Spain’s private sector indebtedness: Where do we stand and what are the remaining challenges?

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Private debt imbalances have begun a process of slow correction. Additional adjustment is necessary, in particular related to the housing market, but important consideration must be given to ensure future deleveraging does not threaten financial stability.

While a significant degree of public attention on Spanish imbalances has been devoted to the public debt, Spain does not seem to have a comparative disadvantage relative to its European peers where public debt levels are concerned. However, Spanish private sector debt experienced intense growth in the years prior to the crisis and is now considerably higher than the EU average. This article shows that Spain’s private debt imbalances are significant and correcting them is one of the major challenges for the Spanish economy over the next few years. Private debt has been mainly channelled through banks. As a consequence, current banks’ asset impairment problems - and the resolution mechanisms necessary to address them - will determine to a large extent the way the deleveraging process is conducted. Furthermore, private sector debt imbalances and related banking problems are linked to house price dynamics. Lower house prices and improved housing affordability could be two of the means through which to help Spain to accelerate private sector deleveraging.

Introduction to Spain’s private debt problem

While controlling public deficit and debt are two of the main current concerns over Spain, it is private debt that accounts for the difference between Spain and other EU countries. There is a link between public and private debt and international investors are interested in determining the extent to which there could be potential transfers from private to public debt. The IMF has pointed out in its latest Global Financial Stability Report, published in April 2012, that “Ireland and Spain are examples of a private debt overhang weighing down the sovereign”. As shown in Exhibit 1, public deficit and debt has been pushing sovereign risk up but there is a link with private debt issues. Specifically, the accumulated private sector debt has increased the banking sectors’ asset impairment and if the resolution mechanisms eventually involve public funding, this may further increase the public deficit, in line with the concerns of the IMF.

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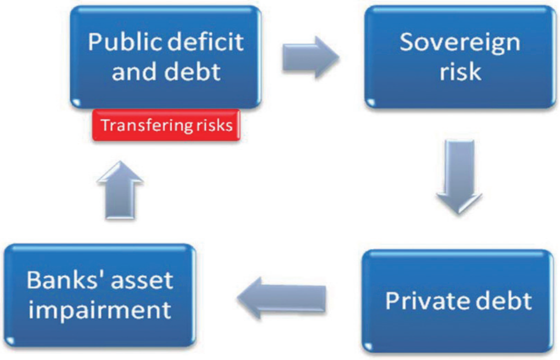
The history of financial crises has shown that domestic private debt crises could be even more harmful than external debt or exchange rate crises as it happened, for example, in Mexico and Brazil during the 1980s, in Russia during the 1990s and in Argentina during the 2000s. Spain's current problems with both sovereign and private debt are good examples. Private sector borrowing expanded rapidly in Spain in the period preceding the 2007 financial turmoil, as occurred in other developed and emerging economies. Household debt has shown a downward adjustment since 2007 -both in terms of GDP and disposable income- although it is still significantly higher than in other EU countries.

Exhibit 1

Public and private debt risk transfer



Source: Own elaboration.

Table 1

Indebtedness and leverage to GDP in selected advanced economies: IMF projections for 2012

	SPAIN	Euro Area	Greece	Ireland	Italy	Portugal	France	Germany	United Kingdom	United States	Japan	Canada
General government debt												
Gross	79	90	153	113	123	112	89	79	88	107	236	85
Net	67	70	n.a.	103	102	111	83	54	84	84	135	35
Primary balance	–3.6	–0.5	–1.0	–4.4	3	0,1	–2.2	1	–5.3	–6.1	–8.9	–3.1
Household debt												
Gross	89	70	70	120	51	105	63	59	99	88	74	89
Net	–72	–123	–48	–68	–171	–124	–127	–118	–178	–226	–236	–151
Nonfinancial corporate debt												
Gross	196	138	75	244	112	154	152	63	118	87	143	53
Debt divided by equity (percent)	149	106	264	84	139	144	85	107	86	82	184	45
Financial institutions												
Gross debt	109	142	33	691	97	63	169	97	742	87	177	60
Leverage of domestic banks	20	23	15	24	19	16	24	28	22	11	23	18
Bank claims on public sector	26	n.a.	29	27	32	19	17	21	8	7	79	18
External												
Gross	221	191	207	1.717	142	286	255	219	717	146	66	93
Net	93	14	97	93	23	107	9	–33	11	16	–52	11
Government debt held abroad	28	25	87	66	49	62	56	48	25	30	19	17

Source: International Monetary Fund (Global Financial Stability Report: The Quest for Lasting Stability, 2012).

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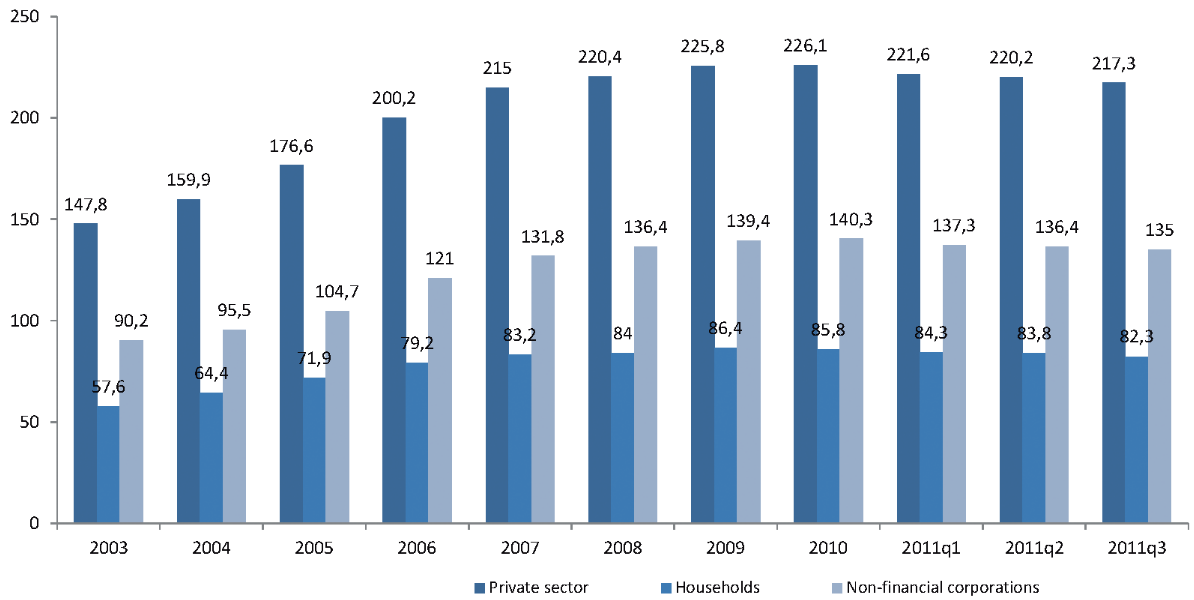
The projections on public and private debt to GDP made by the IMF (see Table 1) suggest that Spanish gross government debt to GDP will be 79% by the end of 2012, while the EU average will be 90%. However, households' debt to GDP is expected to reach 89%, while the estimation for the EU is 70% Similarly, non-financial firms' debt in Spain will grow to 196% in 2012, according to the IMF, while the EU average will be 138%.

Understanding how Spain reached this point, and how intense private sector deleveraging should be in the following years, is critical to understanding the Spanish path towards economic recovery. Where do we stand and what are the remaining challenges? In the following sections, we offer our insights on how Spain's private debt has evolved before and during the crisis and what challenges remain for households, firms, and banks to correct the accumulated imbalances over the next few years. The next section describes the evolution of private debt in Spain. Subsequently, we address

Exhibit 2

Debt of the non-financial sectors in the form of securities other than shares and of loans

(% of GDP)



Source: Bank of Spain and own elaboration.

the extent to which households and firms will need to deleverage and the importance that housing market dynamics (including housing affordability) may have in correcting current imbalances. Finally, the last section offers some conclusions.

Evolution of private debt in Spain and its regions

The information provided in the Financial Accounts published by the Bank of Spain is a useful tool to analyze the recent evolution of households' and non-financial firms' debt in Spain. Exhibit 2 shows the evolution of the debt of the non-financial sectors in the form of securities other than shares and of loans as a percentage of GDP from 2003 to 2011Q3 (latest information available). In 2003, the private debt to GDP ratio was 147.8% and in 2010 it was 226.1%. This represents a net increase in private debt of 52.9% of GDP in just seven years.

A slow deleveraging process started in 2010 as the ratio of private debt to GDP fell to 217.3% in 2011Q3. However, if we take 2003 as a reference, it seems that there is still a significant

Table 2

Net difference between loans and deposits and loans-to-deposits ratio in Spain and its regions (2005-2011)

	2005		2007		2009		2011*	
	Net difference (Eur million)	Loans/ Deposits Ratio	Net difference (Eur million)	Loans/ Deposit Ratio	Net difference (Eur million)	Loans/ Deposits Ratio	Net difference (Eur million)	Loans/ Deposits Ratio
Andalusia	76,974.74	1.96	127,764.27	2.28	124,206.39	2.19	112,559.51	2.08
Aragon	10,016.90	1.46	16,362.67	1.57	13,375.94	1.40	11,069.23	1.32
Asturias	2,723.90	1.18	6,176.29	1.32	4,795.22	1.22	2,561.00	1.11
Balearic islands	14,485.77	2.03	23,126.87	2.32	24,010.84	2.22	21,593.09	2.07
Basque country	15,889.39	1.35	21,029.33	1.35	6,918.15	1.09	10,599.43	1.14
Canary islands	21,312.64	2.22	33,060.77	2.54	32,470.90	2.40	27,868.61	2.20
Cantabria	3,709.31	1.51	5,915.94	1.63	4,497.57	1.40	3,558.12	1.30
Castile-La Mancha	8,806.85	1.36	20,067.80	1.65	19,294.31	1.55	16,129.89	1.46
Castile-Leon	6,305.86	1.14	15,455.70	1.29	11,466.75	1.19	7,432.08	1.12
Catalonia	88,818.83	1.66	147,034.26	1.86	148,300.86	1.76	131,123.14	1.68
Extremadura	3,091.16	1.27	6,024.34	1.41	5,363.70	1.32	4,523.96	1.27
Galicia	10,672.22	1.32	21,247.78	1.50	18,672.00	1.37	11,106.60	1.21
Madrid	47,198.69	1.22	109,038.15	1.35	115,000.17	1.35	130,308.60	1.43
Murcia	14,160.92	1.83	25,638.81	2.17	24,808.44	2.06	22,741.46	1.93
Navarra	4,818.58	1.43	7,616.00	1.51	7,090.70	1.42	6,083.42	1.36
La Rioja	3,534.63	1.73	5,383.81	1.80	4,363.54	1.54	3,592.04	1.44
Valencia	47,857.40	1.69	76,449.43	1.78	82,357.38	1.85	78,356.36	1.82
Ceuta	270.98	1.46	452.31	1.61	505.80	1.61	544.53	1.66
Melilla	201.59	1.36	317.89	1.43	265.17	1.34	184.96	1.22
SPAIN	380,850.36	1.50	668,162.44	1.65	647,763.81	1.58	601,936.02	1.55

* September.

Source: Bank of Spain and own elaboration.

debt reduction effort required ahead. In absolute terms, the Spanish private sector accumulated more than 800 billion euros in debt between 2003 and 2009 and in 2010 and 2011 the reduction of this debt was 70 billion euros.

As for firms, the ratio of debt to GDP was 90.2% in 2003 and increased to 140.3% in 2010. From then onwards, it fell to 135% in 2011Q3. In the case of households, the debt ratio was 57.6% in 2003 and 86.4% in 2009 and it only decreased to 82.3% in 2011Q3. As shown in the latest Financial Stability Report of the Bank of Spain (April, 2012) "credit to the private sector in Spain remained on a declining trend, which is largely due to the natural process of deleveraging by households and firms following the strong credit growth in the years prior to the crisis"[4] . The process, however, seems to be proceeding at a slow pace.

As both households and firms' debt is mainly bank debt, looking at the evolution of bank loans could be another way of analysing private sector leverage, particularly in the case of the regions.

[4] http://www.bde.es/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/12/FinancialStabilityReport_Apr_12.pdf

In order to provide a relative measure of this leverage, we compare the amount of loans with the amount of deposits. This also allows us to have a proxy of the evolution of private sector debt at the regional level, where no other statistics are available or have been recently updated. Table 2 shows the evolution of the loans-to-deposits ratio in Spain and its regions from 2005 to 2011. The ratio increased from 1.50 in 2005 to 1.65 in 2007. This financial leverage ratio fell to 1.55 by September 2011.

As for the regional breakdown, Canary Islands (2.20), Andalucía (2.08) Balearic Islands (2.07), and Murcia (1.93) are the regions where private sector leverage is found to be higher. As for the regions showing the lowest values of the loans-to-deposits ratio, they are Asturias (1.11), Castile - León (1.12), the Basque Country (1.14), and Galicia (1.21).

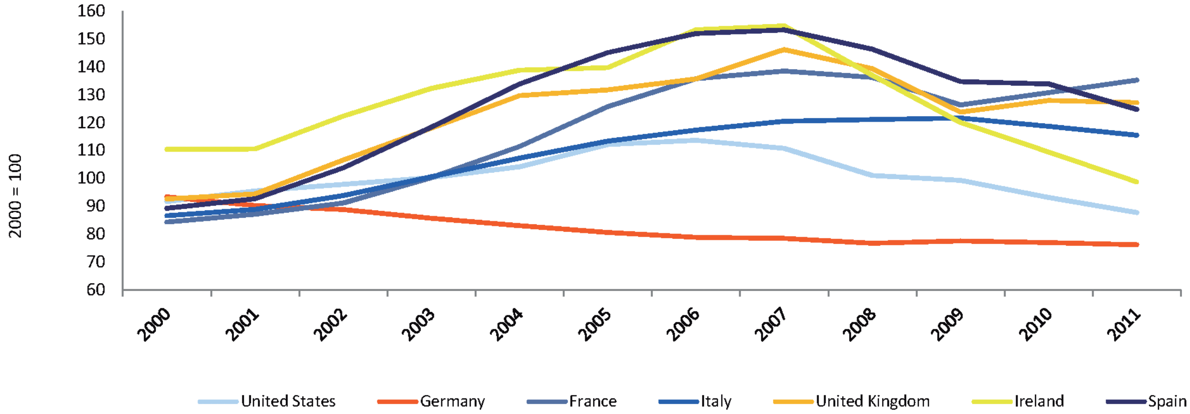
Spain's private sector deleveraging challenge and house price dynamics

Housing market developments and private sector indebtedness have been closely linked during the follow-up to the 2007 financial crisis. Since

Exhibit 3

House price-to-income ratio in selected countries (2000-2011)

(2000=100)



Source: IMF (2012), "Global House Price Monitor. Will House Prices Keep Falling?" by Prakash Loungani.

the late 1990s, expectations of continued house price increases eased credit growth considerably, particularly to the real estate and construction sectors. This is one of the reasons the house price cycle in Spain became particularly pronounced compared to other European countries.

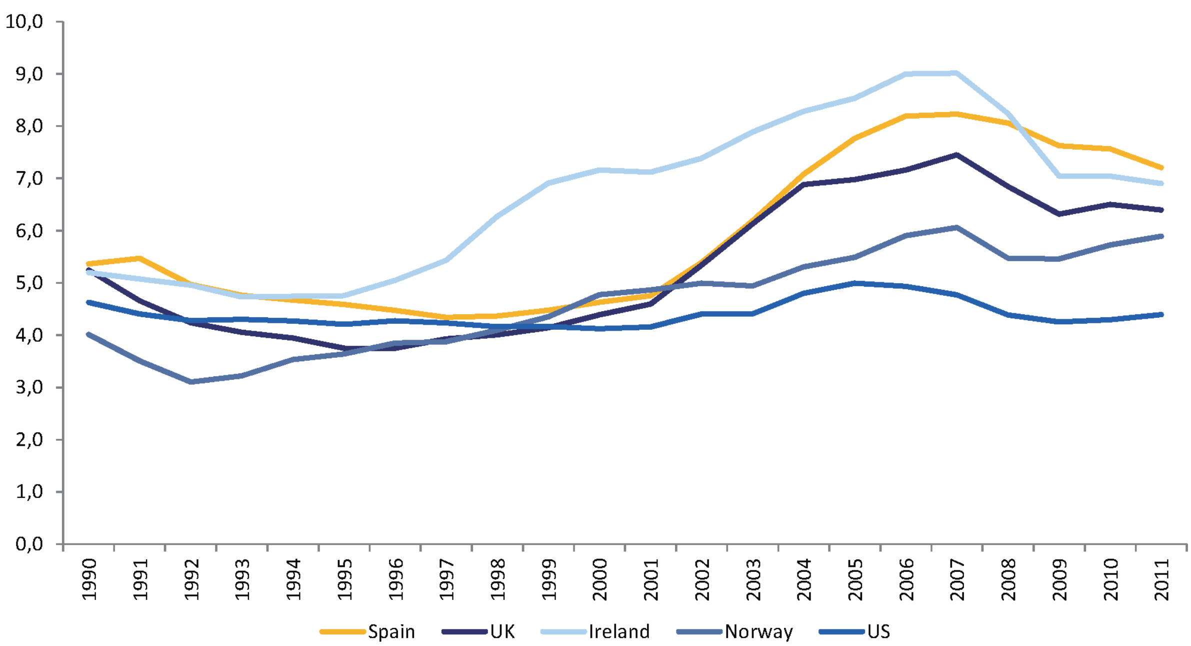
One indicator that Spanish private sector deleveraging and debt imbalances are not being corrected as fast as one would have expected relates to the correction in house prices observed in Spain compared to other countries that also experienced real estate bubbles (i.e., Ireland, UK). Institutions such as the IMF look at this correction in house prices as a key driver of correction of private sector debt imbalances. One of the methods of monitoring the extent to which imbalances are being corrected is housing affordability. The IMF uses the ratio of median house prices to median household disposable income as a metric for housing affordability. As shown in Exhibit 3, Spain is one of the countries (along with France and Italy) where the housing affordability index remains high.

Since the late 1990s, expectations of continued house price increases eased credit growth considerably, particularly to the real estate and construction sectors. This is one of the reasons the house price cycle in Spain became particularly pronounced compared to other European countries.

Another method of showing a house affordability index is by calculating the number of annual salaries that a household will have to pay to acquire an average house. Making such a comparison at an international level is a hard task as it requires taking data from different sources which are as homogeneous as possible.

Exhibit 4

Housing affordability in Spain, UK, Ireland and the US (1990-2011)



Source: OECD Statistical Database and National Statistical Offices.

As for the data on average wages, they are the most homogeneous through the ratio of "expenditure on staff compensation" to "labour force". Both variables can be obtained from the OECD Statistical database. As for the data on average house prices, they are computed by taking different national sources that use similar methodologies. House prices were computed for 90 sq. m. houses.

As shown in Exhibit 4, larger salaries are required to acquire a house in Spain, Ireland and the UK and they have increased significantly over the last 10 years compared to, for example, the US. The house affordability index for Spain experienced a considerable growth in pre-crisis years. In 2000 the number of annual salaries to buy a house was 4.6, in 2007 it almost doubled to 8.2 annual salaries.

Compared to the other selected countries, the correction in terms of housing affordability in Spain seems to be lower and the level still seems to be the higher, suggesting that there is still room for further adjustment.

As for the post-crisis period, the house affordability index for Spain decreased from 8.2 in 2007 to 7.2 in 2011. However, compared to the other selected countries, the correction in terms of housing

Table 3

Number of salaries needed to buy a house in Spain and its regions

	2005		2007		2009		2011*	
	Average salary (Eur)	Number of salaries	Average salary (Eur)	Number of salaries	Average salary (Eur)	Number of salaries	Average salary (Eur)	Number of salaries
Andalusia	16,817.12	9.10	18,094.47	9.72	20,697.03	7.80	20,640.91	6.98
Aragon	18,280.51	9.09	20,165.82	9.58	21,689.90	7.96	21,779.25	6.77
Asturias	18,571.29	8.11	20,189.53	8.72	22,341.24	7.16	22,619.59	6.99
Balearic islands	17,591.54	11.51	19,068.47	12.70	21,034.96	10.11	21,241.31	9.18
Basque country	21,875.79	11.82	23,328.34	12.73	25,987.49	10.54	26,513.22	9.68
Canary islands	15,257.62	10.48	16,759.69	10.89	18,798.60	8.58	18,656.32	7.69
Cantabria	17,519.55	9.87	18,864.98	10.87	20,558.83	8.75	20,703.50	8.64
Castile-La Mancha	17,148.96	7.70	18,481.89	8.21	20,603.82	6.74	20,687.79	6.25
Castile-Leon	16,443.20	7.78	17,914.49	8.03	20,015.62	6.19	19,997.31	5.83
Catalonia	20,851.36	10.03	22,162.33	11.06	23,812.33	9.60	24,169.27	8.44
Extremadura	16,978.58	5.29	16,376.64	6.26	18,820.31	5.32	19,198.79	5.11
Galicia	15,026.50	8.53	17,403.37	8.89	19,402.84	7.56	19,986.27	6.87
Madrid	22,386.10	12.44	23,921.56	12.57	26,013.17	10.07	26,122.19	8.65
Murcia	16,162.56	8.61	17,310.37	9.35	20,265.85	6.67	20,918.46	5.88
Navarra	21,372.07	7.47	22,267.89	7.67	23,365.88	6.95	23,724.93	6.11
La Rioja	17,330.49	8.41	18,880.29	8.58	21,007.74	7.29	21,162.37	6.37
Valencia	16,978.58	8.78	17,948.21	9.27	19,884.05	7.57	20,103.33	6.67
SPAIN	18,034.81	10.12	19,361.08	10.77	21,429.39	8.83	21,660.28	7.86

* September.

Source: INE, Ministerio de Fomento and own elaboration.

affordability in Spain seems to be lower and the level still seems to be the higher, suggesting that there is still room for further adjustment. In the US for example, the housing affordability index dropped from 4.8 in 2007 to 4.4 in 2011, in the UK it fell from 7.5 to 6.4 and in Ireland from 9 to 6.9.

Table 3 shows the housing affordability index in Spain and its regions from 2005 to 2011. In this case, for comparative reasons, the housing affordability index is computed for a house of 100 sq. m. There are significant regional differences. The housing affordability index is higher than 8 in the Balearic Islands, Cantabria, Catalonia, Madrid and the Basque Country. However, it is lower than 6 in Castile - Leon, Extremadura, Murcia, Navarra and La Rioja.

It is important to note that the correction in house prices may have accelerated during 2012 in Spain. The latest official statistics of the Spanish Statistical Office reflect that house price declines are becoming more pronounced. House prices fell by 7.2% on a year-on-year basis during 2012Q1. This type of adjustment path is similar to the one observed during 2009Q2 and 2009Q3. After 2009Q3, house prices kept on falling but less intensely and only by the beginning of 2012 had they started to rapidly decrease again. It should be also noted that some regions are adjusting more rapidly than others. In 2012Q1, the higher declines in house prices were observed in Aragon (10.1%), Andalusia (-9.2%), Catalonia (-8.4%), Valencia (-7.6%), Madrid (-7.5%), La Rioja (-7.4%) and the Balearic Islands (-7.3%). However, price decreases were less pronounced in Castile-Leon (-6.8%), Galicia (-6.8%), Castile-La Mancha (-6.7%), Murcia (-6.3%), the Canary Islands (-5.5%), Extremadura (-5.3%), Navarra (-4.5%), the Basque Country (-2.0%), Asturias (-1.9%) and Cantabria (-0.3%).

One of the impediments to achieve a faster house price adjustment in Spain is that there are very few property transactions. The latest available information is revealing. In particular, urban property transactions fell by 26.2% in February 2012 compared to February 2011. However, there are some expectations that prices could adjust further in the near future. The additional provisions that the new government introduced in February on real estate loans, together with other regulatory actions recently approved, (i.e. special vehicles for the real estate assets of the banks) may lead to further house price reductions. Additionally, owners of unoccupied homes could follow suit and accept lower prices. This may permit improvements in housing affordability and reactivate the market so that banks and households may readjust their asset portfolios and wealth.

Conclusions

The importance of private sector indebtedness and its linkages with public debt in Spain became clear during the course of the current financial crisis. Private debt has been mainly channelled through banks. In this sense, a key concern is how the deleveraging process is conducted and the way it may impact the banking sector. This relationship between private debt and the banking sector depends critically on the correction of current imbalances in house prices. In this article, we have shown that despite an improvement in housing affordability over the last few years, the number of transactions in the housing market and the corrections in prices are still low. Higher market affordability may reactivate the housing market further and correct some of the current imbalances in real estate markets that are still considered internationally as one of the main imbalances of the Spanish economy. Of course, this correction will also imply a reduction in private wealth, which is implicit in the process of deleveraging.

Importantly, some of these interconnections between debt, banks and the real estate market have been mentioned in the latest Financial Sector Assessment released by the IMF on April 25th, 2012: *“Dealing effectively and comprehensively with banks’ legacy problem assets should be the* *priority of the next stage of the financial reform strategy. There are a number of options for managing impaired assets including keeping these assets in the banks or setting up private or public specialized asset management companies. To give guidance on the best strategy for the Spanish banking system going forward, a comprehensive diagnostic of the impaired assets can be particularly useful". The IMF also acknowledges the costs of deleveraging for Spanish household when it states the need "to avoid resolution costs becoming too high for the (banking) industry to bear... after exhausting options for private recapitalization, to preserve financial stability and to avoid excessive deleveraging".*