

## The Case for Spain: a local perspective

### It's the fundamentals, stupid!

Between 2005 and 2007, Spain attracted record inflows of portfolio investments. Spanish GDP was growing, but what were the risks?

- First, Spain ran a significant current account deficit that peaked at 11% of GDP, the second largest in the world in absolute terms, after that of the US. This deficit was financed mainly through short term portfolio investments, which created an enormous liquidity risk, as a drop in the confidence of foreign investors would have drastic consequences for Spain in its ability to sustain its GDP.
- Second, although GDP grew at a nominal level of 7-8%, lending to the private sector by commercial banks grew by over 25% per annum. In other words, each marginal unit of GDP growth required 3-4 times higher growth in lending, as most of that financing went to construction and real estate development, highly unproductive sectors of the economy. This was also the genesis of the banking crisis and of the unemployment crisis.
- Third, the Government and regions' tax collection ballooned as a consequence of real estate-related activities, making Spain one of the few EU countries to run fiscal surpluses (1.9% of GDP in 2007). The problem was that this tax revenue was irregular in essence, but it was used mainly to finance recurring expenses, as seen through the massive increase in the number of public employees. This was the genesis of the fiscal crisis.

One would expect that taking these weak fundamentals into account, asset prices in the 2005-2007 period would reflect these risks. However, the opposite was true: equities traded at a record 21x PE, the M&A market saw deals at double digit EV/EBITDA multiples, and Spanish Government bonds reached a negative premium vs. the German Bunds. Despite these risks, Spain received maximum ratings from the three major agencies, and liquidity continued to flow into the country (€208 bn. of portfolio inflows just in 2006).

By 2012, Spanish GDP was contracting, and Spain saw a record outflow of portfolio investments (€80 bn.). Today, what can be said of the three risks mentioned above?

- Spain's current account deficit has been sharply reduced to levels close to 1.5% this year-end 2012. Spain will probably run a surplus by 2013. Despite this enormous effort, which has closed almost 10% of GDP in external financing in only five years, GDP has only declined 5% between 2007 and 2012.
- Bank lending to the private sector declined from +25% growth rates in 2005-2007 to -5% in 2012, and total private lending is down 16% of GDP from its peak. Again considering this enormous deleveraging effort, Spain's 5% decline in GDP between 2007 and 2012 shows substantial resilience of the economy. By year-end 2012, most banks will have been recapitalized and their liquidity risk seriously reduced by ECB actions. The contagion effect between banks and the Government should be contained.
- The Government undertook a 2012-2014 adjustment equal to 11% of GDP. By year-end 2014, public finances should stabilize with debt below 97% of GDP and structural and non-structural fiscal deficit at 3% and 0% of GDP, respectively.

Despite these reductions in fundamental risks, asset prices trade at historically low multiples. Spain's reputation is at its lowest point in years, and the country has experienced plenty of difficulties in accessing financial markets, which represents a weakness given the illiquid nature of the Spanish economy (too much wealth concentrated in real estate). Although this is the consequence of bad policies undertaken in the "good" years as well as major policy mistakes made in the early years of the crisis, it is important to highlight that in the same way many people took uninformed decisions in the 2005-2007 period based on unbridled optimism, they are similarly making uninformed decisions today based on extreme pessimism that exaggerates Spain's situation. This reports questions existing myths on the Spanish economy (chapter 1), shows the fundamental solvency of the Spanish economy (chapters 2-5), explains why Spain can grow through the historic revival of its exports of goods and services and local underlying trends that are at the heart of a nation's wealth: increased entrepreneurial activity, fostering of SMEs' access to finance, enhanced R&D efforts linked to patents, and a focus on re-industrialization (chapters 6-9), and finally highlights the main risks faced by the country (chapter 10).

The debate between efficient markets and behavioral finance has particular relevance here. In the short to mid-term, behavioral finance is most likely very relevant, but in the long term, markets price in fundamentals. Ultimately, the main practical point this report makes is that an investor buying Spanish assets in 2013 with a mid-term perspective should be making excellent risk adjusted returns, unlike those who bought in 2006.

## ABOUT ARCANO: YOUR LOCAL HOUSE OF REFERENCE TO INVEST IN SPAIN

Arcano is a leading independent advisory services firm with presence in Europe and the United States. The company has three specialized areas: Investment Banking, Asset Management, and Multifamily Office.

Our team is formed by more than 70 qualified professionals that work to offer financial advisory services and tailored solutions for our clients with a unique, independent approach.

Arcano can help you to identify high quality investments in Spain.

- On the corporate finance side, Arcano advises on the buy side and on the sell side for deals ranging from €30 m. upwards. For further information, please contact Jorge Vasallo, [jvasallo@arcanogroup.com](mailto:jvasallo@arcanogroup.com).
- For tech-related VC investments, Arcano provides pre IPO finance rounds to companies for deals ranging from €10 m. upwards to support expansion up to 2 years before the IPO. For further information, please contact Constantino Gómez, [cgomez@arcanogroup.com](mailto:cgomez@arcanogroup.com).
- On the small cap side, Arcano helps small companies float on the Spanish Alternate Market (MAB) with offering sizes from €10 m. upwards, and it intermediates block trades in small caps in the Spanish markets. For further information, please contact Gonzalo Roca, [groca@arcanogroup.com](mailto:groca@arcanogroup.com).
- On the bond side, Arcano will be helping mid-size Spanish industrial companies to raise capital in the soon to be incepted alternative bond market. For further information on issuance and secondary opportunities, please contact Pedro Urbina, [purbina@arcanogroup.com](mailto:purbina@arcanogroup.com).
- On the Private Equity side, Arcano manages more than €1.3 bn. in a fund of funds, both for primary and secondary transactions. Arcano also manages funds investing in European loans and high yield bonds. For further information, please contact Pedro Hamparzoomian, [pedro.hamparzoomian@arcanogroup.com](mailto:pedro.hamparzoomian@arcanogroup.com) and Philip Boole, [pboole@arcanogroup.com](mailto:pboole@arcanogroup.com)
- On the multifamily office side, Arcano advises €1.4 bn. of wealthy families (from €20 m. onwards), on the strategic and tactical asset allocation and the selection of funds, with a unique model free of conflicts of interest. For further information, please refer to Iñigo Susaeta, [isusaeta@arcanogroup.com](mailto:isusaeta@arcanogroup.com).

## ABOUT THE AUTHOR

Ignacio de la Torre has been a Partner of Arcano since 2008. He has fifteen years of experience in investment banking and capital markets, having worked in the equity research and equity sales departments of Deutsche Bank and UBS Investment Bank. The author is also a part time Professor of Finance and Economics at IE Business School. He holds an MBA from Insead, a Ph. D. in History from UNED, an M. Sc. From ICADE, and a M. A. from UNED. He has authored four books and won the Everis prize in 2009.<sup>1</sup>

---

<sup>1</sup> The author would like to thank the numerous knowledgeable individuals from the financial markets, academic world and public policy realm for their careful revision of this report. The author is also thankful to Jaime Carvajal, Colin Fitzgerald, Javier Molero and Olga Núñez-Flores for their support in the elaboration of the report<sup>1</sup>

## Executive Summary

Spanish asset prices have been massacred in 2012, mainly as a consequence of poor investment decisions and policies from the past. Yet, some justifications behind these price movements are biased. We intend to demonstrate in this report why this is so, as we look in detail at some of the country's key macroeconomic and microeconomic data and challenge some of the negative myths about the economy. We also intend to prove that most areas of the Spanish economy are solvent, as assets well exceed debts. Ultimately, Spain is solvent, but illiquid. Liquidity is and will be provided by the eurozone, and this will avoid illiquidity turning into insolvency. Spain is growing through external demand (exports and tourism), which reduced trade deficit from €160 bn. in 2007 to €40 bn. by 2012. This growth, in our opinion, is structural, not short term in nature. It should drive Spain to a current account surplus by 2013, and it should reduce the country's international debtor position.

**Myths.** Spain's real leverage is 268% of GDP, not the often reported figure of 342%, as debts should not be double counted; Spanish real corporate leverage is 107% of GDP, not 134%; Spain kept its market share of world exports during the boom years and after, despite common assessments of its lost competitiveness; Spain has one of the most attractive labor forces in the world in terms of cost per hour, productivity per hour, and number of hours worked; it is therefore not surprising that the country's exports are growing faster than those of the US. Spain is indeed reforming, fiscally and from a supply side perspective. Finally, and despite common assumptions, its deposit base has been stable. Spain's shadow economy (around 20% of GDP) explains the low level of NPLs in the mortgage book, why social tensions are below expectations, and why real unemployment is below official figures.

**Spain is solvent.** When stating an opinion on an economy's fundamental solvency, both assets and liabilities should be taken into account. Yet, many people have formed opinions on Spanish solvency without looking at assets. This report does. Despite the economy presenting high levels of debt (268% of GDP, as a consequence of the real estate bubble which ended in 2007), assets represent 747% of GDP, of which the Government holds 99%, corporates 170%, and households 479%. This contrasts with outstanding debt of 80%, 107%, and 81%, respectively. The Spanish banks' wholesale financing, which reached 54% of GDP, was the Achilles heel of the banking sector and, therefore, sovereign debt, creating a "spiral of death." After the final €60 bn. recapitalization of the Spanish banks takes place by Q1 2013, leaving one of the best capitalized banking systems in Europe, and following the liquidity support by the ECB (replacing wholesale financing with 3 year financing), this negative force should be eliminated, positively affecting Spanish sovereign debt. The loan to deposit ratio, at 151%, should come down close to 134% by the end of 2013 after deleveraging, provisions and the bad bank purchases of toxic assets adjust to market prices. Therefore, the contagion effect on the Sovereign should be over.

**Spain can grow to pay off debts:** Spanish exports are at a record high and will continue growing at a rate above that of world trade. This can be explained by: a) a competitive labor force, with costs at €20/hour and falling, vs. €27-33 in Italy, Germany and France, despite differences per hour worked in productivity ranging between 0-11%, b) Spaniards work 25% more (in terms of hours per year) than employees from these other countries, and c) low elasticity of Spanish exports. With tourism receipts at record highs (Spain is already the second country in the world in tourism revenues, after the US) and subdued imports due to weak consumption, Spain should enter a current account surplus by 2013, for the first time since the euro started. Furthermore, Spain is reforming. The country has implemented supply side reforms, including much needed labor reforms not undertaken in the past 50 years, which could boost future GDP growth. Unit Labor Costs are down 6.4% since 2008 vs. Germany's up 2.6%, and labor reform has ended the connection between inflation and salary increases. Fiscally, the country is performing adjustments totaling 11% of GDP between 2012-2014, making the effort one of the broadest in its history. Local administrations are complying with unpopular cost-cutting efforts such as medicine co-payment, as the refinancing of their maturing debt by the central government is contingent on fiscal responsibility; therefore, regions are complying and should continue to do so. The economic and financial crisis is currently developing engines of future wealth: a) entrepreneurship (the number of new companies being created is starting to increase), b) R&D which has been steadily increasing and resulting in record number of patents filed, c) re-industrialization, which already represents 17% of GDP and climbing, and d) SME financing, which is key to generating jobs.

The country sees formidable risks ahead, political and economic, which this report also analyzes. Ultimately, we believe that from a risk adjusted perspective, investment opportunities in 2013 are extremely attractive, unlike those in 2006.

## Table of Contents

1. Ten myths of the Spanish economy .....	5
2. The balance sheet of Spain: Less dangerous than stated - Spain is illiquid but solvent .....	18
3. Fiscal stability through an 11% adjustment .....	30
4. Spanish banks: light at the end of the tunnel .....	36
5. Spain's liquidity needs: why Europe will support Spain.....	46
6. Spain's growth engine: why Spanish export growth is structural.....	50
7. GDP: a comprehensive review and expected evolution .....	56
8. A new Spain: leveraging in entrepreneurship, R&D and larger SMEs .....	63
9. Why Spain could enter a current account surplus in 2013 after 15 years of deficit .....	69
10. Risks and macro Sharpe ratios .....	73
11. Conclusions. ....	77

### STRUCTURE OF THE REPORT

This report is structured in ten chapters, followed by conclusions and an appendix. Each chapter is introduced with an anecdote setting an investment theme, followed by sub chapters elaborating the investment thesis and a conclusion with implications for investors. [A full list of acronyms can be found in the corresponding appendix.](#) For graphs displaying multiple series on different axes, "RHS" and "LHS" refer to right and left hand side.

## I. Ten Myths of the Spanish Economy

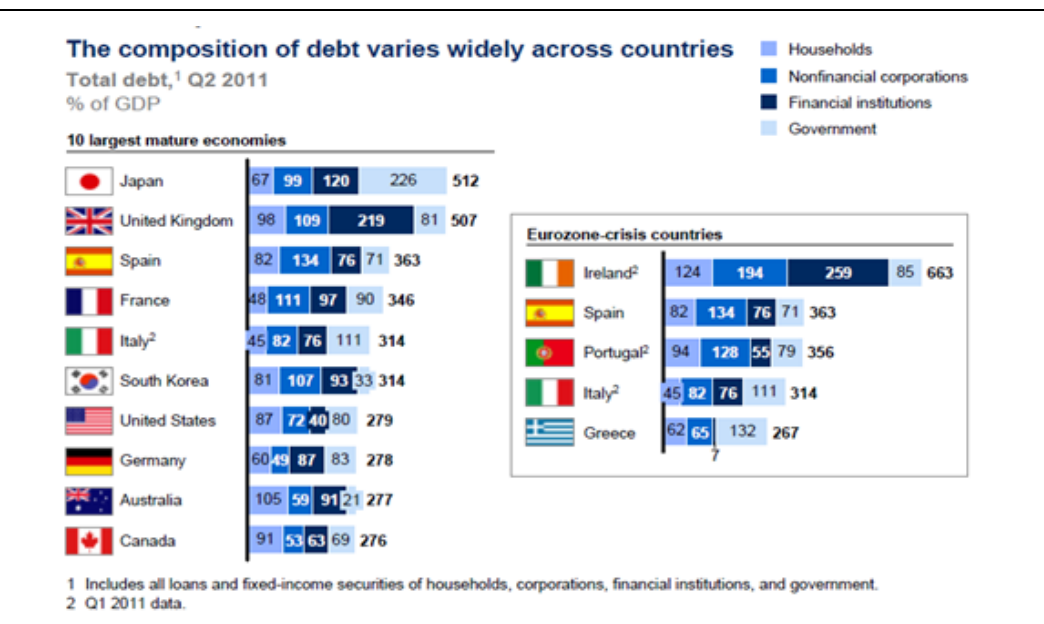
Goebbles famously stated that a lie, repeated a thousand times, becomes a truth. Human beings tend to explain market movements *ex post* by searching for statistics that support an asset price set by financial markets. This flawed logic leads people to find or even fabricate statistics that are disputable (in the best cases), flawed (in many other cases), or simply illogical. Before analyzing the fundamentals of the Spanish economy in depth, let us first take an unprejudiced, *tabula rasa* look at the country. As the German minister of finance stated in September 2012, “I’m one of those who says we should do everything possible to convince the markets that this speculation against Spain is without any basis in reality.”<sup>2</sup>

Our first goal, therefore, is to demystify the commonly held misconceptions of the Spanish economy in order to make a rational analysis of the country in the chapters thereafter.

### **Myth 1: Spain’s Debt / GDP<sup>3</sup> stands at 363%, therefore the country is near collapse**

Spain’s Q2 2012 overall leverage is 268% of GDP<sup>4</sup>, as banks’ wholesale debt should not be double counted in the calculation of internal debt (in the table below, 76%). If you owe €100,000 to a bank, and the bank owes €100,000 to a German investor, national debt stands at €100,000 not €200,000. On the other hand, corporate leverage should be adjusted by inter-company loans, which act as assets and liabilities. Netting this, corporate leverage stands at 107%, not 134%.

**Table I.1. Misrepresentation of Spanish debt**



Source: McKinsey & Co<sup>5</sup>

<sup>2</sup> German Finance Minister Wolfgang Schaeuble – Bloomberg, <http://www.bloomberg.com/news/2012-09-13/schaeuble-cautions-spain-against-aid-request-in-poke-at-france.html>

<sup>3</sup> Gross Domestic Product (for a full description of all the acronyms used in this document, please visit appendix I).

<sup>4</sup> For the purpose of this report we have used Spain’s GDP of €1.06 trn.

<sup>5</sup> “Debt and deleveraging: Uneven progress on the path to growth”, *McKinsey Global Institute*, January 2012, p. 13.

The corporate debt level is cited as the Achilles Heel of the Spanish economy, claiming that Spain's corporate leverage as a % of GDP is twice as high as that of the US and six times that of Germany. In addition to the fact that the actual figure is 107% as detailed above, there are several factors that, first, determine the real level of corporate debt and, second, mitigate the risks associated with the relatively high level of corporate debt to GDP.

These critical factors are as follows:

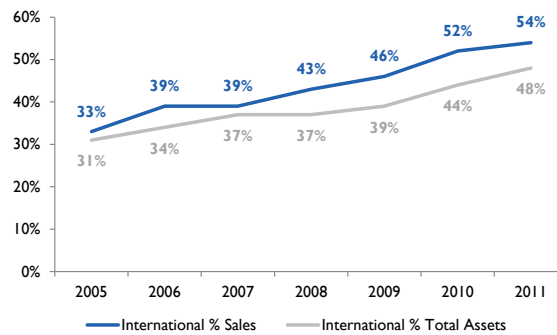
- i) Non-financial institutions' loans stand at €1.1 trn., not €1.3 trn. The difference lies in inter-company loans (i.e. loans that figure in the liabilities of one company and in the assets of another), which should be netted out.
- ii) Of the total 107% corporate debt / GDP, an estimated 40% is associated with toxic assets (real estate developers and construction companies), but a portion of this debt has already been provisioned (14% of GDP and growing fast). So real leverage is 93%. Furthermore, when we observe the remaining corporate debt (non-real estate debt), we find that it is less alarming, at 72%.
- iii) The share of investments in Spanish GDP has increased between 1985 and 2011, when Spanish GDP multiplied by 6 while investment multiplied by 9.<sup>6</sup>
- iv) When analyzing solvency, we must place particular emphasis on the corresponding assets: although corporate debt stands at 107% of GDP (of which 25% of GDP is owed to foreigners and the rest to local banks), corporate net leverage is actually well below this figure, as corporate assets stand at €1.8 trn. (equivalent to 170% of GDP).<sup>7</sup>
- v) Spain has some of the largest infrastructure companies in the world which use project finance (without recourse to the parent company) to fund infrastructure, so statistically, this is considered corporate debt (around €100 bn.), but in reality, most of it is project debt, much of which accrues in international projects.
- vi) A portion of internationally funded corporate debt backs Spanish companies' international assets, which are not linked to Spanish GDP. International assets held by Spanish corporations total €1.1 trn., or 104% of GDP (54% excluding financials). This significant international position has been driven by foreign acquisitions in recent years, as Spanish companies have invested €496 bn. since 2000 (equivalent to 44% of GDP). For example, Telefónica's debt used to purchase O2 in the UK or Vivo in Brazil are included in Spain's total corporate debt, but they should not be compared directly with Spanish GDP. The following tables highlight the progressive internationalization of the Spanish IBEX and its correlation with larger levels of leverage (IBEX banking debt stands at €280 bn.) and the accumulated Foreign Direct Investment (FDI) stock, which explain different levels of leverage.

<sup>6</sup> Investments represented 30% of GDP in 2007 (20% currently, in 2012); out of this 30%, 12% of GDP was housing.

<sup>7</sup> Please see the following chapter for a detailed explanation on calculating assets.

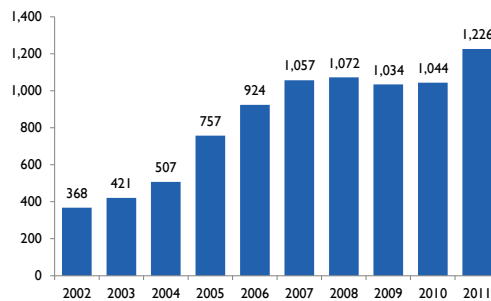


**Table 1.2. Increasing weight of international business with Ibx 35 companies<sup>8</sup>**



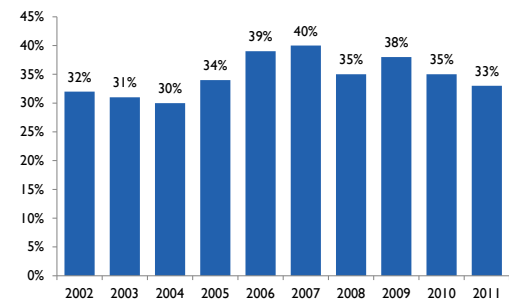
Source: Factset, Company Annual Reports

**Table 1.3. Gross debt in billions of euros (for Ibx 35 companies, including financials)**



Source: Factset, Company Annual Reports

**Table 1.4. Average gross debt as % of total assets (for Ibx 35 companies)**



Source: Factset, Company Annual Reports

**Myth 2: Spain is uniquely reckless in spending and local Governments will not cut costs**

Spanish government expenditures stood at 45% of GDP in 2011, vs. eurozone at 49%<sup>9</sup>. Spain's problem lies in revenue collection, at 36% of GDP, vs. Eurozone at 46%<sup>10</sup>. Spain has certainly been running unsustainable fiscal deficits since 2009 as a result of the crisis. But this is not unlike other major economies such as the US or the UK<sup>11</sup>. Spain ran a fiscal surplus during many of the years ahead of the crisis<sup>12</sup>, whereas other advanced economies in expansion, such as the UK or the US, were running deficits. The Spanish fiscal problem arises from the fact that a sizeable portion of tax revenues (around 4% of GDP) had an irregular (i.e. real estate related) origin, but this money was used in non-discretionary expenditure. Analyzing recent years, it is intriguing to see that Spain is less reckless in spending than the US or the UK, as the following table shows.

<sup>8</sup> Note: figures represent average of all Ibx 35 companies for which data was available.

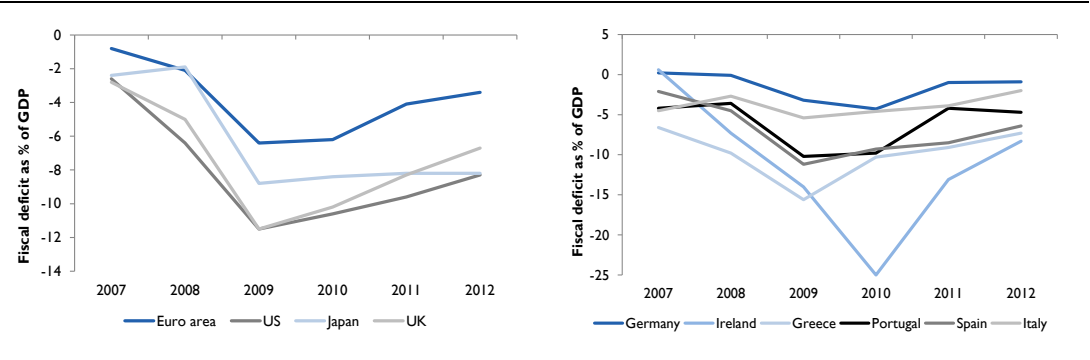
<sup>9</sup> Germany at 49%, France at 56%, Italy at 49%, and outside the Eurozone, UK at 49%, US at 41%.

<sup>10</sup> Germany at 44%, France at 49%, UK at 40%.

<sup>11</sup> According to IMF estimates, Spain's fiscal deficit for 2012-2013 will stand at 7% and 5.7%, vs. the US at 8.7% and 7.3%, and the UK at 8.2% and 7.3%. One can argue that their Central Banks monetize this debt, but you can default through inflation.

<sup>12</sup> By 2007 fiscal surplus stood at 1.9% of GDP, with a total sovereign debt of 36%.

**Table I.5. Fiscal position of the EU vs. US, UK, Japan and intra Europe**



Source: European Commission, *European Economic Forecast – Spring 2012*

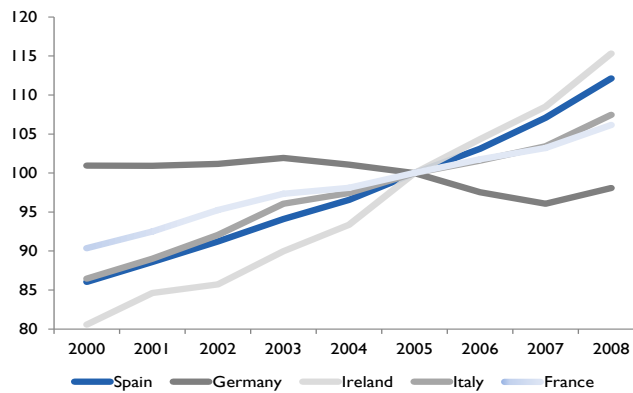
It is also critical to discuss the evolution of spending at the local and regional level, which has worried investors in the past. Local and regional governments' total debt stands at 13% of GDP which, although relevant, is not alarming. Their lack of liquidity does not allow them to refinance their maturing debt, and to do so, they will use the Central Treasury liquidity line (an €18 bn. facility explained in Chapter 3), but the law establishes that the use of this facility comes with strict conditionality focused on cost cutting. Most local and regional governments are already undertaking severe cost cutting measures (co-payment of medicines for the elderly, increased class sizes in education, and firing of thousands of employees in the administration and related companies such as local television); overall, non-interest local costs are down 6.5% YTD. There is, therefore, no argument as to whether or not the local and regional governments will cut costs when they don't have the resources to pay for them. As a result, a fiscal adjustment of €18 bn. was undertaken by 2012, with an additional package of €18 bn. to happen by 2013-2014. By H1 2012, the deficit of local and regional governments stood at 0.7% of GDP, a sharp improvement over that of the previous year and complying with the full year EU target of 1.5%. Beginning 2013, the accounts of local and regional governments will be published once a month using homogeneous Eurostat compliant information. Most of these efforts should crystalize in 2013. Local debt will reach a maximum of 16% of GDP by 2014 and should begin to decline as these entities enter fiscal surplus by 2015.

**Myth 3: Spain is not competitive. The introduction of the euro affected its labor cost evolution, which destroyed its competitiveness**

Table I.6 below shows the evolution of Spanish labor costs and hence, its perceived lost competitiveness vs. other trading partners during 2000-2008. One would expect Spain's market share of global exports to seriously diminish in this period, but this is not the case, as seen in Tables I.7 and I.8 Growth of Spanish exports since 1997 has surpassed that of France and the US, and since 2007, it has further outperformed Ireland and the UK. In fact, between 2000-2008, Spanish average export growth stood at 5% despite ULC evolution. It is also remarkable to see Spain's astonishing export revolution since 1970, as shown in Table I.8.

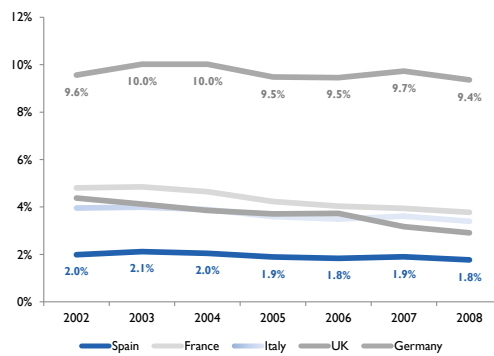


**Table I.6. Relative Unit Labor Cost (ULC)**



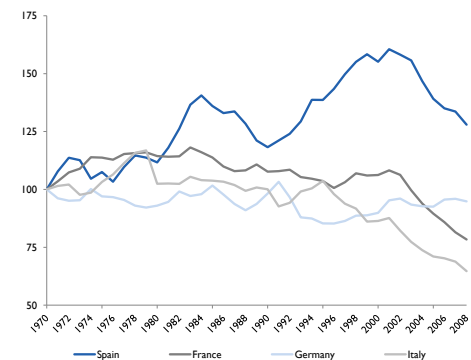
Source: OECD

**Table I.7. Spain's market share in Exports**



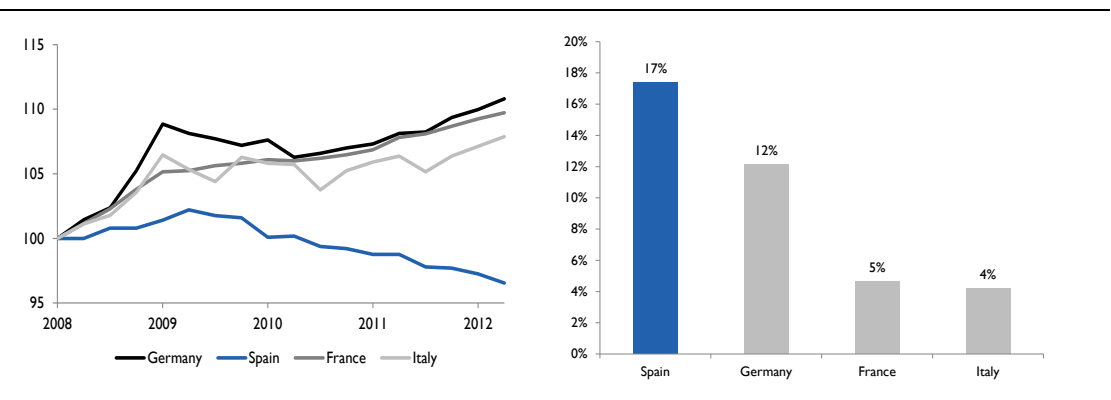
Source: Eurostat

**Table I.8. Share in World Exports of selected European countries**



Source: OECD

Why is this the case? During its construction boom, Spain created many jobs in the construction sector, which has relatively low productivity per worker, compared to other sectors. This meant that aggregate productivity measures were depressed and ULCs increased. These relatively depressed aggregate figures therefore reflected an increase in construction jobs with lower productivity per head, which explains a large portion of the economy's perceived lost competitiveness. Other sectors also saw a decrease in competitiveness, as labor costs were indexed to Consumer Price Index (CPI), but despite this, Spain was able to maintain a respectable market share in international exports. This shows the resilience of Spanish exports and its limited elasticity to input factors. A key conclusion is that Spain's illness is not the result of ULCs and its evolution of exports. Rather, it has been driven by strong growth of imports that were financed by debt, resulting in accumulated current account deficits and an increasing international debtor position. As Spanish competitiveness sharply improved since the crisis started (see Table I.9), it is no wonder that Spanish exports are leading the country out of the crisis, as shown in the next "myth."

**Table I.9. Evolution of Spanish ULC vs. main trading partners and export growth evolution 2008-HI 2012**

Source: Eurostat

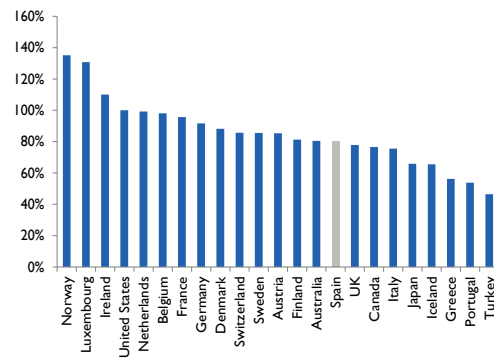
#### **Myth 4: Spain has no growth engine to end the crisis**

During H1 2012, Spanish growth rate of exports surpassed that of China. By year end 2012, Spain's exports will reach a historic record of more than €200 bn. This represents more than 22% of GDP, well below Germany's 44% which leaves plenty of growth potential. Since 2010, for the first time in decades, Spain has been registering a trade surplus vs. the EU (currently at €6 bn.), particularly relevant given the impossibility of currency devaluation. Spain lost 12% of competitiveness (based on ULC) between 2000-2008, but it regained 5% since then. Looking at static dimensions, based on labor costs and productivity per hour,<sup>13</sup> Spain may be the most attractive euro zone country to invest in for exporting. Spain's average cost-per-hour-worked stands at €20, well below Germany's €33 or France's €35, even though the respective differences in productivity per hour worked stand at only 6% and 10% respectively (see Tables I.10 and I.11 below).

Economic weakness in the Eurozone has certainly slowed the momentum of export growth, but the trends, fundamentally speaking, are clear and provide a solution to Spain's imbalances (Spanish exports to non-euro countries are growing 20-30%). The changing weight of construction in the Spanish economy is having a direct effect on the country's economic performance, and the negative effect it has had on aggregate figures should end in 2013. Excluding construction, Spain grew 2% between 2010 and 2011. Exports of services are also performing very well, not only touristic services. Spanish market share in exports of services stands at 3.5%. Overall, Spanish corporates are focusing themselves on external demand (by 2011, the number of corporates exporting increased by 11%), supporting Spain's strong export growth.

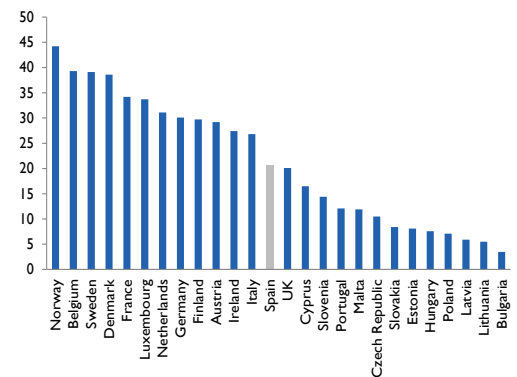
<sup>13</sup> See Chapter 6.

**Table 1.10. Productivity per hour worked, 2011 (US = 100%)**



Source: The Conference Board

**Table 1.11. Labor costs (€/hour)**

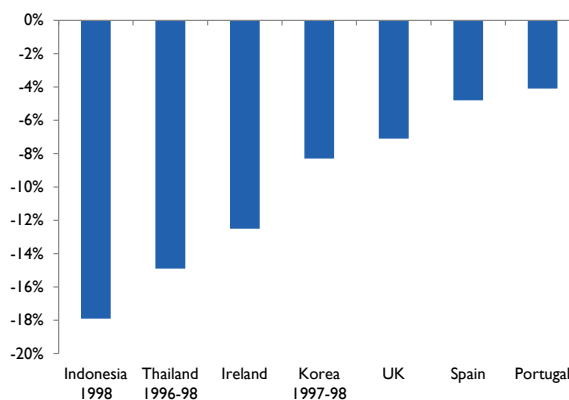


Source: Eurostat

**Myth 5: Spain still has plenty adjustments to make, following the examples of other crises**

Many commentators argue that Spain will decline much further simply by comparing Spain’s current situation with historical data of other countries in crisis. As an example, Table 1.12 shows theoretical further “adjustments” that Spain would make if it repeated historical events. Yet, these analyses are at best simplistic. Credit Suisse<sup>14</sup> compares Irish banking losses on commercial real estate with Spanish NPLs on mortgages, but this comparison makes little sense if one analyzes the financial and legal fundamentals of each. A comparison to South Eastern Asian nations is also improper, as the latter did not have the financial assistance of the European rescue funds, as Spain does.

**Table 1.12 Adjustment of GDP during crisis: Spain vs. Indonesia vs. Other countries**

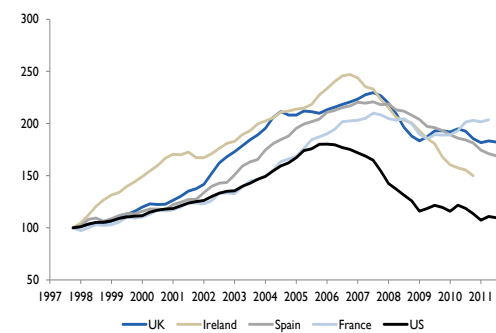


Source: Thomson Reuters

<sup>14</sup>“Asset quality is set to get significantly worse (Irish NPLs and restructured mortgages have been 15.1%, compared to just 3% in Spain);” CS, July 26th, 2012.

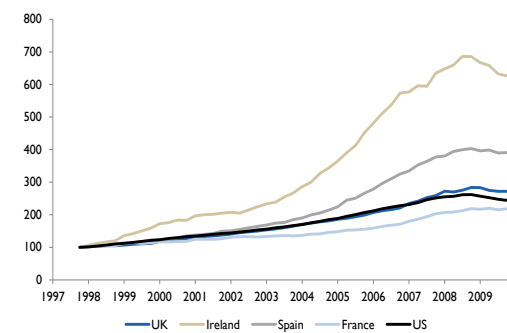
Furthermore, Irish bank assets to GDP were several times higher than those of Spain. Furthermore, projecting NPLs based on historic data (1993 crisis) without adjusting for interest rates makes no sense. The same can be said about house price predictions based on foreign precedents. The argument that “Spanish house prices must fall a further 20%, because that is what happened in Ireland” is childish if not taken into account with past performance, as the following tables illustrate.

**Table 1.13. House prices evolution, 1997 = 100**



Source: National Central Banks and National Statistics Offices

**Table 1.14. Credit evolution, 1997=100**



Source: National Central Banks and National Statistics Offices

### Myth 6: Europe will let Spain exit the Euro

An eventual exit of Spain from the euro zone would be far more costly than supporting its liquidity needs, and no economic or political reasoning can support such a tail event. The foreseeable consequences of a Spanish exit would be:

- a) Immediate insolvency of the ECB, as its claims to the Bank of Spain on the €411 bn. debtor balance in the Target II would devalue (50%?) and it would generate losses on its holdings of peripheral paper through the Securities Market Program (SMP, which allowed the ECB to buy peripheral paper, mainly Greek, during 2010-2011). As the Eurosystem is leveraged more than 20 times, the ECB would need to be recapitalized, mostly with German money;
- b) A contagion effect on Italy, the world's third largest bond market, with a direct impact on its foreseeable future in the Euro (another €300 bn. debt to balance in the ECB through Target II);
- c) A potential breakup of the euro, which could create a sharp recession in export-led economies such as Germany, as the “New Deutsche Mark” would sharply appreciate (30-50%?);
- d) Sizeable losses in the German and French banking books due to their holdings of peripheral government assets (*circa* €300 bn.);
- e) Severe losses in German banks and pension plans due to their large holdings of Spanish covered bonds (€200 bn. held outside Spain, mainly in Germany);
- f) More difficult market access for German exports in Spain given the new FX risk.

The euro was not only an economic project, but a political project, as monetary unions do not tend to fight wars. Furthermore, the euro was also an economical instrument with a political will: generate further political union. Analyzing a potential breakup of the euro based on economic fundamentals is appropriate (we believe these fundamentals provide a clear answer), but European politics should be taken

into account, as well. Of course, the ultimate consequence of a closer “liability union” will be closer “asset union”, i.e., political union.

### **Myth 7: Spain will not reform**

In a well biased and visionary open editorial published in *The Wall Street Journal* (WSJ) on April 26<sup>th</sup> 2012,<sup>15</sup> Raymond Zhong argued that Spain will not have the will to reform based on historical precedents. Yet, two days later, the Spanish Government announced a fiscal adjustment of €62.7 bn., and in July, it announced another of €56.5 bn. The sum of these fiscal adjustments during 2012-2014 is €119 bn., or 11.3% of GDP, one of the sharpest adjustments in the history of fiscal policy.

**Table 1.15. Fiscal adjustments approved by the Spanish Government (Central and Local) between April-July 2012, €bn.**

	2012	2013	2014
April Adjustments	43.1	19.6	0
July Adjustments	13.5	22.9	20.1
<b>Total</b>	<b>56.6</b>	<b>42.5</b>	<b>20.1</b>
% of GDP	5.4%	4.0%	1.9%

Source: Spanish Treasury

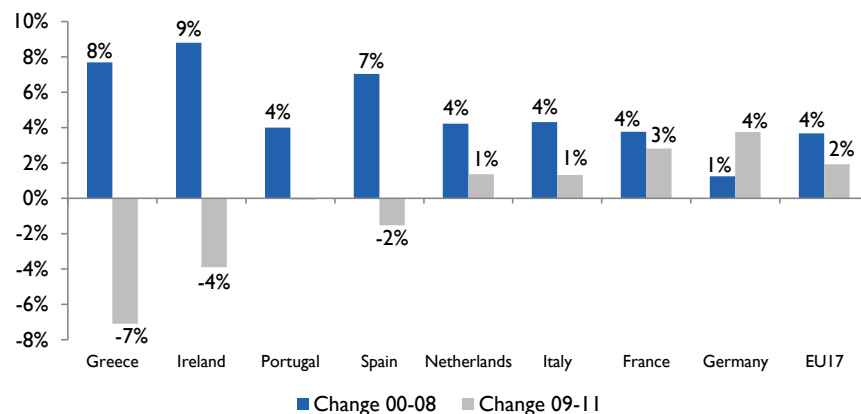
Furthermore, during H1 2012, Spain announced supply side reforms unseen in the country during the last century, which included a sweeping labor reform (including changes in labor mobility, cheap labor redundancy and limits to collective bargaining), a deep financial sector reform, and reforms targeted at providing greater freedom to open businesses. The structural impact of these reforms on mid-term economic growth is significant and should not be ignored. Table 1.16 shows the potential impact on GDP of these supply side reforms. Table 1.17 shows the evolution of Spanish ULC since the crisis started, an evolution which accelerated in 2012 after the approval of the labor reform.

**Table 1.16. Supply side reforms announced in H1 2012 (% of GDP) and their potential impact on employment and GDP**

	Effect on GDP (cumulative until 2020)	Effect on employment (number of employed persons) (cumulative until 2020)
Services Directive	1.2	39,000
Labor Reform	4.5	1,763,000
Pensions Reform	0.4	71,000
Financial Sector Reform	1.6	96,000
Law on Budget Stability and Financial Sustainability	0.9	18,000
<b>Total</b>	<b>8.6</b>	<b>1,987,000</b>

Source: Spanish Treasury

<sup>15</sup> <http://online.wsj.com/article/SB10001424052702304811304577367321691794512.html>

**Table I.17. Change in compensation of employees per annum**

Source: Eurostat

### **Myth 8: Spain is bleeding its deposit base**

The main editorial piece of the WSJ on Aug 31<sup>st</sup> 2012 stated that “deposits totaling €74 billion left Spanish banks in July, bringing total deposit flight this year to €1.7 trillion.”<sup>16</sup> Yet, the total deposit base in Spain is only €1.1 trillion. It is impossible that the country lost more than 1.5x its deposit base! Such a significant mistake in an otherwise superb newspaper suggests that some analysts have reached conclusions before analyzing the data. Let’s look at the data. The funding of a nation’s bank system is a key element of the financial sustainability of a country. Bank deposits can be divided between resident and non-resident deposits, and in the resident section, the focus should be on “other resident sectors,” which *exclude* banks (which currently hold €790 bn.) and the Government (€39 bn.), as the nature of these deposits make them closer to wholesale funding. In turn, “other resident sectors” are divided among retail, corporate, and other financial deposits. When calculating a loan to deposit ratio, these are normally taken into account, due to the fact that they are much less volatile than their counterparts (non-residents, banks, and Government).

Although year to date deposits were down 6.7% by July 2012, this can be explained by the following factors: during the last 12 months, as Spanish banks cancelled many SPVs of covered bond instruments (due to their funding through the ECB and the non-eligibility of certain covered bonds), €75 bn. of deposits by one bank to itself was cancelled, explaining part of the statistical decrease in deposits, but the overall funding was not affected. Another €20 bn. of deposit flight is accounted for by clearing houses operating in the repo market, but this is not hurting the critical long term funding through retail and corporate deposits, as these liabilities are matched by equally liquid assets with no impact on the system’s liquidity. High quality deposits (retail and corporate) did come down €85 bn. over the past 12 months, although €30 bn. moved to commercial paper,<sup>17</sup> and another €25 bn. came down in July/August 2012. However, it is worth mentioning that: a) during July, corporates pay a high portion of taxes, b) families extract money for holidays in July, c) high

<sup>16</sup> <http://online.wsj.com/article/SB10000872396390443864204577621193662196310.html>

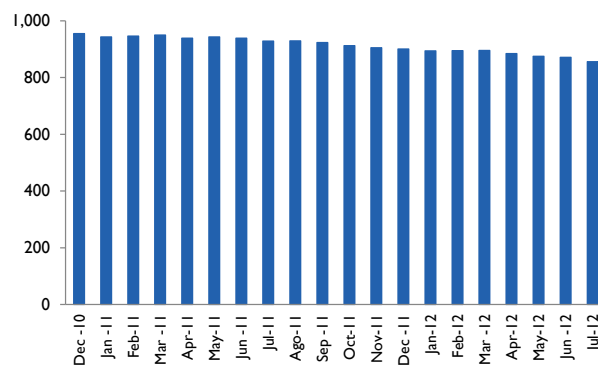
<sup>17</sup> Whose interest rate was not curbed as that of deposits was, following Government regulation in 2011 which was abolished in September 2012. Therefore, much of this flow should revert to deposits in Q4. During the last 12 months Spanish financial institutions’ issuance of commercial paper rose from €18.8 bn. to €79.9 bn.



yields in Spanish T-Bills do offer competition, and d) only €15 bn. went to foreign depositors, according to the Bank of Spain. In sum, the “deposit flight” is an exaggerated effect, as it has only affected 1-3% of total deposit base, despite the enormous news flow volatility on the stability of the Spanish banking system and the future of the euro. Finally, as the Government withdrew the limit compensation for deposits in August, the issuance of commercial paper came down from €17 bn. in July to €5.8 bn. in September, stabilizing the deposit figures (month on month decline of just 1.1% vs. 6.7% decline in July).

Furthermore, some journalists confuse deposits with portfolio flows, adding more noise to reality. As only a fraction of Spanish covered and Government bonds which matured in 2012 were refinanced by international investors, Spain saw a “capital flight” of €247 bn. from January to August (circa €80 bn. from portfolio, more than €165 bn. from financial market activity, mainly covered bonds). Of course, this was refinanced through the ECB long term repurchase operations (LTRO, 3-year financing) and other shorter term liquidity mechanisms.

**Table I.18. Retail and corporate deposits in Spain (€bn.)**

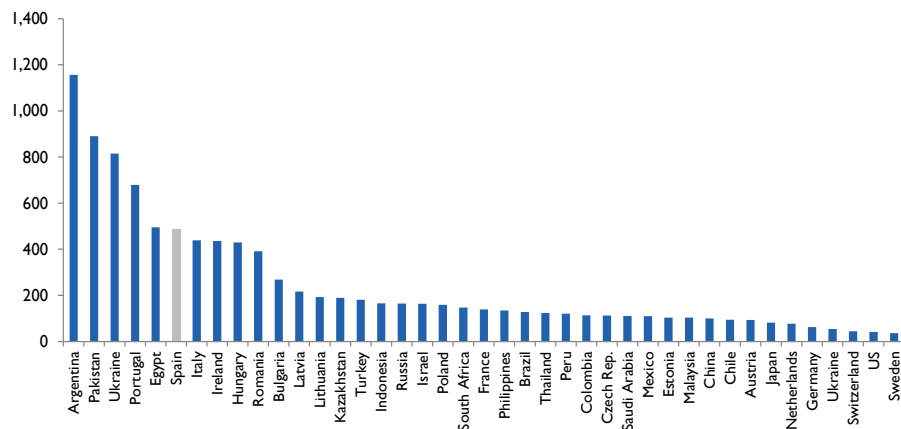


Source: Bank of Spain

### **Myth 9: The CDS “wisdom”: Spain is riskier than many emerging economies**

Measured by CDS spread, this may be so, but the results make no sense. Too often, investors oversee key data that measures long term risk. That is why bond prices of many European powers reached maximum highs in July of 1914 in spite of an impending world war. A nation’s risk depends not only on the “perceived” amount of debt it has (again, assets should also be considered), but on its political system (democracies are more stable than authoritarian regimes), its social class distribution (countries with strong middle classes are less inclined to war and to revolutions), and potential destabilizing factors (such as the weight of food in the CPI basket). Egypt’s CDS is perhaps most ironic and proves this thesis best, as it was well below that of Spain right until the Arab spring took place two years ago. In fact, although Spain has defaulted 13 times in its history, its most recent default occurred in 1882, well before it built a strong middle class (1960s). In fact, before the current euro crisis, the euro zone country to default on its debt most recently was Germany, in 1953 (as a result of debt issued by the Nazi regime during WWII). Overall, CDS spreads can be largely driven by behavioral finance, not fundamental research.

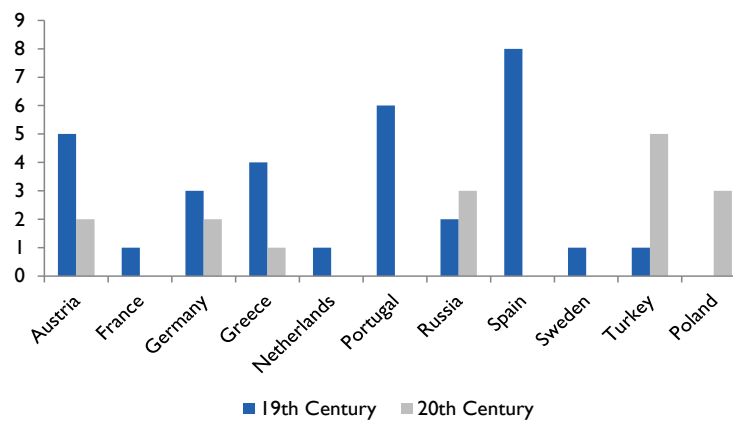
**Table I.19. Sovereign CDS spreads**



Source: Factset

In analyzing a country’s probability of default, it is fundamental to de-link liquidity from solvency. In addition, when analyzing solvency, both debt and assets must be taken into account. As we will show in Section 2 of this report, Spain is solvent but illiquid. Of course, illiquidity can produce insolvency, but policies adopted in 2012 (European Stability Mechanism, ECB’s Outright Monetary Transactions, explained in Chapter 6), should provide enough liquidity to the Spanish economy maintain solvency.

**Table I.20. Number of bankruptcies in the XIX and XX centuries**

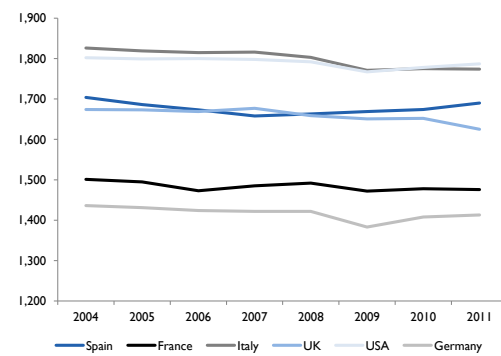


Source: National Bureau of Economic Research (NBER)

**Myth 10: Spaniards don’t work hard**

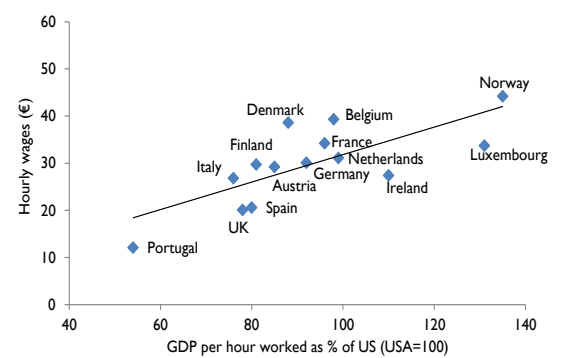
In terms of total hours worked per year, Spain ranks higher than Germany, the UK, and most key euro zone countries (including France, Netherlands, Belgium, and Ireland). The truth is that Spaniards are somewhat less productive per hour worked than other trading partners, but this tendency has changed, and today’s relationship between salaries and productivity per head make Spain a winning choice, as shown in Table I.22. This helps explain why Spanish exports are ballooning.

**Table 1.21. Average hours worked per year**



Source: Eurostat

**Table 1.22. Unit labor costs and GDP per hour worked 2011**



Source: Eurostat, OECD

### Conclusion

Herodotus, in “The Histories,” mentions that Persians have two basic rules for the education of their children: a) forbid them to lie, and b) forbid them to incur debts, as debt holders end up lying. In a sense, when behavioral finance and efficient markets collide, it is tempting to explain asset prices with biased evidence, or even lies. This bias allowed investors to take billions of euros of Spanish risk in 2006-2007 despite the fundamental imbalances and risks. This bias is also preventing a rational analysis of the situation today. Therefore, disproving the myths mentioned previously in a sense follows Herodotus’ rule of preventing children from taking on debts.

## 2. The balance sheet of Spain: Less dangerous than stated - Spain is illiquid but solvent

The obsession with aggregating debt figures and comparing them with national GDP can lead to significant misunderstandings. Debt positions should be netted of working capital and then compared to financial and real estate assets (excluding accounts receivable). This analysis can provide a fundamental framework to state whether a country is solvent or insolvent. Of course, this aggregation does not mean that a specific company or segment of society is insolvent. However, aggregated figures provide a very solid framework to defend the thesis that Spain is solvent, as this chapter will illustrate.

### Key balance sheet data

When analyzing a debt position, investors (whether equity or debt investors) tend to look not only at liabilities, but assets. Oddly enough, many “macro” analysts ignore this critical piece of information, as we mentioned before with the Telefónica/O2-Vivo and Iberdrola/Scottish Power examples (this corporate debt is compared to Spain’s GDP despite backing international cash flows). Table 2.1 elaborates some of the largest M&A deals recently undertaken by large Spanish corporates.

**Table 2.1. Ten largest foreign acquisitions by Spanish companies (by deal size)**

Year	Spanish Company	Target	Country	% of Equity acquired	Volume (€m)
2006	Telefonica	O2	UK	100%	26,094
2006	Iberdrola	Scottish Power	UK	100%	18,000
1999	Repsol	YPF	Argentina	100%	15,901
2006	Ferrovial	BAA	UK	83%	14,500
2004	Santander	Abbey National	UK	100%	13,682
2000	Telefonica	Sao Paulo Telec.	Brazil	62%	8,086
2000	Telefonica	Lycos	US	100%	5,600
2000	Telefonica	Endemol	Netherlands	100%	5,500
2004	Telefonica	Bell South LA	South America	100%	4,731
2005	Metrovacesa	Gecina	France	69%	3,804

Source: Dirección General de Política de la PYME

Before analyzing the balance sheet, we first provide a look at the key figures of Spain.

### National debts

By Q2 2012, Spain’s debt stood at 268% of GDP, of which Government debt stands at 80% (please notice that the Bank of Spain has a more stringent definition of Government debt than Eurostat, as we shall see below - Eurostat’s figure is 4% lower), household debt stands at 81%, and non-financial institution debt stands at 107%. Private debt therefore stands at 188% of GDP, down 16% of GDP since 2009. Out of total national debt, the country’s net international financial debtor position (please see the corresponding section below) stands at €918 bn., or 87% of GDP.

**Table 2.2. Spain's debt at Q1 and Q2 2012 (€ bn. and as a % of GDP)**

	Q1 2012		Q2 2012	
	€ bn.	% of GDP	€ bn.	% of GDP
Total Government Debt	856	81%	845	80%
Households' Loans	862	82%	859	81%
Non financial institutions' Loans	1,159	110%	1,131	107%
<b>Total (Gvt. + HH + NFI)</b>	<b>2,877</b>	<b>272%</b>	<b>2,835</b>	<b>268%</b>

Source: Bank of Spain

To analyze this data further, it is imperative to look at the individual balance sheets of each of the three sectors and focus not only on the debt, but also on the assets.

### National assets

As stated above, analyzing assets and not only debt is especially relevant if a country has heavily invested abroad, as it will accumulate assets that are not linked to the domestic economy, so debt to GDP measures could be biased. Furthermore, it is important to reflect both financial and non-financial assets. Financial assets are reported by the Bank of Spain every three months. The task of calculating the value of non-financial assets was undertaken by FUNCAS in 2008, which is based on the register of public property and adjusted for 2007 real estate prices.<sup>18</sup> We have reduced the value they provided in 2008 by 50% to fully reflect declines in housing prices of 36% since the start of the crisis plus an additional 14% margin (see Chapter 4 for a discussion on house prices).

**Table 2.3. Spain's assets at Q1 and Q2 2012 (€ bn. and as a % of GDP)**

	Q1 2012		Q2 2012	
	€ bn.	% of GDP	€ bn.	% of GDP
Government	1,074	102%	1,047	99%
Corporates	1,831	173%	1,792	170%
Households	5,105	483%	5,061	479%
<b>Total</b>	<b>8,010</b>	<b>758%</b>	<b>7,900</b>	<b>747%</b>

Source: Bank of Spain, FUNCAS, Arcano.

Let's now analyze the balance sheets of the three sectors in further detail (Government, Corporates, and Households).

### **Government balance sheet**

#### Government debt

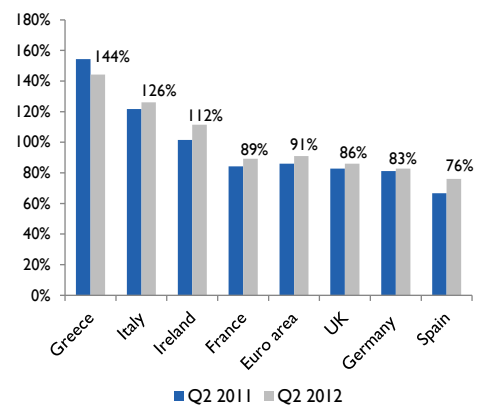
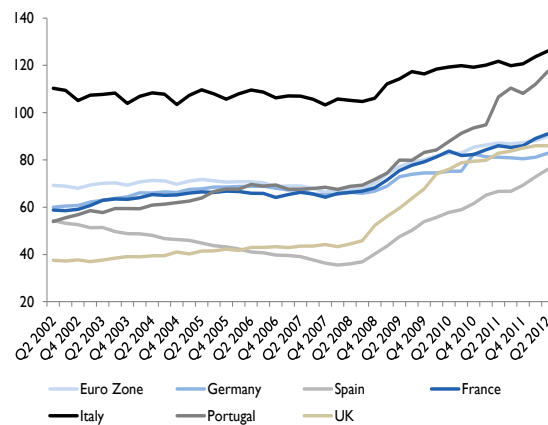
According to Eurostat, Spain held €774.5 bn. of Government debt at the end of Q1 2012, or 72% of GDP, growing to 76% by June 2012. This places Spain in a less dangerous position than other countries as shown in Tables 2.4 and 2.5. Eurostat's definition of Government debt does not take into account arrears (mainly through

<sup>18</sup> Please see the corresponding sections on Government, Corporates and Households to discuss the methodology behind the calculation of the asset base.

regions and local authorities), but these figures are shown in accounts provided by the Bank of Spain (a 4% of GDP difference). For the purpose of comparing national debts of different countries, Eurostat's data should be used. The figure should reach 85% of GDP by year-end 2012, from 70% in 2011. More than 70% of this increase is driven by one offs, of which 6% of GDP is driven by accounting factors, mainly the fund to pay arrears, 4% is driven by the recognition of the securitization of the tariff deficit, 4% by the debt arising from EFSF's loan to Spain to recapitalize its banks in Q4 2012, and more than 1% through the loans to Portugal, Ireland, and Greece. Local debt (regions and local authorities, representing 13% of GDP) is included in this debt by Eurostat.<sup>19</sup> Overall, Spanish Government debt's average maturity stands at 6.3 years and average outstanding cost at 4.1%, below that of 2000 at 5.8%, despite having the same average maturity. Therefore, solvency depends on total level of interest rates, not the spread vs. the German Bund.

**Table 2.4. Gross government debt as % of GDP**

**Table: 2.5. Debt to GDP ratio of general Government**



Source: IMF statistics, as provided by Factset

Source: Eurostat. EDP Notification Tables March 2012

**National statistics or Eurostat?**

A broader calculation of Government debt can be used by incorporating arrears, debt guarantees, and Government companies' debt. However, if you add up this debt, you should also include accounts receivables, because accounting for arrears in the liabilities but *not* in the assets is inconsistent and naïve. As for debt guarantees (€100 bn., of which €76 bn. is of ICO, €11 bn. of FROB, and €13 bn. of FADE), although it could affect the nation's fiscal deficit if debts are not honored, it is not included in the debt calculation of either Eurostat or the Bank of Spain until actual cash is raised to honor the guarantee (quite often these are never used). Otherwise US Government's guaranteed debt of Fannie Mae and Freddie Mac (several trillion USD) should also be added to the US Federal debt. As for the debt of Government-controlled enterprises (5% of GDP), we must take care not to count it twice in the balance sheet of the Government and in that of the corporate sector.

In the end, we believe that Eurostat's figures should be used on the following basis:

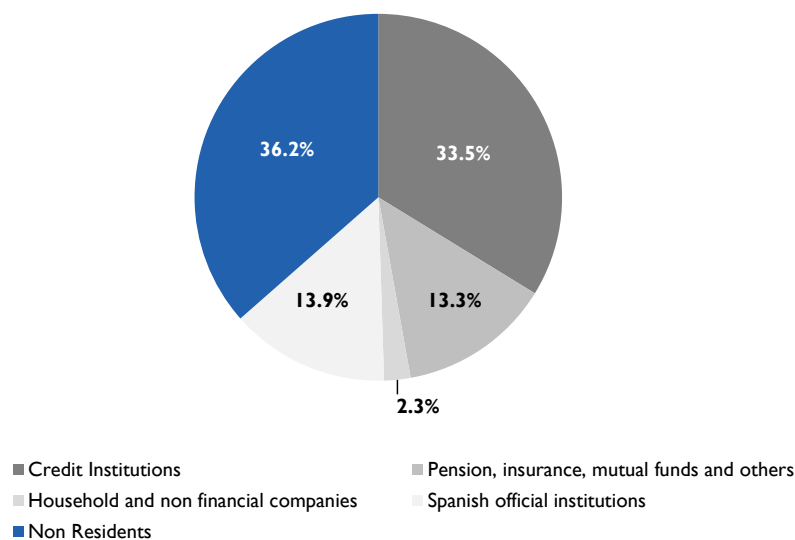
<sup>19</sup> Local debt is not always included in this figure, especially for non-European countries, which can produce inaccurate comparisons.



- i) If you are to compare the debt of different sovereigns, you need to use consistent figures (otherwise you would need to add these additional charges to the other countries on a case by case basis).
- ii) You cannot add working capital debt (arrears) without netting it of accounts receivables.
- iii) Debt guarantees do not imply a cash outflow if the guaranteed asset does not default (at which time the disbursement is recognized by Eurostat).

On the other hand, a key risk associated with Government debt is foreign willingness to finance it (this is why large levels of debt in Italy or Japan are deemed to be less risky than lower levels of debt in other countries, as Italian and Japanese savers finance a high portion of the existing debt load). As international investors have reduced their allocation into Spanish assets, mainly during H1 2012, the result has been that the foreign participation in the Spanish debt holdings has aggressively fallen to 36% of total Government debt (vs. holding majority positions in the past), as investors have sold €87 bn. in H1 (mainly during Q1, over €50 bn., by September, following ECB's actions, foreigners increased positions by €18 bn.). Of course, spurning international investors is not a positive approach in general, but the risks should be lower once Spaniards have replaced foreigners as holders of Government debt. Most of those holdings were replaced by Spanish banks, which bought in the same period €90 bn. of debt, which means that they already control 34% of Government's outstanding debt.<sup>20</sup>

**Table 2.6. Government debt by holder, September 2012 (% of Total)**



Source: Spanish Treasury

For a discussion of the relationship between liquidity and solvency and an analysis of the Spanish Government's liquidity, please visit Chapter 5.

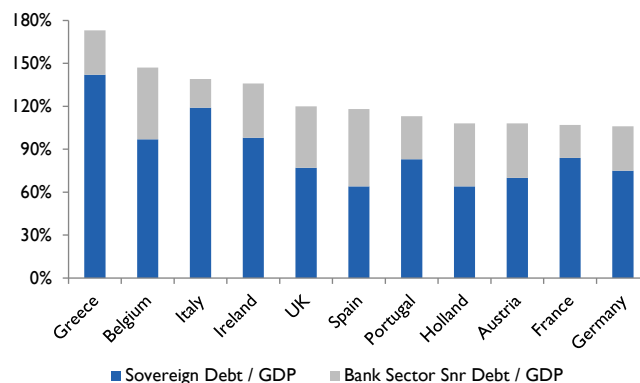
<sup>20</sup> Non Spanish banks control €35 bn. of Spanish Government debt, approximately.

### Banks' wholesale debt as potential sovereign debt

Despite Spain's reasonable Government debt position in the current environment, its vulnerability is tied to the banking sector's wholesale debt. Given the assumption that a nation will not let its banks fail, and given the fact that Spanish banks have large wholesale financing accounts, investors in 2010 correctly added Spain's sovereign debt to the banking sector's wholesale debt and identified a source of distress.

Banks' wholesale debt stood at 54% of GDP in 2010, which included a portion of the debt owed by households, corporates, and the Government, which is why it cannot be double counted. On the other hand, it is precisely this debt that produces stress in the Spanish sovereign accounts, as the addition of both (given the implicit support a Sovereign provides its banks) is somewhat dangerous. Given the recent discussions to recapitalize the banks using European funds (European Financial Stability Facility, EFSF), we believe that the addition of the two debts should be reconsidered.

**Table 2.7. Sovereign + Banking debt, 2010**



Source: Arcano, Barclays

We believe that the European Summit of June 2012, which granted Spain a credit line of up to €100 bn. to recapitalize its banks (of which *circa* €40 bn. will be used), the ECB's actions providing liquidity to Spanish banks, and the structural movement of Europe's banking system to a European supervision and a European deposit scheme (to be discussed in the chapter committed to the Spanish banking system) very much reduce the contagion effect from banking debt into sovereign debt. A firewall has been established, and this should have huge consequences on the fundamental analysis of the Spanish sovereign debt.

### Government assets

Yes, Governments do have assets, although many people in the financial sector have ignored this reality. Assets can broadly be divided between financial assets and non-financial assets (mainly real estate where, again we cut 2008 valuations by 50%). We did not consider accounts receivable as either assets or debt, which is why this account appears in italics (we applied the same criteria for corporates and households). In total, assets stand at €1,047 bn. or 99% of GDP (Table 2.8 provides a breakdown).<sup>21</sup> As current real estate yield stands at 4.1% and average cost of Government debt at 4.1%, we believe it makes sense to promote a large scale policy

<sup>21</sup> Other accounts receivables are in italic as they are not added up in assets as their corresponding liabilities were neither added to the debt.

of sale and lease back of Government buildings, without affecting the deficit and reducing financial leverage.

**Table 2.8 Government's total assets**

Government's Assets	Q1 2012		Q2 2012	
	€ bn.	% of GDP	€ bn.	% of GDP
Currency and deposits	106	10%	83	8%
Securities	85	8%	75	7%
Loans	66	6%	71	7%
Shares and other equity	102	10%	103	10%
Other accounts receivable	84	8%	110	10%
<b>Financial assets</b>	<b>359</b>	<b>34%</b>	<b>332</b>	<b>31%</b>
<b>Non Financial Assets</b>	<b>715</b>	<b>68%</b>	<b>715</b>	<b>68%</b>
Total Government Assets	1,074	102%	1,047	99%
Total Government Debt	856	81%	845	80%
<b>Net Equity Position</b>	<b>218</b>	<b>21%</b>	<b>202</b>	<b>19%</b>

Source: Bank of Spain (financial) and Funcas (non-financial), Arcano.

### Government equity: is Spain solvent?

Investors do not worry about the extremely high level of Japanese sovereign debt, because it is almost exclusively held in Japanese hands. Spanish bonds and CDS spreads, on the other hand, show a very worrisome scenario. Is this deserved?

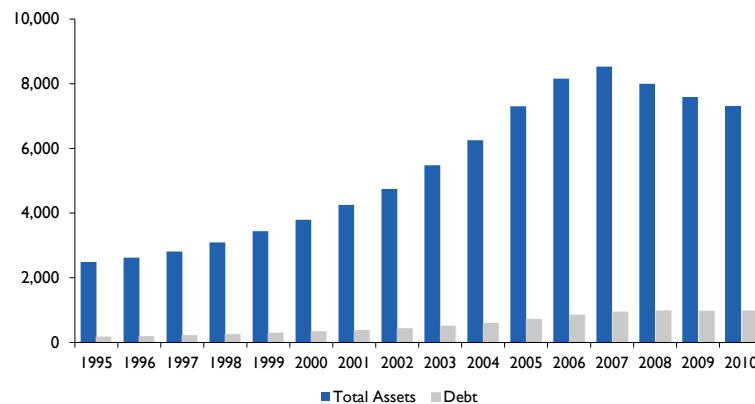
Of Spain's total sovereign debt (80% of GDP), 21% (of GDP) is in foreign hands (a proportion which is well below that of other sovereigns such as the US), and the rest in domestic hands, mainly Spanish banking institutions. The percentage held in foreign hands has been decreasing over time, though, explaining the negative balance in Spain's portfolio movements.

If, as stated above, the crucial issue on solvency is the net difference between assets and liabilities, the Spanish Government has liabilities of 80% of GDP and assets of 99% of GDP, of which 31% are financial assets. This results in positive equity of +19% of GDP. Of course, this would imply that the State could liquidate some of its assets. If it is unable to do so, a lack of willingness by foreigners to refinance existing debt could lead to insolvency. This highlights the crucial relationship (and difference) between liquidity and solvency, but the fundamental numbers are clear, equity is well in the positive territory.

The international position is that the Government has 3% of GDP in international assets and 21% in foreign liabilities, resulting in a net international debtor position of 18% of GDP, quite manageable.

### Households

A report on the structure of Spanish household savings issued by *Fundación de Estudios Financieros* in 2011 showed the relationship between the assets and debt of retailers:

**Table 2.9. Spanish families' balance sheet € bn.**

Source: FEF

This graph is useful to illustrate the fundamental solvency of Spanish households. Yet, again the situation is that a solvency position is negatively affected by illiquid assets, mainly real estate, as the following table shows (again, we have decreased real estate valuations by 50% as with those of the Government).

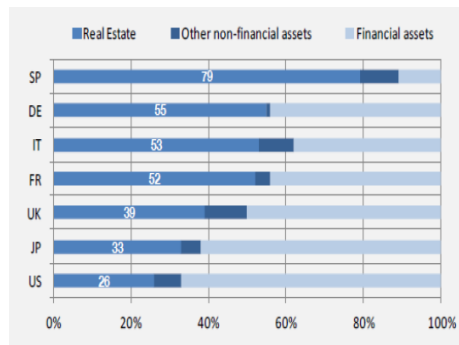
**Table 2.10. Spanish household savings € bn.**

Households	Q1 2012		Q2 2012	
	€ bn.	% of GDP	€ bn.	% of GDP
Cash and deposits	846	80%	852	81%
Securities other than stock	72	7%	65	6%
Stock	423	40%	384	36%
Insurance premia	273	26%	269	25%
Accounts receivable	71	7%	62	6%
<b>Total Financial Assets</b>	<b>1,614</b>	<b>153%</b>	<b>1,570</b>	<b>149%</b>
<b>Total non Financial Assets</b>	<b>3,491</b>	<b>330%</b>	<b>3,491</b>	<b>330%</b>
Total households assets	5,105	483%	5,061	479%
Total households debts	862	82%	859	81%
<b>Net equity position</b>	<b>4,243</b>	<b>401%</b>	<b>4,202</b>	<b>397%</b>

Source: Bank of Spain, Funcas, Arcano.

The problem, of course, lies in the illiquidity of these savings, which was driven by the tax incentives approved by Spanish politicians since 1975 that make investing in real estate appear particularly favorable for Spanish households. Fortunately, these incentives have been eliminated due to EU pressure, but there is “plenty of work to be done” to address the structural illiquidity of households. Table 2.11 shows this dangerous savings structure. Of the non-real estate savings of households, 45% are in deposits, 20% in shares in direct ownership, 15% in pensions and insurance products, less than 7% in mutual funds, and 3% in fixed income. The implication of this dangerous and illiquid structure of Spanish savings is that there are limited financial assets to back an increase in bank deposits (as shown in the table below), improving the loan to deposit ratio and allowing lending growth. The other negative implication is that the starting base to fund successful companies through capital markets is quite limited.

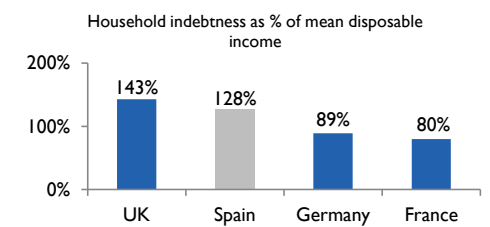
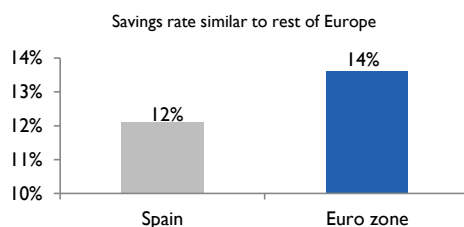
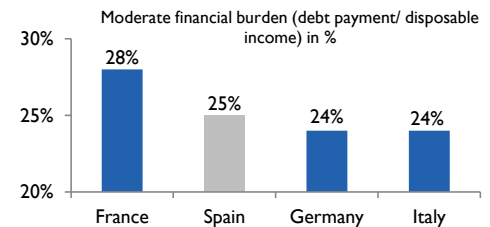
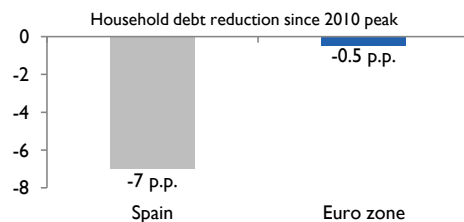
**Table 2.11. Asset split of households (% of total assets)**



Source: Oliver Wyman

Analyzing these figures, one can conclude that there is no financial distress within the general population, although the bottom quintile might be experiencing more difficulties due to the unemployment situation (lower income families paying 40% of their income in debt payments, vs. 20% in the US). This view on the fundamental soundness of the balance sheet of households is further supported by the following tables:

**Table 2.12. Spanish families' financial data**



Source: Spanish Council of Competitiveness May 2012.

**Non-financial institutions balance sheet**

Leverage of Spanish companies is somewhat high (107% of GDP) and is driven by: i) real estate and construction loans (40% of GDP); ii) internationalization of Spanish companies, with a wave of foreign direct investment (Spanish companies abroad; green field and through M&A), accounting for a total of 50% of GDP.

The first element of this debt has been considered in the financial reform (see Chapter 4), and the second should be matched with the financial assets supporting this debt. Additionally, Spanish companies own a rich portfolio of non-financial assets (again, real estate) estimated at €0.7 trillion (original figure provided by Funcas in

2008, we have reduced it by 50%). On a net equity basis, Spanish companies are in a sound position, with net equity of €0.66 trillion,<sup>22</sup> or 63% of GDP. This should limit the NPLs on the banks' books.

**Table 2.13. Corporate balance sheet of Spain**

Non Financial Institutions	Q1 2012		Q2 2012	
	€ bn.	% of GDP	€ bn.	% of GDP
Currency and deposits	235	22%	237	22%
Securities	58	5%	58	5%
Shares and other equity	848	80%	807	76%
Other accounts receivable	534	51%	515	49%
<b>Total financial assets</b>	<b>1,141</b>	<b>108%</b>	<b>1,102</b>	<b>104%</b>
<b>Total non financial assets</b>	<b>690</b>	<b>65%</b>	<b>690</b>	<b>65%</b>
Total Corporate Assets	1,831	173%	1,792	170%
Total Corporate Debt	1,159	110%	1,131	107%

Source: Bank of Spain,<sup>23</sup> Funcas, Arcano.

### Spain's foreign position

According to the Bank of Spain, by Q2 2012, Spain's total external position stands at 87% of GDP, with around 21% accruing through sovereign debt. Another 29% almost exclusively accrues through the banking sector in the ECB, as we shall see (much of this is re-channeled by commercial banks, which employ ECB's liquidity, mainly 3-year financing, to buy Spanish Government bonds). This figure has gone up in September to 38%, presumably reducing the "financial institutions" non-ECB net external position. Another 20% is through foreign holdings of Spanish covered bonds (out of €239 bn. in covered bonds, €203 bn. is held by foreigners and €36 bn. by domestic investors). This means that as long as Spain has access to liquidity, through either a "soft rescue" plan (through the ESM and a new ECB bond buying program, OMT, explained in Chapter 5) or ECB financing of Spanish banks through Target II, 75% out of the 87% of GDP in total external creditor position could be managed, leaving only 12% of GDP at risk (mainly wholesale financing of Spanish banks, which is constantly replaced through ECB use). In other words, liquidity avoids insolvency.

<sup>22</sup> We have excluded loans that figure as assets (intercompany loans) as we netted this figure in the debt as well; this is why it appears in italic in the tables.

<sup>23</sup> Loans in the assets have also been eliminated for consistency, as we are not accounting for them as liabilities when they are intra group loans.



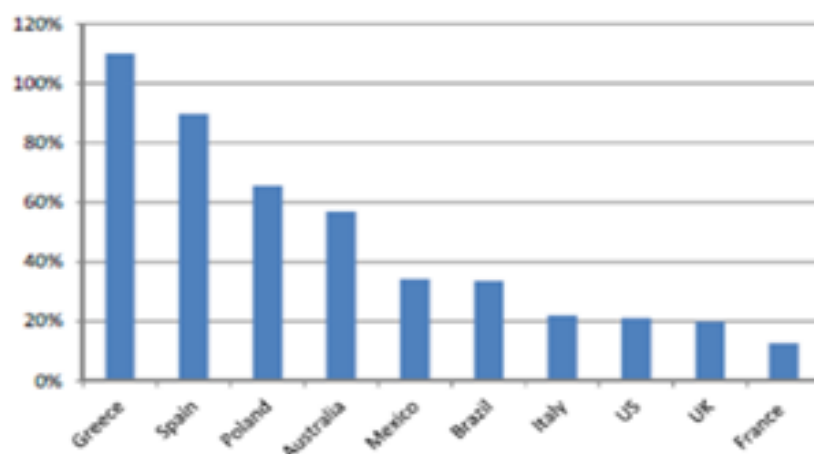
**Table 2.14. Spain's international net position**

Foreign ownership of net debt	€ bn.	% of GDP
Sovereign	222	21%
ECB - Target II	302	29%
Financial institutions	207	20%
Other (corporates)	261	25%
Households, gold and SDR	-74	-7%
<b>Total</b>	<b>918</b>	<b>87%</b>

Source: Bank of Spain

### Spain's net international debtor position

A net international debtor position (excluding Spanish companies' foreign assets) of 87% is very high, when compared to that of other countries, as shown in Table 2.15. Yet, notice that by September, 38% of this is financed through the ECB which is firmly supporting Spain to avoid systemic problems with the euro architecture. So, non ECB international position stands at close to 49%. Other high debt countries include Australia (58%) and Poland (63%). The problem is not the gross international assets that foreigners have in Spain (217% of GDP), but the fact that the assets owned by Spaniards abroad are well below those of other developed nations (120% of GDP, although many of the acquisitions undertaken in Latam in the 2000-2008 period are recorded at book value and could provide upside to these calculations). Hence, the country must undertake a sharp foreign deleveraging by entering current account surplus. The risk in this path of adjustment is in squeezing out liquidity, but as we will state in the corresponding chapter, we believe that the institutional framework established by EU will provide enough liquidity to the country.

**Table 2.15. Net external position as a % of GDP (2010)**

Source: McKinsey

Although Spain's net external position is a clear weakness, it is interesting to analyze it from each agent's perspective, as illustrated in Table 2.16. The Government owes 23% of GDP to foreigners and owes 4% of GDP in external assets. Net foreign leverage stands at 19%, which is not particularly alarming. Non-financial corporates

owe 25% of GDP to foreigners but hold international assets of 79%, a very solvent situation. Household net international position is positive 5%. Therefore, the main weakness of the external position lies in banks' dependency on external financing. As we elaborate in Chapter 4, we believe that the Spanish banks' solvency and liquidity scenario will be much stronger from 2013 onwards. Overall, Spain's net international position, although high, is less alarming once its breakdown is understood.

**Table 2.16. Gross international positions of Spain vs. rest of the world, by nature and by agent, Q2 2012**

<b>Spanish Assets Abroad</b>	<b>€ bn.</b>	<b>% of GDP</b>
Cash and deposits	285	27%
Securities non shares	275	26%
Loans	214	20%
Shares	542	51%
Accounts payable	58	5%
<b>Total Foreign Debts vis a vis Spain</b>	<b>1,374</b>	<b>130%</b>
<i>of which</i>		
Non Financial Corps	572	54%
Financial Institutions	703	67%
<i>of which BoS</i>	81	8%
Government	37	4%
Household	62	6%
	<b>1,374</b>	<b>130%</b>
<b>Foreign Assets</b>	<b>€ bn.</b>	<b>% of GDP</b>
Cash and deposits	777	74%
Securities non shares	559	53%
Loans	396	37%
Shares	507	48%
Accounts payable	53	5%
<b>Total Foreign Assets vis a vis Spain</b>	<b>2,292</b>	<b>217%</b>
<i>of which</i>		
Non Fin. Corps.	833	79%
Financial Inst	1,232	117%
<i>of which BoS</i>	383	36%
Government	239	23%
Households, Gold, SDR	-12	-1%
	<b>2,292</b>	<b>217%</b>

Source: Arcano, Bank of Spain

## Conclusion

When analyzing solvency it is imperative to analyze both sides of the balance sheet. The relationship between the two sides and the relationship between debt and equity provide a reasonable indication of solvency. Yet, at a macro level, people have

ignored this reality. Ongoing debates on whether a country is solvent or liquid are ignoring this fundamental analysis of assets vs. liabilities. Overall, Spain's high leverage is explained by the level of assets. Corporate leverage is explained by the corporate expansion outside Spain. The main risk is the illiquid structure of Spanish assets and the liquid structure of its liabilities, but EU funding schemes minimize this risk as the country starts to reduce its significant international debtor position, which is one of Spain's key weaknesses, but its analysis provides data that is less alarming than the overall figure indicates. Overall, our analysis demonstrates the fundamental solvency of most parts of the Spanish economy.

### 3. Fiscal stability through an 11% adjustment

As an example of fiscal adjustments, during 2012, the Spanish national health system withdrew many drugs from the list of subsidized medicines. For many others, a co-payment mechanism depending on the individual's level of income was introduced. Two months after the introduction, the expenditure was down almost €2.5 bn. annualized (-25% year over year, YOY). Such a measure would have been inconceivable only a few years earlier. Yet, it has come with many other stringent measures, such as the pay freeze for civil servants during 2012 and 2013, following a 5% cut in 2011, a 0% replacement rate of civil servants,<sup>24</sup> and a 46% reduction in infrastructure spending.

Overall, the country is performing many adjustments to eliminate the structural fiscal problem. The structural fiscal adjustment (i.e. measured as the difference between real output growth and potential output growth, in other words, the structural deficit not produced by the cyclical recession of the GDP that is affecting revenues and expenses such as unemployment benefits) stands at 5-6% of GDP. In total, announced fiscal measures stand at 11% of GDP. The difference is due to two factors: a) negative impact of fiscal multipliers (the fiscal multiplier of Spain is a large unknown, but assuming a multiplier of 0.6, this means that to cut the structural deficit 5%, the adjustment must be 7%), and b) poor historic execution of announced measures, which makes it imperative to aim to cut above structural figures. This means executing announced figures is key to regaining credibility. It should be noticed that of the 5% structural adjustment, half should happen during 2012 and the rest evenly distributed between 2013 and 2014.

Once finished, by year end 2014, the country should see a stabilization of public debt at 97% of GDP and structural deficit at 0%, sharply reducing the country's systemic weakness. Of course, fiscal stabilization will require the nominal GDP growth (plus the primary surplus) to at least equal the average cost of debt, which we believe is manageable by 2015, both through higher nominal GDP and by lower interest rates after the actions of the ECB and European Stability Mechanism (ESM), which we discuss in Chapter 5. The notion of cyclically adjusted primary balance (i.e. revenues less non-interest expenditures, adjusted for cyclicity) is key to discussing debt stabilization. Spain was running a deficit of -8.5% by 2009, and it should reach -2.2% by 2012. This measure must turn to +1.7% to stabilize debt, which means a minimum structural adjustment of 4%. As we will see in the following chapter, banking reform should also contribute to the reduction and elimination of the contagion effect between banks and the Sovereign, and together, these measures should stabilize the country's sovereign funding features, easing the access of credit for the rest of the economy. These adjustments, together with significant advances toward a banking Union in European Monetary Union (EMU), should strengthen the fundamental solvency of the Sovereign, and this should be a critical milestone to facilitate the financing of the private sector of the economy.

#### **Fiscal adjustments needed and approved to take the structural deficit to zero by 2014**

Spain was one of the first European countries to amend its Constitution in order to include fiscal responsibility. Article 135 was reformed by the end of 2011, and an organic law was approved to develop its details. It is relevant to emphasize the fact that this new law of budget stability mandates that Spain reach structural budget

<sup>24</sup> 10% replacement rates in basic services such as police.

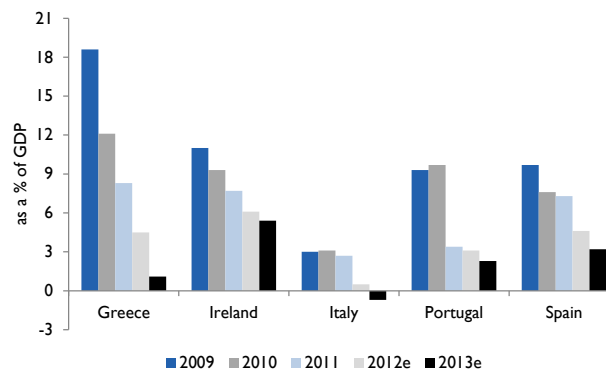
stability by 2020. A debt limit was introduced, interest and principal payments were given explicit priority over any other expenditure, and the ceiling for the structural budget deficit was established at 0% of GDP (EU states 0.4%). The problem, of course is credibility, as the Government decides what is structural and what is cyclical. However, the fiscal adjustment program agreed upon with the EU sets the 0% target year at 2014. The table below illustrates the necessary adjustments to take structural deficit down to 0% by 2014, year by year (totaling 4-5%), and compares these with the announced measures (€106 bn., or 11.3% of GDP, of which €62.7 bn. was announced in April and €56.5 bn. in July 2012).

As stated, the Government must aim to adjust above the necessary level as a % of GDP, taking into account a) the negative impact on GDP of cutting automatic stabilizers b) the negative impact in GDP of a reduction in public expenditures, c) lower tax collection as a consequence of lower GDP produced by the two prior points, and d) the impact of higher interest expenses as a consequence of a larger debt pile. This means that announced fiscal adjustments need to be above the agreed upon adjustment, as the negative multiplier effect of the adjustment will shrink the economy, reducing tax revenues and consequently fiscal deficit. We should also consider the quality of the adjustment, i.e. cutting less productive expenditures, not the R&D ones, for instance. Finally, the other key factor is execution of announced measures (degree of completion), as credibility is low due to consistent deficit figures above pledged figures in the past years. The table below illustrates the Government's projections for deficit and structural deficit, compared to those of the IMF. The main difference lies in the GDP estimate (IMF is at -1.3% for 2013). The chapter committed to GDP discusses its foreseeable evolution. Please note that the European Commission (EC) forecast for 2014 assumes that income taxes will come down in 2014, which we do not deem realistic. These figures do not consider the accounting impact of recognizing a loss in the Government's injection in Spanish banks during 2010-2011 (with a loss of €12 bn. or 1% of GDP).

**Table 3.1. Spain's fiscal consolidation (Government's projections unless indicated)**

	2012	2013	2014	Acum. 2012-2014
GDP growth	-1.5%	-0.5%	1.2%	-0.8%
GDP growth (IMF estimate)	-1.5%	-1.3%	1.0%	-1.8%
GDP growth (EU estimate)	-1.4%	-1.4%	0.8%	-2.0%
Target deficit (% of GDP)	6.3%	4.5%	2.8%	13.6%
IMF estimated deficit (% of GDP)	7.0%	5.7%	4.6%	17.3%
EU estimated deficit (% of GDP)	7.0%	6.0%	6.4%	19.4%
Target structural deficit (% of GDP)	3.0%	1.5%	0.0%	4.5%
Implied structural adjustment (% of GDP)	3.0%	1.5%	1.5%	6.0%
Announced adjustment (% of GDP)	5.4%	4.0%	1.9%	11.3%
Estimated public debt (% of GDP)	85.3%	91.0%	95.6%	

Source: Spanish Treasury, IMF, EC

**Table 3.2. Fiscal Balances, 2008–2013**

Source: IMF

The following tables illustrate the breakdown of the adjustments:

**Table 3.3. Spain's 2012-2014 fiscal consolidation (€ bn.)**

April	2012	2013	2014	2012-2014
Income	24.8	9.0		33.8
Expenditures	18.3	10.6		28.9
<b>Total April</b>	<b>43.1</b>	<b>19.6</b>		<b>62.7</b>
of which central government	30.4	19.6		50.0
of which local governments	12.7	0		12.7
July	2012	2013	2014	2012-2014
Income	5.0	14.9	14.6	34.4
Expenditures	8.5	8.0	5.6	22.1
<b>Total July</b>	<b>13.5</b>	<b>22.9</b>	<b>20.1</b>	<b>56.5</b>
<b>Total April and July</b>	<b>56.6</b>	<b>42.5</b>	<b>20.1</b>	<b>119.2</b>
% of GDP	5.4%	4.0%	1.9%	11.3%
of which higher taxes	29.8	23.9	14.6	68.2
of which lower expenditures	26.8	18.6	5.6	51.0

Source: Spanish Treasury

By September 2012, the central Government deficit stood at 4.4% of GDP,<sup>25</sup> almost reaching the full year target of 4.5%, but this data should be adjusted, because: a) transfers to local Governments, up 25% YOY, were concentrated in H1,<sup>26</sup> b) most of the fiscal cuts and new revenues will accrue during Q4.<sup>27</sup> Including local governments, Spain must reach a 6.4% deficit in 2012. With local Governments complying for the time being (0.7%<sup>28</sup> vs. 1.5% of full year target, with non interest expenditures down 7% YOY), the key will be to what degree the central

<sup>25</sup> 3.8% in the comparable period a year before.

<sup>26</sup> This paradoxically improves the local Government's deficit data during H1, and it will improve it during H2.

<sup>27</sup> VAT increase occurred on Sept 1<sup>st</sup>, and this month VAT revenues saw increases of 12% YOY, additionally, corporate tax revenues increased significantly following the termination of some tax allowances; overall, tax revenues are up 6% YOY in 2012 with non interest expenditures down 8%

<sup>28</sup> 0.9% excluding advanced transfers from the Central Gov.

Government is able to reach 0% deficit during Q4 as a consequence of the execution of the fiscal measures, including the tax amnesty, which will crystalize in October. Probably the deficit excluding this accounting issue will end up at 6.7-6.8%, which could be considered a manageable difference. In turn, social security's coffers entered into deficit as payrolls decreased from over 19m. in 2008 to under 17m. in 2012. Annualized deficit could well be above €5 bn., making it imperative to rethink pensions, as we discuss in the risks chapter. To alleviate the cash drain, the Government used for the first time €3 bn. from the reserve fund, which holds €69 bn. By November 2012, the Government will take a decision on whether to increase pensions with CPI evolution, which increased to 3.5% by September (2012 retroactively and 2013 through a higher base effect), with €4 bn. at stake.

Taking into account the deterioration of assets linked to the funds channeled to the ailing banks between 2010 and 2012 (€18 bn., which produced an accounting loss of €14 bn., half of which is taken to 2011 and half to 2012), deficit could be close to 7.4%, although part of this deviation would simply be an accounting issue which the EU has already stated it will not consider.<sup>29</sup>

The main weakness of Spain's fiscal position is the degree of irregular income arising from real estate related activities. Government revenues reached 41% of GDP in 2007 and stand at 34% in 2012. To address this weakness, VAT was raised in September 2012, but the main problem is the degree to which the shadow economy prevents Spain from raising its revenues (Spanish income from VAT stands at 5.4% of GDP vs. 7% in the EU). 2013 budget consolidated the fiscal adjustments announced between April and July, totaling €40 bn., 55% of which came through lower public expenditure. From 2011, the necessary adjustment to bring deficit down from 6.3% to 4.5% is close to €19 bn., but the real effort has to be larger as, a) interest expenses continue growing, b) GDP continues falling, c) likely final deficit (cash flow, excluding accounting items) in 2012 will be closer to 6.8%, and d) automatic stabilizers increase non-discretionary expenditures. Taxes are expected to grow 4%, mainly driven by VAT's hike in Q4 2012,<sup>30</sup> with non interest expenditure down another 7.3%.<sup>31</sup> On the other hand, the Government announced a new battery of supply side reforms to increase economic activity.

The main criticism of 2013 accounts lies in the underlying assumption that GDP can come down 0.5%, compared to consensus figures of reductions between 1.2%-1.5%. This explains the difference between the Government target deficit (4.4%) and, for instance, that of the IMF (5.7%). The key variable explaining the difference will be export growth, which in turn will depend on the evolution of the Eurozone. For the Government's projection to take place, Spanish PMIs, currently at 44, should be increasing to a range of 46-47 (see Chapter 7 for a detailed breakdown). As for the overall debt of the Government, the IMF incorrectly assumes that the €100 bn. EFSF loan will be fully used, when the final figure will be close to €40 bn. This explains the 6% debt/GDP differential. We believe that the Government's projection is closer to reality in this item.

<sup>29</sup> Government accounting states that a deterioration of an asset (the contingent convertible debt invested in troubled banks) becomes larger deficit, although there is not a cash flow associated with this. This accounting effect also explains the upwards revision of 2011 deficit to 9.4%. Total write off stands at 1.1% of GDP.

<sup>30</sup> Plus a reduction in the depreciation allowance, to increase effective corporate tax, which is well below the EU average.

<sup>31</sup> Additionally this figure excludes noncontributory pensions, which used to be financed by the social security and which starting in 2013 will be directly funded by the Government. In turn, interest expenses are forecast to increase 34% from €28 bn. to €39 bn.

On the other hand, the Government expects that tax fraud prevention policies will collect €8.1 bn., of which €6.4 bn. has already been accomplished by the end of July. However, the data from the tax amnesty and the dividend repatriation policies (repatriation of fraudulent money with a penalty of 10%) that the Government introduced by Q2 has been discouraging only 1.5% of the expected €3.2 bn., even though most of the results should be seen in November.

### **Why regional governments will comply: the regional liquidity mechanism fund**

Spain has a high degree of decentralization, with more than 65% of total expenditure accruing to the regions and cities (vs. an EU average of under 50%). The main reason regions will comply with the adjustment lies in the financial assistance they will request from the central Government through the regional liquidity mechanism fund.

Despite many comments in the press, local and regional Governments have started to undertake sharp reductions in spending, with non-financial expenditures down 7% by H1 2012, with taxes down 3.5%. By H1 2012, their deficit stood at 0.77% of GDP, vs. 1.64% a year ago.<sup>32</sup> University fees have dramatically gone up, ratios between students and teachers in elementary schools went up, some regions have cut salaries of their civil servants (Catalonia 5% in June 2012), thousands of interim civil servants were fired, and co-payment mechanisms were introduced. In turn, townships will be cutting expenditures by €3.5 bn. in 2013 through a reduction of towns and staff.

As regional governments cannot refinance either their existing debt (14% of GDP, of which €23 bn. will expire in H2 2012 and €23 bn. in 2013) or their fiscal deficit (which should stand at 1.5% of GDP in 2012), the central Government approved a tool to finance the regional Governments liquidity needs: an €18 bn. new regional liquidity mechanism fund (*Fondo de Liquidez Autonómica*), which was structured in September 2012 and was financed through a bridge loan (€8 bn.), a special dividend from the National Lotteries operator (€6 bn.), and a cash injection from the Treasury (€4 bn.).

Regional Governments can seek funding from this vehicle, but at the cost of fiscal conditionality:

- Each regional government must present a rebalancing plan and a monthly execution plan;
- The accounts must be controlled by the state's auditor office;
- Potential direct intervention in case of risk deviation from the plan and supervision through monitoring as stated in the organic law for budget stability and financial sustainability;
- All new debt issuance by a regional government under the fund requires the central treasury's approval.

These loans from the central Government to the regional ones will be backed by the participation of the region in centrally collected taxes (i.e. if the money is not paid back, the central Government will not transfer the taxes collected on behalf of the local or regional government in an equal amount). In our opinion, these clear rules (similar to the ones imposed by the troika on rescued countries) give no room for regional governments to violate the terms of the adjustments.

---

<sup>32</sup> As stated, this positive data is partially explained from the fact that central Government' transfer of cash into the regions concentrated during H1, what impacts the revenue recognition. Yet, most of the fiscal cuts are concentrated into H2, so H2 execution will be key to assess deficit reduction.



Regional governments must state before Dec 31<sup>st</sup> whether they want to seek this financing line. As of November, most regional Governments have already stated their intention to do so (the three most important of which are Catalonia, with €5 bn., Andalucía, €4.9 bn., and Valencia, €4.5 bn., with other six requesting €3 bn.). Four regions will not need this rescue (Madrid, Extremadura, Castilla León, and Galicia). The Government has announced that the fund will also meet the regional government's 2013 maturities (€23 bn.), so it will need to raise additional funding.

### Fund for the financing of payments to suppliers

A key problem in the Spanish economy is the extremely high level of working capital, as payment periods overextended. Governments (especially local administrations) were by far the worst offenders, with payment periods that would well exceed 12 months. To solve this situation, a fund for the financing of payments to suppliers (FFPP) was established in June. The fund was financed through a bank syndicate loan of €30 bn. for a 5 year term with a 2 year grace period (this loan is the largest syndicated loan ever given). The liabilities of the FFPP were 100% guaranteed by the central Government.

The fund will pay the arrears of regional and local governments, creating a liability from the local or regional government to the fund (10 year terms, with 2 year grace period). The fund takes full recourse to the participation of the local and regional authorities in the revenues of the State (again, if the fund pays arrears accrued by a local government, and the local government does not pay back the money to the fund, then the central government will divert tax collection on behalf of the local government to the fund). Fiscal conditionality is attached to this scheme, reinforcing the central Government's power to exert control upon the finances of local governments.

In May 2012, €9.3 bn. of arrears of the municipalities was paid down, and in June, another €18.3 bn. of arrears of regions was paid down. In total, liquidity totaling almost 2.7% of GDP was injected, mainly in SMEs. The impact was a mutation of commercial debt into financial debt, which explains why Eurostat's debt / GDP at a local level increased by 3.9% during these two months.

### **Conclusion**

Fiscally adjusting more than 11% of GDP in 4 years is a titanic task that was deemed impossible a few years ago. Reforms unthinkable only a short time ago have already been announced and are being implemented. The key will be execution and evolution of GDP. If targets are not met, then it is likely that EU and Spain will agree on further adjustments and a prolonged timetable to meet stability. Yet, by 2006, the Government was spending irregular income generated by real estate on regular expenditures. Now, the situation should be inverted (there still are 3.2 million public employees and 0.45 million professional politicians, compared to fewer than 13 million private employees). As a result of these efforts, Spain should achieve stabilization in public finances. This milestone is key to allowing Spanish banks to obtain funding, Spanish large corporates to access debt capital markets at reasonable prices, and banks to reignite funding to SMEs by 2014-2015.

## 4. Spanish banks: light at the end of the tunnel

It is relevant to understand the dramatic changes that have occurred during the last four years to credit Spain for finally fixing the banking situation. By 2008, the Spanish financial sector was comprised of more than 50 banking groups. 50% of the assets were held by the *Cajas*, many of which were contaminated by politicians and bad managers. A sizeable portion of the banking sector was insolvent: toxic assets stood at €400 bn., of which less than €100 bn. was provisioned, with a total core tier I of below €200 bn. The sector as a whole was also illiquid, as its wholesale debt equivalent to 54% of GDP had to be refinanced between 2009-2012 with low prospects of refinancing happening, which could produce systemic risk for the entire banking sector and for the Sovereign.

After a sharp reform, by year end 2012 there will be 15 banking groups left (we expect Caja3 to be integrated into another group). *Cajas* and the political interference have all but disappeared. Most of the toxic assets were provisioned, with the remaining needs (€60 bn.) undertaken by Q4 (of which €40 bn. by the Government and up to €20 bn. by the markets), restoring solvency. Most wholesale financing was replaced by ECB's 3-year funding, sharply reducing liquidity risk. After the implementation of a bad bank scheme in Q1 2013, where toxic assets will be transferred at market prices, Spanish banks will have double digit levels of core capital, low toxic assets, and with further deleveraging by year end 2013, they will have a less risky loan to deposit ratio at 134%. These measures should be important in avoiding the contagion effect from the banking sector to the Sovereign. The main challenge, of course, is the structural deleveraging, which will make it difficult for Spanish banks to foster GDP growth from 2014 onwards through credit expansion. The recognition of losses, recapitalization, and securing of funding for the Spanish banks is good for the financial system and for the Spanish economy, but these measures do not mean that there is value in the banking sector. The sector faces many years of negligible growth and lower ROE as ECB funding is replaced in the mid-term by wholesale funding, depressing margins.

### Key figures of Spanish banks

By Q2 2012, Spanish bank assets stood at €3.4 trn., the loan book stood at below €1.7 trillion, of which €0.8 trillion is household debt (€0.65 trillion in mortgages and €0.15 trillion in consumer loans), and corporate debt stood at €0.9 trillion (of which €0.3 trillion is in real estate and €0.1 trillion in construction). Equity stood at €240 bn. with a leverage ratio of 1/14. Meanwhile, reliable deposits (excluding deposits of financials) stood at €1.11 trillion,<sup>33</sup> of which €0.69 trillion is with families,<sup>34</sup> €0.12 trillion with corporates, and €0.2 trillion with others (Governments and non-residents). Therefore, the current implied loan to deposit ratio stands at 151%.<sup>35</sup> It should be noted that the deleveraging process started in 2008, when loans to the private sector reached a historic maximum of €1.9 trillion. Most of the credit squeeze was concentrated in the corporate loan book, mainly in SMEs, which exacerbated the unemployment situation. Pre-provision profit stands at €22 bn., which is a main source of funding to restore solvency (profits up to 2014 have been

<sup>33</sup> As we saw in Chapter 1, this excludes €60 bn. of commercial paper, "pagarés", as the central Government increased the % to be paid to the deposit guarantee fund, banks reacted by convincing clients from deposits into commercial paper, hence avoiding to pay such a fee. During 2012 the slight decreases in families' deposits are similar to the increases in commercial paper, demystifying a theoretical flight of deposits.

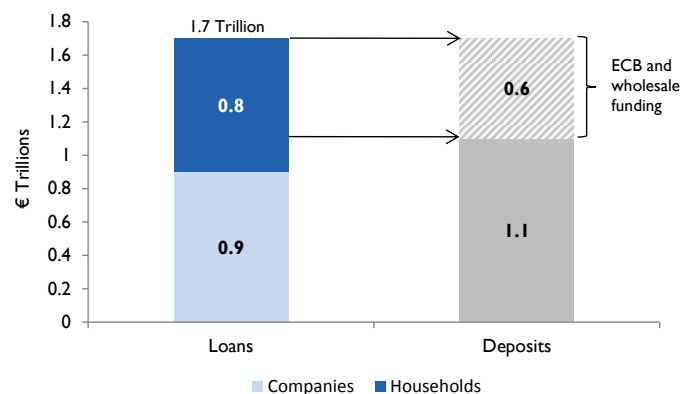
<sup>34</sup> Families have €408 bn. in deposits, and €302 bn. in current accounts, with corporates €102 bn. and €82 bn. respectively (source: Bank of Spain).

<sup>35</sup> Also notice that the loan book should be reduced in the amount of existing provisions, resulting in a lower L/D ratio.

allowed to recapitalize banks, something which was criticized by financial markets, which demanded an upfront solution such as in Ireland). A relevant portion of these profits is achieved through the carry trade, obtaining almost free funding by the ECB and buying Spanish Government paper up to 3-4 years and profiting from the spread. This explains part of the use of the ECB by Spanish banks (i.e. it is not only to replace wholesale financing, although this is still a relevant factor).

Hence, Spain's funding gap stands at approximately €600 bn., of which €411 bn. is financed through the ECB (€378 bn. net of deposits) and the rest through wholesale debt, mainly covered bonds (which offer a double guarantee, first through the underlying mortgages, second against the balance sheet of the issuer's bank).

**Table 4.1. Spanish banks funding structure**



Source: Arcano, Bank of Spain

A key consideration going forward is the pace at which the loan to deposit ratio is reduced. Portugal and Ireland were given strict targets of 120%, which prompted a further credit squeeze. However, such a target was not included in Spain's Memorandum of Understanding (MoU) with the EU in order to receive €100 bn. from the EFSF. This means that the pace of the adjustment could be smaller, preventing further damage. Perhaps such a target is demanded to be applied to nationalized banks. In any case, the process is irreversible, which makes it necessary to facilitate the access of SMEs to non-bank financing.

### Solvency situation and recapitalization

The key figures of the banking crisis are: a total loss of €260 bn. (26% of GDP), of which 50% is due to real estate developers. Of this 26% of GDP, 11% of GDP was provisioned from 2008 to 2011 (this includes 1.5% of GDP in Government's injections). Another 5% will need to be cleaned through provisions (4%) and equity (1%) following two decrees of the Government in early 2012. Another 6% will be cleaned through the recapitalization of the Spanish banks (4% through the Government, using the EFSF's credit line, up to 2% through the markets) following the external auditors' report in September 2012. The final 4-5% will be cleaned through pre-provision profits during 2013-2014.

Of the €1.7 trillion in the loan book, an estimated €0.4 trillion (40% of GDP) are linked to "toxic assets," mainly loans to real estate developers (€287 bn.<sup>36</sup>) and

<sup>36</sup> Peak levels of €324 bn.

construction companies (€92 bn.<sup>37</sup>). Recognized non-performing loans stand at 10% of the book (€169 bn.)<sup>38</sup> as of July 2012, or 16% of GDP. Since June 2008, a total of €112 bn. were provisioned (11% of GDP). As maximum estimated losses accruing to these toxic assets might reach €270 bn.<sup>39</sup>, or 26% of GDP, according to Oliver Wyman, this means that less than 50% of estimated losses had been provisioned. This difference between 11% of GDP of provisions and 26% of estimated total losses is at the heart of the banking crisis. Spanish banks became “zombie” banks by not adjusting the valuation of these assets to reality between 2007 and 2011 due to complacency of the Government and the Bank of Spain. As in the Japanese banking crisis, zombie banks do not lend, and this behavior prompted a sharpened crisis as banks cut funding to healthy companies. To avoid recognizing some loans as non-performing, a portion of toxic loans were “renegotiated” and not recognized as non-performing. Government policies to address this difference between 11% and 26% of GDP in provisions was clearly insufficient: up to 2012, “only” €25 bn. (2.5% of GDP) had been injected in the troubled banks (€18 bn. through FROB <sup>40</sup> 1 –pref. shares- and FROB 2 –equity-, of which around €14 bn. is already lost; and €7 bn. through the deposit guarantee scheme).

Between 2008 and 2011, weak *Cajas* were consolidated with stronger banks, with the deposit guarantee scheme granting asset protection schemes for a total of €81 bn. Following this, the financial map changed dramatically, as the number of these institutions fell from over 50 to only 14, and combined with banks, less than 20 now hold over 90% of total assets, as of the end of 2011. Internal restructuring began as well, with the total number of employees in the financial sector falling from 270k in 2008 to 240k in 2011 and the total number of branches falling from 45k to 40k, with more to come. However, the balance sheets were still not sufficiently clean of the toxic assets.

The situation changed in 2012. Up until December 2012, an estimated 19% of these toxic assets should be cleaned by: a) 11% through the consumption of generic (2.5% of GDP), restructuring (1.9%), and specific (6.6%) provisions<sup>41</sup> (totaling 11% of GDP, undertaken up to 2011), b) special 2012 provisions, which accelerated during H1 2012 following two decrees of the Minister of Finance forcing banks to assume losses in toxic assets, increasing provisions in 4% of GDP and equity in 1.4%, although banks have not yet fully accomplished these provisions, c) recapitalizations and asset protection schemes by the deposit guarantee fund (3% of GDP),<sup>42</sup> and d) FROB’s injections in 2010 and 2011 (1.5%). Yet there was still a difference between the 21% of GDP in the clean-up exercise and the 26% as the final bill.

In June 2012, Oliver Wyman (OW) and Roland Berger (RB) were placed in charge of examining the solvency needs of the Spanish banking industry and published their findings to the public. The stress test was applied to over 90% of total banking assets during the period 2012-2014. A base case scenario and a worst case scenario were established. The base case assumed a core tier 1 capital ratio of 9% and standard

<sup>37</sup> Peak levels of €100 bn.

<sup>38</sup> NPLs went up 3% vs July 2011 as a consequence of the cleaning exercise enhanced by the auditors’ report on needs of the Spanish financial system. Real estate developers’ NPLs stood at 27% (22% during Q2), construction companies loans’ NPLs at 24%, with NPLs in mortgages at just 3.2% despite unemployment at 25%. Low interest rates and a strict regulation in mortgages, which make individuals personally responsible for the mortgage even if the price of the house falls below the level of the mortgage, explain this healthy NPL rate.

<sup>39</sup> €153 bn. in property related loans (49% expected loss), €112 bn. in non-property related loans (9% expected loss), according to Oliver Wyman.

<sup>40</sup> FROB is the Spanish Government banking restructuring agency.

<sup>41</sup> Generic provisions are non-specific counter-cyclical provisions mandated by the Bank of Spain since 2001.

<sup>42</sup> Additionally, the Spanish deposit guarantee fund, FGD, committed € 8.5 bn. to the recapitalization of CAM (taken over by Sabadell) and Unim (taken by BBVA), leaving its net worth negative.

GDP projections, and its outcome was that the Spanish banks would need €16-25 bn. of additional capital (OW) or €25.6 (RB). Under the worst case scenario, they assumed a core tier I capital ratio of 6%, non-performing loans at 15% (despite being currently under 10%), further GDP contraction of 6.5%, unemployment of 27%, and housing prices down 55% from peak (with land down 85%). The outcome of this scenario was that banks would need €51-62 bn. (OW) or €52 bn. (RB).

The bottom up exercise, finalized in September 2012, yielded a final figure of €59 bn. capital shortfall in the adverse scenario<sup>43</sup>. 7 out of the 15 major banks were short of capital, 4 of which, representing 86% of the short fall were the ones nationalized by the FROB. To recapitalize the banks, the EFSF provided a €100 bn.<sup>44</sup> credit line to the Spanish Government<sup>45</sup>. The Government expects that €20 bn. of the recapitalization will take place from private sources, with €40 bn. provided by the EFSFS credit line (half this amount will go to the nationalized Bankia). Most of the recapitalization will be undertaken by Q4 2012. Recapitalization will be undertaken using 5-7 year contingent convertibles (COCOs), remunerated at 8.5%-9%, converted into equity if core Tier I goes below 5.1%.

A resolution for the outstanding €5 bn. hybrid debt sold to depositors in troubled banks is still pending. In total, an estimated €30 bn. of subordinated debt is outstanding, of which €14 bn. does not belong to the big three banks (Santander, BBVA, Caixa). If this €14 bn. is repurchased at 50% of notional value, then another 1% of GDP of equity could be generated, but at a high social cost, as these products were sold to long standing retail clients as quasi deposits. A new regulation is being implemented to limit these abuses in the future, but deposit growth should be constrained due to the limited trust generated by these practices.

Banks were divided into four groups: group 0 (without capital needs), group 1 (nationalized firms, which will be recapitalized by the Government and whose toxic assets will be transferred to the bad bank), group 2 (firms with a deficit of capital which cannot raise equity in the private markets and will therefore be nationalized with toxic assets transferred to the bad bank and equity injected by the FROB by February 2013), and group 3 (firms with a deficit of capital but ability to raise it though the markets). Table 4.2 shows where each bank stands.

**Table 4.2. Spanish Banks**

Group 0	Group 1	Group 2	Group 3
Santander	Bankia	CajaDuero	Popular
BBVA	Banco Valencia	BMN	Ibercaja
Caixa	NCG	Caja3	
Kutxabank	CatalunyaCaixa	Liberbank	
Sabadell			
Bankinter			
Unicaja			

Source: Bank of Spain

<sup>43</sup> €54 bn. excluding deferred tax assets.

<sup>44</sup> These loans will have a 12 years maturity, with an interest of just 1.54%.

<sup>45</sup> Bankia, CatalunyaCaixa, NCG, Banco Valencia.

The main remaining risks are: a) the criticized measure to allow recapitalization to be generated by future profits (4-5% of GDP), b) the recognition of deferred tax assets as assets (5% of GDP), when in other countries they were written off to maximize the quality of the equity due to its disputable accounting quality, and c) non real estate “refinanced” loans, which total 21% of the SMEs credit book and 9% of the mortgage book, where no individual breakdown is provided and no specific provisions have been asked; the chances of “refinanced” loans ending up being restructured are very high. Despite these criticisms, the scale of the cleanup undertaken in 2012 has been considerable and sufficient to restore soundness in the financial system.

Overall, by early 2013, the picture should be quite clean, resulting in a banking sector with high levels of high quality capital (core tier I of 9%) and provisions in toxic assets up from 30% to 50%. We take these figures as definitive, even though some people have used, in our opinion, biased data to prophesize Armageddon-type scenarios. Mortgage non-performing loans stood at only 2.5% thanks to low interest rates. In our opinion, forecasting future default rates based on history without adjusting by interest rates is overly simplistic, to say the least (in 1993 interest rates were much higher than today...).

The other implication is a European Banking union, which could produce the effect of direct recapitalization of Spanish banks going forward. A discussion of this item is found in the following chapter, which discusses EU’s policies in providing help to Spain.

### Impact of the Bad Bank

To take toxic assets off the balance sheets of banks, a “bad bank” (in reality, an asset management company to be named SAREB) will be used early in 2013. The bad bank will acquire the assets after banks’ recognition of their real value, and it will be managed using a long term perspective. The bank will have capital of around €5 bn., of which 55% will be in private hands (to avoid the consolidation of its debt with the Sovereign). It will issue bonds with the State’s guarantee, and will be leveraged 10 times. Total assets will therefore stand at close to €60 bn.

Only nationalized banks will be forced to sell their toxic assets to the bad bank, but “good” banks could create their own “bad banks” to dispose toxic assets. The bad bank will pay for the toxic assets with State-guaranteed bonds, which can be discounted for cash at the ECB. This cash should be used to face debt maturities of covered bonds, hence reducing this wholesale finance exposure from 20% of GDP to 15% of GDP. As for transfer prices, they will reflect “market values” according to the provisions set in September 2012. Overall, new houses will be bought at discounts ranging from 31% to 63% of face value, existing homes at 23%-59%, and commercial real estate at 24-55%, real estate development at 40-75%, and land at 58%-88%.

As we have seen, total toxic assets stand at €400 bn., yet only a fraction of these are included in the €1.7 trn. of private lending, as many real estate assets have already been transferred to the banks once their owners defaulted (these are called *activos reposeídos*). Overall, we expect just 25% of the Bad Bank purchases to affect “bad loans” and 75% to affect “*activos reposeídos*.” Therefore, if the bad bank purchases €60 bn. from intervened banks (€120 bn. gross), and 25% of this amount is in loans, an estimated €30 bn. will leave the loan book. If non intervened banks dispose another gross €120 bn. into their own non-consolidated “bad bank,” then if 25% of this figure is in loans, and using the same 50% coverage, another €30 bn. might leave the loan book.



Net lending by September 2012 stood at €1.65 trn. and is expected to fall to €1.62 trn. by year-end. €60 bn. will leave the loan book by Q1 2013 through the “bad banks.” Another 5% of credit contraction could be expected during 2013, leaving the loan book at year end at around €1.49 trn. Assuming stable deposits at €1.1 trn., this would take the loan to deposit ratio down to a less risky level of 134%.

Going forward, the bad bank should consider expanding its balance sheet (current limit capped at €90 bn.) with more private investors to buy non deconsolidated toxic assets at market prices, mainly “refinanced” loans to SMEs (€120 bn.) and “refinanced” or troubled (with loan to value above 80%) mortgages (around €100 bn.).

### Liquidity needs

As stated before, Spanish banks’ loan book stands at under €1.7 trillion, with deposits at €1.1 trillion, resulting in a funding gap of €600 bn., which in turn is financed through both the ECB (€411 bn., with €378 bn. net of deposits, of which €330 bn. comes from LTRO, providing three year funding that minimizes liquidity risks from maturing wholesale debt, which seriously reduces banks’ liquidity risk; the rest are market repurchase operations) and wholesale debt, mainly covered bonds, (€180 bn., maturing mostly in 2013 and 2014).

As we have seen, Spain’s loan to deposit ratio stands at 151%.<sup>46</sup> Traditionally, Spanish banks financed this funding deficit in the wholesale markets, mainly through covered bonds, but since the start of the crisis, this funding disappeared, given the lack of confidence in Spain’s banks. As wholesale debt matured, banks replaced this funding with ECB funding while simultaneously pursuing progressive policies of shrinking balance sheets. By September 2012, Spanish banks obtained ECB funding of €411 bn., mostly with a 3-year maturity. Concerned about the closure of wholesale markets, the ECB facilitated access to this financing, and long term funding programs such as LTRO and normal operations were heavily used by Spanish banks. As the banks found less and less collateral to post as a guarantee for the ECB’s loans, the requisites of these guarantees were progressively reduced in order to avoid a liquidity crunch mutating into a solvency crunch, which would have unforeseen consequences for all other euro banks.

Finding a replacement for ECB funding is difficult in the foreseeable future (especially in the wholesale markets), although in September 2012, the wholesale markets reopened again for Spanish banks. However, there is still €180 bn. in wholesale debt that matures between 2013 and 2014 within the sector, and if it is not refinanced, the only alternative banks will have is to keep using ECB funds. However, after the recapitalization and the sale of toxic assets, Spanish banks will be in much better shape to issue wholesale funding in order to gradually reduce ECB reliance.

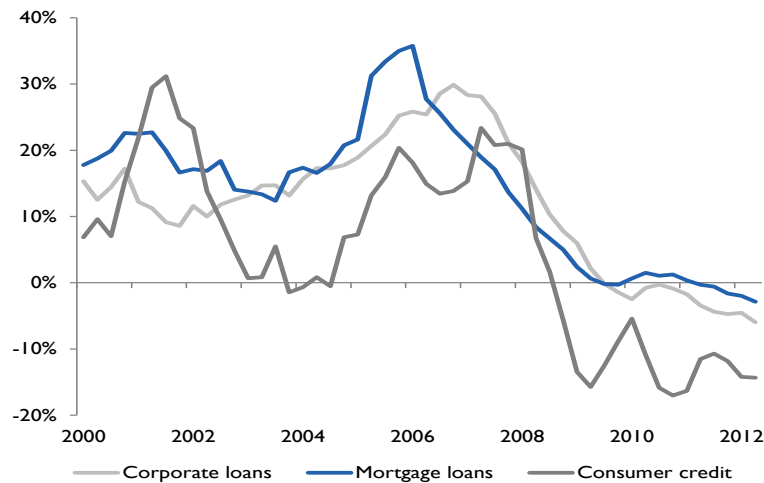
### Deleveraging and saving

By July 2012, private credit was down 5% YOY, the worst figure since 1962 (new loans stood at -25% YOY). Since 2007, new loans to corporates were down 50-60%, and the outstanding corporate book has fallen 13% since April 2009. Overall, private lending is down 16% of GDP since 2009. The situation is especially dire within SMEs, which find it very difficult and expensive to access to credit, something we discuss in the SMEs section of this report. As we will see in the chapter committed to the Spanish banking industry, the country is suffering a structural process of deleveraging.

<sup>46</sup> 178% excluding more volatile non-banks financials deposits, which stand in €0.15 trn.

Since the credit crisis started, Spain's household debt to disposable income has fallen 4%, and outstanding stock of household debt has fallen 1%. Consumer credit and corporate loans were seriously affected, which seriously damaged consumption, investment, and unemployment. As corporate loans were concentrated in SMEs, which did not have an alternative route of financing through the capital markets, many healthy SMEs had to close down due to the unexpected shrinkage of liquidity that occurred due to top down factors, as shown in the following table.

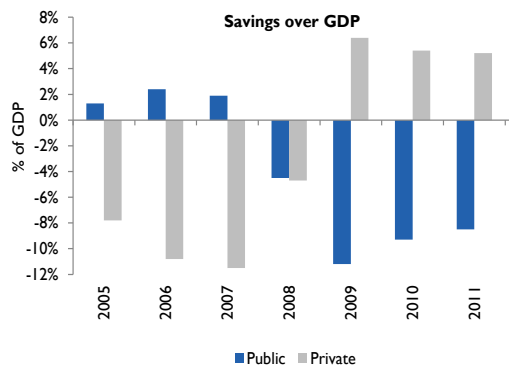
**Table 4.3. Spain's deleveraging (YOY%)**



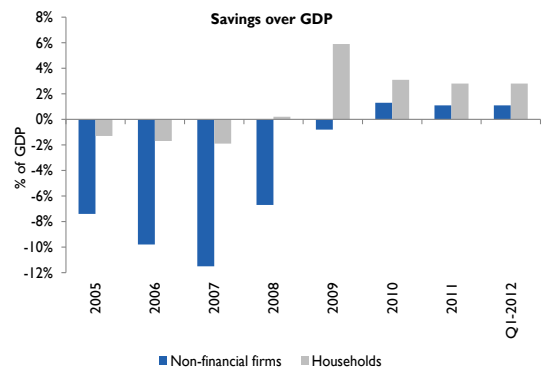
Source: Bank of Spain

In this environment, Spanish families started to save as soon as 2008 (vs. corporates in 2010), as shown in the tables below. Of these three sectors, only the Government has maintained a net borrowing position, something which will be addressed with the fiscal consolidation package explained in the corresponding chapter. The implication is that Spain is experiencing a structural movement towards saving, a factor which is behind the lower levels of domestic demand (compensated by higher levels of exports), and the country's expected entry into positive current account levels by 2013. This process should further alleviate the loan to deposit ratio.

**Table 4.4. Private Spain started to save**



**Table 4.5. Breakdown of private saving**



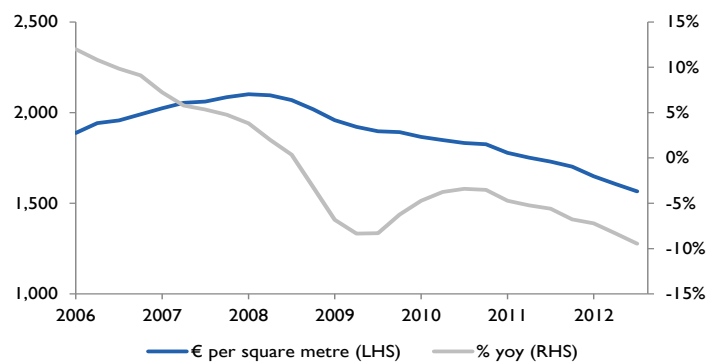
Source: INE



### Housing market

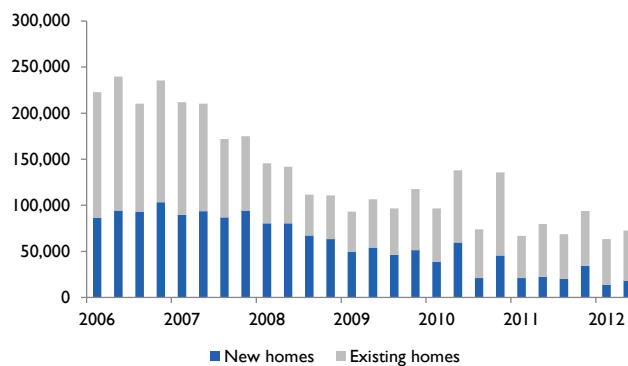
House prices in Spain have fallen 27% between 2008 and 2011 (36% in real prices), improving the affordability ratio from 42% in 2007 to 22% by 2012. To reach historical levels of affordability ratios (house prices to disposable income), housing prices should fall a further 10% in 2013 (following a 12% reduction in 2012). This means that if house prices actually fell down another 10% in 2013 (when most of the inventory currently in the hands of the banks reaches the market), the adjustment could be completed at -49%. It is important to highlight the low levels of liquidity behind these price figures, as the number of transactions between July 2012 to July 2011 (316K) is approximately 40% that of 2007 (775K). The fact that transaction costs are much higher in Spain than in the US, thanks to taxation, explains part of the delay in the adjustment. If we factor in the 12% expected fall in 2012 and the 10% fall in 2013, we obtain a total 49% decrease in house prices from peak levels, compared to 33% in the US, 21% in the UK, and 46% in Ireland (where credit boom before the crisis was far higher than in Spain).<sup>47</sup>

**Table 4.6. House prices**



Source: Ministry of Development

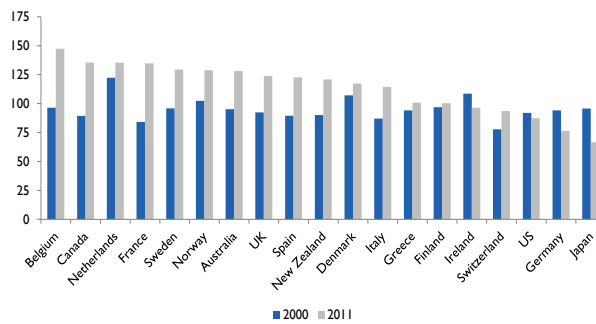
**Table 4.7. Quarterly home sales**



Source: Ministry of Development

<sup>47</sup> Source: Spanish Council of Competitiveness

**Table 4.8. House prices / disposable income ratio**

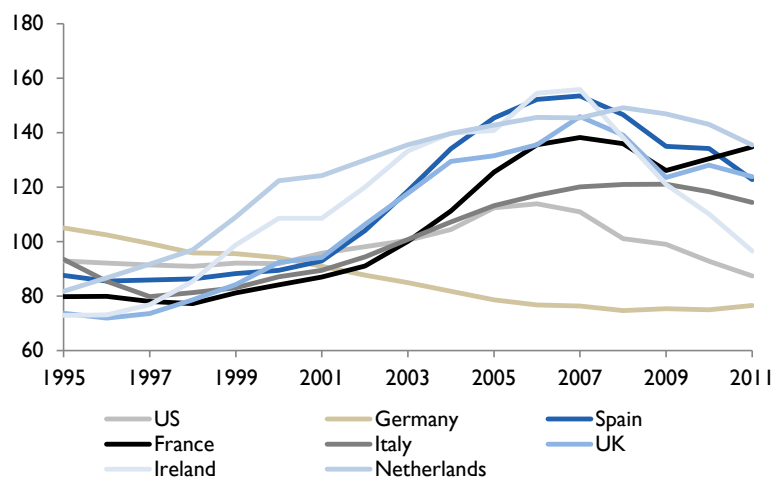


Source: OECD

The affordability ratio, which stood at 3.8 years at the end of the 90s, increased to 7.6 years in 2007 and is back to 6 years by Q2 2012 and should probably fall below 5 at the end of 2013. Considering the differential in interest rates, we believe that we should see a stabilization at this level going forward; indeed historic PE (inversion of rental yield) stood at 19x, and the current PE stands at 23x, implying an additional 15% decline between H2 2012 and 2013.

Although prices might not recover in the coming years (there are still 1-2 million empty houses), the negative effect on consumption through the wealth effect should end by 2013. In the meantime, the supply of new homes has seriously declined, from building between 500-600k houses a year in the 2000-2007 period to only 60k houses a year finished in 2011 (representing construction levels not seen in over 30 years), with a normalized scenario of 200k per year in the mid-term. In any case, if the current level of over 300K house sales a year does not improve, then it will take a minimum of three years to absorb the existing inventory, which means that house price inflation and higher construction activities should not be considered ahead of 2016. Finally, it is important to highlight the structural factors behind Spain’s mid-term enhanced demand for real estate: weather, security, and infrastructure. This makes Spain a destination of choice for many retired Europeans.

**Table 4.9. House price to disposable income ratio (Long-term average = 100)**



Source: OECD

## Conclusion

In 2008, Spain had more than 50 banking groups with a loan to deposit ratio well above 150% and between €300-€400 bn. in toxic assets without proper impairment, making over one third of the banking system practically insolvent. By Q1 2013, Spain will have 15 main banking groups (likely to go down even further) with a loan to deposit ratio below 140%, core tier I at a minimum of 9%, and toxic assets provisioned at above 50%. House prices should fall another 10% in 2013, completing a 49% correction. By year-end 2013, loan to deposit ratios should be at a manageable level of 134%. These significant efforts should have positive results, including potentially positive lending growth as the economy recovers.

The cost of this restructuring stands at *circa* 26% of GDP, courtesy of foolish lending policies and a complete lack of responsibility on the part of some Spanish banks and *Cajas* over the past ten years. Although public funds have inevitably been used to recapitalize the system, much of the cost has been borne by the banks' shareholders, as operational profits have been used to clean up the balance sheet and as banks have carried out significant equity raising exercises. There is probably no financial system in the world that has gone through this much analysis by public and private agents. This scrutiny and transparency makes Spain's financial system much less likely to produce negative surprises than the banking systems of other European countries. It is also fair to say that after the ongoing public recapitalization and as the deleveraging process continues, Spain's banking system will be one of the most capitalized in the world and ready to sustain the economic difficulties Spain faces. The key milestone will be to see if the deleveraging process associated with the restructuring is severe enough that it has a further impact on the country's economic recovery, as lending to consumers and corporations is an essential element in the return to growth.

## 5. Spain's liquidity needs: why Europe will support Spain

Any solvent country can become insolvent if free cash flow generation is less than the value of the maturing debt and financial markets are closed, prompting a spiral of death. Hence, a solvency analysis should be completed alongside a liquidity analysis. In this chapter we state that: a) Spain, despite being solvent, is illiquid and needs European liquidity to avoid illiquidity turning into insolvency, b) for the first time since the crisis started, European liquidity mechanisms are above funding needs, and c) considering Spain's systemic relevance, Europe will support Spain through liquidity, and this support is instrumental in sustaining the country's fundamental solvency.

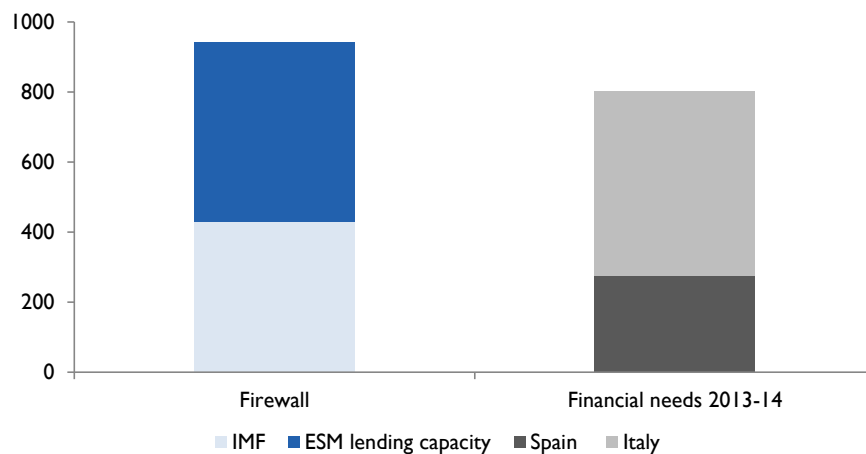
**Debt maturity:** Up to €1.1 trillion of Spanish debt will mature by 2015, of which €400 bn. is linked to the ECB, €400 bn. to the Government (€300 bn. maturing in 2014<sup>48</sup>), €200 bn. to bank wholesale debt, and €100 bn. to corporate debt with foreign institutions.

**Funding sources:** Spain was awarded a credit line of €100 bn. from the EFSF in June 2012 with a cost of 1.4% and with no seniority. Of this amount, only an estimated €40 bn. will be used to recapitalize banks through contingent convertibles. Additionally, there are several vehicles in place to assist Spain with liquidity: the EFSF (acting with unanimity rules<sup>49</sup>) with €148 bn. left (€208 bn. assuming that Spain ultimately uses only €40 bn. of the €100 bn. credit line), the IMF rescue fund with €310 bn., and the ESM (85% majorities needed) with €513 bn. by mid-2014 (potentially leveraged four times if a "first loss" insurance scheme is conceived). Additionally, a European Restructuring Fund (ERF) is being negotiated with the possibility to mutualize debt in excess of 60% of GDP, in exchange for conditionality to progressively reduce debt to the 60% level (an agreement is not expected until after the German elections of 2013). Finally, the ECB agreed in September 2012 to commit itself to unlimited purchases in the secondary market of bills and bonds for up to three years for countries with funding problems, if acting alongside the EFSF/ESM and conditioned to a fiscal package. This program, called Outright Monetary Transactions (OMT), can definitively avoid the spiral between illiquidity and solvency, as it is unlimited. Excluding the ECB and the ERF, €1.1 trillion could be available, assuming no leverage of the ESM.

These funds might be needed mainly for Spain and Italy, for which Government funding needs stand at €1.3 trillion through 2015 (both countries' stockpiles of debt stand at €2.8 trillion), as illustrated in the following table, which shows that for the first time since the Sovereign crisis started, available liquidity is above funding needs.

<sup>48</sup> Average maturity of the Spanish debt stands at 6.2 years with an average yield of 4.2%. Currently only 21% of GDP of the existing Government pile of debt is in foreign hands.

<sup>49</sup> EFSF has €148 bn. left after €192 bn. in commitments to Ireland, Portugal and Greece plus €100 bn. to Spanish banks. EFSF expires in mid-2013.

**Table 5.1. ESM/EFSF resources and gross financial public needs in Spain and Italy (€ bn.)**

Source: Bloomberg

As a conclusion, it seems that the necessary steps to address an eventual shrinkage of liquidity have been taken, and the death spiral will be avoided.

### The Spanish rescue

To receive EU funding, Spain must ask for a rescue with a conditionality agreement. ECB's rhetoric helped drive a sharp reduction in Spain's interest rates since September, which lowered the pressure for a rescue. Yet, we believe that Spain's external debtor position of 87% of GDP makes it imperative to ask for this precautionary credit line early in 2013. The end of this uncertainty should be good news for the risk premium and the cost of finance for Spanish agents. As Spain has already undertaken a sharp fiscal and supply adjustment, we believe that the marginal political costs of conditionality will be reduced. According to the IMF, 200 basis points of the Spanish risk premium (currently at 400) are driven by non-country specific reasons (mainly doubts about the euro architecture). The Spanish rescue might seriously diminish this extra premium. Through a precautionary credit line, Spain might negotiate conditionality in exchange for: a) ESM funding in the primary market (a minimum of €30 bn.), and b) ECB's OMT actions (approximately €40-50 bn. in the secondary markets in Spanish 0-3 year paper, with a total outstanding of €215 bn.). These two actions combined should allow Spain to maintain access to the bond market (in the region of €50 bn.) at reasonable yields.

A key question to ask is why Spain did not ask for the rescue straight away. Some thoughts include: a) conditionality will imply a specific schedule for reforms, which can be politically costly, b) further conditionality might affect sensitive issues such as pensions and active labor policies (which do not work and are intimately related to unions - in any case, a reform of active policies is expected by Q1 2013), c) an independent body to watch public accounts (similar to the US CBO), which should be expected by Q1 2013, and d) additional fiscal adjustments should GDP perform below expectations, again a politically costly decision. Overall, the Spanish treasury is financed at 96% of its 2012 needs and has cash of €36.7 bn. On the other hand, the Spanish treasury has been progressively reducing the maturity of issuance of new obligations, increasing its 2013 liquidity risk. Hence, we believe the "soft rescue" is more than necessary given this vulnerability, but we do not expect it until early 2013.

## Why Europe will support Spain

As interbank markets almost disappeared after 2007, the ECB had to enter as lender of last resort, resulting in institutions in liquid countries placing their deposits with the ECB (€900 bn., of which €700 bn. is from Germany) and the ECB financing institutions in deficit countries (€940 bn.), processes that were both intermediated by the corresponding central banks. The result is a €0.8 trillion imbalance in the Target II system, in which Germany is liable to 29% (a higher portion, close to 50%, should Spain and Italy leave the euro). Were Spain and Italy to abandon the euro, the ECB would immediately suffer a huge accounting loss on these imbalances (depending on the devaluation of the peseta and the lira), and it would need to be recapitalized by the surviving central banks at the agreed upon rates, which would rise according to the new weights after Spain and Italy go. In total, the German Bundesbank might have a bill of over €300 bn. in such an event. However, Germany has already committed circa €500 bn. to European rescue mechanisms.

On one hand, an exit of Spain and Italy would imply the exit of Greece, Ireland, and Portugal, resulting in heavy losses in the ECB's book of SMP (peripheral bonds, mainly Greek, acquired up to 2012, totaling €211 bn.). Much of this book was built to allow German financial institutions to sell their toxic bonds to the ECB, in effect mutualizing bad investment decisions and passing 71% of this risk to other European countries, a rescue in itself.

Additionally, German banks still own positions in peripheral Government bonds (over €200 bn.), which would sharply depreciate should the euro break apart. Therefore, an exit from the euro of these two countries would require a German rescue of their financial systems. Furthermore much of Spain's issuance of covered bonds was sold to German investors, mainly banks and pension funds, which own almost €200 bn. An exit of Spain from the euro would immediately produce a high level of losses in these covered bonds positions for German financial institutions, many of whom are not well capitalized.

Overall, should the euro break apart by peripheral nations leaving it, the German Government and the Bundesbank would need to recapitalize the ECB (€300 bn. bill from target II, €50 bn. from the SMP) and recapitalize the German financial system (€250 bn. to face losses in peripheral Government bonds and covered bonds).

If we add to these losses the sizeable negative impact of a depreciation of the peseta and the lira and the corresponding appreciation of the euro affecting German exports (several hundred billion euros are at stake) it becomes clear why 90% of the German Parliament, the Bundestag, approved supporting Spain in 2012. Of course, this support only happens as there is a consciousness in the German political class that Spain is solvent but illiquid, and that Spain is adjusting, both fiscally and through external demand, key points shown in this report. In total, it is much cheaper to hold the euro together than to let it fall apart. This simple cost/benefit analysis provides a clear ground for the argument that the euro will stay together. However, it is clear that the German political class has not sufficiently explained these points to the German electorate, nor has it fully explained the support that the ECB has provided to German banks through the purchase of peripheral bonds.

Finally, it is important to mention that Europe is not only an economic project, but a political one, and one of the reasons the union was "created" was to avoid fighting wars with each other. Establishing a single currency was a key milestone to this process, and analyzing the euro on economic grounds alone and not on political grounds is a mistake. Therefore, we believe the ultimate consequence of these policies will be a political union.

## European banking integration

A monetary union cannot work without a fiscal union (something that will be addressed in 2013) and a banking union. Banking union should be established upon common governance and supervision from the ECB, a common deposit guarantee scheme, and a common resolution mechanism for troubled banks. None of the three should happen before year-end 2013. Probably, legacy assets from the past credit crises will be a liability for national taxpayers, and a future banking crisis will bear a European responsibility. This means that Spain will not be able to deconsolidate the €40 bn. loan secured from EFSF to recapitalize its banks. Ultimately, an integrated European banking architecture will stop deposit flows between Eurozone countries and will help the reopening of banking wholesale markets.

## Conclusion

The ultimate outcome of EU's support to Spain is a reduction in real interest rates that should seriously diminish Spain's systemic risk as the country returns to growth by 2014. The ECB's announcement of potentially unlimited purchases of Eurozone countries asking for help following conditionality is an instrumental piece in this exercise. We believe Spain will use this facility in early 2013. As the IMF stated in autumn 2012, to reduce Sovereign debt below dangerous levels (100% of GDP), one needs a primary fiscal balance, nominal growth, and reduced interest rates. We believe that the combination of a sharp fiscal adjustment (chapter 4), nominal growth from 2014 onwards (chapters 6-9), and reduction in interest rates (chapter 5) will explain the exit from these weak positions. By 2013 it could be soundly stated that "the worst is over."

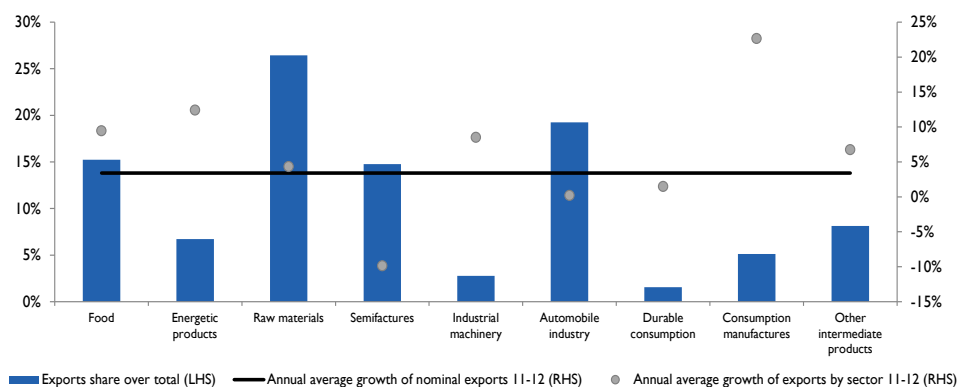
## 6. Spain's growth engine: why Spanish export growth is structural

In December 2011, a Spanish-led consortium was awarded the Medina high speed train, a €40 bn. project, beating French and Chinese led consortiums. This was the most important contract ever to be won by a Spanish consortium, proving that Spanish companies can be very competitive at winning high value-added projects. Such an event was not isolated. Since 2009, the country has re-invented itself as a strong exporter. In 2007, Spain had a trade deficit of €160 bn., but by 2012, it fell to €40 bn., due to energy. What are the underlying factors behind this transformation?

In 2004, China's exports grew 35%. Since then, wages have increased 150%, land 70%, energy 30%, and the Chinese currency, the yuan, appreciated 30%, whereas productivity only grew 8% during that period. As Chinese exports are elastic (main competitive factor is price, hence a relative increase in production costs results in a decline in market share), by H1 2012, export growth stood at just above 2%, below global trade growth at 2.5%.

By Q2 2012, Spanish exports were growing 5.9% quarter on quarter (QOQ; Q1 growth stood at 3.2% QOQ) after having grown 13.5% and 7.6%, respectively, in 2010 and 2011. By August 2012, exports were growing above 4%, with a strong performance in Q3 (annualized growth in double digits). Spain's strong export growth is explained by the same factors that explained China's slowing export growth: Spain has seen a decrease in labor costs,<sup>50</sup> decrease in the price of land, increase in the price of energy (this factor, of course, is negative), depreciation of the euro, increase in productivity,<sup>51</sup> and low elasticity of exports (during 2000-2008, Spain kept its world market share of exports despite labor costs rising significantly). Of the 36% increase in exports since 2008, 83% corresponded to manufactured goods, which tend to have low price elasticity. It is relevant to highlight that this performance occurred despite YTD Eurozone car sales down 7.6% (cars represent one fifth of Spain's exports).

**Table 6.1. Spanish export evolution<sup>52</sup>**



Source: INE

<sup>50</sup> 4% between Q1 2011 and Q1 2008, vs. 9% up in Germany and France, 13% up in the UK.

<sup>51</sup> GDP per hour worked since Q1 2001 and Q1 2008 increased in Spain 8% vs. -1% for the UK or Germany, or 2% for France.

<sup>52</sup> Please notice that LHS y RHS refers to left and right hand side axes henceforth.



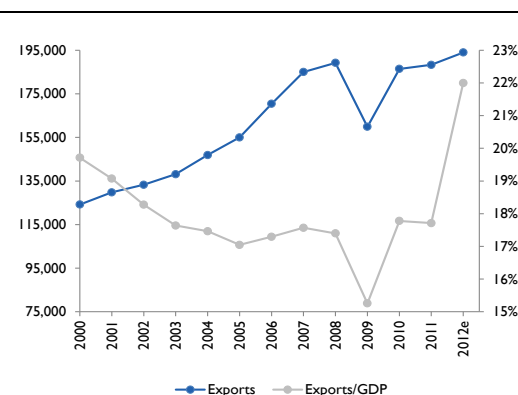
In this chapter we intend to show why Spain's exports have grown steadily since 2000 (5% per annum) and even more since 2010 (10% p. a.) due to the several underlying structural reasons we have mentioned above. Yet, Spain's exports continue to represent only 22% of GDP, vs. 43% for Germany. Spain can continue growing its exports by increasing its penetration in non-Eurozone markets, mainly America and Asia, a tendency which is occurring in 2012 (with growth of exports in these regions in the order of 20-37% vs. sales to the Eurozone down 1%, mainly due to weak car demand). Finally, a special mention should be made regarding the behavior of non-touristic services exports (engineering, architecture, financial services, etc.), a category in which Spain achieved surplus in 2011 and sharply increased the surplus by 2012 (above €5 bn.). This is relevant given the low elasticity of such services.

It is relevant that this export revolution is occurring despite the country's satisfactory performance in the 2000-2008 period, as we have shown in the first chapter.

### Key figures on Spain's exports

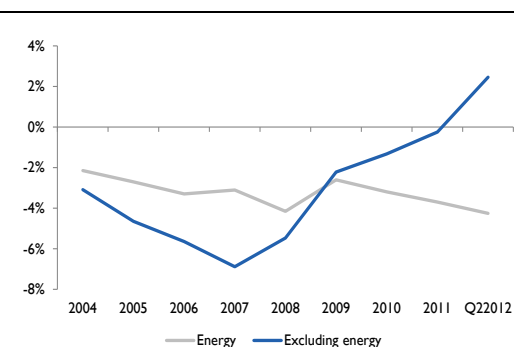
During H1 2012, exports stood at €110 bn., or 22% of GDP,<sup>53</sup> compared to 18% in 2008 (see Table 6.2). By 2010, Spain was running a trade surplus with the European Union (last twelve month –LTM– surplus with the EU stood at €5.6 bn.) for the first time in its recent history (coverage ratio of exports vs. imports stood at 86%). 100% of the trade deficit represented energy imports, and this trade deficit was financed with the surpluses of tourism. Excluding energy, Spain would run a trade surplus of €6.7 bn. in only the first seven months of 2012 (compared to a deficit of €1.8 bn. the same period a year ago), as can be seen in Table 6.3.

**Table 6.2. Spanish exports evolution**



Source: INE

**Table 6.3. Spain's trade balance evolution**



Source: INE

Please notice that when calculating breakdowns of exports, it is relevant to state whether services are included in the total figure. In this paragraph and in Table 6.3, we present exports without services, while the pie chart in Table 6.4 presents it with services. Spain's main exports are automobiles (19% of total exports), down 10% YTD due to the weakness of the European consumer but providing significant upside once consumption stabilizes<sup>54</sup>. The automobile industry is particularly important to the country's economy, not only because it represents 6.1% of GDP, but because

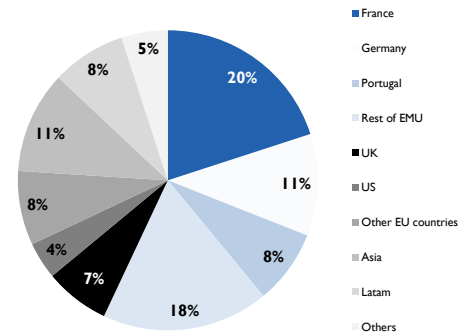
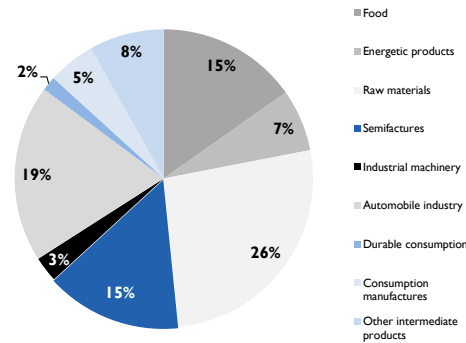
<sup>53</sup> France and Italy stand at 23%.

<sup>54</sup> H1 European car sales were down 6.8% with Spain's down 0.5%, in contrast US car productions is up 22% YTD.

Spain is currently the world's 10<sup>th</sup> largest auto manufacturer, and 90% of its automobile output is exported. Spain's other main exports include food (15% of total, up 9.5% YTD) and capital goods (10% of total, flat YTD). One third of the exports are services, which tend to have low elasticity. As Table 6.5 shows, 57% of Spanish exports are to the Eurozone, where Spain's relative improvement in ULC is stronger. Since 2012, Spain has seen a significant rise in exports to non EU countries.

**Table 6.4. Spain's Exports by Type 2011**

**Table 6.5. Spain's Trading Partners 2011**



Source: Eurostat

Source: Eurostat

However, as stated, exports still only represent 22% of GDP, which is well below that of other countries such as Germany. Therefore, if the current trend is maintained, Spain will have a growth model to exit the crisis – a growth model driven by exports.

**Why Spain has become ultracompetitive: an analysis of input prices**

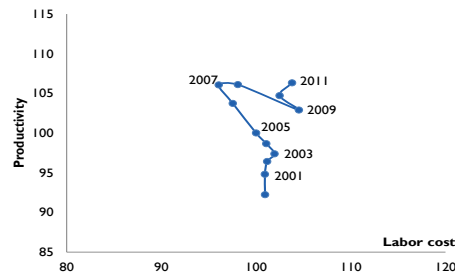
**Labor costs**

Spain's median salary stands at €19k. Although Spain experienced a 50% increase in labor costs between 1995 and 2008, its labor costs today are among the lowest in the OECD, at €20 / hour (note the sharp difference compared to Spanish trading partners, with France at €34, Germany at €30, and Italy at €27). However, productivity differences do not explain these sharp deviations in cost per hour of work. GDP per hour for Spain, France, Germany, and Italy stand at €37-44-43-35, respectively. In other words, assuming constant taxes, the profit's participation per hour of GDP would stand at 47%-17%-20%-14%, respectively. Please notice that ULC reflects severance payments, which have been considerable in Spain. Excluding these, Spanish ongoing ULC would appear even more competitive.

**Productivity**

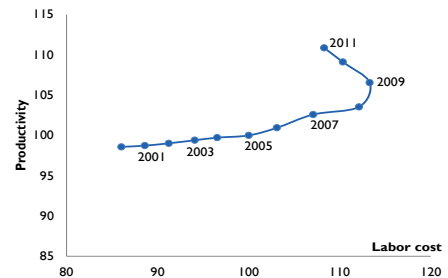
Spain's Achilles heel lies in productivity of labor, which did not evolve according to labor costs, as shown in the Tables 6.6 and 6.7. There are several factors at play in this evolution: i) historically larger weight of the construction sector in Spain, which is much less productive per head, ii) lower weight of industry, which enjoys above average productivities per capita, iii) larger fraction of the economy in Spain represented by SMEs, which are less productive per head, and iv) a lower effort in R&D as we discuss in the chapter nine. However, as can be seen, productivity has begun to adjust, with productivity growth experiencing healthy increases.

**Table 6.6 Productivity - Unit Labor Costs (2005=100) Germany**



Source: OECD

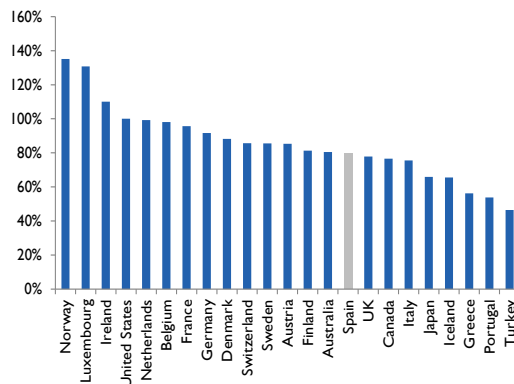
**Table 6.7. Productivity - Unit Labor Costs (2005=100) Spain**



Source: OECD

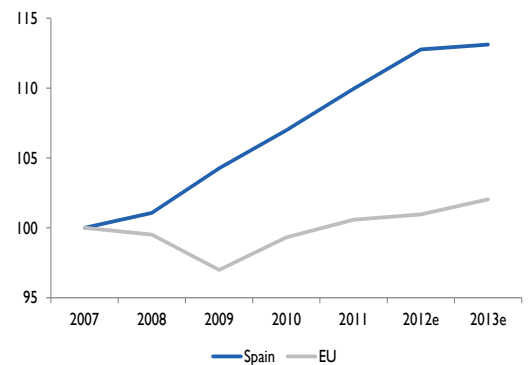
Since 2007, productivity of labor improved: between 2007 and 2010, it increased 6.8% (about 50% of this can be attributed to lower construction jobs), with labor costs growing 8.9% between 2008 and 2011. By 2012, productivity per hour worked (conference board) for Spain stood at 75% that of the US, vs. Germany at 85% of the US and France at 90%, a minor difference that does not explain the major differences in salaries.

**Table 6.8. Productivity per hour worked, 2010**



Source: OECD

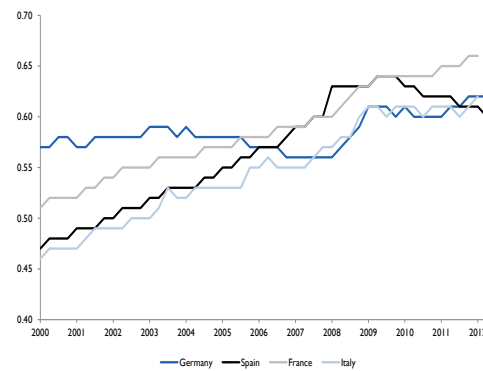
**Table 6.9. Labor productivity change from previous period 2007=100**



Source: OECD

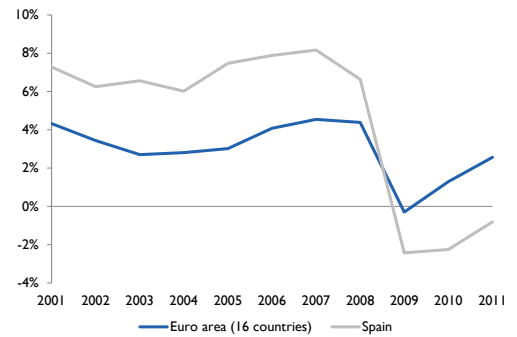
As a result of a decrease in real wages and an increase in productivity since the crisis started, Spanish Unit Labor Costs (labor cost increases minus productivity increases) have decreased 6.4% (Germany's ULC increased 2.6% in the same period) much of the competitiveness lost since the inception of the euro. Finally, the labor reform passed in Q1 2012 should end the link between CPI and salaries, facilitating salary evolution to productivity gains. The first signs of such policies could be seen in 2012, with collectively bargained salary increases of 1.3% agreed for 2012 vs. CPI at 3.5% and 2.6% bargained for 2011. By Q1 2012, Spanish ULCs were down 0.4%, by Q2, 0.7%, and vs. Eurozone at +0.3% and 0.4% respectively. Something structural is occurring in the Spanish labor market, as can be seen in the following two tables.

**Table 6.10. ULC evolution**



Source: ECB Statistical Data Warehouse

**Table 6.11. Real wages evolution Spain vs. Euro area (YOY%)**

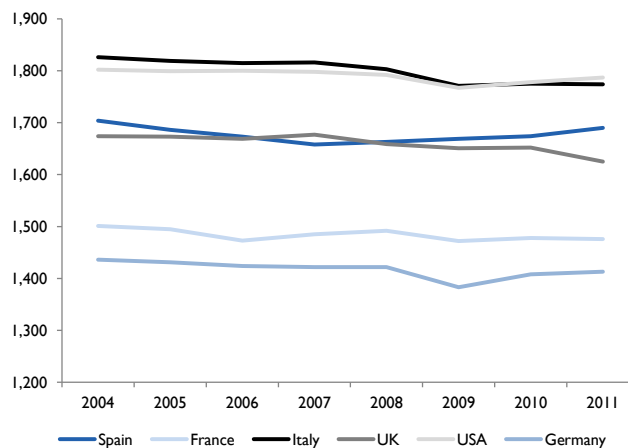


Source: Eurostat

**Number of hours worked**

Contrary to popular wisdom, Spain is one of the countries with the longest work hours. Its main weakness lies in productivity per hour, but as stated above, the difference is small, only 6% apart from that of Germany. Overall, Spain has one of the cheapest labor forces in the OECD, boasts some of the longest working hours among peers, and is experiencing increasing productivity, and for these reasons, it is easy to see how Spain is exporting more and why it should attract further Foreign Direct Investments (FDI).

**Table 6.12. Average hour worked per year**

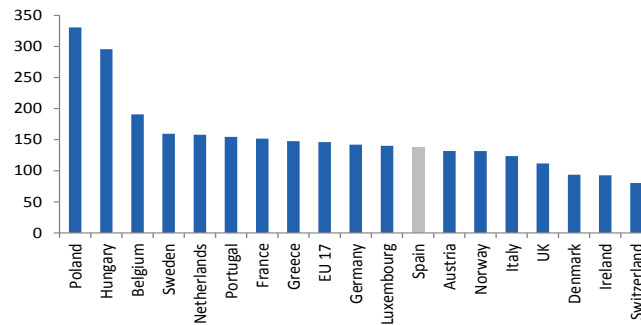


Source: Eurostat

**Energy**

Although Spain's energy dependence and its higher prices are key weak points of its economy, it is interesting to see that the country's energy intensity is well below that of other countries (mainly due to weather reasons), as we show in Table 6.13, making the comparative evolution of Spain's ULC much more relevant. The bad news is that for the industry, weather is not relevant, and Spain achieved the second highest energy prices in Europe (€45-50 MW) thanks to erratic policies linked to renewables.

**Table 6.13. Energy intensity of economy (gross inland consumption of energy in kilograms of oil equivalent divided by GDP)**



Source: Eurostat

On the other hand, the Government reformed the energy sector by September 2012, ending the yearly €8 bn. “tariff deficit” which arose from the difference between real electricity prices and the prices at which electricity companies must sell their energy to their customers (below cost). Although these measures shared new taxes and injections from the Treasury, the curve of future electricity prices clearly shows that the final payer of the deficit will be the end customer. Historic deficit, at €24 bn., has been partially securitized with the State’s guarantee and will be paid through future revenues.

### Land & taxes

As a consequence of the economic crisis, the price of land has fallen close to 66%, making land the last of the main productive factors cheap in comparison to other countries. As for taxes, effective tax rate stands at 30% (large companies) and 25% (SMEs). However, real tax rates in 2012 stood at only 11.6% of profit before tax, thanks to generous tax allowances. Even though these might be reduced for large companies, Spain still enjoys a very favorable tax regime for business.

### Conclusion

Since 2009, Spain’s export growth has reached 36%, vs. 32% in Germany, 30% in Italy, and 23% in France. In this chapter, we have shown the structural underlying trends behind this evolution, which should continue driving export growth in the future. Export growth will be the main driver behind Spain’s emergence from the crisis. The other consideration to make is foreign direct investments. In 2012, FDI was up 500% YOY. As an example of the FDI trend, Ford announced the closure of one of its Belgian plants in order to boost the capacity of its Spanish factory in Valencia. Since 2008, the Spanish economy has experienced a sharp reduction in key input costs: unit labor costs and land. The country is in a process of enhancing productivity and sustaining a high level of hours worked. Therefore, it is no surprise to see the evolution of Spanish exports. This situation should attract foreign direct investment aimed at installing capacity to export. This depends on the absolute level of labor costs, which is quite attractive, as well as the relative productivity per hour and the number of hours worked. All of these factors are quite attractive both on a static and dynamic basis (they have significantly improved since 2008). As exports keep growing and increasing in share of GDP, Spain will emerge from the crisis with positive growth. This tendency will allow the country to reduce its systemic risks, and FDI and acquisitions of Spanish assets should grow structurally to take advantage of Spain’s lower input prices.

## 7. GDP: a comprehensive review and expected evolution

In analyzing the evolution of Spanish GDP since 2008, three key factors should be addressed: i) Spain almost eliminated its current account deficit, which stood at 10% by 2008 and should reach surplus by 2013, ii) private lending growth, which stood close to +25-30% p.a. between 2005-2008, was negative since 2009-2012 due to an unprecedented banking crisis, and overall private leverage came down 16% of GDP, and iii) construction as a share of GDP has fallen in half during that period, from 12% to 6%. Overall, taking these three factors into account, it is remarkable that Spain has lost only 5% of GDP between 2007 and 2012, especially considering that fiscal stimulus has been lower than publicly believed (public expenditure increased 3% of GDP from 2008 to 2011).

Early 2012 IMF and Government estimates for GDP contraction stood at -1.7%. The main reason was the 3% structural fiscal adjustment concentrated in 2012. Yet, by Q4 it appeared that final GDP contraction will end up being below 1.5%, mainly due to higher than expected external demand and strong tourism performance, again highlighting the structural theme we elaborated in the previous chapter. We believe that these factors show the fundamental resilience of the Spanish economy.

In this chapter, we will analyze the foreseeable evolution of Spain's GDP. We believe that 2012 should be the last year in which construction is a lag for GDP (it is already at Eurozone average, or 6% of GDP). In 2013, the main drag will be the fiscal adjustment, and here the fiscal multiplier is unknown. In the meantime, external demand continues to generate most of the economic growth. Finally, unemployment should stabilize between 25-26% (it reached 25% by Q3 2012 with 5.8m. unemployed), and it is relevant to assess the impact of such a stabilization of unemployment in producing some growth in consumption (which is currently down 2% and has been retreating for 54 months).

### Key macro forecasts

2012 GDP growth should stand at -1.5%, with 2013e at a contraction of 1%-1.5%. Growth should resume by 2014e (+0.5-1%), although net employment will not be created until 2015. For 2013, the key factor behind GDP contraction will be the performance of external demand, which in turn is significantly correlated to the world economy, especially the Eurozone.

**Table 7.1. Consensus estimates for Spain's 2013 GDP**

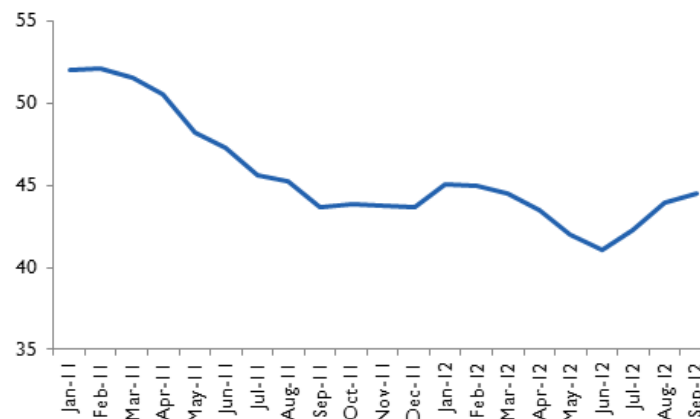
Institution	2013
Government	-0.5%
IMF	-1.3%
European Commission Forecast	-1.4%
Standard and Poors	-1.4%
CEOE	-1.6%
Fitch	-1.5%
Oliver Wyman Base	-0.3%
Oliver Wyman Adverse	-2.1%

By quarters, the economy stagnated in Q3 2011 (0% QOQ growth) with negative growth rates the following four quarters (-0.5%, -0.3%, -0.4% and -0.4%, respectively). In H1 2012, the economy was declining at an aggregate rate of -1.3%, but this should

worsen in H2 to levels near -1.7%, resulting in an end-of-year decline of approximately 1.5%.

Forward looking indicators (PMI) point towards GDP contracting less than 1.5% during 2012, which is remarkable in the context of sharp deleveraging and fiscal adjustments (VAT increase was effective in September 2012, and most of the fiscal cuts are concentrated in H2, as well). Additionally, recent manufacturing PMI evolution suggests a better than expected GDP evolution going forward, despite all the negative noise about it:

**Table 7.2. Spanish manufacturing PMI evolution**



Source: Bloomberg

During 2013, several factors will weigh in to decide final GDP growth:

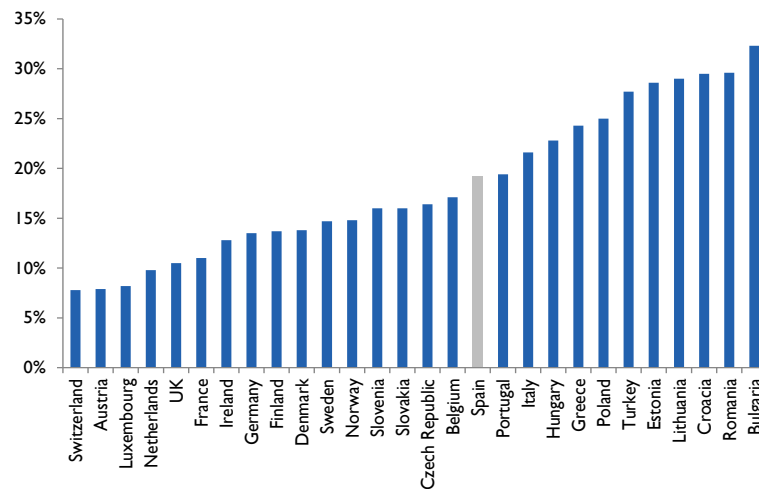
- The negatives: Fiscal adjustment is concentrated in Q4 2012 and 2013, domestic banks are cutting RWA 5% to boost core tier 1, wages should fall a further 5-10% during H2 2012-2013, and low consumer confidence as a consequence of very high unemployment (5.8 m.) will likely keep consumption depressed.
- The positives: Liquidity (€27 bn. injected through the suppliers fund in June to 135k companies, mainly SMEs) could boost GDP by 0.8%, export growth should accelerate, and construction, currently falling at a rate of 16% for 2012, is reaching trough levels, so the negative contribution this sector has to GDP should begin declining soon.

### Impact of supply side reforms

Since early 2012, the Government has undertaken supply-side reforms which would have been inconceivable a few years ago. Of particular importance are the labor reform, pension reform, services reform, financial services reform, education reform, a plan to boost entrepreneurship, a plan to provide SMEs access to finance, transport liberalization, a plan to unify market rules limiting barriers to competition in professional services, a plan to create REITs to boost rental in real estate, and fiscal reform initiatives. The Government expects these measures to boost GDP by 8.5% and create two million jobs before 2020. Although these policies generated protests, a relevant portion of Spaniards understood that the previous economic model was outdated and the social impact of these measures was much lower than anticipated. Going forward, these measures should produce structural increases in GDP by

moving a portion of the black economy (accounting for 19% of GDP and probably 4 million jobs<sup>55</sup>) into the formal economy. The challenge, of course, will be addressing Spain's higher taxation levels preventing such a shift. By Q4, a new law against tax fraud was passed, limiting payment in cash to €2,500. Soon, another law to prevent unlawful employment and a reform of the penal code law (i.e. without registering the job in the social security) will be passed with the aim of raising a portion of jobs in the shadow economy and in the formal economy

**Table 7.3. Shadow economy of EU countries 2012 (% of GDP)**



Source: European Commission

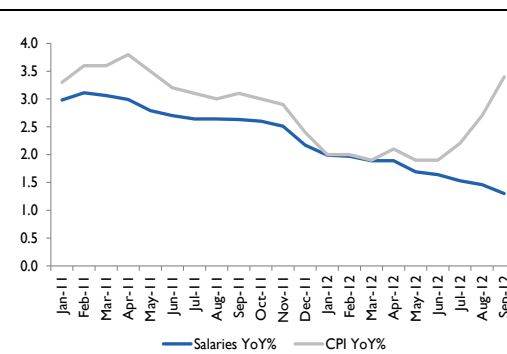
The Spanish labor laws of 1941 and 1981 consecrated extreme levels of labor protection. With structural unemployment of 13-15% (see Table 7.4), much higher among young people as a consequence of high dismissal costs, the March 2012 labor reform is by far the most important labor reform in recent Spanish history and probably the most relevant in terms of decreasing high structural unemployment and linking salaries to productivity (the Government expects this reform to generate almost 4.5% GDP growth and 1.6 million additional jobs before 2020). It reduced dismissal costs from between 45 days and 42 months to between 20-33 days and 24 months, it encouraged permanent contracts<sup>56</sup> (which should improve investment and consumption decisions plus training and productivity), and it increased a company's ability to negotiate a collective bargain *vis a vis* its employees without having to adhere to the sector's negotiation. This last point allowed many companies to cut salaries in the workforce in exchange for not firing further employees. In other words, salaries are no longer indexed to inflation providing a key competitive advantage for companies. Such measures should limit future growth destruction. By 2012, the first effects of this reform were felt, with collective bargained salary increases well below inflation, as shown in Table 7.4.

<sup>55</sup> As estimated by FUNCAS.

<sup>56</sup> Although by August 2012 its effects were still limited in terms of fixed contract generation.

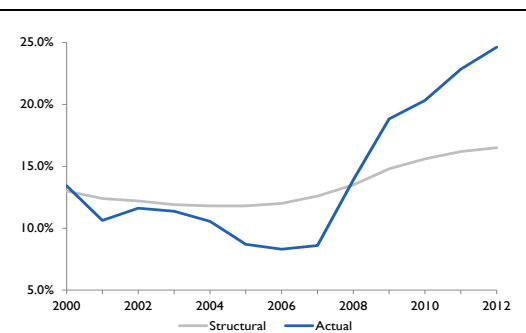


**Table 7.4. Spanish salaries and CPI evolution**



Source: INE

**Table 7.5. Unemployment**

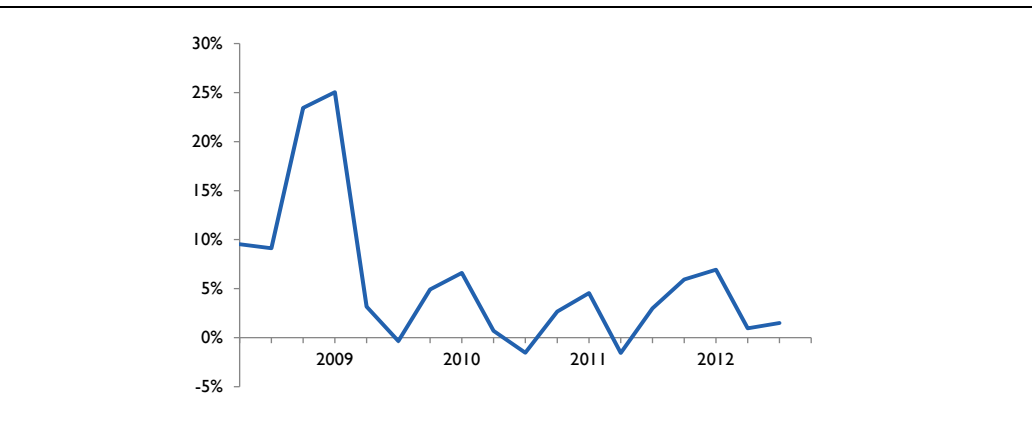


Source: INE

### Consumption

With decreased levels of ULC (as stated, wages to further adjust 5-10%), the negative wealth effect of housing until late 2013, an increase in the price of gasoline (10% YTD), high unemployment, negative consumer lending, a 3% increase in VAT, an increase in income tax, and weak payroll figures, it is not surprising to see the depressed level of Spanish consumption, with decreases of 2% in 2012 and 2013e. As unemployment stabilizes at 26%, the marginal attitude to save might decline, but no substantial growth in consumption should be expected before 2014. This largely explains the weakness in the services sector, which represents 51% of GDP. Yet, the reality is that the marginal increases in unemployment are being reduced, as shown in the next table. Current consumption level is clearly depressed (Spanish car sales are at the same level as Moroccan car sales despite the Spanish economy being several times larger...), and how this evolution affects future consumption will be a key factor in explaining future GDP.

**Table 7.6. Unemployment quarter on quarter growth evolution (EPA)<sup>57</sup>**



Source: INE

<sup>57</sup> EPA: Encuesta Población Activa

## Investments

Overall, investments were down 9.4% in Q2 2012 (annualized), mainly dragged down by weak construction data and industrial production (down 6.3% YOY). Before the fiscal cuts, the main driver of depressed GDP growth was residential investment, as the weight of construction in GDP sharply decreased from 2008 onwards. Most of the adjustment should be finished by the end of 2012. The main rationale and starting point was housing starts, which averaged 500-600k in the 2000-2010 period but stood at only 60k in 2011 (depressed levels similar to those 40 years ago, despite Spanish population having grown consistently since then), though a mid-term normalized level consistent with population growth should be around 250k. Housing starts will probably not reach normalized levels within 3-4 years, though, as the excess inventory still must be cleared (around 100k a year, half through foreigners). The same happened with civil engineering, as the administration has cut civil works since 2010. As a result, construction, which represented over 8% by 2000 and over 12% by 2007 (compared to an EU average of close to 6%), declined sharply to reach almost 6% by 2012, almost in line with EU despite Spain's tourism and retirees attraction. This means that the construction sector has fallen 60% in activity from its peak levels to reach current levels that are almost in line with those from 1990. Overall, after experiencing negative GDP growth of around -1.2% between 2008-2011, in the 2012-2015 period, the sector's contribution to GDP growth should be negligible, not negative.

## Exports and imports

As stated in the Chapter 6, evolution of ULCs and the labor reform point towards Spain consolidating and expanding its market share in global exports, while a weak consumption should further depress imports. By Q2 2012, exports were growing at an annualized rate of 3.3% while imports were falling 5.4%, implying a reduction in the trade balance of 23%. As a consequence, external demand has again been the main driver of GDP's resilience to further contraction and should insure mid-term growth.

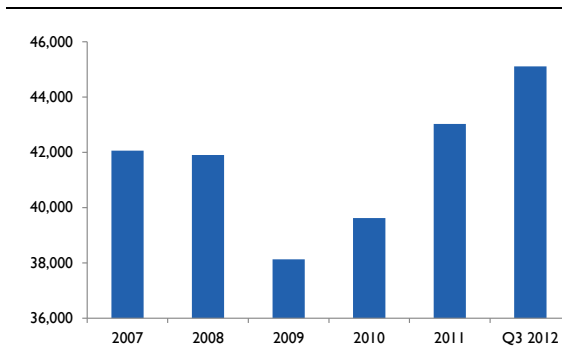
## Tourism

Tourism represents 10% of the Spanish economy, of which 5% is domestic and 5% is foreign. 2012 will probably see a historic record in foreign tourism (58 million people<sup>58</sup>), which should leave €55 bn. in the country (+7% YOY)<sup>59</sup>. These growth figures are achieved despite the strength of 2010 and 2011, which saw record levels of inflows (56 million people in 2011 +8% YOY). Spain's tourism industry is maintaining a very high level of visitors despite some peoples' worries that the strong performance over the past two years was cyclical, driven by the Arab spring. As we have seen, this is not the case, and, 2012 should again record one of the best years of the tourism industry in Spain (see Tables 7.7 and 7.8). Weather, security, infrastructure, and cheap labor costs are the structural factors explaining this performance.

<sup>58</sup> By September number of visitors were increasing 3% YOY.

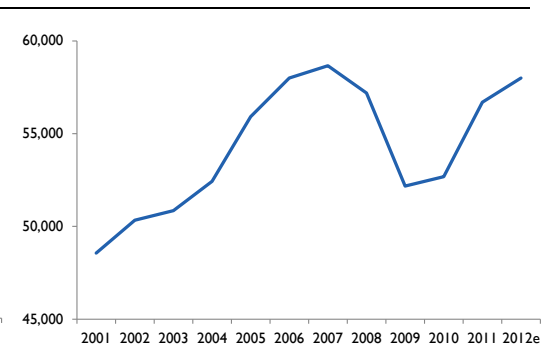
<sup>59</sup> The impact in the current account balance is lower as expenditures of Spaniards abroad should be netted.

**Table 7.7. Net revenue from tourism each year (€m)**



Source: INE

**Table 7.8. Total number of tourists each year (thousands)**



Source: INE

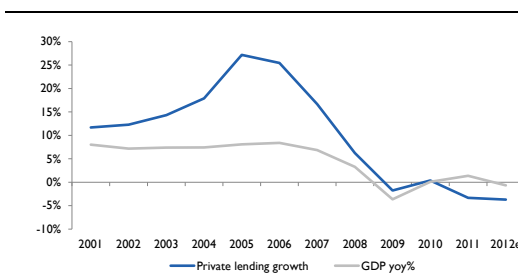
### Public expenditures

The announced 2012-2014 fiscal adjustment of 11% of GDP concentrated in 2012 (4% impact, partially achieved through a 7% decrease in public expenditure) will be, by far, the main negative driver of economic growth. Of course, a euro spent by the Government is considered in GDP, but the fiscal adjustment is instrumental in avoiding the “liquidity trap” of the Sovereign consuming the available liquidity, leaving the more productive private sector without resources. The ultimate question is: is Spain better off or worse off without building an airport that has no planes?

### Deleveraging

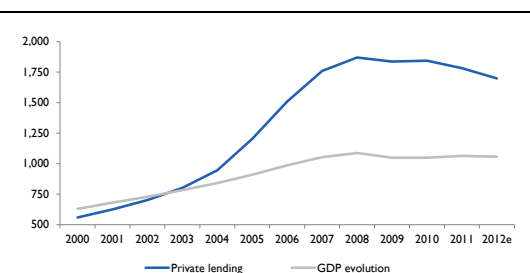
By the end of July 2012, loans to the private sector had fallen 5.2% (LTM) to €1.65 trillion, with a reduction of €26 bn., the largest fall seen in 50 years. New loans to households stood at €66 bn. (-25%), representing a 75% reduction from peak levels. As for corporates, new loans have fallen 50% from peak levels. A further decrease in the banks’ credit books should drain economic activity going forward, and this is why facilitating the access of SMEs to direct funding from capital markets is an important strategic milestone that the Government must accomplish, and as such, it is recognized in the MoU from June. Having said this, the fact that credit contracted 14% since 2007 (maximum credit at €1.9 trn.) while the economy contracted only 5% during the same period (Table 7.9) is remarkable in our opinion, especially considering the fact that Spain’s intensity of credit of 2006 was 4:1 (i.e. 5 euros were needed to boost the economy only 1 euro). Since 2010, GDP ex-construction has been growing despite negative lending.

**Table 7.9. Private lending and GDP % YOY**



Source: Bank of Spain

**Table 7.10. Private lending and GDP evolution**



Source: Bank of Spain

## Conclusion

Spain should see a GDP contraction of 1.5% in 2012 and between 0.5% and 1.5% in 2013, with growth resuming in 2014. Construction will no longer be a drag on economic growth, but public expenditures will be a drag in 2013. With consumption subdued, export evolution will be the key factor behind GDP growth. This should be based on global economic activity and, mainly, German internal demand growth. In the mid-term, tourism and export growth will be the two pillars to the country's future structural growth.

## 8. A new Spain: leveraging in entrepreneurship, R&D and larger SMEs

In the 1970's the US Information Technology (IT) industry reached a serious crisis which prevented the hiring of engineering graduates. Many of these young engineers had no option other than starting up their own businesses. As a result, many of the most successful US tech companies were created during this time. A similar process is occurring in Spain, but the unfortunate difference between the two scenarios is VC<sup>60</sup> funding, which was widely available in the US at that time but is difficult to find in Spain. The purpose of this chapter is to explore, from a local perspective, the cultural shifts occurring in Spanish society, a cultural shift linked to fostering entrepreneurship, SME growth, R&D, and industrial revival. The wealth of the nation should depend on these tendencies further materializing.

### Entrepreneurship

Spain has traditionally been a country in which parents encouraged children to secure a career in civil service. Furthermore, decades of interventionism by multiple questionable political administrations increased red tape and regulation, making it difficult to create a new business and to operate it, as shown in Table 8.1.

**Table 8.1. Global ranking on ease of doing business for selected countries**

Global ranking on ease of doing business for selected countries			
Rank	Economy	Rank	Economy
1	Switzerland	23	New Zealand
2	Singapore	25	Malaysia
3	Finland	27	Ireland
4	Sweden	29	China
5	Netherlands		
6	Germany	33	Chile
7	United States	36	Spain
8	United Kingdom	38	Thailand
9	Hong Kong SAR	41	Poland
10	Japan	23	New Zealand
11	Qatar		
12	Denmark	48	Brazil
		49	Portugal
15	Norway	50	Indonesia
16	Austria	52	South Africa
17	Belgium	53	Mexico
18	Saudi Arabia		
19	Korea	94	Argentina
20	Australia	96	Greece
21	France		
22	Luxembourg	104	Bolivia

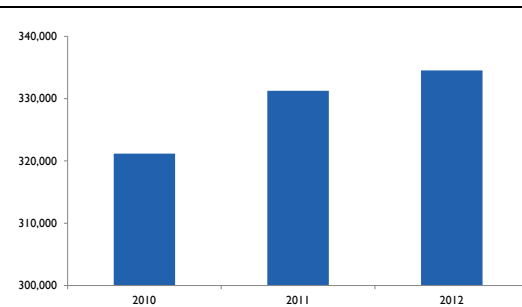
Source: World Bank

However, the crisis is changing this - either you become self-employed or unemployed. During 2012, the creation of new companies stood at 334K (+1% YOY),<sup>61</sup> as shown in Table 8.2, and this entrepreneurship is helping to offset the closure of companies, as shown in Table 8.3.

<sup>60</sup> VC: Venture Capital.

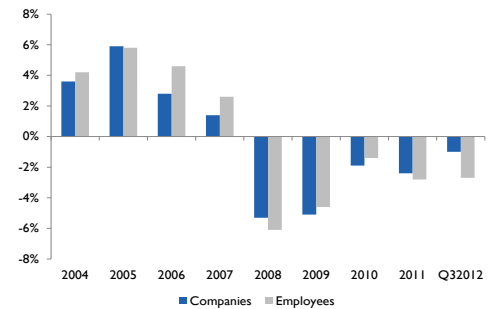
<sup>61</sup> Source INE, closed companies at 391K.

**Table 8.2 Creation of gross new companies**



Source: INE

**Table 8.3. Number of net new companies and employees being created/destroyed**

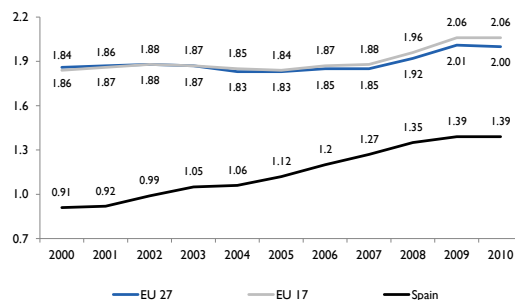


Source: Boletín Estadísticas Laborales, MTIN

**R&D**

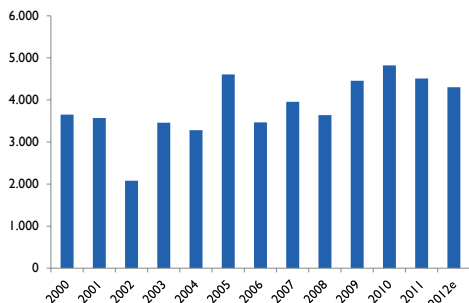
Although Spain’s investment in R&D at 1.3% of GDP is below the EU average (1.8%), the country’s effort has sharply increased in the recent past, as shown in Table 8.4. This effort has resulted in an increase in the number of patents being filed compared to pre-crisis levels (see Table 8.5), and this should support future productivity growth. Furthermore, the “technology balance” (i.e. royalties received vs. royalties paid) reached 50% in 2012, a historic maximum, showing this progression.

**Table 8.4. R& D as a % of GDP**



Source: Eurostat

**Table 8.5. Patent registration evolution**



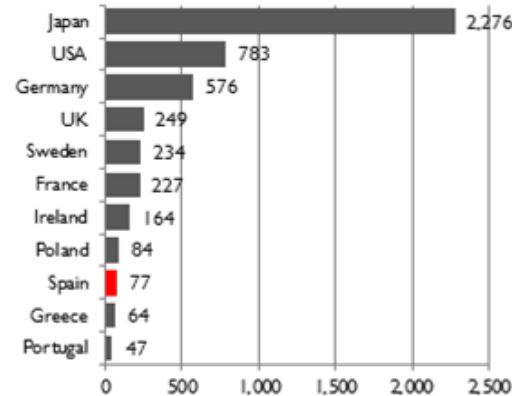
Source: OEPM<sup>62</sup>

The problem lies in the low productivity of Spain’s R&D, as a consequence of the fact that the % of R&D in private hands is low (45%) compared to the EU (66%), the participation of companies in R&D is low (56% vs. approximately 70% in China, US, or Germany), and collaboration between companies and universities is low (19% vs. 66% in EU).<sup>63</sup> This low productivity can be seen in the following two tables:

<sup>62</sup> OEPM: Oficina Española de Patentes y Marcas.

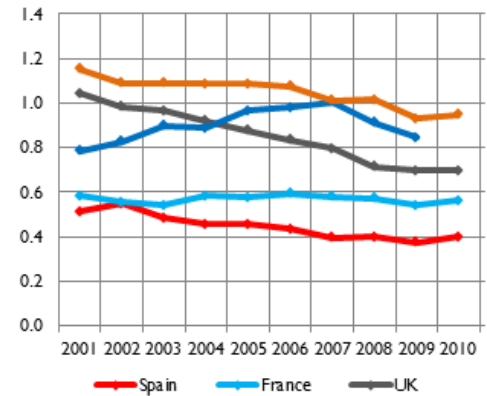
<sup>63</sup> Source: PWC.

**Table 8.6. Number of patents filed per million of population (2010)**



Source: World Intellectual Property Organization

**Table 8.7. Number of patents filed per \$ million in R&D expenditure**



Source: World Intellectual Property Organization

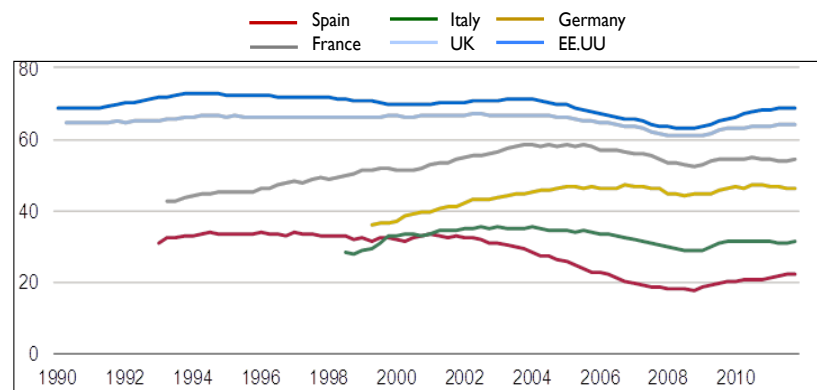
In conclusion, R&D is improving, but a structural shift tackling the productivity of R&D is needed to boost its results. To achieve this, Spain must undertake an in-depth reform to boost financing, mainly through VCs and IPOs. The MoU signed between Spain and the EU to obtain a credit line contemplates the obligation of Spain before Nov 15<sup>th</sup> to propose how to boost VC investment. To succeed, the country needs to unlock a large portion of the capital tied in real estate. Such a process will be very slow.

### SMEs

Spanish SMEs contribute 65% of the country's GDP and 78% of its employment (in the EU 27, the latter figure stands at 67%). As in most countries, job creation is largely stimulated by small, high growth companies. However, the bank deleveraging, a consequence of nonsensical lending policies which channeled money to real estate developers, is now forcing healthy SMEs to close business, as their credit lines to back working capital are being cancelled. This has consequently boosted unemployment, hence an in depth strategy to boost alternative financing to SMEs is needed. Indeed, a report published by the ECB in September 2012 stated that Spanish SMEs were paying a 50% higher credit spread for financing than German SMEs (Spanish SME at 6.6% vs. German SME at 3.8% and 4.1% as EU's average), aggravating the situation due to the historic reliance of Spanish SMEs on bank financing. Statistics from the Bank of Spain show that 100% of Spanish companies saw a decline in value added of 5% during H1 2012, yet attributable net income fell 74% as a consequence of leverage. Ability to mend operational and financial leverage is by far the main risk facing SMEs.

The main weakness of the Spanish corporate finances is its small reliance on capital markets vs. other major economies (see Table 8.8). On the debt side, this can be softened with an alternative bond market for SMEs, similar to the ones working in Germany (such as Stuttgart's BondM), and to be launched in Italy, UK, France, or Sweden in 2012. The Spanish equivalent, MARF (*Mercado Alternativo de Renta Fija*), should be ready by Q4 (its launching is also forced by the MoU signed with the EU). On the equity side, Spain launched an alternative stock market in 2008 for SMEs, the MAB (*Mercado Alternativo Bursátil*), but fewer than 25 companies have listed on this exchange due to the lack of specialist micro-cap equity funds (in the UK's AIM or France's Alternext, this was solved by creating specialized investment vehicles with tax advantages, something that was not done in Spain).

**Table 8.8. % of financing through capital markets vs. bank finance in selected economies**

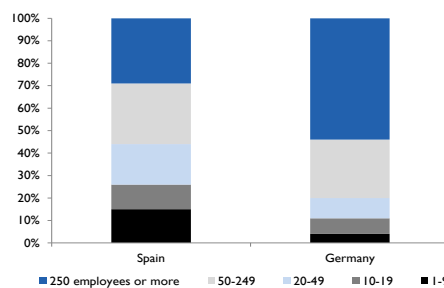


Source: CNMV

The main problem facing both markets will not be supply, but demand. The structure of Spanish savings is troublesome, as we have shown before, with an 80% concentration in real estate. On the other hand, most of the financial investments which are not deposits are channeled into insurance schemes or funds with regulation that effectively prevents portfolio managers from investing in SMEs (mainly on the grounds of liquidity concerns). This means that if these new alternative markets are to work, the Government must create tax incentives and a new regulatory environment that facilitate the appearance of specific vehicles committed to investing in SMEs through these two markets.<sup>64</sup> The banking crisis brings an end to the historic weight of banks as a source of financing, but it must be substituted with capital markets, as has happened in the US after the savings and loans crisis of the 80s and in the UK at the beginning of the 90s. The faster this transition happens, the better for Spain.

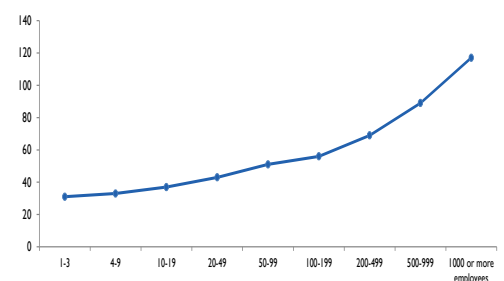
On another note, Spanish SMEs must increase in size (see Table 8.9). This is critical for several reasons: a) access to capital markets is highly correlated with size, b) productivity of labor improves with larger companies (see Table 8.10), and c) access to foreign markets is easier for larger companies.

**Table 8.9. Breakdown of companies by sizes: Spain vs. Germany**



Source: Eurostat

**Table 8.10 Productivity and company size**



Source: INE

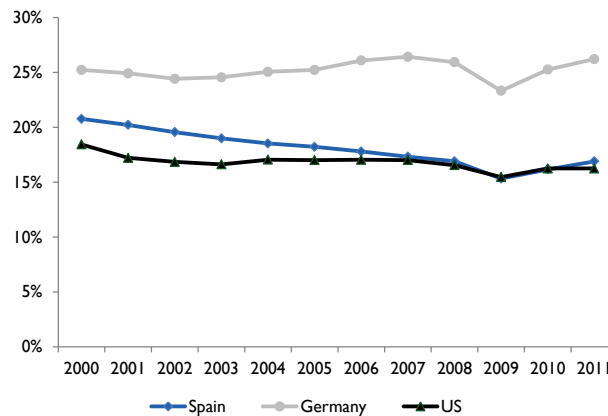
<sup>64</sup> Please note that Arcano is a member of the Spanish Alternative Market and hence is interested in this statement, although we firmly believe that this is a badly needed measure, irrespective of our professional affiliation.



### Re-industrialization

The weight of industry in Spanish GDP has fallen over the past 34 years from 39% to 17%, vs. 16% in the US, 25% in Germany, and 20% on average in the EU (Table 8.11). Industry is an important strategic sector for any country for several reasons: i) higher value added per worker, ii) stable employment, iii) orientation toward exports, and iv) high R&D intensity (five times as high as that of the services sector).

**Table 8.11. Industry as a % of GDP**

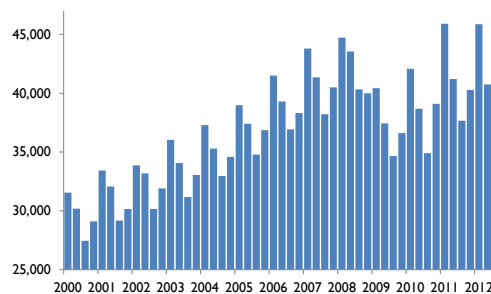


Source: OCDE

The reasons behind the decrease of industry in Spain’s GDP are: i) labor inflexibility and rigidity, ii) low productivity per head, iii) energy costs, which evolved well above CPI, iv) a worsened environment for professional education (*formación profesional*), v) low productivity of R&D as a consequence of a divorce between industry and universities, vi) the small size of many companies, and vii) red tape.

Spain’s increased level of export activity, lower level of ULC, and an improvement of productivity give grounds for a recovery of industry in the coming years, but the country must focus on high value-added segments of the global supply chain network. To achieve this, Spain needs a long term industrial policy. Yet, the first signs of a revival of Spanish industry are already felt, as shown in the next table.

**Table 8.12. Evolution of Spanish value added in the industrial sector (€m)**



Source: INE

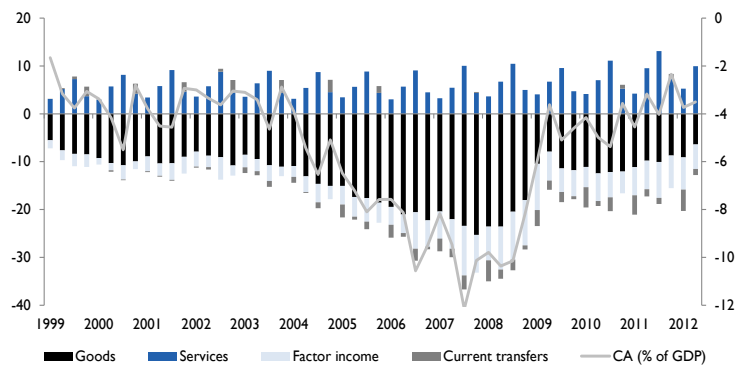
## **Conclusion**

To change the Spanish economy into a new growth paradigm, the new pillars should rely on productive innovation, entrepreneurship and re-industrialization. SMEs play a key role in such an economic transformation. The main challenge is the difficulty in obtaining funding for SMEs in the context of deleveraging, and the main opportunity lies in facilitating non-banking financial markets for them. This implies unlocking capital from real estate, which cannot be achieved without active policies.

## 9. Why Spain could enter a Current Account surplus in 2013 after 15 years of deficit

In July and August 2012, Spain generated current account surpluses of €0.5 bn. and €1.2 bn., respectively. These were the first two months since 1999 that the country registered current account surpluses. In the January-August period, the current account deficit stood at €13 bn., a 26% reduction YOY. For the first time in many years, services receipts (€26 bn.), mainly tourism (€22 bn.), were above the trade deficit (€19.5 bn.). The current account deficit was hence generated by the factor (€15.7 bn.) and current income accounts (€4 bn. including capital transfers).

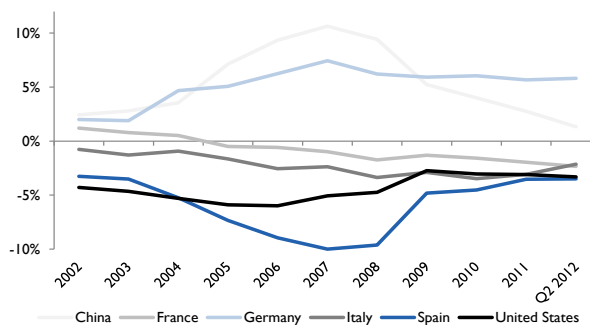
**Table 9.1. Current account (€ bn.)**



Source: Bank of Spain, OCDE

What is driving this transformation? By 2006, Spain was running a current account deficit of 11% of GDP, the second largest in the world in absolute terms after that of the US. By H1 2012, the deficit was cut to 1.7% (see Table 9.2). Despite this sharp 10% adjustment, GDP only contracted 5.5% during that period. On the financial front, despite this progress in the current account, since June 2011 a total of €343 bn. left the country, mainly through portfolio and covered bond movements (both portfolio and covered bond inflows reached record highs by 2006, when Spain was facing its worst current account deficit of its history, again showing the combined relevance of behavioral finance and human stupidity). This means that ECB support in providing liquidity to Spain in such an environment has been critical for the country in this transformation.

**Table 9.2. Current account balance as % of GDP**

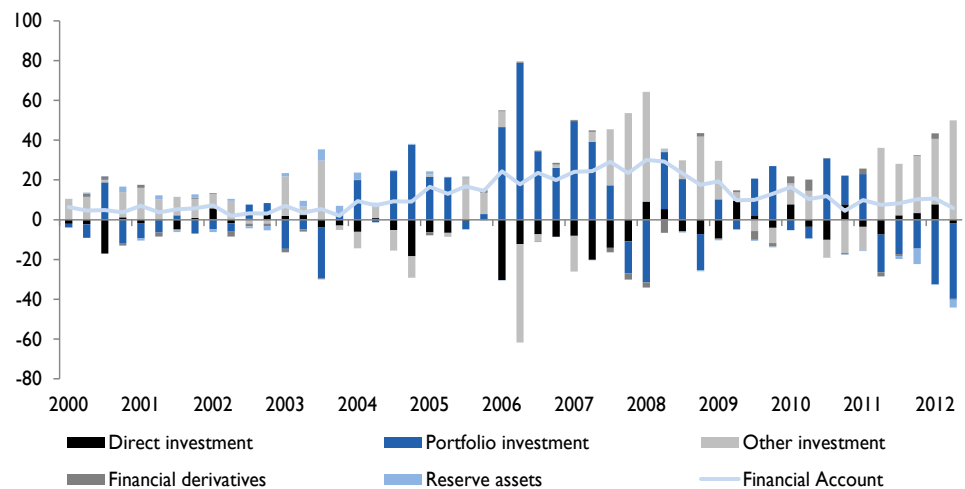


Source: Factset

Traditionally, Spain has experienced a trade deficit even after excluding energy imports. This deficit was partially compensated with the income generated from foreign tourism, which as we have seen today represents more than 5% of GDP. Spain's historic current account deficit presented a key source of risk to the Spanish economy, as one tenth of the economy was based on attracting external funding. The financial crisis proved this flaw, and the impact on the economy was harsh. However, the sharp adjustments in labor costs and their positive impact on exports, together with lower imports as a product of weak domestic demand, are changing the current account picture. By 2013, Spain may well be entering a current account surplus and exporting capital to the rest of the world, which represents significant progress. This shift, from having the second largest current account deficit in the world in 2006 to exporting capital in 2013 is remarkable. The economy has been damaged, but its inherent risk is much lower today.

However, the financial account changed dramatically, mainly between January and August 2012, as a consequence of the withdrawal of portfolio flows (-€81 bn. vs. -€8 bn. a year before), mainly by foreign institutions selling Spanish Government bonds (outflows of €93 bn. between January and August), loans, repos, and deposits (-€178 bn. vs. +€20 bn. a year ago), mainly produced by the movement of securitization vehicles outside Spain. Of course, the Eurosystem replaced this financial tool (injecting close to €170 bn. during H1 through the Bank of Spain Target II, which corresponds to "other investments" in Table 9.3). Again, one should question the risk associated with a country. If much of the external financing occurs through portfolio flows, then the inherent risks to that economy are very high, because should the country lose favor with international investors, the positions of those investors are easily liquidated. Today, relying on the Eurosystem is probably less risky than past dependence on portfolio flows.

**Table 9.3. Financial account (€ bn.)**



Source: Bank of Spain, OCDE

Another interesting issue was net FDI, with a positive balance of €6.6 bn. vs. a negative balance of €11.3 bn. only a year ago. Today, Spain's current account deficit (less than 2% of GDP) is financed through high quality FDIs, seriously reducing the risk of the economy.

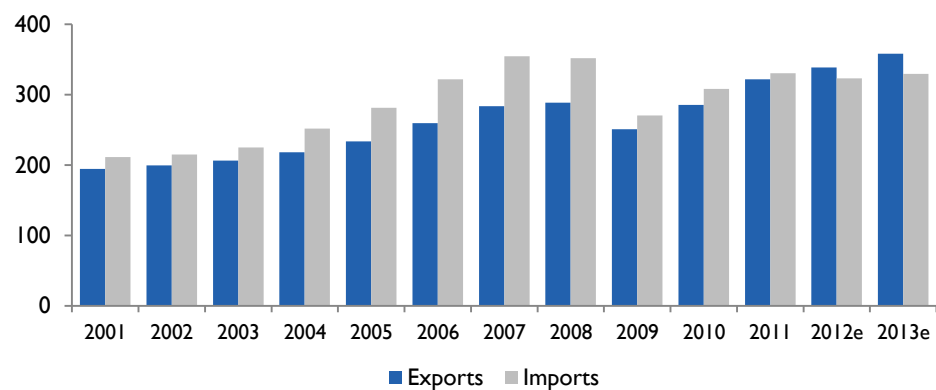
### Reasons for the country's entry into current account surplus in 2013

The main driver of the change of Spain's current account balance is, of course, the trade balance. Strong export growth and weak import growth has resulted in a trade surplus ex-energy in 2012 (€5.1 bn. during H1), and this surplus should expand in 2013 (to an estimated €15 bn.). During 2013, Spain should be generating an ex energy trade surplus of €30 bn., importing approximately €45 bn. of energy, with foreign tourism bringing €45 bn. per annum, leaving a clearly positive balance of exports vs. imports of goods and services (Table 9.4).

FDI should continue to post a positive inflow (€15 bn.) as Spanish companies keep liquidating foreign assets to meet financial obligations and as foreign companies enter Spain to seize the opportunity of cheap labor and its competitive capacity to export. This source of high quality, long-term funding is key to the country's recovery. Should FDI continue increasing (as we explain given the arguments provided in Chapter 6), we believe it should provide further justification for Spain's entry into current account surplus.

To sum up, a trade deficit of circa €30 bn., tourism generating €45 bn., and FDI at €15 bn. imply a surplus of €30 bn., which should compensate €30 bn. of deficit in factor income and current transfers. Both factor and current transfer income deficit should improve going forward. On the one hand, it is interesting to see that the emigration of Spanish citizens abroad has re-emerged. Since the crisis started, around 350k Spaniards have left the country, as can be tracked in the electoral bureau. In addition, immigrants have begun to go back to other EU countries, which should improve the factor income balance. Overall, since 2009, almost 2 million people left Spain (20% of them Spaniards), which is a sad conclusion for a society, but it will have a positive impact on the factor income by 2013. On the other hand, the progressive reduction of Spain's net international debtor position through the current account surplus should reduce the factor income deficit.

**Table 9.4. Spanish imports and exports of goods and services (€ bn.)**



Source: Historical figures and projections provided by Eurostat

Spanish households have been saving since 2009, and corporates since 2010. It is mainly the Government that produces a deficit. As fiscal cuts will be addressed mainly in H2 2012 and in 2013, the implication is that the Government's fiscal deficit will fall below the cumulative savings of corporations and households, producing a current account surplus. Of course, the main challenge will be addressing the oil price, taking into account Spain's high dependency on foreign oil.

## Conclusion

Spain has been able to adjust almost 10% of GDP from its current account since 2008. Understanding the fundamental competitiveness of Spain's exports and touristic sectors in a context of deleveraging is key to understanding the reasons why the country will begin to export capital from 2013 onwards, hence reducing its net external debtor position. The evolution of Spain's current account is the best proof that the country can reform, and such an evolution towards a positive balance should be understood to reassess systemic risk. Such an evolution in the current account balance should reduce Spain's net international debtor position going forward.

## 10. Risks and macro Sharpe ratios

As investors apply “Sharpe ratios” to adjust risks and return, the same should be done at a macro level. In our opinion, a large current account deficit financed through portfolio inflows is an extreme risk in an economy. Accumulated leverage as a consequence of lending growth above 20% is also a key risk. Both risks, though have almost disappeared.

The challenges that Spain faces are still formidable, but they are certainly lower than those from 2006-2007, when Spanish asset prices, backed by credit, reached historic maximums while portfolio inflows also peaked. The ultimate question an investor should pose is: do you make more attractive risk adjusted returns in 2013 than you would have in 2006? At least on the denominator side of the equation (risk), the answer is simple: 2013. Furthermore, Spanish asset prices have reached minimum levels. On the return side of the equation, the key is to focus on the growth of Spain’s global market share in exports, which should be the main engine of future returns.

In sum we propose a “Sharpe ratio” methodology to critically assess the attractiveness of the Spanish economy based on:<sup>65</sup>

Numerator (return): GDP growth adjusted by a factor of competitiveness (measured as the differential growth rate between Spanish exports and global trade, using three year moving averages<sup>66</sup>).

Denominator (risk): total leverage (currently at 268% of GDP), adjusted by the change in leverage, the sources of funds, and the current account deficits/surplus (a deficit would penalize the balance, whereas a surplus would improve it, as expected return should be higher if the economy is adding leverage as opposed to reducing leverage).

Aside from the main risks mentioned into this report (external debt, weak consumption, deleveraging, difficult funding conditions for SMEs, many real estate and construction companies’ leverage structure resulting in their termination of operations the following years...), let’s analyze the main risks of the Spanish economy, the evolution of these risks, and the mitigating factors.

### Unemployment

Spanish unemployment, at 25%, is an unsustainable tragedy. With 5.8 million unemployed (1.8 m. in 2007), long term unemployment represents 49% of total, threatening the country’s long term structural growth. Youth unemployment, at 54%, implies a clear failure of past labor laws. In turn, immigrant unemployment stands at 36%, which explains the migratory process outside Spain we describe in the corresponding section (an irony, since the welfare state paid for the education for this generation of Spaniards and once they become productive they must leave, showing the structural failure of the policy makers). Yet structural unemployment is above 10%. To bring real and structural unemployment down, a historic labor reform was passed in March 2012. As unit labor costs come down foreign direct investment to acquire capacity in Spain to export will be the key catalyst behind a decrease in unemployment, which should materialize by year end 2013. As consumption recovers in 2014, export led demand and internal demand will cooperate in bringing down unemployment. Overall, payrolls indicate 16.7 m. Spaniards

<sup>65</sup> I am thankful to Arcano’s CEO, Jaime Carvajal, for developing this idea.

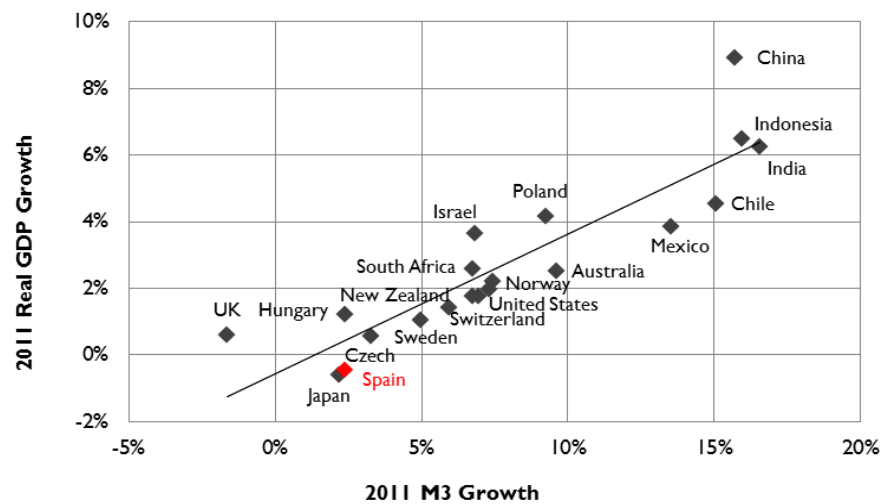
<sup>66</sup> Please note that global trade statistics are nominal, with export growth of a country normally real, so it should be adjusted.

are working, from a maximum of 19.2 m. in 2007. Taking into account people who affirm being employed in surveys (as measured by EPA), maximum employment reached 20.5 m. and then 17.3 m. by 2012. This decrease is perfectly related to the increase in number of unemployed to 5.8 m. from 1.8 m.<sup>67</sup> Half of this decrease can be attributed to the construction sector. To improve these ratios, several policies should be adopted: a) simplification of labor contracts into a single one, b) reconsidering of unemployment benefits, critical to reduce the “black economy” jobs, c) change in current active labor policies, which do not work, and d) rethinking of minimum salaries (in Germany they do not exist) and of social security taxes on corporations, particularly SMEs.

### Leverage & intensity of credit

Although Spain still has high levels of leverage, it is interesting to see how M3 growth has fallen aggressively, well below growth rates of other countries, as can be seen in the following table:

**Table 10.1. M3 growth vs. real GDP growth**



Source: OECD StatExtracts for non-Spain M3 growth figures, Factset for GDP growth figures, and Bank of Spain Boletín Estadístico 2011 for Spanish M3 figure

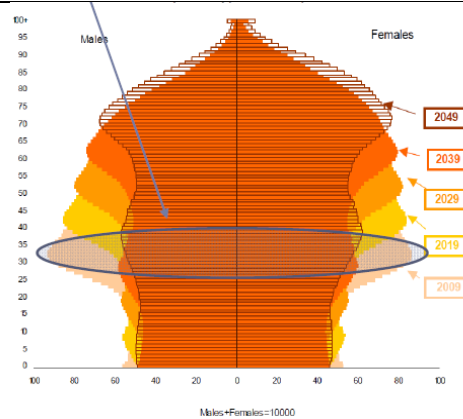
Spain should see further deleveraging, which will hamper future growth, but deleveraging should be finished by 2014, as it can be financed through asset sales and as banks’ final loan to deposit ratio will stabilize.

### Demographics and Pensions

As is the case with all European countries, Spain’s demographic pyramid is quite dangerous, as can be seen in Table 10.2.

<sup>67</sup> The main statistics to watch are: i) pay rolls (“afiliados a la seguridad social”), ii) European-equivalent unemployment (“encuesta de población activa”) and iii) registered unemployed (INEM), currently at 4.7 m.; EPA is 1.1 m. above INEM since INEM excludes unemployed in training and unemployed who did not work before. The difference in the employed figure (0.6 m. is people who affirm being working despite not appearing in the social security; the real difference is well higher, up to 4 m. as we have seen before according to studies by FUNCAS).



**Table 10.2. Spain's population pyramid**

Source: INE

Ultimately, this pyramid creates a clear difficulty in financing a welfare state. The situation does not improve if you analyze the relationship between employed and retired people, which stands at 2x, the worst ratio since 1999. Ultimately, a pension reform and attraction of younger immigrants will be needed to balance this situation. Such a reform will imply that one's entire work life will be used to calculate pension (currently, only the last 15 years are taken into account), a delay of the retirement age, and the non-indexation of pensions to CPI.

### Education

The Spanish educational system has been unable to achieve good results in PISA's results (PISA is the most well-known evaluator of quality of education) or to boost productivity. Even though Spain has three of the world's best business schools, the country does not excel in secondary, higher or technical education. There are no Spanish universities ranked in the top 200 of the world, and this cannot simply be blamed on lower education expenditure, but also on the efficiency of such expenditures. Despite the education system being revamped in 2012, it will take many years to bring forward a new generation of better educated Spaniards, showing another key failure of policy makers.

### Political system

Spaniards deem the political establishment as their #3 worry, after unemployment and the economy. There is a serious institutional crisis in the country, and the first institution being questioned is the political system. Political parties which arose from the dictatorship at the end of the 1970s established a system of "closed lists," which prevents the emergence of quality politicians, benefiting the less brilliant but loyal ones. Some of the results have been irresponsible fiscal policies and an almost inept supervision of the banking sector.

A second locus of political instability is related to the recent burst of calls for independence in Catalonia. Indeed, the Catalan nationalist political elite, faced with the need to stabilize the region that had suffered one of the most dramatic fiscal mismanagements in all of Spain, decided to take the crisis as an opportunity to gain more power using the independence from Spain as the red herring. The official basis of such demand is that the Catalans have a net fiscal imbalance with the rest of Spain equivalent to 8% of GDP, based on real transfers. The Catalan nationalists themselves acknowledge that this number should be reduced by the services provided to the Catalans by the Spanish State that are spent outside of Catalonia,

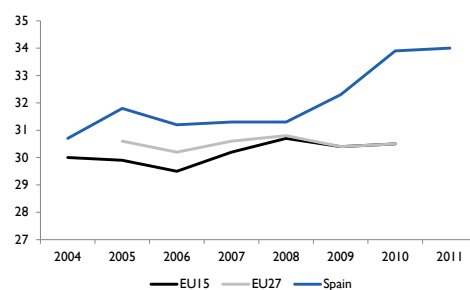
such as military expenditures, foreign service, interest on the national debt, etc. (according to their studies, this would already reduce the fiscal imbalance to around 5% of GDP). But even this ignores the fact that Catalonia is a net recipient of social security funds from the rest of the State and that Catalan companies are net “exporters” to the rest of Spain of around €20 bn. (€45 bn. gross), on which Spaniards from outside Catalonia pay VAT (a 2% of GDP impact). In addition to all of this, the two largest Catalan banks depend very heavily on the rest of Spain and any break-up would create havoc on their deposit base.

We believe that practically speaking, the odds of secession occurring are minimal on political and economic grounds. Politically, the Spanish Constitution establishes that secession can only occur through a national referendum, and the odds that secession is approved are minimal. Additionally, EU law makes it clear that should a new state be created, it would immediately need to apply for membership, which can be vetoed by a single country. Economically, the implications are that exports would suffer tariffs, which can destroy these exports. Furthermore, many HQs of corporations would be relocated into “EU” territory, and banks based in Catalonia would not receive funding from the ECB, and their overall deposits would not be guaranteed by the Spanish or soon to come Eurozone mechanism, producing a deposit flight. As two thirds of Catalonians still feel Spanish, and the economic consequences of secession are dire, the most likely outcome is that a fiscal package is renegotiated between the Central State and Catalonia after the November 2012 local elections, not without some further political tensions related to the demand by the nationalist to call for a local referendum on independence.

### Income Inequalities

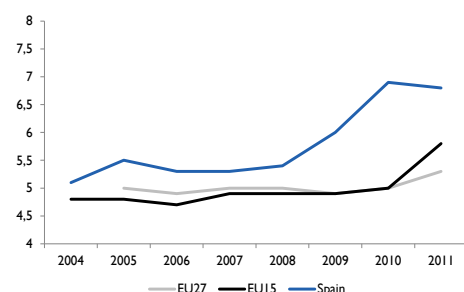
As in many countries of the world, income inequality worsened during the past 8 years, as can be seen in Tables 10.3 and 10.4. As measured by both GINI and by the 80/20 ratios, Spain’s inequalities are increasing and alarming, as they create social tensions. The best policy to amend this is reducing unemployment, the country’s major concern.

**Table 10.3. Gini coefficient**



Source: Eurostat

**Table 10.4. Ratio s80/20**



Source: Eurostat

### Conclusion

Spain faces many significant challenges, and many of these do not have short term solutions. Yet, from the perspective of the financial markets, the main risks are those associated with a fiscal crisis, a banking crisis, and a current account crisis. As we have explained thus far, we firmly believe that the inherent risks of the Spanish economy in 2012 are well below those of 2006. This report has provided information on the evolution of these different factors, which should allow investors to rethink the risk they assign when investing in Spanish assets.

## II. Conclusions

Overall, in times of need, a country's best qualities come forth. Spain is currently facing one of its most difficult periods since 1959, when an enormous devaluation of the peseta took place. Historically, Spain has adjusted its economy through devaluations, which prompted systemic capital flights. This is the first time in which the country is adjusting its structural problems. Therefore, the euro can be perceived as a weakness, but also as a historic opportunity. Despite all of its fragilities, it is critical to remember Spain's capacity to reinvent itself in the 30 years after the Franco dictatorship, having built a corporate sector that includes companies such as Inditex, Santander, BBVA, Telefónica, Iberdrola or Ferrovial, which are world leaders in their sectors, an unthinkable feat only 20 years ago. Indeed, changes in Spanish companies and society in general are already pushing the country towards external demand with initial signals of success. These changes are critical to reinvigorating the country going forward. As in any economy, the country's evolution from negative growth to positive growth will depend on several key factors: (i) a competitive corporate sector; (ii) a high quality physical infrastructure; (iii) the capacity to finance such growth (new capital investments, working capital needs, etc.); (iv) an efficient public system in terms of providing basic social needs (security, health, education) as well as a legal system that enables companies to flourish; (v) growth of SMEs to create employment, and (vi) the confidence of consumers. As indicated in this paper, we believe Spain has a truly competitive corporate sector and there is no question that Spain has one of the best physical infrastructures in the world. However, financing is beyond scarce and public finances are in shambles, putting into question the sustainability of the social benefits enjoyed by Spaniards (including one of the world's best health systems), resulting in an extremely low level of consumer confidence.

In order for Spain to achieve sustainable growth, we suggest below some specific public policy recommendations with a particular focus on fiscal sustainability and financing:

1. Achieving fiscal sustainability:
  - Continue with the fiscal consolidation process, focusing on a reduction of spending and not an increase in tax rates. Increases in tax revenues must come from economic growth (the base), not the rate.
  - Establish independent oversight of public finances, distinguishing between regular and irregular income and expenditures and stating the cyclically adjusted deficits.
  - Liquidate the government's real estate assets by entering into massive sale and lease back transactions. The proceeds would be used to reduce debt.
  - Identify duplicity of administration layers to force the elimination of redundant administrations and regulations.
  - Reform unemployment benefits in terms of amounts, periods and eligibility with a particular focus on eliminating fraud.
  - Incentivize employment creation by reducing Social Security taxes on corporates, particularly on job-creating SMEs.
2. Finding new financing sources for corporates and consumers:
  - Provide tax incentives to specialized vehicles that invest in high growth SMEs, either through debt or equity. As SMEs in growth stages are the main driver of employment generation, facilitating the access of SMEs to financing through specific markets is a key policy to reduce unemployment.

- Speed up non-banking financing channels, including capital market mechanisms directed at SMEs, including fostering the financing of technology through Venture Capital Trusts which can finance tech companies from startup to growth and IPO stages, eliminating the “equity gap” that exists in the Spanish economy
- Strengthening the role of ICO (Government owned bank) in financing SMEs.
- Delay the implementation of Basel III by one year to allow for a slower deleveraging of banks.
- Facilitate concentration of SMEs to boost productivity and exports. This can be done through specific tax actions and support to export markets linked to size. The increase in the size of SMEs should also reduce the size of the shadow economy.

Ultimately Spain is systemic to the euro architecture, as we have tried to show in this report. This fact, together with Spain’s “illiquid solvency,” make us believe that Spain will ask for a “soft rescue” (a precautionary credit line by the ESM plus ECB support in the secondary market) in early 2013 and that the EMU will support Spain. In the context of continuing the (albeit slow) process of banking and fiscal integration in the euro zone, we believe this soft rescue plan could possibly turn out to be the “beginning of the end” of the euro crisis. We believe such an event will be the ultimate catalyst for Spain and the euro zone to regain investors’ confidence, creating a sufficiently strong firewall such that even a potential exit by Greece would have a limited impact. In this context, investors should increasingly focus their attention on the positive fundamentals of the Spanish economy we have exposed in this report.

By 2013, Spain will show its strength as a hub for exporting goods and services, with fiscal deficits on route to stabilization, solvent banks, and more stable loan to deposit ratios. All the ingredients for a 2014 recovery will be set.

## APPENDIX

### Acronyms / Definitions

BondM	Alternative bond market in Germany
CBO	Congressional Budget Office
CDS	Credit Default Swap
CPI	Consumer Price Index
DB	Deutsche Bank
ECB	European Central Bank
EFSF	European Financial Stability Facility
EPA	Encuesta Población Activa
ERF	European Restructuring Fund
ESM	European Stability Mechanism
EU	European Union
FADE	Fund for Securitization of the Electric System Deficit
FDI	Foreign Direct Investment
FFPP	Fund for Payment of Creditors (Fondo para la Financiación de los Pagos a Proveedores)
FROB	Fund of Orderly Bank Restructuring (Fondo de Reestructuración Ordenada Bancaria)
FUNCAS	Foundation of the Saving Banks (Fundación de las Cajas de Ahorros)
GDP	Gross Domestic Product
ICO	Official Credit Institute
IMF	International Monetary Fund
LTM	Last Twelve Months
LTRO	Long Term Refinancing Operation
M&A	Mergers and Acquisitions
M3	Measure of Money Supply with equals M2+CDs and deposits of eurodollars and repurchase
MAB	Spanish Alternative Market (Mercado Alternativo Bursátil)
MoU	Memorandum of Understanding
NCG	Nova Caixa Galicia
NPLs	Non-Performing Loans
OECD	Organization for Economic Cooperation and Development
OMT	Outright Monetary Transactions
OEPM	Oficina Española de Patentes y Marcas
OW	Oliver Wyan
RB	Roland Berger
R&D	Research and Development
RWA	Risk Weighted Assets
SME'S	Small and Medium sized Enterprise
ULC	Unit Labor Cost
VAT	Value Added Tax
VC	Venture Capital
YTD	Year to Date

## **DISCLAIMER**

### **IMPORTANT DISCLOSURE**

Additional information available upon request.

### **ANALYST CERTIFICATION**

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s) about the subject issuer and the securities of the issuer. In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Ignacio de la Torre.

This document has been prepared by Arcano Valores AV, S.A.U. (Arcano Valores). Arcano Valores is an investment firm regulated and registered under number 243 by the Spanish National Securities Market Commission (CNMV). This document is provided for information purposes only and must not be considered as an offer to sell or a solicitation of an offer to buy any financial instrument or to participate in any particular trading strategy. The information contained herein has been compiled from sources believed to be reliable, but while all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, we make no representation that it is accurate or complete and it should not be relied upon as such.

All opinions and estimates included herein constitute the current judgement of the author as at the date of this report and are subject to change without notice. Arcano Valores has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof in the event that any opinion, forecast or estimate set forth herein, changes or subsequently becomes inaccurate

Arcano Valores has internal rules of conduct that contain, among other things, procedures to prevent conflicts of interest with respect to recommendations, including: the consideration of its Research Department as a separate area, Chinese Walls, and the possibility of establishing specific restrictions on research activity where appropriate. Arcano Valores' research reports contain a certification stating that they reflect the authors' own opinions. Arcano Valores may from time to time perform services for or solicit business from any company mentioned in this report. Neither Arcano Valores nor any other person accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents. This report may not be reproduced, distributed or published by any recipient for any purpose.

This Equity Research was produced by:  
Arcano Valores, AV, S.A.U.  
López de Hoyos, 42  
28006 Madrid

+34 91 353 21 40

[www.arcanogroup.com](http://www.arcanogroup.com)