment penalty. This indicates the need to account for both issues when designing policy interventions aimed at promoting customers' mobility.

3.2. Search costs

KEY FINDINGS

- Contract complexity and lack of clarity in providing information about mortgage conditions may severely constrain consumers' ability to understand and compare offers. This lowers customers' mobility and creates barriers to entry and expansion.
- Many European consumers have difficulties in understanding relevant features and risks involved in mortgage contracts. They also indicate difficulties in comparing offers as a major obstacle to switching, and call for further intervention in this area.
- Information disclosure provision (such as ESIS) may help to lower search costs and favour comparability of offers. The collected evidence indicates that such measure may significantly reduce the information deficit of consumers and enhance their ability to process the key aspects of a mortgage contract, although to date little evidence is available on whether better pre-contractual information leads actually to better decisions by consumers in terms of either lower borrowing rate or more suitable mortgage contracts.
- The effectiveness of information disclosure policies is likely to be downsized, at least to some extent, by two factors: the lack of financial education and the existence of cognitive biases (i.e. irrational biases that affect judgement and the decision-making process). These two factors can lead to poor financial choices even in presence of transparent and comparable information.
- A cooling-off period may further contribute to addressing consumers' information deficits by giving additional time to seek advice, shop around for better deals or correct emotion-based decisions. The lack of evidence regarding the effects of such provisions where they have been implemented makes it difficult to assess the extent to which cooling-off periods can promote competition in the mortgage market.

[66] MOW (2003) provides an estimate of the potential benefits resulting from a reduction in transaction costs which should promote early repayment and switching. However, the estimate appears to be based largely on assumptions and is thus not necessarily robust.

3.2.1. Introduction and insights from the literature

Search costs are the costs incurred by a consumer when identifying a supplier and/or set of products and offers that can suit his needs, regardless of whether the consumer then buys the product from that supplier. In other words, search costs arise when a customer needs to exert effort in order to find and select a supplier and/or a product. While search costs can be a further cost that consumers have to incur when switching suppliers, they differ from switching costs in several dimensions:[67] a) search costs are not incurred by a fully informed consumer; b) search costs may be incurred more than once when searching across multiple firms; c) search costs are incurred whether or not a customer finally decides to switch or to remain with their current supplier; and d) search costs can arise before any initial purchase.[68]

In the financial sector search costs may play a critical role as financial products can be very complex or involve many dimensions to be evaluated, thereby requiring customers to devote a large amount of time and effort to searching and scanning among many alternative offers. When it comes to mortgages, for example, consumers must consider several features of the contract: size and the duration of the loan, interest rate (fixed, variable or hybrid), the amount of instalments, additional fees and costs (notary and registration fees, etc.), the possibility and terms of early repayment, penalties in the event of late payment or defaulting, the requirement to purchase additional financial products linked to the mortgage, etc. The variation in pricing structure, terms and conditions, etc. render the comparison of different products inherently difficult. Moreover, the way information is provided by firms (the structure and format of the information documents, the explanations provided, the presence of warning regarding key aspects, etc.) may further reduce transparency and limit meaningful comparisons.

Search costs may have considerable implications for competition. For consumers who have already a mortgage, costly searching may render switching more difficult and, thus, lower customer mobility (Schlensinger and Schulemburg 1991; Borenstein 1991; Knittel 1997). For consumers who are searching for an initial mortgage, search costs appear to be of less concern as, in principle, no supplier has an advantage *vis-à-vis* the competitors. They might nonetheless constitute a barrier if consumers tend to purchase mortgages from the closest supplier or from the one they have already purchased financial products in the past. The evidence shown in the Section 2 suggests that, indeed, distance plays a role in the selection in the mortgage supplier, and, when coupled with search costs, indicates that competition in the market is severely constrained by the need of having a physical presence close to the consumers. As a consequence, competition may be reduced between existing lenders and entry of new suppliers may be limited.[69]

3.2.2. Evidence and relevance of search costs as a barrier to competition

This section will review the available evidence on the existence and relevance of search costs. As regards to the existence of such costs, surveys that investigate whether consumers perceive understanding and comparing mortgage offers as difficult provide useful information.

[67] See Wilson (2009) for a general overview of the differences between search and switching costs.

[68] See Baye, Morgan and Scholten (2006) for a survey of the literature on search costs.

[69] As stated by the European Commission (2011a): "*Although true at the domestic level, this is even truer for those consumers who do shop around cross-border*". This is the case because the differences across countries in the definition of some pre-contractual information (such as the APR) may limit the consumer's ability to identify the most suitable mortgage.

The assessment of the relevance is more problematic as search costs can in general not be easily measured. Nevertheless, interesting evidence can be indirectly drawn from the analysis of the impact of policy interventions aimed at promoting better disclosure by suppliers and facilitating comparability through standardised information. In this regard, we will review some national experiences. As part of the section, we will also briefly discuss the relevance of cooling-off periods as a further measure to reduce search costs and facilitate customer switching and mobility.

Existence of search costs in the mortgage market

Clarity of information and comparability of offers in the financial sector have been the subject of some surveys conducted by the European Commission. Eurobarometer 2005 highlights that 59% of EU citizens found it difficult to understand information on the way their mortgages work and the risks involved, and that 54% considered difficult to compare information on different mortgages. More recently, Eurobarometer Flash 2009 constituted a survey across all Member States that focused on consumers' ability to compare offers from various suppliers in several service sectors, among which the mortgage market.[70] Difficulties with comparing offers were most widely reported in the retail banking services sector, in particular mortgage loans ranked as the second highest service in terms of percentage of citizens (39%) that indicated that the offers were difficult to compare (see Figure 32).[71] Among these, 12% believed it was very difficult and 27% indicated that it was fairly difficult (see Figure 33). Consistently, respondents indicated as the second and the third main aid[72] that could help them to change supplier, respectively, a dedicated website that provided a standard reliable overview of the conditions of the various market offers, and standardised comparable offers from providers. These results further confirm the important role played by search costs in affecting the decision process of consumers in the mortgage market. The incompleteness (e.g. in relation to additional costs) and the opacity (use of technical jargon, relevant clauses presented in 'small print', etc.) of the information provided by lenders was also indicated as a further critical element.

While this evidence suggests that access and use of information by mortgages' customers is an issue, the extent to which search costs constitute a barriers to mobility for consumers and consequently to the development of fierce competition among lenders, is less clear. As anticipated above, a way to investigate the relevance of search costs is to look at the (actual or expected) impact of information disclosure policies that have been adopted (or have been planned) by some countries and by the European Commission. It can be argued that the higher the search costs, the higher the likely impact of regulation that aims at addressing the problem. In other words, the impact of regulation provides indirectly a measure of how much search costs affect the decision-making process of consumers. While recognising that a scarce impact may not necessarily indicate that the underlying issue is not relevant (the policy may not have been well-designed or concomitant factors may have prevented beneficial effects to materialise), this evidence provides useful insights on the extent of search costs in the mortgage market.

[70] Other services monitored in the survey were: savings or investments, long term loan, current bank account, electricity supply, mobile telephone, gas supply, home insurance, fixed telephone, car insurance (for third party liability) and internet.

[71] However, the percentage of consumers claiming difficulties in comparing offers varied significantly across the EU countries, ranging from only 12% in Bulgaria to almost 60% in Hungary and the Czech Republic (see Figure 33).

[72] Switching at no cost was selected by the respondents as the most effective help in facilitating mobility.

Relevance of search costs in the mortgage market

This paragraph will review two sets of evidence: first, consumers' surveys investigating whether better information disclosure policies improves the ability of consumers to understand and compare mortgage offers, and second, quantitative assessments of the impact of such policies on market outcomes (borrowing rates, defaults, etc.).

We first considered the UK and US experience. The UK FSA carried out a study in 2006 (FSA 2006)[73] to assess and measure the impact and effectiveness of the *Mortgage Conduct of Business (MCOB) regulation* introduced in 2004 which requires suppliers to provide standardised disclosure documents to consumers. In particular, the FSA assessed the impact of two key documents, namely the Initial Disclosure Document (IDD), which details the services offered by a mortgage firm, and the Key Facts Illustration (KFI) which sets out the features of a particular mortgage product. Several improvements were observed in searching experience of consumers: a) the number of people obtaining product information from more than one firm increased slightly from 75% in 2004 to 77% in 2006; b) when provided with IDD shoppers could understand whether they have received advice or information only, and c); consumers were able to use the KFI to identify some of the risks and features of mortgage products. Overall, the FSA concluded that the evidence was encouraging as it showed "*progress towards achieving the four consumer outcomes*".[74]

Along the same line, the US Federal Trade Commission (FTC 2007) released in 2007 a study on the effectiveness of *Truth-in-Lending Statement* (TILA statement) and *Good Faith Estimate of Settlement Costs* (GFE) as means of providing meaningful disclosure on costs and terms of a mortgage to borrowers. The FTC examined whether consumers understood well existing mortgage cost disclosure and the terms of their own recently obtained mortgage as well as the potential for improving consumer understanding of mortgage costs. To this aim, it developed a prototype disclosure form[75] and tested whether better disclosure could actually help consumers in understanding mortgage conditions, facilitating consumer shopping for mortgage loans, and reducing consumers' vulnerability to deceptive lending practices. The results indicated a significant improvement when consumers used the prototype form compared to the existing disclosure forms.

[73] In 2008 the FSA conducted a follow-up study (FSA 2008) with particular attention to the areas of the mortgage markets where consumers could be exposed to greater risk, namely the sub-prime and lifetime mortgage sectors. The findings were broadly consistent with those of the previous study. Nonetheless, the FSA concluded that further interventions on disclosure policies could be required in order to better protect vulnerable consumers, such as sub-prime customers.

[74] In 2008 the FSA commissioned a study to Illuminas on the same subject whose results were somewhat less encouraging (Illuminas 2008) Based on the responses provided by 60 consumers who had recently purchased a prime mortgage, the study found that KFI played a limited direct role in driving the decision process as they were only very rarely used to draw a comparison between products but rather seen as 'post purchase' support enabling consumers to check that their understanding of the purchased product was as previously envisaged. Similarly, the effectiveness of IDD was seen as rather limited as apparently consumers did not consider it relevant to know in advance the nature of the service supplied. The authors argued that the key distinction for consumers was the route that they had used to purchase the product, namely, whether they purchased directly, or used an intermediary. Most consumers who had directly approached providers had some knowledge of the types of offered products, and this had affected the choice of contacted providers. In these cases, consumers were expecting to receive product information, but not necessarily advice (they explicitly stated that they would have used an intermediary service if they had needed more formal advice). In contrast, respondents who used an intermediary were implicitly expecting that intermediaries provided some form of advice or guidance in that they shopped around and provided a preliminary screening (and helped in narrowing the search) of the range of suitable products.

[75] The prototype form included a number of cost disclosures not required by TILA and GFE including.

Indeed, respondents reading the prototype form answered on average 80% of the test questions correctly, whilst this figure was 61% for respondents reading the current forms (see Table 10).[76]

The second set of evidence is aimed directly at the impact of information disclosure policies in terms of market outcomes; among them we further distinguish between *ex-ante* assessments of the (expected) effects and *ex-post* evaluation based on actual data. Estimates of the expected effects of information disclosure provisions have been provided in the impact assessments and cost/benefit analyses carried out by the European Commission (or by external experts).[77] A impact assessment, undertaken in the context of the recently adopted proposal COM(2011)142 (European Commission 2011a), contains a dedicated section that deals specifically with the issue of pre-contractual information and estimates costs and benefits related to a number of different policy options. The beneficial effects were estimated based on assumptions about the policy options' impact on the level of the default rate[78], i.e. the extent to which such policies are expected to reduce the default rate (measured in terms of basis points). Depending on the policy option, the Commission considered default rate reductions ranging from 0.5[79] to a maximum of 5 basis points, that result in monetary benefits ranging from EUR 39 million to EUR 611 million.[80]

A second study carried out by London Economics (2009) considered two other sources of potential benefits deriving from policy changes in the area of pre-contractual information: a) the time savings in searching information about mortgage conditions; and b) the ability of obtaining better rates as a result of having more information. The benefits accruing to consumers from a wider availability of standardised pre-contractual information (European Standardised Information Sheet - ESIS) were estimated in several million euro. This figure varied greatly from country to country depending on the existing level of ESIS provision in each Member State (ranging from 0, in case a provision similar to ESIS was already in place, to a maximum of EUR 28 million[81]).

As regards *ex-post* evaluations, it is worth mentioning the UK experience where the FSA analysed which changes (in terms of market outcomes) in the mortgage market have occurred since the MCOB regulation was introduced (October 2004). A first study[82] released in 2007 focused on the changes of prices and efficiency of consumer choices. The rationale of the study was that if MCOB was successful in making consumers informed and more able to compare the value of different products, one would expect that lenders could not charge more than their competitors because they would lose their customers, and thus on average market prices should have decreased.

[76] The impact was stronger for more complex loans (56% for respondents viewing the current forms and 78% for those using the prototype form) and for subprime borrowers (with an improvement of 19.2% compared to 18.6% observed for prime borrowers).

[77] A similar study was commissioned by the UK FSA to Oxera with the objective of assessing the impact of changes in its disclosure policy. This study, however, only focuses on the costs side and does not assess the impacts in terms of benefits.

[78] As recognised by the Commission, several other benefits (such as saved costs in relation to the legal costs expenses linked to the foreclosure procedure and to the social cost for the borrower of losing his home or the benefits coming from an increase in competition between creditors that may result from the improved ability to compare offers and shop around for better deals) and costs (such as cost in the form of reduced access to credit) could not be quantified due to the lack of relevant data, therefore the figures presented in the report could only provide a rough estimate of the expected impact.

[79] Except for the 'Do nothing' option for which a zero reduction was assumed.

[80] For such calculation they considered the annual gross value of mortgage loans in 2007 (EUR 1 244 966 million).

[81] See Table 29 in London Economics (2009).

[82] Monteiro and Zaidi (2007).

The price analysis found, however, no reduction after the introduction of MCOB but rather that prices have overall increased for all mortgage products. According to the FSA this result could suggest that the mortgage market was already competitive even before MCOB regulation and that the increase in prices could reflect a pass through of the costs of MCOB's implementation by lenders.

In a second study carried out two years later in 2009[83], the FSA analysed whether the MCOB has actually improved the ability of consumers to select mortgages that were more suitable to their needs. The Authority used the fraction of mortgages in arrears up to 24 months after the date of sale as a measure of the suitability of mortgage sales and tested whether arrears rate was lower on mortgages originated after the MCOB introduction than before it, focusing on the mortgage market for borrowers with impaired credit histories. Similarly to the results of the price analysis, no appreciable effect of MCOB on arrears rate was identified.

Overall, the evidence suggests that consumers face an information deficit, i.e. barriers to search and select mortgages. Therefore, better pre-contractual information may improve their ability to understand and compare offers. However, the impact of search costs on distorting decisions by consumers is not clear. The only case we are aware of is the UK experiment to assess *ex-post* the actual impact scale of pre-contractual information provisions aimed at addressing the problem; however, this case is not conclusive and further research appears necessary.

However, a proper assessment of pre-contractual information policies cannot ignore the role of financial illiteracy[84] in driving consumers' decisions. When consumers have no financial education, they can make poor decisions even if information is transparent and mortgage offers are largely comparable[85] because they do not understand key concepts (such as e.g. the APR)[86] or they fail to account for (or are misled about) relevant features of the mortgage contract. In light of this problem, several Member States have launched financial literacy initiatives and schemes addressing the problem.[87]

In addition to financial illiteracy, consumer choice may also be distorted by cognitive biases. There is indeed evidence that even financially sophisticated individuals do not take sensible decisions when confronted with apparently simple choices. This seems to have more to do with psychology (or bounded rationality) than with knowledge. Behavioural economics has identified a number of cognitive biases that may influence decisions in both, financial and non-financial, contexts irrespective of the level of financial education.

[83] Kohlberger and Johnson (2009).

[84] The problem of so called *financial illiteracy* is largely present in the mortgage sector. Several studies have documented the impact of financial capability on the mortgage decision (Moore 2003, Bucks and Pence 2008, Campbell 2006, Gerardi et al. 2010) and pointed to it as one of the major ingredients of the sharp rise of mortgage defaults during the recent crisis (Boeri and Guiso 2007). Although related, it is important to separate search costs and financial illiteracy as they raise different competitive concerns. Indeed, financial illiteracy appears to be of greater concern from the viewpoint of consumer protection as the lack of financial education may lead customers to poor decisions and, also, expose them to exploitative practices by their financial provider that, by misleading the borrowers' decision process, induce them to make choices that are not in their interest but that are in the interest of the lender (generally referred to as 'predatory lending' practices).

[85] London Economics (2009) stated that "*The provision of good and understandable pre-contractual information is a necessary but not sufficient condition for consumers to be able to make informed choices. Indeed poor financial literacy, unwillingness to spend a fair amount of time reviewing and comparing long and complex documents may limit the benefits under either of the options [those intended to increase the availability of ESISs]".*

[86] According to research on UK consumers' financial literacy, nearly four out of five people do not know that APR refers to the interest and other costs of a loan (reported in a study of FSA (2008): "*Financial capability: A behavioural economics perspective*"; see also London Economics (2009).

[87] Evers & Jung (2007).

In a study prepared for the FSA (2008b), De Meza, Irlenbusch and Reyniers analysed some of the principal cognitive biases, namely procrastination, regret and loss aversion, mental accounting, *status quo* bias and information overload. These biases lead people to draw incorrect conclusions, focus on inappropriate or unimportant data, be distracted by too much information and choice, misuse information, etc. The study stresses that from a policy perspective "*it is crucial to identify whether the reason people behave as they do is primarily the result of lack of knowledge and mastery of relevant financial management techniques, or whether it reflects fundamental aspects of human nature. Only in the former case is conventional financial education an appropriate remedy*".

3.2.3. Cooling-off period

As part of this section, we also briefly discuss the potential benefits of a cooling-off period provision. A cooling-off period is a specified timeframe during which the customer has time to 'cool-off' regarding his decision to enter a contract and, in case he changes opinion, legally withdraw from it without costs. Such a measure is intended, among other things, to contribute to addressing consumers' information deficits by giving additional time to seek advice or shop around for better deals.

In particular, cooling-off periods can be very effective in the mortgage context where the specific conditions of the contract are often disclosed only at the very end of the application process (Gibbons and Schwartz 2007[88]). This can make shopping around quite difficult and time-consuming, creating a *situational monopoly* for the lender as the consumer may believe that there are no alternative suppliers or it would be excessively costly for him to seek an alternative supplier (Rekaiti and Van den Bergh, 2000).[89] Moreover, a common situation in the mortgage market is that consumers need to have at least one mortgage offer in their pocket in order to close a deal on the property they want, which they may otherwise lose. In the heat of the moment, consumers may then select the mortgage without fully considering the terms of the contract. Giving consumers some time to reconsider their choice and collect more information can, thus, have beneficial effects for consumers, and also indirectly for competition.

It has also been argued (see Consumers Affairs Victoria 2009) that a further reason for introducing cooling-off period is to provide a remedy against irrational decisions guided by an emotional state of mind or taken as a result of high-pressure sales. These episodes tend to be more frequent with vulnerable and disadvantaged consumers and, thus, cooling-off provisions period may also be important from a social policy point of view.

Even though, in principle, consumers could significantly benefit from cooling off periods, to our knowledge there is no evidence either on the extent to which consumers make use of this option in the mortgage market, nor on whether consumers are actually inclined to reconsider their decision (and be able to recognise quickly enough that they have made a poor choice) or to use such period to shop around in search of better deals. Moreover, behavioural biases may downsize the effectiveness of such policy if, for example, consumers tend to "*justify their decision after the event rather than admitting they made a poor decision, [or] …may interpret their behaviour as deliberate decision-making even if it is based on emotion*" (Consumers Affairs Victoria 2009). In conclusion, given the limited amount of evidence available, we are not in the position to fully assess the likely effects of the lack of a cooling-off period.

[88] They refer generally to consumer credit but their argument extends also to mortgages.

[89] This effect is even stronger when the transaction and the conclusion of the contract take place at temporary premises or at the door-step (a broker or an agent may make unrequested phone calls or visit the customer to sell a mortgage; for a case study, see Consumer Affairs of Victoria, Australia (2009)).

CONCLUSIONS

This study has investigated the main barriers to competition in the European mortgage sector. We have considered and evaluated obstacles affecting both the supply and the demand side of the market. Below we briefly summarise the major findings of the study and discuss which barriers, in our opinion, raise the most severe concerns from a competition perspective.

Supply side barriers

- On the supply side, the most significant barriers to more competitive markets stem from differences in the regulatory framework between Member States. Among them, bankruptcy procedures in case of borrower's default and legislation dealing with mortgage foreclosures appear to be the areas where policies that promote harmonisation across Europe are likely to have the most beneficial effects on competition.
- Restrictions and/or discriminatory conditions in terms of access to credit registers also seem to play a significant role, especially in limiting cross-border activity. Interventions that facilitate exchanges of information among credit register systems may therefore boost market integration at European level.
- Cross-selling practices (bundled sales of mortgages and other financial services), when largely adopted by market players, may in some cases reduce consumers' welfare by limiting their ability to search and switch for better deals, thereby allowing lenders to enjoy greater market power. However, generally valid conclusions are difficult to derive as *ad hoc* assessments of the market/country-specific characteristics are needed in order to establish the potential anti-competitive impact of such practices.
- Agreements between mortgage lenders on one side, and real estate agents, property developers or intermediaries on the other side, do not seem to pose serious competitive problems given the fragmentation of the market. Intermediaries have a role in promoting cross-border entry by reducing both physical and social distance between borrowers and lenders. Furthermore intermediaries may reduce search costs. However the existence of asymmetric information available to intermediaries and customers, and in particular the misalignment of incentives between them, appears to be of greater concern as it gives rise to the phenomenon of misselling practices by intermediaries. Policy interventions can help to address the problem, e.g. rules that require disclosure of intermediaries' payment structures, definition of professional standards for performing the intermediation function and obligations to ensure that consumers are confronted with a sufficient number of available mortgage products.

Demand side barriers

- Switching costs, in the form of restrictions and/or penalties on early redemption, and transactions costs are largely perceived by consumers as a relevant obstacle to their mobility in the mortgage market. As to the conditions for early repayment, legal restrictions appear to have a stronger impact than penalties/charges to exercise the early repayment option (as long as they do not exceed a fair value level). Also transaction costs (property valuation, solicitor's/notary fees, mortgage registration, loan and taxes, etc.) play a role in constraining consumers' mobility. Measures that jointly target both early repayment conditions and transaction costs are likely to be the most successful in view of the aim to facilitate customers' mobility and encourage competition between lenders.
- Contract complexity and the lack of clarity in the way information about mortgage conditions is provided can severely constrain the ability of consumers to understand and compare offers and, as a consequence, dampen their incentive and ability to switch across lenders. Information disclosure regulations aimed at providing better pre-contractual information to consumers have proved to be very effective in enhancing their ability to process the key aspects of a mortgage contract and, thus, seem to move in the right direction of promoting competition through more informed choices and higher customers' mobility. However, given that the lack of financial education and the existence of cognitive biases may, at least to some extent, downsize the effectiveness of any information disclosure policy, interventions targeting these issues are likely to strengthen the impact of pre-contractual information policies.
- Finally, the provision of a cooling-off period may further contribute to addressing the information deficit of consumers' by giving additional time to seek advice, shop around for better deals or correct emotional or pressurised decisions. However, the lack of evidence on the effects of such a provision where it has been implemented makes it difficult to assess the extent to which cooling-off periods are effective in promoting consumers' mobility, and thus in fostering competition.

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ANNEX: TABLES AND FIGURES

N.B. Abbreviations for Member States/Country abbreviations are used according to the Interinstitutional style guide (http://publications.europa.eu/code/en/en-000100.htm), i.e. the two-letter ISO code is used (ISO 3166 alpha-2), except for Greece and the United Kingdom.

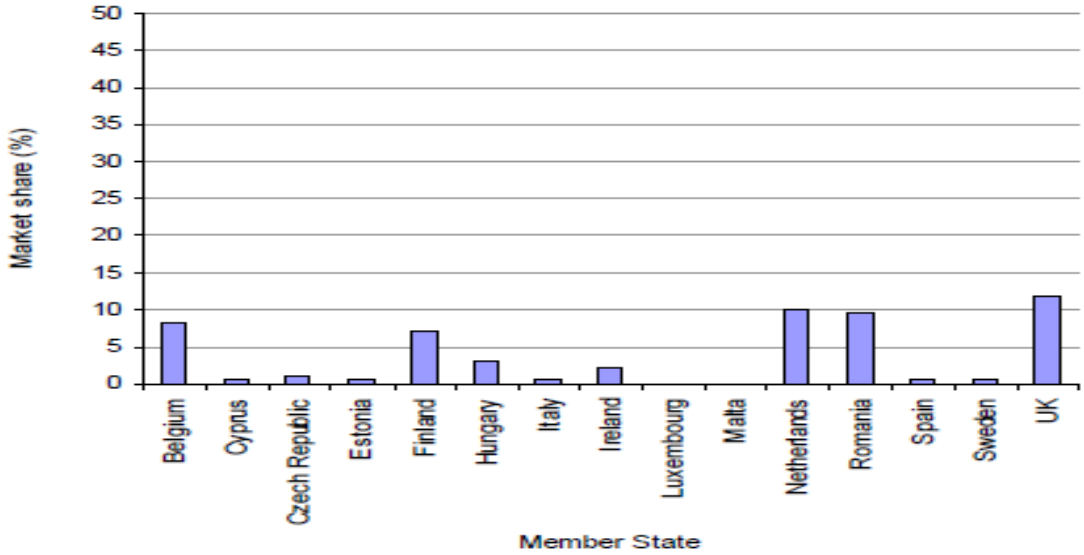
Table 1: Type of suppliers in the mortgage markets, country by country

Country	Type of lender *(Inside brackets market shares when available)*
Austria*	Bank and nonbank specialist mortgage originators; Building societies and credit unions.
Belgium	Banks, insurance companies, mortgage companies, public companies, low-cost housing companies, other companies
Denmark	**MAINLY BANKS**: Mortgage banks and retail commercial banks
France	**MAINLY BANKS**: Commercial banks. Specialised mortgage banks hold a small share of the market.
Germany	**MAINLY BANKS**: Private, cooperative, public banks, Bausparkassen (mainly savings banks) and insurance companies
Greece	21 national commercial banks and 23 foreign banks plus 2 specialised lending institutions, which operate mainly for Civil Servants.
Ireland*	Banks and building societies and mortgage banks
Italy	**MAINLY BANKS**: Banks
Latvia	**MAINLY BANKS**: Commercial banks, specialised non bank financial institutions, cooperative savings and loan associations, Mortgage banks, State-owned development banks, pawnshops. According to estimates, as of the end of 2006, only 3.6% of all loans are issued by non-bank creditors, whereas 96.4% have been granted by banks.
Netherlands*	Banks and mortgage banks.
Poland	**MAINLY BANKS**: Commercial banks (97%) and mortgage banks (3%)
Portugal	**MAINLY BANKS**: Universal and commercial banks. There are no specialised mortgage banks.
Spain	**MAINLY BANKS**: Commercial banks (36.4%), Savings banks (55.7%), Cooperative Banks (6.3), non- deposit taking lenders regulated by the Bank of Spain (1.6%).
Sweden	Mortgage institutions hold a large share of the mortgage market in Sweden. Nonetheless the majority of mortgage institutions are owned by banks. There are also a number of banks which directly offer mortgages.
United Kingdom	Banks (50%), building societies (17%) and other specialist lenders (33%)*.

Note: "In 2008 the credit crisis changed the market landscape dramatically. The year saw a number of large lenders undergo mergers, and by the end of the year a number of major British banks had been taken into part or full public ownership as emergency measures. With the securitisation market still closed and other funding channels severely restricted, most of the non-deposit taking specialist lenders ceased accepting new business, and in some cases ceased operating altogether". EMF Factsheet UK (2008).

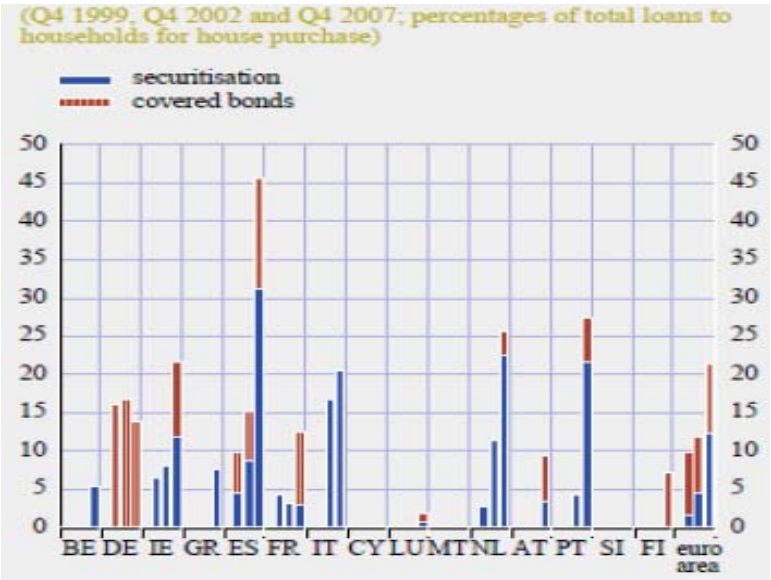
Source: EMF Country Factsheets,2008 and 2009; (*) IMF (2011).

Figure 1: Market shares (in term of residential mortgages) of OMLs



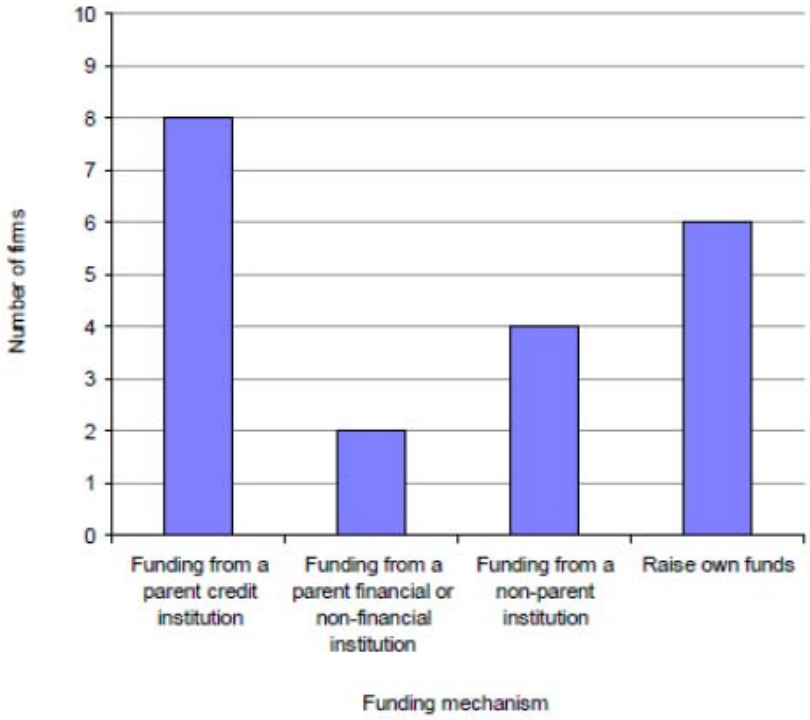
Source: London Economics (2008).

Figure 2: Alternative sources of funding for credit institutions (2007)



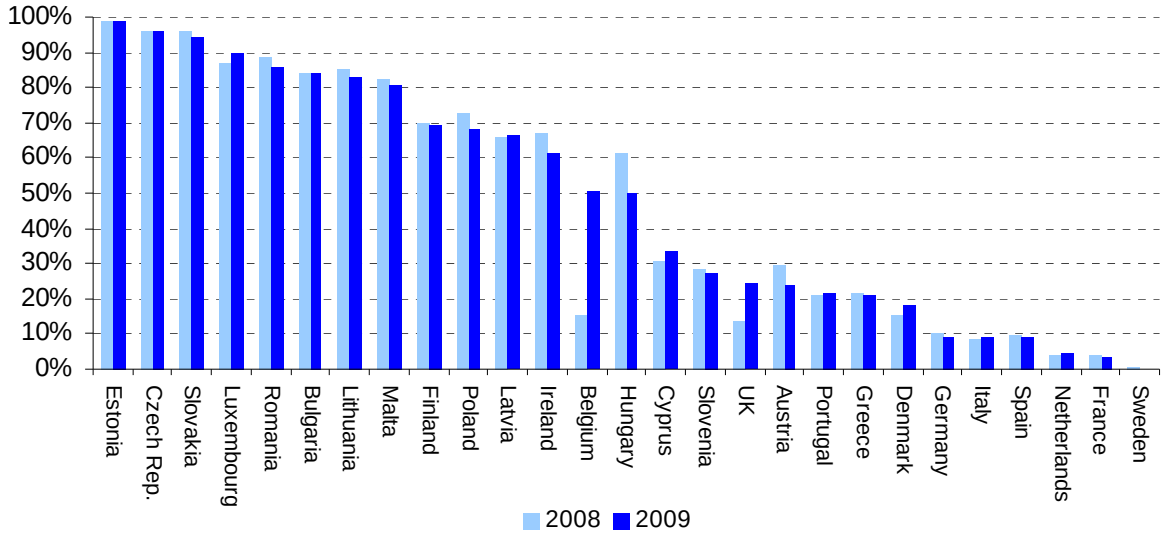
Source: ECB (2009).

Figure 3: Sources of funding for OMLs



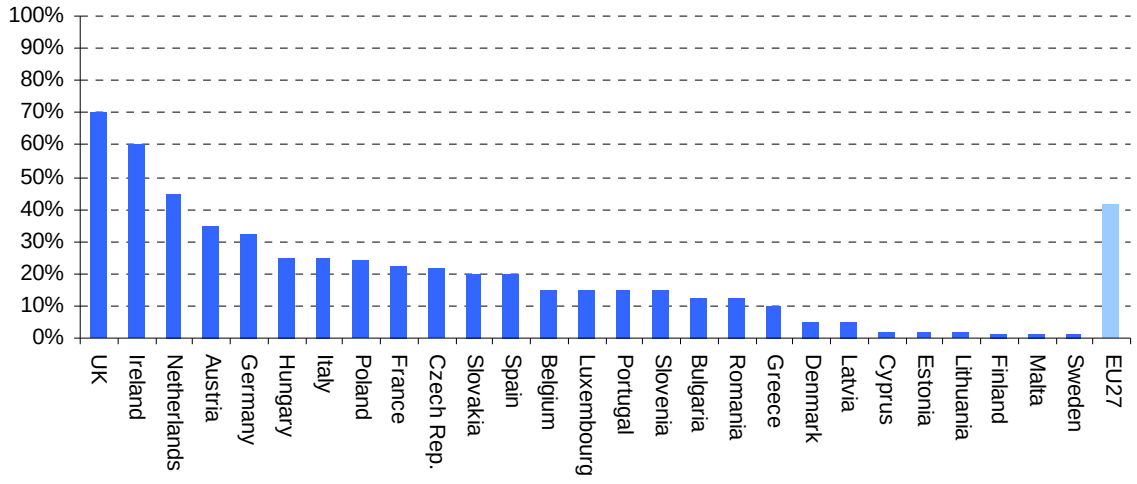
Source: London Economics (2008), survey to OMLs.

Figure 4: Market share (in terms of total assets) of foreign credit institutions.



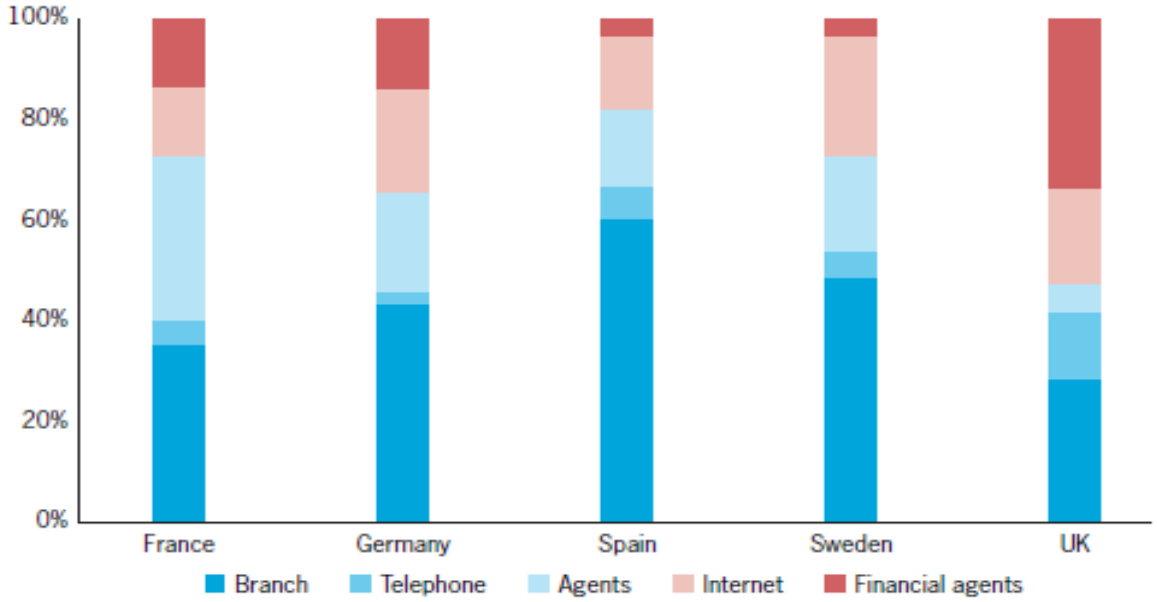
Source: ECB Statistical Data Warehouse, available from http://sdw.ecb.europa.eu/browse.do?node=71390.

Figure 5: Share of intermediary in the distribution of mortgages (by value of mortgage)



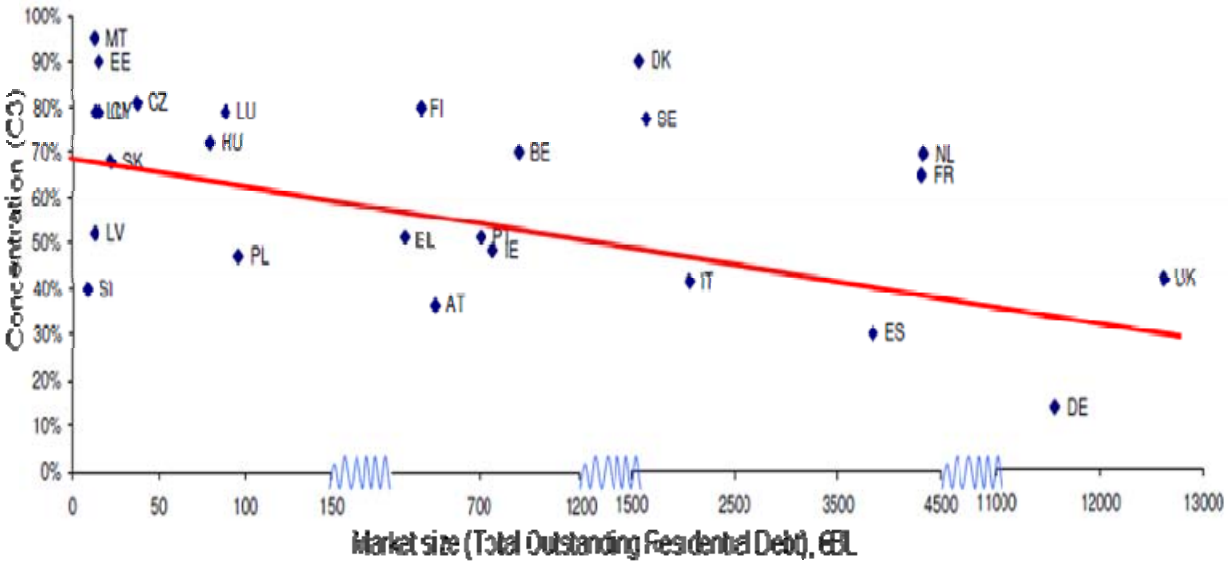
Source: Europe Economics (2009).

Figure 6: Distribution channel mix by country



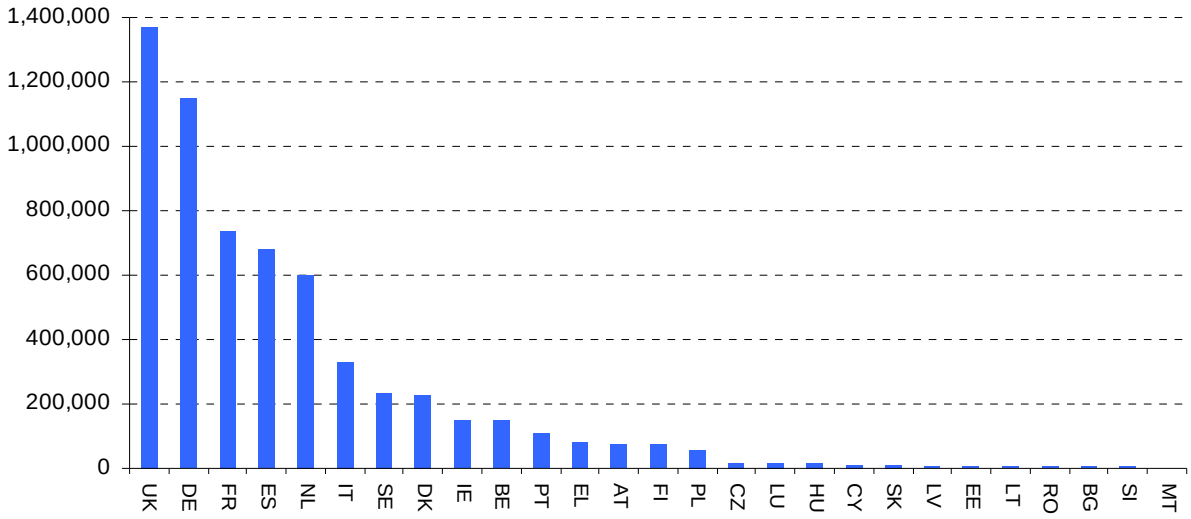
Source: MOW (2007), survey on consumers.

Figure 7: Concentration vs. mortgage market size (2004)



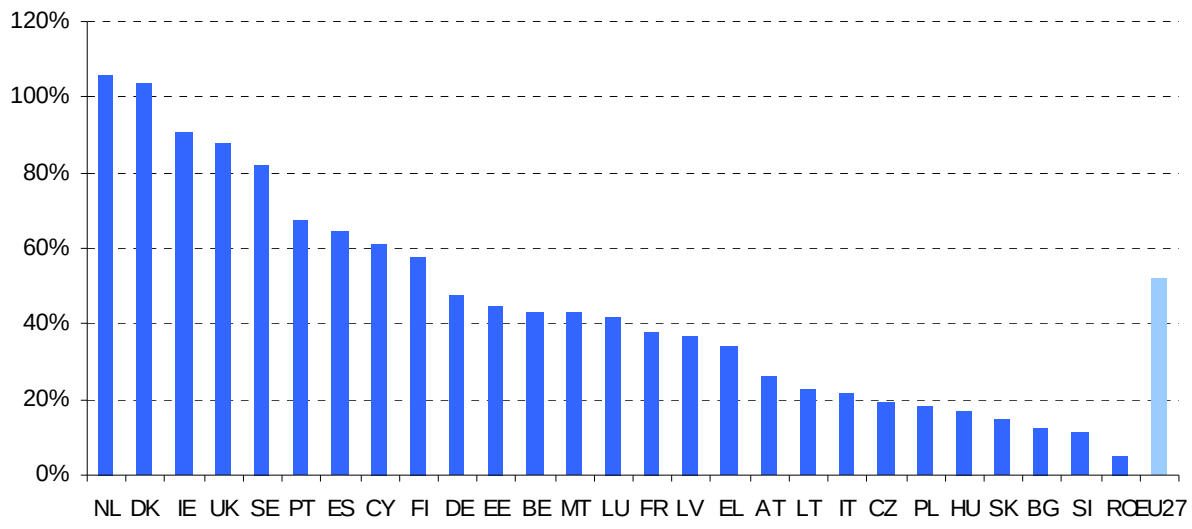
Source: EMF 2010 (market size); ECB (2005) (concentration)

Figure 8: Total Outstanding Residential Loans in million EUR, 2009



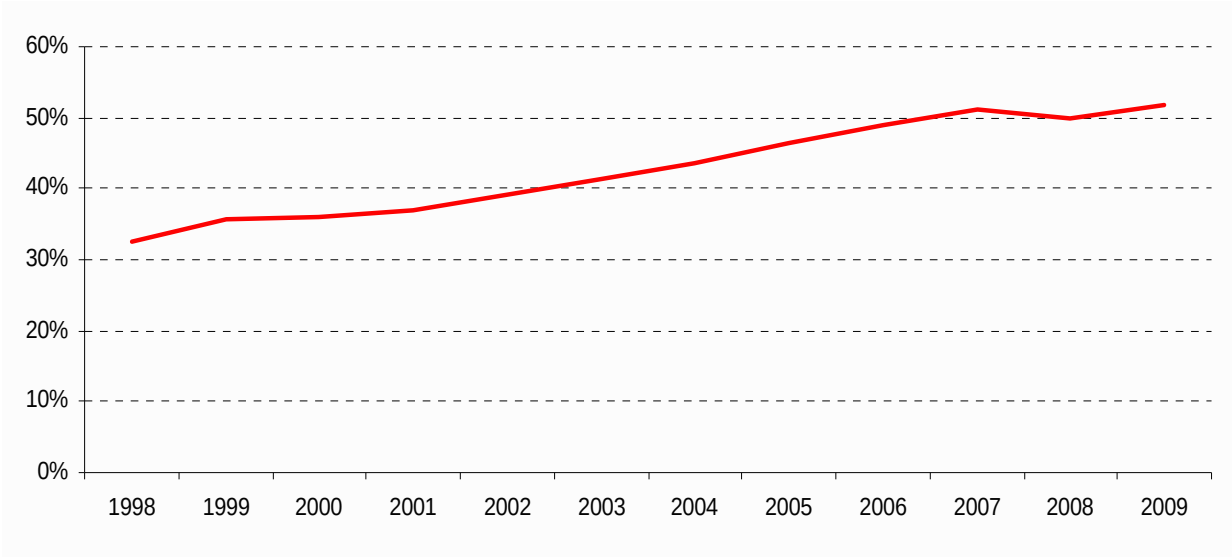
Source: EMF (2010)

Figure 9: Residential Mortgage Debt to GDP ratio (%) (2009)



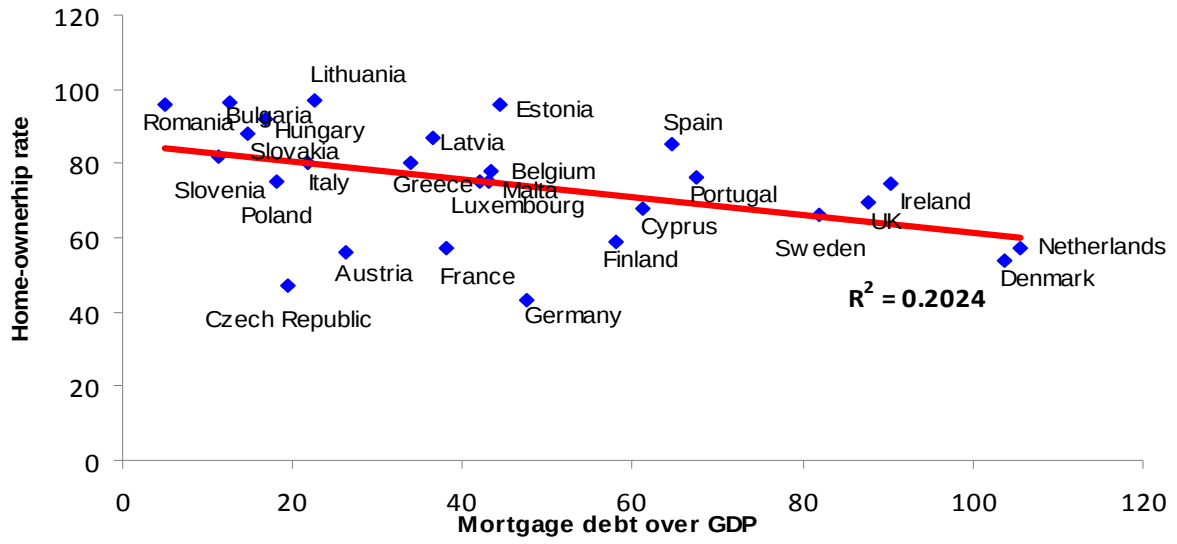
Source: EMF (2010)

Figure 10: Residential Mortgage Debt to GDP ratio (%), average across EU-27



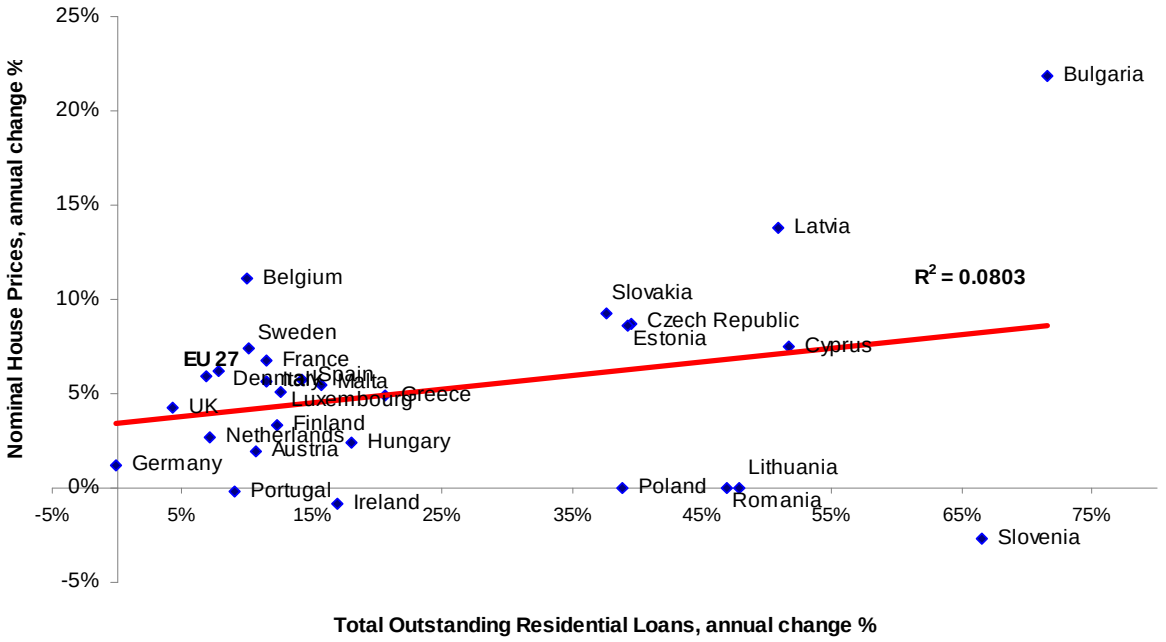
Source: EMF (2010)

Figure 11: Homeownership rate and mortgage debt over GDP (%)



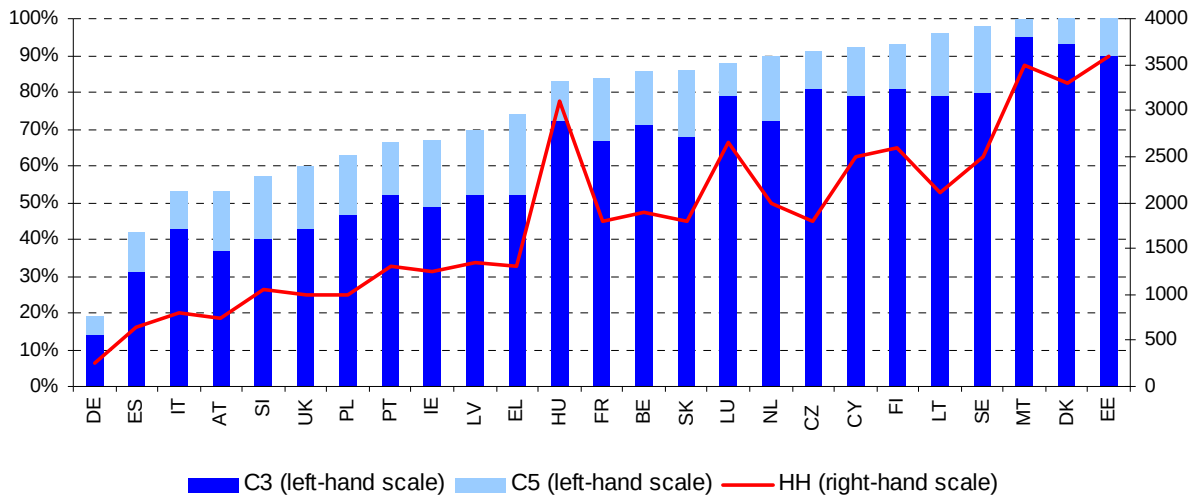
Source: EMF (2010).

Figure 12: Total outstanding residential loans and nominal house prices (average annual changes, years 2004-2009)



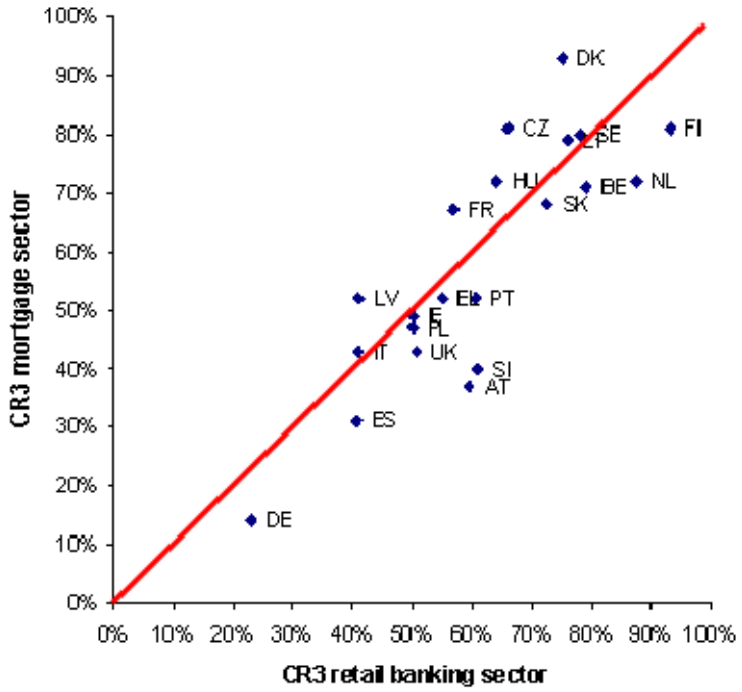
Source: EMF (2010).

Figure 13: CR5, CR3 and Herfindahl index (2004)



Source: ECB (2005).

Figure 14: Market concentration (banking sector vs. mortgage sector; 2004)



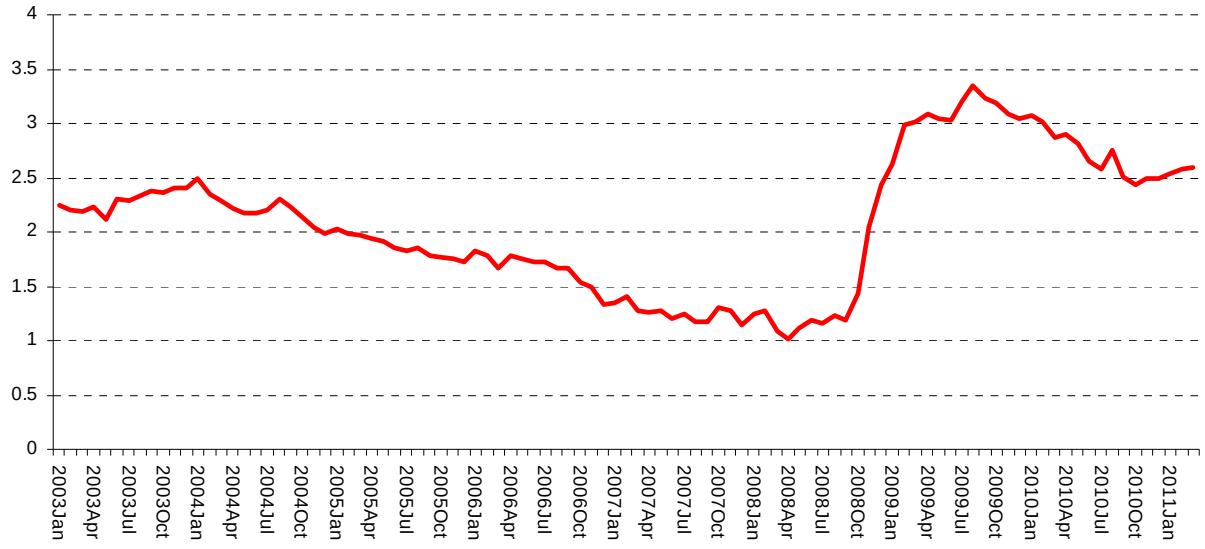
Source: ECB (2005) (data on mortgage sector); European Commission (2007a) (data on banking sector)

Table 2: Concentration in the banking sector (CR5)

	CR5 2005	CR5 2006	CR5 2007	CR5 2008	CR5 2009	Change in CR5 (2005-2009)
Austria	45	43.8	42.8	39	37.2	0.5
Belgium	85.3	84.4	83.4	80.8	77.1	-7.8
Bulgaria	50.8	50.3	56.7	57.3	58.3	-8.2
Cyprus	59.8	63.9	64.9	63.8	65	2
Czech	65.5	64.1	65.7	62.1	62.4	7.5
Denmark	66.3	64.7	64.2	66	64	5.2
Estonia	98.1	97.1	95.7	94.8	93.4	-2.3
Finland	82.9	82.3	81.2	82.8	82.6	1.3
France	51.9	52.3	51.8	51.2	47.2	3.4
Germany	21.6	22	22	22.7	25	-3.1
Greece	65.6	66.3	67.7	69.5	69.2	-0.3
Hungary	53.2	53.5	54.1	54.4	55.2	-0.1
Ireland	47.8	49	50.4	55.3	58.8	-4.7
Italy	26.8	26.2	33.1	33	34	3.6
Latvia	67.3	69.2	67.2	70.2	69.3	11
Lithuania	80.6	82.5	80.9	81.3	80.5	7.2
Luxembourg	30.7	29.1	27.9	27.3	27.8	2
Malta	75.3	70.9	70.2	72.8	72.7	-2.9
Poland	48.5	46.1	46.6	44.2	43.9	-4.6
Portugal	68.8	67.9	67.8	69.1	70.1	1.3
Romania	59.4	60.1	56.3	54	52.4	-7
Slovakia	67.7	66.9	68.2	71.6	72.1	-3.3
Slovenia	63	62	59.5	59.1	59.7	4.4
Spain	42	40.4	41	42.4	43.3	-4.7
Sweden	57.3	57.8	61	61.9	60.7	3.4
UK	36.3	35.9	40.7	36.5	40.8	4.5
EU-27	42.6	41.5	41.5	45.2	44.3	1.7

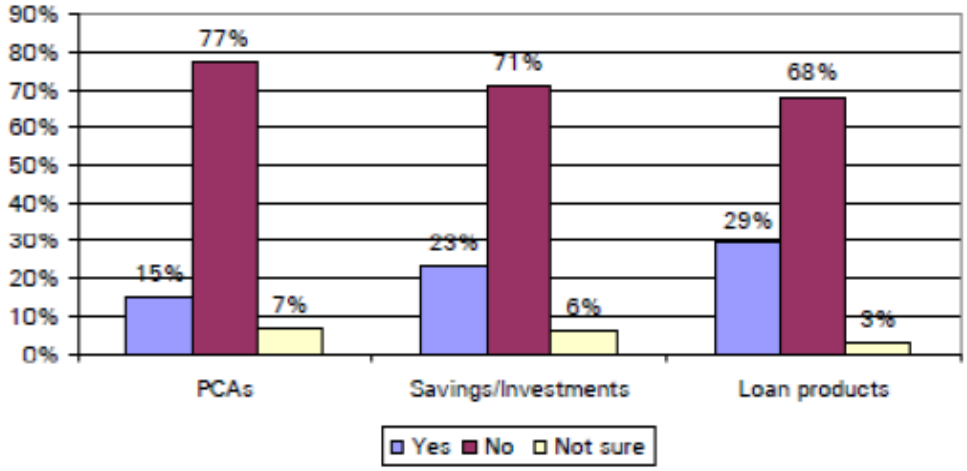
Source: ECB (2010).

Figure 15: Average spreads between mortgage and deposit rates



Source: ECB Statistical Data Warehouse: http://sdw.ecb.europa.eu/browse.do?node=71390

Figure 16: Importance of branches for retail banking services



Source: consumer survey (OFT 2010)

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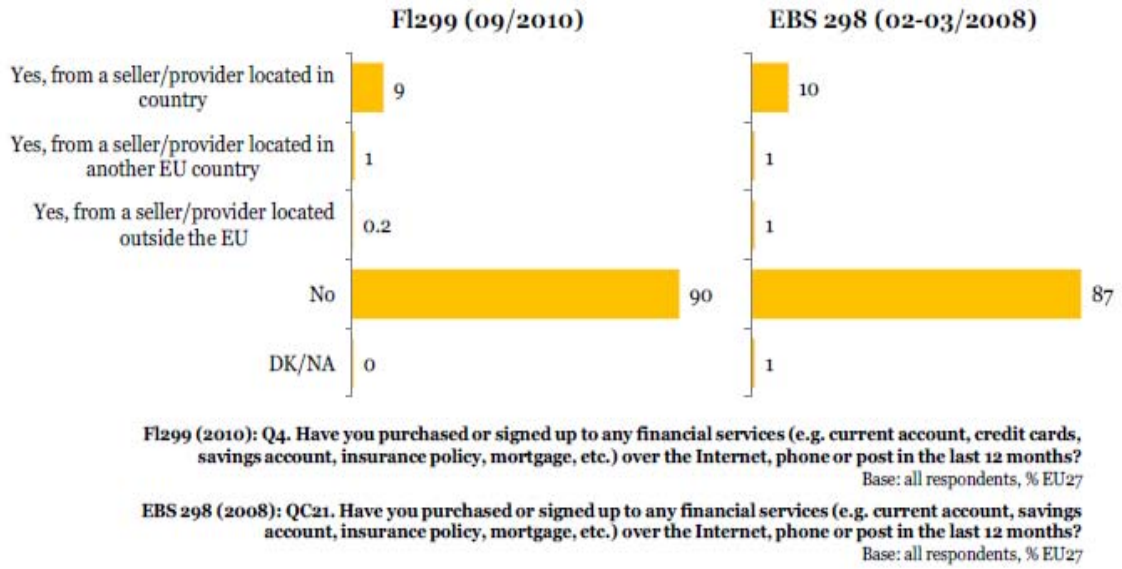
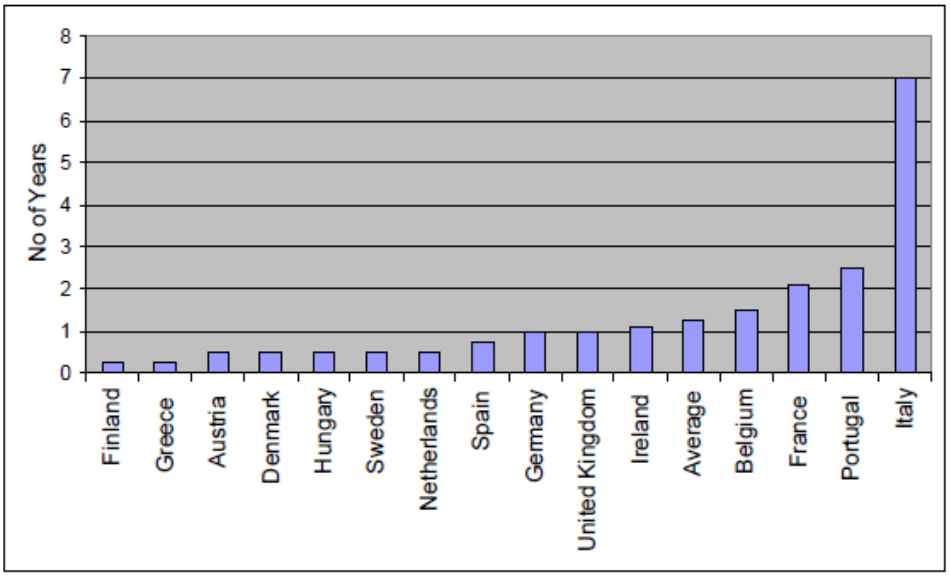
Figure 17: Percentage of financial services sold "at a distance" (internet, phone, post)



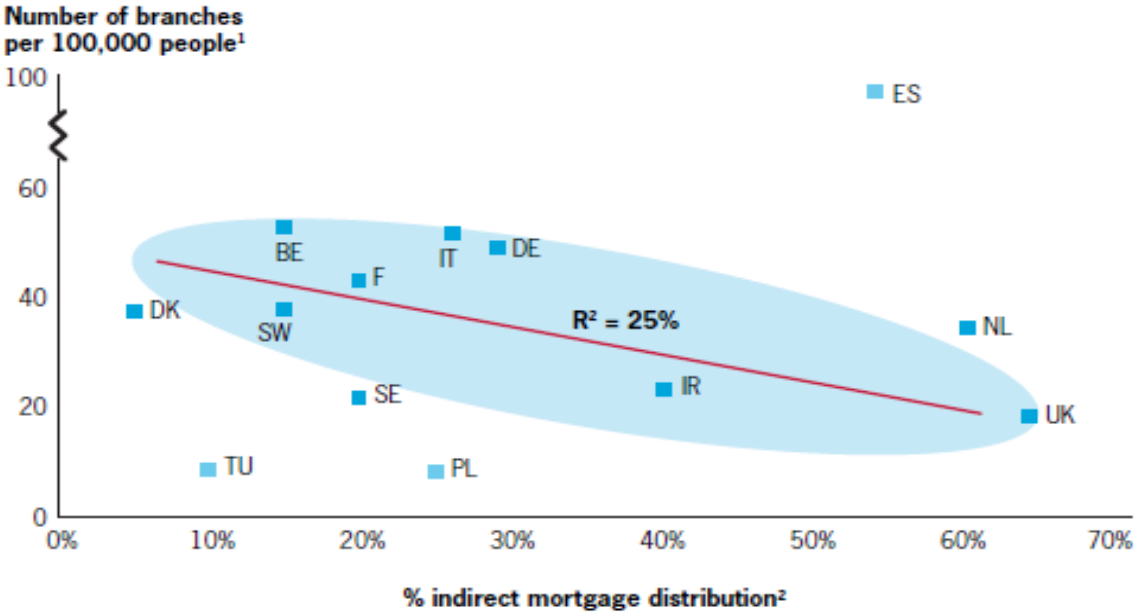
Source: Eurobarometer Flash (2011).

Figure 18: Foreclosures length (2006)



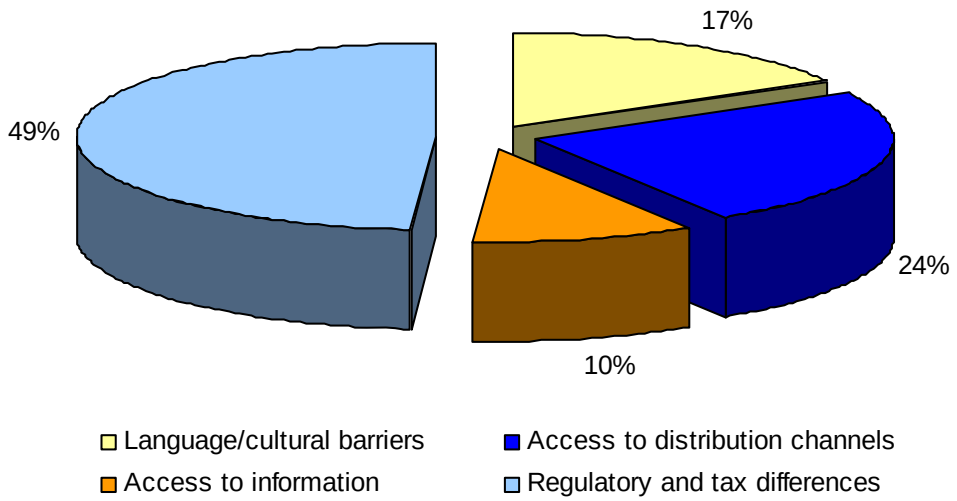
Source: White Paper on the integration of EU mortgage credit (European Commission 2007b, Annex 3).

Figure 19: Physical presence of mortgage banks and indirect distribution



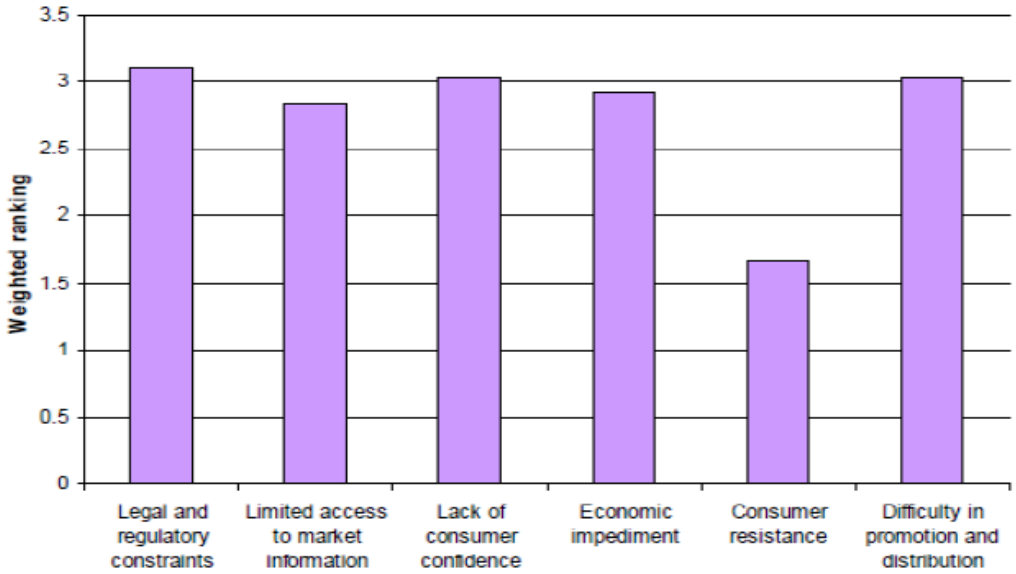
Source: MOW (2007).

Figure 20: Main barriers to cross-border expansion in mortgage markets



Source: MOW (2007), lender survey.

Figure 21: Supply side barriers to cross-border trade



Note: 1 = the barrier is insignificant; 5 = the barrier is very significant

Source: Europe Economics (2009)

Table 3: European Credit Reporting System

Country	Public credit register	no. of private Credit Bureaus			Ownership structure		
		For profit	Not for profit	Not ownership by creditors	≤ 50% Ownership by creditors	> 50% Ownership by creditors	Other
Austria	Yes		1				1
Belgium	Yes						
Bulgaria	Yes	1		1			
Cyprus	No	1				1	
Czech Rep.	Yes	1			1		
Denmark	No	2		2			
Estonia	No	1		1			
Finland	No	1		1			
France	Yes						
Germany	Yes	1			1		
Greece	No	1			1		
Hungary	No	1			1		
Ireland	No	1			1		
Italy	Yes	2	1	1		1	1

Table 3: (continue)

Country	Public credit register	n. of private Credit Bureaus			Ownership structure		
		For profit	Not for profit	Not ownership by creditors	≤ 50% Ownership by creditors	> 50% Ownership by creditors	Other
Latvia	Yes						
Lithuania	Yes	1				1	
Luxembourg	No						
Malta	No	1				1	
Netherlands	No	1	1	1			1
Poland	No	1		-	1	-	
Portugal	Yes	2				1	
Romania	Yes	2		1	1		
Slovakia	Yes	2		1	1		
Slovenia	Yes		1				1
Spain	Yes	2		1		1	
Sweden	No	6		5	1		
United Kingdom	No	3		3			

Source: Expert Group on Credit Histories (2009).

Table 4: Data stored by PCRs and CBs

Country	Data structure				Threshold (€)		CBs operations			
	PCR		CB							
	positive & negative	negative only	positive & negative	negative only	PCR	CB	For creditors only	For creditors+ other service providers	For credit assessment only	For other purposes
Austria	•		•		35000		•		•	•
Belgium	•				200					
Bulgaria	•		•				•		•	•
Cyprus			•							
Czech Rep.	•		•				•		•	
Denmark				•					•	
Estonia			•							
Finland				•			•	•	•	•
France		•			500					
Germany	•*		•		1,5 ML	100	•	•	•	•
Greece			•				•		•	
Hungary			•				•		•	
Ireland			•				•		•	
Italy	•		•	•	30000 **		•		•	

Table 4 : (continue)

Country	Data structure				Threshold (€)		CBs operations			
	PCR		CB							
	positive & negative	negative only	positive & negative	negative only	PCR	CB	For creditors only	For creditors+ other service providers	For credit assessment only	For other purposes
Latvia	•				150					
Lithuania	•			•						
Luxembourg										
Malta				•						
Netherlands			•				•		•	
Poland			•			125	•		•	
Portugal	•		•		50		•		•	
Romania	•		•				•	•	•	
Slovakia	•		•				•		•	
Slovenia			•				•			
Spain	•		•		6000		•	•	•	
Sweden			•				•	•	•	•
United Kingdom			•				•	•	•	•

Note: *Does not cover consumers, **No threshold applies to bad debts

Source: Expert Group on Credit Histories (2009).

Table 5: Retention periods of stored information in credit bureau databases (in months)

Country	Defaults	Defaults then settled
Austria	60	84
Belgium	120	12
Czech Rep.	48	48
Germany	36–48	36–48
Denmark	24-60	0
Finland	24-48	24-36
Greece	120	60
Hungary	n.a.	60
Italy	36	12-36
Netherlands	Ongoing	60
Norway	48	n.a.
Romania	48	48
Russia	180	180
Sweden	36	36
Slovenia	48	48
Slovakia	60	60
Spain	72	0
Turkey	60	60
United Kingdom	72	72

Source: ECRI (2011)

Table 6: Overview of national regulators and main national regulation

Country	Main national regulator	Main national regulation
Austria	Austrian Data Protection Commission	Austrian Data Protection Act (DSG 2000)
Belgium	- The Ministry of Finance (for the NBB) - The Ministry of Economic Affairs (for the credit register)	Loi centrale des crédits aux particuliers (10 August 2001)
Czech Rep.	Data Protection Office	- Personal Data Protection Act - Commercial Code
Germany	Federal Data Protection Authority (Bundesbeauftragter für Datenschutz)	German Federal Data Protection Act (Bundesdatenschutzgesetz - BDSG)
Denmark	DataInspection	Personal Data Protection Act (Persondataloven)
Finland	Data Protection Ombudsman Ministry of Justice	- Credit information act - Personal data act
Greece	Data Protection Authority (DPA) and Parliament	- L. 2472/1997 - L. 3259/2004 as amended by L. 3746/2009 and by L. 3816/2010 - L.3869/2010 - DPA's decisions 24 and 25/2004
Croatia	Not yet	Croatian Act on Registries (in preparation by the Ministry of Finance)
Hungary	Parliament	Act CXII of 1996 on credit institutions and financial enterprises
Island	Data Protection Authority	Data Protection Authority
Italy	Data Protection Authority	- Data Protection Code - Code of Conduct*
Netherlands	Dutch Data Protection Authority	Personal Data Protection Act (Wbp)
Norway	Data Protection Authority	Personal Data Act
Poland	- Ministry of Economy - General Inspector for Personal Data Protection	- Banking Law (Act on the Access of Economic Information) - Personal Data Protection Act
Romania	Data Protection Authority	- Law no. 677/2001 on personal data processing - Data Protection Authority Decision no. 105/2007 on personal data processing by the credit bureaus
Russia	Federal Service on Financial Markets	Federal Service on Financial Markets
Sweden	- Justice Department - Data Protection Board	Credit Bureau Act
Slovenia	Data Protection Office	Banking Law

Table 6: (continue)

Country	Principal national regulator	Principal national regulation
Slovakia	Data Protection Authority	- Personal Data Protection Act - Banking Act - Commercial Code
Spain	Agencia Española de Protección de Datos	Ley Orgánica 15/1999, de 13 de diciembre, de protección de datos de carácter personal
UK	Information Commissioner	- Data Protection Act 1998 - Representation of the People Act 2001

Note: * "Code of conduct and professional practice applying to information systems managed by private entities with regard to consumer credit, reliability, and timeliness of payments".

Source: ECRI (2011)

Figure 22: Formal cross-border data exchange agreements in Europe

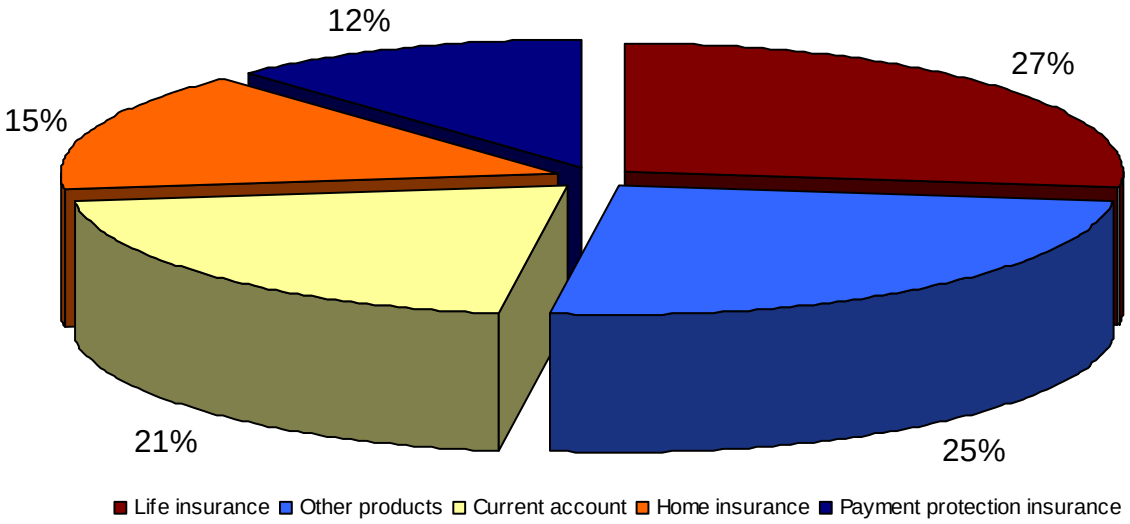
Source: ECRI (2011)

Table 7: Percentage of banks requiring mortgages customers to open a current account

Country	
Austria	0%
Belgium	33%
Cyprus	67%
Czech Rep.	67%
Denmark	63%
Finland	75%
France	70%
Germany	11%
Greece	83%
Hungary	100%
Ireland	14%
Italy	69%
Latvia	100%
Lithuania	100%
Luxembourg	50%
Malta	67%
Netherlands	0%
Poland	50%
Portugal	100%
Slovakia	100%
Slovenia	25%
Spain	86%
Sweden	20%
United Kingdom	8%
EU-15 Average	43%
NMS Average	67%
EU-25 Average	47%

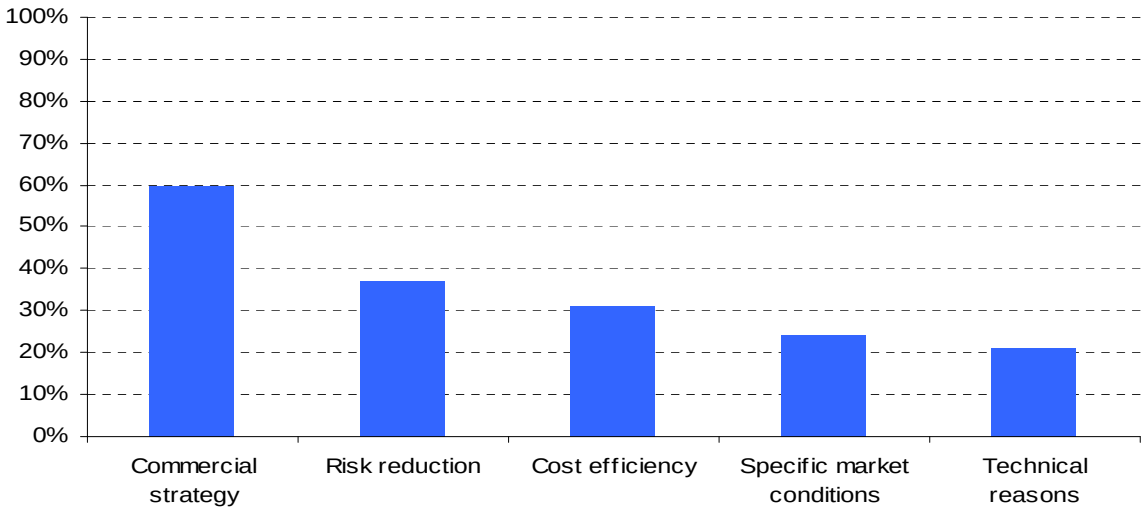
Source: European Commission (2006).

Figure 23: Products combined with mortgage loans



Source: CEPS (2009).

Figure 24: Reasons for selling bundles



Source: CEPS (2009), survey.

Table 8: Share of intermediated sales of mortgages and other lending secured on property, 2007

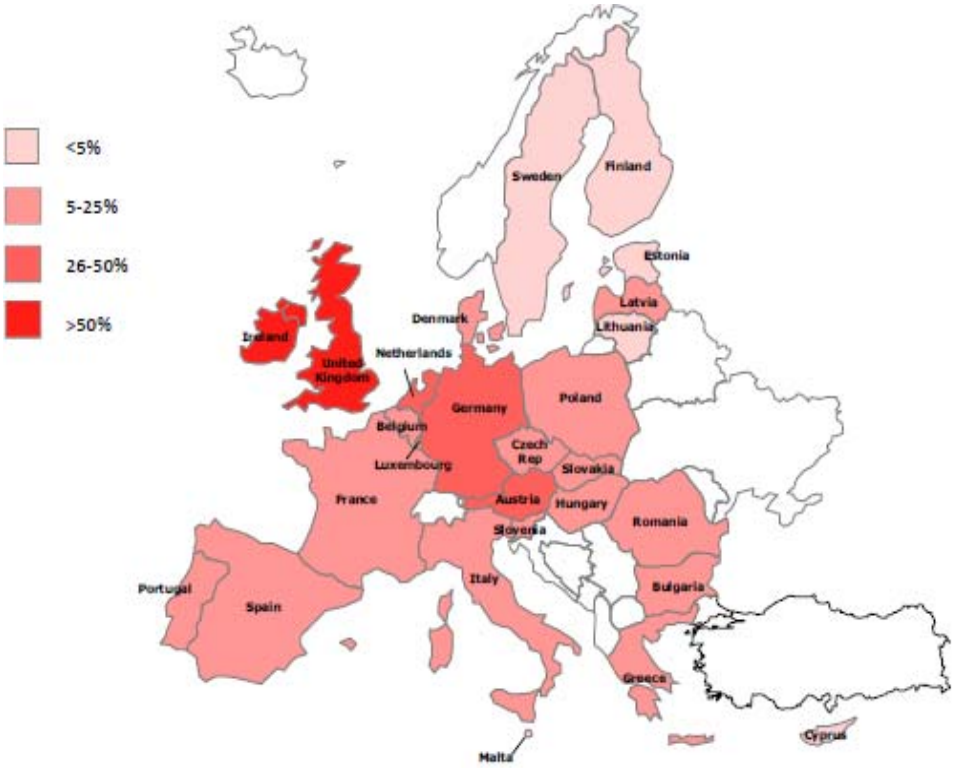
Country	Intermediary share (%) (by value of mortgage)	Value (FLOW) €m	Volume (FLOW) 000s
Austria	35.0%	1,422	14
Belgium	15.0%	3,424	34
Bulgaria	12.5%	377	19
Cyprus	2.0%	52	3
Czech Republic	22.0%	1,462	21
Denmark	5.0%	2,161	22
Estonia	2.0%	43	2
Finland	1.0%	289	3
France	22.5%	33,030	330
Germany	32.5%	38,870	268
Greece	10.0%	1,520	20
Hungary	25.0%	728	24
Ireland	60.0%	20,285	203
Italy	25.0%	23,533	193
Latvia	5.0%	102	5
Lithuania	2.0%	37	2
Luxembourg	15.0%	656	4
Malta	1.0%	1	0
Netherlands	45.0%	39,816	346
Poland	24.0%	656	15
Portugal	15.0%	1,062	14
Romania	12.5%	2,678	134
Slovakia	20.0%	444	15
Slovenia	15.0%	263	4
Spain	20.0%	27,176	163
Sweden	1.0%	455	5
United Kingdom	70.0%	363,589	1,605
Total		564,130	3,468

Table 8 : (continue)

Country	Intermediary share (%) (by value of mortgage)	Value (FLOW) €m	Volume (FLOW) 000s
EU-27 average	41.5%		
EU-15 average	42.6%		
Eurozone average	27.2%		
EU-12 average (NMS)	13.8%		

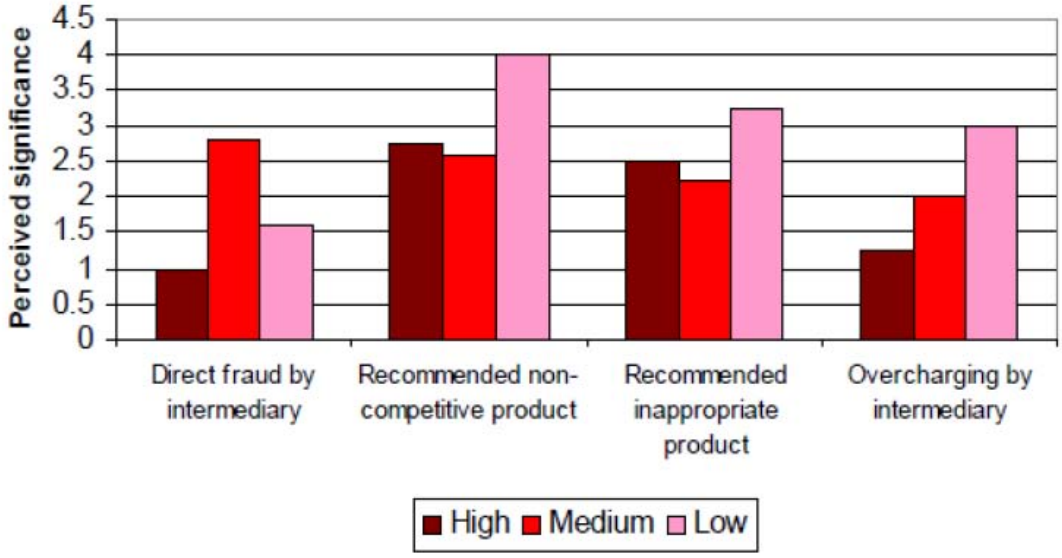
Source: Europe Economics (2009).

Figure 25: Intermediary penetration in the mortgage credit market



Source: Europe Economics (2009).

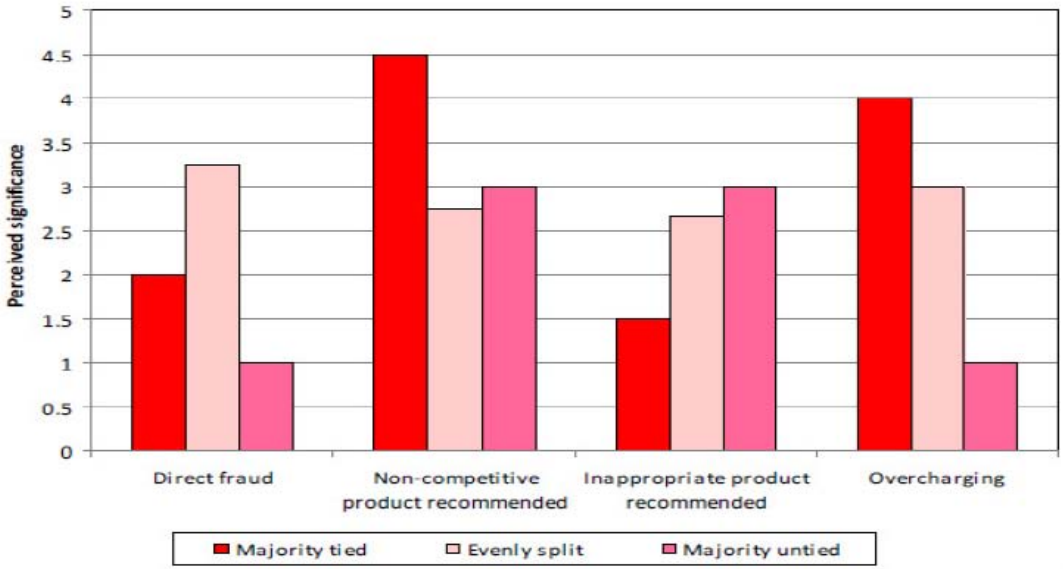
Figure 26: The perceived significance of specific sources of consumer detriment in mortgage intermediation



Note: 5 indicates high perceived significance, 1 indicates no or negligible significance

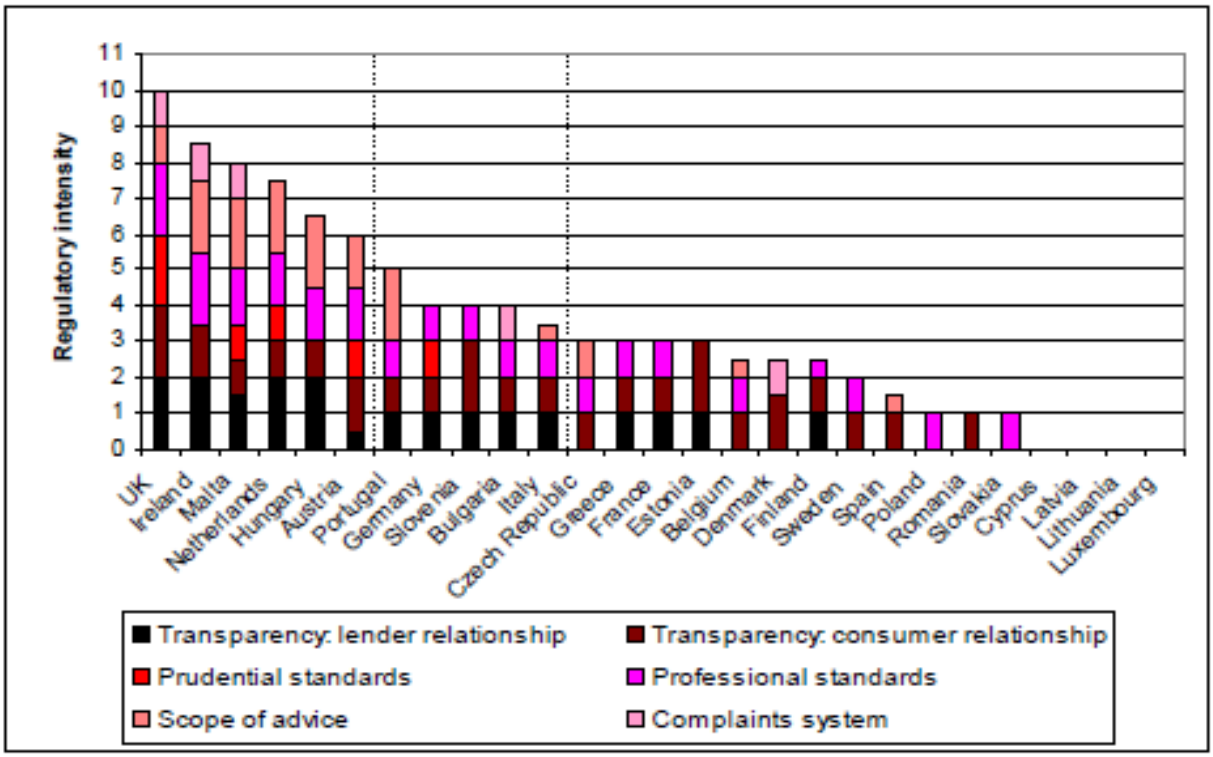
Source: Europe Economics (2009).

Figure 27 : Perceived detriment and industry structure



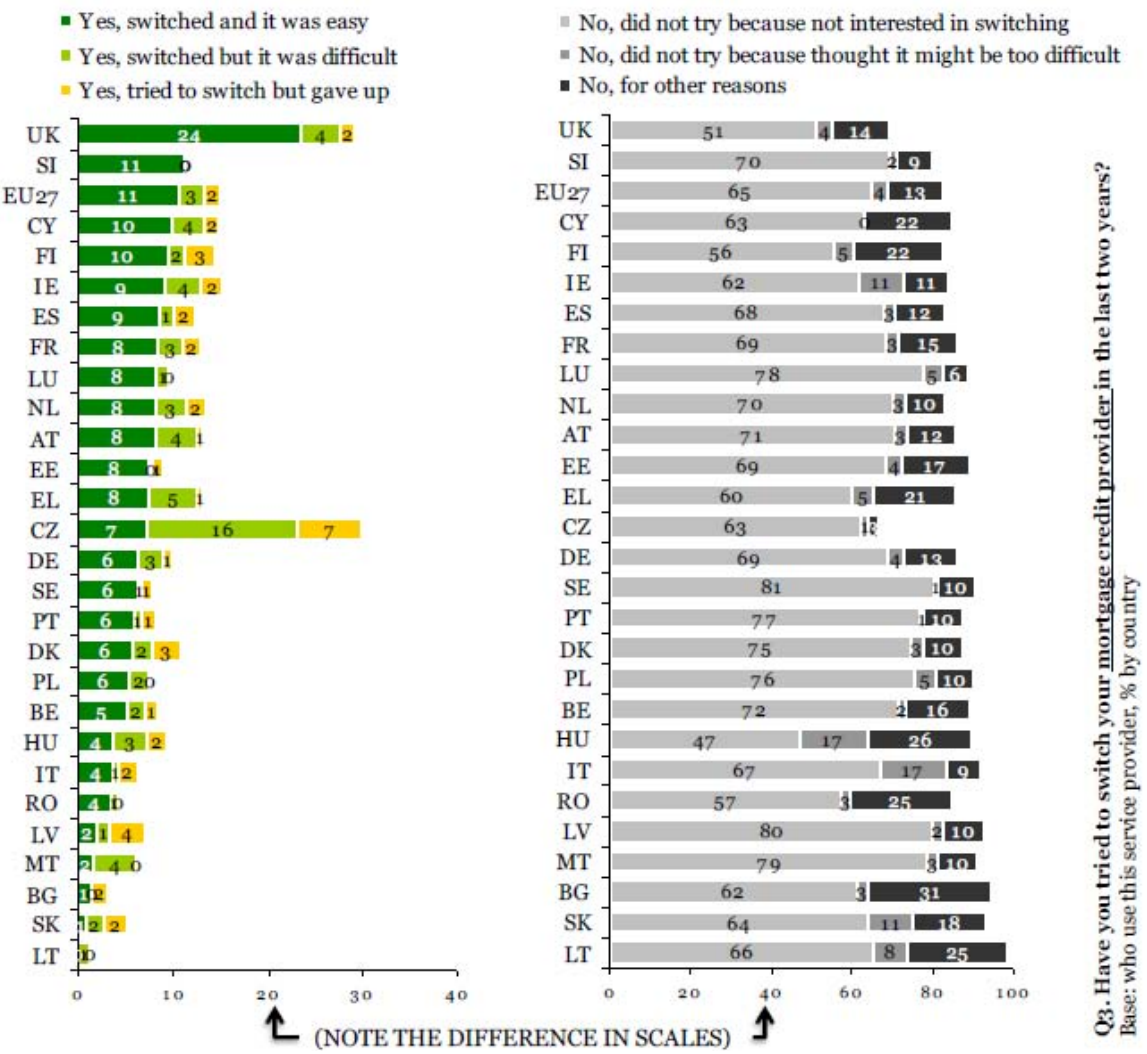
Source: Europe Economics (2009).

Figure 28 : Regulatory framework for residential mortgage intermediaries – EU-27



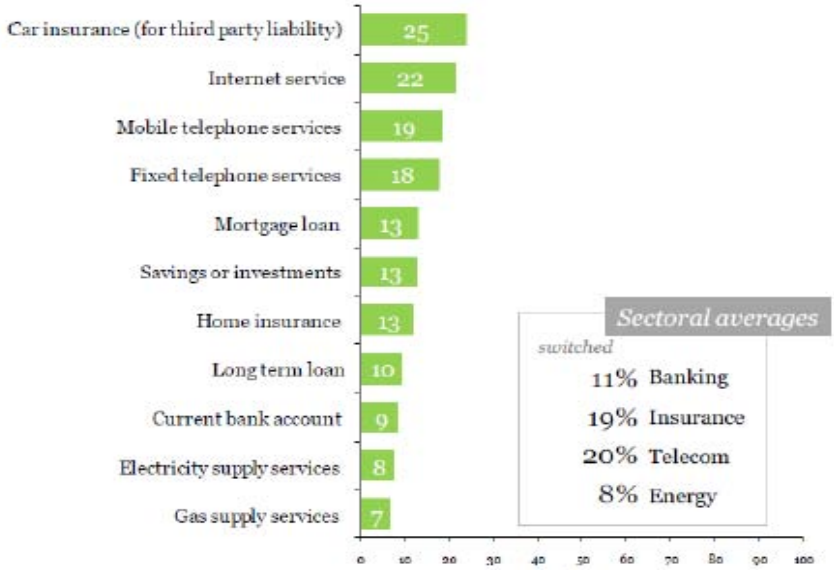
Source: Europe Economics (2009).

Figure 29: Percentage of switchers across EU-27 mortgage markets



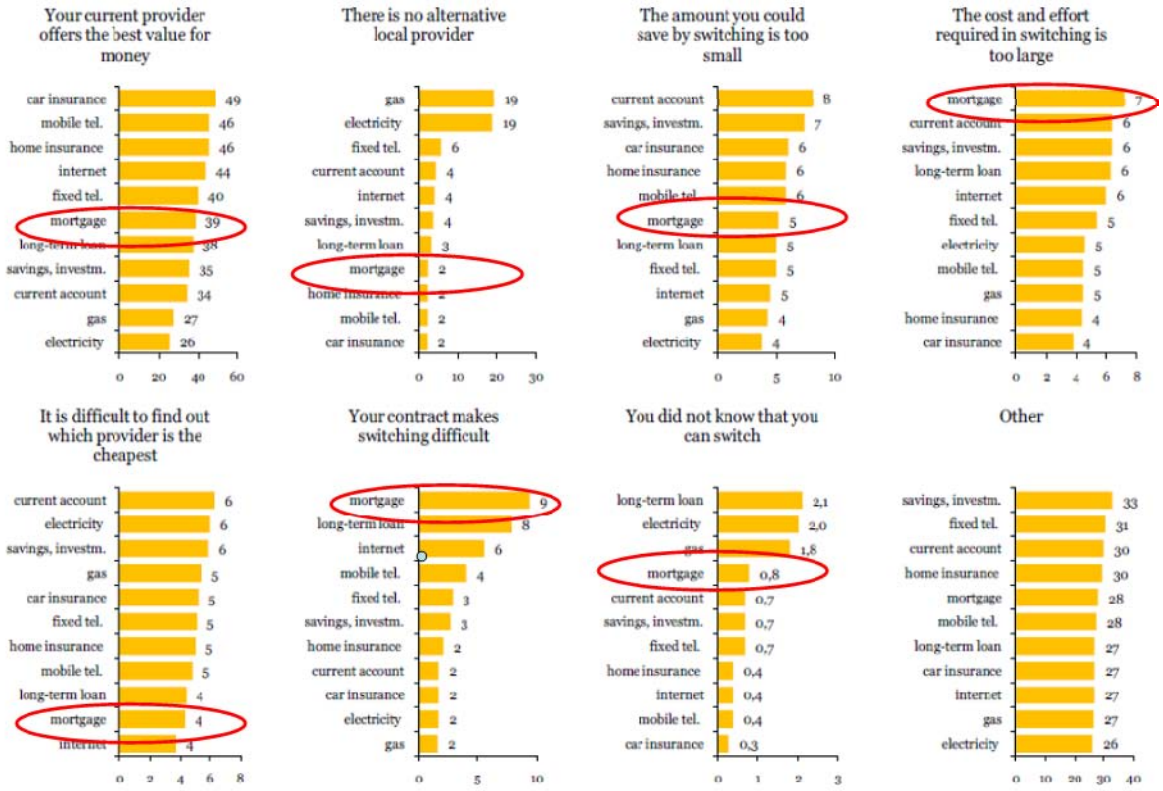
Source: Eurobarometer Flash (2009).

Figure 30 : Switching consumers (across sectors)



Source: Eurobarometer Flash (2009).

Figure 31: Reasons for not switching



Source: Eurobarometer Flash (2009)

Table 9: Restrictions on early repayment

Country	Ability to repay		Compensation		
	Contractual option	Universal legal right	No compensation	Caps	No legal limits
Austria		X		X	
Belgium		X		X	
Bulgaria	n.a.	n.a.	n.a.	n.a.	n.a.
Cyprus	X (1)	X (2)		X	
Czech Republic	X				X
Denmark	X				X
Estonia	X (3)	X (4)			X
Finland		X		X (5)	
France		X		X	

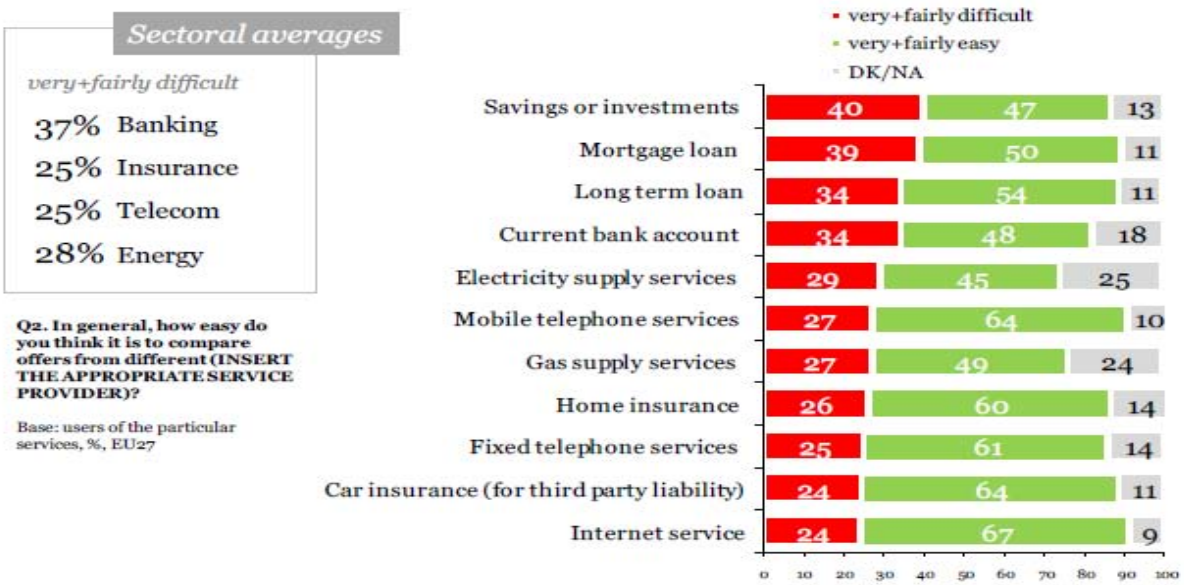
Table 9: (continue)

Country	Ability to repay		Compensation		
	Contractual option	Universal legal right	No compensation	Caps	No legal limits
Germany	X (6)	X (4)	X (7)		X (8)
Greece	X				X
Hungary	X				X
Ireland		X			X (9)
Italy		X	X		
Latvia		X	X		
Lithuania		X(10)			X
Luxembourg	n.a.	n.a.	n.a.	n.a.	n.a.
Malta	n.a.	n.a.	n.a.	n.a.	n.a.
Netherlands	X				X
Poland	X(11)	X(12)	X(12)		X(11)
Portugal		X			X
Romania	n.a.	n.a.	n.a.	n.a.	n.a.
Slovakia		X			X
Slovenia		X			X
Spain		X		X	
Sweden		X			X(9)
United Kingdom	X				X

Notes: (1) For loans over EUR 85000. (2) For loans under EUR 85 000 (rules for consumer credit apply). (3) For fixed interest rate loans. (4) For variable interest rate loans. (5) Only if amount of credit exceeds EUR 17 000, interest rate is fixed and new interest rate by the same creditor is lower than the interest rate originally agreed upon. Maximum compensation is difference between interest rate originally agreed upon and new interest rate. (6) For fixed interest rate loans. However, there is a right to terminate the loan at the end of the fixed interest period (if the fixed interest period ends before the allotted repayment date and no new agreement has been entered regarding the interest rate) and in any case after 10 years. These rights cannot be waived. In addition, there is a right to terminate the contract 'for cause' which requires a legitimate interest of the borrower, for instance if the borrower needs to sell his house due to a move. This right can be waived by the consumer. (7) For variable interest rate loans at all times and for fixed interest rate loans after 10 years and at the end of a given fixed-interest period. (8) For fixed interest loans, in case of termination 'for cause'. (9) (6) Only during the period of fixation for fixed interest rate loans. (10) Borrower shall have right to ERP to conditions established by contract. (11) For loans over EUR 20 100. (12) For loans under EUR 20 100 (rules for consumer credit apply).

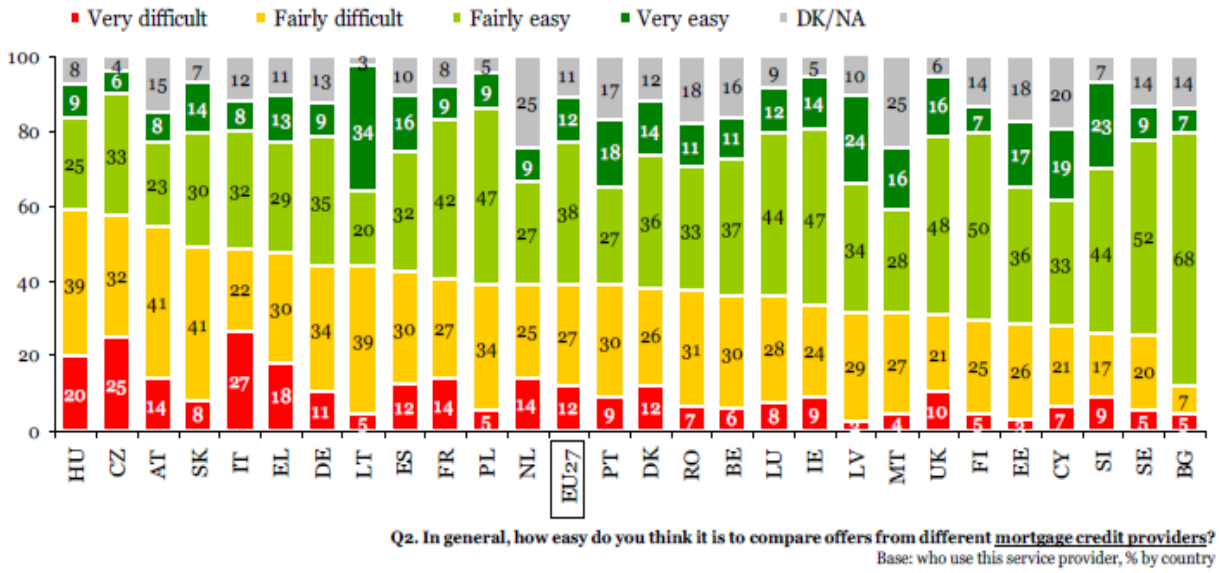
Source: White Paper on the integration of EU mortgage credit (European Commission 2007b, Annex 3).

Figure 32: Comparability of offers



Source: Eurobarometer Flash (2009).

Figure 33: Difficulty in comparing offers



Source: Eurobarometer Flash (2009).

Table 10: Percentage of questions answered correctly

Title	Percentage of questions answered correctly		Difference between forms (prototype – current)	
Loan scenario and borrower type N. of respondents (current forms / prototype form)	Current forms	Prototype form	Percentage point difference	Percentage change
Both loans combined				
All borrowers (411/408)	60.8%	79.7%	19.0*	31.3%
Prime borrowers (204/211)	62.0%	80.6%	18.6*	30.0%
Subprime borrowers (207/197)	59.6%	78.8%	19.2*	32.2%
Simple purchase loan				
All borrowers (205/210)	65.9%	81.9%	16.0*	24.3%
Prime borrowers (100/102)	67.0%	82.6%	15.6*	23.3%
Subprime borrowers (105/99)	65.0%	81.2%	16.2*	24.9%
Complex refinance loan				
All borrowers (206/207)	55.7%	77.7%	22.0*	39.5%
Prime borrowers (104/109)	57.2%	78.8%	21.6*	37.8%
Subprime borrowers (102/98)	54.0%	76.4%	22.4*	41.5%

Notes: Two tailed t-tests were used to test the differences. * indicates significance at the one percent level.

Source: FTC (2007).

EUROPEAN PARLIAMENT

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

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