

**Francisco
Carballo-Cruz**

NIPE and School of Economics
and Business,
University of Minho,
Portugal

✉ fcarballo@eeg.uminho.pt

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Causes and Consequences of the Spanish Economic Crisis: Why the Recovery is Taken so Long?

Summary: Spain is currently facing its worst crisis in the last fifty years. The crisis began as an extension of the international financial crisis, but the internal imbalances accumulated in the pre-crisis period aggravated the situation. At present their incomplete adjustment is making difficult the economic recovery. This paper describes the evolution of the economic crisis in Spain. The real estate sector and the banking sector are analysed in detail, as they played a key role in the detonation and the deepening of the crisis. The results of the main reforms carried out so far are also carefully examined. It also discusses the main factors that have delayed the economic recovery up to now (unemployment and indebtedness), and present some alternatives to define an exit strategy.

Key words: Crisis, Real estate, Banking, Debt problems, Unemployment, Public debt.

JEL: E24, F34, G21, H63, R31.

After a long period of economic expansion, which began in the mid-nineties, in 2006 the Spanish economy began to show the first signs of exhaustion. The international economic crisis, which began in 2007 and deepened in 2008, hastened the end of the expansive cycle and triggered a severe adjustment of the imbalances accumulated during the previous decade, whose correction continues to these days, four years later, pending its completion.

The rapid deterioration of the international macroeconomic context highlighted the structural weaknesses of the Spanish economy, especially after 2008. Betting on a growth model heavily dependent on domestic demand, and more specifically on construction and property development activities, has proved to be an absolute failure. The disproportionate growth in the real estate sector, coupled with the expansion of credit needed to finance it, is at the basis of the economic imbalances. In the real estate sector a spiral of growth in demand, prices and supply fuelled a major bubble, which burst when the impact of the international crisis was felt in Spain.

The massive credit granting to construction and property development activities caused an excessive exposure of the banking industry to those sectors. This exposure was the means of transmission of the housing crisis to the banking sector, whose business is still very constrained by the inadequate risk policy and the deficits of supervision of the pre-crisis period.

The paper aims to: i) describe the evolution of the economic crisis in Spain; ii) highlight its differential aspects, and; iii) discuss the main factors that have delayed the economic recovery so far. The rest of the paper is organized as follows. Section one describes the impact of the crisis on the Spanish economy. Section two presents the evolution and current situation of the sectors that contributed to the deepening of the crisis: the real estate sector and the banking sector. Section three addresses the two main barriers to recovery: debt and unemployment. The reforms in the banking industry and the labour market are described and discussed in section four. Section five discusses some relevant issues and presents several policy recommendations. Section six concludes.

1. The Crisis's Impact

The Spanish economy's downward phase of the expansion cycle began in 2007. Four years later an economic recovery is yet to be seen. During 2007 and the first quarter of 2008, there was a growth slowdown, and from the second quarter of 2008 until the last quarter of 2009, the economy was in recession. This recession period of seven consecutive quarters was unusually long, since in a normal cycle, the recession does not usually extend beyond three or four quarters. The hardest stage of the crisis in terms of product breakdown and job destruction coincided with the first quarter of 2009, when GDP fell 6.3% and unemployment increased by around 800,000 people.

The Spanish economy began to recover in 2010, with a slight growth in output in every quarter except in the third. The output's growth of that year, 0.6%, was very modest when compared with the accumulated loss of production in the previous two years (almost 5%). The 2011 data show the weakness of the recovery, with growth rates of 0.3% and 0.2% in the first and second quarters, respectively.

As far as unemployment is concerned, the available data is very alarming. The unemployment rate rose from 8.3% (1,834,000 unemployed), in late 2007, to 20.1% (4,632,000 unemployed) in late 2010. The years of higher job destruction were 2008 (growth of 41%) and especially 2009 (growth of 60.2%), in which the unemployment rate increased to 18.0% of the total workforce (4,150,000 unemployed). Unemployment increased mainly among younger workers (41% in the range of 16 to 25 years), particularly those with lower qualifications (between 25 and 45%, depending on education levels) and among foreigners (30%). Throughout 2010 there was a strong growth in long-term unemployment, which represents 42.5% of the total, particularly among workers between the ages of 45 and 64 years old (52.5%). Unemployment growth is a differentiating aspect of the crisis in Spain. Between 2007 and 2010, the unemployment rate in Spain rose from 8.3% to 20.1% (11.8 percentage points), whereas in the euro zone the increase was less accentuated merely from 7.5% to 10.1% (2.6 percentage points).

In addition to the high unemployment rates, there are other differentiating aspects when compared to the eurozone. Although the product's fall is similar in terms of magnitude, its composition presents significant differences. Between 2008 and 2010, domestic demand in Spain fell 7.6%, whereas in the eurozone it fell merely 1.6%. Investment in housing was the most affected component, which in these three years decreased by 41%. Households reduced their savings rate to historically low

levels and increased their fixed capital investment to maximum levels. In 2007, this behaviour decisively contributed to the increase of the households' debt up to 130% of their gross disposable income (GDI). Currently, the ratio of debt lies close to 125%, higher than the eurozone average (98%), similar to the United States (118%) and lower than the United Kingdom (151%). The slow pace of households' deleveraging is mainly due to the weakness of household income and the long term debt amortization for house purchase, which hinder the rapid liabilities depletion.

Non-financial firms' debt, in terms of gross operating surplus, is around 750%, surpassing those of the eurozone (~ 550%), the UK (~ 650%) and the U.S. (~ 350%). Since the peaks reached in 2008, the ratio of firm debt has only been reduced by 1% due to the scant growth of firms' results. It should be noted, however, that in terms of debt, there are considerable differences at the sectoral level. For instance in the construction and property development sectors, the level of debt greatly exceeds that of other sectors of the economy, in spite of the fact that over the past two years, the deleveraging process of non-financial firms has been mainly focused on these sectors. The high amount of debt in these sectors reflects the enormous stock of unsold real estate assets.

In 2009, the high growth of public investment (11.2%) served to offset the impact of the strong adjustment of private investment. However, in 2010, the need to control the growth of public deficit led public investment to contract by more than 17%. The Spanish economy went from having a surplus in public accounts of 1.9% in 2007, to presenting a deficit of 9.2% in 2010, having peaked at 11.1% in 2009. Public debt increased from 36.1% in 2007 to 60.1% in 2010.

In 2010 a process of fiscal consolidation was initiated. The Updated Stability Programme of February 2010 established a procedure for gradually reducing the deficit to 3% of the GDP by 2013. In 2010, fiscal consolidation was achieved thanks to a one percentage point increase in the ratio of tax revenues on GDP and a fall of eight tenths in the ratio of public expenditure on GDP. Table 1 presents the main budget adjustments approved by the Spanish government since September 2009. In 2010, revenues increased primarily due to the increased VAT collection, which offset the less dynamic collection of direct taxation. The cut in spending has focused mostly on capital expenses and intermediate consumption. Social benefits increased due to the inertial evolution of pension expenditure and the high incidence of unemployment benefits. Interests on debt followed an upward trend and already account for 1.9% of GDP. In the coming years due to the likely evolution of public debt and interest rates, it is expected that the interest burden of public debt will increase its weight in public expenditure.

In April 2011, the government submitted a new version of the Stability Programme, for the 2011-2014 period. According to the set out objectives, public deficit will be reduced to 3% of the GDP by the end of 2013 and the public debt ratio will stabilize just below 70% of the GDP, in the 2012-2013 biennium. 65% of the adjustment in the 2009-2013 period is based on spending cuts, including a deep reduction of public consumption (35% of total).

Table 1 Main Fiscal Consolidation Measures in Spain

Set-2009	Increase of VAT's general rate to 18%; Elimination of the deduction of €400 on Personal Income Tax; Reduction of ministries expenditure (€8,000 million).
Jan-2010	Setting of limits to hiring in the civil service (one entry per ten exits); Reduction of ministries expenditure (€5,000 million).
May-2010	Suppression of monetary incentives to childbirth (elimination of the baby-check); 5% reduction in public sector's wages; Pensions' freezing; Cuts on medicines and public works expenditure.
Set-2010	Increase of Personal Income Tax for high income groups; Reduction of ministries expenditure (€13,200 million).
Dec-2010	Increase of taxes on tobacco; Privatization of public enterprises – National Lotteries (Loterías del Estado) and Airports (AENA).
Aug-2011	Anticipation of payments on account of the Firm's Income Tax; Additional cuts on medicines spending.

Source: Author's reviews.

In light of current macroeconomic situation there is great uncertainty regarding compliance with the objectives of last April's Stability Programme. Firstly, because they are based on a macroeconomic scenario, that assumes a relatively high rate of economic growth. Secondly, because a significant proportion of Spain's public expenditure has, traditionally, an incremental inertia, namely expenditures in health, education and pensions. Thirdly, due to the significant expense of unemployment benefits (equivalent to 3% of the GDP in 2010), caused by the persistence of high unemployment levels (over 20%), whose reduction is not foreseeable in the near future.

Regarding prices' evolution, the sharp drop in consumption and in fixed capital investment has allowed to partially correct the huge imbalances accumulated in the pre-crisis expansion period, in terms of inflation differential with the eurozone. As far as wages are concerned, in the early years of the crisis, remuneration per employee continued to increase as a result of the inertia of collective bargaining and the sharp increase in non-wage costs, such as compensations for dismissal. In 2010, remuneration per employee grew only by 1.4% (2.3 percentage points less than in 2009), in part due to the Agreement for Employment and Collective Bargaining (AENC), signed by the social agents in February 2010. The expected wage moderation indicates the beginning of the process to correct the Spanish Economy's real exchange rate.

As previously mentioned, the construction and property development sectors in Spain had an essential role in the detonation and extension of the current economic crisis. The disproportionate growth of housing prices has led to a housing bubble of enormous proportions. There are three factors that have contributed to its emergence and development. First, the monetary policy followed by the European Central Bank, since 2001, which kept the reference interest rate at very low levels for the cyclical position of the Spanish economy. Secondly, the fiscal policy followed by the Spanish government, which promoted the acquisition of housing instead of other alternatives, such as renting, and encouraged the purchase of real estate assets (including housing) in detriment of other investment assets. Thirdly, the advantages of a model of eco-

conomic growth based on construction and property development activities, from the political economy point of view i) reduction of unemployment, given that these are labour-intensive activities (favouring politicians), ii) increase in housing value (favouring the median voter, who is usually a home owner), and iii) generation of large tax revenues (particularly real estate) for the different public administrations (favouring politicians) (Celia Bilbao Terol, María A. García Valiñas, and Javier Suárez Pendiello 2006). Therefore, in this context, it can be stated that for many years, there was no political interest in halting the excessive growth of construction activities and property development.

The initial price increases derived from favourable market conditions for mortgages, followed by additional increases resulting from the contagion of positive expectations about price evolution, resulting in a bubble of enormous proportions. The bursting of the bubble led to a severe fall in demand, which in turn resulted in an adjustment in supply, either via prices or via quantities.

Credit for construction and property development activities was the mean of transmitting the housing crisis to the banking sector. In the pre-crisis expansion period, 2004-2007, credit to the construction sector experienced an average annual growth of 24.6%, whereas credit to the real estate sector grew at an average annual rate of 43.1%. In 2007 loans to both sectors accounted for almost 45% of the Spanish GDP (14.5% to construction and 30% to property development), when their overall weight in product was less than 20%.

This unbalanced growth of credit has resulted in a high concentration of risks in the construction and property development sectors, both on the supply and on the demand side, resulting from the inadequate risk policy of the banking system and the Bank of Spain's insufficient supervision during this period. The huge stock of real estate assets, whose construction or purchase was financed with bank loans, remained in the financial entities balance sheets and, in a recession period with a demand deficit like the current one, produces losses by default and assets depreciation and adversely affects banks' turnovers. This situation is at the basis of the solvency problems of an important part of the banking system, namely the Savings Banks – *Cajas de Ahorros*, whose weight in the sector, measured by various indicators, is close to 50%. To tackle the solvency problems, throughout 2010 an intense restructuring process took place in the banking sector in Spain, which up to now is producing positive results in terms of reorganization, losses recognition and recapitalization.

Currently, the program of fiscal consolidation, the elevated rates of unemployment and the high indebtedness levels explain the low dynamism of internal demand. The recovery of economic growth is also aggravated by the sovereign debt crisis. Spain, Italy and the three rescued countries (Greece, Ireland, and Portugal)¹ are facing financing problems as a result of the eurozone institutional design's problems (Paul De Grauwe 2011a). In these circumstances, be a member of the eurozone can contribute to the deepening of its own crisis (Paul Krugman 2011). This is particularly evident in the Spanish case, as their fiscal problems do not stem from irre-

¹ For excellent reviews on the crisis in these countries see Georgios P. Kouretas and Prodromos Vlamis (2010), Constantin Gurdgiev et al. (2011), and João Sousa Andrade and Adelaide Duarte (2011), respectively.

sponsibility of its government. Arise from the asymmetric shocks that occur within the eurozone (Krugman 2010).

2. The Two Key Sectors

2.1 Evolution and Current Situation of the Real Estate Sector

Between 1997 and 2007, there was a long cycle of housing expansion in Spain. This cycle is different from others due to the extraordinary construction volume and its exceptional duration (eleven years). During this period, the average annual growth in the construction sector was higher than 5%. In late 2007, the construction sector concentrated almost 14% of employment and 16% of the Spanish GDP. By including demand related sectors, output and employment dependent on the construction sector achieved respectively, in that same year, 25% of the GDP and 23% of the overall employment (Ramón Tamames 2009).

The demand for housing has been stimulated by several factors. The main ones are the strong economic expansion seen in this period (in part due to the real estate's boom) and the reduced interest rate on housing loans after the Euro integration (the reference rate for loans of this type decreased from 9.6% in 1997 to 3.3% in 2007). Other factors explaining the strong dynamics of demand are the greater competition in the banking sector, the growth in the number of households, largely due to the massive influx of immigrants (about 4.5 million in the 1997-2007 period), and the housing purchase by non-residents, as second homes.

The strong demand for housing found a very dynamic response on the supply side. In the 1997-2007 period almost 5.3 million dwellings were finished in Spain and, in several years of the expansion cycle, the number of finished dwellings per year surpassed half a million. The net increase in the housing stock between 2001 and 2008 was of 4.3 million homes. The stock rose from 20.8 million in 2001 to 25.1 million in 2008, representing an increase of almost 21%. The extraordinary growth in demand has resulted in an increase in housing investment (from 4.7% of GDP in 1997 to 9.7% in 2007).

The massive housing acquisition stimulated by these demand factors has spurred an extraordinary demand for credit. Between 1997 and 2007, housing loans as a percentage of GDP increased from 28.4% to 102.9%. The widespread use of credit for housing exceptionally increased households' private debt. This debt rose from 52.7% of disposable income in 1997 to a maximum of 132.1% in 2007. As a result, the effort of individuals to acquire a dwelling rose from 4.3 years of salary at the beginning of the cycle to 9.1 years at the end of it.

In the demand's growth initial phase, the inability to adjust supply automatically, due to the specific characteristics of the good's production process, led to the emergence of tensions in prices (Prakash Loungani 2008). The increases in real estate prices became more intense when expectations of the price's future growth affected their own demand, inducing a spiral of growth in demand, supply and prices. This situation led the average price growth to come close to 20%, in several years.

According to the Bank of Spain (the Spanish Central Bank), between 1997 and 2007, the average housing price in Spain rose by 115% in real terms, while in Ireland

the revaluations were of 160%, in the UK of 140%, in the United States of 80% and in the eurozone merely 40% (Banco de España 2011a). In Spain, the economic fundamentals of price growth are not the only factors explaining the high inflation in the sector. The observed increase is also explained by the demand's significant over-reaction. The extraordinary revaluation of property assets until 2007, followed by a sharp decrease, reveals that there was a great bubble in the Spanish real estate sector, which caused strong overvaluation of residential real estate.

From late 2007, prices began to slightly fall and sales experienced a very strong decrease. In other words, in the months following the bubble's burst, adjustments were made through quantities rather than prices. Later on, a price adjustment was made in order to approach market prices to the real economic value of the assets. In the Spanish case, the reduction in prices from peak levels was very gradual; albeit in cumulative terms it is already beginning to reflect a significant adjustment. According to the Ministry of Public Works, the fall in prices between the maximum of 2007 and the first quarter of 2011 was 15% in nominal terms and 20% in real terms (Banco de España 2011a). Tinsa (the main real estate valuation company in Spain) estimates that the adjustment in prices was even greater. In nominal terms, the cumulative fall in prices, between the maximum at the end of 2007 and July of 2011 was slightly above 22% (Tinsa 2011). This decrease in prices is justified by the decline in employment, the increase in the cost of capital, the growth in the housing stock and the presence of significant levels of credit rationing. Despite the continuous declines in prices, the decrease in housing sales in cumulative terms between 2007 and 2010 was higher than 43% (Banco de España 2010).

The supply's adjustment has also been very important. In 2006, the number of dwellings started surpassed 850,000. Two years later only one-third were actually begun. In 2010, the number of works started included only 90,000 dwellings, 20,000 less than in the previous year (Julio Rodríguez 2011). According to the evolution of the number of dwellings completed in the 2008-2010 period, the housing stock in late 2010 could have reached 25.7 million homes. In that year, the estimates on the stock of completed unsold homes ranged between 670,000 and 1,100,000 (Rodríguez 2011). In the real estate's expansive cycle an average of nearly 500,000 dwellings a year were built, when according to the demographic structure of the country, the annual potential of homes' creation is of approximately 350,000 per year (David Martínez, Tomás Riestra, and Ignacio San Martín 2006); however, that potential, in the Spanish case, depends largely on the effective evolution of employment.

The sectoral adjustment will be long and slow. According to the transaction volumes over the last two years, the absorption of the stock of new unsold housing can last four to five years. In 2010, the volume of transactions grew approximately 6%, countering the drops of previous years. However, the total number of transactions amounts to little more than half of those held in the most dynamic exercise (2006). This growth in transactions is primarily justified by the anticipation of purchases to save taxes, the fall in asset prices and the low interest rates (there was, nevertheless, a tightening of the credit criteria).

Last August, the government announced a temporary VAT reduction for new housing purchases by four percentage points (from 8% to 4%) until the end of the

year, in order to stimulate housing demand and accelerate the reduction of the accumulated stock. It is unlikely that this conjectural measure will boost the Spanish housing market. Its main impact will be the anticipation of housing acquisition by a limited number of households to take advantage of this VAT reduction.

2.2 Evolution and Current Situation of the Banking Sector

From 2007 onwards, the evolution of the Spanish banking sector is highly conditioned by the extent of the international crisis and the bursting of the housing bubble in Spain. The generalization of the international crisis and the lack of confidence in the financial markets, have restricted Spanish banks' access to financing in the international markets. In recent years, the internal factors that have mostly affected the sector's profits are the banks' high exposure to real estate, together with the economic downturn and the consequent unemployment increase. Note that these factors decisively contributed to the rising of the default rate, with consequences on the solvency levels of the sector.

At the end of 2010, the Spanish banking sector was among the firsts in the ranking of the eurozone in terms of return on assets (0.47%) and return on own resources (7.9%) (Banco de España 2011b). On the contrary, in terms of solvency, its position is not as favourable. The overall solvency of the Spanish banking sector is among the worst of the eurozone, 11.9%, almost two percentage points below the average. The use of other indicators of solvency, for example, Tier 1, also shows the weakness of the Spanish banking sector (9.6%, well below the eurozone average).

This overview of the banking sector conceals the existence of significant asymmetries between the two main types of entities, particularly in terms of solvency. In the Spanish banking sector two major classes of entities coexist: traditional banks and Savings Banks – *Cajas de Ahorros*. The latter assume a central role in the Spanish banking system, since they concentrate more than 48% of deposits and more than 46% of the loans of the banking sector (Confederación Española de Cajas de Ahorros 2011). During the long expansion period before the crisis, a significant part of the Savings Bank sub-sector accumulated financial imbalances of various kinds, which became evident after the change of the macroeconomic conditions.

One of the most troubling aspects of the balance sheets of these entities is the high risk concentration in construction activities and property development, both on the supply and the demand side. In late 2009, before the beginning of the restructuring process of the banking sector, credit to the construction and property development sectors granted by the Savings Banks accounted for 56.3% of the total financing for productive activities and 27.7% of its loan portfolio to the resident private sector. In that date, credit for the acquisition and rehabilitation of housing represented 41% of the total number of loans granted. Other problematic aspects of this sub-sector are the excessive dependence on wholesale financial markets, the excess of capacity installed by the intense growth of their retail distribution networks, the significant sectoral fragmentation and the loss of profitability derived from the structures' oversize, the increase in unprofitable assets and the rising financing cost.

In late 2010, due to the potential problems that exposure to the construction and property development sectors could generate to the entire banking sector, the

Bank of Spain promoted an informative transparency exercise. The goal was for banks to publish, in early 2011 and according to predefined standards, additional information about their exposure to these sectors, identifying the percentage of bad loans, guarantees at their disposal and the provisions made to cope with possible assets' deterioration. The results of this exercise revealed a significant degree of heterogeneity in the sector, in terms of levels of solvency, rates of bad loans, degree of exposure to the construction and property development sectors, magnitude of the assets awarded and the degree of coverage with provisions, among others.

In late 2010, the credit concentration in the construction sector, real estate activities and house purchases reached nearly 60% of the credit to the resident private sector. Credit to construction and property development accounted for around 20% of the loan portfolio to the resident private sector (22% of the Savings banks' loan portfolio and 17% from the Banks'), while housing loans accounted for approximately 39% of it. As mentioned before, this high concentration of risks is extremely worrying, due to the continuous growth of default rates and the high value of real estate assets that passed into the hands of banks, as a consequence of high failure rates. In late 2010, the default rate for credits granted to real estate developers reached 14%, while those granted to construction companies neared 11%. Contrarily, the default rate for housing loans was significantly lower, falling below 2.5%.

In late 2010, Savings Banks continued to report higher levels of exposure to construction and property development. Specifically, their total exposure was of €217 billion, of which €173 billion (80%) were related to investment credit and the remaining €44 billion (20%) to awarded properties. At that time, the potentially problematic investment which included bad debts, substandard loans and awarded properties amounted to €100 billion (46% of the total). The specific provisions made represent 31% of these exposures (38% if general provisions are accounted for).

Regardless of the various challenges that the banking sector is currently facing, the most worrying from an economic point of view as a whole is its inability to fulfil its basic function of financing economic growth. With the intensification of the crisis there was a sharp contraction of the annual credit growth rate, which became negative due to the prolonged crisis. The type of credit that experienced a greater contraction during the crisis was the credit to companies. Credit to households has also declined, albeit to a lesser extent. With regard to bank credit to companies, it presents a clear pro-cyclical behaviour. In early 2008, credit to companies in Spain grew at annual rates exceeding 30% (twice the eurozone average). In late 2009, the growth of credit to companies became negative, reaching its maximum in the first half of 2010 (-4.2%). Since that time, it has remained virtually stagnant. The construction industry was the sector most affected by the crisis, showing a downward trend since late 2008, which reached the two digits by mid-2009. In the case of households' credit the rates falling has been less pronounced and, since early 2009 they have remained close to zero.

Tensions experienced during the last year and a half in the eurozone's financial markets, resulting from the sovereign debt crisis, brought about an increase in the state's and the banks' financing costs, and has made access to markets more difficult for the latter. Risk premiums from resident issuers have been increasing. Last

August, they went slightly beyond the 400 basic points. The risk premiums remain high and subject to the fluctuating market perception on the situation of public finances and the macroeconomic framework of various countries, as well as the solvency of their financial systems in a context of high volatility. In this context, banks' activity is subject to pressures of a different nature. Firstly, because the sovereign debt crisis has resulted in a significant increase in financing costs for these entities, and secondly, because they continue to bear the losses arising from the deterioration of real estate assets, due to the excessive exposure of its risks' portfolio to a sector where the process of price adjustment has not yet been completed.

3. The Two Big Problems

3.1 The Huge Debt Growth

In the medium term, the most important problem of the Spanish economy is not the public debt's size, as in other European economies. The main source of problems is the high private debt, resulting from a historically high amount of liabilities of businesses and households. In Spain, since 2004, the increase in the private sector's debt was five times higher than in the eurozone. Credit growth rates to the private sector followed an upward trend until 2006, when the annual growth rate approached 30%, remaining at levels higher than the nominal growth in GDP until the end of 2008.

The Spanish public debt was at the end of 2010 equivalent to 60.1% of the GDP, 25 percentage points lower than the eurozone's average (85.1%), on the other hand private debt represented around 224% of the product. Households' debt amounts to €902 billion (~ 85% of the GDP), while firms' debt reaches €1.477 billion (~ 139% of the GDP). Since 2004, the debt's total increased by over 71% since in that year it was only of €1,800 billion compared to the €3,085 billion in late 2010.

The private sector's indebtedness has been mainly growing during the pre-crisis period. In the 2004-2007 period, the credit's average annual growth in Spain was of 21.8%, while in the eurozone it was only of 8.9%. This particular credit evolution can be explained by the strong growth in housing loans to households and especially by the excessive credit growth for productive activities, in particular, for construction and real estate activities. The remaining productive sectors registered credit increases in line with the eurozone.

The economic recession caused a significant drop in households and firms' incomes that refrain private debt growth. Simultaneously, economy's private sectors began a process of debt reduction, albeit at an extremely reduced pace. Since its peak in 2008, the debt ratio of non-financial firms fell by only 1%, while the decrease in the ratio of households was even more modest.

The pressure that markets exert on the Spanish economy, since the beginning of 2010, results in part from the fact that a very significant proportion of public and private debt is computed as external debt. In late 2010, for example, in the case of public debt, foreign investors owned almost half (47%) of the Spanish sovereign debt. This is a differential aspect of the Spanish economy over other highly indebted economies such as Italy, Belgium or Japan, since in these cases the debt is mostly financed by domestic savings.

In late 2010, the Spanish economy's external debt was of €1,740 billion, equivalent to 164% of the GDP. In March of that year it had reached its historical peak at €1,790 billion, representing 167% of the GDP. The distinctive feature of the Spanish external debt is not its relative size; the most worrying aspect of its recent evolution is its rapid growth, since between 2002 and 2010 it nearly tripled, rising from €600 billion to €1,740 billion today. During this period, two thirds of the funds used to finance the Spanish economy's growth came from abroad.

The deleveraging of the private sector should intensify in the coming years. The best way to further this process is through recovering income, and that is why all policies aimed at improving the capacity to generate economic growth are the best contribution to complete it successfully. Otherwise, debt will continue to be a burden on spending, especially in an environment where interest rates may rise again in response to inflationary pressures in the core countries of the eurozone.

The structural deleveraging of the private sector is extremely important for the banking sector, since it reduces their financing needs. According to the Bank of America Merrill Lynch, each basic point reduction in leverage implies a decrease of €15 billion in the financing needs of Spanish banking (Centro del Sector Financiero PwC and IE Business School 2011). Thus, a credits' reduction and a zero growth in deposits would reduce the financing needs of Spanish banking by €37 billion.

3.2 Unemployment's Uncontrolled Growth

The crisis' impact on employment in the Spanish economy was devastating. Since the crisis began until the end of 2010, the number of people unemployed increased by 152%, up to 4,632,000 workers (20.1% of the workforce), of which 4 out of 10 are long-term unemployed persons, 1 out of 4 have a temporary contract, 1 out of 3 are less than 29 years old and 6 out of 10 are low-skilled. The current number of unemployed people is higher than in early 1994 (just over 3.5 million), when the unemployment rate peaked in the time series (24% of the workforce). These data reveal that there are institutional aspects in the Spanish labour market that give rise to structural unemployment, that unemployment particularly affects well-defined groups and that the problem of high unemployment is not a new phenomenon, probably because some of its main causes have been persisting for decades.

The current high unemployment rate has its origin in factors of a different nature. The first factor is the impact of the housing crisis on employment levels. In the years of greater intensity, between 2008 and 2010, job losses in the Spanish construction sector (including real estate) were higher than 36% (Carlos Alvarez Aledo 2011). Job losses in construction were higher only in the Baltic countries and Ireland (around 50%), whereas in other countries affected by housing crisis, such as the United States and Denmark, were considerably lower (around 25%). The reduction in the employment's percentage is amplified in the Spanish case by the relatively high weight that employment in the construction sector had in the employment's total at the beginning of the crisis (13.2% versus 8.4% in the eurozone). To this loss we must add those of the construction activities' industrial and service suppliers.

Another factor that justifies the high unemployment growth since the beginning of the crisis is the sharp appreciation of the real exchange rate observed from

the launch of the monetary union. Over the past decade, labour costs per unit produced increased 20% more in Spain than in the eurozone, which reduced the Spanish economy's competitiveness (Ángel Laborda 2010). During the pre-crisis period this wage inflation had no effect on economic growth (through the loss of competitiveness), since it was primarily based on the expansion of non-tradable sectors and on the strong growth of domestic demand. With the triggering of this crisis firms have been forced to reduce costs in order to maintain their market share and profitability levels. Due to the inability to devalue the currency and the rigidity of nominal wages regarding the fall, the only way to make the necessary adjustment is to increase productivity, which in the short run is only possible through the workers' dismissal.

A third factor that explains the enormous unemployment growth in Spain is related to the structural characteristics of its labour market. This is characterized by a strong rigidity of wages and hours worked and by an intense workers' segmentation. This segmentation results in a dual labour market where workers with high wages and protected by high severance pays coexist with low wage earners with little protection. The adjustments are mainly produced at the cost of the latter due to their lower level of productivity. Therefore unemployment rates within this group are significantly higher than the average.

Maintaining high levels of wage rigidity and labour market conditions implies that the only way to reduce relative costs is by improving productivity by adjusting or reducing firms' workforce. Therefore, it is expected that economic growth in the coming years will be less labour intensive than in the pre-crisis period, both by job losses in construction and by the adjustment of the real exchange rate. Economic forecasts for the coming years predict a steady decline in unemployment levels with consequences for economic growth. On the one hand, via demand, because it affects the demand for household consumption, and, on the other hand, via supply, because it will reduce the economy's potential growth.

4. The Two Main Reforms

4.1 The Banking Sector's Reform

Regardless of the crisis' impact on the banking sector and its consequences on the real economy, for several years in Spain there was a broad consensus on the need for a thorough reform of the banking sector in general and of the Savings Banks sector in particular. The beginning of the crisis showed that it was necessary to move quickly with a deep reform process, mainly for structural reasons and for the intrinsic characteristics of the Spanish economy's growth model in the pre-crisis period: the high importance of the construction and real estate sectors and its great dependence on external funding. However, the reform process did not materialize until 2010, two years later than in most European countries and the United States.

However, already in 2009, a new institution with a key role in the process of bank restructuring was created, the so called Fund for Orderly Bank Restructuring (FROB), whose principal aim is to strengthen the solvency of banks by providing funding to facilitate the processes of restructuring. The FROB was created in order to find solutions for entities with specific difficulties, thus minimizing the use of public resources.

In 2010 a series of measures were implemented in order to increase financial transparency so as to improve investor confidence in the Spanish banking: the stress tests and the exercise of informative transparency (to make public the extent of each bank' exposure to the real estate sector). Also in 2010 regulation on provisions was tightened and the reform of the Savings Banks Law was approved. This reform aims at healing the main weaknesses of the sector, namely governance and funding issues. On the one hand, managers' professionalism requirements are strengthened. On the other, these entities are allowed to raise high quality equity, permitting, among other possibilities, to exercise their financial activity through a commercial bank with the ability to issue shares in the markets.

At the beginning of 2011, due to the increased tensions in the debt markets, the Bank of Spain (through the RDL 2/2011) raised the minimum requirements of core capital to 8% or 10% of risk-weighted assets, depending on the specific characteristics of the banks. This measure also allows the FROB to serve as a recapitalization tool to those banks that are unable to reach the minimum levels by themselves.

A key aspect of the bank restructuring model developed in Spain is its orderliness, which contrasts with the bailouts, capital injections and other piecemeal measures previously implemented in other European banking systems. The reform of the Spanish banking system, that integrates the measures described above, has three main objectives: reorganization, recognition of losses and capitalization.

The restructuring, integration and capacity reduction processes fall within the scope of reorganization. The concentration processes that were started by the end of 2010 affected 40 of the 45 Savings Banks with operations in the market earlier that year, whose assets represented 94% of the sub-sector (€1,212 billion). There were twelve concentration processes, through conventional mergers or Institutional Protection Systems (SIP) or through the acquisition of previously intervened entities (at the end of 2010, they have been intervened *Caja Castilla-La Mancha* and *Caja Sur*).² In nine of the twelve concentration processes FROB resources were requested by a total amount of €11,559 million. The remaining three processes did not request public funding.

At the end of 2010, after the aforementioned concentration processes the Savings Banks sub-sector had only 17 entities. The size of the entities has more than doubled (the average of the assets total by bank grew from €29,000 million to €76,000 million) and the number of small and medium sized savings banks was dramatically reduced (from 36 to 6 – with less than €35,000 million in assets). Additionally, the sector's concentration has allowed a significant reduction in capacity. The adjustments provided under these processes represent staff reductions between 12% and 18% and networks' size reductions between 10% and 25%.

Under the second objective, the Spanish banking industry has recognized and assumed losses in asset value by an amount equivalent to 9% of the GDP. Since 2008, the banking system made a significant effort in sanitation (€91,000 million),

² In late July 2011, *Caja de Ahorros del Mediterraneo* (CAM), the fourth biggest Spanish Savings Bank (with €78,000 million in assets and more than 950 branches) was also intervened. The FROB nationalized the CAM, with an injection of €2,800 million, and intends to auction its banking business in September this year.

through the establishment of specific and general provisions (€69,000 million) and the recognition of significant losses in the assets' value within integration processes (€22,000 million) (Santiago Carbó Valverde and Joaquim Maudos 2011). This effort focused primarily on the Savings Banks' sub-sector, since in that period, they recognized asset losses of an amount close to €52,000 million (Banco de España 2011d).

Finally under the goal of recapitalization of banking entities, they increased their capital mostly through reserves by an amount equivalent to 3.7% of the GDP. The recapitalization involved an effort to improve the Tier 1 ratio, which rose from 7.6% in late 2007 to 9.5% in late 2010.

4.2 The Labour Market Reform

The institutional structure of the Spanish labour market generates great inter-generational injustice, since older workers with higher skills enjoy an extraordinary level of protection and considerable wage increases at the expense of younger ones. It is therefore a dual labour market, where important issues such as the protection of workers, the introduction of flexibility and the updating of wages should be redefined because: i) the level of protection for permanent contracts and the precariousness of temporary contracts are among the highest in the world; ii) the introduction of flexibility in the labour market is usually done through temporary contracts with very low levels of protection, which has negative consequences in terms of productivity, and; iii) the regime of wage bargaining generates a bias that promotes wage increases, undermining job creation.

In order to solve some of the labour market's structural problems, in 2010 the government undertook a reform of this market, which came into force later that year. The main objectives of this reform are the reduction of duality and wage rigidity, and the promotion of internal flexibility within firms (Felipe Sáez 2011). The main features of the reform are as follows. First, regarding hiring formulas: i) the promotion of indefinite hiring, by reducing compensation of objective dismissal (with the redefinition of the economic causes); ii) the extension of the workers that can be hired through the so-called contracts of employment promotion – *contratos de fomento* (with greater ease and lower cost of dismissal, in justified cases); iii) the introduction of new limits on temporary hiring and on contracts' duration for work and service, and; iv) extension of the groups of workers that can benefit from traineeships and apprenticeships.

Second, in the lay-offs' context working conditions were modified and a more flexible representation of workers was considered and the use of arbitration when there was disagreement. Third, with regard to the duration of collective labour contracts, changing of the established conditions of higher order collective agreements is allowed when there is a private agreement between employer and employee. Fourth, regarding labour market policies, the possibility is introduced that the Public Employment Services may, in certain circumstances, make brokerage arrangements with private job placement agencies or other entities. Temporary employment agencies may also conduct placement activities in new sectors. Finally, in what relates to collective bargaining, the law includes a commitment for reforming the collective bargaining agreement with the social agents.

Although this reform has been in force for a short time, it seems that it is already failing to meet the desired objectives in terms of stimulating employment and reducing temporality, since the number of indefinite contracts remained virtually stagnant, the growth of negotiated wages barely moderated and the increase in employment as a result of new employment promotion contracts was not as significant as expected. The scarce results of this reform have led the government to adopt some additional measures relating to the promotion of part-time employment, the transformation of temporary contracts into indefinite ones and the introduction of a new training and learning contract for young workers.

In future it seems that this reform may lead to some changes. It is expected that the employment promotion contract will become more widely used than in the past primarily for two reasons. Firstly because compensation by objective dismissal is almost 30% lower than in conventional indefinite contracts and secondly because the cost of unfounded dismissal is considerably lower than in other types of contracts.

In terms of temporary hiring, due to the introduction of greater restrictions on temporary contracts and on work and service contracts, it is likely that new contracts will be replaced by informal relationships or forged part-time jobs, especially among low-skilled workers. Nevertheless, these types of contracts will continue to be largely used, as indefinite hiring is still unattractive to employers in certain circumstances. In what concerns promoting employment for specific groups of workers, the introduction or enhancement of direct and indirect incentives will favour the hiring of these collectives.

This reform of the labour market can be considered as being relatively conservative. Its main objective was the reduction of the gap between compensations for dismissal of indefinite and temporary contracts, by using some formulas that have been tested in previous reforms with little success (José Ignacio Conde-Ruiz, Florentino Felgueroso, and José Ignacio García-Pérez 2011). This reform has shown that the government's stance regarding the interests and proposals of entrepreneurs and trade unions is not optimal. Since it has failed to achieve the desired objectives, in the short term, measures should be taken in order to promote job creation and reduce the problems that still persist in this particular market.

5. Discussion

After four years of crisis, the Spanish economy is stagnant, with little prospects of recovery. Growth dynamics will be progressive as a result of the adjustments needed to correct the imbalances accumulated in the expansion period and the deterioration of the fiscal situation during the crisis. The economic activity's recovery will continue to be very moderate, due to several factors, namely to the negative forecasts on the evolution of public consumption and of investment in housing in 2011 and 2012, as a consequence of the intense fiscal consolidation and the adjustment in the real estate market. Public demand will be reduced due to the need to balance public finances, by adapting to the available resources, while private demand will remain restricted due to the high debt accumulated in recent years.

To overcome this situation it is necessary to break the vicious circle of low economic growth, high unemployment and elevated debt. It is essential to redefine the growth model by choosing labour intensive and credit extensive alternatives. In this sense it is necessary to adopt measures that may enhance the services sector and some tradable sectors. In this model, exports have an absolutely fundamental role. The lack of domestic demand might be offset by the dynamics of foreign demand if adequate measures are taken in order to restore the competitiveness lost in recent years. In the short term, a move that could boost competitiveness is the so-called competitive devaluation already implemented in other countries (Laborda 2010). This measure, which is equivalent to a monetary devaluation, consists in reducing the taxes paid by companies to Social Security, thereby lowering labour costs. The short-fall in Social Security would be offset by increases in VAT or other indirect taxes.

The subsequent gain in competitiveness would help to increase exports, thus recovering corporate earnings. This measure would also contribute to job creation (and unemployment reduction), thanks to its lower costs, which in turn would then contribute to the recovery of household incomes. Therefore, the increase of private sector income could speed up the deleveraging process and reduce the high volumes of private debt. In the medium term increases in competitiveness require more investment in education and R&D and higher levels of competition in some sectors which are relatively protected.

The two key sectors in the detonation and extent of the crisis, real estate and banking, should stabilize. The economic recovery in the medium term is only possible if the process of correcting imbalances in these sectors is intensified. The banking sector has a key role in the stock elimination of unsold new homes. On the one hand, because, due the large number of properties that at this time it has in its portfolio, it should lead the process of price adjustment, which is still incomplete. On the other hand, because when the current credit rationing in the wholesale markets is reduced, it should relax the conditions for granting loans, even guaranteeing certain standards of creditworthiness.

In the normalization of the real estate sector the government also has an important role. The measures implemented in the last year and a half intended to limit tax benefits to house purchasers are going in the right direction.³ However, the rental market needs to be boosted by increasing the liberalization and simplification of contracts, by improving legal security for the owners, by removing barriers to tenants, by introducing tax benefits to rental and by re-orientating public housing policies (José García-Montalvo 2009).

The normalization of the banking sector will take some time. Despite the extensive reform carried out, there are reasonable doubts about whether the measures implemented will be sufficient to address the imbalances accumulated during the pre-crisis period. Because of these doubts markets continue without fully relying on the health of the Spanish banking industry, due to its still high exposure to real estate and the large volume of potentially problematic assets.

³ For a discussion on this for the Spanish case see Miguel Ángel López García (2004).

For markets to regain confidence in the Spanish banking sector it is necessary to deepen the reforms already started, to consolidate the reorganization process, to accelerate the recognition of losses and to rapidly increase equity levels. Additionally, it is absolutely necessary to improve transparency by regularly providing detailed information to markets. In this sense, in such a heterogeneous sector, the most problematic situations should be isolated, to avoid that the entire sector is ultimately affected by uncertainty (Carbó Valverde and Maudos 2011).

The banking sector reform was not the only one that did not produce the expected results. The results of the reform of the labour market were also well short of the expectations initially created (Conde-Ruiz, Felgueroso, and García-Pérez 2011). The changes did not lead to job creation or to the reduction of the large market segmentation. The conservatism of the reform prevented it from achieving its major objectives and it proved once again that the labour market needs to be reformed without prejudice.

To reduce the duality and diminish the prevailing high levels of temporality of the Spanish labour market it is necessary to introduce a single employment contract, as has been defended for several years by many Spanish academics (see, for instance, Samuel Bentolila, Juan José Dolado, and José Francisco Jimeno 2008) and various international organizations. This type of contract will promote the creation of stable jobs and the accumulation of human capital, and it will simultaneously ensure that wages are set in accordance to the evolution of productivity (Ángel Ubide 2011a).

The recovery of the Spanish economy is also heavily constrained by the instability in the international markets since the beginning of the sovereign debt crisis. The Spanish public finances and therefore its creditworthiness are very different from the countries rescued so far (Greece, Ireland and Portugal). Its level of debt is significantly lower and the economic growth expected for the next few years is slightly higher (Emilio Ontiveros 2011a). In addition, there were no anomalies in their public accounts and the government has responded to all requests concerning information.

Although since the first interventions, Greece and Ireland, the Spanish economy has decoupled itself from these countries, in terms of perception, from a given moment in time contagion became explicit, and the risk differential began to increase, primarily for two reasons. The first one is the high private indebtedness of the Spanish economy. In the current situation, this problem is aggravated by the low expectations for economic growth and the high unemployment levels. The probability that this situation can trigger the conversion of private debt into public debt is reflected in higher risk premium for sovereign debt (Ontiveros 2011b).

The second reason is the governance deficit in the eurozone (Jean Pisani-Ferry 2010). In Europe most of the errors committed during the management of the emerging markets' crisis of the nineties were repeated. Decision-making has been extremely slow, concern over moral hazard excessive and rescue measures in some cases absolutely insufficient (Ubide 2011b).

Currently, there are two major lines of intervention over which should lay the foundations of the Spanish economic recovery. First, at the national level, the reforms implemented over the past two years should be further pursued and structural

reforms in other areas should be initiated (Javier Suárez 2010). Additionally, the process of bank restructuring should be completed and the model of state organization should be redesigned (Jesús Fernández Villaverde and Lee Ohanian 2010). Secondly, at the European level, solutions should be promoted to eliminate the fundamental problems of the eurozone: the restrictions on the European Central Bank's intervention (De Grauwe 2011b) and the lack of fiscal integration (De Grauwe 2010). Since the likely solutions may involve changing the Union's Treaty, support shall be provided for temporary solutions that restore confidence in the markets and allow the recovery of financing levels.

6. Conclusion

The problems being faced by the Spanish economy are not the usual of a cyclical downturn (Kosta Josifidis, Alpar Lošonc, and Novica Supić 2010). Their severity can make it move further away, convergence wise, from developed countries, particularly from EU countries, which are also having difficulties to keep up with the growth of the emerging areas and to meet the challenges of globalization.

The impact of the financial crisis on the real economy caused a sharp drop in output and an enormous rise in unemployment. The burst of the real estate bubble produced a very strong shock on economic activity and employment. The high exposure of banking to construction and real estate activities (through the massive volumes of credit granted) was the means of transmission of the housing crisis into the banking industry. The consequence of this contagion is that the Spanish banks have faced serious solvency problems, especially from 2009.

Currently, the recovery of economic growth is strongly affected by the high level of debt, especially private debt, and the high unemployment rate. Additionally, the serious financial situation of the private sector together with the financing difficulties in the international markets, adversely affect the banking system, which have serious problems to finance the economy.

Besides a broad program of fiscal consolidation, which began in 2010, the authorities have promoted various economic reforms in some sectors and markets, but results have fallen far short of expectations. A well succeed exit strategy for the current situation needs, on the one hand, to deepen the reforms launched so far and, on the other, to extend the reformist agenda to other areas, such as education and research, as a way of guaranteeing further increases in growth potential.

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