Box 2

CROSS-COUNTRY HETEROGENEITY IN MFI INTEREST RATES ON LOANS TO NON-FINANCIAL CORPORATIONS IN THE EURO AREA

The dynamics of bank lending rates on loans to non-financial corporations (NFCs) have been highly heterogeneous across countries since the start of the financial crisis. Heterogeneity has increased further, following the intensification of euro area sovereign debt concerns in 2010. This box uses detailed MFI interest rate statistics to analyse developments in interest rates on loans to NFCs in the four largest euro area economies and in the EU/IMF programme countries. It first analyses developments in MFI interest rates on loans with different maturities and then describes the dynamics of interest rates on loans of different sizes. The box concludes with a discussion of the possible reasons for the observed heterogeneity.

Computing an indicator of the cost of borrowing for euro area non-financial corporations

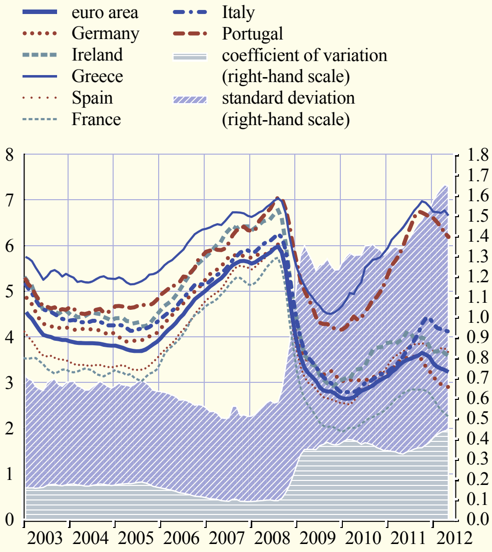
The borrowing costs of NFCs located in different countries vary, reflecting differences in their economies and in the structure of their financial sectors. For an accurate assessment of developments in borrowing costs in the euro area, the overall financing structure of firms must be taken into account when computing an indicator of the marginal cost of loans to NFCs. For example, MFI interest rate statistics on short-term loans to NFCs, which capture bank lending rates on loans with a rate fixation period of up to one year, only offer a partial view of firms' financing costs in some countries. That is because those statistics do not include overdrafts, which are a major source of finance for firms in some euro area economies (e.g. Italy and Portugal). Indeed, because interest rates on overdrafts are higher than other short-term bank lending rates, the estimated borrowing costs tend to be lower if those data are excluded, in particular in countries where overdrafts are an important source of firms' external finance.[1]

Chart A shows an indicator of the short-term cost of borrowing for NFCs in the euro area which includes data on overdrafts. The indicator is a weighted average of bank lending rates on loans with a rate fixation period of up to one year and interest rates on overdrafts, using outstanding amounts as a weighting scheme. The chart shows that the short-term cost of borrowing for NFCs has tended to be lower in Germany, Spain, France and Italy than in Greece and Portugal.

1 It should be noted that lending rate statistics do not capture the full cost of borrowing from MFIs, because they do not include fees and other non-interest related costs that non-financial corporations incur when taking out a loan.

Chart A Indicator of the short-term cost of borrowing for non-financial corporations

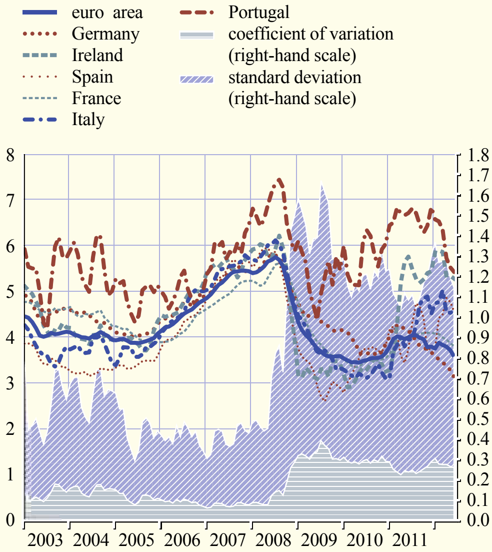
(percentages per annum; three-month moving averages; March 2003 to September 2012)



Sources: ECB, as well as the MIR and BSI databases.
Notes: The indicator is computed using lending rates on loans with a maturity of up to one year and interest rates on overdrafts, aggregated on the basis of amounts outstanding. The weight applied to lending rates on loans with a maturity of up to one year accounts for the share of long-term loans issued at a floating rate. The coefficient of variation and the standard deviation are computed for all euro area countries where data are available, based on a changing composition of countries.

Chart B Indicator of the long-term cost of borrowing for non-financial corporations

(percentages per annum; three-month moving averages; March 2003 to September 2012)



Sources: ECB and the MIR database.
Notes: Long-term lending rates on loans with a maturity of more than one year. Aggregation is based on new business volumes. The coefficient of variation and the standard deviation are computed for all euro area countries where data are available, based on a changing composition of countries. Data for Greece are not available.

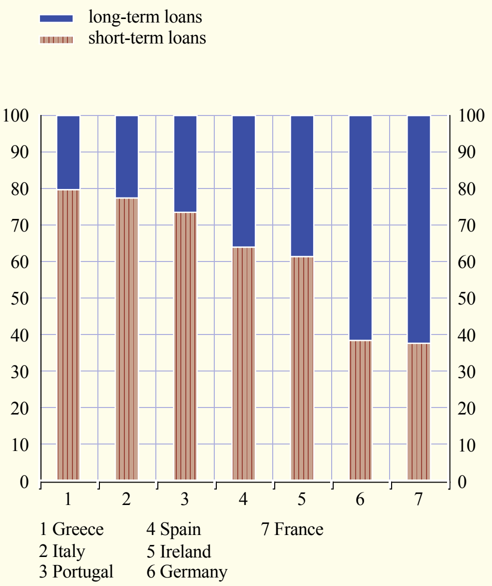
The long-term cost of borrowing for NFCs, aggregated at the euro area level on the basis of long-term moving averages of new business volumes, has been more volatile and has tended to follow a less clear-cut structural pattern (see Chart B).

The short and long-term costs of borrowing for NFCs have both exhibited different dynamics across countries in response to the financial crisis and the intensification of concerns about sovereign debt in the euro area. In the early stages of the financial crisis in late 2008 and in 2009, short-term lending rates tended to contract to a lesser extent in Greece and Portugal than in the other euro area countries. Thereafter, following the intensification of sovereign debt tensions in 2010, rates in these two countries started to rise sooner and more rapidly than in the other euro area countries. Since mid-2011 the short-term cost of borrowing has also increased in Italy and remains above the level recently recorded in the other euro area economies. With regard to interest rates on long-term loans, the cost of borrowing has increased in Italy and Spain since mid-2011, while it has contracted in Germany and France.

The heterogeneous developments in the short and long-term cost of borrowing for NFCs are reflected in measures of the dispersion of lending rates across countries. In particular, the dispersion of interest rates on both short and long-term loans to NFCs increased significantly in the early stages of the crisis in late 2008 and early 2009. Although the dispersion narrowed somewhat in the period from late 2009 to mid-2011, it has thereafter tended to widen again in the case of short-term loans. By contrast, the dispersion of lending rates on long-term loans contracted somewhat

Chart C The share of short and long-term loans in total loans

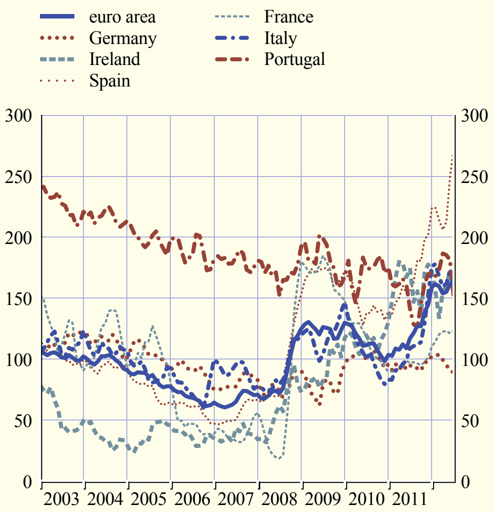
(percentages; September 2012)



Sources: ECB, as well as the MIR and BSI databases.
Notes: Short-term loans are those with a maturity of up to one year, plus overdrafts and the share of long-term loans issued at a floating rate. The data are aggregated on the basis of outstanding amounts.

Chart D The spread between lending rates on small and large loans

(percentages per annum; three-month moving averages; March 2003 to September 2012)



Sources: ECB and the MIR databases.
Notes: Lending rates have been aggregated using new business volumes. Small loans are loans of up to €1 million, while large loans are those of over €1 million. Data for Greece are not available.

recently.[2] Developments in short and long-term lending rates on loans to corporations result in different funding pressures across countries, owing to differences in the financing structure of firms. Chart C shows that NFCs in Greece, Ireland, Spain, Italy and Portugal rely more heavily on short-term financing than their counterparts in Germany and France.

Heterogeneities in bank lending rates for small and medium-sized enterprises in the euro area

Based on the assumption that loans to small and medium-sized enterprises (SMEs) are generally smaller than loans to large corporations, a breakdown of lending rates into those applied to small loans and those for large loans permits a more detailed analysis of the borrowing costs of SMEs.[3] A long data series on MFI interest rates is available in the MIR database, distinguishing between lending rates on loans of up to €1 million and those on loans of over €1 million. Chart D shows that the spread between lending rates on these two types of loan is positive for all the countries considered. Lending rates on loans to small businesses are higher than those on loans to large businesses, owing to the higher transaction costs and weaker bargaining power of SMEs and the higher business risk they represent (given that they have fewer assets and a higher probability of default), among other factors. The chart also shows that during the crisis in late

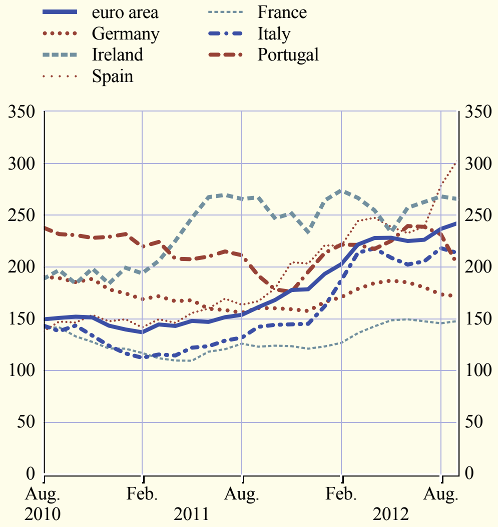
2 For an analysis of heterogeneities in mortgage interest rates in the euro area, see Kok Sørensen, C. and Lichtenberger, J-D., "Mortgage interest rate dispersion in the euro area", *Working Paper*, No. 733, ECB, February 2007.

3 The size of loans may also be related, to some extent, to the purpose (e.g. inventory financing, working capital, long-term investment) and the duration of the loan.

2008 and in 2009, bank financing conditions for SMEs deteriorated sharply in most euro area countries, but particularly so in Ireland, Spain, France and Italy. The situation improved in all countries during 2010, but has deteriorated again since 2011. The spread between bank lending rates on small and large loans has recently widened again, particularly in Spain, Italy and Portugal. In France, the increase has been more moderate.

Chart E Spread between lending rates on very small and large loans

(percentages per annum; three-month moving averages; August 2010 to September 2012)



Sources: ECB and the MIR databases.
Notes: Very small loans are loans of up to €0.25 million, while large loans are those above €1 million. Aggregation is based on new business volumes. Data for Greece are not available.

The €1 million ceiling used to define small loans may be too high a proxy for lending to SMEs. Consequently, since June 2010, the ECB has collected more refined data on bank interest rates on small loans. Specifically, the category of loans of up to €1 million was broken down into two sub-categories, which capture loans of up to €0.25 million and loans of over €0.25 million and up to €1 million. This additional breakdown permits a more precise measure of the borrowing costs of SMEs.[4] Chart E shows that the spread between interest rates on very small loans (of up to €0.25 million) and large loans (of over €1 million) is wider than that between small (of up to €1 million) and large loans (over €1 million) shown in Chart D for each of the countries considered. As was the case for the spread between lending rates on loans of up to €1 million and those on loans of over €1 million, the spread between interest rates on very small loans and large loans shown in Chart E has increased since 2011, particularly in the case of Spain, Italy and Ireland. In Germany and France, the spread has also increased since the beginning of 2012, although to a much lesser extent. The spread between bank lending rates for very small loans and large loans remains high by historical standards, standing at about 240 basis points, on average, in the euro area in September 2012.

Factors affecting the dynamics of bank lending rates on loans to non-financial corporations

Although it is difficult to isolate the precise determinants of cross-country divergences in MFI lending rates, a number of driving factors seem to be at play. First, the structure of the financial system differs across countries. Lending rates tend to be lower in economies where bank competition is stronger and alternative, market-based sources of finance are available through more developed financial sectors, such as in Germany and France. Second, the observed heterogeneity in MFI lending rates to non-financial corporations may also reflect country specific institutional factors, such as the fiscal and regulatory frameworks, enforcement procedures and differences in the degree to which loans are secured. Third, the business cycle and the associated perceptions of

4 Other improvements in the collection of MFI interest rate statistics from June 2010 include: i) further breakdowns by period of rate fixation; ii) additional information on guarantees and collateralisation; iii) data on interest rates on overdrafts and revolving loans compiled by an homogenous method and separately from data on credit card debt; and iv) the separate reporting of interest rates on loans to sole proprietors in the household sector. See the article entitled "Keeping the ECB's monetary and financial statistics fit for use", *Monthly Bulletin*, ECB, August 2011.

credit risk have also differed across countries, particularly over the last few years. In periods of weak economic activity, credit risk tends to increase because the probability that a firm will go bankrupt increases. Hence, weak economic conditions in countries such as Greece, Spain, Italy and Portugal may also have played a role in explaining recent diverging dynamics in lending rates. Finally, the divergence in banks' funding conditions is another key factor explaining the heterogeneity in MFI lending rates offered to NFCs across euro area countries.[5] Pressures on banks' funding conditions have eased in 2012, following the cuts in the key ECB policy rates and the implementation of further non-standard monetary policy measures (namely the broadening of the Eurosystem's collateral framework and the two three-year longer-term refinancing operations). These policy measures have contributed to lower lending rates across the euro area, as shown by the short and long-term cost of borrowing indicators presented in Charts A and B. At the same time, sovereign debt tensions also help to explain differences in the cost of lending to NFCs across countries, to the extent that they translate into bank funding and balance sheet vulnerabilities in several jurisdictions.

5 See the box entitled "Monetary policy measures decided by the Governing Council on 6 September 2012", *Monthly Bulletin*, ECB, September 2012.