Evolution of Spain´s debt dynamics: Who's who in the Spanish debt market

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Despite strong deleveraging efforts by Spanish households and corporates, increased public sector borrowing continues to drive up Spain´s overall debt burden. The changes in debt composition are being mirrored by the increase in Spanish banks´ holdings of public debt relative to a decrease in traditional lending, but the overall level of financial intermediation in the Spanish economy remains high.

Since the start of the financial crisis, global aggregate debt ratios have been on the rise – albeit masking a decline, or at least stabilization, in private sector borrowing and a spike in public debt. This trend is reflected in Spain´s debt dynamics throughout the crisis. Initially high private sector debt levels underwent a notable correction. Meanwhile, initially low public sector debt levels rose as a result of increased public borrowing, leading to a surge in overall Spanish debt levels. An analysis of Spain´s external debt dynamics in 2008 relative to mid-2014, broken down by debtor and creditor, more visibly illustrates the deleveraging across households and corporates in contrast to the releveraging within the Spanish government. Banks remain the main creditors to both the private and public sectors, however, there has been a corresponding shift in banks´ creditor positions - the reduction of their exposure to corporate and household loans and their increased holdings of public sector securities, reflecting the changes in the relative composition of Spanish debt.

Introduction: Global debt dynamics

Debt dynamics have emerged as one of the key factors for understanding the duration and depth of the crisis and the effectiveness of the related policy response. A recent report, "*Deleveraging? What deleveraging?,"* published by Geneva Reports on the World Economy, provides an international comparison of these debt dynamics.

Global debt has continued to rise since the start of the crisis, mainly driven by incremental borrowing by emerging nations. In the developed world, the divergences are noteworthy in terms of both aggregate debt levels and the breakdown along sectoral lines. According to the abovementioned Geneva report (2014), aggregate debt across the developed economies, excluding financial sector debt, went from 230% of GDP in 2007 to 272% in 2013, with the U.S., UK and Eurozone presenting

[1] AFI - Analistas Financieros Internacionales, S.A.

broadly similar leverage ratios and trends. The rise in the aggregate leverage ratio in the last six years masks a decline, or at least stabilisation, in private sector borrowing and a spike in public debt.

The Eurozone is a case study in itself. As with most analyses, the aggregate debt snapshot is not representative of the trend in the various economies making up the region. While the debt stock of households and non-financial corporates is below 150% of GDP in Germany, France and Italy, this metric stands at over 200% in Spain and more than 300% in Ireland. The Eurozone's peripheral nations' public finances have deteriorated more significantly on a relative basis. Translating this into external debt terms calls the sustainability of the recent growth trend into question. Without a monetary authority with scope for intervention on par to that of the Federal Reserve or the Bank of England in terms of financing public sector debt, the Eurozone looks particularly vulnerable to further episodes of financial stress, such as that witnessed in 2011-2012, when the sovereign debt crisis ravaged the region's peripheral economies.

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A cross-country comparison of capital investment and savings rates in the Eurozone is useful in terms of understanding the magnitude of the debt taken on during the boom years and the obstacles lying in the path of accelerated deleveraging in the near term. The peripheral economies had relied on debt to fund growth in domestic spending, which translated into investment rates of over 25% of GDP and the international expansion of their corporate sectors. This took place without an intense correction in aggregate savings. However, when the crisis broke out and the financial markets ground to a halt, the correction in the external borrowing requirement was fuelled by collapsing investment rates. The reduction in savings rates against the backdrop of shrinking income and high public deficits is crucial to understanding the slow pace of deleveraging in peripheral nations. In economies such as Italy and France, the correction in investment levels was accompanied by a similar drop in savings, which is why their stock of external debt has not come down. The flip side of the coin is illustrated by countries such as Germany, where aggregate savings rates have even increased thanks to sustainable debt levels.

Spain: Diverging paths in private and public debt

Spain's pre-crisis aggregate debt level was high, albeit concentrated in private debt, with Spanish public debt accounting for just 41% of GDP.[2] The economy's overall leverage, excluding the financial sector, stood at just over 250% of GDP, with corporates and households contributing debt equivalent to 210% of GDP, i.e., over 80% of total debt outstanding in Spain at the time.

The financial sector played a key role in channelling external savings into sectors whose investment decisions exceeded their self-financing capacity. This is evident in the growth in the amount of bank credit extended to the resident private sector: the weight commanded by this form of debt in the economy surged from under 85% of GDP at the start of the century to 170% of GDP pre-crisis.

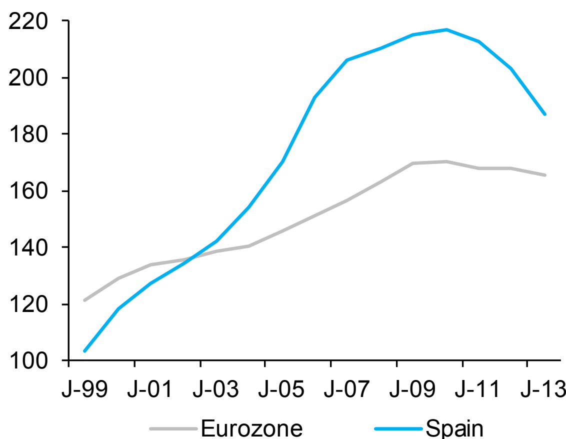
The recent recessionary period has driven an uptick in overall Spanish debt levels, which at

[2] Ratio calculated on the basis of the value of liabilities taking the form of loans and debt securities at all levels of government using information from the national accounts. For this reason, the ratio does not coincide with the public debt ratio arrived at using the so-called Excessive Debt Procedure criteria.

Exhibit 1

Private debt ratio (households and non-financial corporates) in the Eurozone *vs.* Spain

(% of GDP)

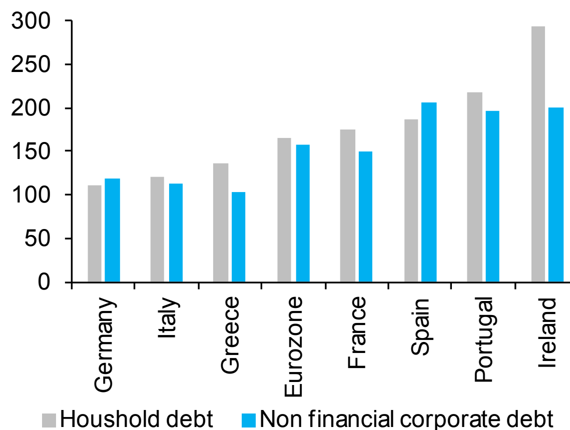


Sources: EUROSTAT, AFI.

Exhibit 2

Private debt ratio (households and non-financial corporates) by country

(% of GDP)

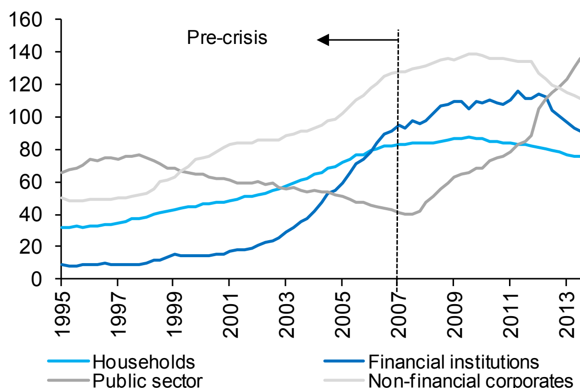


Sources: EUROSTAT, AFI.

Exhibit 3

Debt ratios in Spain by sector

(% of GDP)

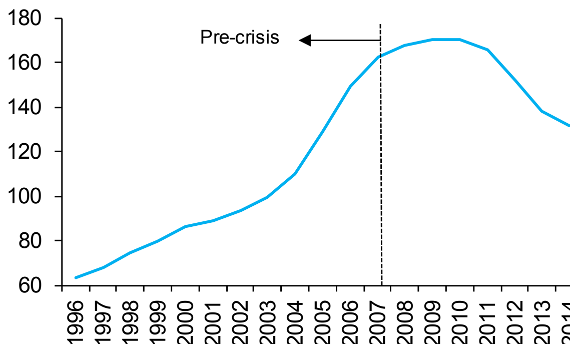


Sources: Bank of Spain, AFI.

Exhibit 4

Volume of credit extended to the resident private sector in Spain

(% of GDP)



Sources: Bank of Spain, AFI.

June 2014 stood at 322% of GDP, albeit marking one important difference with respect to the composition of the nation's pre-crisis debt: government borrowing has increased considerably, while the two main private sectors, i.e., households and non-financial corporates, have deleveraged.

Indeed, Spain has reduced its private sector indebtedness by more than any other country, having deleveraged since the peak of mid-2010 by some 40 percentage points of GDP. On the other hand, in the Eurozone as a whole, the debt stock of households and corporates increased by almost 9 points as a percentage of GDP between

2007 and 2013, in stark contrast to the trend in places such as the U.S., which has witnessed a

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more typical 'balance sheet adjustment', marked by a swifter and sharper correction in output, employment, real estate prices and debt relative to the Eurozone.

In Spain, within the private sector, the deleveraging process has been more intense in the corporate sector, due to the sharp credit crunch experienced in certain segments of the economy, such as construction and property development, given the need to reduce dependency on external borrowing against the backdrop of high financing costs and a reduced need for fresh capital in light of widespread business contraction. As a result, Spanish corporate debt as a percentage of GDP has fallen by 27 points from the peak of 2010 to mid-2014. The fact that the bulk of household debt takes the form of long-term mortgage loans and is held by households facing significant income constraints explains the slower deleveraging process in this sector. Nevertheless, household debt has fallen by 12 points of GDP during the same period, which translates into a significant improvement in terms of disposable income: the household debt-to-income ratio has declined from 1.3% in 2008 to 1.13% in 2014.

Who's who in the Spanish debt market

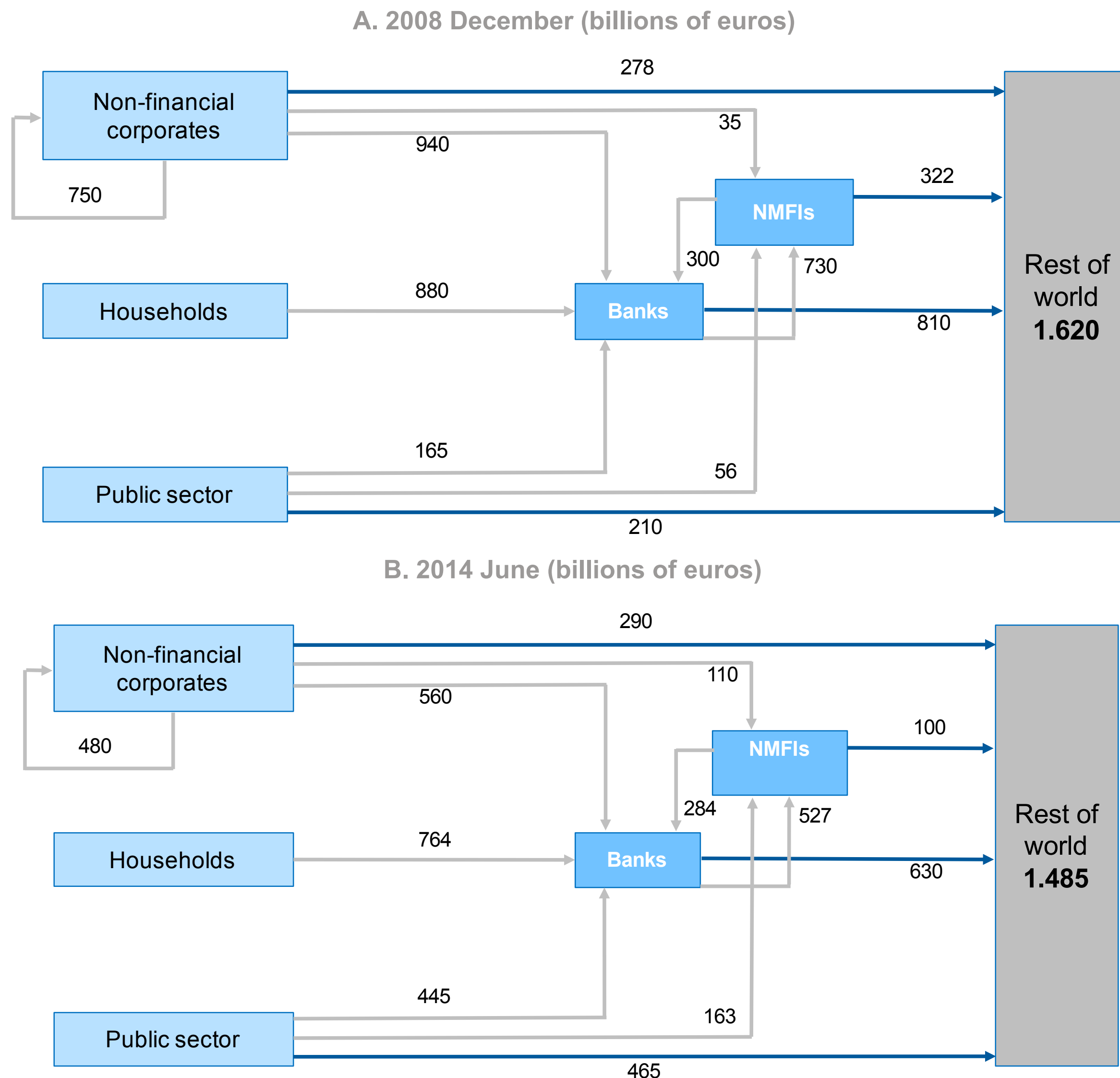
In analysing debt levels, it is worth distinguishing between gross and net debt (net of financial assets). In aggregate sector terms, the more meaningful metric is gross debt because the net balance of financial liabilities and assets in an aggregate sector is the sum of the positions of economic agents whose net financial positions cannot be offset.

Following this line of reasoning, we have built a debt map which allows us to identify 'who owes whom' in aggregate terms by sector and compare the current situation (June 2014) with the pre-crisis debt map (year-end 2008), with a view to deducing the changes arising in the nature of Spain's debtors and creditors. Exhibit 5 below sums up the debt map as of those two points in time, emphasising two key issues: the role of the financial system in Spain´s debt and the volume extended by external counterparties, i.e. the role played by foreign creditors or economic agents.

On the debtor side of the equation, we have contemplated the three major sectors: households, non-financial corporates and government, the latter at all levels. For government debt, we have excluded the debt for which the counterparty is another public administration. This exclusion, undertaken purely for accounting purposes, also has a financial rationale since the creation of the Regional Liquidity Fund (FLA in its Spanish initials), which essentially implies a degree of debt consolidation among the various levels of government.

As for the financial system, for the purposes of its role as primary counterparty, we have broken it down into banks (monetary financial institutions or MFIs) and non-monetary financial intermediaries (NMFIs). This second category encompasses institutions which have played an active role either holding and/or channelling abroad a large part of the debt taken on by the various sectors. This heading includes mutual funds, securitisation funds and the SAREB, the so-called bad bank set up to manage the toxic real estate assets resulting from the bank restructuring process. Spain's non-financial corporates ended 2008 with outstanding debt of around 2 trillion euros, of which roughly 750 billion euros was intra-company debt, mostly trade debt (trade payables), although there

Exhibit 5
Spain's debt map: Who owes whom?



Note: These accounts estimate financial assets and liabilities at their market values, which do not coincide with these instruments' face values, particularly in the case of bonds.
Source: AFI, using the Spanish economy's financial accounts *(CFEF in their Spanish initials).*

may also be some intra-company loans in this category. Of the remainder, around 278 billion euros was debt taken on directly with foreign creditors, or the 'rest of the world'. However, the bulk of this sector's debt (almost 1 trillion euros) was held by financial institutions, mainly banks. The preponderance of bank debt in the financing mix was even more pronounced in the household sector, which owed the banks 880 billion euros at the time.

The various levels of government, meanwhile, had around 430 billion euros of debt, of which almost 50% (210 billion euros) was owed directly to the rest of the world, some 165 billion euros to the banks and around 56 billion euros to other financial intermediaries, mostly mutual funds.

It is important to additionally highlight the significant flow of 'cross financing' evident in 2008 between non-monetary financial institutions (NMFIs) and the banks. The NMFIs owed the banks around 300 billion euros, mainly as a result of securitisation bonds issued by the NMFIs and acquired by the banks, while the banks owed the NMFIs around 730 billion euros, mainly due to the bank deposits held by the numerous funds. This heading also encompasses the subordinate loans extended by the banks to the securitisation funds which served as credit enhancement tools, thereby facilitating their placement with investors, particularly foreign investors. The funds' sizeable effort to place their paper overseas is evident in the 322 billion euros of debt owed by the NMFIs to the rest of the world.

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In addition to the external debt channelled through the financial system (banks and other financial institutions), both the government and non-financial corporates had raised debt directly from overseas (210 billion euros and 278 billion euros, respectively), bringing total gross external debt at the time to 1.62 trillion euros.

The contrast between the debt breakdown at year-end 2008 and that of mid-2014 is very significant in terms of analysing the trend in Spain's debt throughout the crisis. Let's start with Spain's household bank debt, which has decreased by almost 120 billion euros (12% of GDP) to 764 billion euros.

The most noteworthy change in the case of non-financial corporates is the sizeable decrease in intra-company debt, which has fallen by around 270 billion euros. Without a doubt, the drop in trading volumes among companies, coupled with harsher payment terms, is behind this significant decrease, which in relative terms is even higher than the decrease in bank debt.

The latter has fallen by close to 380 billion euros, although some of this reduction has been offset by the sharp increase (75 billion euros) in debt with NMFIs, which is attributable almost in its entirety to the transfer by intervened banks of all their real estate loans to the SAREB. Taking the financial system as a whole (banks and other financial intermediaries), the non-financial corporates have deleveraged by around 300 billion euros, i.e., 30% of GDP, which, coupled with the 120 billion euros reduction in household debt, translates into a deleveraging effort by the private sectors of the economy equivalent to 42% of GDP. As an aside, the debt owed by non-financial corporates to foreign creditors has increased by an amount not deemed material in relation to the volume of debt owed to the financial sector.

The private sector deleveraging effort has been more than offset by the sharp increase in government debt. Total government debt has increased by over 600 billion euros since 2008, with the public sector owing more to all three major counterparties. Firstly, the public sector's

direct debt with the rest of the world had doubled to 465 billion euros by June 2014. The percentage increase is even more pronounced in the case of the public sector's bank debt and more noteworthy again in terms of the sum owed to NMFIs. The balance owed by the government to NMFIs has tripled to 163 billion euros, fuelled by renewed investor appetite on the part of households.

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Lastly, the banks' creditor position with the Spanish public sector rose to 445 billion euros, driven mainly by massive buybacks of public debt since the ECB launched its long-term liquidity scheme (long-term refinancing operations, or LTRO) in 2012 with the clear-cut goal of facilitating the acquisition of sovereign bonds by providing banks with stable funding at low interest rates.

'Cross financing' between the banks and NMFIs, meanwhile, has fallen considerably, particularly in terms of the volume of debt extended by the banks to the NMFIs, which has decreased by 200 billion euros, exactly the same amount by which the NMFIs' foreign debt has decreased. The decrease in this balance, on aggregate, is attributable to a significant reduction in the role played by the NMFIs in channelling foreign savings into Spain, a role it had played actively in the run-up to the crisis in the mortgage bond segment, an asset class which has suffered as a result of the lack of investor confidence from the outset of the crisis.

The external debt held by the overall financial system (banks and NMFIs) has decreased by no less than 400 billion euros between 2008 and mid-2014, although it remains the economy's biggest debtor with the rest of the world, owing more than 700 billion euros. The direct external debt position of Spain's non-financial corporates has barely changed (at close to 300 billion euros), while that of the public sector has increased very significantly, as already outlined.

As a result of all of these offsetting movements, Spain's aggregate external gross debt has fallen by very little – around 140 billion euros – masking, however, a very significant shift in composition marked by a sharp decline in the financial system's external debt and a similarly noteworthy increase in external government debt.

The ultimate snapshot: gross external debt of close to 1.5 trillion euros, with the financial system still the biggest debtor, accounting for around half, followed by the public sector, which holds a little over 30% of the total, and lastly by Spain's non-financial corporates, which directly owe a little under 20% of the balance.

The predominant role of the banking system

The predominant role played by the banks (credit institutions in general) in Spain's financial system is the reason why the banks are the biggest counterparty to the nation's debt, this being true for the stocks of both private and public debt.

In terms of private sector debt, virtually all of the debt held by Spain's households (with the exception of deferred retail purchases) is in the form of bank loans, either home mortgages or consumer finance.

In the case of non-financial corporates, the balance taking the form of securities is very small, with bank financing also predominating in this sector, in which trade finance (supplier credit) also accounts for a significant percentage (around 20%).

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the Treasury's most important financiers insofar as they are the most active investors in the securities it issues. The purchase of public debt (securities) by the Spanish banks has taken on extraordinary importance in the last three years under the ECB successive liquidity schemes and injections.

Leaving aside the implications for market risk and vulnerability to potential spikes in secondary market yields, it is becoming clear that the banking business in Spain has embarked on an undesirable business shift in which loans to productive activities are losing weight relative to public sector financing at an alarming pace, as depicted in Exhibit 6, which shows aggregate financing extended by the Spanish banking system to the private and public sectors in absolute terms and as a percentage of their total assets.

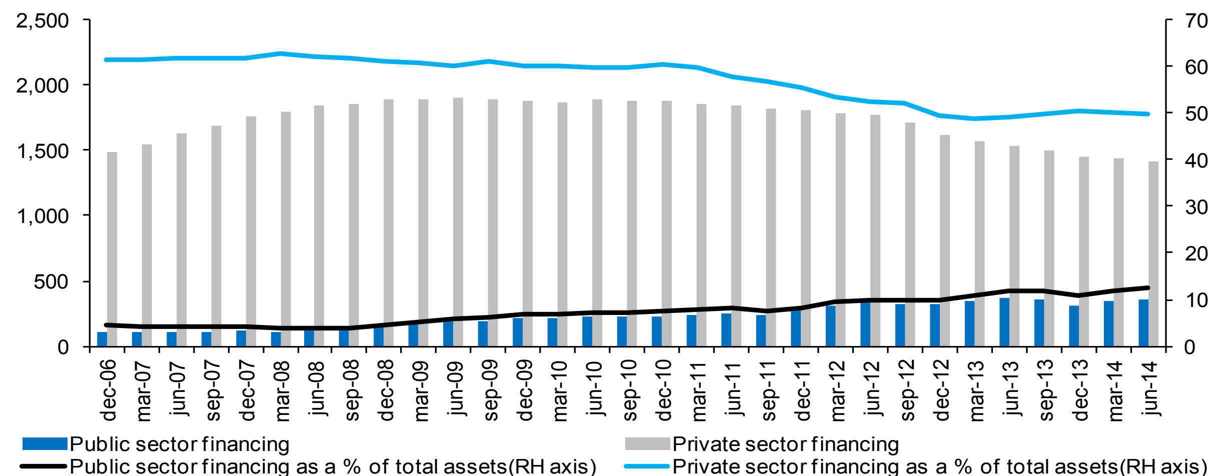
The Spanish banking system has shifted its exposure to both sectors very dramatically. Private sector financing (corporates and households) has fallen by over 10% in terms of consolidated banking assets (or more than 300 billion euros), while public sector financing has gained weight by almost exactly the same percentage.

This trend, particularly intense in the last two years, has a corresponding impact on the nature of the banking business, as is most evident in the breakdown of banks' income between lending activities and public debt holdings (along with other fixed-income security investments), which is depicted in Exhibit 7.

Exhibit 6

Deposit-taking entities' asset bases

Billions of euros (columns, left-hand axis) and as a percentage of total assets (lines, right-hand axis)

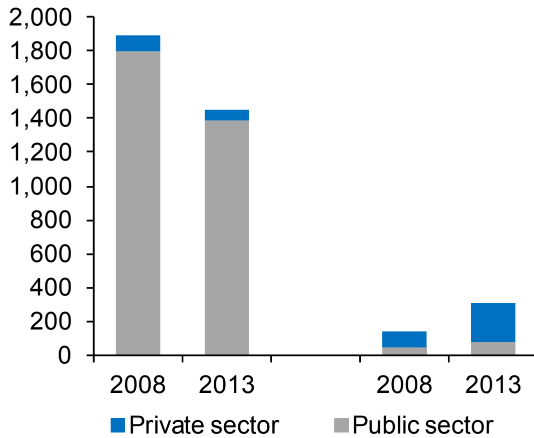


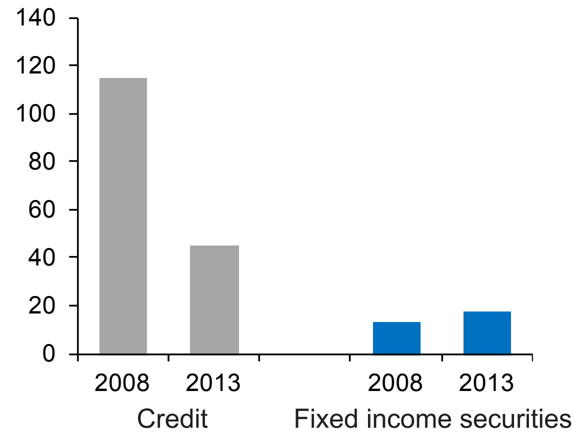
Sources: Bank of Spain, AFI.

Exhibit 7

Sources of financial income in the Spanish banking system

(Billons of euros)





Sources: Bank of Spain, AFI.

At the onset of the financial crisis, the Spanish banking system was owed a total of 1.9 trillion euros by the private sector (corporates and households) and around 140 billion euros by the public sector, which translates into a ratio of 93% to 7%, mirrored by a similarly proportionate contribution by each sector to the banks' financial income: 90% of their income was generated by loans and 10% by their fixed-income security holdings, which mainly took the form of sovereign bonds. This relative weighting has undergone a dramatic change between then and now, with the current private vs. public sector creditor position split at 80/20. In terms of the sectoral contribution to banks' income, the shift has been even more marked, with income from security holdings now accounting for 25% of the total, highlighting the fact that the banking system currently obtains a higher return from holding public debt than from lending money to the private sector. It is worth noting, however, that net interest income has been sharply eroded by the rise in non-performing loans as a result of the surge in NPL ratios, which have in turn fuelled risk aversion on the part of the financial institutions, affecting their propensity to lend to the private sectors, particularly Spain's small and medium sized companies. Insofar as the NPL ratio has been trending lower for a full year now, this risk aversion should start to dissipate, paving the way for renewed private sector lending activity, particularly in the SME segment, whose only source of external financing remains bank credit.

Conclusions

The shift unfolding in the banking system's creditor positions, marked by declining exposure to corporates and households and increasing exposure to the public sector, is nothing other than the counterpart to the trend in both sectors' relative leverage in terms of the Spanish economy's overall stock of debt: intense deleveraging by the private sectors, more than offset by spiralling public sector debt with the net result of these offsetting trends being an increase in Spain's aggregate stock.

In parallel, we have witnessed a significant change in the relative weights of debt taking the form of securities compared to that of bank loans. The fact that the only sector capable of raising money predominantly in the form of securities, the public sector, has substantially releveraged, while the

sectors which rely on bank loans – households, corporates and, within the latter, small and medium sized companies in particular – have deleveraged, has driven a decline in the weight of bank loans in the economy's overall aggregate debt stock relative to fixed income securities.

Notwithstanding this shift in debt instruments, under no circumstances can it be claimed that the Spanish economy is witnessing bank disintermediation in aggregate terms, as the banks' share of overall liabilities and assets has barely fallen. Banks are simply substituting lending for the purchase of public debt, having emerged as the biggest buyers and holders of Spanish sovereign bonds.