

European mortgage interest rates: A comparative analysis of the case of Spain

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The correction of Spain's mortgage market lagged behind most other euro area countries, but recent evidence points to rapidly declining interest rates since 2013, as well as an incipient recovery in this market overall. Current monetary policy, together with recent regulatory changes, should continue to support the persistence of improved borrowing conditions.

After the burst of the housing bubble, the real estate market in Spain suffered a substantial correction, with mortgage contracts being no exception. While the number of contracts fell significantly, mortgage interest rates have followed a more erratic pattern. In the case of Spain, bank competition and low market rates led to too lax mortgage pricing policies relative to most other euro area countries prior to the crisis. However, market and competitive pressures on bank margins have not been a major determinant of mortgage rates during the crisis. In fact, rates increased faster in Spain than in other euro area peers during the crisis, in particular, in 2011 and 2012 amid sovereign debt tensions. Mortgage rates have been falling significantly since 2013 and in 2015, the mortgage market is showing signs of an incipient recovery. Recent factors, such as the progressive removal of interest rate floors on mortgage contracts, and the achievement of historically-low market rates, are increasing bank customers' leverage at the time of negotiating rates on new and existing mortgages. The result has been more favorable terms for borrowers.

The European mortgage market: A comparison of rates

Credit conditions across borders in Europe are supposed to become more and more homogenous over time as the single market for financial services advances with common rules and regulation. The reality, however, is that the financial crisis has

interrupted the trend towards financial integration in Europe, as prices and access conditions have become more divergent in the last few years. There are several reasons for this, including the varying impact of the crisis on risk and financial stability across European countries. Where mortgage markets are concerned, cross country differences in rates and access conditions are also explained by the unequal evolution of real estate markets in

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Europe. In some countries, such as Spain, Ireland and the United Kingdom, real estate markets were severely affected by the burst of the housing bubble, while in others, like Germany there was no evidence of a housing boom. Additionally, the effect of the crisis on country-risk indicators –such as sovereign spreads– has also had a negative impact on mortgage rates.

The rates applied on loans for house purchase are one of the main indicators of household access to funding. Comparing different rates in loans for house purchase across Europe is a difficult task, due to the variety of loan contracts across countries in terms of the type of rate (fixed, floating or mixed), the fees, other implicit rates that can apply, the horizon of the mortgage, vesting periods and other contract terms.

The basic reference for cross-country comparisons in Europe is the Manual on Monetary Financial Institutions (MFI) Interest Rate Statistics, provided by the European Central Bank (ECB, 2003). There are two main ways of computing rates on loans for home purchase according to the ECB. The methodology is explained in the *Banking statistics guidelines and customer classification* under the section “MFI interest rate statistics.” Either the Annualized Agreed Rate (AAR) or the Narrowly Defined Effective Rate (NDER) are reported. The only difference between these two calculation methods is their underlying process of annualizing interest payments. The AAR is based on a formula that can only be applied to loans with regular interest payment capitalization. However, the NDER is calculated repeatedly, and can therefore be applied to all types of loans. Both calculation methods include all interest payments on deposits and loans but no other costs associated with the loan, such as the costs for enquiries, administration, preparation of documents, guarantees and credit insurance.

The AAR is the interest rate agreed between the reporting agent and the household or nonfinancial corporation on a loan, and is converted to an annual basis and quoted as a percentage per

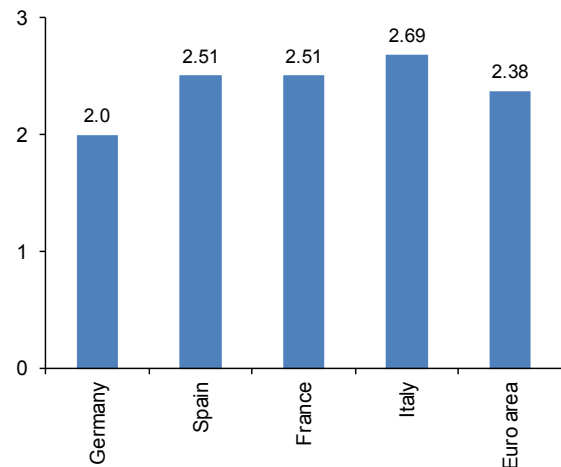
annum. For an interest rate with a maturity of less than one year, the agreed interest rate is to be annualized. The NDER is the interest rate which, on an annual basis, equalizes the present values of all commitments (loans, payments or repayments, interest payments), future or existing, agreed between the reporting agent and the household or non-financial corporation.

In both the AAR and NDER, the interest rates are to be compiled in gross terms before taxes, as the pre-tax interest rate reflects that which the reporting agent receives for loans. In addition, subsidies from third parties granted to households and non-financial corporations should not be considered during the interest payment calculation, as these are neither received nor paid by the reporting agent. Consequently, only the interest components which the reporting institution charges as interest will be included in the interest rate statistics, and not the part which the borrower pays to the reporting agent.

Other methodological caveats refer to what loans are comparable. The MFI of the ECB provides

Exhibit 1

Eurozone house purchase lending rates (for comparison of cost of borrowing purposes) (February 2015)



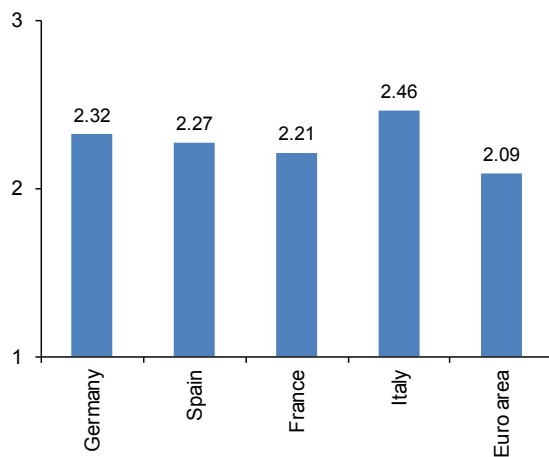
Source: European Central Bank and own elaboration.

what they call the interest rate for “comparison of cost of borrowing purposes.” In this case, the comparable item is the “Lending for house purchase excluding revolving loans and overdrafts, convenience and extended credit card debt.” It is important to note that choosing this rate for comparison of cost of borrowing is important, as other similar rates published by the ECB may vary significantly and are not as homogenous as this one for comparative purposes. The rate is calculated by weighting the volumes with a moving average following the AAR (for regular interest payments) and NDER (for non-regular interest payments) methodologies described above. This rate is shown in Exhibit 1 for Germany, Spain, France, Italy and the euro area as of February 2015.

Rates in Spain were slightly higher than the Eurozone average (2.51% vs. 2.38%) in February 2015. Rates in France were at exactly the same level (2.51%) as in Spain, while they are higher in Italy (2.69%). At 2%, Germany shows the lowest average rate among the countries analyzed.

Exhibit 2

Eurozone house purchase lending rates (for comparison of cost of borrowing purposes): Loans with a horizon up to 1 year (February 2015)

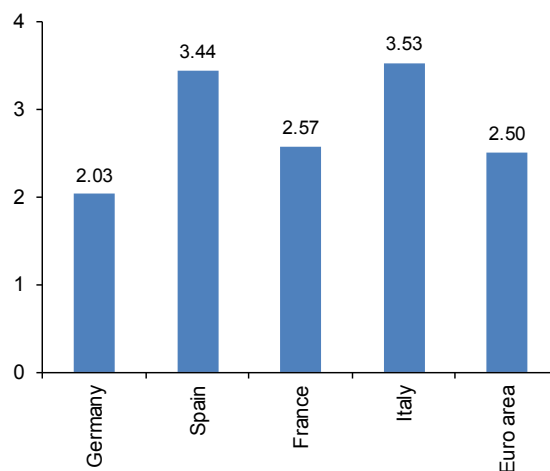


Source: European Central Bank and own elaboration.

A breakdown by loan maturity reveals further differences across countries. This is shown in Exhibits 2 and 3 for loans up to 1 year, and loans of more than 10 years, respectively. The rates in short-term loans are found to be smaller in Spain

Exhibit 3

Eurozone house purchase lending rates (for comparison of cost of borrowing purposes): Loans with a horizon of more than 10 years (February 2015)



Source: European Central Bank and own elaboration.

(2.27%) than in Germany (2.32%). The average rate for the euro area is 2.09% meaning that other members of the single currency area offer even lower rates in short-term loans for home purchasing. However, in the case of loans of at least 10 years, rates in Spain are again higher than in Germany (3.44% vs. 2.03%) and the euro area average is 2.50%, with 2.57% in France and 3.53% in Italy.

Recent evolution of European mortgage rates

It is important to keep in mind that all of the rates reported in Exhibits 1 to 3 refer to those offered on new loans for home purchase and, therefore,

do not show the rates on outstanding loans. “New business” is what the ECB considers relevant for comparison of “cost of borrowing purposes.” If outstanding rates were chosen, the picture would be a different one. For example, the rate in Spain would be 1.8%, much lower than the 2.4% Eurozone average.

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Using the same baseline source as that in Exhibit 1 (for comparison of cost of borrowing purposes), Exhibit 4 shows the evolution of interest rates on loans for home purchase in Spain, Germany, France, Italy and the euro area as a whole from January 2003 to February 2015. The exhibit suggests that mortgage rates were lower in Spain

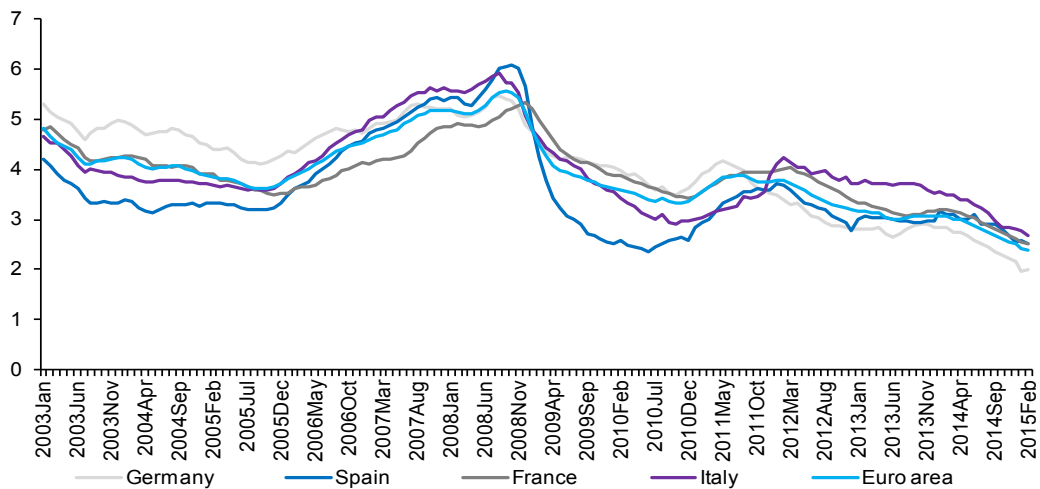
at the beginning of the 2000s. In particular, the average rate in Spain was 4.21% in February 2003 and it was 4.81% for the Eurozone. This situation remained until 2005 and then rates started to increase. They reached 6% in Spain in February 2009. Official liquidity boosting measures by the ECB underpinned a decline in rates during

The sovereign debt crisis exacerbated the increase in mortgage rates even more significantly during 2012. Although there is no perfect correlation between sovereign bond yields and mortgage rates, the countries where risk premiums increased to a larger extent, such as Spain, were particularly affected.

2009 and 2010, but the Central Bank’s decision to raise rates in 2011 drove further increases in the price of mortgages. The sovereign debt crisis exacerbated this increase in mortgage rates even more significantly during 2012. The

Exhibit 4

Evolution of Eurozone house purchase lending rates (for comparison of cost of borrowing purposes) (January 2003-February 2015)

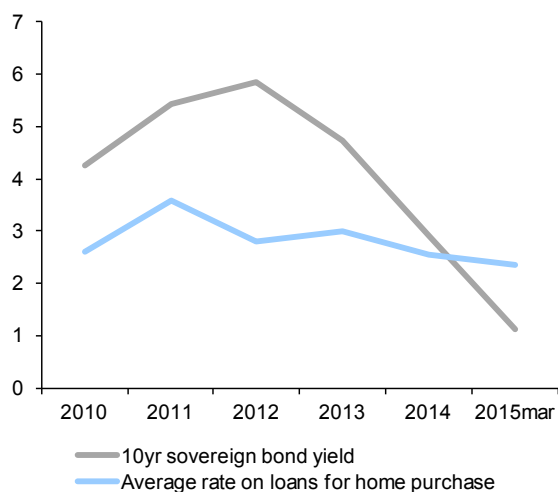


Source: European Central Bank and own elaboration.

countries where risk premiums increased to a larger extent, such as Spain, were particularly affected. Subsequently, rates fell again, but still remained a bit higher in Spain than in other EU countries at the beginning of 2015.

There could be several factors affecting the evolution of mortgage interest rates during the crisis years. If we take Spain as a reference, country risk-premiums may have had an effect on rates as shown in Exhibit 5, although there is no perfect correlation between sovereign bond yields

Exhibit 5
Mortgage rates and sovereign bond yields in Spain
 (2010- March 2015)



Source: European Central Bank and own elaboration.

and mortgage rates. Rates on loans for house purchase in Spain increased in 2010, fell in 2011 and increased again in 2012.

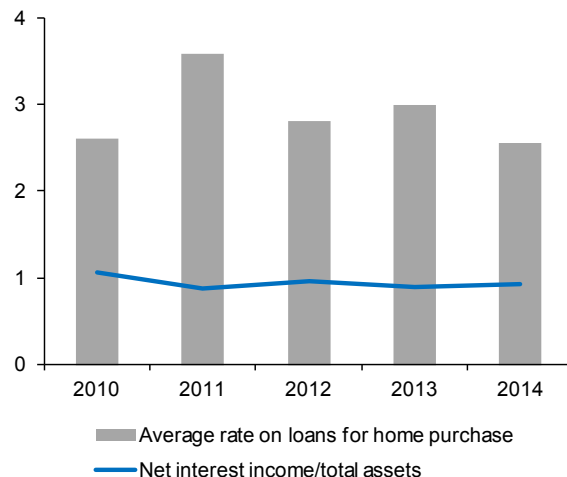
Sørensen and Lichtenberger (2007) analyze the process of convergence of mortgage interest rates for house purchase in the euro area, and find that supply and demand factors only partially explain interest rates, while a fundamental role is given to institutional factors specific to each country. The ECB itself acknowledges that standard

economic theory suggests that the interest rate-setting behavior of banks can be influenced by a large number of other factors, such as “the

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degree of competition between banks, market contestability, competition from market-based financing and investment possibilities, perceived credit and interest rate risk, the cost of refinancing, the cost of switching banks, the existence of information asymmetries between MFIs and their customers and the strength of the bank customer relationship. Significant differences across countries in these factors may give rise to differences in national MFI interest rates, just as they may also explain differences within countries. Finally, some influence may also be expected from differences in the economic cycle.”

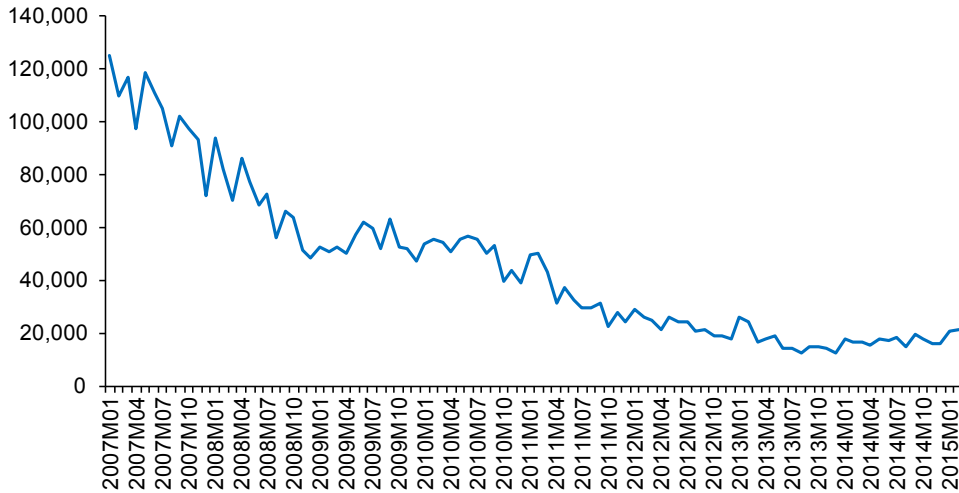
Exhibit 6
Rate applied to loans for house purchase and net interest income to total assets of Spanish banks



Source: Bank of Spain.

Exhibit 7

Number of mortgage contracts (January 2007 – February 2015)



Source: Spain's Statistical Office (INE) and own elaboration.

Many of these particular features have been present in Spain during the crisis years. The situation of the real estate market itself (with declining house prices and volumes) should have had a considerable effect. Similarly, some recent decisions taken by banks and regulators –such as the removal of interest rate floors or regulation preventing foreclosures– have also probably had an impact on mortgage pricing.

The latest data for Spain –using mortgage contract-level information– show that lending standards were softer in the real estate boom than in the bust. Too soft lending standards and excessive risk-taking were observed during the boom years. For example, mortgage spreads for non-employed were found to be identical to those of employed borrowers during the boom.

Along with institutional factors, mortgage rates could have also been affected by pressure on bank margins. When the evolution of mortgage rates and interest margins are compared (Exhibit 6), we observed that when rates have increased (decreased) in the years of the crisis, net interest

income has fallen (risen). During the crisis, banks seem to have priced mortgages following the perceived market risk, while competitive forces of business generation opportunities have had a more limited influence. This is also the case because the market for mortgages collapsed during the crisis years, as shown by the evolution of the number of mortgage contracts (Exhibit 7), which fell from 124,826 in January 2007 to 15,962 in December 2014. However, mortgages are starting to grow again in 2015. The number of mortgages constituted on dwellings was 21,298 in February 2015, 29.2% higher than that registered in February 2014. The average value of mortgages constituted on dwellings increased 6.1% year-on-year.

Overall assessment and status of European mortgage rates

The different indicators shown in this note suggest that:

- Mortgage rates increased in Spain during 2011 and 2012, faster than in other euro area

Table 1

Changes agreed in the rates of mortgage contracts (February 2015)

	Original interest rate structure (no. of mortgages)	Original interest rate structure %	Original average interest on loan	Final interest rate structure (no. of mortgages)	Final interest rate structure %	Final average interest on loan
Total interest rate changes	8,573	100	--	8,573	100	--
Fixed	479	5.6	4.57	299	3.5	3.68
Variable	7,969	93	4.34	8,219	95.9	3.32
Variable - Euribor	6,737	78.6	4.26	7,432	86.7	3.25

Source: Spain's Statistical Office (INE) and own elaboration.

countries, but have been rapidly falling in 2013 and 2014.

- It is difficult to identify the main determinants of mortgage rates as different market-level, institutional and regulatory factors have been in play. However, it seems that mortgage pricing has been significantly affected by the general evolution of market rates following ECB decisions.
- The pressure on bank margins has not seemed to be a major determinant of mortgage rates during the crisis. Recent research, however, suggests that both competition and too low market rates led to too lax mortgage pricing policies before the crisis.
- Even if rates have varied significantly, the number of mortgage contracts fell considerably amid the burst of the property bubble and banking crisis, and subsequent restructuring and resolution of the financial sector. However, mortgage contracts are starting to increase again in 2015, although they are still far from pre-crisis year levels and it seems that any growth will be low and moderate in the coming years.
- Even if the market is not yet too deep in terms of volume, there are interesting changes taking place. In particular, as shown in Table 1, many borrowers are bargaining with banks to modify

the interest rate on their mortgage contracts. Factors such as the progressive removal of mortgage interest rate floors and historically-low market rates are motivating such bargaining practices. As shown in Table 1, in February 2015 alone, 8,573 contracts were renegotiated with average rates applied falling by around 1 percentage point and most of the contracts being resettled as variable-rate ones (96% of them as of February 2015).

References

ECB (2003), *Manual on MFI Interest Rate Statistics – Regulation ECB/2001/18*, Frankfurt am Main.

SØRENSEN C.K., and J.D. LICHTENBERGER (2007), "Mortgage Interest Rate Dispersion in the euro area," *ECB Working Paper* n. 733.