

Financial flows and debt dynamics in Spain

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Spain's private sector continues its deleveraging process in contrast to increasing leverage in the public sector. Given heavy reliance of the private sector on bank debt, the relative importance of bank-based financing in the Spanish economy has decreased, while capital markets-based finance has increased, albeit still too low and public sector biased.

At year-end 2013, the Spanish economy reported net internal savings of 15 billion euros (1.5% of GDP), after 15 consecutive years of negative savings. The maximum negative position was reached in 2007, at 10% of GDP. The public sector sharply deteriorated its financial position, while both households and nonfinancial firms shifted from negative to positive, mainly as a consequence of a sharp downwards adjustment in net investment. Such symmetrical financial flows have resulted in very different debt dynamics. While households and firms have decreased their overall debt levels by 10% and 27% of GDP, respectively from the peak of the cycle, the public sector has almost doubled its level of indebtedness, leading to an increase in the overall debt level to reach close to 350% of GDP by end 2013. The combination of private sector deleveraging and public sector leveraging has led to a decreased reliance on bank finance, as well as trade finance, while leading to an increase in the relative share of securities market debt. However, market-based finance is still too low in the Spanish economy, and heavily biased toward the public sector. Current public debt is 80% securities based, while only 20% is bank based or trade finance based. On the opposite side, nonfinancial firms' debt is heavily biased towards bank loans (70% of total liabilities excluding shares and other equity) and trade finance (25%) with less than 5% being raised in securities markets. The bias towards bank finance is even higher in the household sector, whose debt is 95% bank loans and 5% trade finance.

Closing the external financing gap

In 2013, the Spanish economy registered a positive net saving position of 15 billion euros (1.5% of GDP), the first positive position after 15 consecutive years of net negative savings. The largest imbalance was recorded in 2007, when the Spanish economy registered negative savings in excess of 10% of GDP. It has taken, therefore, six years of

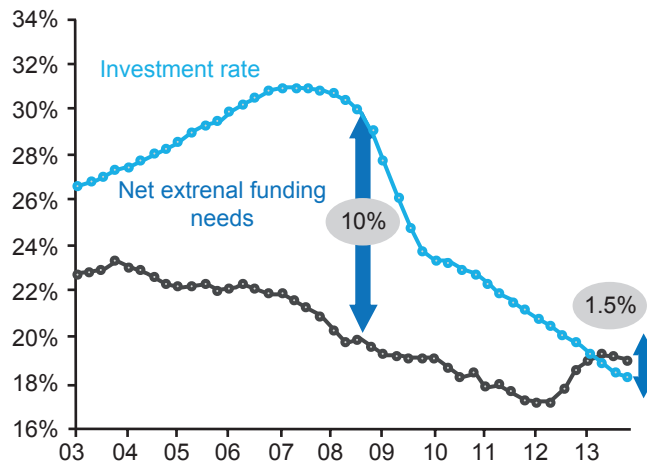
adjustment in savings and investment, where the bulk of the correction took place, to close the gap between these two variables. As a mirror of the current account balance, such an adjustment reflects the improvements in Spanish external competitiveness.

In this article, however, we are more interested in analyzing the pure financial flows and especially

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Exhibit 1

Spanish savings and gross fixed investment rates Percentage of GDP



Source: INE, AFI.

the debt dynamics that have been driving these flows, with implications for the net financial position in different sectors, as well as the relative importance of different financial segments, especially bank-oriented versus market-oriented, or even commercial trade finance.

Debt dynamics: Private versus public

Moving from a -10% to +1.5% of GDP net savings in just six years has necessarily changed the contribution from the main institutional sectors. In this context, we consider the public sector on the one hand and the private nonfinancial sector on the other, distinguishing between households and nonfinancial firms.

On aggregate, the household sector has changed from a negative savings position in 2007 (-2.8% of GDP) to a positive one (+2.5% of GDP) six years later. Even more outstanding has been the change in financial flows registered by the aggregate of nonfinancial firms, which registered in 2007 a negative savings of around 11% of GDP,

and six years later have closed 2013 with a net savings of 44 billion euros (4.3% of GDP).

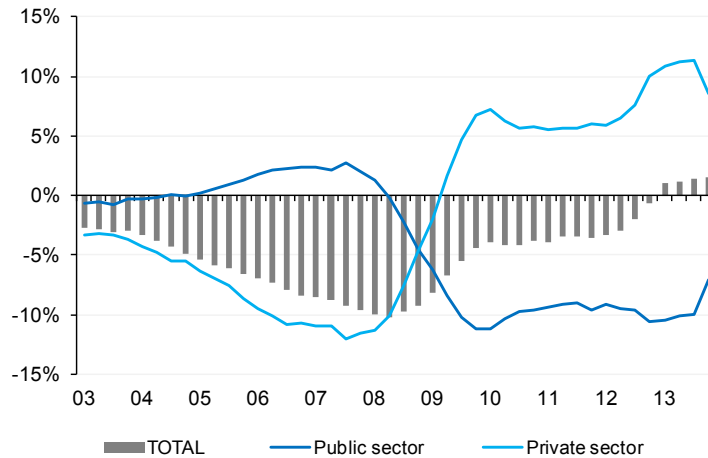
The opposite pattern can be seen in the public sector. In the last year prior to crisis, 2007, the public sector registered a net positive savings of 2% of GDP. Six years later, as a result of the strong deterioration of public finances, the net financial position of the public sector stood near -7% of GDP. In fact, that figure was even higher in 2012 (-10.5% of GDP), when financial assistance to banks was also added to the public sector's negative savings position.

Such symmetrical behavior in net savings by the private and public sectors has some implications for the debt dynamics for each of them, sharply increasing the level of public debt, while decreasing private debt. We illustrate this trend by using data from the Spanish Financial Accounts from 2007 to 2013.

A first question is whether to use gross or net (of financial assets) debt. If we were analyzing a single company, or household, the appropriate measure

Exhibit 2

Spanish external funding (+)/ lending (-) capacity by institutional sector
Percentage of GDP



Source: INE, AFI.

for indebtedness would be net debt, as long as financial assets can be used to alleviate debt payments. In aggregate sector terms, however, it is much more accurate to use gross debt for several reasons. The first and most obvious is that it is not possible to net a household's or a firm's debt with other households' or firms' financial assets. In fact, there is probably a negative correlation between holdings of financial assets and liabilities across households and firms – the most indebted ones are the ones with fewer financial assets.

A second reason to use gross debt at the aggregate sector level has to do with financial stability concerns. In terms of systemic financial stability, gross debt is the relevant measure, regardless of who is the debtor or creditor, or type of debt instrument.

Under this reasoning, the exhibits below show the debt dynamics, from 2007 until today, for the public and private sectors, and expressed as a percentage of GDP.

Table 1

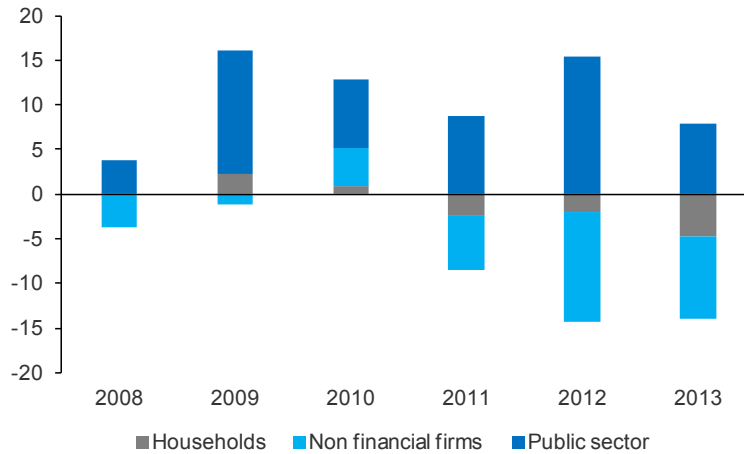
Spanish gross debt dynamics: Private and public
Percentage of GDP

% GDP	2007	Peak of cycle (2010)	2013	2013-07 change	2013-peak of cycle change
Households	89	93	83	-6	-10
Non financial firms	200	198	171	-28	-27
Public sector	36		94	58	
Total	325		348	23	

Source: Bank of Spain, AFI.

Exhibit 3

Spanish gross debt dynamics: Private and public Percentage of GDP



Source: Bank of Spain, AFI.

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From those figures, we can infer that the Spanish economy entered the crisis with an overall debt level of 325% of GDP, the bulk of it (about 290% of GDP) being private debt and only 36% of GDP in public debt. Six years of crisis have produced an overall increase in the indebtedness of the Spanish economy to nearly 350% of GDP, with an intense rebalancing between private and public debt. From their peak at 2010, households have reduced their debt by 121 billion euros (10% of GDP), and firms by a much bigger amount, 328 billion euros (27% of GDP). This intense deleveraging by the main components of the private sector has been greatly surpassed by an increase in public leverage, increasing by almost 600 billion euros (close to 60% of GDP), reaching 94% of GDP at the close of 2013, when measured according to the so-called excessive deficit procedure (EDP) as dictated by the European Commission. Public debt is measured on a consolidated basis across different public administrations – otherwise loans made from the central government to regional or local governments would be double counted. Moreover, it is registered at face (nominal) value, while in the financial accounts it is estimated at the market price, which is higher than the nominal

value as long as market interest rates remain considerably lower than at the time when most of the outstanding public debt was issued.

Debt instruments: Bank based/ market based/ trade based

The above discussion on public bonds leads us to the next issue discussed in the article – debt dynamics in Spain. Specifically, we analyze the relevance of different types of debt instruments. The literature on financial systems distinguishes between bank-oriented and market-oriented ones. In Spain, reliance has largely been on bank finance. Given the impact of the crisis on banks, adversely affecting their traditional function as credit providers to the economy, there are some concerns about the ability to find non-bank sources of finance to compensate the lack of bank funding.

The debt dynamics observed in the different institutional sectors is going to have a mutual double-effect with the relative role of bank *versus* nonbank finance in the economy. As long as a leverage

increase has taken place in the public sector, heavily biased towards market based finance (issuance of bonds and bills), while deleveraging has taken place in the private sector (households and firms) with a heavy bias towards bank finance, it is expected that the share of bank finance in overall debt finance has considerably decreased.

Bank debt is virtually unchanged as a percentage of GDP as a consequence of the very different dynamics in the private and public sectors. Nonfinancial firms and households have reduced their bank debt by around 10% of GDP since the start of the crisis, while the public sector has increased its bank debt by almost the same magnitude in the same period.

This is what emerges when we analyze debt dynamics, by debt instrument, in each of the three institutional sector. Bank debt is virtually unchanged as a percentage of GDP as a consequence of the very different dynamics in the private and public sectors. Since 2007, nonfinancial firms and households have reduced their bank debt by around 10% of GDP, while the public sector increased its bank debt by almost the same magnitude. Such an increase in bank debt by the public sector is completely attributable to regional and local governments, unable to access the market during the crisis years, they had to rely almost exclusively on bank debt.

On the contrary, the public sector at the central government level relied almost exclusively on securities (bonds and bills) issuance. Almost 50% of GDP has been raised by the public sector through securities issues since the crisis started.

A final source of debt is trade related finance. In the case of households, as well as in the public sector, this form of finance has been non-

significant, and it has virtually stayed flat since the beginning of crisis.

For nonfinancial firms, however, trade finance has traditionally been an important source of finance, and continues to be so despite a sharp fall since the crisis started. Before the crisis, trade finance in nonfinancial firms represented around 65% of GDP, approximately half of bank debt, and much more important than debt in the form of securities. Since the crisis started, trade finance has fallen by one third, to around 42% of GDP currently.

Such a sharp fall in trade finance is probably a reflection of the fall in operational activity among nonfinancial companies, as well as the lack of credit worthiness among trade partners. It may also be adversely affected by more stringent conditions by banks in order to accept commercial paper as collateral for short-term finance.

Spanish debt dynamics by instrument and institutional sector (% GDP)

If we sum up the debt dynamics observed in the three institutional sectors, we end up with some interesting conclusions. Overall debt has increased by almost 40% of GDP, with a clear rebalancing among debtors and debt instruments.

Increased securities issues to finance the public sector, combined with decreased bank and trade finance for households and nonfinancial firms, has had an important effect in terms of characterizing the Spanish financial system. All new debt finance has been provided through securities issues, while bank loans stayed flat and trade finance shrank.

While private sectors (households and firms) went through an intense deleveraging process, amounting to more than 30% of GDP, such a

Table 2

Households

% GDP	2007	Peak of the cycle	2013	2013-07 change	2013-peak of cycle change
Bank debt	83	88	77	-6	-11
Securities	n.d.	n.d.	n.d.	-	n.d.
Commercial debt	6	7	6	-0	-1.0
Total	89		83	-6	

Source: Bank of Spain, AFI.

Table 3

Non-financial corporations

% GDP	2007	Peak of the cycle	2013	2013-07 change	2013-peak of cycle change
Bank debt	130	143	127	-4	-16
Securities	1	3	3	2	-0
Commercial debt	68	68	42	-26	-26
Total	200		171	-28	

Source: Bank of Spain, AFI.

Table 4

Public sector

% GDP	2007	Peak of the cycle	2013	2013-07 change	2013-peak of cycle change
Bank debt	7	21	19	13	-2
Securities	30	75	75	45	0
Total	36		94	58	

Source: Bank of Spain, AFI.

process was largely surpassed by the almost doubling of public sector leveraging.

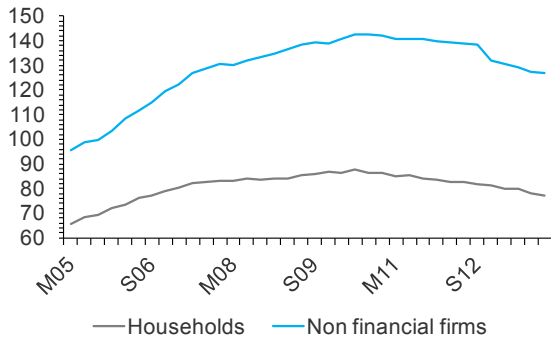
Increased securities issues to finance the public sector, combined with decreased bank and trade finance for households and nonfinancial firms, has had an important effect in terms of characterizing the Spanish financial system as bank-oriented or market-oriented, given the share of securities-based finance has increased considerably versus

bank-based finance. All new debt finance has been provided through securities issues, while bank loans stayed flat and trade finance shrank. As a consequence, market-based debt, which at the beginning of the crisis represented 25% of overall debt in the Spanish economy, has jumped to almost 40%.

A word of caution should be given on the role of security markets as true channels of finance.

Exhibit 4

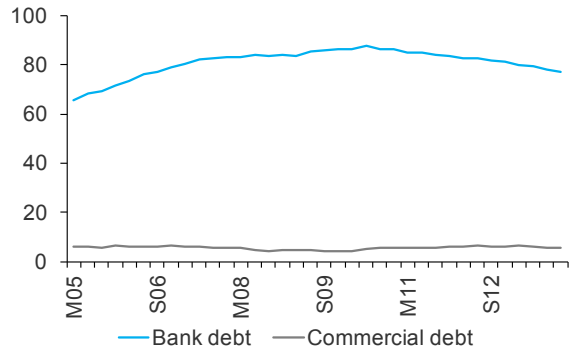
Banking debt
Percentage of GDP



Source: Bank of Spain, AFI.

Exhibit 5

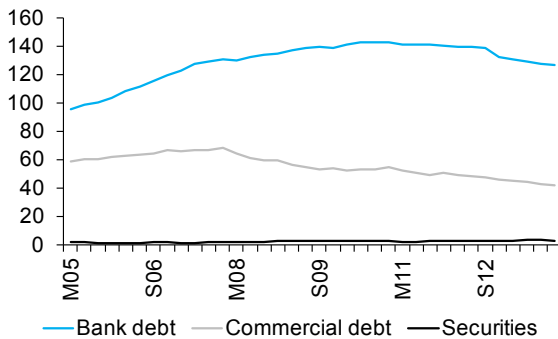
Households financial position
Percentage of GDP



Source: Bank of Spain, AFI.

Exhibit 6

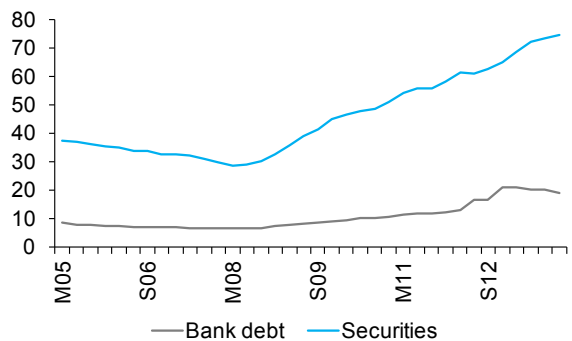
Non-financial firms financial position
Percentage of GDP



Source: Bank of Spain, AFI.

Exhibit 7

Public sector financial position
Percentage of GDP



Source: Bank of Spain, AFI.

Despite having behaved much better than bank finance in the last six years, their role as debt providers is only relevant for the public sector, as they represent almost 80% of total outstanding debt. When we talk about nonfinancial firms, however, the role of market-based debt is completely marginal (less than 5%), and only available for the largest companies. Only recently has the market started to increase appetite for

debt issues by mid-sized companies, a trend that will have to intensify.

Spanish debt: Where is it heading?

Future debt dynamics in Spain will depend on the relative behavior of the different institutional sectors, as well as the relative role of banks and markets as providers of finance.

Table 5

Private indebtedness

% GDP	Euro area	France	Germany	Italy	Spain
Households	71	68	58	56	84
Non financial firms	68	68	43	78	99

Notes: Households: Includes all liabilities, not just loans.

Non-financial firms: Includes an adjustment for estimated intercompany loans.

Source: IMF.

Starting with the public sector, we anticipate public debt will continue growing, though at a slower pace than in recent years, reaching a high of around 104% of GDP in 2017 –that is about 10% higher than today, and only then, starting a slow deleveraging process.

Regarding private sectors –households and nonfinancial firms– there are good reasons to believe that their deleveraging will continue. Despite having reduced their overall debt by almost 40% of GDP (10% households and almost 30% companies), overall private debt is considerably higher than in other large Eurozone countries, such as France, Germany or Italy, as recent data from the IMF show.

Private deleveraging, however, will proceed at a slower pace than has been the case in the latest years. In fact, nonfinancial companies, especially small and medium sized ones with export oriented activity, are progressively taking the lead towards potential recovery of the Spanish economy, given that an intense internal devaluation has taken place, allowing Spanish companies to gain international competitiveness.

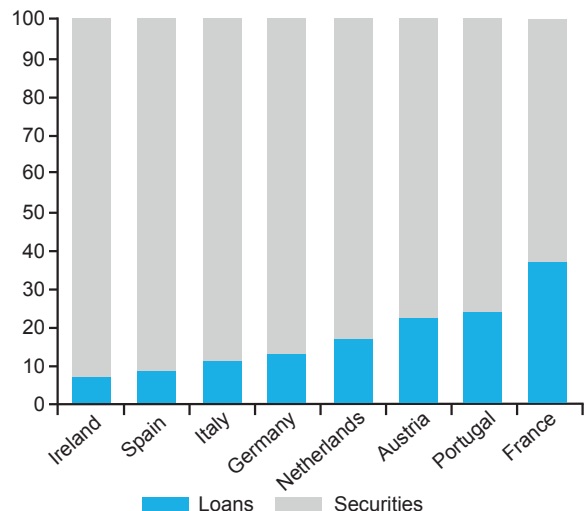
The new role of SMEs rests on being able to access new forms of finance outside the banking system, which is not going to show up in net loan growth in the near term. Nonbanks sources of finance for SMEs are especially needed in Spain, whose over-reliance on bank financing

is among the highest in Europe, as the IMF has systematically recalled, and as following Exhibit illustrates.

Exhibit 8

Sources of nonfinancial corporate credit, 2013:Q3

Percent of total



Note: Excludes estimated value of intercompany.

Source: IMF.