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Introduction

Across the euro area the banking sector has traditionally played a key role in the provision of financial resources to the private sector. This is a distinctive feature compared with other advanced economies, such as the United States and the United Kingdom, where the role of the capital markets is more prominent as regards the financing of non-financial corporations.

The banking system's function as a financial intermediary is closely linked to its capacity for easing the asymmetrical information problems that lenders and borrowers habitually face in credit operations. Banks' long-standing and personalised relationship with their clientele gives them access to information that is highly relevant for assessing risks and choosing and monitoring borrowers. The dispersion of investors on the markets, by contrast, makes these tasks more costly and even inviable for lenders.

Academic discussion as to the pre-eminence of a model in which the role of debt markets prevails as opposed to one that is more bank-based is not conclusive. Authors such as Levine (2002) argue that it is not the importance of markets as opposed to banks that exerts a more positive influence on economic growth in the long run, but rather the extent to which the financial sector is developed; and particularly as far as their legal frameworks are concerned. However, one of the lessons of the crisis is that the euro area economy had come to depend very highly on the banking sector, which placed it in a position of great vulnerability. Langfield and Pagano (2015) consider that the source of this fragility would be banks' high leverage and the procyclicality in credit supply, which tends to react disproportionately to changes in the level of economic activity, particularly when accompanied by wide-ranging fluctuations in asset prices. Indeed, the crisis unleashed a long and intense process of deleveraging and balance sheet re-balancing at banks, in parallel also with an overhaul of the regulatory framework at the global level aimed at bringing about a sounder and more stable banking system. These factors would have had an adverse bearing on the supply of credit during those years.

In these circumstances, euro area non-financial corporations began to cover their external funding requirements more intensely with the issuance of fixed-income securities, whereas bank lending contracted. This switching of financing sources was also seen in other advanced economies and took place against a background of weak demand for financing, as a result of the adverse cyclical position, high economic uncertainty and high levels of debt built up by the private sector in the prior expansionary phase.

This article analyses the process of disintermediation that has come about in the external borrowings of euro area companies during the recent crisis. An aggregate approach is adopted for non-financial corporations as a whole, though it should be noted that, in practice, corporate debt markets are not a source of financing for all these companies. In particular, SMEs depend largely on the availability of bank credit and on other sources of non-bank financing that are beyond the scope of this article, such as, for example, leasing, trade credit and other informal channels.

Fixed-income issuance by non-financial corporations

The article is structured as follows. Section 2 describes corporate issues in respect of countries, credit rating and issue size, among other characteristics. The third section shows the scope of the disintermediation process in terms of the weight acquired by fixed-income securities relative to total debt in the sector, while the final section analyses the factors that have most likely boosted market-based financing. The final section draws some brief conclusions.

Since 2009, non-financial corporations in the euro area have resorted relatively intensely to bond issues to cover their financing requirements, while bank loans contracted (see Chart 1.1). Cumulatively over the past seven years, net resources obtained via fixed-income securities operations exceeded 5% of GDP. Over the same period, by contrast, corporations made net repayments of bank loans for an amount of 3.2% of GDP.

From a broad historical perspective, marketable debt issues in recent years have also been relatively high. As Chart 1.2 shows, for placements with a maturity of more than one year, the volume of gross issues amounted to €219 billion in annual average terms over the 2009-2015 period, compared with €100 billion from 2003 to 2008, entailing an increase of more than 100%. After the temporary rise recorded in 2009, when €275 billion were raised on fixed-income markets, issues regained vigorous momentum from 2012 onwards, coinciding with the slump in euro area economic activity and the tensions on the sovereign debt markets, with both events notably impacting the banking sector.

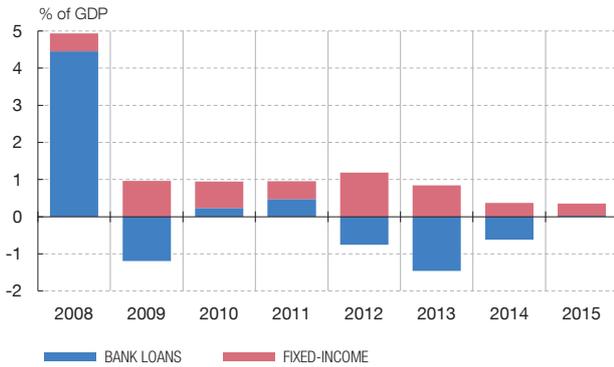
As can be seen in the same chart, most corporate issues are investment-grade, i.e. with a credit rating of BBB/Baa or higher. Issues of the riskiest (so-called high-yield or junk) bonds ground to a halt in 2008, at the most critical juncture of the international financial crisis, although they grew very sharply from 2012, accounting in the most recent period for over 20% of total issues. Discernible behind this pattern is yield-search by investors in a setting of low interest rates, along with an increase in the number of issuer companies with this rating, against a background in which the economic crisis has entailed a notable deterioration in the sector's credit quality.

As Chart 1.3 illustrates, the increase in market-based financing has been across the board in the euro area countries. However, the scale of issues is not uniform, as it is the countries with more tradition in market instrument-based financing – such as France – that have experienced a bigger increase.

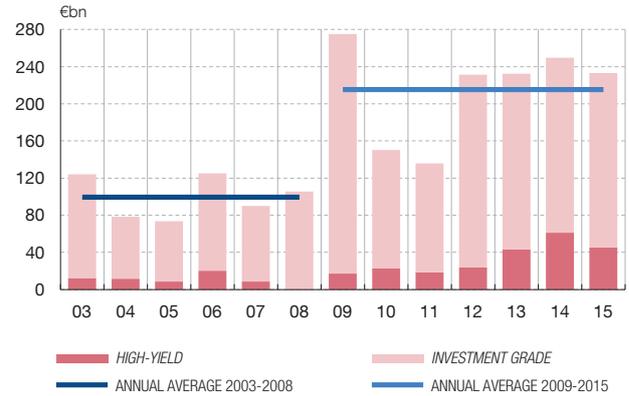
The breakdown of issues by size does not reveal significant changes over these years, except in 2009, when the individual volume of new operations was relatively high (see Chart 1.5). With the exception of that year, the aggregate growth in issues has essentially been due to the increase in the number of operations, which was particularly notable from 2012 onwards. Significantly, a growing proportion of these operations stemmed from new issuers on the market, namely those companies that had not issued in the period from 2003 to 2008. In particular, during 2013 and 2014, for example, almost 50% of placements of this type of instrument were from these companies. Country-by-country analysis indicates that the presence of new issuers has been a general trend since 2012. When the issuance volumes of this group of companies are analysed, the observed result is a relatively small size, although it is not possible to distinguish whether this is determined by the fact that the use of this means of financing is new to these corporations or by the size of the company (see Chart 1.6).

The resort to the bond markets has come about in a setting marked by the differing course of the relative cost of loans and bonds. As can be seen in Chart 2.1, although there

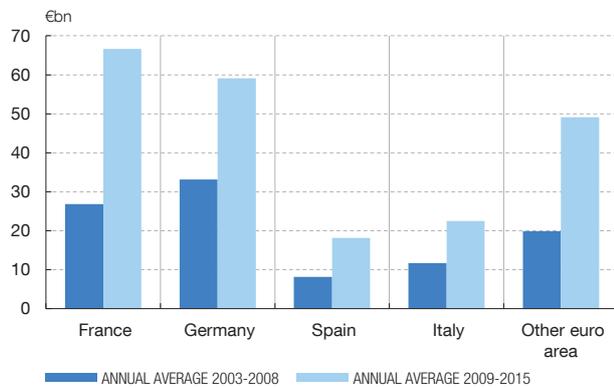
1 BANK LOANS AND FIXED-INCOME SECURITIES
Net flows (a)



2 GROSS FIXED-INCOME ISSUES (b)
Breakdown by credit rating



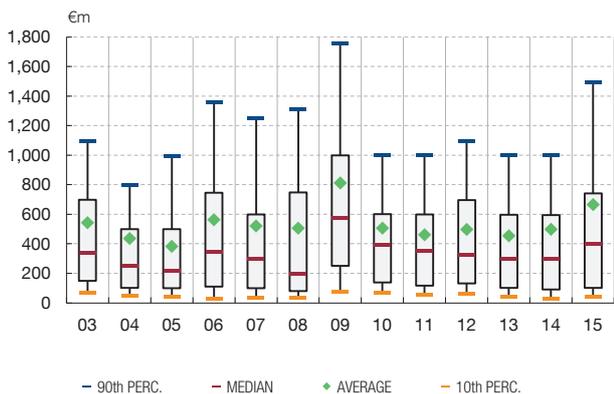
3 GROSS FIXED-INCOME ISSUES BY COUNTRY (b)



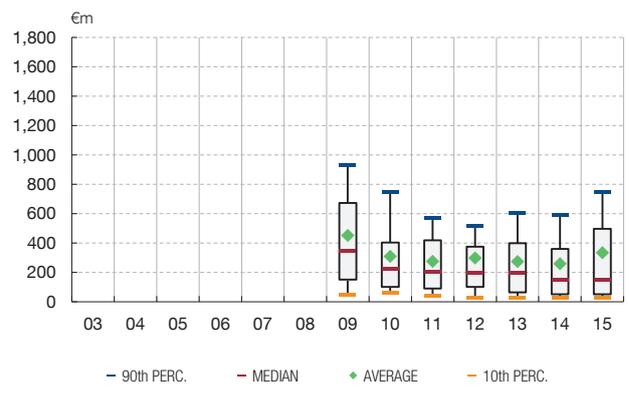
4 NUMBER OF GROSS FIXED-INCOME ISSUES (b)



5 SIZE OF FIXED-INCOME ISSUES (d)



6 SIZE OF FIXED-INCOME ISSUES. NEW ISSUERS (c) (d)



SOURCES: Dealogic, ECB and Banco de España.

- a Bank loans adjusted for securitisation and transfers.
- b The information for 2015 is completed by accumulating the necessary months prior to 2015 to complete the year.
- c "New issuers" are considered to be corporations that have not issued from 2003 to 2008.
- d The lower and upper bounds of the rectangle correspond to the 25th and 75th percentiles, respectively.

was a relatively sharp increase in the cost of financing via corporate bonds, the transmission of the extremely lax monetary policy stance was initially more intense in the debt markets than in the conditions of new loans. Indeed, in March 2014 – and for the first

1 INTEREST RATES

New loans and corporate bond yields



2 RISK PREMIUM ON FIXED-INCOME ISSUES (a)



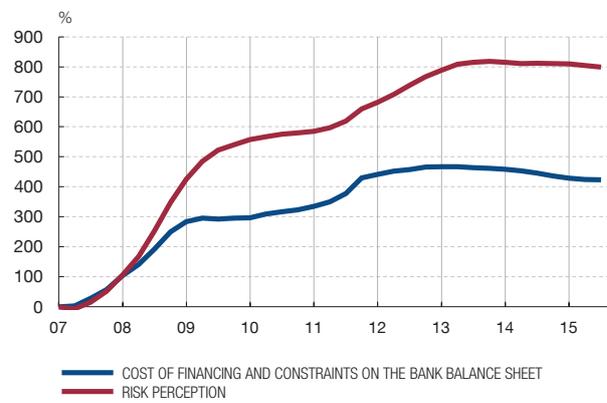
3 BANK LENDING SURVEY (b)

Cumulative changes in supply and demand



4 BANK LENDING SURVEY. SUPPLY-SIDE FACTORS (c)

Cumulative changes



SOURCES: Datastream, Dealogic and ECB.

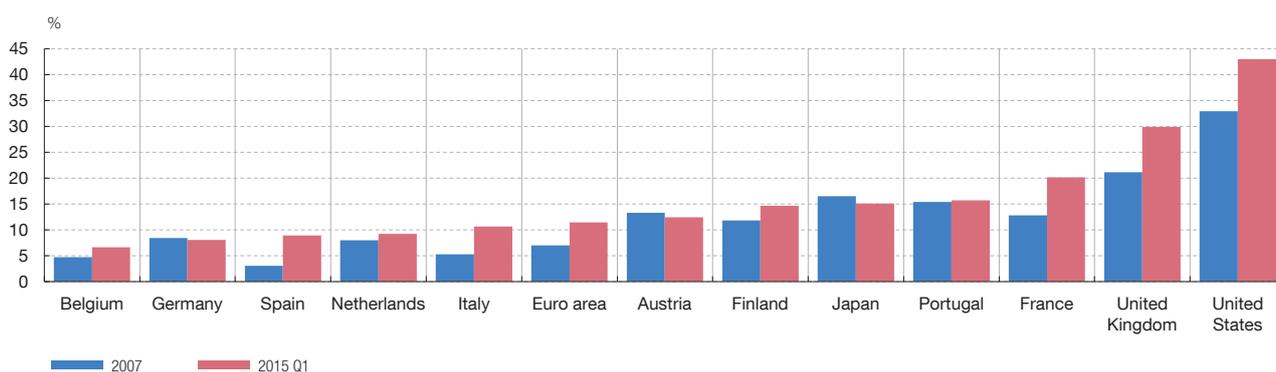
- a Individual data from Dealogic are used, and the spread-to-benchmark average for each period is calculated for A-, BBB+ and BBB issues. The vulnerable countries are Spain, Italy, Portugal, Greece and Ireland. Making up the other countries are Germany, France, the Netherlands, Belgium, Austria, Finland and Luxembourg.
- b A growth in supply denotes more restrictive criteria, and a growth in demand denotes an increase.
- c The "risk perception" factor is the sum of the results of the factors "general expectations" and "industry-specific expectations". The "cost of funds and balance sheet constraints" factor is the sum of the results of the factors "institution's liquidity position", "access to financing" and "costs related to the capital position".

time since statistics have been available on interest rates on loans (2003) – corporate BBB bond yields temporarily stood below the interest rates on new loans for an amount in excess of €1 million (used essentially by large corporations). More recently, this trend has been reversed, which would partly be reflecting the impact on bank loan conditions of the European Central Bank's non-standard measures applied since June 2014. There have, however, been sizeable gaps in the cost of financing across countries, both in loans and in bonds, derived not only from geographical area-based credit risk differences but also from the financial fragmentation that came about in the euro area further to the sovereign debt crisis in 2011 and 2012. Hence, as Chart 2.2 shows, for non-financial corporations with a similar rating (A- or BBB) the cost of debt issues was far greater in the countries most affected by this crisis, with these divergences being subsequently corrected.

The structure of corporate debt

The greater resort to bond issues in a setting marked by the sluggishness of bank loans has led to some reordering of the types of debt taken on by euro area non-financial

WEIGHT OF FIXED-INCOME SECURITIES IN DEBT (a)



SOURCES: Eurostat, BIS and Banco de España.

a Debt includes fixed-income securities, bank loans and other loans. BIS data, except for the euro area (Eurostat) and Spain (Banco de España).

corporations.¹ On information from the Financial Accounts, the outstanding balance of liabilities in the form of fixed-income securities amounted to close to 12% of GDP in the euro area as a whole in 2015 Q2, compared with 7% in 2008. By contrast, the weight of bank loans, which accounted for more than 50% of GDP in 2008, has diminished by more than 8 pp.² The figure for other loans has stood at 46%, on average, since 2008.

In terms of weight in total debt, fixed-income securities came to account for somewhat more than 11% as at mid-2015 (compared with almost 7% in 2008). This increase includes a slight positive contribution arising from the rise in bond prices on markets. There is some dispersion from country to country, with France, Portugal, Finland and Austria the economies where the weight of bonds is greatest. The significance of market financing is still far from that observed in the United States and the United Kingdom, where the related figures are around 40% and 30% of total debt, respectively (see Chart 3).³

It should be mentioned that the financial structure inferred from the aggregate data in the Financial Accounts cannot be made extensive to the business sector as a whole. This structure depends on numerous factors, including most notably the relative cost of the various sources of financing, the institutional characteristics of the financial system and the tax treatment of the instruments. In the case of SMEs, the constraints derived from their size and from their lesser ability to produce a sufficient flow of recurrent information for investors make their funding on the markets inviable in the main. These entry barriers might contribute to explaining, at least in part, why the weight of bank financing at the aggregate level is higher in countries with a greater presence of SMEs in their business demographic.

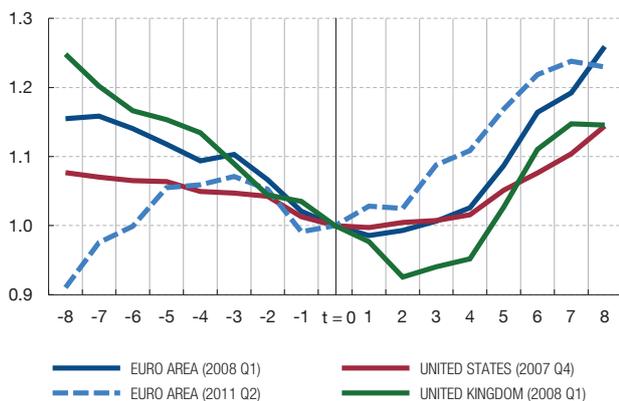
A necessary caveat regarding the interpretation of the aggregate data of the Financial Accounts relates to the fact that the weight of financing via securities may be somewhat understated if companies have resorted to subsidiaries not classified in the NFCs sector

¹ The concept of debt used is that of fixed-income securities plus total loans (including non-bank loans, such as those from non-residents, from leasing companies or from subsidiaries, for instance). Trade credit is excluded.

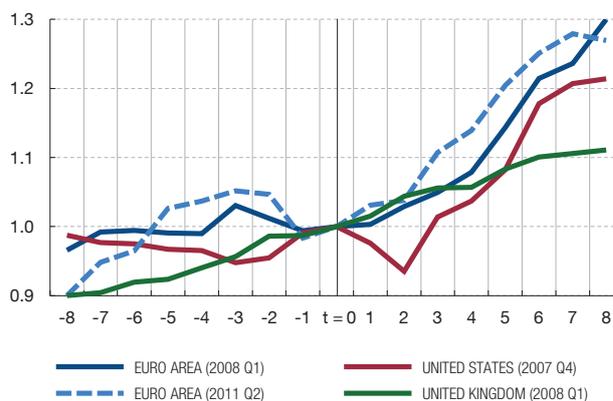
² This figure is adjusted for securitisation and other transfers made by the banking sector.

³ If the non-financial non-corporate sector is excluded, this ratio rises to 67% in the United States. The non-financial non-corporate sector includes the self-employed, who in the European sectoral accounts would be considered to be in the households sector.

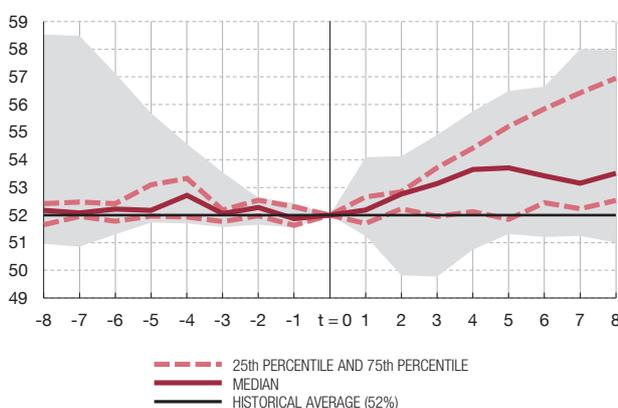
1 FIXED-INCOME SECURITIES/TOTAL CREDIT (b)
Last crisis



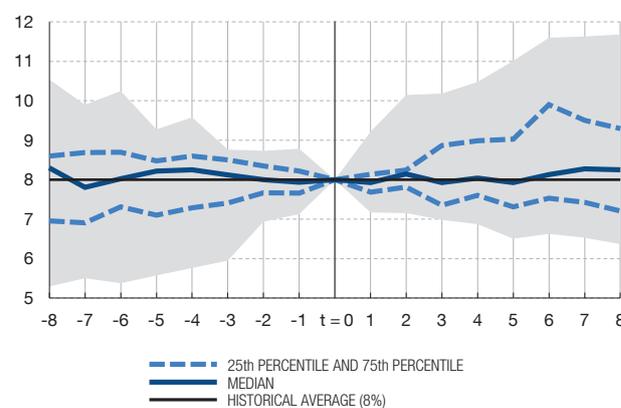
2 OUTSTANDING BALANCE OF FIXED-INCOME SECURITIES (b)
Last crisis



3 FIXED-INCOME SECURITIES/TOTAL CREDIT (c)
Past crises in the United States (1967-2006)



4 FIXED-INCOME SECURITIES/TOTAL CREDIT (c)
Past crises in the euro area (1990-2006)



SOURCES: BIS, Eurostat, OECD, UK Office of National Statistics, US Federal Reserve and Banco de España.

- a Quarterly data. The start of recessions is identified by two consecutive quarters of decline in the quarterly rate of real GDP, assigning the moment zero to the cyclical peak (the quarter prior to the start of the recession). In the United States, NBER dating since 1980 is considered. The debt variable is the sum of fixed-income securities plus total loans for all the geographical areas. For the United States information is drawn from the Financial Accounts of the non-financial corporate business sector.
- b For inter-area comparison, variables are normalised at a value of 1 at the cyclical peak, that is to say, 2007 Q4 for the United States, 2008 Q1 for the euro area and the United Kingdom, and 2011 Q2 for the euro area.
- c The variable is normalised at the average value at the cyclical peaks considered and expressed as a percentage. In total six crisis episodes are taken for the United States and 15 for the euro area countries. The euro area countries considered are Germany, France, Italy, Spain, the Netherlands, Belgium, Portugal and Finland. The shaded area encompasses the ratio values between the maximum and the minimum in the episodes analysed.

to execute issues. Thus, for example, in countries such as Spain and Germany, non-financial corporations have used financial or non-resident subsidiaries to issue securities, routing the resources subsequently to the rest of the business group through a loan.⁴

Finally, it may be asked whether the debt switching witnessed in recent years matches the patterns observed in previous episodes. Following the work by Grjebine et al. (2014), Chart 4 analyses the behaviour of the ratio of fixed-income securities to total debt for non-financial corporations in the United States, the United Kingdom and the euro area countries around the dates of the different bouts of recession. Specifically, the chart shows the course of this variable over the previous eight quarters and the eight quarters subsequent to the start of the recessions. As can be seen in Panels 1 and 2 of Chart 4, during the last

4 The figures in Chart 3 are adjusted for these effects for Spain.

**The role
of the fixed-income
markets as an alternative
source of financing
to banks**

crisis disintermediation in corporations' external borrowing was a common thread to the three areas. In all three, the increase in the ratio is in response to a notable rise in issues against a background of weak loans. Performing the same exercise for past crises (see Panels 3 and 4 of Chart 4), it can be seen that this behaviour constitutes an empirical regularity in the United States⁵, something that is not inferred from the historical analysis for the euro area countries. Indeed, aggregating the euro area member countries, only a single recession in 1992 Q1 could be dated in which debt switching was not observed. The disaggregated analysis by country enables 15 episodes of recessions to be analysed and, although the weight of securities increases in some of them (e.g. in early 2000 in Germany and Italy), there is no evidence of disintermediation in the recessions and nor can there be said to be a differentiated pattern across the countries.

The increase in corporate bond issues observed during the crisis is difficult to reconcile with some of the more traditional economic theories relating the composition of firms' external borrowing to their net worth or the quality of their projects. Under the hypothesis that bank financing is relatively more costly⁶, the companies that pose fewer problems derived from asymmetrical information vis-à-vis their lenders – which are usually those with the highest net worth or with less risky investment projects – will finance themselves through bond issues. The rest of the corporate population would depend to a greater extent on bank financing or would face credit constraints [see, for example, Repullo and Suárez (2000)]. In keeping with these considerations, a loss of access to markets might be expected during cyclical downturns as a result of the adverse influence of a recession on companies' equity situation, contrary to what was observed during the last crisis.⁷

To explain the disintermediation in business financing during the last crisis, the economic literature has focused on the supply of bank loans, specifically on the contraction in the flow of credit derived from the impact of the crisis on banks' balance sheets, which would also have prevented a sharper initial transmission of the expansionary monetary policy stance (see Panels 3 and 4 of Chart 2). For the euro area, Altavilla et al. (2015) have identified these specific factors of banks drawing on the Bank Lending Survey and they link them to the contraction in credit volumes and the momentum behind securities issues. The connection between higher corporate issues and the contraction in the supply of bank loans is also supported by the direct evidence provided by Becker and Ivashina (2014) for the US case. Papers such as that by De Fiore and Uhlig (2015) have attempted to rationalise this evidence in the theoretical framework of a general equilibrium model. At the microeconomic level, Jiménez et al. (2012) illustrate, moreover, how the intensity with which the cyclical situation feeds through to credit supply would be influenced by banks' solvency and liquidity position.

While the tightening of bank loan supply conditions appears to be a key determinant in this phenomenon, an additional factor might also be the increase in investors' demand for bonds. In this respect, official interest rates at levels close to zero and the progressive rise

5 In the case of the United Kingdom, data availability would only allow us to analyse one single additional crisis, that in 1990, when there was also a sharp increase in the fixed-income securities/debt ratio.

6 This hypothesis, a habitual one in the literature, is derived from the costs that the control of borrowers entails and from the greater flexibility of bank financing.

7 The consequences for bank credit would be more uncertain. First, there would be a shift towards bank financing by those companies that cease to resort to the markets or that need greater flexibility in their financing conditions. Further, the perception of greater credit risk would increase the number of firms with restrictions to bank credit. Relationship banking theories would mitigate this latter conclusion insofar as the relationship created between the bank and its customer over time generates a reputation and confidence on both sides when it comes to maintaining or renegotiating that financing channel, irrespective of the business cycle juncture.

in the price of sovereign debt in most of the euro area would have been conducive to the demand for investment and corporate debt, contributing to the growing buoyancy of high-yield bond issues.

If the shift towards fixed-income issues is due, at least in part, to a contraction in the supply of credit, companies without access to the markets might be expected to have had greater difficulty in mitigating the derived recessionary effects. Chava and Purnanandam (2011) found evidence along these lines using the episode of the autumn 1998 Russian crisis for the case of the United States. The companies most dependent on bank financing tended to experience a greater loss in value and in profits during banking crises than the companies with access to the securities markets. In this respect too, Bentolilla et al. (2015), for the Spanish case, conclude that companies with financing from weak banks (and which, therefore, had to apply greater restrictions on their supply of credit) underwent sharper reductions in employment.

The experience during the last crisis therefore reiterates the importance of having well-developed corporate debt markets and, generally, corporate financing channels other than bank-based ones, especially for companies which, owing to size restrictions, normally evidence a high degree of dependence on the credit channel. Along these lines, there have been measures at the national and European levels in recent years aimed at promoting the diversification of business financing sources. As regards fixed-income, such measures include, for instance, the birth of the alternative markets, with access conditions that may be more readily met by medium-sized companies. In 2010, platforms depending on the German stock markets – such as BondM, on the Stuttgart bourse – were created; in 2012, the fixed-income segment of Alternext was launched, with the participation of the Amsterdam, Brussels, Lisbon and Paris exchanges; and in 2013 ExtraMOT PRO, launched by the Italian stock market, and MARF (the Alternative Fixed-Income Market), managed by BME (the Spanish Stock Exchange and Markets company), both commenced operating.

In this connection, the most ambitious ongoing project is that of the creation of a single market for capital for the European Union. In September a major step was taken in this direction, with the publication by the European Commission of a detailed action plan, whose objective was that by 2019 the foundations of the single market for capital would be in place. The single market for capital seeks to increase and diversify firms' financing sources, especially SMEs, mobilising greater financial resources in the economy and generating a greater development and integration of capital markets in Europe. In a monetary union, the integration of financial markets is a particularly important element. Lowering barriers to cross-border operations should increase the potential for greater risk diversification and better risk allocation across the EU, which will entail benefits for macroeconomic stability. Although the single market for capital is a medium-term project, the EC proposes short-term priority measures, including the development of a regulatory framework for the re-launching of simple, transparent and standardised securitisation, which will allow the transfer of banks' off-balance-sheet risk and will increase their capacity to channel resources towards the economy.

Conclusions

Since 2009, non-financial corporations in the euro area have resorted intensely to the capital markets for financing. This can be largely explained by the entry of a growing number of companies that had not undertaken issues during the prior years.

The switch towards corporate debt markets has been more appreciable during the times of greatest contraction in bank credit, particularly in 2009 and in 2012. This behaviour was

euro area-wide, but was also observed in the United States and in the United Kingdom, where the weight of capital market-based corporate financing is considerably higher than in the case of the euro area.

The growth of firms' issuance activity in recent years has largely been in response to the contraction in the supply of credit against a background of crisis and deleveraging in the banking sector. However, an additional factor that might also have contributed to the demand for private fixed-income securities is their higher return compared with instruments such as public debt, in a setting of very low interest rates.

In any event, the development of non-bank financing is expected not to be a conjunctural process, but one that will become rooted over the coming years. For one thing, access by new issuers to the markets will contribute to generating a reputation for these companies, with the subsequent tempering effect on asymmetrical information problems, and to reducing the cost of their issues in the future. The project of a single market for capital reflects the growing interest of the European authorities in promoting the development of sources of financing other than bank lending, in particular for SMEs, so that such sources may contribute to mitigating the adverse effects of the excessively procyclical nature of the flow of bank credit.

11.12.2015.

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