The Case for Spain III

Further Beyond

“El Coloso”, attributed to Francisco de Goya, 1808-1812

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About Arcano: The reference firm to invest in Spain

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• Arcano is a leading independent advisory services firm, with presence in Europe and the United States. It specializes in three 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 offers financing solutions to mid-market companies via bonds, equities and hybrid instruments. The responsible person for the Capital Markets team is Constantino Gómez (cgomez@arcanogroup.com).

• Through its equities & fixed income desk, Arcano has developed in-depth analysis over specific securities with which it implements the macro vision about Spain deployed in this report. With regard to ideas related to equities please contact Sergio Ruiz (sruiz@arcanogroup.com). With regard to ideas related to fixed income securities please contact Angel Fernández – Pola (angfpola@arcanogroup.com).

• Arcano’s Investment Banking team is the leader in the Spanish mid-market segment, especially in M&A with clients such as private equity firms, family-owned businesses and listed companies. The responsible person for the team is Jorge Vasallo (jvasallo@arcanogroup.com).

• Arcano also runs several funds linked to different sectors of the Spanish economy. The responsible person for the Asset Management team is José Luis del Río (jldelrio@arcanogroup.com). Furthermore, through the Multifamily Office division, Arcano offers advice to high net-worth individuals. The responsible person for this team is Iñigo Susaeta (isusaeta@arcanogroup.com).

About The Case for Spain

• In the midst of rants about the alleged crash of the Spanish economy and the breakup of the euro, Arcano was the first research firm to actively recommend investing in Spain, in autumn 2012, taking advantage of attractive prices. Arcano estimated in its first report; The Case for Spain: it's the fundamentals, stupid!, a turning point in the Spanish macroeconomy, strongly supported by an export revolution.

• In autumn 2013, against consensus, Arcano predicted in its second report Spain 2014 = Germany 2004, that financing, employment and consumption in Spain would improve imminently, boosting the 2014 GDP well above consensus. Those predictions where perceived with great skepticism by certain economists. At that moment, the IMF estimated a Spanish GDP growth of 0.2% in 2014. Nevertheless, because of the factors that we have previously mentioned, GDP growth will finally be 1.3% for this year.

• In Autumn 2014, the third Plus Ultra report analyzes the recovery of the Spanish real estate sector, its interrelation with financing (bank and non-bank) and its consequences: economic growth for the next 3-4 years.

About the author

• Ignacio de la Torre is partner in Arcano since 2008, and he is the author of the two previous reports of The Case for Spain. He has 16 years of working experience in investment banking and capital markets. He previously worked in the equity research and equity sales teams of Deutsche Bank and UBS Investment Bank.

• The author teaches Economy and Finance at IE Business School. He holds an MBA from INSEAD, a Ph.D. in Medieval History from UNED, a Bachelor in Economy from ICADE and a Bachelor in Law from UNED. He has written four books and obtained the Everis award as co-author in 2009.

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1 The author greatly appreciates the valuable assistance of his colleagues Olga Nuñez-Flores, Francisco Zaldívar and Luis Casas in the preparation of the report.
Executive Summary

“The market has predicted ten of the last three recessions”

The British weekly, The Economist, in its edition “The World in 2014”, published in October 2013 (when Arcano published its second report on Spain), predicted that the Spanish economy would decrease again in 2014. 2 Reality showed, a year later, that the Spanish economy had grown 1.3% in such time. On the other hand, Spain, which was considered by many European countries, especially Germany, as the ill man of Europe, has soon turned to generate admiration for its growth. Thus, in September 2014, Hans-Joachim Massenberg (member of the Senior Management Board of the Association of German Banks), stated that Spain could become the locomotive of Europe.

What has happened in Spain to cause this sudden change of perception? This third report on Spain intends to explain in detail the acceleration of the economy, analyzing the sophisticated circuits of interconnection between the financial industry and the economy, and how such circuits (which can harm the economy of a country) can quickly spur an economy upward. Specifically, we affirm:

- The Spanish real estate and construction industries, which are very relevant for the GDP, employment and collection, are already starting their recovery, to be sustained over time.
- The Spanish housing, with prices falling 40%, will not only stop falling, but also increase earlier than expected.
- Financing to the Spanish economy has increased from very low levels. The report specifically analyzes the reasons that explain why bank and non-bank financing will accelerate, and how such financial environment will boost economic growth and assets’ values.
- Spanish exports, which currently represent more than one third of the GDP (percentage superior than in the US, Italy, the UK or France) will continue acting as a locomotive of the economy for a sustained period of time, improving the current account balance. Export potential is enormous (for example, Spain exports more to Portugal than to all of Latin America).
- Spanish employment will continue to grow, decreasing unemployment by 450,000 people per year as from 2015.
- Such environment of growing financing and employment is closely related to accelerating investments and consumption, increasing GDP more than 2% over the next years, leading growth in the Eurozone. Moreover, Spanish economic growth is sustained by two pillars; internal and external demand; so it does not depend solely on the latter anymore, reducing risk.
- Spain could grow in 2015 more than estimated by the government and the consensus (2%), due to several factors that benefit the country: a) decreasing oil prices (currently at USD 80 vs. USD 103 expected by the government); b) euro depreciation (EUR/USD at 1.25 vs. 1.37 estimated by the government); c) monetary stimulus by the ECB (a balance sheet expansion that could reach 5% of the Eurozone GDP) and d) fiscal policies that for the first time since 2009 will not contract the GDP.

Despite the factors explained above, the country continues to face several risks that are explained in the last chapter of the report. Some of these risks are the enormous structural unemployment (that will reduce long-term economic growth), a profound demographic and institutional crisis and a very high total-debt level (3x GDP) which fails to lower and in which one third corresponds to external debt.

All in all, Spain presents in 2014 a risk profile that is much lower than that of 2007 due to the following: i) the country has managed to convert its enormous current account deficit into surplus; ii) it has managed to carry out several structural reforms that had not been carried out in decades, laying the foundation for a more sustainable growth and iii) it has enormously reduced dependence on credit – in 2007 the live credit balance increased by €80 bn., increasing the GDP by €68 bn. in 2014 the live credit balance will decrease by €80 bn., and despite of that the GDP will grow by 13 bn. Approximately. 3 The Spanish economy is much healthier and sustainable.

In our opinion, the opportunities that the country offers are higher than the risks explained. The key to all is whether the good years are exploited to minimize latent risks, or if once again, during these good years risks are ignored so that they strike again in the mid-term.

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3 The GDP grew 3.5% in 2007 and it will grow 1.3% in 2014
Summary

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Introduction

“Bear in mind Sancho, that one man is worth no more than another unless he does more. All these squalls that we have met with are merely a sign that the weather is going to clear and everything will turn out for the best; for it is impossible that either good or evil should be lasting; and from this it follows that, the evil having lasted so long, the good must be near at hand.”

Cervantes, Don Quijote

The Pillars of Hercules and the non plus ultra

Greek mythology states that the tenth task entrusted to the hero and future demigod Hercules consisted on finding and moving Gerion’s cattle, for which he had to defeat a two-headed dog and a hydra. The cattle was located in the western end of the world, in the mythical isle of Eritrea, close to today’s so-called Gibraltar. After taking care of the job, Hercules commemorated his achievement by building two enormous pillars: one in Gibraltar and one in today’s so-called Ceuta. In other mythological versions of the story, closer to the Roman culture, it is stated that the Mediterranean Sea was then closed at its western end, and Hercules opened the strait pushing two mountains in opposite direction (the one from Gibraltar and the one from Ceuta) that correspond to the two columns. As the known world ended in such strait, in Classic History the motto non plus ultra advised boaters not to sail further beyond in that direction, as the world ended there.

After the discovery of America in 1492, the Spanish began to settle in the new continent. In 1519, the young King Charles I (who one year later would also assume the title of Holy Roman Emperor) incorporated by advice of his physician, the Italian humanist Luigi Marliano, the motto Plus Ultra (further beyond) in his coat of arms. With that motto, the King wanted to show how Spain managed to overcome an ancient prohibition inculcated by the Greek and the Roman Empire. Such motto and the Pillars of Hercules are still part of the Spanish coat of arms.

Spanish coat of arms, Plus Ultra and the Pillars of Hercules
The Case for Spain I

In 2012, we started writing the set of reports The Case for Spain. By that time research firms and economic media debated on the crash of the Spanish economy (the last Spanish crash however, happened in 1883) or on the breakup of the euro. Our report was the first to explain in depth why in 2012, Spain offered unique investment opportunities, and to justify why the economic model presented a promising future via exports.

More specifically, the report showed that Spain was a solvent but illiquid country, and if liquidity was provided, the country should not crash. We also reasoned with economic and political grounds why the euro would not break up, and we explained that the export revolution would push Spain away from recession and make the country generate current account surplus in 2013.

We further explained why the vicious circles that infected and interconnected the real estate, banking and sovereign sectors were turning around, contracting the Spanish risk premium. From that and from assets prices at historical lows (the Spanish 10-year bond yielded more than 7.5%, the IBEX was below 6,000 and many companies were sold at less than 5x EBITDA), we suggested that the investing opportunity was historic, and so it was.

The Case for Spain II

In 2013, the turning point was already a fact, but critics were constant: Spain could not improve if financing and domestic demand problems were not solved, and the consensus estimated that it would take several years for this to happen, expecting that Spain would stagnate for many years. An important north American investment bank suggested by that time that Spain still showed negative signals and that recovery would be very slow.

With our second report (autumn 2013) we suggested the opposite: the financing and domestic demand (consumption and investment) would recover promptly, adding a second pillar to recovery, as it effectively happened in 2014. We also predicted that Spain could develop slightly positive employment growth rates in 2014 (consensus expected zero growth employment in 2014). Reality shows that Spain will generate almost 300,000 jobs in 2014. We kept track of the report by making predictions in January 2014 suggesting that Spain would grow more than the Eurozone this year, something that seemed unreasonable and finally happened.

John Galbraith stated in a famous quote that “the only function of economic forecasting is to make astrology look respectable”. We believe that humility is a key element for any analyst, and even though we were the first to predict the elements exposed above, we have also made incorrect predictions. We predicted an exports growth rate for 2014 that has not been achieved in such intensity due to factors explained in the chapter devoted to demand. As a consequence the Spanish current account surplus, which we expected to increase, has been limping over 2014, in part due to the strength of imports. Moreover, the entrepreneurial spirit developed in Spain at the start of the crisis pushed the new businesses creation pace that could reach peak levels. However, during 2014 the creation of new businesses slowed down, growing only 1% YoY, showing how the human being relaxes once labor conditions improve.

In any case, Arcano’s The Case for Spain reports have been a breakthrough when analyzing the Spanish economy. We do not write reports under the protection of the Latin motto rebus sic stantibus, used by some economists and that states that predictions are made assuming “all things remaining equal”. Under those conditions it is very hard to make good investment recommendations. Under this clause a well-known economic analyst from an investment bank predicted in May 2007 that the possibilities to suffer a global recession where 0%, and in summer 2008 the IMF suggested that the worst part of the crisis was over.
The Case for Spain III: Plus Ultra

This third report, Plus Ultra, holds the thesis that the processes developed in the Spanish economy will have an impact on a set of virtuous circles that will make the recovery not to be transient. It will go further.

In our previous reports, we have always wanted to reflect forcefully the enormous risks that Spain still faces. In this report those risks are explained in an ad-hoc chapter. If the first two chapters were well known for exposing the 20 more repeated (and false) myths of the Spanish economy, in this report we mutate such section in an entire chapter dedicated to "the ten risks that the Spanish economy faces". The tenth, the most important, acts as a conclusion to the report and explanation of the front page.

All in all, the next years of this decade are optimistic for Spain. The reason behind is the concatenation of an incipient real estate recovery, improvements in financing and the interrelation between those factors and the acceleration of the demand, resulting in the strong employment growth that we predicted.

Thus, we can see once again, after almost five centuries that collective effort can beat a cliché. The non plus ultra of the doomsayers has been beaten by the sacrifice of all, and from that victory arises the motto that illustrates this report, a motto that predicts some positive years: Plus ultra, continued growth supported by two pillars: external and domestic demand.

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2 Paradoxically, if positive factors like credit accelerate too much such as is currently occurring in China, we will advise that Spain is not a good investment opportunity.
I. Recovery of the real estate industry

“I only believe in statistics that I doctored myself”.
Attributed to Winston Churchill

Introduction: importance of the construction / real estate industry

As we will explain later in this chapter, in 2014 several SOCIMIs (Spanish REITs or Real Estate Investment Trusts), raised funds (mostly from foreign countries) to invest in the Spanish real estate market. At the end of 2014, a family-owned company from Zaragoza proceeded to sell a warehouse to a SOCIMI, reinvesting part of the funds received in productivity capacity. This is how real estate wealth was quickly converted into financial wealth.

In The Case for Spain I, we highlighted as a weakness of the Spanish savings its enormous concentration in real estate wealth (80% of the total compared to 50% in other developed economies), which turned into illiquidity. Nevertheless, the arrival of liquidity to the real estate market implies a quick conversion from real estate wealth to financial wealth, generating the necessary liquidity of the economy.

The result of such transaction in Zaragoza shows that:
- **First:** liquidity is being channeled to the real estate sector through several ways.
- **Second:** liquidity generates demand for properties, pushing prices up.
- **Third:** the conversion of real estate wealth into financial wealth makes the Spanish economy less vulnerable and susceptible of channeling the liquidity obtained after the sale of real estate assets into more productive industrial activities.

The Spanish economic crisis is highly associated to the real estate crisis, which depends on the financial crisis. In the following chapter we expose the turning point of the financing and how it has been produced. This turning point is making an impact on the real estate cycle, which will recover earlier than expected.

As a prelude, it is important to highlight the crucial role played by the construction industry in an economy:
- **First:** the real estate/construction sector, which represented 7.3% of the Spanish GDP, increased to 12% before the crisis and is currently (2014) at levels close to 5%, generating an upward potential of 2.5% of the GDP.

**Chart 1.1. Investments in construction (% of GDP)**

- **Second:** the sector is very intense in employment, and therefore has an enormous impact on the labor market, impacting consumption.
- **Third:** the real estate cycle is highly related with the financial cycle: in times of growth in the real estate sector, the financial sector tends to accelerate the credit expansion, which accelerates the GDP (sometimes even close to dangerous levels) and in contraction of the real estate sector, the opposite takes place, exacerbating the cycle of production and employment. Moreover, the industry tends to perform well in times of low interest rates, as easy access to credit pushes domestic demand.
**Fourth:** it is a very tax-intense sector (for example, if an existing home is purchased, taxes usually represent between 6 and 8% of the transaction price, a tax rate higher than in other advanced economies). When the sector grows, many more taxes that have a cyclical nature are raised and when sales decrease such collection disappears originating a fiscal gap that prevents governments from cutting other taxes that could prompt consumption. Taxes directly related to real estate activities in 2006 amount to €43 bn. and only €9.3 bn. in 2013.

**Fifth:** the sector is highly related to auxiliary industries. For example, if you buy a house you usually buy other items like a TV, cutlery, etc. It also activates the construction material industry (cement, tiling, etc.). Auxiliary real estate industries can represent half of the real estate industry as a % of the GDP. The following chart shows the collapse of the construction sector to historic lows, affecting other industries. For example, the cement industry sold 56 million tons in 2007 and this year only 11 million.

**Why is an upward real estate cycle coming?**

After six years of crisis due to real estate excesses in the past, consensus predicts that there is still a long way to go before a recovery of the sector comes and house prices increase.

In our opinion consensus is wrong. Let’s first expose the arguments used to suggest that the construction sector will not recover soon:

**Consensus’ arguments: “the real estate cycle will be depressed for several years”**

First: the stock of empty houses (depending on the source ranges from 0.58 to 1.7 million houses) is extremely high. Until the stock is not reduced drastically new houses will not be built and prices will not increase.

The following chart shows that the stock is a consequence of building more houses than are sold. We are currently in the opposite process; much more houses are being sold than built, but the adjustment pace is very slow.
Second: house prices have fallen between 30 and 45% depending on the indicator analyzed. Nevertheless, despite downfalls prices are still over historical levels (price to gross rent ratio has decreased from 7x to 5.2x but are still over historical levels between 4 and 5x). Therefore prices still need to fall another 10% to reach historical levels and then recovery will be gradual and slow.

Chart 1.4. House prices evolution in Spain

In the appendix section, we give an explanation of each house price indicator with its associated characteristics. It is important to differentiate nominal from real downfall (adjusted by inflation). The most relevant is the real downfall, which was 40%.

5 Ratio that shows the purchasing capacity of a certain article indexed to the population income.
6 The ratio between prices and rent has already reached historical average.
Chart 1.5. House Price/ Income (% of undervaluation or overvaluation vs. its historical average)

Third: Financing must increase in order to have a recovery of the construction industry, but financing will not improve in the short-term.

In our opinion, many of these statements are correct but must be nuanced and the conclusions are incorrect.

Empty houses stock and new housing construction

It is true that the empty houses stock of 0.6 million units, (decreasing at a pace of 0.1 million per year) is still high. Nevertheless, the key to this is not the aggregated figure but the geographic distribution. This figure (as a % of total housing stock) is very small in certain provinces like Biscay, but very large in other provinces like Castellón. It is logical to state that prices and new house construction will recover earlier in Biscay than in Castellón. The distribution of empty houses in Spain shows great irregularities with a high concentration (54%) in Andalusia, Valencia and Castile La Mancha, three important Autonomous Communities but that account for less than one third of the national GDP. Other important regions like Madrid, the Basque Country and Catalonia the stock of empty houses is not that high, and they account for approximately 43% of the GDP together. These three regions have empty houses levels lower than the national average (3%) and also lower than historical averages (2%), a signal that the recovery in prices and construction is incipient. This asymmetry explains, for example, why the purchase of houses in Madrid and Barcelona grows more than twice the national average in 2014.

8 Nevertheless, part of the stock (around 100,000 units) will never be sold due to its construction in wrong locations and to demographic trends.
The following map shows the irregular distribution of the stock of empty houses as a percentage of the total housing stock.

Moreover, the stock of empty houses within a province must also be analyzed. For example, if the stock is zero in the northern part of Madrid but there are still empty houses in the southern cities, prices will probably rise in the northern part and developers will start to build homes again there, while there is still stock in the south. In our opinion this is already happening in certain areas of the country that have an important relevance for the Spanish GDP and housing construction is already starting in certain areas.

It is important to highlight again that the starting points are so meager, 35,000 housing starts per year\(^9\) (one third of the housing starts in the recession of 1959, when the Spanish population was only 25 million), so what we will face in the coming years is the normalization of housing starts to median historical levels (around 200,000 houses per year vs. the historical average of

244,000),\textsuperscript{10} as shown in the next chart. This slow but continued recovery process will have a big incidence in employment (there can be generated 0.5 million direct vacancy jobs).\textsuperscript{11}

**Chart 1.8. New housing construction**

![Chart 1.8. New housing construction](image)

*Source: Ministry of Development, Arcano*

In fact, the necessary condition for the recovery is the improvement of confidence in the sector, when it improves, housing construction improves. Confidence (ISCOF,\textsuperscript{12} equivalent to the NAHB in the US)\textsuperscript{13} has already improved, giving positive figures for the first time since 2007. At the same time, the construction sector has already started hiring (it was the second sector with more than 80,000 contracts on the second quarter of 2014). Furthermore the construction sector started contributing positively to the GDP on the second quarter of 2014 (0.9% QoQ, highest growth in the Eurozone).

**Chart 1.9. ISCOF vs. New housing construction(Q-4)**

![Chart 1.9. ISCOF vs. New housing construction(Q-4)](image)

*Source: Ministry of Development*

Moreover, as housing starts (around 35,000) is well below new houses sold, around 150,000 per year,\textsuperscript{14} the inverse situation as the one in 2006 or in China nowadays. Once the stock of empty houses decreases, housing starts will increase.

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\textsuperscript{10} This could be explained in part by the migration flow. Even though now the country is generating emigration, population is constant at 46.5 million since the beginning of the crisis and the active population has increased by 0.5 million.

\textsuperscript{11} Approximately, for each GDP percentage point that construction varies, 230,000 jobs will be destroyed or created, so if we move from 5% to 7.3%, 530,000 jobs will be created.

\textsuperscript{12} The Ministry of Economy uses the ISCOF index to anticipate trend changes. This index considers the housing sales, the started housing, the requests for building permits, the number of unionized employees and the demand for building materials.

\textsuperscript{13} National Association of Home Builders, US.

\textsuperscript{14} Compared to a peak of 326,000.
The trend will become more pronounced with the gradual improvement of home sales, which are increasing since 2014 (at a pace close to 15% according to the Ministry of Development), which will progressively accelerate the disappearance of stock of empty houses and the construction of new houses.
The stock of empty houses is impacted by demand and supply, as we will explain later. There is a turning point in the demand and supply of land. In the past, there were no land transactions as banks kept these assets in their balance sheet at inflated prices. Nowadays, after intense capital requirements (close to 80%) banks are closing transactions. Moreover, the SAREB (the wrongly named “Spanish Bad Bank”, which absorbed the toxic assets related to the real estate sector) has also started to sell land, easing the development activity. Investors (mainly investment funds and family offices) are increasing their interest in these assets and they are financing the development of houses, while banks are granting mortgages again. Finally, housing cooperatives, which are very important in the downward cycle of the sector, are reactivating their activity, increasing housing starts.

The trend can only have one direction: upward.

**Real estate prices**

As exposed above, after important price downfalls (34% on first homes and 45% on second homes) very few analysts predicted a recovery in prices, claiming that there were historical relationships between prices and the purchase capacity, the consensus thus stating that there would still be a period of one to three years of price downfalls.

Arcano, in *The Case for Spain II*, already mentioned that even though the firm was not expert in real estate, the reasoning used by the consensus might be incomplete, explaining certain reasons for this, and predicting a recovery in prices much faster than the one defended by the consensus.

House price indicators of the National Institute of Statistics (INE) announced in the second quarter of 2014 that real estate prices had entered positive figures, both QoQ (1.7%) and YoY (0.8%) for the first time in six years. This data was reaffirmed by the data from the Land and Mercantile Registrars Association of Spain (1% YoY and 1.5% QoQ) as we will explain later on in the report. Rent prices (which have a lag of a few months with sale prices) showed in June 2014 the lowest YoY decrease (2%) in 76 months, according to the Fotocasa index.
Why is consensus wrong?

Why don’t historical comparisons work?

- First: it is important to analyze how real estate prices are measured. Even though the square meter price is at €1,459, its distribution is very asymmetric. Houses in Madrid have a much higher price per square meter than in Puertollano. The same happens with the size of the house: big houses are cheaper per square meter than small houses. Therefore, if for example, in year one, one small house is sold in Madrid and one big house is sold in Puertollano; and in year two, one big house is sold in Madrid and two big houses are sold in Puertollano, statistics will show enormous downfalls in prices, even though the price of the house in Madrid might have increased. Most price series do not make adjustments for both effects due to the complexity of the calculus. One indicator that corrects both adjustments is the S&P Case – Shiller in the US, which only compares housing transactions of houses of equivalent size and same city (currently house prices in the US are increasing by 7% approximately). In Spain most of the statistics do not correct both effects. Statistics provided by the Land and Mercantile Registrars Association of Spain correct these effects, taking only into account purchases of houses that are sold more than once. Even though the disadvantage is clear (smaller sample to set an indicator) the quality of the data reaches excellence. As exposed above, with this methodology prices have already touched bottom and have started to increase.

- Second: even though there must be a relationship in the long term between prices and gross rent (purchase capacity), it is incorrect to forecast price movements only taking into account this relationship and ignoring other key factors like interest rates, liquidity provided by the ECB or participation of foreigners in the real estate market. For example, the relationship between asset prices and interest rates is reverse, with low
interest rates, assets are worth more than historical averages (that is why P/E ratios in equities oscillate inversely to interest rates) and rates are currently at historical lows.

- **Third:** massive liquidity injections carried out by central banks have pushed sovereign bond prices to peak levels (for example, the Spanish sovereign bond is currently at its historical high) moving savings to other asset classes like corporate bonds, equities, foreign real estate assets (there are clear bubbles in Norway, Switzerland, Canada, the UK, Australia, Germany and several emerging markets in which relationships between real estate assets and rents are much higher than in Spain)…and Spanish real estate assets. The ECB (Eurosystem) has a balance sheet that ranges between 20% and 25% of the Eurozone GDP, above its historical average. Such liquidity generates inflation in asset prices, affecting real estate prices. This phenomenon cannot be ignored when forecasting prices.

### Chart 1.15. Central Banks assets (% of GDP)

![Central Banks assets (% of GDP)](image-url)

*Source: Bloomberg, ECB, Bank of England*

### Spain: the Florida of Europe

During decades, the North American state of Florida has received structural real estate demand from citizens from the rest of the US and neighbor countries (with high incomes), looking for good weather conditions, security and infrastructures. This additional demand has untied the real estate cycle of Florida from the rest of the US. In our opinion, Spain shares many characteristics with Florida allowing the country to receive foreign demand that invalidates or modifies the prediction hypothesis of future Spanish real estate prices.

Finally, relationships between prices and gross rents only consider the national investor. Nevertheless, reduced absolute prices (1,459 euros/square meter) attract foreign investors with comparatively higher rents, generating an arbitrage effect. Foreigners traditionally represented less than 10% of the real estate transactions but since 2013 they have participated massively in the market, representing around 25% of the housing market. With such environment, it is methodologically incorrect to forecast prices taking only into account national gross rent.

Chart 1.16. Is the past a reflection of the future? Housing Price / Gross household income

The office markets of Madrid and Barcelona are great examples. Until 2012 the forecasts predicted a bleak future for these markets, but in 2013 and 2014 liquidity came massively, pushing prices up earlier than expected (anticipating rent prices to increase, which started in mid-2014); once that prices of other asset classes are consistently inflated (sovereign bonds, corporate bonds, corporates…) the logical consequence is that liquidity will move imminently to the Spanish residential market.

Conclusion: consensus is wrong

For all of these reasons, analyzing house prices based on historical factors (like average prices to gross rent) is incorrect nowadays, because those relationships are being affected by interest rates, by balance sheets of central banks and by foreign investors with higher gross rents. These factors explain why house prices have started to rise much earlier than expected.

The funding of the real estate sector

As exposed before, few analysts expected at the end of 2013 that the financing to the Spanish economy would come back soon, but it did. Currently most analysts do not expect that liquidity will arrive to the real estate sector. We disagree on this. On one side, arguments linked to monetary policies are inexorable: if rates are at zero level, and most certain classes are at peak levels, liquidity must flow to alternative assets that do not yet present signs of bubble. The Spanish real estate industry is a clear candidate. On the other side, improvements in the solvency and liquidity of financial institutions must conclude in a mortgage expansion. Moreover, with improvements in unemployment figures, delinquency rate decreased, which should encourage banks to grant more mortgages. In fact, granting of mortgages has increased considerably in inter-annual terms, pushing demand and prices upwards.

Prime offices profitability of Madrid has decreased from 6.2% in the 2Q13 to 5.3% in 2014 according to Jong Lang Lasalle.

The quarterly volume of new given mortgages rises to €5,000 m. against €45,000 m. in 2008. It gives us an idea of why there is an important upward potential in the mortgage market. Potential that will accelerate the housing demand and its prices.
A third part of the purchased houses do not involve a mortgage, which shows the high purchasing power of investors, especially foreign investors. Moreover, non-bank financing entities (especially very sophisticated hedge funds) have placed their interest in the Spanish real estate sector since the end of 2013. Nowadays, those funds are capable of financing residential developments, and appetite for the real estate sector within these funds is clearly booming.

As exposed before, there has been a change in the supply demand and financing of land. There is funding to leverage and develop land (with a 30% of presale, developers can obtain funding for 50% to 60% of the value of the land and the construction). The final purchaser has now better access to mortgages with an LTV of 80% and spreads close to 180 bps. As it takes 2-3 years since the purchase of the land until all houses are sold, any price increases will add more margins to the developers.

The SOCIMIs are also playing an important role since their inception. They offer important fiscal advantages to develop portfolios of real estate assets and exploit them through rentals. The change in the real estate cycle is so clear that in 2013, four Spanish SOCIMIs raised €2.5 billion to invest in the Spanish real estate sector (plus the debt that will be used to buy properties). Finally, fixed income markets will sooner or later include the real estate market, like in most developed economies.

<table>
<thead>
<tr>
<th>Year</th>
<th>Buyer</th>
<th>Seller</th>
<th>Amount</th>
<th>Description</th>
</tr>
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<tbody>
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<td>2013</td>
<td>IPIC</td>
<td>Bankia</td>
<td>€450mn</td>
<td>Foster Tower (Madrid)</td>
</tr>
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<td>2013</td>
<td>Fibra uno</td>
<td>Moor Park</td>
<td>€300mn</td>
<td>Sabadell Bank Branches</td>
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<td>€250mn</td>
<td>Agbar Tower (Barcelona)</td>
</tr>
<tr>
<td>2013</td>
<td>Goldman Sachs</td>
<td>Ayuntamiento de Madrid</td>
<td>€201mn</td>
<td>Housings</td>
</tr>
<tr>
<td>2013</td>
<td>The Art of Real Estate</td>
<td>Consorcio</td>
<td>€200mn</td>
<td>Vela Hotel (Barcelona)</td>
</tr>
</tbody>
</table>

Source: Arcano
As we have exposed, liquidity has reactivated the real estate market, and home purchases are now growing at a good pace, like car purchases did almost one year ago.

Again, we believe there are several arguments, which support that real estate liquidity not only exists, but it will also increase.

That is why houses sold, price and residential investments increase.

**Conclusion: the comeback of the real estate sector**

In this chapter we have explained several arguments that in our opinion show that the construction sector will recover and prices will increase sooner than expected. There are five key arguments:

- **First**: financing increases, improving the real estate market. Mortgage credit is improving considerably (at a double-digit pace) as the starting point is very low (€18 billion annually of new mortgages granted vs. €173 billion at peak levels).

- **Second**: foreign investors (both institutional and retail) arbitrage the low prices of the Spanish residential market, and its increasing role will accelerate the turnaround.

- **Third**: internal demand will surge as a consequence of improvements in the financial situation of households (its financial wealth is currently at 2006 levels after the saving effort carried out over the past five years), increasing employment (around 300,000 new jobs per year), improving access to mortgages, and there may be contained demand from the past years.

- **Fourth**: the enormous asymmetry of the total housing stock in Spain explains the asymmetry in the recovery, and important Autonomous Communities with regard to GDP contribution (Madrid, Catalonia and the Basque Country) lead the recovery.

- **Fifth**: housing starts over the last twelve months (35,000 units) is ridiculous compared to levels previous to the crisis (886,000) and normalized levels (200,000).

---

17 Mortgage credit strongly increases in 2014 because the starting point was very low and delinquency has started to decrease, as a consequence of a decrease in unemployment.

18 Net financial wealth (financial savings minus debts) is equivalent to 102% of the GDP.
This author has never been considered a real estate expert. His thoughts are humble considerations about the sector from an external perspective, and aligning it to the unusual monetary policy that we are living through. All in all, we believe that data supports our forecast. Hence, home sales and prices, and office prices increase; sales of auxiliary housing products grow at a triple rate than retail sales, which suggests that the real estate cycle is reactivated. The construction sector has grown over the last two quarters and it has created new jobs. In fact, it is one of the three sectors with more hiring. Finally, investments grew 1.5% QoQ in the third quarter, which is only explainable by a recovery of the sector.

\* In any case, the conviction of the author is such, that he bought a house in Madrid in May 2014 for the first time in his life.
2. Improved funding accelerates the Spanish economy.

“To get there first, you first have to get there”

Indianapolis investor Warren Buffet quoted in reference to the excessive use of debt.

As discussed, a year ago the IMF predicted that in 2014 Spain was going to be one of the Western economies with lower economic growth (0.2%). A year later, not only has he recognized the error (updated on their “outlook” to 1.3%) but he also said that Spain, among the great nations, would be the economy that would grow more in the euro area in 2015. What has happened for the IMF to have been so clearly wrong?

The answer lies in funding. The financing of a country is key to sustaining economic growth, which in turn leads to employment.

In the early twentieth century, the American economist Irving Fisher published his “quantity theory of money”, in which he stated that with a constant velocity of money (the velocity of money measures the amount of transactions a monetary unit makes during the year), the money supply (M) determined the level of output and prices.

\[ M \times V = P \times Q \]

After the 1929 crisis, the Fed erred by letting many banks drop, rather than supporting them with massive liquidity, and the banking crisis that the error caused, resulted in a huge unemployment figures, exceeding 35%. After the credit crisis of 2007, Western central banks did not repeat the error, and provided massive liquidity to the banking sector to prevent its collapse, that would have led to a new economic depression. However, the liquidity provided to banks did not quite get to the real economy; hence the increase of effective money supply in circulation has been very limited, which has resulted in an anemic economic growth in the euro zone. However, the situation has gradually improved, and Spain paradoxically stands today at the forefront of this change in funding, as we will see below.

In our report, The Case for Spain II, we assert against consensus in October 2013 that funding was about to improve, and that this factor was key to understanding the cycle change of the Spanish economy, and making economic predictions is therefore essential to understand well the flow of finance. Many economists were wrong in their predictions of the Spanish growth in 2014, because very few knew how to glimpse the change in the funding cycle that was already brewing since late 2013.
The first step in improving the funding was the arrival of money into sovereign bonds. In autumn 2014, the yield of the Spanish ten-year bond reached its lowest level since the last two hundred years. This yield drop is associated with the enormous rise in value, explained by the huge influx of liquidity experienced by the Spanish bond since the third quarter of 2012. Liquidity has slowly shifted to other sectors of the economy, which has been greased and quickly became ready for economic growth. For example, notice the recovery in the credit to households during 2014:

**Chart 2.3. Loans to households (YoY growth, %)**

![Chart 2.3. Loans to households (YoY growth, %)](chart)

Source: Bank of Spain

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20 Funcas obtains its estimations from a study that it realizes every two months to 19 prestigious national institutions on short-term forecasts for the Spanish economy. The institutions are the following: Analistas Financieros Internacionales, BBVA, Bankia, Catalunya Caixa, Cemex, Centro de Estudios Economía de Madrid, Centro de Predicción Económica, CEOE, ESADE, FUNCAS, Institución Complutense de Análisis Económico, Instituto de Estudios Económicos, Instituto Flores de León, Intermoney, La Caixa, Repsol, Santander y Solchaga Recio & Asociados.
The financing of a country depends on the supply and demand for credit. In addition, funding may be bank or non-bank. Consider first the supply of bank financing, then the offer of bank financing, to analyze at the end the demand for credit and the SME financing. As we will see, most of the ingredients have been developed, so the funding, which is now reaching the Spanish economy, increases its contribution to economic growth in a sustained manner.

**Bank financing: it’s the flow of new credit, you idiot!**

The supply of bank credit depends mainly on two factors: liquidity and solvency of banks. In turn, it is important to distinguish between the outstanding balance of credit and the flow of new credit. The latter, equivalent to the derivative of the balance (which in turn increases with the flow of new credit and falls with the repayments of existing debt), is the most representative to understand the impact of credit on GDP.

So, let us imagine two people enjoying a credit of 10,000 euros awarded time ago; each of them pays 1,000 euros every year as maturity concept, and a third person receives in turn a new 1,000 credit to buy a computer, a credit that he was denied the previous year. The outstanding credit will be decreased in 1,000 (2,000 minus 1,000 new repaid granted), but for the economy what matters is the 1,000 euros invested in the computer (that in this case would be considered eligible GDP). This is very important to understand what happens in Spain. The credit balance falls in 2014 as it did during the previous six years, but the flow of new credit to households and SMEs remains positive, hence this flow is positively impacting the GDP (which primarily affect households and SMEs) 21, and therefore employment.

**Chart 2.4. New credit flow**

<table>
<thead>
<tr>
<th>Monthly</th>
<th>Total</th>
<th>Companies</th>
<th>Enterprises</th>
<th>Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-14</td>
<td>32.809</td>
<td>28.419</td>
<td>10.577</td>
<td>11.146</td>
</tr>
<tr>
<td>Feb-14</td>
<td>30.210</td>
<td>25.655</td>
<td>10.694</td>
<td>12.467</td>
</tr>
<tr>
<td>Mar-14</td>
<td>35.834</td>
<td>30.562</td>
<td>11.795</td>
<td>15.177</td>
</tr>
<tr>
<td>Jun-14</td>
<td>43.882</td>
<td>38.375</td>
<td>12.462</td>
<td>25.913</td>
</tr>
<tr>
<td>Jul-14</td>
<td>36.387</td>
<td>30.798</td>
<td>13.990</td>
<td>16.808</td>
</tr>
<tr>
<td>Aug-14</td>
<td>23.537</td>
<td>20.341</td>
<td>9.051</td>
<td>11.290</td>
</tr>
</tbody>
</table>

**Bank liquidity**

Liquidity is mainly measured by the ratio of private sector loans and deposits. If a bank lends above its base of deposits, the ratio will be greater than one,22 and will have to seek finance for the difference through capital markets. Banks that practice this financing aggressively (ratios of loan to deposits ratios higher than 1.3 times) are considered dangerous, so when confidence in the capital markets worsens, banks react cutting credits and mobilizing deposits, to balance their financial situation.

21 The flow of new aggregate credit is still in negative territory due to the fall in the flow of financing corporations, which falls, as we will see that they still consolidating balance sheets, and because they are increasingly financed through bonds, as discussed later in the chapter.

22 The bigger the ratio is, the lower the liquidity is.
Spanish banks had a very unbalanced stability between loans and deposits in 2007. In a context of capital market closure and distrust to the Spanish banking, it carried out a very strong rebalance using credit contraction, which exacerbated the damage to the Spanish economy. However, the adjustment was achieved in less time than expected. In late 2013, many banks had balances close to 1.2 times, with some representative ones below 1 time. Therefore, banks were in a position to lend. During 2014, this trend was underpinned with loans decreasing to 1.38 billion euros and deposits rising to 1.26 billion, generating a ratio of 1.1 times, so the stability objective of 1.2 times, envisaged by analysts as a hard achievable target for 2018, had been achieved four years earlier. The following chart shows how the ratio of private sector loans and deposits has been adjusted in recent years.

**Chart 2.5. Balance sheet of the Spanish financial system (€ thousand)**

As a conclusion, it can be said that Spanish banking has moved from an extreme liquidity in 2009 to a more comfortable liquidity situation in 2014. This liquidity will be increased by the adopted measures of the CEB, specially the TLTRO, which will provide massive liquidity to the European banks in exchange for it being used in new credit flow.

**Solvency**

The solvency of a bank can be studied in different ways. The Basel capital ratios observed the relationship between equity and risk-weighted bank assets. Sometimes the weighting is considered highly subjective and leads to paradoxes. For example, in Spain it was estimated that the probability of maximum drop in house prices was quite low, thus allowing banks and saving banks to expand its real estate loan risks erroneously.

This subjectivity leads to a more objective way of looking at bank solvency that resides in analyzing its portfolio of loans to the private sector (without weights, to absolute value) and comparing it with the total volume of capital and provisions of the bank, to face possible credit losses in that portfolio. In 2008, Spanish banks had a total of 1.9 trillion euros in loans to the private sector, to address such risks, including 0.4 billion lent to real estate promoters and builders, maintaining an equity volume of 0.225 billion. As the losses in real estate were in the region of 0.2 billion (half of what was borrowed), many financial institutions (in particular saving banks) were in obvious insolvency (if the value of the asset is reduced, the value of liabilities must be reduced, leading to a reduction in equity, which can be placed below the required levels of solvency or even negative, bankruptcy). As the losses were not recognized, but disguised in the balance, a “zombie” banking system was generated, so called because by keeping false assets, it stops lending (as it happened in Japan in the 90s). In this context it followed a massive credit crunch, prompting even more delinquency, which in turn reduced the capital via bank losses.

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23 TLTRO stands for Target Long Term Repurchase Operations. A CEB program whereby massive banking liquidity is provided until 2016, related to granting of loans to companies.
However, by the summer of 2014 there was a turning point. Financial institutions were recapitalized by almost 200,000 million euros, the most latent losses were recognized and as a result, the loan book, which by then only reached the amount of 1.38 billion, and to back it up it kept 0.34 billion euros in provisions and equity (25%). The recent European Banking stress tests, which were made taking a picture of 2013, showed the huge improvement of the Spanish banking that passed the exam with good score. Thus, the Spanish banking system was since the end of 2013 in a solvent position to lend.

**Chart 2.6. Solvency of the Spanish financial system (€ billion)**

<table>
<thead>
<tr>
<th></th>
<th>Jul-08</th>
<th>Jul-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans to private sector</td>
<td>1,842</td>
<td>1,383</td>
</tr>
<tr>
<td>Capital + Provisions</td>
<td>211</td>
<td>344</td>
</tr>
<tr>
<td>11%</td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>

*Source: Bank of Spain*

The first step was to lend to the government through the massive purchase of bonds, which occurred between 2012 and 2013; this phenomenon is known as “crowding out” and assumes that financial resources are monopolized by the state and so not channeled to the private sector. According to Spain, it became fashionable, prices of government bonds continued to rise, thus lowering yields. As stated above, since 2013, Spanish bonds reached higher levels of price/lower yield. Hence, the incentive for banks to lend to the government was already lower. In addition, economic improvement caused the stabilization of bank delinquency between 13% and 14%, an important factor to encourage banks to lend to the private sector, and secondly insolvent companies fell 30% in 2014 vs. 2013. Among all these factors a breeding ground had been created start lending to the private sector, which began to occur in late 2013.

**Conclusion: Boom of Bank Financing**

As the other elements involved in bank financing (solvency and liquidity) have improved greatly since the end of 2013, there has been a clear turning point in bank financing. The flow of new credit to households and SMEs is growing, and that supports economic growth.

In turn, large companies maintain two routes of action: a) reduce its debt, historically high, and b) be massively financed through non-bank financing (so far in 2014, Spanish companies have raised funds via the bond market for an amount higher than 22,000 mm. euros). Observe the latter phenomenon.

**Non-bank financing**

In the period 2011-2014, the top 25 non-financial companies in the IBEX, reduced their bank financing by 35%. Part of that process was due to a strong flow of corporate bond issues. This trend illustrates well the growing importance of non-bank financing.

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24 Capital and reserves figures of June 2008 and June 2014 have been used, since the Bank of Spain publishes this data on a quarterly basis rather than monthly.

25 It is the percentage of loans within a loan portfolio that have delinquent payments. As it has decreased sharply, we can paradoxically see that, although the balance of delinquency is decreasing (linked to the economy recovery) if the balance falls faster than the stock of credit, the ratio does not decrease or it could even increase. In any case the trend is clear: a drop of the balance of delinquency, and gradually it will raise the stock of credit because the flow of new credit is positive, it will finally be followed by a decrease in the delinquency rate.
Non-bank financing is very relevant in many countries such as the US or the UK, where it represents more than three quarters of the total funding. In continental Europe, its weight has been close to a third, in Spain its weight has been close to 10% as noted in the following charts.

Chart 2.7.  US vs. Eurozone

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>Eurozone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 GDP ($)</td>
<td>$16.8 tr.</td>
<td>$17.4 tr.</td>
</tr>
<tr>
<td>2014 GDP Growth forecast</td>
<td>2.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Size of the banking system (GDP %)</td>
<td>77%</td>
<td>340%</td>
</tr>
<tr>
<td>Size of capital markets for corporate bonds (GDP %)</td>
<td>$6 tr.</td>
<td>$2 tr.</td>
</tr>
<tr>
<td>Securitization market size</td>
<td>$9 tr.</td>
<td>$2 tr.</td>
</tr>
<tr>
<td>Size of capital markets (GDP %)</td>
<td>89%</td>
<td>23%</td>
</tr>
</tbody>
</table>


Chart 2.8. Capital markets financing

The credit crisis radically changed this situation, and since 2011 significant increases occurred in non-bank financing in Europe, with Spain at the head (which is explained if the low starting point is considered). Thus, between 2013 and 2014 many Spanish companies proceeded to issue bonds in the capital markets (bonds can be either investment grade or high yield). The funding received was used to repay bank debt and make new investments. In Chart 2.9. debt issues made by Spanish companies since 2013 are shown.

26 The difference between both categories depends on the bond agency rating. Over BBB- it is considered investment grade; under, high yield.
Although much has been said about non-bank financing, there is lack of systematic explanations about this new financing source and the instruments used in Spain. In this section, we try to give a panoramic view of non-bank financing, because its acceleration will be very productive for future economic growth.

A company can also obtain financing by giving cash flows generated by an asset to a company that issues bonds and becomes the creditor of such cash flows. This more or less complex process is called securitization. Another method is called project bond, which is issued to finance a specific project; the buyer of the bond is entitled to the cash flows of the project, but if it breaks, he or she cannot claim to the sponsor of the project who has built and promoted the bonus. Funding is also created if a company issues new shares traded, as Colonial did in 2013, or convertible bonds (as Sacyr did in 2014).

Non-bank financing can also be performed by instruments not listed on stock markets. For example KKR, a North American investment fund, lent money to the building materials company Uralita in 2013, these non-bank loans are known as direct lending. If the loan is implemented into a company with serious difficulties, in addition to the interest rate, the lender usually requires an element of profit sharing or possible conversion into capital. These loans are called rescue finance. Funds that give non-bank finance to companies are called “private debt funds”.

What are the reasons that lead a company to use non-bank financing?

- **First**, to diversify funding sources in order to prevent bankruptcy crisis, as experienced recently, from turning into a credit crunch that can make an illiquid company turn into an insolvent company. Source diversification allows the company to improve negotiation conditions of the different banking lines at the same time. The

<table>
<thead>
<tr>
<th>Chart 2.9. Spanish corporate bond issuances 2013 - 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issuer</strong></td>
</tr>
<tr>
<td>Abengoa SA</td>
</tr>
<tr>
<td>Ferrovial</td>
</tr>
<tr>
<td>Ence SA</td>
</tr>
<tr>
<td>Abengoa SA</td>
</tr>
<tr>
<td>ONO</td>
</tr>
<tr>
<td>Prosegur SA</td>
</tr>
<tr>
<td>Gestamp</td>
</tr>
<tr>
<td>Gestamp</td>
</tr>
<tr>
<td>Grupo Avanza</td>
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<tr>
<td>Grupo Avanza</td>
</tr>
<tr>
<td>NH Hoteles</td>
</tr>
<tr>
<td>Empark</td>
</tr>
<tr>
<td>Port Aventura</td>
</tr>
<tr>
<td>Port Aventura</td>
</tr>
<tr>
<td>Copasa</td>
</tr>
<tr>
<td>Grifols</td>
</tr>
<tr>
<td>Grupo Antolin</td>
</tr>
<tr>
<td>Almirall</td>
</tr>
<tr>
<td>Isolux</td>
</tr>
<tr>
<td>Enagas</td>
</tr>
<tr>
<td>Alyessa</td>
</tr>
<tr>
<td>Tecnocom</td>
</tr>
<tr>
<td>Redexis Gas</td>
</tr>
<tr>
<td>Elecnor (Pagarés)</td>
</tr>
<tr>
<td>Tubacex (Pagarés)</td>
</tr>
<tr>
<td>Europac (Pagarés)</td>
</tr>
<tr>
<td>Grupo Ortiz</td>
</tr>
<tr>
<td>DIA</td>
</tr>
<tr>
<td>EYSA</td>
</tr>
<tr>
<td>Acerinox</td>
</tr>
<tr>
<td>Audax Energía</td>
</tr>
</tbody>
</table>

*Source: Bloomberg, Factset (August 2014)*

(*) Axesor Rating has rated this issuance with a positive solvency report
The diversification of such sources allows the company to improve the negotiation conditions of its banking lines. If the compression of differentials observed in the loans of large companies (which can issue bonds) ends up reverting to small and medium enterprises, it could produce a transfer value of about €15,000mm. banking profit to non-financial companies in the coming years.

- **Second**, extend debt maturities, a phenomenon called "lengthen its duration". Upon receiving long-term financing\(^\text{27}\), an entrepreneur can raise medium-term investments (such as building a factory, which in turn creates jobs). If the funding is only for short-term, some entrepreneur will dare to make the investment because if the credit is not renewed then the company could break (since the cash flows generated by the factory are more long-term maturities of debt).\(^\text{28}\)

- **Third**, the process of issuing and listing generates visibility and transparency, which creates very positive externalities for the group, both business and reputation wise.

- **Fourth**, the supply of bank credit in the past was supported by more than fifty competing entities; after the concentration process occurred in Spain, less than fourteen institutions form the banking activity, and in many provinces the effective number of entities is even smaller; this process has a positive outcome (the banking system, having more concentration of risk, takes more exhaustive analysis of risks) and a negative one (the concentration of supply increases the risks for the lender and borrower and can increase credit prices). In many cases, the resulting bank institution in a merger discovered that it could have an important percentage of the credit of a company, which was not coherent with an appropriate policy of risk management that led to the desire of the bank to reduce such exposure.

- **Fifth**, infrastructure financing. The gradual disappearance of the Project Finance of Banking has prompted that the infrastructure sector, very relevant in Spain, explores related capital markets solutions, especially project bonds.

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\(^{27}\) For example, a bond has an average life of seven years, compared to the three-year average life of a bank loans; bonds also tend to repay their principal at the end of their lives, while a bank loan is amortized linearly.

\(^{28}\) Financing long-term assets with short-term financing methods was a big tragedy for Spanish companies. Although the project was solvent, in a situation of bank crisis, Banks proceeded to remove the funding lines, leading to a possible illiquidity of the companies and this illiquidity turning into being insolvent. In 2000, almost a quarter of the company liabilities were short-term lines, nowadays they represent less than 10%.
Which are the benefits of non-bank financing for the economy?

- **First**, diversification of funding sources favors banking itself, as in a context of massive contraction of bank credit (as experienced recently) both solvent and insolvent companies fall, increasing delinquency which in time causes even greater credit contractions, creating an evil vicious circle. If in a banking crisis scenario, creditworthy companies can issue bonds, delinquency does not rise as much as in the case of only relying on bank financing, which ultimately benefits the financial health of the bank itself. And with the contraction process of banking institutions, many have observed how the concentration of credit to certain companies increased more than desirable; the introduction of non-bank financing can reduce these concentrations, which in turn mitigates the bank risk.

- **Second**, it allows for reactivation of investment, since long-term financing promotes investment, which in turn reactivates employment (today in Spain and in Europe the ratio of investment to GDP is at the lowest levels of its history, which partly explains the high unemployment).

- **Third**, it limits the risk of the taxpayer, because when a bank fails, it must be rescued by the state (if this did not happen, it would cause many banks to fall, which would greatly increase unemployment, as it happened in the thirties); bankruptcy of a bond should not be rescued with taxpayer money. Investors in bonds and debt funds are institutional investors who invest their money in the medium and long-term. Banks mainly use depositors’ money in lending. If a bond falls into bankruptcy the deposit money is not in risk. It is a key factor to explain the systemic importance of banks and why most of taxpayers’ deposits must be guaranteed.

- **Fourth**, it can limit the growth of bank assets as a % to the GDP of a country. When banks grow exorbitantly, as the Icelandic, Irish or Cypriots banks before the crisis, assets can represent a huge proportion of their GDP. Thus, in a crisis, the State may
be unable to rescue their own banks, which in turn can generate an economic and financial crisis of biblical figures. Non-bank financing diversifies funding sources and limits this systemic risk.

- **Fifth**, the issuance of bonds involves an exercise of transparency (prospectus), of good corporate governance and of recurrence of the information issued. This exercise is very healthy for businesses, and limits corporate risks, which in turn leads to the benefit of the lender. Also, the market price of the bond involves an objective valuation of the solvency of the issuer, compared to subjective or discretionary valuation that (even taking into account the regulations of the Bank of Spain) banks hold on loans on their balance sheets. An active capital market decreases the banking system capacity. This is why many banks in the US prefer to lend money in the form of bonds.

- **Sixth** and last, it is desirable to achieve an increase in credit in proportion to nominal GDP growth (so as not to increase the ratio of credit to GDP, a prelude to a banking crisis). This means that although banks gradually expand their financing, their situation will prevent them from growing as fast as the growth of the nominal GDP, generating a gap that is filled by non-bank financing, allowing the economy to achieve the desired and diversified funding to sustain growth.

**The future of non-bank financing**

During the 1983-2013 period, financing of the Spanish corporate sector as a percentage of GDP has fluctuated between 40% (1996) and 141% (Q2 2011). Similarly, Spanish bank financing to the Spanish corporate sector as a percentage of GDP has fluctuated between 38% (1996) and 95% (June 2010). The Bank of Spain estimates that at the end of 2013, Spanish bank financing to corporations will stand at 55% of GDP.  

Spanish corporations are net savers (around 4% of GDP p. a.), and this has been driven by the difficulty in refinancing existing loans, which resulted in less investment (which came down from 30% of GDP in 2007 to 17% currently). In the last 3-4 years, asset disposals have also explained some of the deleveraging. Spanish banks have cut total credit by 40% of GDP since the peak in 2008. Many “healthy” Spanish SMEs which had financed mid-term assets with short-term liabilities disappeared as banks cut working capital lines, forcing solvent but illiquid SMEs to shut down. At the same time, these financial institutions have reduced the average maturity of corporate loans, causing the contraction in other markets as the key project finance to fund infrastructure investments. 

Currently, the bonds issued by companies amounting to €117,000 million (11% of GDP) are growing substantially. Of the €117,000 million representing currently non-bank financing, it is estimated that €22,000 million were issued in 2014. Therefore, the Spanish finance companies in 2014, excluding international banks represented 66% of GDP, of which 83% corresponds to financial institutions and 17% to non-bank financing.

**Looking ahead: estimating the value of non-bank financing**

We propose a methodology for forecasting the weight of non-bank finance in Spain by the year 2020 and we provide our results and conclusions in the forthcoming analysis.

**Methodology**

To forecast the non-bank financing as a percentage of GDP (through 2020), we estimate GDP growth, corporate credit penetration (as a percentage of GDP), Spanish bank loans to corporations (as a percentage of GDP), and finally the value of non-bank finance (calculated as the difference between total corporate credit penetration and corporate credit provided by Spanish banking institutions). We explain each of these steps in further detail below:

1) **Forecast of GDP growth:** The first step is forecasting Spanish GDP growth through 2020. Spanish GDP should stand at €1.34 trillion by 2020, using the government’s...
forecasts through 2015 (which are, in our opinion, too low) and assuming a 3% nominal growth from 2017 to 2020 (1% inflation, 2% real GDP growth).

2) **Forecast of credit penetration**: Second, we forecast credit penetration taking into account the expected deleveraging of the Spanish economy. Currently, credit penetration stands at 66% of GDP, and we estimate this figure to rise slightly by 2020 at the rate of 1% per year (forecast that we judge as conservative given the revival of the real estate sector).

Why is this projection conservative? Credit intensity (i.e. how many units of credit are needed to grow one unit of GDP) in the past years in Spain has been quite high (3:1), but today, it is negative, driven by the boom of the export sector, which is less sensitive to credit. Having said this, we believe that credit as a percentage of GDP should start increasing as soon as midterm financing becomes available, since the investment ratio needs to increase and housing starts should also increase (the residential construction sector today only accounts for 5.5% of GDP, vs. the historic average of 8% over the past few decades). This means that our 72% credit penetration hypothesis through 2020 has the potential to be higher. As investments are more related to long-term financing (where bank credit is more difficult), the market share of non-bank financing could be significantly higher if this ratio proves higher.

3) **Estimation of bank lending to enterprises**: To calculate the companies’ bank financing we use the following methodology:

- Assume banks’ total loan to deposit ratio will decline from 110% currently to 104% in 2020 (as encouraged by the EU).
- Assume total deposits as a percentage of GDP remain stable.
- Calculate total value of Spanish bank loans (to all sectors of the economy) given the level of total deposits and forecasted total loan to deposit ratio.
- Forecast total Spanish bank loans to corporations (which will be only a portion of the total Spanish bank loans) by assuming that of the total decline in loan value as a percentage of GDP (total Spanish bank loans as a percentage of GDP on average decline by 3% per year), 2/3 is attributed to the decline in Spanish banks’ corporate book (with the remaining 1/3 attributed to the mortgage book). This means that the value of Spanish bank loans to corporations as a percentage of GDP declines by approximately 1% (of GDP) per year.

4) **Calculate the implied value of non-bank finance**: With our forecasts for total corporate credit penetration and Spanish bank loans to corporations, we can now calculate the implied value of non-bank finance (as percentage of GDP) by simply subtracting the latter from the former.

**Results**

We provide our complete results in the chart below and summarize it as follows:

- Corporate credit penetration stable at 72% of GDP in 2020.
- Spanish bank loans to corporations as a percentage of GDP declines from 55% currently to 50% in 2020.
- Loans and deposits converge, resulting in a loan to deposit ratio of 104% in 2020.
- Non-bank finance as a percentage of GDP increases from 17% currently to 31% in 2020 (well below current penetrations of non-bank financing in other Western countries).
The growth of non-bank financing has been surprisingly low in the past: In 2011 and 2012, there were no transactions, only corporate bonds issued by large companies such as Telefónica. In 2014, the volume of alternative funding has been considerable, with many bonds and direct lending transactions.

Non-bank financing stock should be worth €300,000 million in 2020, compared to €84,000 million in 2013. This is an increase of 3.6 times as much. As percentage of GDP, this figure should increase from 8% in 2013 to 22% in 2020. This calculation has the potential to increase in a) loan penetration (72% of GDP is a conservative figure) and b) the market share of non-bank funding (31% estimated for 2020 is much lower than the actual figures of Germany, US, UK and France).

Non-bank financing may coexist in the future with bank financing: This financing alternative will be competitive as it will provide long-term bank financing in Basel III. The logical result is for medium-term bank financing to prevail in the short-term and in small businesses, and non-bank financing in the long-term and in large businesses.

Non-bank financing will come from different sources: We think that opportunities that offer higher returns will be found in: i) new bond issues (international market, AIAF and MARF), ii) direct lending and rescue finance loans, and iii) new opportunities in SME loan securitizations, covered bonds with loans to SMEs, and opening market project bonds. However, the biggest challenge to reach the projected volume (€300,000 mm.) will depend on the speed the corporate sector takes to issue (bonds largely) at the pace set by demand. Issues from securitizations and covered bonds will play a key role.

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1. The Official Spanish market of fixed income issues, belonging to BME.
3. The recent measures announced by the ECB contribute to the exponential growth of securities discussed in this section.
Banks provide an indispensable service to society. Through credit, channeling savings into productive projects is achieved, resulting in very depressed areas eradicating poverty parts, helping to promote the industrialization of a country (Spain in the sixties), or allowing a young couple to own a house (channeling savings through deposits from floods of generations who have already paid their house and who are saving money to face retirement). However, we have learned from the crisis that diversity in funding sources is good and healthy for the economy, including banks as beneficiaries thereof. In fact, the UK and the USA have already reached the level of production they had before the crisis. Continental Europe has not yet succeeded. The diversity of funding sources is one of the reasons.

**Funding for Spanish SMEs and credit demand**

Spain is an economy that is very dependent on SMEs. Spanish SMEs account for two thirds of our GDP and nearly four-fifths of employment. So, if SME financing suffers, the economy and employment in a country like ours suffers greatly.

**Chart 2.12. Non-bank financing**

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-bank financing stock (thousands of mm.)</th>
<th>Non-bank financing volume (as GDP %)</th>
<th>Non-bank financing market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>121</td>
<td>11.4%</td>
<td>17.2%</td>
</tr>
<tr>
<td>2020</td>
<td>300</td>
<td>22.4%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

Source: Arcano

The emergence of Basel III was a painful process for many SMEs as not only bank lending contracted, but this contraction was massively addressed to the SME universe (and paradoxically Basel III penalized the exposure to SMEs), which resulted in a huge loss of production and employment. Finally, the huge bank concentration that has occurred in Spain in recent years has resulted in a tight supply market, which increases the concentration of risk and can compromise future credit.

**Chart 2.13. % of employment generated by SMEs (*)**

Source: European Commission “SBA Fact Sheet 2013”

(*) By SME we refer to companies with revenues lower than €50 mm.
To underpin the change in the trend in the Spanish economy it is essential to weave a network of wide and stable funding for SMEs. We believe this trend change is being achieved, and financing of SMEs will improve.

On the one hand, the credit demand, which has been negative in recent years in a context in which SMEs were looking eminently to repair their balance sheets, has changed during 2014. In fact, the Bank of Spain stated in the second quarter of 2014 that demand for credit by Spanish companies in general had not only stopped falling, but was increasing.

On the other hand, the supply of credit has increased. Observe the different opening lines.

- **Bank financing of SMEs** materialized as new credit flow of less than a million euros, turned positive in December 2013, and has accelerated during 2014. All evidence seems to indicate that this trend is still getting stronger (and the ICO, which has 10% of this market, publicly stated that its SME lending in the first half of 2014 had turned to be the most intense semester in the credit history of that forty year old public agency.). The improvement in solvency and liquidity of banks, and the introduction of extraordinary measures carried out by the ECB especially TLTRO, will shore up this trend.

**Chart 2.14. Market share of loans to SMEs (2013)**

Source: Finae Partners

**Chart 2.15. New credits (up to €1 mm.) to non-financial**

Source: Bank of Spain

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34 In fact, doubling the credit granted during the same period the previous year.
The Spanish government launched in late 2013 a bond market for medium-sized enterprises, the MARF, in which institutional investors (particularly insurance agencies) could channel a tiny portion of their savings to industrial companies with rating and with the exercise of transparency, necessary for the issuance of bonds. The need of the market lies in the fact that accessing to the traditional bond market (whether in its variant of investment grade, or a variant of high-performance, high yield), the minimum issuance volumes (about €200mm.) means that only very large companies (with over €80mm. EBITDA) could access this way of financing. The MARF allows medium enterprises (EBITDA from €15mm. or more) accessing this funding source that did not exist before. Although it is likely that the trajectory of the market continues to expand successfully (in less than nine months since its inception, eight companies have obtained funding of €341mm.), its major limitation is that it will not allow small businesses access thereto, since the minimum liquidity required in an issue (about €20mm.) prevents companies with very small EBITDA from issuing. The key question therefore is how to open the capital market to these companies? The answer is covered bonds and securitizations.

- **Securitized products and covered bonds** can break into in the financing of SMEs very quickly. A securitization is the result of yielding to an entity (special purpose vehicle) the income from an asset, and financing such entity by issuing a series of bonds entitled to such flows. The bonds can be all of the same kind (unitranche) or of different types of risks (multi-tranche). Securitizations have been very important to fund all kinds of assets, including car rentals, mortgages or student loans. A covered bond is a bond issued by a bank and supported by an asset. In Spain they have been used to issue supported mortgage bonds (in fact the current legislation does not allow other underlying), so that the acquirer of such title enjoys two guarantees, assets underlying the bond, and in case of default, the action against the bank that has to honor your payment (in fact there has never been a default of a Spanish covered bond). In a securitization there is only one resource on the underlying asset, not against the assignor, hence, in the case of a covered bond the liability is included in the balance sheet of a bank and in the case of a securitization generally not. The emerging trend is twofold. On the one hand, securitization markets will reopen, action supported by the recent measures announced by the ECB. Such vehicles will maintain atomized and diversified risks that have a common component of SMEs and will issue bonds that will become creditors of the cash flows inherent to such risks. On the other hand, many European banks will proceed to mutate their SME loans to covered bonds, to give the most senior part (the hardest to break) to the ECB. Such movement may result that with a credit of €1,000 given to SMEs, it can consume less capital in form of certificate or securitization, which would generate a huge incentive for banks to lend more. Spain will support at the end of 2014 a new financial law, which will help securitizations, so that the country will have one of the most advanced laws in this key source of funding.

However, it is known that despite the overstatements, and despite the enormous effort of deleveraging, the Spanish company in general has too much debt and a lack of sufficient funds, as noted in the chart below.

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35 Arcano proceeded as one of the ideologues of the market and advised the Ministry of Finance in its design.
36 Ratings over BBB-.
37 Ratings under BB+. 
From the high level of debt, it follows that measures to reopen the funding to SMEs remain lame if measures are not implemented to strengthen equity. In this segment, efforts have been made, but little has become a reality for the moment. So on one the hand, the FondICO\textsuperscript{38} program allows growth segment venture capital to obtain funding to be used in turn to increase the equity of companies targeted, which have good organic growth rates; in turn the program has financed the venture capital segment, or managers who invest in the form of equity in companies with a specific know-how, especially technology (the tragedy of the Spanish innovation has had much to do with the lack of relevant Spanish venture capital industry). On the other hand, Spanish banks, with consultants and other investment banks have raised solutions for solvent companies with excessive debt leverage to mutate the debt into equity and stabilize the company. Finally, the MAB was created in 2009, equivalent to the British AIM, to facilitate access to financing of small businesses through own funds. For different reasons, its development has been disappointing so far.

**Conclusion: impact of the arrival of liquidity to the Spanish economy**

We are moving towards a world in which funding will be closely linked to the size of the company that seeks financing. The challenge to be faced by Spain is the conversion of many micro businesses into larger companies so they have access to credit (which becomes cheaper) and incidentally achieve a higher level of productivity (closely related to the size of the firm) and therefore larger export power. Progress achieved in this direction has been disappointing so far.

As discussed in the introduction of this chapter, the arrival of liquidity to the economy has been key to generate the growth that few analysts expected. Liquidity began to flow in early 2014, prompting purchasing managers index (PMI)\textsuperscript{39} to begin to rise above 50, ensuring an acceleration of future GDP, to the point that up to the date of the publication of this report, the PMI predicts that Spain’s economy will grow more than the major economies of the euro zone in 2015.

\textsuperscript{38} Arcano was adviser of ICO in the program.

\textsuperscript{39} The purchasing managers index (PMI) are monthly surveys conducted on hundreds of companies exhibiting trends observed in economic activity in different areas (employment, production, export, investments ... ), so that above 50 signals show acceleration of the economy and deceleration below 50. It is one of the statistics with greatest power and quality to explain the behavior of future GDP.
This trend was observed in the leading activity indicators.

Production and employment have responded to the stimulus that liquidity has generated in faith.

In this chapter we have presented sufficient arguments to understand that this arrival is sustainable over time, it has quality (extension of durations) and is diversified. Liquidity allows reactivating demand (GDP), with the effect that the Spanish economy is today the fastest growing economy of the four big economies in the euro zone as we explain in the next chapter.

40 The compound PMI is the weighted average between manufacturing PMI and public sector PMI.
41 The Synthetic Activity Indicator is built on different levels of economic activity, in order to forecast future increases or decreases.
However, while the recovery of credit is reviving the economy, it is important to point out that the flow of new credit (about € 30,000 m per month) is much lower than the flows that the economy recorded in the past (in 2004 the monthly flow was € 80,000 m, and in 2007 it amounted to € 110,000 mm). The good news is that we have created a model that is not addicted to excessive credit recovery, which will make the recovery sustainable over time.

The concern and risk, as could not be otherwise, if we can live as a society with a healthy dose of credit (a relation between credit and stable GDP) or we go back to depending massively on debt again, like during the period 2000-2007, we fall into complacency when analyzing risk, and we generate the foundations of a future banking crisis, the famous financial instability hypothesis of Hyman Minsky (which says that many years of growth, lead to complacency, and this to not measuring the risk when granting credit, and when the cycle changes it generates the opposite effect, causing a financial and economic crisis). Hopefully the terrible crisis lived these years and from which we have recovered with the commendable efforts of the whole Spanish population, helps us not to fall again into past mistakes.
3. Demand acceleration

“The day is not far off when economic problems will take the back seat, where it belongs, and the arena of heart and the head will be occupied or reoccupied by our real problems, the problems of life and of human relations, of creation and behavior and religion”.

John Maynard Keynes

The recovery of demand will accelerate

The Spanish economy grew 0.5% QoQ in the third quarter, best growth data of the main European economies. The Spanish economy will probably end the year growing 1.3% compared to 0.7% in the Eurozone, which means that the Iberian country’s growth is almost twice as much. We can only marvel at how quickly an economy can surprise the market.

All in all, the Spanish economic recovery exposed in the previous reports in Autumn 2012 (“it is the time to invest in Spain”) and Autumn 2013 (“the economy is just about to turn around spurred by consumption and financing) has followed the classic pattern: exports initiated the recovery, impacted by salary deflation and competitiveness increase; then nonresidential investments improved during the second part of 2013 and accelerated in 2014. These investments impacted positively on employment and consumption (the starting point of which were rock-bottom). Even though this is a classic pattern, the complexity of an economic crisis linked to a massive financial crisis, and to the absence of an own currency made the outlook of the Spanish economy very difficult to predict.

In any case its positive development has been much quicker and intense than predicted by the consensus. For example, 80% of the unemployment reduction of the Eurozone over the last year occurred in Spain. As the following chart shows, out of the 480,000 people unemployment drop in the Eurozone, Spain contributed with 384,000.

Chart 3.1. Unemployment evolution in the Eurozone

<table>
<thead>
<tr>
<th>Germany</th>
<th>Euro Zone</th>
<th>Spain</th>
<th>France</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change vs maximum (thousands)</td>
<td>-1165</td>
<td>-487</td>
<td>-446</td>
<td>-76</td>
</tr>
<tr>
<td>YoY Change (thousands)</td>
<td>-85</td>
<td>-480</td>
<td>-384</td>
<td>-52</td>
</tr>
</tbody>
</table>

Source: Eurostat

Let us now move on to analyze the current situation and outlook of each of the demand variables of the GDP: export, investment, consumption and public spending.

Exports

The previous reports analyzed this variable: the export sector has been the main character of the recovery of the country, increasing from only 10% of the GDP to 35%, the second largest level among western economies. Exports have maintained this level in the first half of 2014, but have not grown at 4% as predicted by most analysts (including the author), but at 2%, due to a meager growth through June. Although July and August data is more volatile, the growth trend between January and August has been of 1.5%. Even though such figure is below estimates, it contrasts positively with exports of the main commercial partners of Spain, which means that Spain is still gaining market share.42

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42 Nominal and real data differ, especially in the context of a volatile currency. With regard to GDP, the real data is more important, and it is the one analyzed in this report.
### Chart 3.2. Spanish goods and services exportations, activity and geography breakdown.

- **Semi-manufactures**: 18.6%
- **Capital goods**: 13.2%
- **Food**: 17.0%
- **Automobile Sector**: 14.1%
- **Manufactured consumer**: 9.8%
- **Energy products**: 9.8%
- **Other goods**: 4.4%
- **Raw materials**: 4.7%
- **Tourism**: 1.8%
- **Other Services**: 18.3%

**Source:** ICEX and Bank of Spain

Reasons behind the deceleration of the first half: i) strength of the euro through May and ii) weakening of world trade in the first half, due to several factors:

- a) Temporary contraction of the US economy during the first half of the year.
- b) Weakening of the Eurozone.
- c) Weakening of emerging markets.

All in all, weakening in the Eurozone seems to have reached a turning point:

Our opinion is that Spain will continue to have an extremely competitive export sector, supported by:

- a) Lower labor costs than the ones from the main trade counterparties (€21/hour worked vs. €28 in the Eurozone).

### Chart 3.3. Labor cost (€) / hour worked

- **France**: 37%
- **Germany**: 36%
- **Portugal**: 10%
- **Italy**: 10%
- **United Kingdom**: 08%
- **Asia**: 07%
- **Latin America**: 07%
- **Remaining**: 06%

**Source:** OECD

- b) Strong productivity per hour increase since the beginning of the crisis, vs. stagnation of competitors, reducing productivity per hour spread between Spain and the Eurozone to 5%.
c) As a consequence of a) and b), labor unit costs (that take into account salary and productivity variations) remain at a very competitive level to gain exports market share and attract direct foreign investment.

d) This situation will remain over time, as unit labor costs continue to be lower than those of trade partners (thanks to this trend Spanish exporters have managed to reduce the price of exports by 1% in 2014), a trend that will not change in the future.

e) Tourism growth is structural and not cyclical: Spanish tourism has defeated predictions that suggested that its growth was cyclical due to the Arab Spring, reaching a historical high for the second consecutive year (it will end 2014 with 64 million tourists, 6% more than in 2013, and it will earn 7% more than last year). Spain is now the second leader in tourism, earning €20 billion more than what the country spends in energy (Spain extracts very little oil but it is very lucrative).
f) Relevance of non-touristic services exports (like engineering or computing): it has become an important pillar of the Spanish economy due to small price elasticity.\(^{44}\)

g) Increases in trade finance will have a positive impact on Spanish exports that also benefit from having very good infrastructures.

Chart 3.6. Services exportations (GDP %)

Spain has managed to develop a strong export model that must be consolidated, but as export mass increases, it is harder to maintain high exports growth. Cheapening social insurances balanced with a higher VAT is currently under study, which would boost the export model generating a "competitive devaluation" focusing production on exports, but the Ministry of Finance has not taken a decision yet. In any case, the World Trade Organization predicts that world trade will double its growth in 2015, from 2.4% to 5%. This trend will benefit exporters like Spain.

**Investments**

Improvements in financing and in the export sector have had a positive impact on investments, which had a very low starting point (17% of the GDP vs. a peak of 30%, partly explained by the real estate boom and the historical average of 23%).

\(^{44}\) Elasticity measures changes in demand of a good or service due to changes in price. Tobacco for example is very inelastic. This concept is applied to exports: the less elastic an export is, the higher its quality as they are more difficult to copy. The services sector is very inelastic and therefore the importance of this sector for the Spanish economy.
Improvements in financing have made investments reach a turning point. The following chart shows the strong relationship between investments and credit access, especially for SMEs.

Investments are formed by two big components: construction (residential and non-residential) and capital goods:

- Investments in construction have fallen with intensity since 2007, impacting GDP and generating unemployment. As explained before, we are at the beginning of a slow recovery, in fact construction investments decrease by 3.4% YoY on the second quarter of this year (8.6% on the previous quarter) but increased YoY, suggesting that the worst part is over, and with such a small starting point the trend can only be upwards, having a positive impact on GDP (around 3-4%) and on employment,

- Investments in capital goods have grown at a good pace in the second quarter (8.6% YoY) as companies have started to reinvest in productive capital after five years restructuring their balance sheet.

Foreign investments (around 2% of GDP) are growing by 9% in 2014. 80% of such investments focus on new productive capacity.
Altogether, investments have been an important drainage of GDP over the last years, they are now contributing to the GDP with increases of 1.5% YoY on the third quarter of 2014. Once companies perceive that consumption is recovering (explained in the next chapter), and once that sources of finance are more accessible, companies’ propensity to invest will increase. This is very relevant as investments are associated to job creation, which we will now explain.

**Employment and consumption**

In *The Case for Spain I and II*, we explained why it did not make sense that the sale of Spanish vehicles had reached a similar level to the one of 1975, when the population was only 35 million (currently 46 million). We showed that when employment improved, consumer confidence would increase and it would turn into a higher sale of vehicles. This trend started in 2013 and has expanded in 2014. Spain is the European country (only considering the most important ones) with highest growth in vehicle sales in 2014.

This explains a process suffered by domestic demand: employment improves, consumer confidence rises and consumption is normalized, boosting economic growth.

Consumption increased by 0.4% QoQ during the first quarter of 2014, becoming the main driver of the economy, this trend continued in the following two quarter. Let us now observe the different steps of this process.

In *The Case for Spain I* we explained that consumption could be related not to unemployment levels but to the volatility of unemployment. In that case, a consumer could postpone the purchase of a car if his neighbor has lost his job. After that, if no other neighbor loses his job (unemployment stabilizes or its volatility decreases) and even if the first neighbor has not found a new job, the potential purchaser of a car increases its consumer confidence (previous step to purchasing the car). This trend started in spring 2013 (once unemployment stops increasing) and by the way, vehicle sales started to increase at that moment.

Second: Job creation (2014): Okun’s Law

In our second report (Autumn 2013) we suggested that unemployment was about to decrease. To defend this thesis we presented the famous Okun’s Law that measures the relationship between economic growth and job creation. Countries with rigid labor markets need a higher economic growth to create jobs and vice versa. Spain maintained for a long time an extremely rigid labor market, inspired in Mussolini’s Italy (that transformed into the labor regime of Franco and later changed, but not substantially, in the Statute of Workers Rights of 1981, active in practice until 2012). Thus, Spain required a 2% GDP growth to create jobs. In our report we questioned the impact that the new labor regime (much more flexible) could have on Okun’s Law, and therefore the growth threshold at which the Spanish economy could create
employment. That is exactly what has happened in 2014 (the year will probably end with 320,000 new jobs).\textsuperscript{45}

\textbf{Chart 3.12. Unemployed population level (thousands)}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart12.png}
\caption{Unemployed population level (thousands)}
\end{figure}

\textit{Source: INE (Employed Population Survey)}

An academic research of the National Bureau of Economic Research\textsuperscript{46} written in 2013 suggested that Spain could be one of the European economies that would benefit most from Okun’s Law, with a coefficient (that measures by how much unemployment decreases per 1% of GDP growth, so the higher the coefficient in negative terms, the better) of -0.85, being this the highest ratio of the 19 economies studied. The fact that the Spanish coefficient is higher than that of economies with more flexible labor regimes like the UK or the US is probably due to the temporality of the labor market, which although is negative due to certain factors explained later, it eases employment in times of job expansion.

\textbf{Chart 3.13. Okun’s coefficient}

\begin{table}[h]
\centering
\begin{tabular}{l|l|l|l|l|l}
\hline
Country & Austria & UK & Ireland & Belgium & \hline
Italy & -0.254 & France & -0.367 & USA & -0.454 & Holland & -0.511 \hline
Portugal & -0.268 & Germany & -0.367 & Finland & -0.504 & Spain & -0.852 \hline
\end{tabular}
\caption{Okun’s coefficient}
\end{table}

\textit{Source: Ball, L.M., Leigh D. and Loungani, P.}

Evolution of employment and unemployment in Spain will be positive, but will present different characteristics from the past. Reduction of unemployment will be higher than job creation due to emigration of active population. 90% of such emigration will be formed by immigrants that came to Spain between 2000 and 2008 (this immigration explains the enormous increase of active population in Spain during those years and that is now a large part of the denominator of unemployment rate). Total active population is approximately 23 million (as stated, it has not decreased with the crisis but instead it has increased by 400,000, vs. a level of 17 million employed). This emigration factor contributes to reducing unemployment but it also generates concern in a country exposed to a severe demographic crisis.

\textsuperscript{45} Nevertheless, as exposed later, temporality of jobs continue to be very big. All in all, permanent employment is scarce but has been growing for a year.

On the other hand, job creation is focused on minijobs, between 20 and 29 hours worked per week, limiting disposable income (all in all, in Spain only 16% are minijobs compared to the 22% average of the Eurozone, which shows an upside potential of 1.2 million jobs). Moreover, until more permanent jobs are not created it will be difficult to promote investment in the labor force, which will limit future productivities. Other interesting trends are the improvement of self-employment (tendency to create new companies, explained in our first report) and the decrease of absenteeism (number of hours that workers are absent from work for health reasons was at 5.5/month in 2008, and now only at 3.7 which means that the Spanish are suddenly 33% more healthy since the start of the crisis).

**Conclusion: reduction of future unemployment in Spain.**

As a conclusion, taking into account the Okun coefficient calculated in the academic article of the National Bureau of Economic Research (-0.85) and taking into account that in 2014 there are 274,000 new jobs, growing at a rate of 1.3%, we can assume that in 2015, with an expected growth rate of at least 2% there will be at least 350,000 new jobs. Additionally, taking into account the net migration of 2013 (net emigration of 103,000k), the active population could be reduced by another 100,000 people. Therefore, the total unemployment reduction for the year 2015, will be of, at least, 450,000 people.

The construction sector could recover in the next years its level prior to the crisis, and therefore recover 500,000 jobs (in any case a small figure compared to the 1.8 million lost during the crisis). The services sector which also lost 1.8 million jobs could recover 0.3 million in the next two years and the industrial sector could recover 0.2 million. The incognita will be the eventual employment translation from black economy (more than 20% of the GDP) to official figures.

Unemployment data will continue to be extremely high, but the future trend can only increase.

**Chart 3.14. Vacancies in the Spanish labor market**

![Chart](chart3_14.png)

Source: INEM (SEPE)

**Third: consumption is reactivated**

In 2014, two trends that we adverted in this report have been present: i) growth in 2014 has been much higher than expected by many analysts, especially due to increases in financing and consumption; and ii) the growth threshold at which employment has been created has surprised many analysts, in fact the Spanish economy has been able to create 320,000 jobs by only growing 1.2% in seasonally adjusted terms.
These changes in the labor market have had several consequences: consumer confidence that had slightly improved at the end of 2013 grew with intensity in 2014, reaching pre-crisis levels.

Retail sales have positively surprised since spring (as mentioned, consumption between November 2012 and March 2013 was artificially low due to, in our opinion, economic factors, so the starting point was extremely low) and as a consequence consumption grew by 2.4% in the GDP of the second quarter (real inter-annual growth, inflation net) and by 2% in the third quarter, reflecting six consecutive quarters of growth. The sale of vehicles kept recovering (supported by incentives) with increases close to 16% YoY, and only the UK sold more vehicles.

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47 Consumption grew more than households' income, reducing savings rate, which is not sustainable over time.
48 Disclaimer: the author replaced his 11-year car for a new one in Spring 2014.
The key to this was the low starting point explained before (as mentioned, the same number of cars were sold in Spain in 2012 than in 1975, when the population was 12 million less). In the end, cars must be replaced sooner or later. On the other hand, it is interesting to highlight the turning point of the tourism sector in the country. It used to account for 6% of the GDP and in 2012 it only accounted for 4%. There are clear signs of a recovery if the touristic sector, pushing it slowly up to 6%.

**Public Spending**

**Fiscal adjustment: 2009-2013**

It is true that GDP figures have disappointed during the crisis (decrease of 7%), but this decline could have been much larger (domestic demand has fallen by almost 20%), in a context of intense credit contraction (falling by around 40% of the GDP) and of enormous employment adjustments (a rigid labor regime leads production adjustments to reduce employment and not salaries, resulting in massive layoffs, that could have been avoided with a more flexible labor regime). Apart from these factors, it is also important to understand the enormous burden that contractive fiscal policies have been to the GDP since 2010.

As explained in our previous reports, the fiscal surplus of the Spanish public administration before the crisis (2% of the GDP) was only an illusion. The reason is that part of the revenues were irregular, associated to the real estate boom. The different public entities decided to invest those non-recurrent revenues in recurrent spending, generating a fiscal bomb that exploded in 2009, generating a deficit of 10% of the GDP. The necessity to reach sustainability in the public balance sheet resulted in contractive fiscal policies (tax increases and cuts in public spending), which has negatively impacted the GDP. The fiscal adjustment can be measured by gross effort (total spending cuts and tax increases) or net effort (net impact of those measures in the GDP in terms of the multipliers assumed to impact the fiscal contraction as a % of the GDP).

The fiscal deficit can be divided into cyclical (generated by seasonal factors, like a massive unemployment increase or a punctual increase in the risk premium), or structural (difference between revenues and spending isolating the economic cycle). Moreover, it is usually analyzed whether the fiscal deficit is primary (previous to debt interest payments). The fiscal situation in Spain was so dramatic that even after big efforts; the country has not reached a primary balance in 2014 (Italy or Greece have already achieved balance) and it will probably not be reached until 2016. There are doubts on whether how much of the effort carried out is economic or structural (for example, the retained extra pay to public civil servants in 2012 will be paid in 2015, thus becoming an economic measure). The obvious consequence of such fiscal debacle is the enormous public indebtedness, analyzed in the last chapter of the report.
Altogether, the gross fiscal effort carried out between 2009 and 2013 has been higher than 12% of the GDP (from which 8% of the GDP was carried out between 2012 and 2013), but the net impact has only been 4.3%, as the 8% has caused a contraction in the GDP (decrease of 2.8% in two years) reducing the final impact of these measures.

Fiscal relaxation

Several factors that have been developed during 2014 suggest a change in fiscal policies: the adjustment will be more gradual than that explained to the market and to the Eurozone. GDP data of the second quarter of 2014 show that public spending did not fall (as everyone expected), but increased by 0.1% of the GDP QoQ and 1.1% YoY, surprising all analysts (including the author). We believe that such surprise will continue in the future.

There are several reasons that explain the change in fiscal policies (a change that we do not judge as positive or negative, we simply show it):

a) Risk premium has decreased, reducing interest debt payments, and therefore discipline imposed by the market to the public sector.

b) The IMF and the European Commission have changed their rhetoric in 2013 and 2014, especially about Europe. They have changed from recommending fiscal balance at all costs, to recommending the graduation of such balance to avoid a scenario of new recession and eventual deflation.

c) Spain will hold important elections in 2015 (local and regional in spring, and presidential in autumn), and the European elections of 2014 showed great disaffection for the governments, in terms of fiscal adjustment.

d) In September 2014, Spain proceeded to increment the size of its GDP by accounting certain activities (like R&D or prostitution), expanding the size of the denominator (revision of the GDP from 1.022 trillion euros to 1.045 trillion euros), and therefore allows to play with the numerator (euros spent over earned are equal, but as a % of GDP they are reduced…the magic of public accounting)

e) The improvement in the labor market has started to positively impact the contributions to social security, a trend that will continue in the following years as 350,000 jobs will be created each year, and the low inflation limits pension disbursements

Between 2015 and 2016 Spain will need to carry a net fiscal effort of 2.7% of the GDP but probably because of the factors previously explained, the gross fiscal effort will be smaller. Altogether, after enormous fiscal contractions (again, more than 8% of the GDP between 2012 and 2013), future adjustments will drain less the GDP, which will allow for a larger economic growth.

The eventual increase in the real estate market caused by the tax collection impact will be very relevant, due to the high contribution capacity of such sector (very high taxes associated to real estate transactions), which could alleviate much of the fiscal effort, especially at a regional level. In any case, it is important to mention that the importance of the public sector in the Spanish economy is smaller than in other advanced economies, which should turn into more economic growth. The fiscal consolidation will enlarge this advantage.
All in all, the evident risk is to hide structural spending with economic revenues: the public administrations seem to have relied on the size of the GDP as the principal element of fiscal adjustment. The good news is that Spain will stabilize its public accounts in 2017, with spending and revenues at 40% of the GDP, 6% below other countries of the European Union, which will allow the private sector to push the economy with more dynamism than in other economies like the French or the Italian.

### Conclusion: the recovery of demand will accelerate

The most important thesis of this report is that domestic demand is supported by a solid base, and that economic growth of the next years will accelerate without the need to appeal to factors of financial instability (like an increase in credit as a % of GDP in exorbitant proportions).

In order to forecast the evolution of the Spanish economy, we believe that it is very important to use the confidence levels of the purchase managers index (PMI) that show economic acceleration if the index is over 50 and contraction if it is under 50. In general terms, the PMIs give a much better prediction of the evolution of an economy than forecasts made by economists (as perceived in the next chart). For example, the Eurozone had levels close to 51 in October in the manufacturing PMI and 52 in the services PMI. Spain had levels of 53 and 56 respectively, showing the strength of the future Spanish economy, detached of the weakness associated to France and Italy.
On the other hand, data published over the Summer, even though worse than the second quarter data (in a context of deceleration of the Eurozone), have been better than that of other countries of the Eurozone: industrial production of 2014 increases between 1.5% and 2%, exports increase almost 1.5% vs. -0.5% in the Eurozone, tourism continues to break records (7% growth) and consumption data have been considerably positive.

Spain could maintain growth levels of 0.5% in the upcoming quarters, pushing the 2015 growth more than 2%. Government budget predicts a 2% growth based on conservative hypothesis of EUR/USD exchange rate of 1.37 (currently at 1.26) and Brent at 103 (currently at levels of 80). Finally, tax cuts that will be applied since 2015 might add 0.5% to the GDP.

Our opinion is that in the mid-term, the foundations to maintain solid economic growth rates are settled:

a) Job creation due to economic growth, which will increase consumption over 2% in real terms.

b) Continued improvement in financing.

c) Sustainability in the export model of goods and services (that should keep the growth rate of exports at least at import levels).

d) Recovery of investments (which will grow between 4% and 6% in the upcoming years) with emphasis on residential investments impacting on employment and public revenues.

e) Lower fiscal contraction.

These factors support the GDP growing between 2 and 2.5% in the following three years, placing Spain at the forefront of economic growth in the Eurozone. Such growth is well diversified between domestic and external demand, something that does not occur in other European economies. Nevertheless, there are several risks analyzed in the following chapter. All in all, if the relationship between risk and return to invest in Spain in 2006 was clearly adverse, in 2014 the relationship is very favorable for Spain.


49 The Spanish industry accounted for one third of the GDP in 1975, reaching a historical low of 12% in the crisis and it currently accounts for 14%. The target is to reach 20% in the upcoming years.

50 It depends on the fiscal multiplier, but in a context of economic improvement, the multiplier usually improves. Thus, a bigger proportion of the lower taxes will be translated into consumption and not savings.
4. Ten risks of the Spanish economy

“Everyone thinks of changing the world, but no one thinks of changing himself.”

Leo Tolstoy

First: unemployment

The biggest wound caused by the crisis in Spain is undoubtedly the huge unemployment. With official rates close to 25%, and much higher in segments of the population such as the young or immigrants, or in certain geographic areas, unemployment impacts negatively in the future growth, cohesion and happiness of a nation. While it is true that Spain has special characteristics that have mitigated the social damage generated by unemployment, especially the black economy, which itself absorbs some unemployment, and social protection provided by family ties, it is difficult to argue that the crisis is over while such a large amount of unemployment remains.  

The relevant data are: destruction of 3.5 million jobs between 2008 and 2013, of which 1.5 million were in the construction sector, 1 million in industry, 0.5 million self-employed and the rest (0.5) public officers. There are 17.3 million Spanish workers (the lowest figure was 16.3 million in 2003), although the figure could be higher if the black economy was taken under consideration.

Chart 4.1. Employment data (third quarter 2014)

<table>
<thead>
<tr>
<th>Employment data 2014</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
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<tr>
<td>Active Population</td>
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<tr>
<td>Inactive Population</td>
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<tr>
<td>Employed Population</td>
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<tr>
<td>Public Sector Employment</td>
</tr>
<tr>
<td>Privat Sector Employment</td>
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<tr>
<td>Unemployment</td>
</tr>
</tbody>
</table>

Source: INE (Employed Population Survey)

It is important to objectify all the data:

First, as we discussed above, unemployment is affected by the massive migration flow received by Spain between 2000 and 2008, the flow increased by five million people the workforce at that period, of which more than half (3 million) were immigrants, many of them dedicated to the construction industry; reverse migration flow since the crisis began has been much lower, which partly explains the remaining stock of unemployment (the denominator is unusually high).  

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51 Although concerns about unemployment have started to decline in 2014 for the first time since 2009, it remains by far as the biggest concern of the Spanish.

52 Data from the Employed Population Survey (used internationally) do not match with data from the Ministry of Employment and Social Security that only take into account the official economy and reflect 16.6 million of employed people and 4.4 million of unemployed people.
Second: part of the percentage of unemployment shows income levels associated with the black economy;

Third: the Spanish natural unemployment could reach high levels, due to the impact of the shock experienced by the real estate /construction sector (which reduced employment from the current 2.7 million to one million), generating a structural unemployment population (1.7 million, out of which 1.3 million are low-skilled) with no easy relocation (only 0.5-0.7 million of these jobs will be recovered, leaving at least one million people as part of structural unemployment), and also due to the limited geographical mobility (caused in part by the high level of home ownership). Active policies that have tried to help the long-term unemployed people find a job have not succeeded. Even though certain employees are transferred to other sectors, the lower relative productivity of the construction sectors would prevent all unemployment of the sector to be recyclable, which relentlessly leads to a net migration flow that would coexist with a very high structural unemployment of the sector.

Chart 4.3. Employed population / population with age to work\(^\text{23}\) ratio

Although Spain has an employment percentage that is clearly lower than that of other economies, the labor force in contrast represents a higher percentage than in other western

\(^\text{23}\)Total population refers to the total amount of working age people (15-64 years of age).
economies. This can be an opportunity if a reduction of unemployment is achieved, resulting in an improved rate of economic growth.

Chart 4.4. Participation rate

As we will see below, huge unemployment, and especially long-term unemployment, which represents almost half of the total, is a national failure that apart from the enormous suffering caused, limits the possibility of future growth. With a total volume of unemployment of about 5.5 million (of which 2.1 million are long-term unemployed), at a rate of 0.4 million per year of reduction the adjustment of this huge risk will be too slow for the damage involved, especially when the improvement in productivity achieved in Spain (for example the export sector, thriving but less intense in employment than the construction sector) involves the creation of future job vacancies, it will be necessarily less intense than in the past.

Chart 4.5. Unemployment level, according to studies (3Q 2014)

Finally, although the labor system has been simplified, there is still a huge variety of contracts, which will not help to end the duality in the work system: those protected by fixed contracts and those unemployed or employed by precarious contracts. The new French Minister of Finance said "originally the regulation was intended to protect the weaker; however over the time, the labor regulation has just demonstrated the opposite effect: it has protected in excess the permanent worker at the expense of the unemployed and unprotected the precarious workers, who are weakest, thus threatening the final philosophy of the regulation". If you want to protect the weaker (paradoxically combines fewer votes) you must simplify the labor regulation.

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54 The participation rate measures the active portion of the population of an economy. It includes people who are employed or actively seeking for a job, in contrast with the population aged between 15 and 64.

Chart 4.6. Employed and unemployed population (millions)

Second: demography

Although Spain presented for a long time a relative youth demographic balance, the truth is that for many years now the fertility rate in Spain per woman (1.26) is at the lowest levels of Western economies, with the aggravating circumstance (for actuarial purposes) that the Spanish life expectancy average is six years higher than that of other Europeans, which has gradually led to an aging population and an unsustainable demographic structure with the current pension system. Thus, Spain is facing a relationship between worker and pensioner 2 to 1, compared to Western economies’ average which is sustainable at 3 to 1.

Although in spring 2014 Spain approved a pensions reform, that in practice means the minimum increase of 0.25% per year, the percentage (increasing to 2% per year) and the average pension (increasing in 1.8% according to retired people who grow at a higher rate than those who die) increase at a slightly lower rate than 4% per year between the two factors, so that the percentage of GDP spent on pensions continues rising (amounting to 11% of GDP compared to 8% before the crisis, generating a genuine deficit, without taking into account transfers, about 3% of annual GDP). In the medium term (end of the decade) a factor of “sustainability” may even set negative growth, but in the context of an inverted population pyramid, with a net migration and the 8.3 million of votes that represent the pensioners, it is difficult not to talk about alarmist signals in the medium-term.

Chart 4.7. Population growth until 2022

Source: INE (Employed Population Survey)
**Third: fiscal sustainability**

France has not balanced the public budget since the 1970s. The political initiative of governments to eliminate fiscal irresponsibility has been very limited. The Spanish fiscal problem is more serious than the French, but for better or worse, being in the spotlight of markets has led to significant fiscal reforms brought by the different Spanish governments, that should at least improve the very worrying public taxation situation. Despite the efforts made since 2010, the fatigue between different political parties, voters and different levels of public administration, to achieve fiscal sustainability is evident. Paradoxically, the fact that it has not culminated will prolong fiscal imbalances that will result in a debt that will be paid by those who do not have capacity to choose: current and future children. In any case, the shift in fiscal consolidation since 2014 is clear, as stated above in the section on demand. Spain will not balance its primary fiscal deficit until 2016, it will not balance public accounts (pay in more than what is spent, like any family or company) until the end of the decade (if successful), and it will not perform public debt targets (60% of GDP) for the year that it has committed to (2020).

Fiscal relaxation is so obvious that local governments, that incurred in higher deficit levels, for past greater fiscal irresponsibility, were paradoxically favored with targets of "asymmetric" deficit since 2013 (the worst non-compliant had more years to reduce it) and in 2014 a relaxation was announced of the requirements for the Communities that were financially rescued had to meet, something worrying when you consider that the Communities have a debt of 22% of GDP but 180% of its tax revenues (huge imbalance). The current public spending stopped decreasing from 2014. The government set up a commission of experts in public finance ("Lagares Commission") to carry out a thorough review of the tax structure of the State, in order to achieve lower volatility in government revenues, more efficiency in tax collection (Spain now has one of the highest tax rates of the Western economies and yet, it collects less than other countries, showing the inefficiency of the system) and higher economic growth. Although the study was released in spring 2014, the Ministry of Finance barely implemented the recommended measures.

**Fourth: indebtedness and long-term growth**

When the crisis began, Spain had a huge private debt and a low public debt. Total debt was slightly less than three times GDP. After six years of crisis, private debt (households and businesses) has decreased and public debt has increased, but the total debt is still at the same level (293% of GDP). On the other hand, this situation similar to that of other Western countries (in the emerging countries the opposite has happened, private debt rising, public debt going down, a trend that will reverse imminently). It questions the ability of the economic system to reduce enormous leverage over the medium-term, especially if you consider that a huge proportion of such debt is at variable rates. There is no perspective of increasing rates in the short-term in the euro zone, but when those increases arrive, the heavily indebted economies will suffer, and Spain is at the back.

The Spanish debt situation has several very obvious vulnerabilities:

**The public debt problem**

Public debt has grown from levels close to 35% of GDP before stabilizing in 2015 at expected levels of about 102% of GDP, due to the fiscal crisis. Since then, although the deficit continues to grow (revenue minus public spending) the expected nominal GDP in nominal terms will grow faster, which will stabilize the debt which stands on the other side at the highest levels in the recent history of Spain (in 1975 public debt represented less than 10% of GDP). Paradoxically, this huge debt situation coexists with the lowest financial cost of public history; it is even lower than that of the USA ... (Which does not make much sense in our opinion). Fiscal stability included in the Spanish Constitution intends to achieve objectives of public debt reflected by the European Commission (60% of GDP) for 2020. As we have seen, is an unenforceable target (GDP would have to grow 10% in real terms...), which calls into question the rules of unenforceable validity. As we will discuss, high public indebtedness generates, other than what Thomas Jefferson called "a moral scam from one generation to the next", vulnerability in case of lack of liquidity (such as those experienced between 2009 and 2012) and a lower level of potential growth in the long term.

Chart 4.8. Treasury debt distribution (T.D.) and debt issued by Autonomous Communities (Billion €)

Source: Public Treasury and IMF

The private debt problem

Both families and companies have proceeded to improve their balance sheets since 2008 and 2009 so that until 2013 they were generating a net saving exceeding 7% of annual GDP. The families have reduced their debt levels to near 80% of GDP (in line with other Western economies).

Chart 4.9. Composition of household debt (GDP %)

Source: Eurostat, Bureau of Labor Statistics

Meanwhile, although firms still have high balance accounts (110% of GDP in net terms\textsuperscript{16}) compared to other economies, as a percentage of assets, the debt stands at comparable levels to other trading partners. The explanation of the latter phenomenon may be due to a factor mentioned in The Case for Spain I, that we revealed in the section of "myths" that much of the Spanish corporate debt, was due to the internationalization of Spanish companies. Then, the debt is in the matrix, but the cash flows that serve it are outside it (Brazil, UK...) and therefore comparison to GDP was deficient.

\textsuperscript{16} 130% in gross terms.
The external debt problem

Chart 4.10. Net external indebtedness of the Spanish economy (billion €)

Source: Eurostat, Bureau of Labor Statistics

The accumulation of large current account deficits since the mid-80’s process accelerated since the introduction of the euro has caused a huge external debt problem of the Spanish economy, net debt (assets of foreigners against Spain, net from foreign assets that Spanish people have) that reaches the GDP (99%), outrageously high levels and without international comparison.

This stock of external debt creates obvious problems for an economy: first, that the net debt generates recurring income payments to foreign countries, limiting the ability of saving and growth of the Spanish economy in the future; and second, that debt makes an economy vulnerable, as if at any time the economy is no longer supported by the foreign investor (a simple refusal to renew the stock of debt) may cause an economic collapse. The membership in the Eurozone limits these vulnerabilities (here comes the debate of whether it is worrying that a resident’s savings from Oregon finances the consumption of a resident of Louisiana, and if this parallelism can or cannot be applied to the Eurozone), because during the crisis it has been perceived that the Eurosystem (aggregation of central banks and ECB) reflects the swings in external intra Eurozone indebtedness through balances denominated "Target II" (thus, the capital flight from Spain caused the Bank of Spain to be in debt with the ECB, and indirectly with the Bundesbank close to 40% of GDP, balance currently lower than 20% of the GDP).

Chart 4.11. Target II balances between the Bank of Spain and the Bundesbank

Source: Bank of Spain and Bundesbank

57 Thus, even today Spanish exports goods and services at a percentage of 2.5% of GDP more than it imports, the payment of income to meet the interests of foreign assets in Spain is causing the net amount of such income and transfer balances (immigration remittances) to be close to 0.5% of GDP... so that with income and transfers, 20,000 million euros leave Spain every year, as a result of the huge net debt assumed.
Nevertheless, Spain must reduce its risk by reducing such disproportionate international debt. The mechanisms to achieve this goal are twofold: first, a nominal GDP growth that reduces the stock of debt as a percentage of the size of the economy, and second a positive current account balance (surplus) so that the surplus is gradually engaged in reducing the balance of net foreign debt. We believe the first measure can be achieved in real terms, but inflation, that would help, is or will not be expected in the near future. The second, although Spain achieved a heroic current account deficit adjustment of 11% of GDP in just 6 years, to reach a surplus in 2013 close to 1% of GDP, the recovery of domestic demand in 2014 has caused a surprising rise in imports, bringing the current account balance into the marginally positive territory. For the future, it is very important therefore to ensure that imports grow faster than exports, to get nominal growth to gradually mitigate this risk. It is important to consider that Spain is now an underinvested economy. However, as domestic savings only reach 18% of GDP, if we want to invest more, foreign savings will be required, which paradoxically would lead us back to the current account deficit... so either exports grow faster than imports, or domestic savings grow to finance investment (in this case, there will be less cash available for consumption) or we will return to the external deficit, so the vulnerability will not be easy to mitigate.

Chart 4.12. Current account balances (GDP %)

Source: FMI

Fifth: international crisis

In their book Why Nations Fail, economists Daron Acemoglu and James Robison, mention how at the end institutional quality is what makes the economic and social development of a country (the best example in our opinion is the case of North Korea and South Korea). If a population feels identified with their institutions, it is easier to achieve prosperity, and this identification is achieved if the general perception is that institutions work for the common good. What a better example of this hypothesis, than the German expression “not all Germans believe in God, but they all believe in the Bundesbank”.
In Spain, the crisis has revealed an institutional architecture woven from the late 70’s, which has generated a huge frustration among citizens. This frustration, linked with the severe economic crisis, unemployment and rising inequality\(^\text{58}\) has generated multiple spotlights of protest, such as nationalism\(^\text{59}\), populism, behavior based on the axiom that the citizen have rights but no duties... and the widespread feeling that a significant part of the elites have not worked to unite the nation, but in a "extractive"\(^\text{60}\) function, that caused a huge crisis of trust between citizens and institutions, trust and key cohesion to the future wealth of a nation.

It is evident that Spain is currently confronting an unprecedented institutional crisis and that such crisis leads to a lower cohesion, it is important to highlight that the leeway of the government (whoever governs) to react against the populism is getting smaller. There are clear reasons for that: a) more political union within the Eurozone due to the crisis (for example, the national budgets are previously audited and approved in Brussels); b) the dependence of a debtor country to the financing of the ECB in order not to go bankrupt, which in practice, implies following the mandates of the financing entity (logically), and c) a debt position almost equal to the GDP, placing the debtor at the mercy of the creditor. Once Spain repays its debts there will be margin for populism, but fortunately or unfortunately, that will not occur in the following two decades.

Sixth: long term growth

A nation should lay the foundations for enough sustainable growth to maintain a certain level of welfare, create commensurate jobs with their demographic and migratory structure, and eventually reduce the level of debt, especially if it is high as the case of Spain.

Although the main thesis of this report is that Spain’s ability to grow in the coming years is higher than what many people predicted, the long-term growth (let us say 2020) are threatened by very complex circumstances underserved:

- **First**, sustainable growth depends on a key factor: productivity. When a nation is underdeveloped it is easy to grow by adding population to the labor market and optimizing production methods (that’s how Spain grew strongly in the 60’s). However, when an economy is optimized, the last source of growth and competitiveness is productivity (the great challenge that Japan could not face and that China is currently facing). Although productivity is a complex factor, it is obviously associated with the educational level of a country, other than the incentives to undertake R&D. The picture is not rosy for Spain, with an education system with very poor results for decades, spending on R&D (1.3% of GDP) lower than any competing Western economy (2%), and a productivity of that expenditure (euro conversion of each patent) also lower than in other Western economies.\(^\text{61}\) Spain has experienced productivity gains associated with the enormous destruction of unemployment (the relationship between the two is usually negative), but as the country rebuilds employment, paradoxically it will probably live a meager productivity growth, calling into question the future growth. In fact, in 2014 productivity growth is already under 1%. Without changes in the production model that promotes R&D, quality training in

\(^{58}\) Rising inequality may lead to deeper causes than that argued by populists. The inequality in a country is measured by Gini coefficients, where 0 marks complete equality, and 1 total inequality. In Spain, the Gini coefficients, although being lower than in other countries like the US, has increased during the crisis (especially under socialist command, which shows the complexity and the limited policy space to deal with it). The coefficient can be measured by pre-tax income, after tax (which makes more sense in a progressive fiscal framework as the Spanish) for consumption (reflecting the income not declared collected in the black economy) or assets (reflecting inequality motivated by inheritance and not for work). However, as pointed out by Bullard, http://research.stlouisfed.org/econ/bullard/pdf/Bullard_CFR_26June2014_Final.pdf, (aging of the population explains part of the increase in inequality (the older the families are, the less debt and the more savings they have to face retirement), which does not mean that inequality of people of the same age has increased as much as indicates a Gini coefficient. This whole issue is to some extent subject to passionate populism and lack of critical analysis.

\(^{59}\) The economic analysis of the nationalism is analyzed in The Case for Spain I.

\(^{60}\) Following Why Nations Fail terminology. The best example of this "extraction" has been the neglection and looting of most savings banks, which were mostly favored by the political system, which held them in the 80’s. Spanish savings banks were instrumental in the eradication of rural poverty in the nineteenth century, and until their politicization in early 80’s they had never broken a single saving. The political assault on those institutions was key to its misuse, systematic bankruptcy and losses for the taxpayer (EUR 1.000 per Spanish person) and for savings that were sold poor securities through questionable methods.

\(^{61}\) Having said that, the coverage ratio of high technology (royalties paid less royalties received) stands at 57%, a low level but the highest in history.
employment and a better education system, it will be very difficult to mitigate such threat.

- **Second**, the underinvestment experiences by the Spanish economy (as a % of GDP) will necessarily imply a smaller future economic growth.

- **Third**, Spain’s enormous dependence on SMEs represents vulnerability, as financing SMEs is more expensive than financing large firms, they export less and they are less productive per worker. SMEs are a key element in the Spanish economy, but the country needs more small and medium-sized companies for the reasons given here. Such transition would increase opportunities for future growth. Unfortunately hardly anything has been done in this direction.

**Chart 4.13. Distribution of companies by country turnover**

![Chart showing distribution of companies by country turnover](chart.png)

- **Fourth**, a high percentage of structural unemployment (natural), as is the case in Spain, where it could exceed 15 %, versus for example 6% in the USA, also limits the ability of a country’s growth. If policies are not undertaken to reduce structural unemployment, long-term growth will be insignificant.

**Seventh: wage recovery**

The recovery of the Spanish economy has been based on an improvement in competitiveness associated with wage deflation and improved productivity. Huge unemployment limits the ability of an employee to claim future wage increases, which in practice, leads to predict wage freeze for the next two years. While the freeze is good for competitiveness, it is very bad for household consumption, which is necessary to spur investment. The reality is that salaries in Spain remain stagnant since 2008. It is possible that in highly productive sectors such as industry, employers will transfer part of the productivity improvements to the employees. It is also possible that although the unemployment mass remains high, unemployment in certain sectors disappear, which could accelerate the wage recovery in that sector. However, in the overall economy it is difficult to predict significant wage increases, so that the increase in consumption must trust nothing but the percentage of employees, not the salary increase. Paradoxically, the absence of wage pressures will cause a very low future inflation (see next risk), which in turn will prevent mitigating the problem of debt.

**Eight: limited disinflation**

Although the Spanish economy trend has been inflationary in the past, with enormous social and economic costs that have led to this inflation, the huge falling aggregated demand since the
beginning of the crisis has resulted in an excess of supply of goods and services, oversupply that has resulted in very low levels of inflation. Oversupply is evident in the services sector with unemployment levels close to 25% when levels of natural unemployment can be placed between 15% and 20% (hence, the excess of labor unemployment limits wage increases and in turn, price increase). In the manufacturing sector, the industry is at utilization capacity levels close to 75%, below historical averages close to 78%. In general, the Spanish economy has an excess production capacity compared to demand (known as output gap) of 4% of GDP (until it disappears it will not be easy to see inflationary pressures). In turn, the money supply has not helped to ease this situation, despite the ECB attempts, with negative or close to 0% annual increases, especially in a context of a sharp reduction in the velocity of money (number money transactions during a year, directly proportional to inflation). If we add to these factors the fall in food prices and energy occurred during 2014, it is not surprising to observe inflation of consumer prices and industrial prices as being slightly negative.

However, we do not think Spain will suffer deflation, because:

a)  It is usually associated with a banking system with false balance sheets and inability to lend, something that happened in Spain until 2012, but not now.

b)  Deflation requires low or a non-growing domestic demand, contrary to what happens in Spain since 2014.

c)  Given a scenario of demand recovery and many years of competitive tension of infra-investments, prices can only increase.

d)  The ECB’s monetary policy, will sooner or later impact on higher funding, and the confidence improvement, in greater velocity of money, both factors will generate economy inflation.

If high inflation is bad for a country, a very low level of prices in a highly leveraged economy is also something that is not desirable. The ideal scenario for Spain would be to get inflation close to 2%, which is attached to the real 2% growth, which would lead to over 4% nominal growth, which would greatly reduce debt imbalances. However the factors discussed here show that there is a long way to go before achieving those inflation targets.

Ninth: energy

Spain imports 73% of its energy consumption, creating an energy deficit of 50,000 million euros. Although fortunately Spain compensates the deficit with tourism revenues, the evolution of energy costs has been extremely negative. Thus, policies encouraging to limit energy dependence through massive subsidies of renewable energy, have prompted the Spanish energy to reach the highest price level in the euro area (despite the lower level of disposable income) which mitigates consumers’ purchasing power and the competitiveness of companies (that have to carry lower wages against a higher energy bill to remain competitive). In turn, the country was duped in a massive investment effort in combined cycle power plants, which have been underutilized due to the sharp reduction in energy demand experienced since the crisis began. The debt carried by the deficit generated by renewable energy reaches 3% of GDP, and although very painful measures have been undertaken to control the tariff deficit (difference between the cost of production, which includes subsidies and the selling price), it is still present, so it is unlikely that the price of the Spanish energy will become competitive again in the near future.

Spain presents opportunities to mitigate this weakness; and owns plants to liquate natural gas imported by ship (hence Spain is one of the few European countries that does not depend on Russian gas), and these facilities, with convenient connections to France, could in medium-term, pour American gas to Europe through the Spanish terminals. Furthermore, Spain has authorized prospections to find gas (through fragmentation, in northern Spain) and oil (in the Canary Islands) but with uncertain results and predictable limited percentages. It is also possible to increase the percentage of nuclear production. However, the State agreement facts required to address past misbehavior are still far from being achieved.
Conclusion, tenth risk: complacency.

“Knowing is not enough; we must apply. Willing is not enough; we must do.”

Johann Wolfgang von Goethe

We have discussed in the last chapter the nine most obvious risks faced by Spain. In our opinion, although these are formidable, they are much more manageable than the risks Spain presented in 2007. However, they are risks, many of them are medium-term risks, which must be managed to be kept under control and prevent further damage. For the proper management of these risks it is crucial not to fall into the tenth risk, which we will explain in this epilogue and conclusion of the report.

In the “Colossus”, the “black” painting that appears in the front of the report, the author (either his disciple or Goya), shows a Spanish landscape ravaged by war, expected to be the Independence war, in which the French army swept over the country with a huge and tragic human cost for both sides. Many allegories have been made to the giant, or Colossus, who rises from the depths. Many authors note that it is the genius who is able to awaken the Spanish population when facing a situation of national tragedy. Thus, the genius, or Colossus rises facing the opposite side of the fleeing civilians, predictably willing to confront and destroy the French army, as it happened indeed.

For us, this painting illustrates very well the tragic circumstances experienced by Spain in recent years. Thus, the recession has been by far the most devastating since 1959, the damage to economic and institutional social level has been enormous, and its effects are well symbolized by the desperate migration shown in the picture. Also, in the middle of such an unfortunate situation, the nation has known to give the best of itself, with commendable development of the export sector (our Colossus), it has been able to take Spain out of the crisis without devaluing, a Colossus that allowed balance of the monstrous trade deficit accumulated in good years,63 and a Colossus that has returned the ability of a nation to believe in herself.

However, in the painting, in the middle of the chaos generated by the fleeing civilians, a small donkey is shown still doing absolutely nothing, neither helping the Colossus to engage the enemy, nor fleeing to be safe. Many symbologies have been attributed to the donkey. In our report, the donkey is the tenth risk, the most macabre of all: complacency.

Many of the evils that have emerged during the crisis had been conceived in the “good” years. As Warren Buffet says, “only when the tide goes out do you discover who’s been swimming naked”. The Chinese character of “crisis” also means “opportunity”. These years of crisis have been an opportunity to build a more sustainable country than the one developed during the last twenty years, founded on an outdated and dangerous model, rooted on excess credit, which in turn was built on the aggregated complacency. However, as the situation improves with the efforts of all, complacency gradually begins to make an appearance.

It is only in our hands to bring about when the next generations look at “The Colossus”, they recognize our generation through the donkey…or the Colossus.

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63 Lay the groundwork for developing a second pillar on which to build our economic growth, domestic demand, and a Colossus.
## APPENDIX I

### Free housing square metres mean price

<table>
<thead>
<tr>
<th>Source</th>
<th>Periodicity</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household price index</td>
<td>National Institute of Statistics, Quarterly</td>
<td>Database: General Council of Notaries. Sheltered housing are excluded. New housing is considered when it is the first transmission in the deed of sale.</td>
</tr>
</tbody>
</table>
| Mean sqm. price for free housing    | Ministry of Development, Quarterly          | Database: AEV and ATASA. Geographic break downs were estimated with provincial data, published by the Ministry of Development and using as weights:  
    i) Until the second quarter of 2011 the number of households by province Census of Population and Housing 2001 of INE.  
    ii) Subsequently, the number of households by province Census of Population and Housing 2011 of INE. |
| Investment deflator                 | National Institute of Statistics, Quarterly | Quarterly National Accounts, implicit deflator in gross fixed capital formation in housing.                                                   |

### Activity

<table>
<thead>
<tr>
<th>Source</th>
<th>Periodicity</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>New housing permits on the last twelve months</td>
<td>Ministry of Development, Monthly</td>
<td>Construction management permits. Geographic break downs were obtained by adding the provincial data.</td>
</tr>
<tr>
<td>Number of home sales transactions: under notary</td>
<td>Ministry of Development, Quarterly</td>
<td>Geographic break downs were obtained by adding the provincial data.</td>
</tr>
<tr>
<td>Number of home sales transactions: registered</td>
<td>Land and Mercantile Registrars Association and National Institute of Statistics, Quarterly / Monthly</td>
<td>Until December 2006 data obtained from the quarterly data released by the Association of Registrars; subsequently from the Statistics on Transfer of Rights in the Property of INE.</td>
</tr>
</tbody>
</table>

### Foreign property investment

<table>
<thead>
<tr>
<th>Source</th>
<th>Periodicity</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Price Index</td>
<td>ECB and OECD, Depends on the Country</td>
<td></td>
</tr>
</tbody>
</table>
IMPORTANT DISCLOSURE

Additional information available upon request.

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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.

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