

Asymmetries in Europe: causes, consequences, remedies

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The Spanish Economy Today: A Deep Structural Crisis

**Antoni Soy, Professor d'Economia Aplicada, IEB (Institut d'Economia de Barcelona),
Universitat de Barcelona**

Abstract

This study takes a non-orthodox perspective: on the one hand, because it chooses to focus on demand (rather than on supply) and, in particular, because it examines foreign sector demand as the key factor in explaining the processes of economic growth and crisis; and, on the other, because it considers the euro (and the EMU) to be a problem without remedy for its country members. Indeed, for both economic and democratic reasons, the best thing that these countries can do is to start dismantling the system. From this perspective, the study first examines the evolution taken by the main macroeconomic variables of the Spanish economy, focusing above all on the sources, causes and consequences of growth and of the current crisis before and after the introduction of the euro. In so doing, the paper adopts a highly innovative approach that includes the perspective of sectorial balances developed by Wynne Godley and his disciples. Secondly, the paper argues that the main macroeconomic imbalances and asymmetries have become manifest in the period 2008-2013, especially if we consider Spain's outcomes in relation to those of the main countries of the eurozone and the averages of the EU-27 and the EU-15. Thirdly, in an analysis of claims that the Spanish economy is beginning to show signs of recovery, this study looks at the explanations for this supposed turnaround. Finally, the paper concludes by outlining various suggestions from the perspectives adopted throughout the study, taking into account the main challenges that the Spanish economy faces.

JEL Classification: O52; O57; F34; F50; H63

Since 2008, the Spanish economy, in common with the European economy, has been hit by a serious crisis, of a similar dimension to that of the crisis of the 1930s or perhaps even greater. The crisis has been primarily structural in nature, although it may well have been exacerbated by a number of circumstantial elements. The traditional explanations for this crisis, and certainly the most predominant among economists and policymakers, are that its underlying causes are public sector borrowing, on the one hand – which rapidly became the sovereign debt crisis in Europe and its periphery, and the failure to initiate a series of "structural reforms", which in turn has limited productivity growth and the competitiveness of the economy, on the other. Seen from this perspective, government policies have sought to overcome the crisis by reducing public deficit and public debt – which as we shall see throughout this paper has been an on-going battle in the current crisis, while at the same time they have taken steps to implement the necessary "structural reforms". At the moment of truth, however, these "reforms" have been limited to the "reform of the labour market" – that is, to the liberalization, deregulation and flexibilization of the labour market to the benefit of firms (with employers and governments taking the initiative) and to the detriment of the workers (who have had to sit and watch the increasing passivity, conformity and resignation of the unions). Yet, the whole process has been characterized by a great deal of short-sightedness, because the companies and the governments, with their policies of "wage devaluation", have failed to take into consideration that the workers' wages are the main source of demand for companies and, so, by adopting these policies they have merely limited the possibilities for economic recovery: this is precisely what Joan Robinson – in line with the analyses developed by Marx, Keynes and Kalecki – described as "an essential paradox of capitalism" (see, among other publications, Robinson, 1956).

Here, however, we offer a very different vision of the causes (and consequences) of the current crisis (Soy, 2013; Soy, 2014; Soy 2014b), with a particular emphasis on the developed world, and especially on Europe. First, we examine, on the one hand, the financial crisis, the result of the far-reaching liberalization and deregulation of the financial system that was already underway at the end of the last century, and which gave excessive weight to the financial system in the global economy – the "money manager capitalism" of Minsky (Wray 2009; Wray 2011), which Hein (2002) has referred to as the "financialization" of the economy (Hein 2012); and, on the other, the tremendous growth in private debt which is a fundamental cause of the current crisis. The public deficit and rising public debt (which, incidentally, are much less significant than private debt) are not the causes of the crisis, rather they are its consequences. It should be stressed, as Professor Bagnai (Bagnai, 2014; Bagnai 2014b) has insisted repeatedly and as the Vice President of the European Central Bank has explicitly recognised (Constâncio, 2013), that public deficit and public debt are a consequence and not the cause of this crisis. The blame lies firmly at the feet of private debt.

Second, as has been reported throughout the literature (most recently, among others, by Bah & Brada, 2014; Cingano, 2014; Hellebrandt, 2014; Karabarbounis and Neiman, 2013) we should not forget the role played by the progressive growth in inequalities in the distribution of income and wealth (above all in the developed world since the 1980s), which has sent shock waves through the middle classes, increasing poverty and

driving a wedge between a very small wealthy minority and the massed ranks of the poor. This has not only reduced demand, adversely affecting production and employment, but it has resulted in the growing indebtedness of the middle classes as they strive to maintain previous levels of income and consumption. Hence, significant growth has been reported in private debt.

Third, we have witnessed the growing external imbalances between those countries that export more than they import – and thus that have an excess of savings over investment, allowing them to lend to other countries and, so, to become creditors (Germany being the most obvious example in Europe) – and those that import more than they export – and thus that have insufficient savings to finance their investments, forcing them to borrow and, so, to become debtors (Spain and the other peripheral countries of Europe being the obvious examples). The persistence of these external imbalances can only but create problems in these countries – for debtors and creditors alike, and, hence, for the economy as a whole. These imbalances, as has been noted, are linked to the endogenous nature of structural asymmetries between central and peripheral economies, especially in the case of the European Union (Botta, 2014; Pérez-Caldentey and Vernengo, 2012) and moreover, they have converted the peripheral countries in the eurozone in fragile and "developing countries" from a financial point of view (De Grauwe, 2011; Saka et al., 2014). Beyond certain specificities of the different countries in the periphery of the euro zone, a highly interesting attempt has been made to explain and interpret the crisis in these countries using a unified conceptual framework: Minsky's theory of cycles and its application to recent crises in "developing countries", in interaction with the Kaldor-Verdoorn's cumulative growth model. Within this framework, these countries are seen as having reached a perverse situation in which they can see how "net external liabilities" grow although at the same time their "real growth rate is not booming" (Bagnai, 2013, following Taylor, 1998; Frenkel and Rapetti, 2009; Thirlwall, 2002; León-Ledesma, 2002; see also Cesaratto, 2014; Frenkel, 2014).

As Meade (1957) noted, the only possibility for sustainable economic integration between countries with different economic structures and levels of competitiveness is the flexibility of the nominal exchange rate, something that the euro clearly does not allow. This is the same conclusion that a number of recent studies published by the International Monetary Fund seem to reach (Gosh et al., 2014a; Gosh et al., 2014b) and also the same conclusion pronounced by various "unorthodox" economists several years ago (Frenkel and Rapetti, 2009). In the case of the euro area, external imbalances are closely linked to the existence of a fixed exchange rate between the member countries and the euro, which is not the currency of any one country and as such means that these countries cannot engage in their own exchange policy. The possibilities for borrowing and the conditions under which these countries can borrow are in the hands of the European Central Bank, which applies many limitations on its lending, and especially in the hands of international financial markets. In short, eurozone countries have lost control of their currency and some are in danger of "default".

For this reason, the European crisis escalated with the sovereign debt crisis, which began in Greece before expanding to Ireland and Portugal, and then subsequently to Spain and Italy. First Greece, then Ireland and Portugal were bailed out by the "troika" (European Commission, European Central Bank and International Monetary Fund) so that they could repay the debt and avoid bankruptcy. Likewise, in 2012, Spain (which had received significant sums from Europe to bolster up its banking system and which increased its public deficit and public debt) and Italy found themselves in a critical position with the risk spreads in their bond debts reaching dramatically high levels. The situation was redirected in mid-2012, at least momentarily, with the intervention of the European Central Bank and its Outright Monetary Transactions (OMT) and more specifically when its president, Mario Draghi, announced that the ECB would do all that was necessary to prevent the continued sovereign debt crisis affecting the euro and the eurozone. Since then things seem to have calmed down somewhat.

The "troika" bail-outs were accompanied, however, by the imposition on Europe's peripheral countries of extremely severe austerity policies, together with an internal devaluation (a reduction in wages and public spending), given that a devaluation of the countries inside the euro area was not possible. These policies, while they have improved the foreign sector balance, have served merely to exacerbate the recession and problems of unemployment. In short, they have not helped to reduce the public deficit, rather they have led to the rapid growth of public debt and the public debt to GDP ratio. Clearly this begs the question then as to what extent these policies might be considered intelligent or even appropriate.

This paper considers, first, the evolution taken by the main macroeconomic variables of the Spanish economy, focusing above all on the sources, causes and consequences of the growth and of the current crisis before and after the introduction of the euro. In so doing, the paper adopts a highly innovative approach that includes the theory of sectorial balances developed by Wynne Godley and his disciples. Second, it is argued that the main macroeconomic imbalances and asymmetries have become manifest in the period 2008-2013, especially if we consider Spain's outcomes in relation to those of the main countries of the eurozone and the averages of the EU27 and the EU15. Finally, in an analysis of claims that the Spanish economy is beginning to show signs of recovery, this study looks at the explanations for this supposed turnaround. The paper concludes by outlining suggestions from the various perspectives adopted throughout the study, taking into account the main challenges that the Spanish economy faces.

1. The recent evolution of the Spanish economy

In this section we consider the evolution in the main macroeconomic variables of the Spanish economy, focusing in particular on the sources, causes and consequences of its growth and its crisis before and after the introduction of the euro. One of the main sources of inspiration for this section, but by no means the only one, is a similar study of the Greek economy undertaken by the Levy Institute in 2012 (Papadimitriou, Zezza, Duwicquet, 2012).

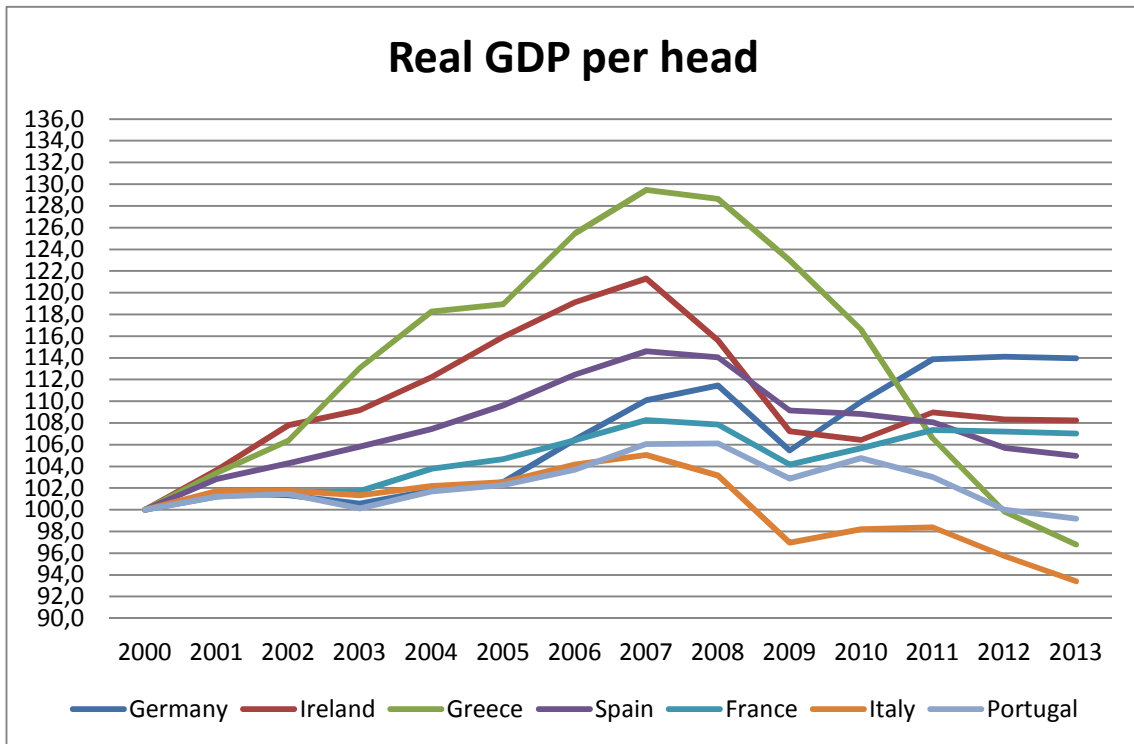
1.1 Growth and crisis in the Spanish economy

Since 2008, the Spanish economy has been immersed in a deep crisis, undoubtedly the most important of the last seventy five years since the 1936-39 civil war. This crisis has its origins in the financial crisis that began in the USA but which quickly expanded to Europe and the whole world, rapidly becoming a full-scale economic crisis.

The data in Figure 1 show us the recent trend in per capita GDP (at constant prices of 2010) for Spain, and for other eurozone peripheral countries (Greece, Ireland, Italy, Portugal) as well as for Germany and France. Spanish per capita GDP increased significantly until 2007 (at over 14%), only exceeded in this regard by Greece and Ireland. During this period Spain overtook Italy and Portugal, caught up with France, but lost ground in relation to Greece and Ireland and also, albeit only slightly, to Germany. However, per capita GDP went into decline between 2008 and 2013 (falling almost 10%), a period in which the decline hit Italy and Ireland and especially Greece (-32.7%) much worse. Spain thus gained positions on these countries, while slipping further behind Germany, the only country in which per capita GDP has actually grown in this period of crisis. Today, in 2013, as at the start of the period under analysis, only Portugal and Greece have a per capita GDP lower than Spain's. Taken as a whole - 2000-2013 - Spanish per capita GDP has increased by 5% (that is more than rates in Greece, Portugal and, especially, Italy, but less than rates in France, Ireland and, above all, Germany, with an increase in excess of 14%). In fact, Spanish per capita GDP is 9% down on Germany's for the whole period.

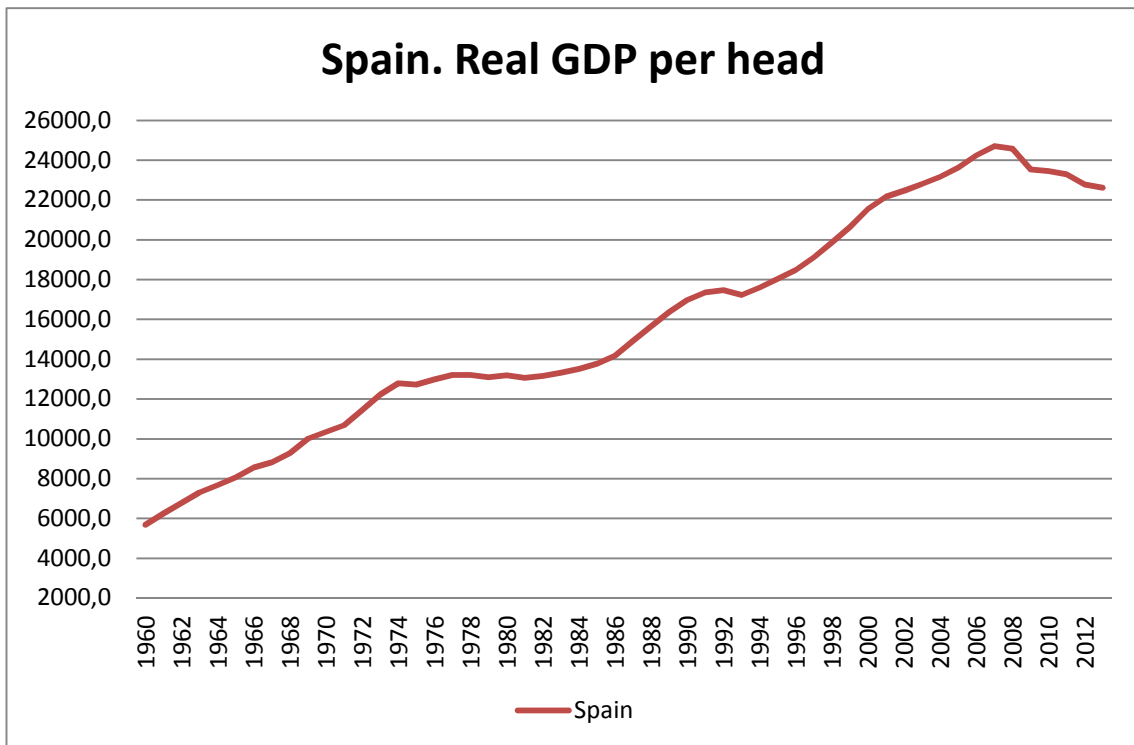
For a broader view, it is interesting to see the evolution in Spain's per capita GDP since 1960 (Figures 2 and 3). The country experienced a huge growth (a cumulative annual growth of more than 6%) in the period 1960-73; a slowdown during the 1974-85 crisis (0.7% growth); a resurgence (2.8%), albeit more moderate than in the 1960s, between 1986 (the year Spain joined the EU, then the European Economic Community) and 1993 when the European Monetary System was hit by a crisis; a similar rate of growth in the following period between 1994 and 2007 (2.6%); and finally a major recession between 2008 and 2013 (-1.65%). It is also interesting to see how the rate (2.9% cumulative annual growth) is higher in the period 1986-99 (from the country's entry to the EU until the adoption of the euro) than it was between adopting the new currency and the end of the period of growth (2000-07) when the economy grew at a cumulative annual rate of 2%.

Figure 1.- Eurozone: Real GDP per head



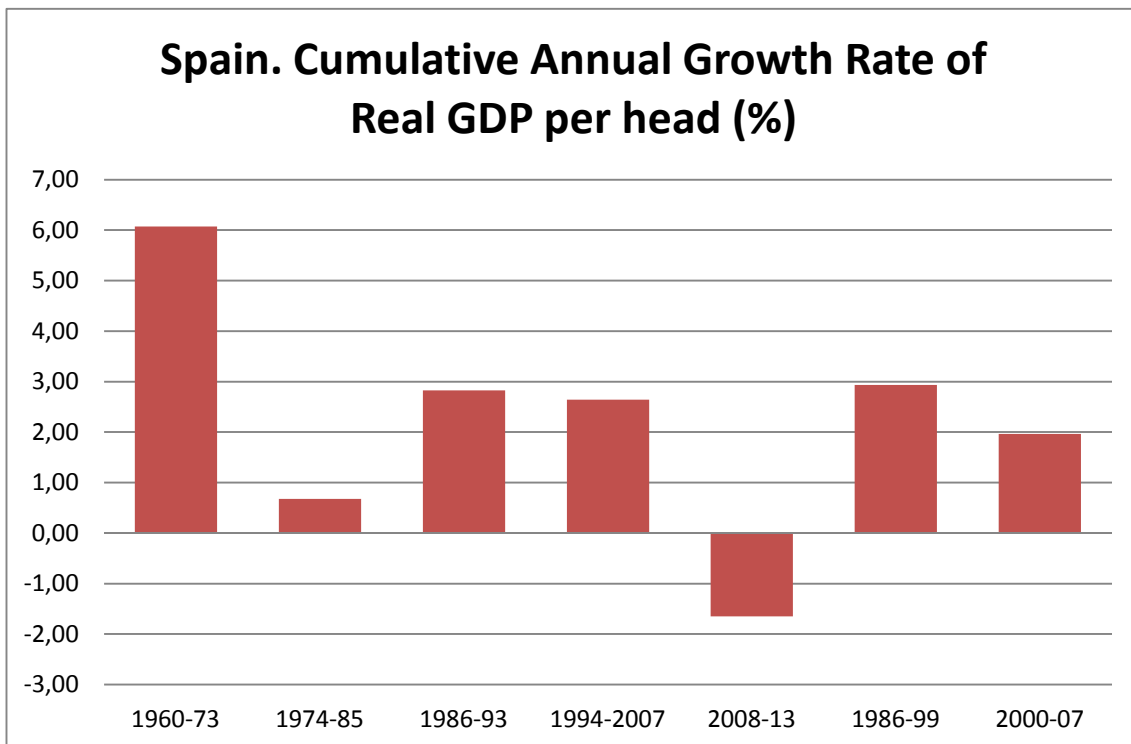
Source: AMECO

Figure 2.- Spain. Real GDP per head



Source: AMECO

Figure 3.-Annual Average Rate of Growth of GDP per capita (%)



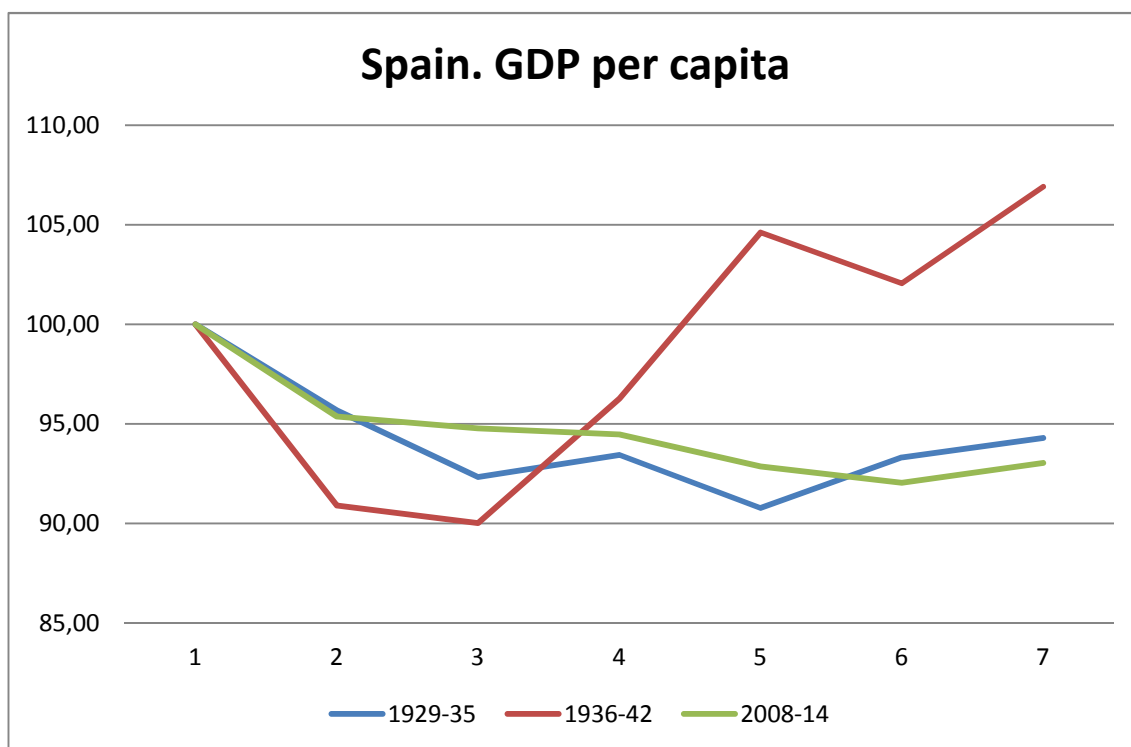
Source: AMECO

There can be no doubt that the Spanish economy is experiencing its deepest crisis since the 1936-39 civil war, a crisis that given its intensity and duration can be compared to the impact in Spain of the Great Depression of the 1930s. Figure 4 shows the evolution of per capita GDP in Spain in the seven-year periods following the start of the crises of 1929, 1936 (Civil War) and 2008, respectively. The periods have been fixed at seven years because the 1929 crisis was immediately followed by the outbreak of the 1936 civil war. GDP per capita fell at the outbreak of the civil war, but it recovered much faster if we take into account that in the fifth year of the period it was higher than it had been in the initial year. In the 1929 crisis, per capita GDP was below the levels recorded in the current crisis in the third, fourth and fifth years, but in the last two years it rose above the corresponding levels of the current crisis. And thus in both cases, after seven years, the per capita GDP remained somewhere between 6 and 8% below the initial level.

The current crisis therefore is characterised by its great intensity and duration, with an overall fall in per capita GDP of between 7 and 8% seven years after its onset. This has had a great impact on the rise in unemployment, the increase in poverty and the threat of the general deterioration and the collapse of public finances (deficit and debt).

It is widely held that the evolution in the per capita GDP depends on the evolution of labour productivity as well as on that of the labour market and the population. Put simply, real per capita GDP = real GDP per employee multiplied by the number of

Figure 4.- Spain's GDP per capita in recent crises



Source: Maddison Project and WEO database

employees in relation to the total population and, therefore, the growth in real GDP per capita = the growth in the real GDP per employee + the growth in the number of employees in relation to the total population (considering that the real GDP per employee is equivalent to labour productivity). We are very interested, therefore, in seeing how these variables have evolved.

After Spain joined the European Union in 1986, labour productivity (in 2010 constant prices) grew much more slowly than it had done previously: a cumulative annual growth rate of 1.3% between 1986 and 1993 vs. 0.4% between 1994 and 2007, despite the significant growth in per capita GDP in these periods (almost reaching 3% cumulative annual growth). However, labour productivity rose significantly in the crisis period (2.4% cumulative annual growth) as per capita GDP fell significantly. If we consider what happened when the economy grew, before (1986-99) and after (2000-2007) the introduction of the euro, we see that productivity grew almost three times more in the first period than in the second (see Figures 5 and 6).

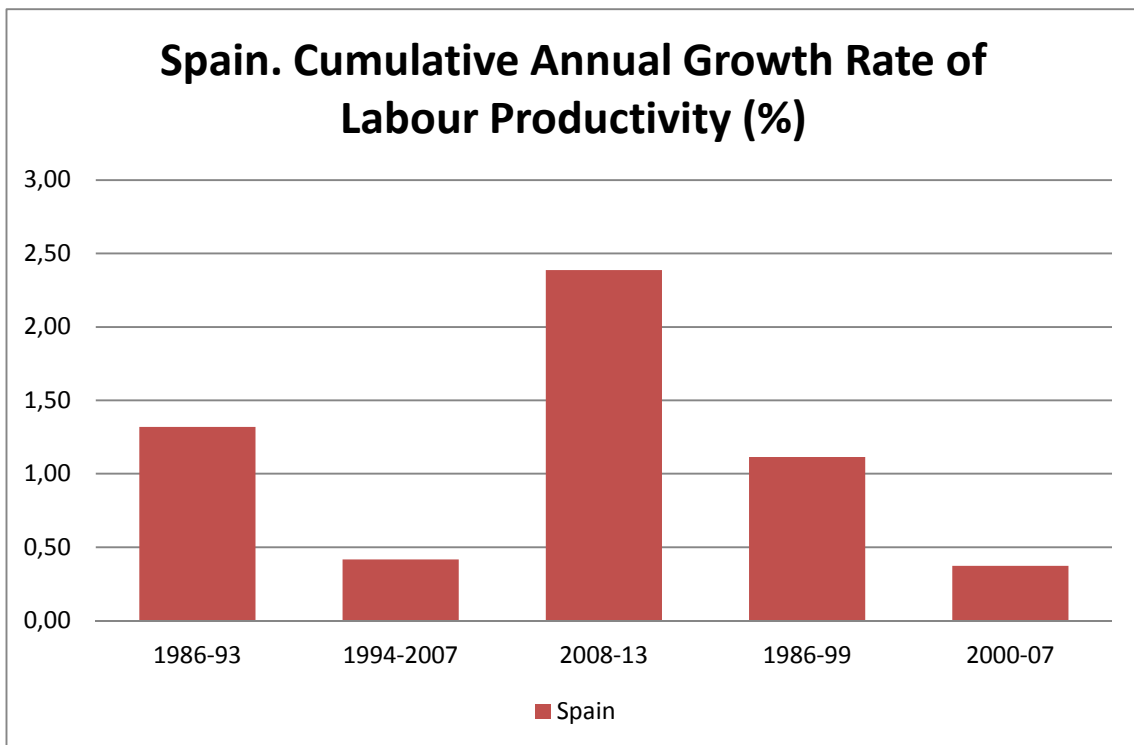
That is, it is quite evident that with the onset of the crisis, the decline in the GDP per capita and the increase in labour productivity in Spain occurred as a result of a significant decrease in the employment to population ratio. And as Spain's overall population has not undergone very substantial changes, the ratio has fallen because of the large decline in the employed population (for more on the marked rise in unemployment see below).

Figure 5.- Labour Productivity



Source: AMECO

Figure 6.- Labour Productivity, Cumulative Annual Growth Rate



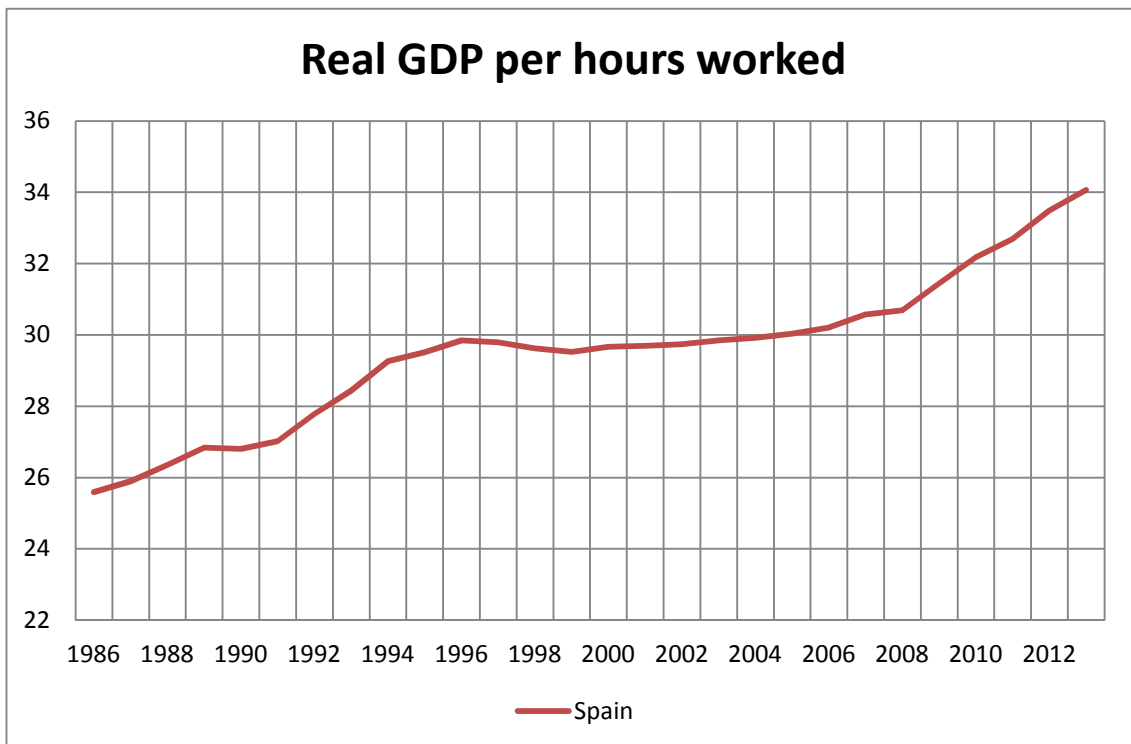
Source: AMECO

Notice, however, that labour productivity (i.e., real GDP per employee) can be broken down into real GDP per hour worked and the hours worked per employee (i.e., real GDP per employee = the real GDP relative to the total number of hours worked multiplied by the total number of hours worked in relation to the number of people employed, and the growth in real GDP per employee = the growth in real GDP per employee in relation to the total number of hours worked + the growth in the total number of hours worked in relation to the number of people occupied).

The behaviour of real GDP in relation to total hours worked (see Figures 7 and 8) in the Spanish economy is very similar to that of real GDP per employee (labour productivity): thus, we find a cumulative annual growth rate of 1.5% between 1986 and 1993 and just 0.3% between 1994 and 2007, despite the significant growth in per capita GDP in these periods (reaching almost 3% cumulative annual growth). However, real GDP increases significantly in the crisis period (2.1%) as GDP per capita decreases significantly. If we examine the situation when the economy grows, before (1986-99) and after (2000-2007) the introduction of the euro, we see that real GDP in relation to total hours worked grew almost three times more in the first period than in the second.

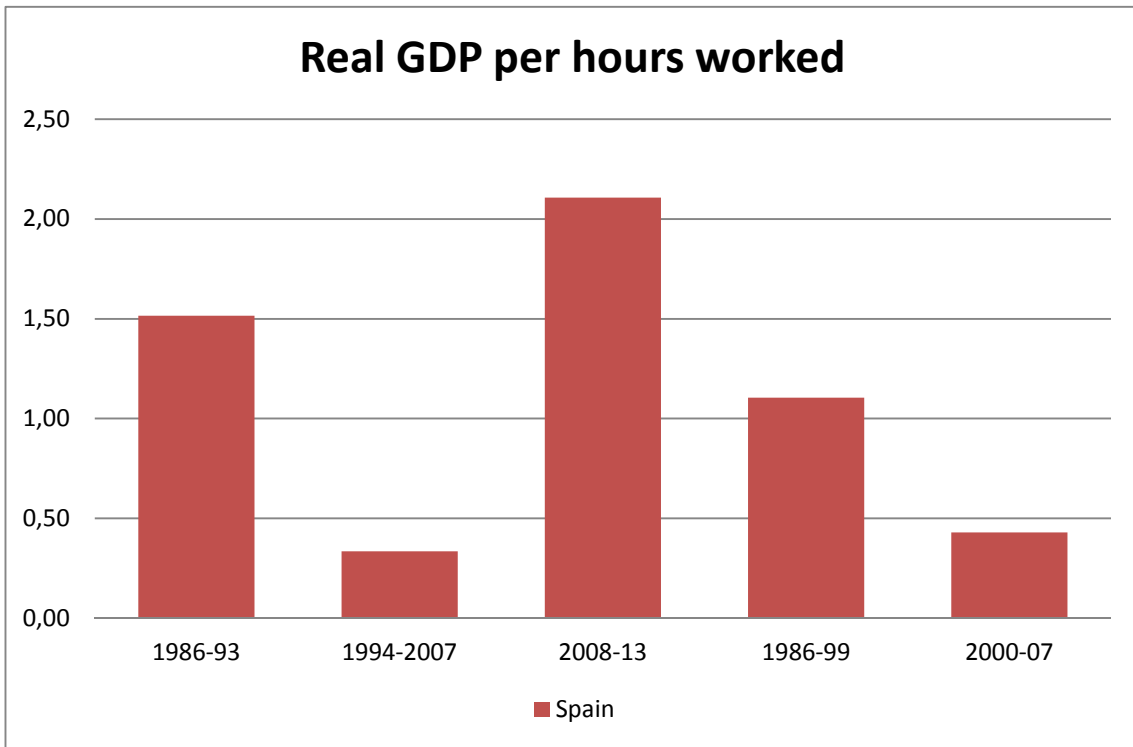
As for the average number of annual hours worked per employee (see Figures 9 and 10), they show a clear tendency to decrease throughout the period, and in all the sub-periods considered, especially from 1986 to 1993 and, more particularly, from 2000 to 2007. They also fell in the period of the great crisis after 2008; however, the average number of hours worked per employee is about the same in 2013 as it was in 2007.

Figure 7.- Real GDP per total hours worked



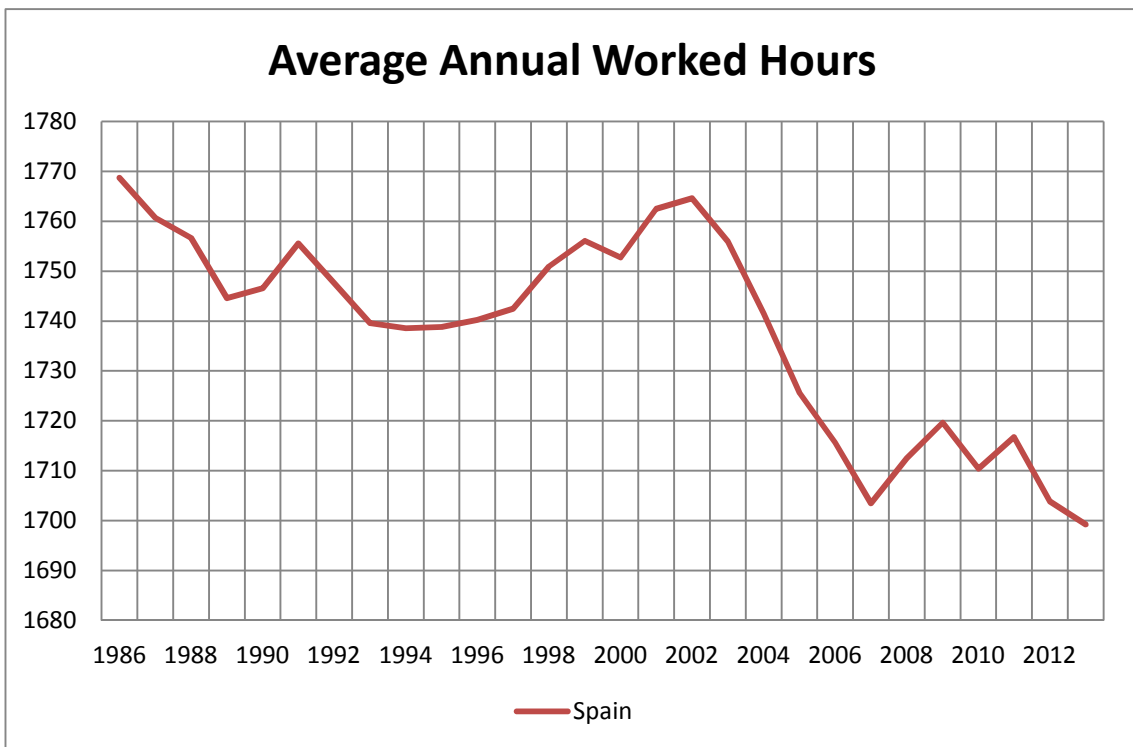
Source: AMECO

Figure 8.- Real GDP per total hours worked, Cumulative Annual Growth Rate



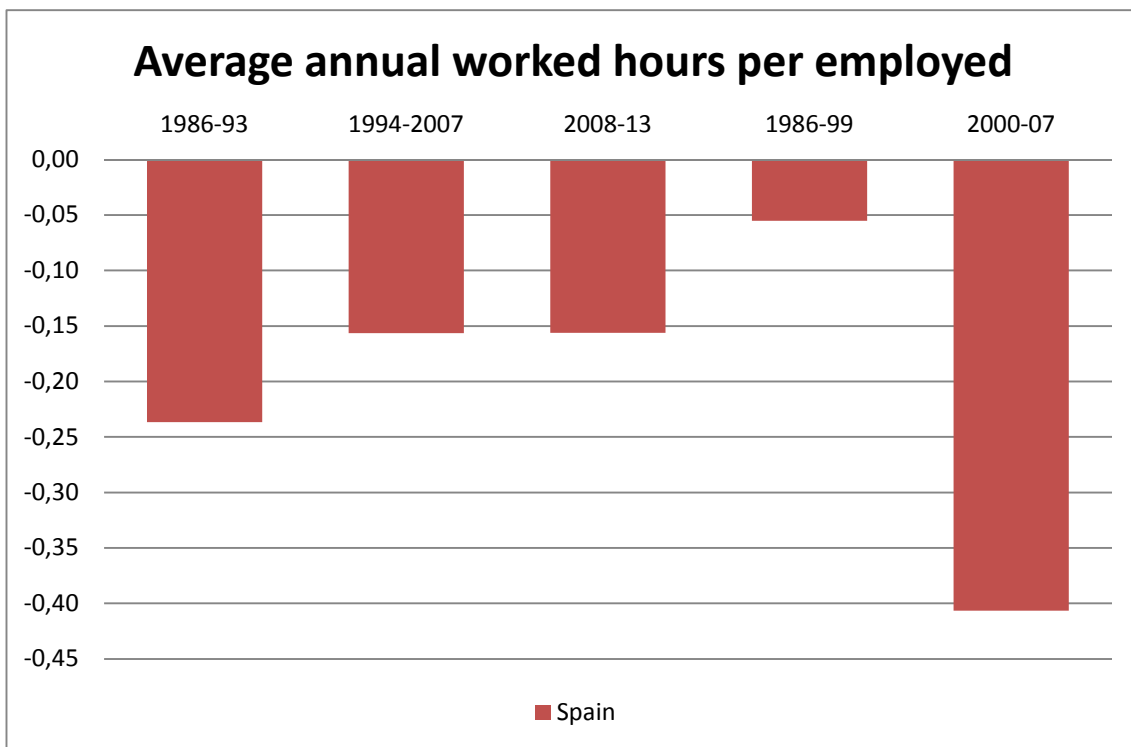
Source: AMECO

Figure 9.- Average annual hours worked per employee



Source: AMECO

Figure 10.- Average annual hours worked per employee, Cumulative Annual Growth Rate



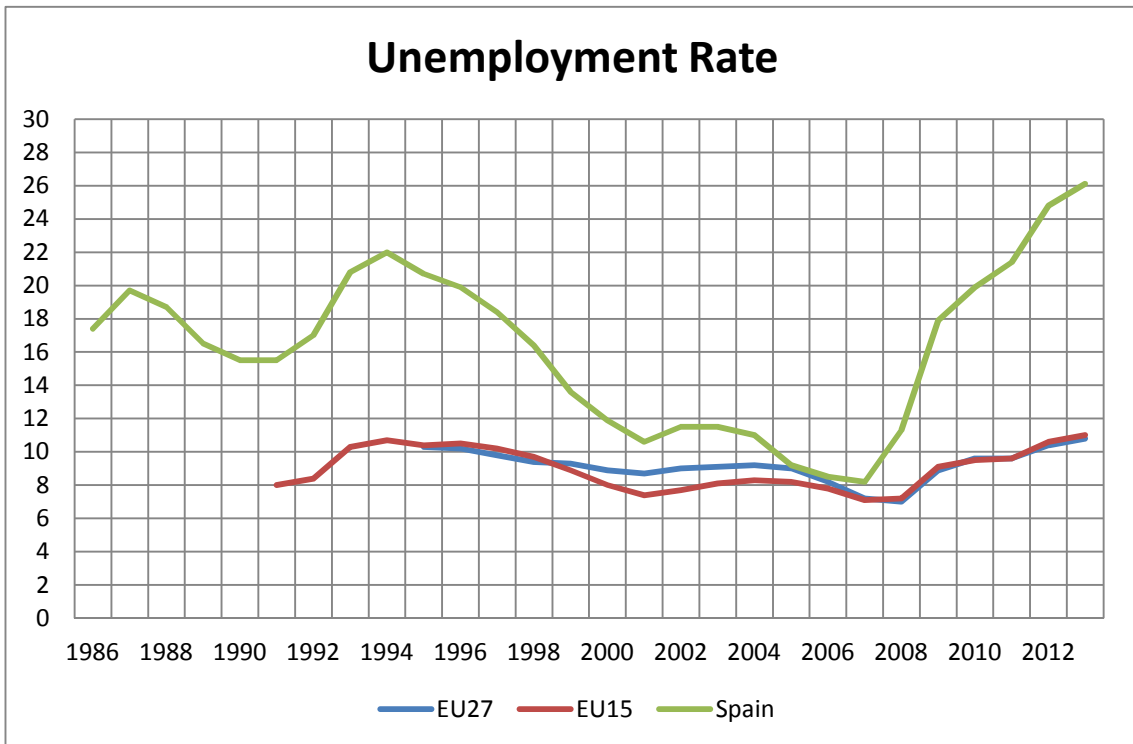
Source: AMECO

The unemployment rate in Spain has usually been well above the European average, especially during the 1990s and since the onset of the recent crisis. Only in the late nineties did it draw close to the EU average, being almost on a par in 2007.

However, during the current crisis (2008-13), as there has not really been a significant reduction in the number of annual hours worked per employee, the marked increase in real GDP per hours worked and in labour productivity (real GDP per employee) against a background of a marked decline in GDP per capita (without any substantial changes in the total population), are attributable primarily to the large decline in the working population and, therefore, to a massive increase in the unemployed population and consequently in the rate of unemployment (see Figure 11).

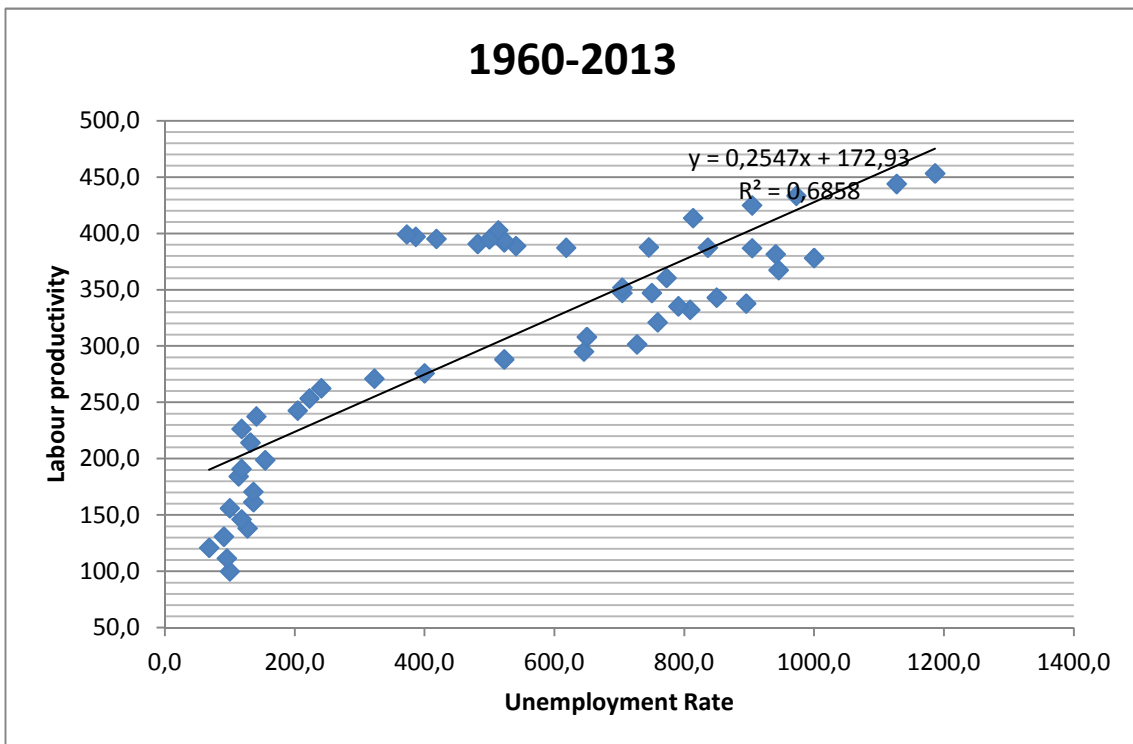
If we examine a long series (1960-2013) of the unemployment rate and labour productivity, a positive correlation can be seen between the two variables of considerable intensity (Figure 12). However, tests seem to show no causality (Granger testing) between the two variables. Indeed, the extant literature informs us that the relationships of co-integration and causality between these two variables are unclear. Indeed, on the contrary, the results reported are inconclusive and often contradictory (Gordon, 2004; Landmann 2004; Benigno and Ricci and Surico 2010; Dew-Becker and Gordon, 2012).

Figure 11.- Unemployment Rate



Source: AMECO

Figure 12. Unemployment Rate and Productivity Correlation



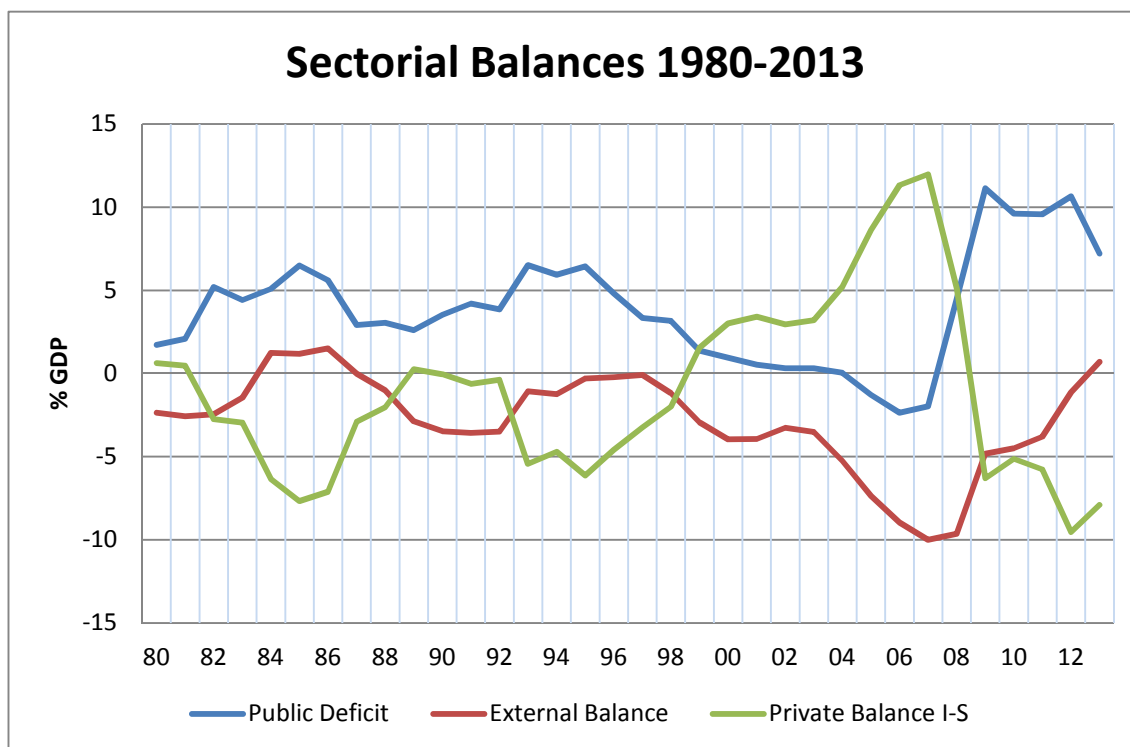
Source: AMECO

1.2 The sectorial balances

In this part of the study the aim is to examine the sources of growth in Spain's economy in recent decades. We base this analysis, in part, on the "financial balances approach" initially developed by Wynne Godley, first at the University of Cambridge (UK) and then at the Levy Economics Institute (US). This approach is based on the components of aggregate demand (private consumption, investment, government spending and net exports) and analyses the implications, in terms of the financial balances of the main sectors of the economy (exterior, public, and private – companies and households) by taking into account that ***the capacity or need for financing by the private sector = the public sector deficit + the balance in the foreign sector*** (see Zezza and Papadimitriou, 2012; Lavoie and Zezza, 2012; Godley and Lavoie, 2012).

The sectorial balances of the Spanish economy are shown in Figure 13, while Figure 14 shows the evolution of real GDP per capita in the period 1980-2013. The results of the balances are represented in such a way that when there is growth, there is an increase in the contribution from the different sectors – exterior, public or private – to the increase in the aggregate demand and the opposite when there is a decrease.

Figure 13.- Spain. Financial Balances

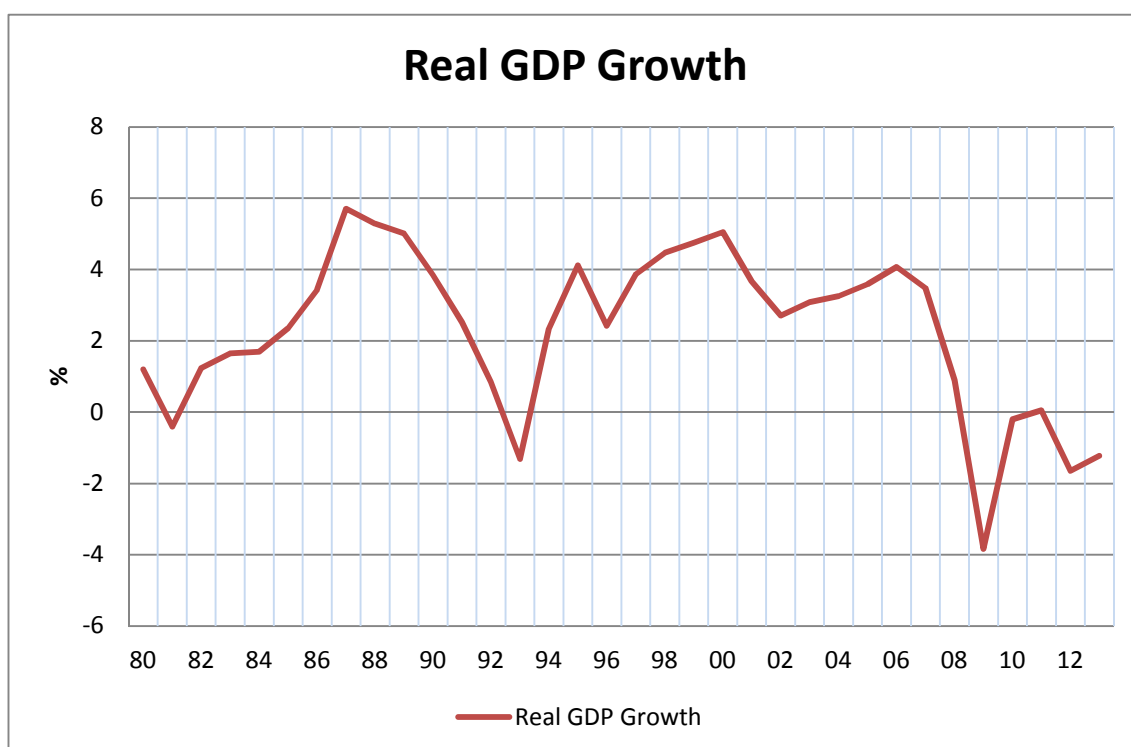


Source: WEO Database. IMF

As can be seen, the Spanish economy grew at a significant pace after 1982 (especially in 1985) until 1991 and between 1994 and 2007. In contrast, it suffered a brief period of crisis in the years 1992-93, coinciding with the problems suffered by the European Monetary System, and has undergone a downturn since 2008 to the present day. Between 1980 and 1991 (recovering after the crisis that had lasted from 1973 to 1984), the public sector deficit was the main contributor to the growth in aggregate demand and GDP, while the external sector made a positive contribution in the period 1984-87; meanwhile, the private sector continued to reduce its borrowings (savings exceeded investment) until 1985. In that year, the sector began investing again, but not at sufficient levels to overtake the sector's savings.

During the 1992-93 crisis, public sector deficit once again made a large contribution to the growth in aggregate demand and GDP (a situation that would last until 1998); meanwhile the private sector reduced its borrowings again until 1995 and the foreign sector improved its balance thanks to successive devaluations of the peseta, an improvement that would last until 1997. With the arrival of a new period of growth (1994-95), the private sector began to borrow more and more (with investments outstripping savings) to fund the expansion of the economy – up to a maximum of 12% of the GDP in 2007. This was financed through the progressive borrowing of the external sector, which recorded a historical high of 10% of GDP in 2007. Meanwhile, the public sector, which had to fulfil the Maastricht criteria in order to enter the euro, gradually decreased its borrowing to the point that it recorded a surplus in the period 2005-2007.

Figure 14.- Spain. Real GDP Growth

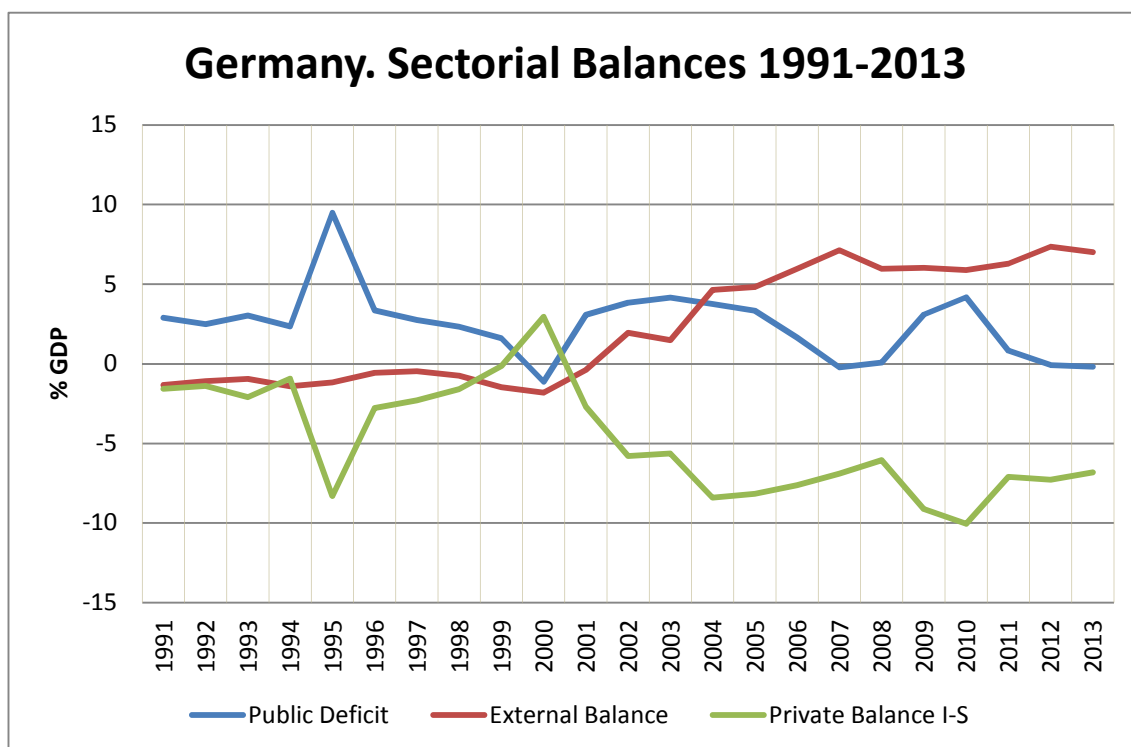


Source: WEO Database, IMF

All this was to change again with the onset of the 2008 crisis: the private sector began to reduce its borrowing rapidly and since 2009 its levels of savings have once more outstripped its investments. The same is true of the foreign sector balance, which has gradually decreased its borrowing (with a large drop in imports) to achieve a small surplus in 2013. Thus, the public sector gradually began to borrow again in order to maintain a minimum aggregate demand, and since 2008 it has reported growing deficits, recording historical highs. Moreover, it has not been easy to reduce the deficit despite the austerity policies implemented aimed at achieving fiscal consolidation and meeting the criteria of the "fiscal compact".

It is interesting to compare the sectorial balances of the German economy (data only available since reunification) with those of the Spanish economy (Figure 15). In Germany, as in Spain, until the introduction of the euro, it was public sector deficit that financed economic growth. However, after the introduction of the euro, this situation continued together with growing surpluses in the external sector. Together these are financing economic growth and are able to offset the excess of savings over investment in the private sector. In contrast, in Spain, the large and growing deficit in the foreign sector – which fell with the onset of the crisis and the implementation of the country's austerity policies – has been used to finance the excess of private investment in relation to private savings, which have also fallen since the beginning of the crisis.

Figure 15.- Germany. Financial Balances

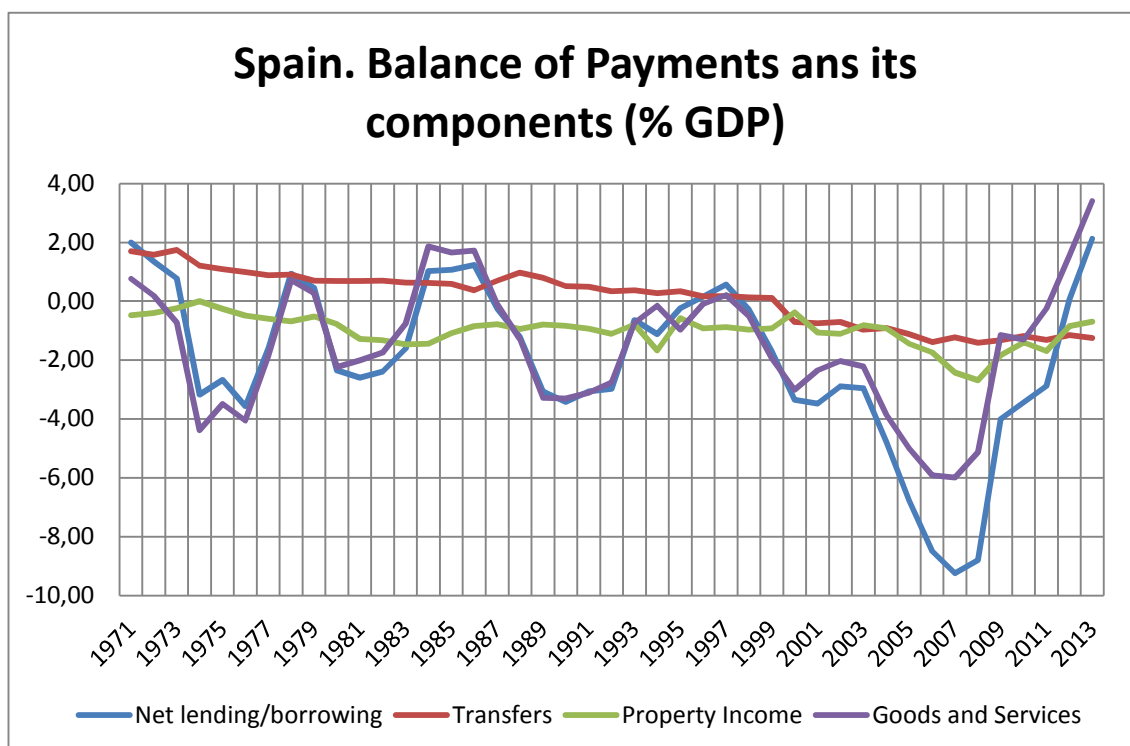


Source: WEO Database, IMF

1.2.1.- The external sector

Figure 16 presents a breakdown of the components of the Spanish balance of payments expressed in % of GDP. The first feature to note is the strong correlation between the behaviour of the current account balance and the balance of goods and services, especially until 1999 (the year of the introduction of the euro), because until that moment the deficit in the balance of property income had been offset by the surplus in the balance of transfers. Second, in most years both the current account balance and the balance of goods and services presented a deficit, except that is in the early seventies, 1978-79, 1984, 1986, 1997 and 2012-13. Third, after 1999 (the year of the introduction of the euro), foreign borrowing increased gradually and rapidly, which meant a large and growing deficit in the current account until 2007 (coinciding with the period of expansion of the Spanish economy), while the deficit in the balance of goods and services also grew, albeit not so strongly, and therefore both the balance of property income and the balance of transfers presented a deficit. With the onset of the 2008 crisis, due in the main to the large fall in imports, the balance of goods and services improved rapidly, the balance of property income improved slightly, while the balance of transfers remained constant. At the same time, the balance of the current account improved which, in common with the goods and services balance, presented a small surplus in 2012 and 2013. The austerity policies implemented in Spain, although unsuccessful in ending the crisis, stemming the loss of jobs and making significant inroads into public deficit and debt, have on the contrary been able to improve the situation in the foreign sector.

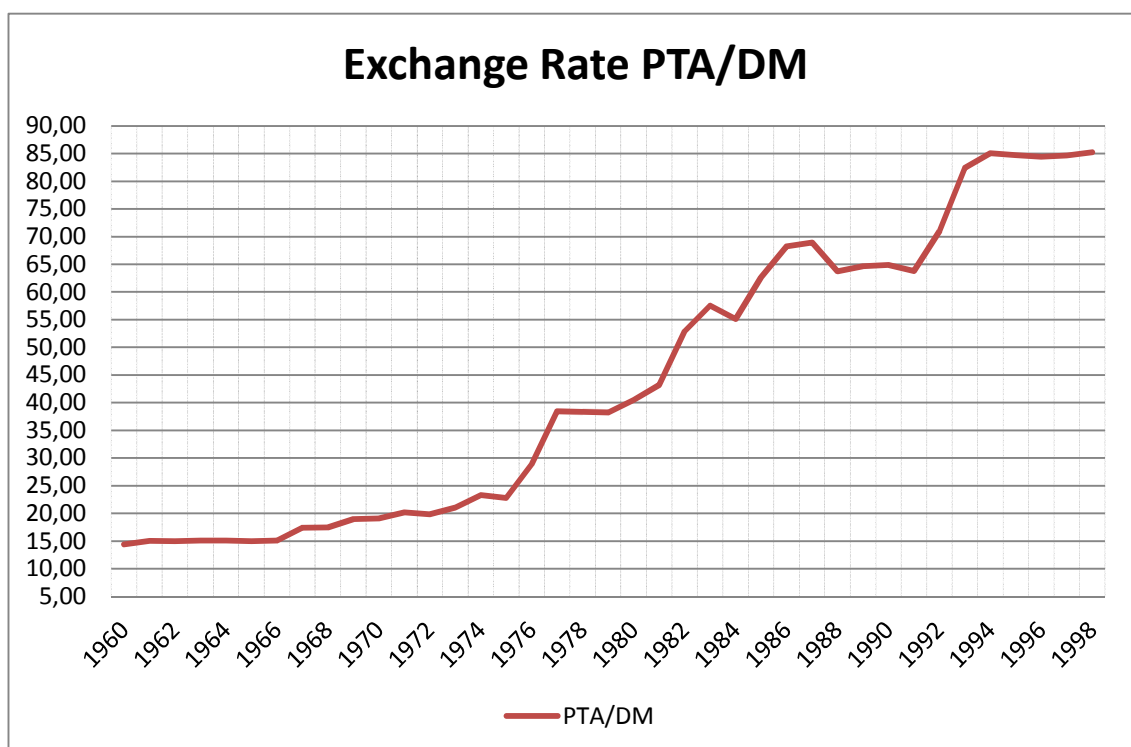
Figure 16.- Spain. Balance of Payments and components



Source: AMECO

Figure 17 shows the exchange rate of the Spanish peseta in relation to the German mark since 1960 (following the major devaluation of 1959) until entry into the euro and, hence, the establishment of a fixed exchange rate. The graph shows a gradual depreciation of the peseta (with some exceptions following the Moncloa Pacts of 1978-1979, 1984 and 1988 to 1991 coinciding with entry into the European Monetary System) and significant formal devaluations in 1967, 1976, 1977, 1982 and 1992-93 (with three devaluations following the crisis of the European Monetary System). From 1994 until entry into the euro, the exchange rate remained stable.

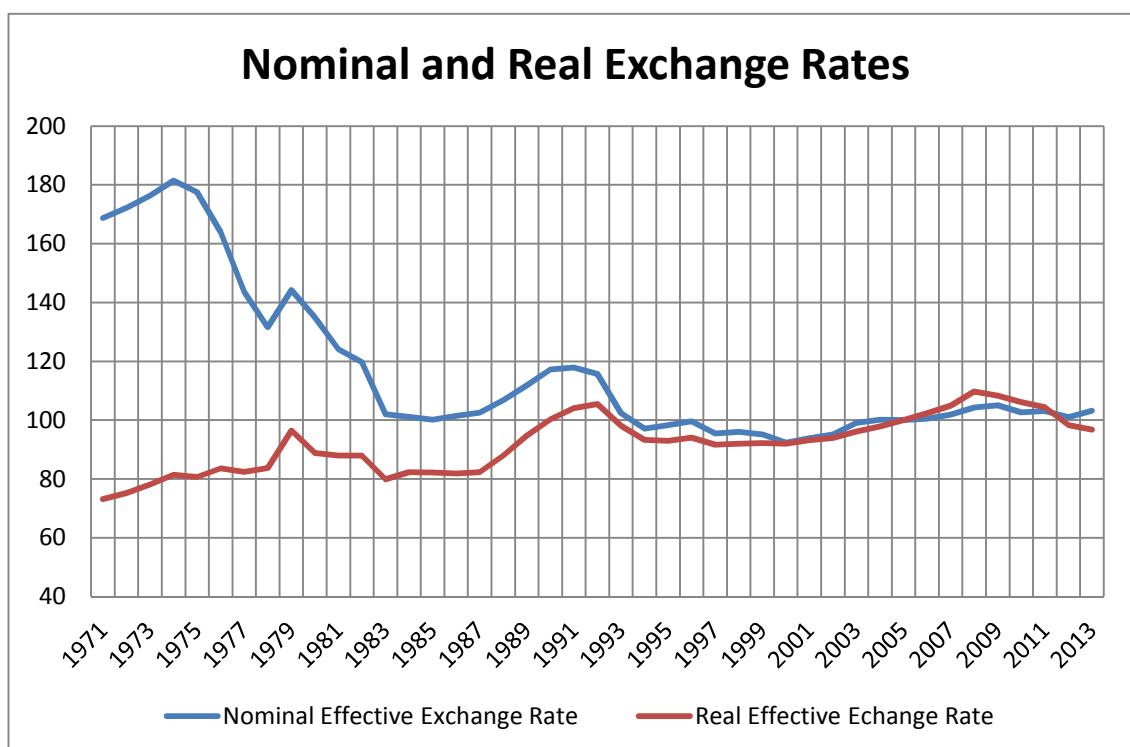
Figure 17.- Exchange Rate PTA/DM



Source: IMF: International Financial Statistics

An important determinant of the trade balance is the price of goods in the country in relation to those of its competitors. We can approximate this measure using the nominal effective exchange rate (an index built using figures for 34 industrial countries) and the real effective exchange rate (an index constructed with respect to the EU 15) which provide estimates of relative price values (Figure 18). Since the early 1970s and until Spain's entry into the euro, the nominal effective exchange rate of the peseta depreciated considerably. This, however, was not paralleled by the real effective exchange rate (despite the difficulty of comparing the two as they are calculated differently). This depreciation of the nominal effective exchange rate may have contributed to the fact that the deficits in the balance of goods and services and in the current account have not been even more marked in most of the years between 1971 and 1999.

Figure 18.- Spain. Nominal and Real Exchange Rates

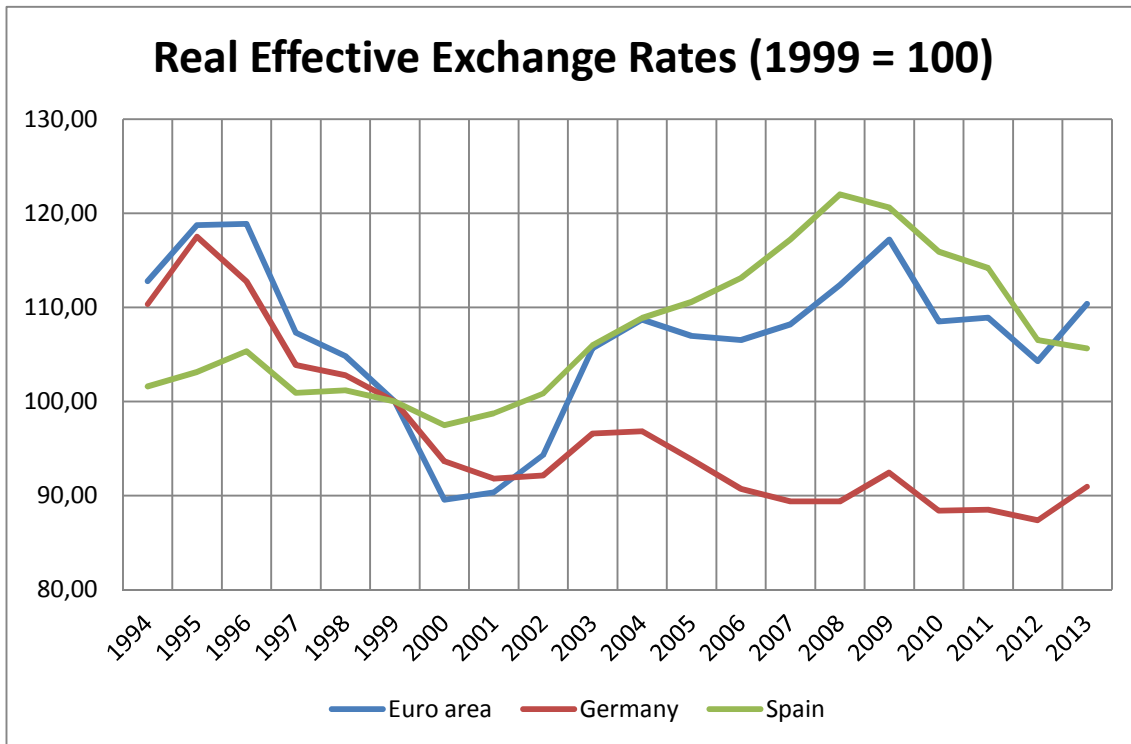


Source: AMECO

We can also see how the real effective exchange rate (calculated using the deflators of the unit labour costs compared to those of 36 trading partners) has evolved more recently, by comparing the situation in the Spanish economy with that of the German economy and the euro area in general (Figure 19). In Germany, after reunification and labour market reform, the real effective exchange rate depreciated, which accounts for the continuous improvement of its external sector surplus. In contrast, the real effective exchange rate in the Spanish economy remained almost constant until the arrival of the euro. After that it appreciated until the onset of the crisis – with the consequent record increase in external sector deficit – and thereafter it depreciated in parallel with the crisis, reflecting labour market reforms and the decline in unit labour costs, and allowing the balance of the external sector to improve. In the euro area, the real effective exchange rate at the outset of the period depreciated as in Germany, but after that its pattern of behaviour was more in line with Spain's, both following the introduction of the euro and with the outbreak of the current crisis.

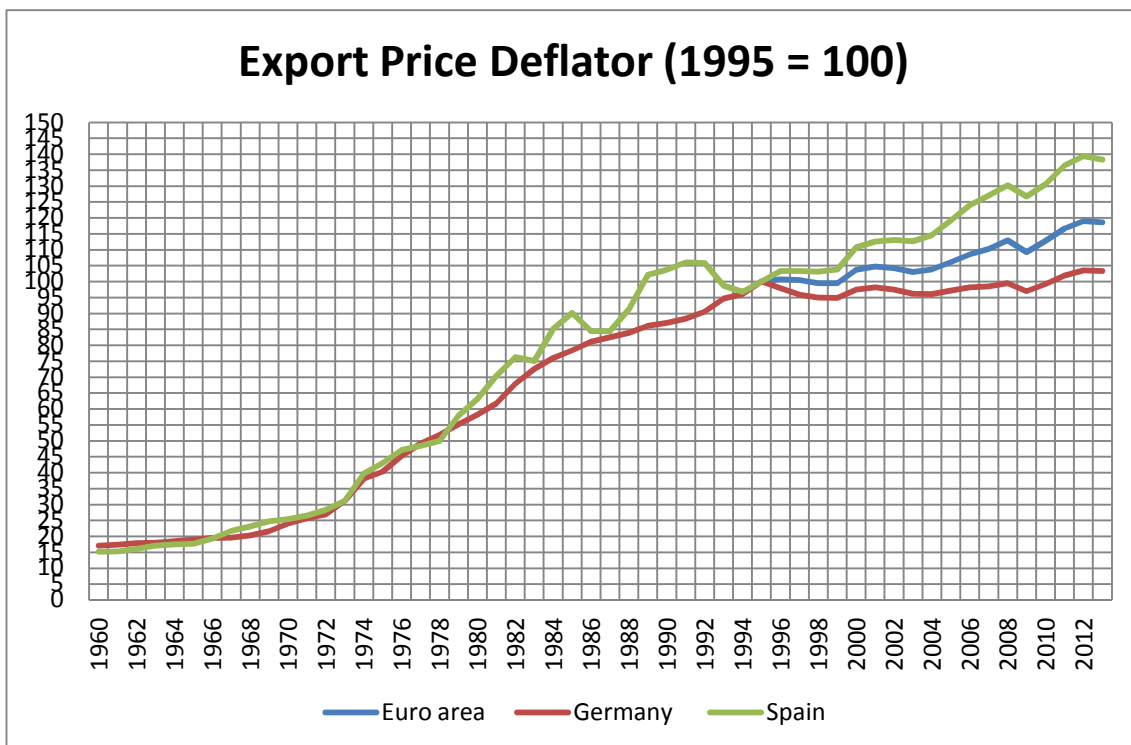
As for the price deflator for the exports of goods and services (Figure 20), from the year for which data for the euro area (1995) first became available, these prices have grown much more rapidly in Spain than they have in the eurozone and in Germany (where from 1995 to 2013 in fact they remained almost constant). Earlier, in the 1960s and 1970s, export prices were very similar in Spain and Germany, but from the early 1980s onwards they grew faster in Spain.

Figure 19.- Real Effective Exchange Rates



Source: Eurostat

Figure 20.- Export Price deflator

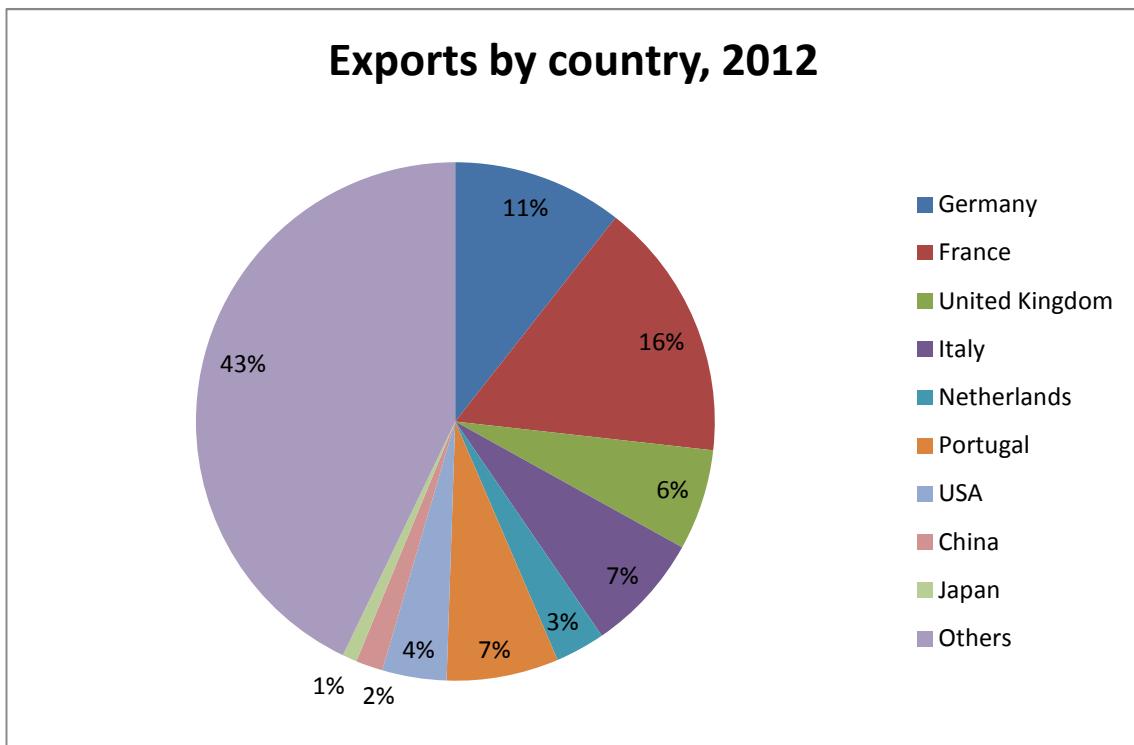


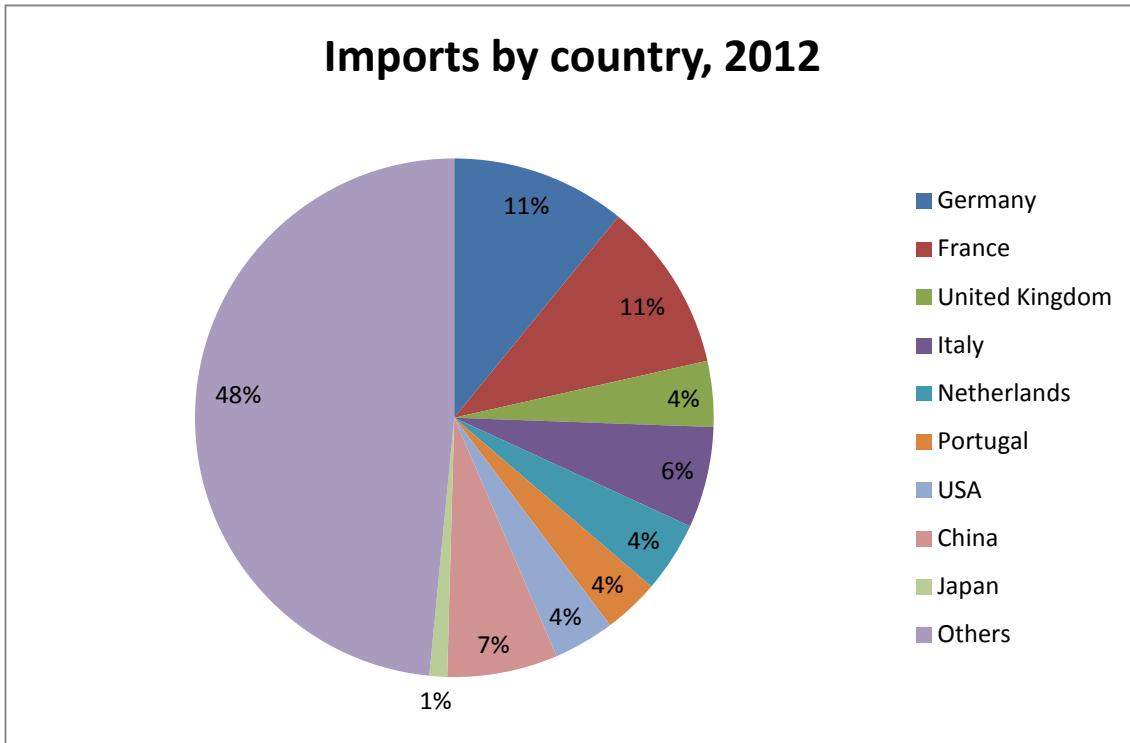
Source: AMECO

Manufactured goods are clearly dominant among both exports and imports, but with a tendency to decrease, above all in the case of imports. Both exports and imports of raw materials and food products have remained essentially constant. Finally, in the case of both fuel exports and imports there has been a clear upward trend.

Spanish exports are directed primarily to the larger countries in the European Union (France, Germany, Italy and the UK) plus the Netherlands and Portugal (due to the latter's proximity). In contrast, exports to the US, China and Japan are still quite limited (Figure 21). A similar pattern emerges for imports – with Spain's main imports originating from France and Germany, followed however by China (7%). They, in turn, are followed by Italy, UK, Netherlands, Portugal and US. Japanese imports have very little weight (Figure 21).

Figure 21.- Exports by country



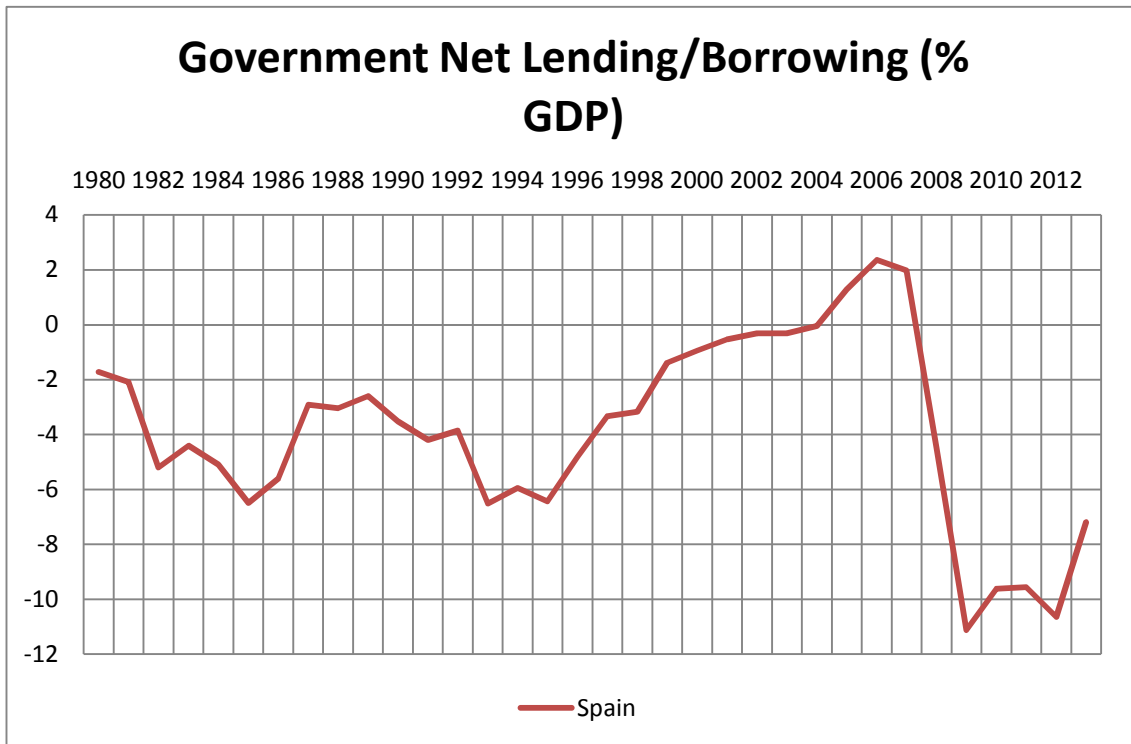


Source: INE

1.2.2.- The public sector

As highlighted above in our discussion of sectorial balances, since 1980 the Spanish public sector has normally been in deficit, with the exceptions of the years 2005, 2006 and 2007 (Figure 22). The public deficit was of particular concern in the early 1980s (at the end of the crisis that had begun in 1973), during the crisis of the early nineties (coinciding with the crisis of the European Monetary System) and, above all, during the current crisis that began in 2008. Spain's public deficit has recently reached a historical high, and the depth of the crisis is such that, despite the austerity policies applied, it is very difficult to make a significant reduction (and even when applying the criteria of the "fiscal compact") in the aforementioned deficit.

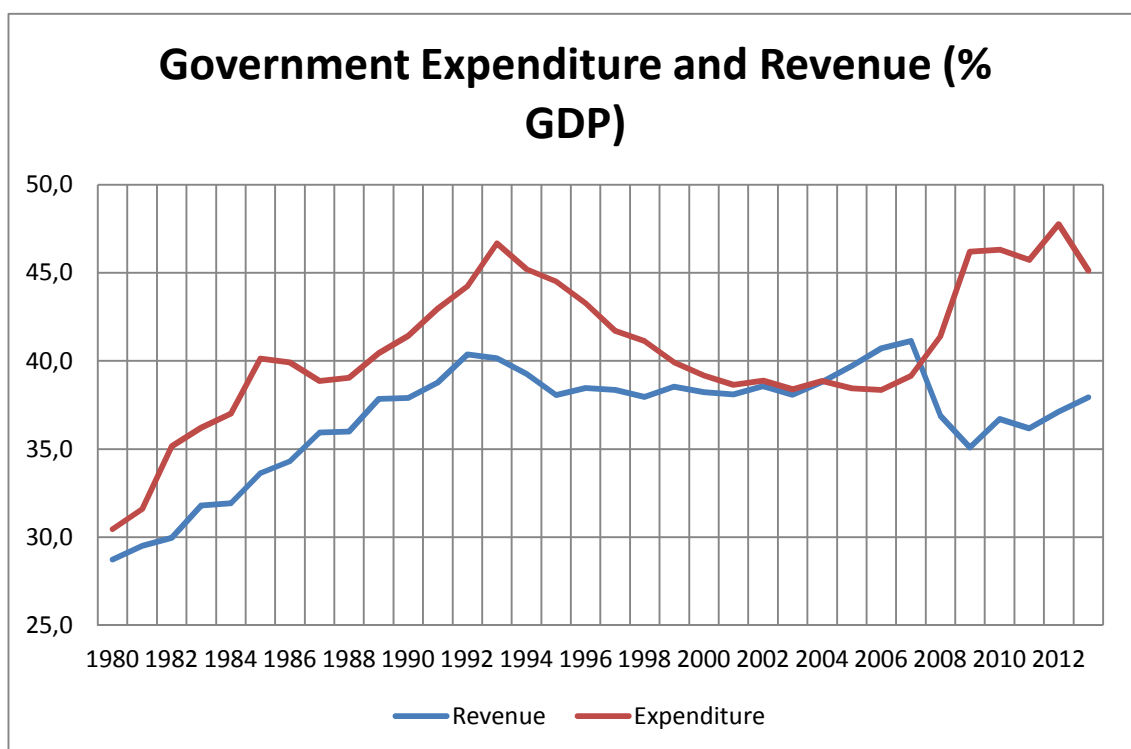
Figure 22.- Government Net Lending or Borrowing



Source: WEO Database, IMF

As can be seen in Figure 23, public spending increased dramatically between 1980 and 1993 (16.2 percentage points of GDP), reaching its peak in this last year (46.7% of GDP), reflecting the fact that the Spanish economy was building (albeit somewhat belatedly) its welfare state, its infrastructure and service facilities, which had been badly neglected since Franco's dictatorship and the transition to democracy. From 1994 until the onset of the current crisis, public spending was moderated, representing slightly less than 40% of GDP. With the crisis and with the tremendous growth in unemployment, public expenditure (automatic stabilizers) has rocketed reaching the highest ever figures in terms of percentage of GDP (47.8% in 2012). Public revenues also grew significantly up to 1992 (40.4% of GDP), 11.6 percentage points of GDP, before moderating their growth at a rate slightly below 40% of GDP until 2004. Between 2005 and 2007, public revenues grew again, and in this three-year period, their weight in relation to GDP was higher than that of public spending, coinciding with a public sector surplus. With the dawn of the current crisis, however, the weight of public revenues in GDP fell dramatically, which, together with the aforementioned increase in the weight of public expenditure, accounts for the current significant public deficit.

Figure 23.- Government Expenditure and Revenue

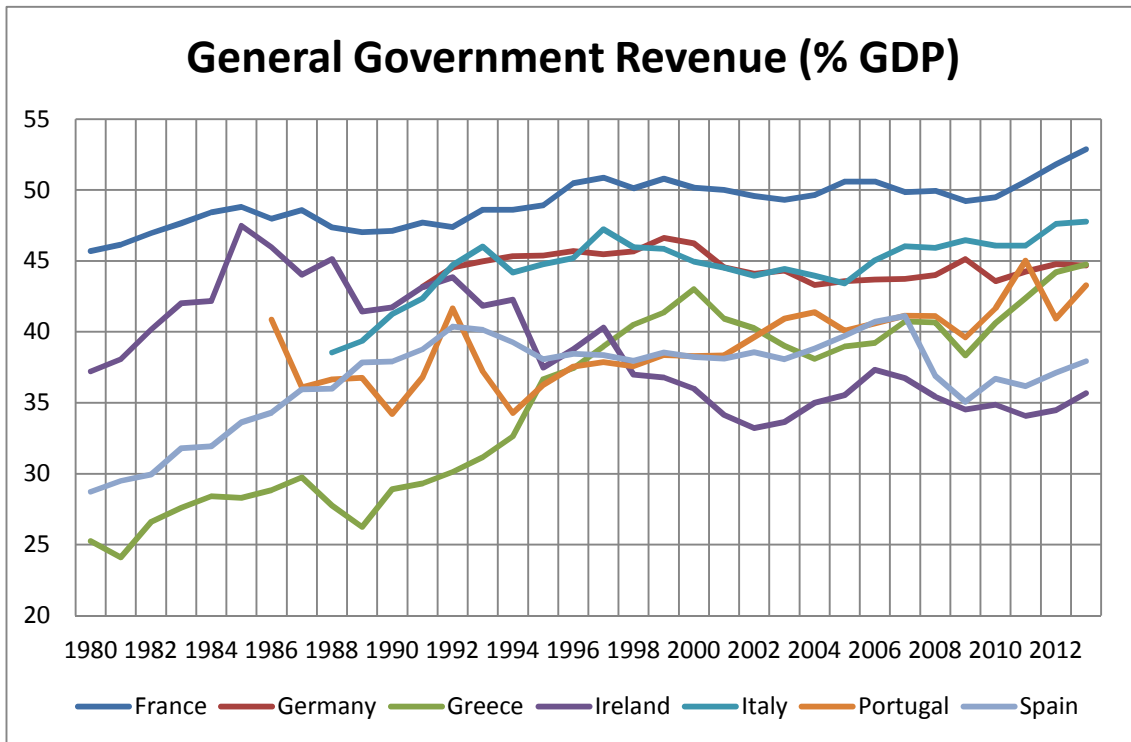


Source: WEO Database, IMF

If we compare the Spanish economy with those of Germany and France, as well as with those of the other peripheral countries (Greece, Ireland, Italy and Portugal), Spain's public revenue (in % of GDP) – the evolution of which we have just described – is clearly lower than those of the other large countries in the eurozone (France, Italy and Germany) but also lower than those of Portugal and Greece and, as such, it only exceeds that of Ireland, which has presented a downward tendency since the late 1980s.

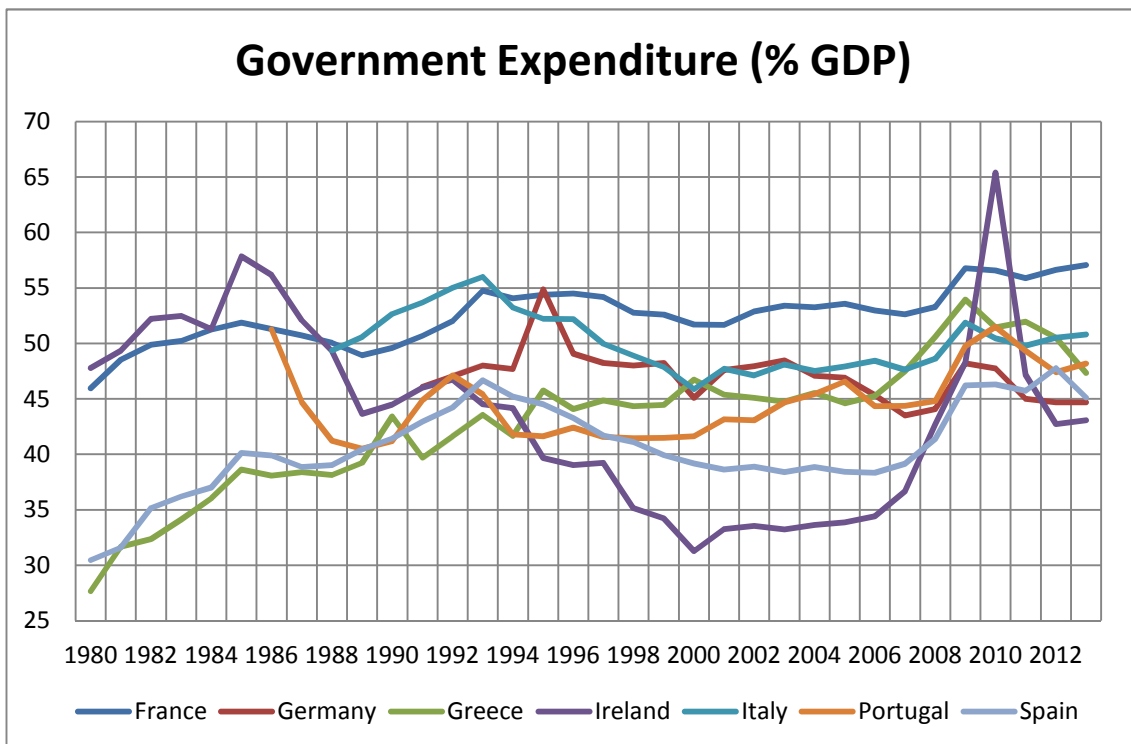
Spain's public expenditure (in % of GDP), on the other hand, was only higher than Greece's until the early 1990s, and only above Ireland's in the last economic boom (1994-2007). Today, after six years of crisis, Spain's public spending, as a percentage of GDP, is at the level of Germany's and above Ireland's, but below that of the other countries considered, especially France's and Italy's (Figure 25).

Figure 24.- General Government Revenue



Source: WEO Database, IMF

Figure 25.- General Government Expenditure



Source: WEO Database, IMF

According to Eurostat data, in the period 1995-2013, Spain's main public revenue items were social security contributions followed by taxes on income and wealth and taxes on production and imports, while taxes on capital were largely marginal. Public expenditure, on the other hand, is devoted in the main to social protection, followed by health, economic affairs, general public services, education and defence and security.

If we analyze the evolution in Spain's public debt as a percentage of GDP (Figure 26), a significant increase can be seen in the latter part of the 1973-1985 crisis: rising from 16.5% in 1980 to 43.3% in 1986. In 1991 it was almost at the same level as in 1986, but after the 1992-93 crisis (coinciding with the crisis in the European Monetary System) it rose again significantly until 1996 (finishing at 67.5% of GDP). Thereafter, and coinciding with the economic expansion and a continuous reduction in the public deficit, the ratio of public debt to GDP fell until 2007, when it stood at just 36.3% of GDP. With the onset of the current crisis, the public deficit increased significantly, and it continues to do so on a year-to-year basis, so that the public debt to GDP ratio reached 93.9% in 2013 and is as high as 96% today.

Figure 26.- Government Gross Debt

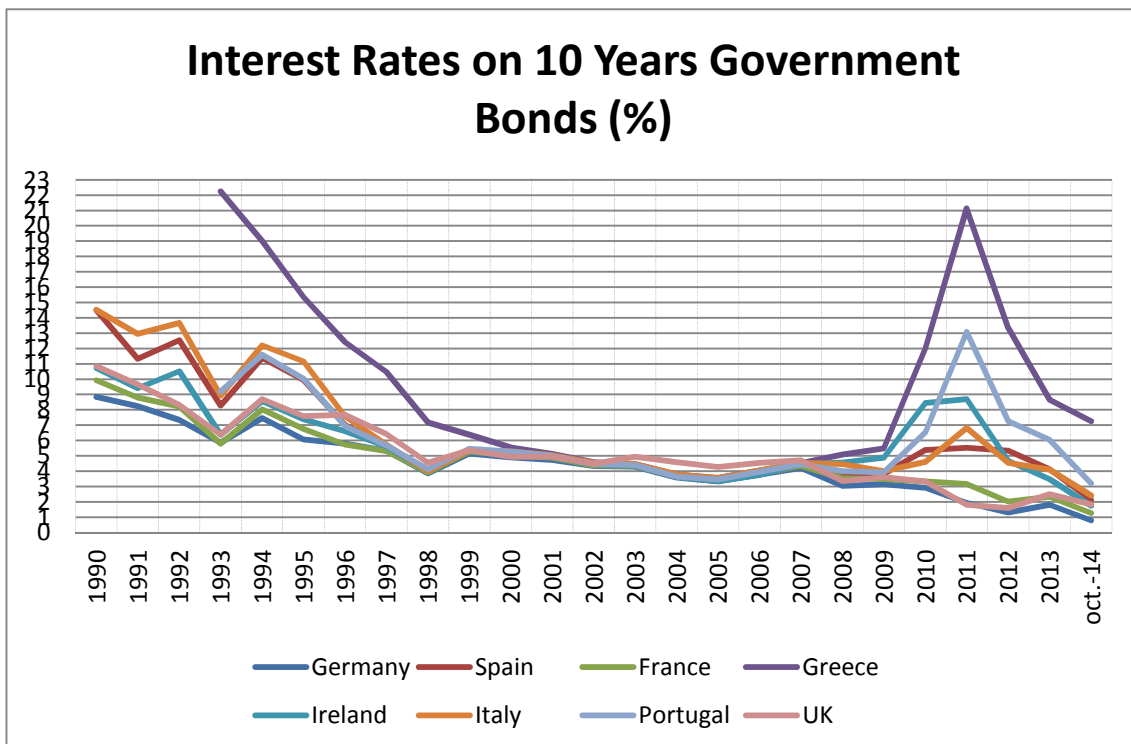


Source: WEO Database, IMF

Taking into account the evolution in interest rates on long-term public debt (Figure 27), we see that they were relatively high in the early nineties of the last century but presented a clear downward trend, which, in the case of Germany, France and the United Kingdom, has continued down to the present day. However, in the peripheral

countries (Greece, Portugal, Ireland, Italy and Spain), after a period of decline between 2000 and 2008, the risk premiums began to increase markedly between 2009 and 2012 (the period of the so-called sovereign debt crisis), until the intervention of Mario Draghi and the implementation of the OMT operations by the European Central Bank seemed to calm down, at least temporarily, the international financial markets. As a result, the interest rates on the public debt of the peripheral countries have once more established themselves at around the same rate as that on the public debt in the German economy.

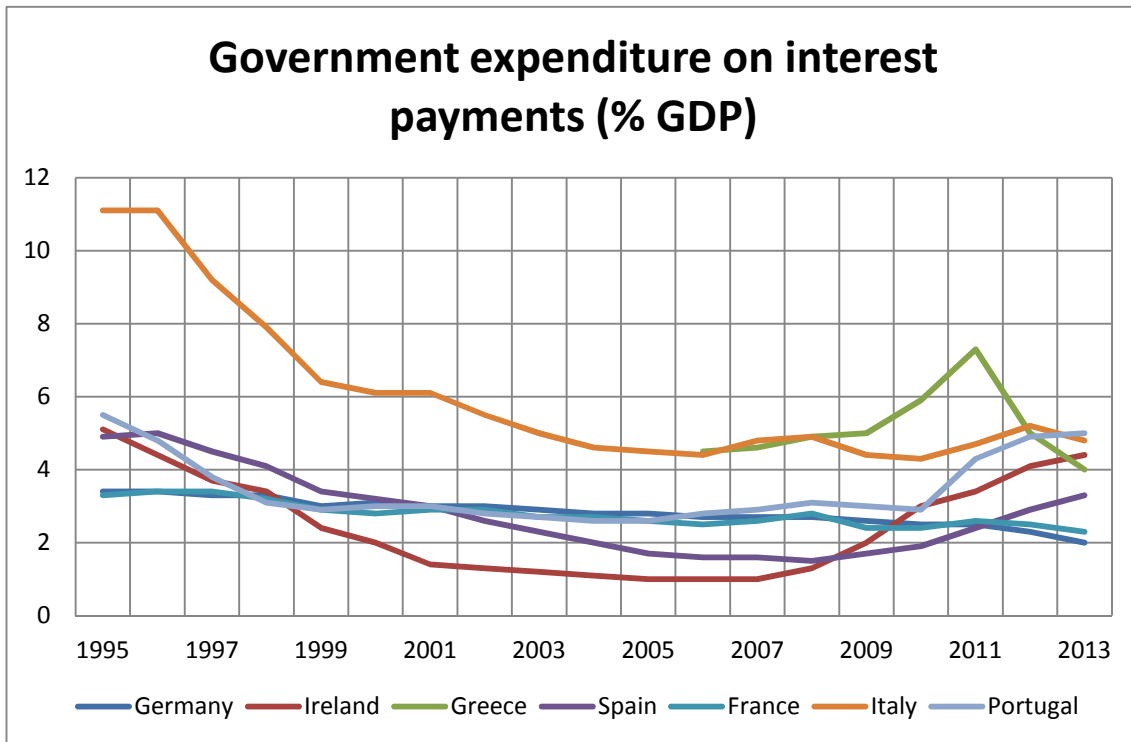
Figure 27 .- Interest Rates on 10-Year Government Bonds



Source: Banco de España

Clearly, the evolution in expenditure on interest payments by the various states corresponds closely to the evolution in the interest rates on public debt (see Figure 28). These started off relatively high in the 1990s, becoming more moderate in the early 2000s and, while in Germany and France they have continued this downward trend to the present, in the peripheral countries, specifically in the case of the Spanish economy, they have risen since the beginning of the current crisis.

Figure 28.- Government expenditure on interest payments

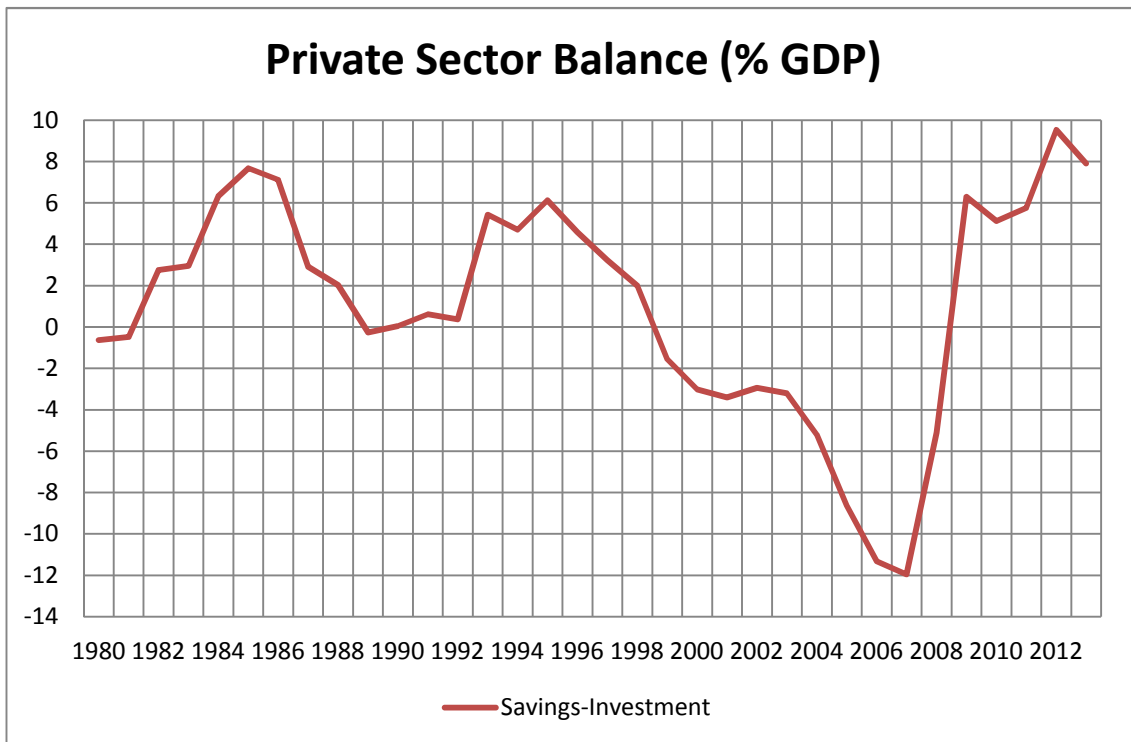


Source: Eurostat

1.2.3.- The private sector

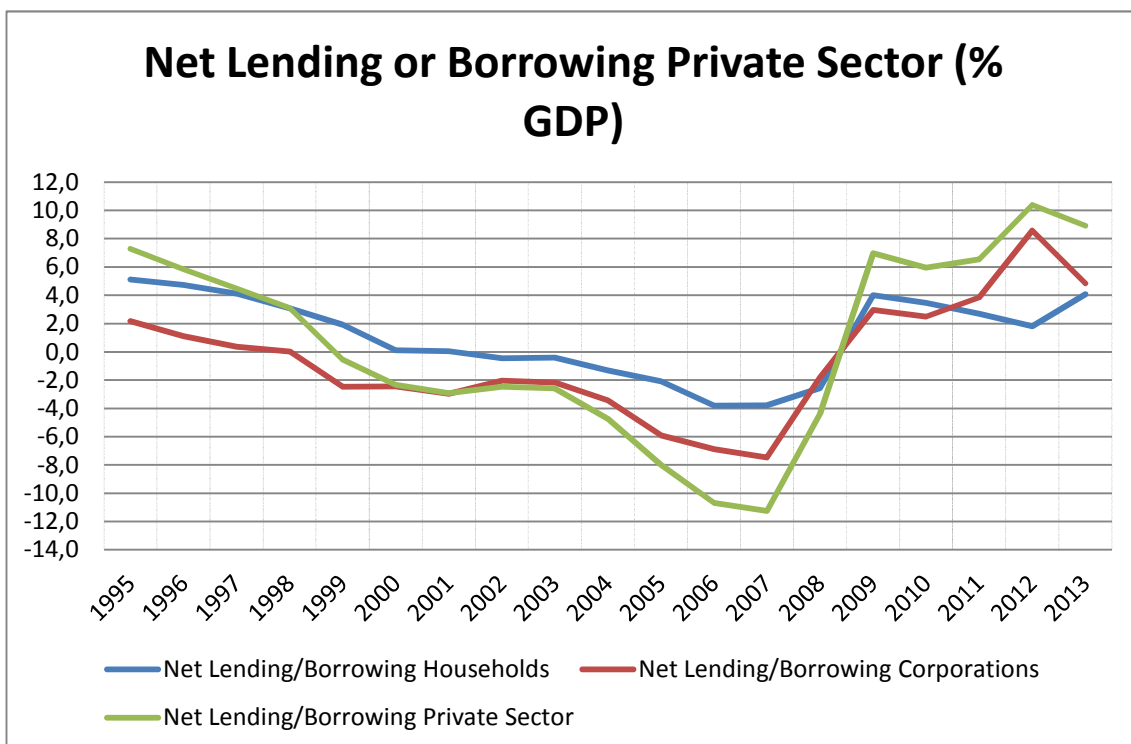
The balance of the private sector as a percentage of GDP (Figure 29) was positive – i.e., savings were higher than investments – from 1982 to 1998 (except in 1989), with an increasing trend from 1981 to 1985, a decreasing trend from 1986 to 1989, a period of relative stability until 1992, and an upward surge until 1995. Between 1996 and 2007, however, the balance presented a marked downward trend, and after 1999 (the year of the introduction of the euro) the balance became negative until 2008, with a historical low of -12% of GDP in 2007. That is, in the period of expansion, investments grew much faster than savings (eventually outstripping them) in the private sector, and so it was gradually forced to borrow. To do so it had to call on another sector to finance it – in this case, as we have seen, the foreign sector. With the onset of the crisis, the private sector began to reduce its borrowing very quickly and after 2009 savings once again gained the upper hand over investments (as a percentage of GDP) and with a growing trend the following years.

Figure 29.- Private Sector Balance



Source: WEO Database, IMF

Figure 30.- Private Sector Net Lending or Borrowing

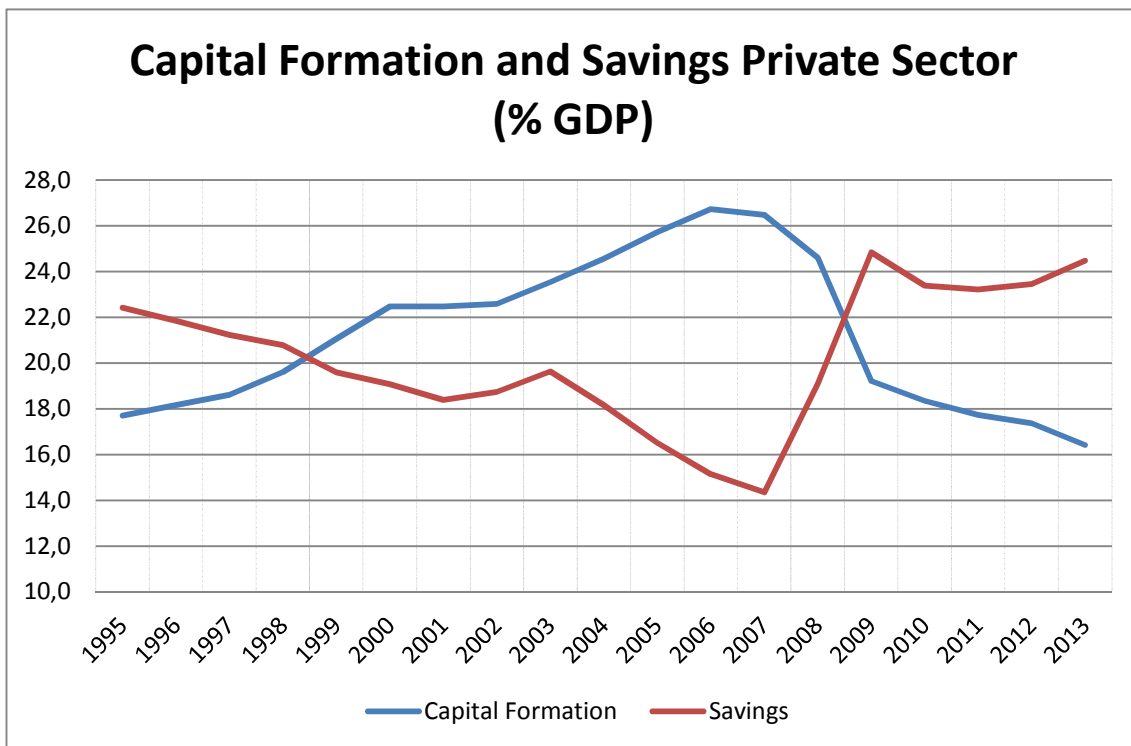


Source: AMECO

As we know, the private sector comprises households (and other non-profit organizations) and businesses. It is clear that the private sector data presented in Figures 30 and 29 do not exactly match – indeed the sources are different, but the evolution and trends are the same. In Figure 30 we can see that both in the period in which the private sector got itself increasingly into debt (1995-2007) and in the period in which it was increasingly borrowing (2008-2013), companies generally played a more important role, first, in the borrowing and, subsequently, in the deleveraging of the private sector.

In accordance with the balance of the private sector, it is logical that savings in this sector exceed capital formation (investment) – see Figure 31; in fact, reference here is almost entirely to fixed capital formation, which represents almost the whole of capital formation in the period 1995-98, when there was a surplus in the balance of the private sector. In the period 1999-2008, capital formation was greater than savings and the balance of the private sector presented a deficit. But after 2009, savings once more exceeded capital formation and the balance of the private sector returned to a surplus.

Figure 31.- Private Sector Capital Formation and Savings

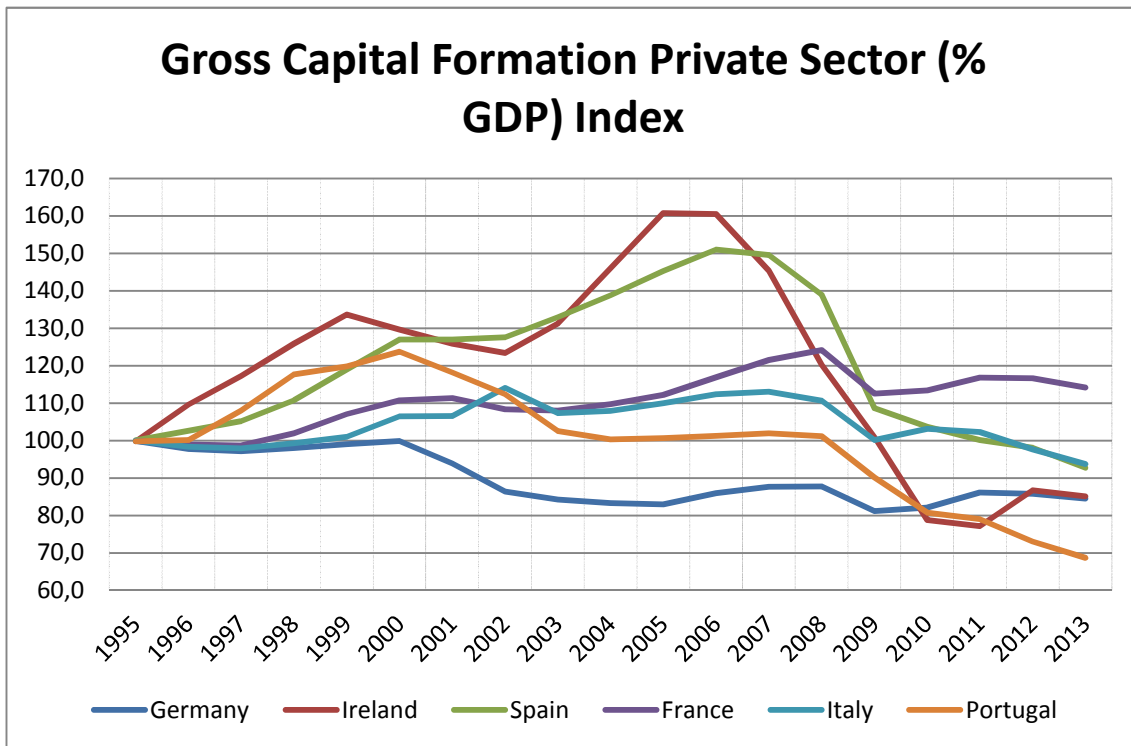


Source: AMECO

Next we consider capital formation and private sector savings in this same period for various European countries, including Germany and France and the peripheral countries of the eurozone (Spain, Italy, Ireland and Portugal, but not Greece as our data are incomplete). The evolution of capital formation in the private sector (Figure 32) shows a constantly declining trend in the case of Germany, which recorded the

second largest fall in the period, and a constantly rising trend in the case of France, especially up to the onset of the current crisis, it being the only country considered in which capital formation was higher in 2013 than it had been in 1995. In the case of the peripheral countries, Spain and Ireland present a similar evolution: strong growth until 2006 in the case of Ireland and until 2007 in that of Spain, and significant falls since then until the present. However, both upward and downward trends tend to be more intense in the case of Ireland than in Spain. Portugal presented significant growth until 2000 and a continuous, gradual decline since then. Italy presents a more moderate growth in its capital formation until 2002, a period of stabilization until 2007, and a gradual reduction after 2008 down to the present day.

Figure 32.- Evolution of private sector capital formation in several European countries

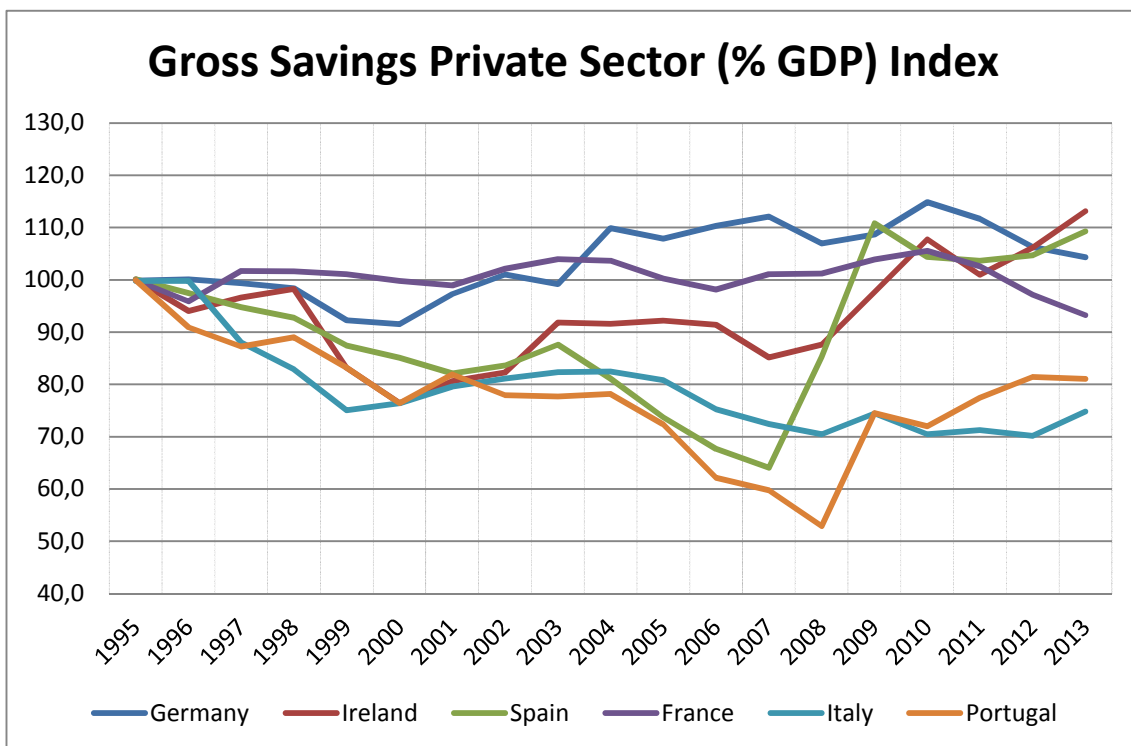


Source: AMECO

An examination of the evolution of private sector savings (see Figure 33) in Germany shows that, after a period of decline between 1995 and 2000, they have since increased, albeit with certain fluctuations. Indeed, in 2013 they were at a level that was higher than that at the beginning of the period. Since 2000, savings (as a percentage of GDP) have tended to grow while, as noted above, capital formation has tended to decrease. This has promoted at the same time an excess of savings over investment in the private sector, corresponding to German's exports exceeding its imports and a surplus in its external sector balance. In the case of France, private sector savings have generally remained slightly above their 1995 level, but from 2011 onwards they have fallen and today stand at a level below that of 2005. In the

peripheral countries, Ireland and Spain again present, up to a certain point, similar behaviours, with private sector savings currently being well above their respective 1995 levels. Indeed, they are the two countries with the highest levels of savings. However, while in Ireland savings fell only until 2000 before they increased (albeit within a general pattern of considerable fluctuations), in Spain the downward trend lasted (again with fluctuations) until 2007 before they picked up to the present day. Portugal experienced a constant decline until 2008, before recovering somewhat. But in 2013 the rate is almost 20% below the rate in 1995. Finally, Italy underwent a marked decline in its savings rate until 1999, experienced a minor recovery until 2004, a further fall until 2008 and since then savings have been around 30% less than they were in 1995.

Figure 33.- Evolution of private sector savings in several European countries

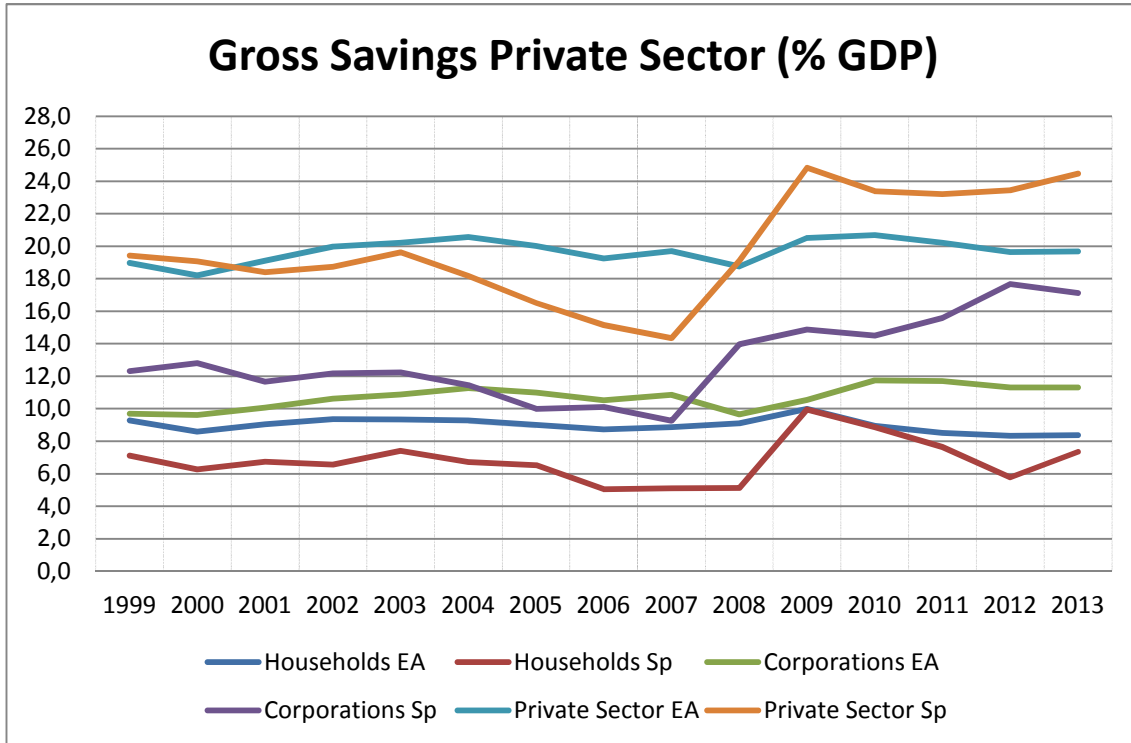


Source: AMECO

In the case of private sector savings, if we differentiate between companies and households and we compare the situations of the Spanish economy (Sp) and the economy of the euro area (EA) (Figure 34), it is evident that between 1999 and 2013 household savings (as a percentage of GDP) were higher in the eurozone than in the Spanish economy; in contrast, company savings were generally higher in the Spanish economy than in the euro zone, except in the period 2005-2007, and since 2008 much higher in the Spanish case than for the whole of the euro area, with a tendency to present an increasing differential (reaching 5.8% in 2013). Finally, the combined outcome of these patterns of behaviour was that the respective situations of the private sector were relatively similar in the two areas (Spain and the euro zone) between 1999 and 2003. However, private savings were relatively more important in

the euro area between 2004 and 2007, and relatively more important in the Spanish economy after 2009, with a difference of 4.8% being recorded in 2013.

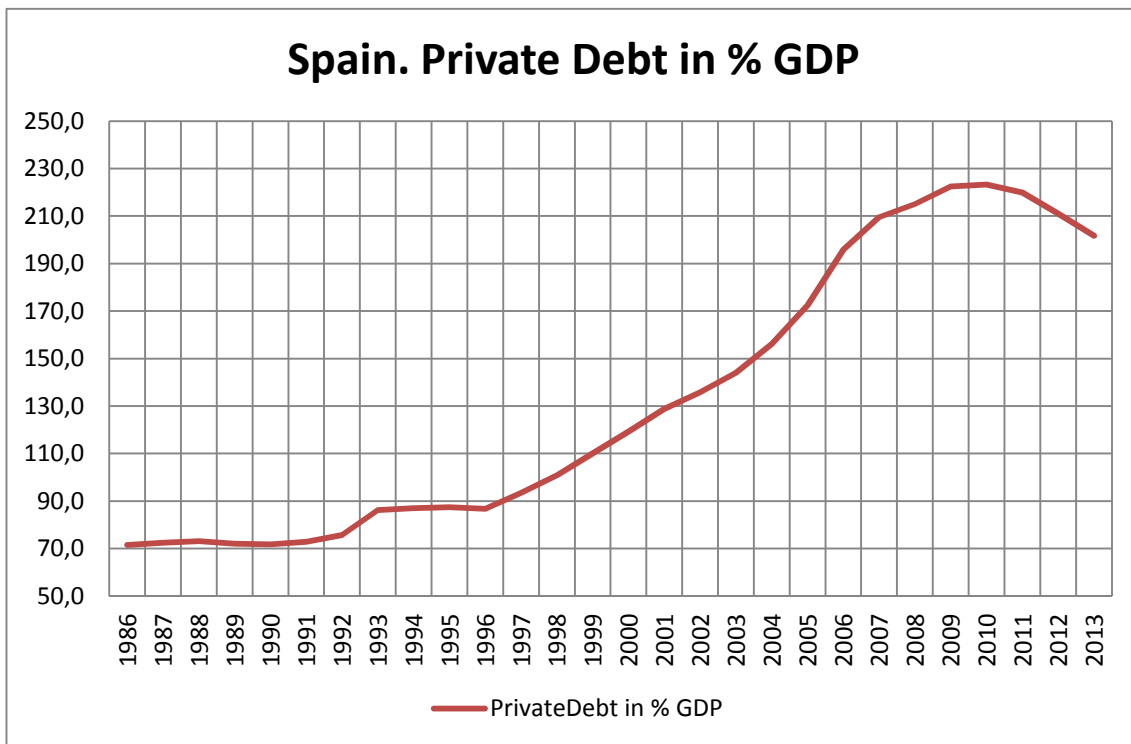
Figure 34.- Private Sector Gross Savings



Source: AMECO

Finally, we need to emphasise the importance of private debt (measured both in absolute terms and as a percentage of GDP) in the Spanish economy (Figure 35). It is critical to note that it is much higher than public sector debt (see Figure 26) and that it has grown spectacularly since 1996. Between 1986 and 1992, private debt stood at slightly above 70% of GDP, in 1992 and 1993 it increased by almost 15% (the time of the crisis of the European Monetary System and the devaluation of the peseta) and by 1996 it had reached 87 % of GDP. Since that time there has been a spectacular growth of more than 190% (an annual cumulative variation of 7%) reaching 223.3% of GDP in 2010. In 2011 it began to decline but it continues to represent 201.7% of GDP in 2013, an extremely high figure.

Figure 35.- Private Debt



Source: AMECO

2. The Spanish economy: a deep structural crisis

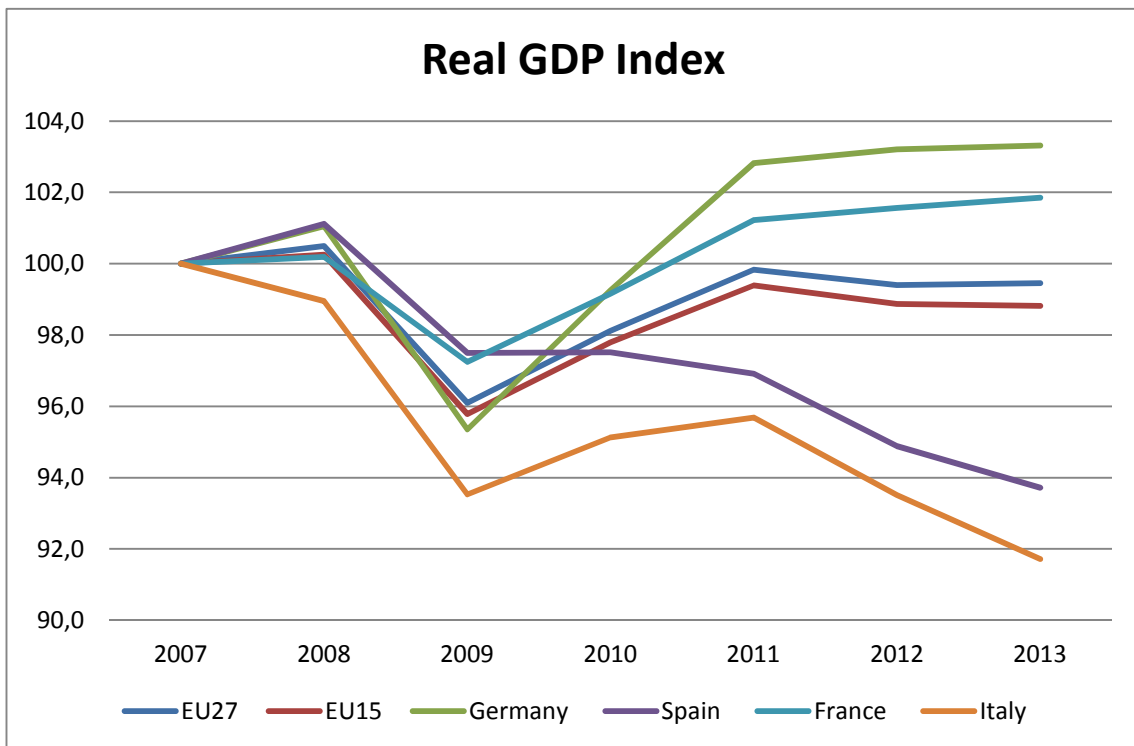
Since 2008 the Spanish economy has suffered the effects of a major crisis, with a sharp drop in its GDP and per capita GDP, against a backdrop of significant economic imbalances and severe structural problems. In this section, we consider the evolution of Spanish GDP and per capita GDP in real terms, together with its productivity figures, unemployment rate, inflation, the public and private debt in the economy, the external and public sector balances, the distribution of income and wealth and the growth in inequality and poverty, for the period 2007-2013 and compare them with the larger countries in the eurozone and the EU-27 and EU-15 means (and in some cases the means for the whole of the eurozone).

Spanish GDP at constant prices (base 2010) is the lowest of the largest countries in the eurozone (Germany, France, Italy). After 2007 (see Figure 36) Spanish real GDP has followed a downward trend – a fall of 6.3% since the onset of the crisis, which is less than the downturn suffered by Italy (down 8.2%) but more than that of the means of the EU-27 and the EU-15 and more than that of France and Germany, where since 2011 real GDP has recovered to climb above 2007 levels.

If we consider the real per capita GDP at constant prices (base 2010), Spain also presents the lowest rates for all the countries considered: around 22,600 euros in 2013 (at constant prices of 2010), as much as 3,000 euros less than the EU-27 average and 7,000 euros less than the EU-15 average. Moreover, it has presented a downward trend since the onset of the crisis, standing at more than 24,700 euros in 2007. In fact, Spain's real per capita GDP has fallen 8.4% between 2007 and 2013, which is not as great as in Italy (-11.1%) but more than the EU-27 and the EU-15 means, and much more than in France and Germany, the only countries in which the 2013 level is above the per capita GDP level of 2007 (Figure 37).

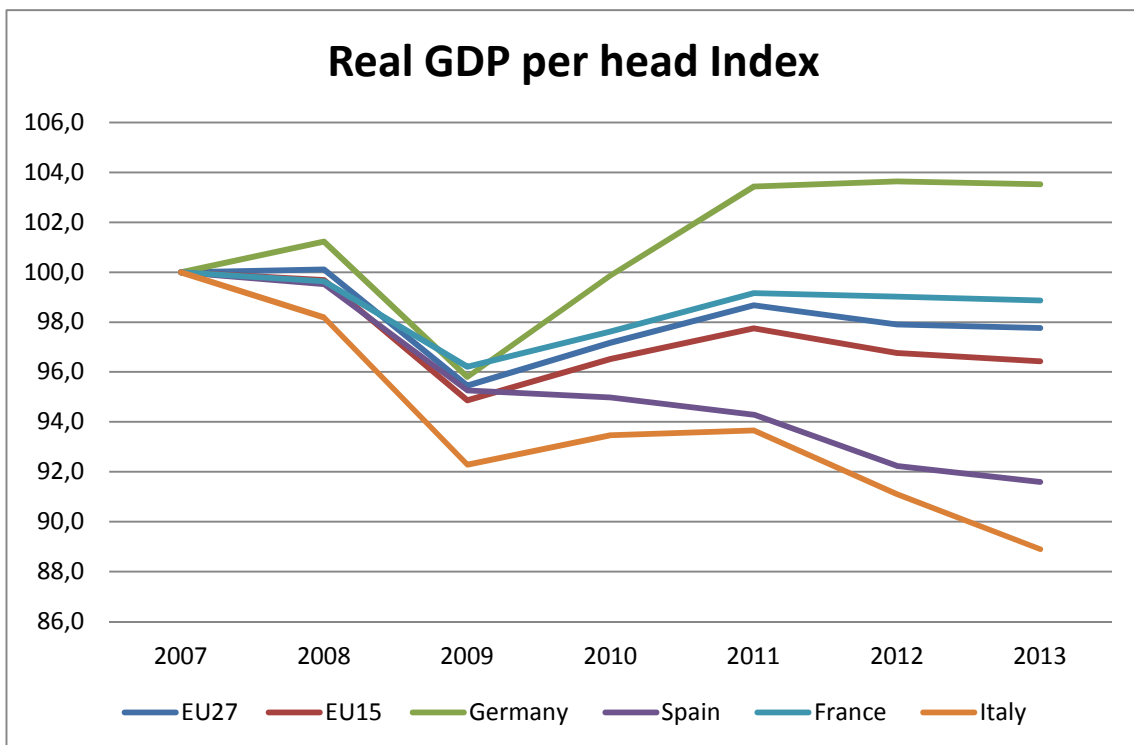
In the previous section we saw that the evolution of per capita GDP depends on the evolution of labour productivity as well as on the evolution of the labour market and population. We are particularly interested in seeing, then, how these variables have evolved. Despite the fall in real per capita GDP since the onset of the crisis, there has been spectacular growth – 13.6% – in labour productivity in Spain during this same period (Figure 38). Meanwhile, labour productivity in other countries or groups of countries has increased only very slightly and it has even fallen in Germany and Italy. In other words, it is clear that the decline in per capita GDP has occurred as a result of a significant fall in the employment/total population ratio. And as the total population has not undergone very substantial changes, the ratio has fallen as a result of the marked decline in the employed population and, hence, the large increase in the number of unemployed and in the unemployment rate.

Figure 36.- Real GDP Index



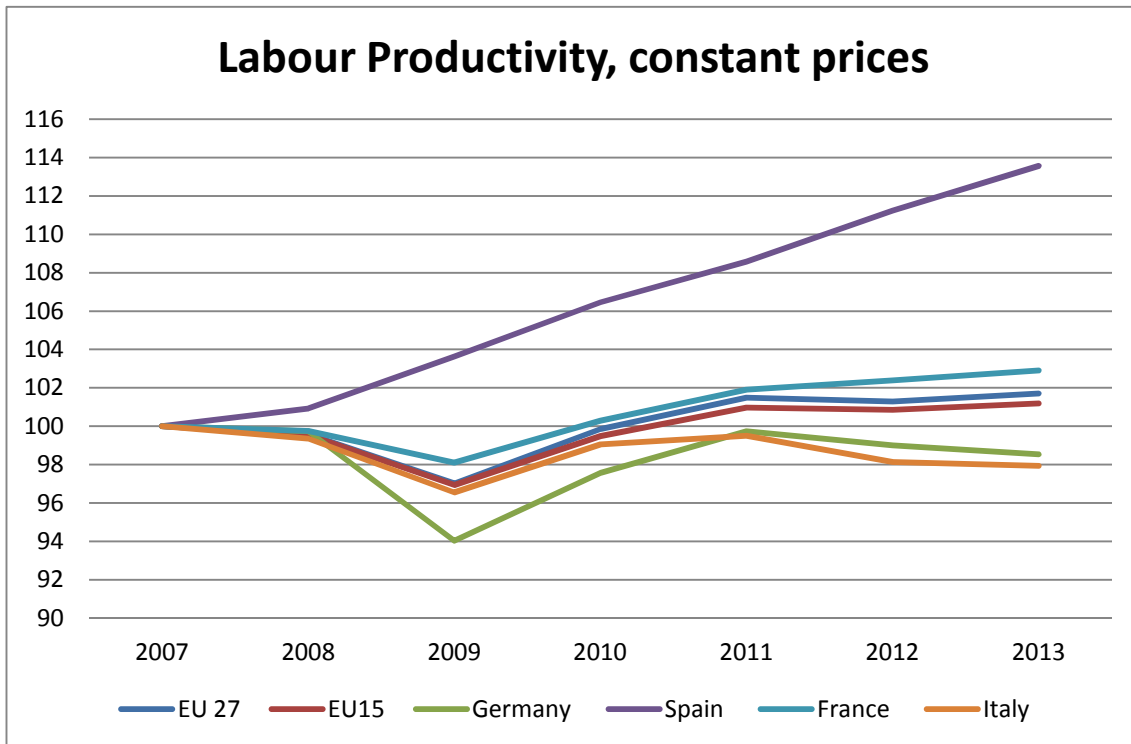
Source: AMECO

Figure 37.- Real GDP per head, Index



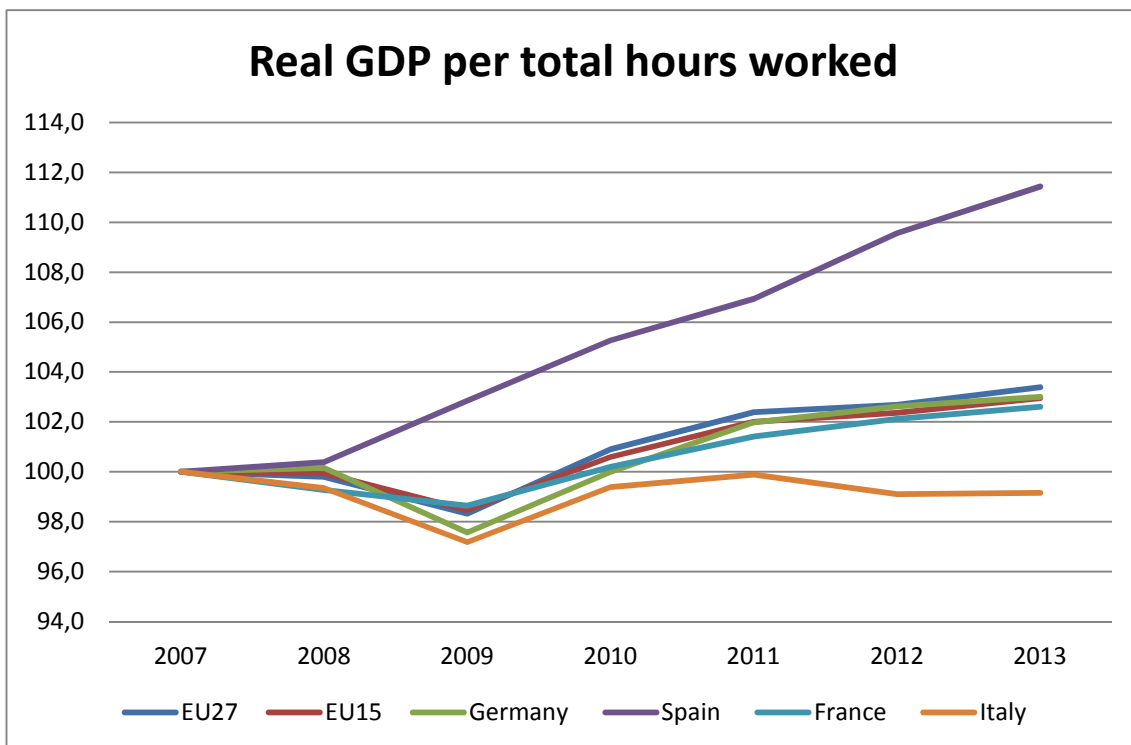
Source: AMECO

Figure 38.- Labour productivity



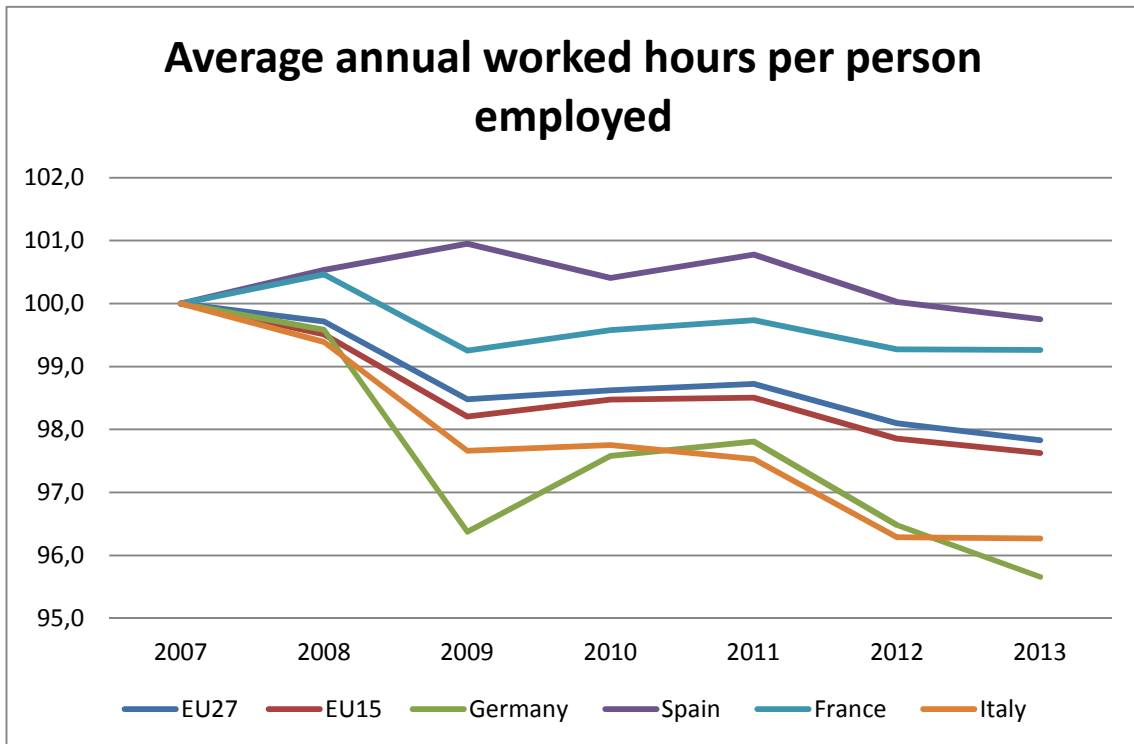
Source: AMECO

Figure 39.- Real GDP per total hours worked



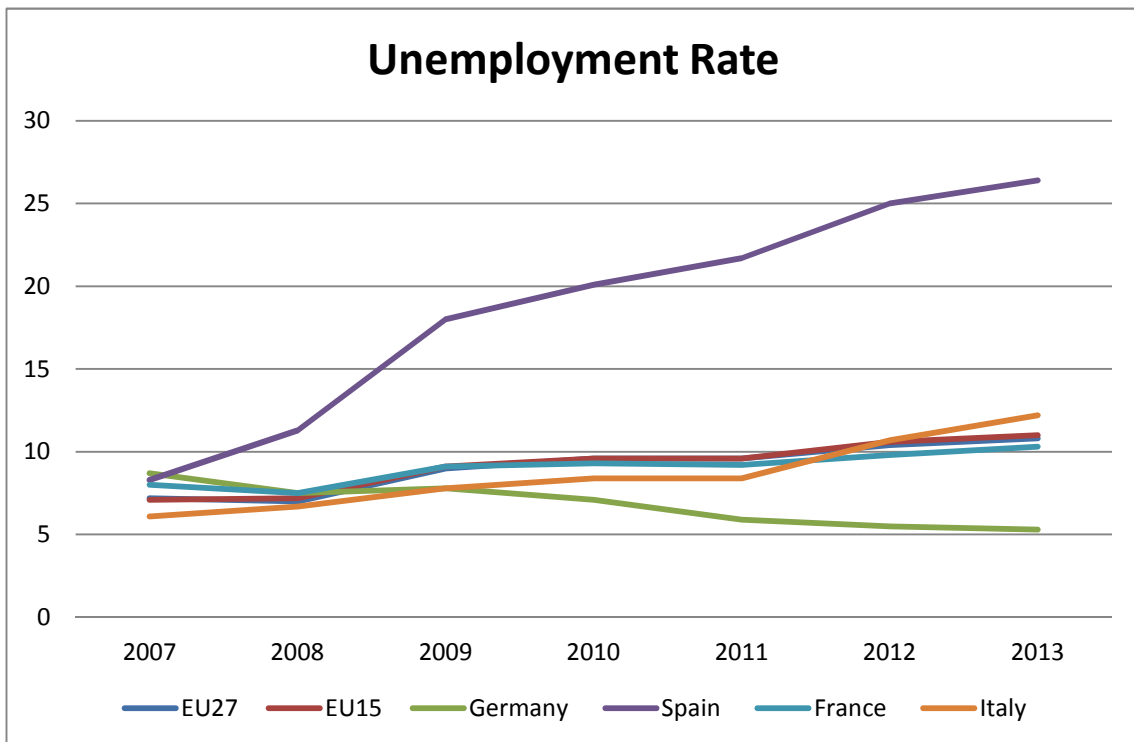
Source: AMECO

Figure 40.- Average annual worked hours per person employed



Source: AMECO

Figure 41.- Unemployment Rate



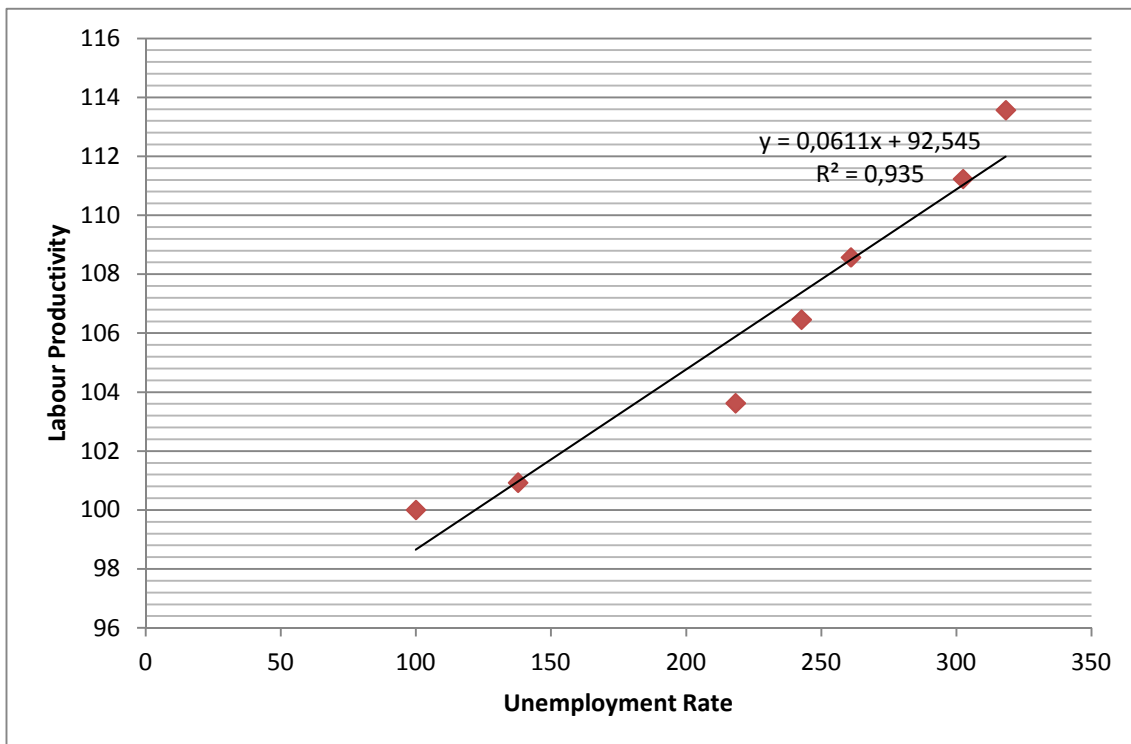
Source: AMECO

The behaviour of real GDP in relation to total hours worked (see Figure 39) is very similar to that of real GDP per employee with a spectacular growth of 11.4% being recorded in the Spanish economy in the period 2007-2013. Meanwhile, real GDP per total hours worked in other countries or groups of countries has increased only very slightly and even fallen in Italy. As for the number of annual hours worked per person employed (see Figure 40), this has fallen during this period in all countries and areas considered (most notably in Italy, Germany and E-15) with the exception of Spain where it has increased, if only slightly.

Thus, as there has been only a slight fall in the number of annual hours worked per person employed, the significant increase in real GDP per hours worked and in labour productivity (real GDP per employee), against a backdrop of a marked decline in per capita GDP (and with no substantial change in total population), are attributable primarily to the large fall in the employed population and, hence, the large increase in the number of unemployed and in the unemployment rate.

As can be seen in Figure 41, in 2007, Spain's unemployment rate was more or less at the level of that of other countries or groups of countries (8.3%), but in the intervening years it shot up dramatically so that by 2013 it stood at 26.4%, more than twice the rate of the rest of countries where it also increased slightly. However, Spain's rate is five times that of Germany's, the only country in which unemployment has actually fallen in the period considered. Patrick Artus (2014) estimates that it will take the Spanish economy more or less 25 years to get its labour market back to pre-crisis levels.

Figure 42.- Unemployment Rate and Labour Productivity



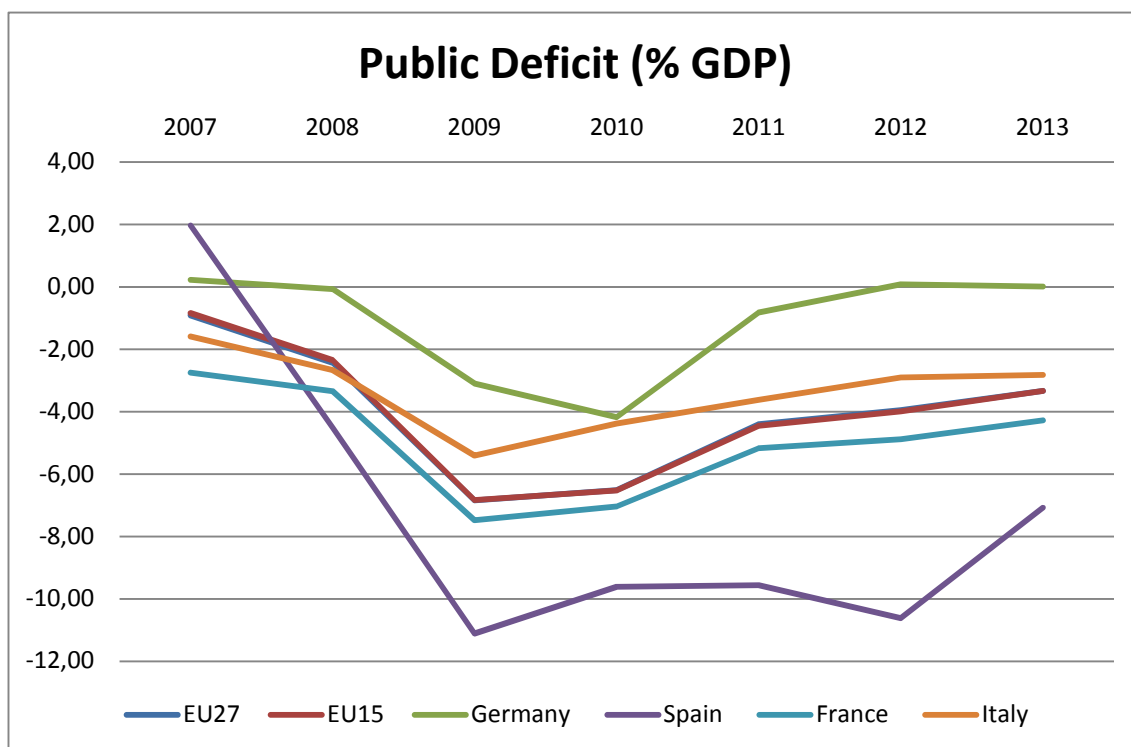
Source: Based on AMECO

Figure 42 leaves us in little doubt of the significant correlation between Spain's unemployment rate and labour productivity in the period 2007-2013. However, this is a very short data series and the Granger tests conducted do not enable us to deduce whether there is any cointegration or causality between the two variables.

In the last three years of economic expansion (2005, 2006 and 2007), the Spanish economy presented a public sector surplus; however, with the appearance of the crisis (see Figure 43) the public deficit grew rapidly peaking at 11% in 2009. Thereafter, the deficit remained high, finishing 2013 at 7.1% of GDP, well above the 3% limit fixed by the European Fiscal Stability Treaty or the "fiscal compact". Moreover, the Spanish deficit remained much higher than that of the other countries or groups of countries considered, among which in 2013 only Italy and Germany were able to meet the aforementioned criteria of the "fiscal compact".

As a result, Spain's public debt as a % of GDP, which was at a very low level in 2007 (at 36.3%), has increased much more rapidly than in any other country or group of countries considered (151.3% until 2013). In 2013 Spain's public debt stood at 93.9% of GDP (and is currently in excess of 96%), surpassed only by Italy whose debt has, however, increased at a slower rate over the period (see Figure 44).

Figure 43.- Public Deficit

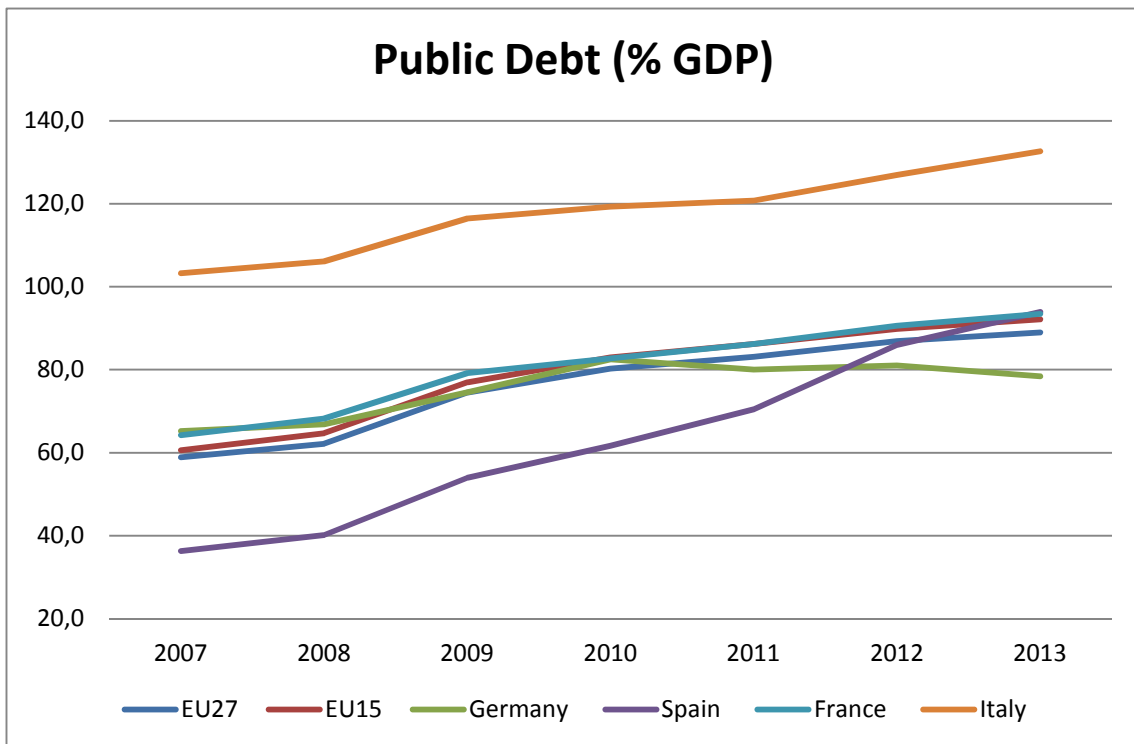


Source: AMECO

As Paul Grauwe (2014) notes, although the interest rate on Spanish government bonds has fallen thanks to the OMT (Outright Monetary Transactions) operations

implemented by the European Central Bank since mid-2012 (which have improved the situation of the aforementioned public debt), this does not mean that they have made the situation sustainable. Indeed, although the interest rate on public debt has fallen, the nominal GDP growth rate remains low because of the crisis and of the austerity policies that have been adopted (a reduction in the structural or primary deficit given the large and increasing growth in interest on debt) in a situation where the currency (the euro) cannot be devalued, and in any case a nominal growth rate that is below the interest rate. In this situation, Spain will face grave difficulties in turning its public debt around and will be obliged to introduce even stricter austerity policies. This in turn will further reduce the nominal rate of GDP growth plunging the country into a vicious circle that will be extremely difficult to break. And, moreover, these austerity policies could entail a further 4.5% of annual GDP just to be able to stabilize the ratio between public debt and GDP: something that will prove very difficult to achieve.

Figure 44.- Public Debt

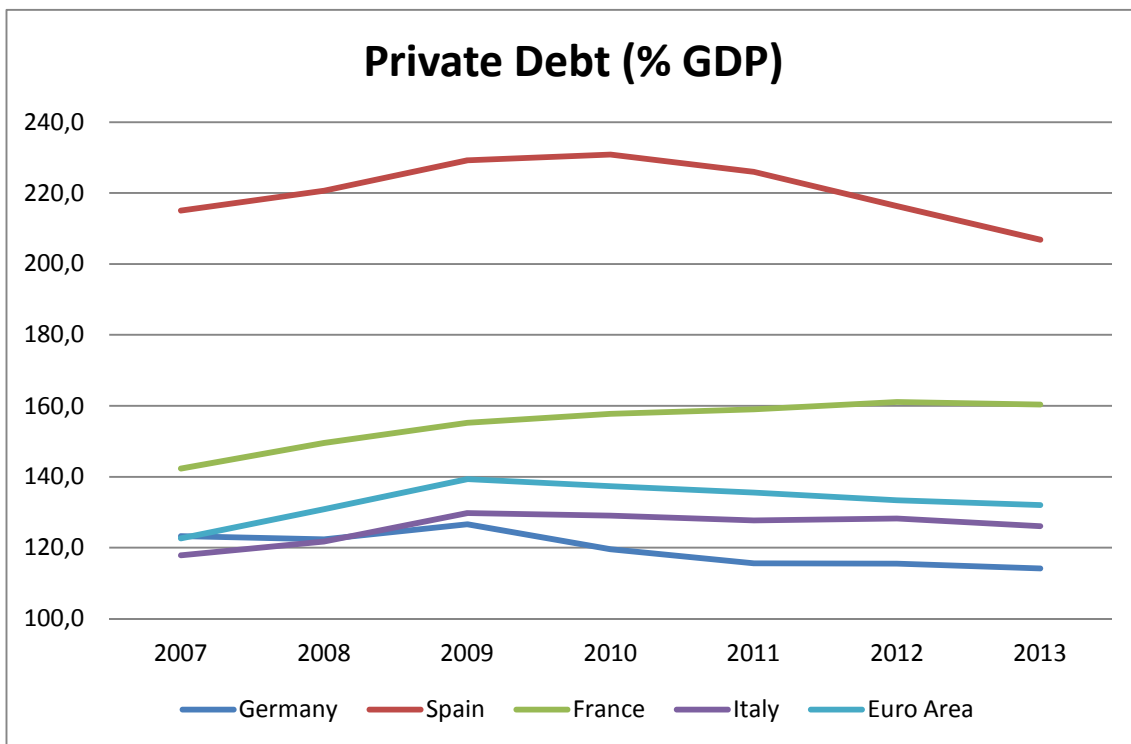


Source: AMECO

Private debt (Figure 45), on the other hand, has increased significantly and rapidly since 1999, when it represented 112.9% of GDP, reaching a maximum of 230.9% of GDP in 2010, before falling again to finish at 206.9% in 2013. As can be seen, therefore, Spanish private debt is more than twice that of public debt. In comparison with other countries, private debt in relation to GDP is more than 46% higher than that in France, 74% higher than the mean for the euro area, 80% higher than that in Italy and 92% higher than that in Germany.

Beyond doubt, the Spanish economy's private debt, albeit in decline since 2011, has been one of the main causes of the crisis and remains one of the most important problems to be faced. As discussed above, and as happened before 2008, one of the main symptoms of a looming crisis is rapid growth in private debt. More specifically, a number of studies seem to demonstrate that a crisis is inevitable when the private debt to GDP ratio exceeds 150% and when this ratio has grown at a rate equal to or greater than 17% over the preceding five years (Keen, 2014; Vague, 2014a; Vague, 2014b; Clemons and Vague, 2012). These were exactly the circumstances that the Spanish economy, like many others, faced before the Great Crisis of 2008. The question is, though, with the crisis underway, how have these two variables evolved between 2008 and 2013? The private debt to GDP ratio remains well above 150% but the ratio's rate of growth began to decline in 2011 and continued to fall over the following two years.

Figure 45.- Private Debt

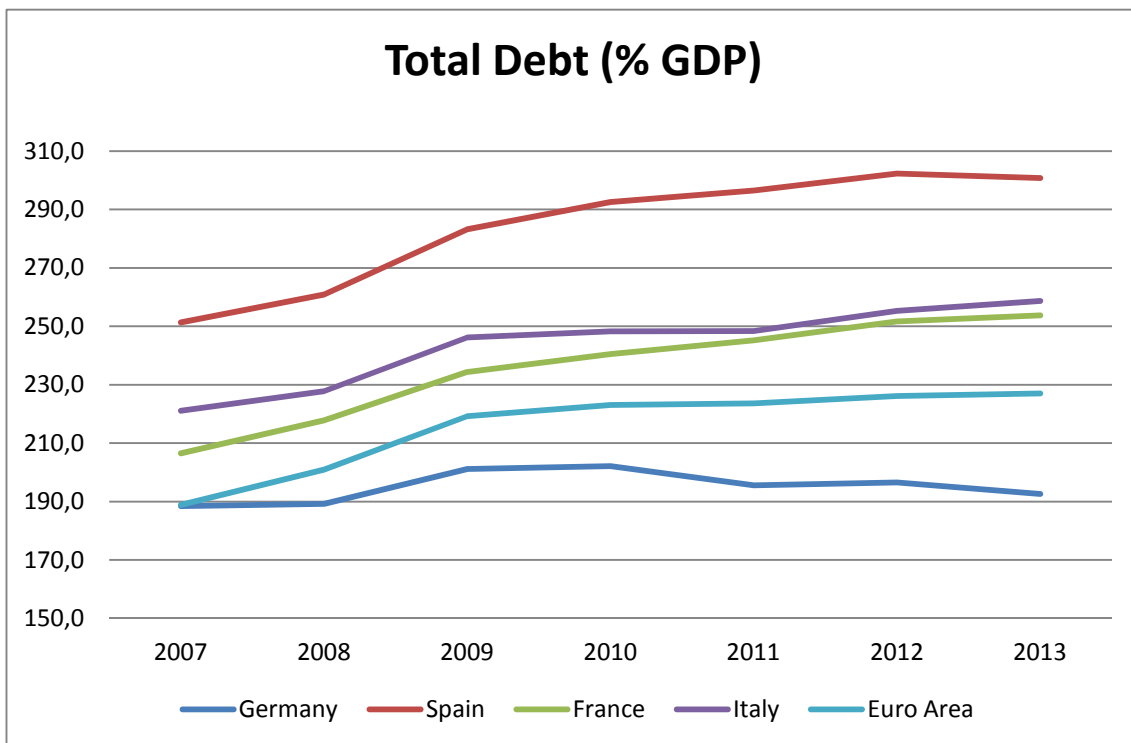


Source: BIS for private debt; AMECO for GDP

Thus, Spain's total public and private debt, which in 1999 amounted to 175.3% of GDP, and was below the total debt levels of Germany and Italy, grew very quickly reaching a peak of 302.3% of GDP in 2012 (300.8% in 2013). As can be seen in Figure 46, Spain's total debt is much higher than that of the other countries and groups of countries considered. In 2013, for example (as a percentage of GDP), it was 42% higher than Italy's, 47% higher than France's, 73% higher than that of the euro area and 108% higher than Germany's.

Patrick Artus (2014) has estimated that in order for Spain to return to a more or less normal situation, the economy would need about 5 years of deleveraging for the public debt and about 14 years for the private debt. Moreover, De Grauwe and Ji (2013) have calculated that Spain would need from between 12 and 25 years to halve its debt levels. Likewise, Eichengreen and Panizza (2014), with reference to Europe's public debts, conclude that debt sustainability – in the absence of restructuring, foreign aid or bursts of inflation – would require governments to run large primary budget surpluses (in many cases over 5%) for ten years, which while not entirely unknown would be exceptional.

Figure 46.- Total Debt, private and public



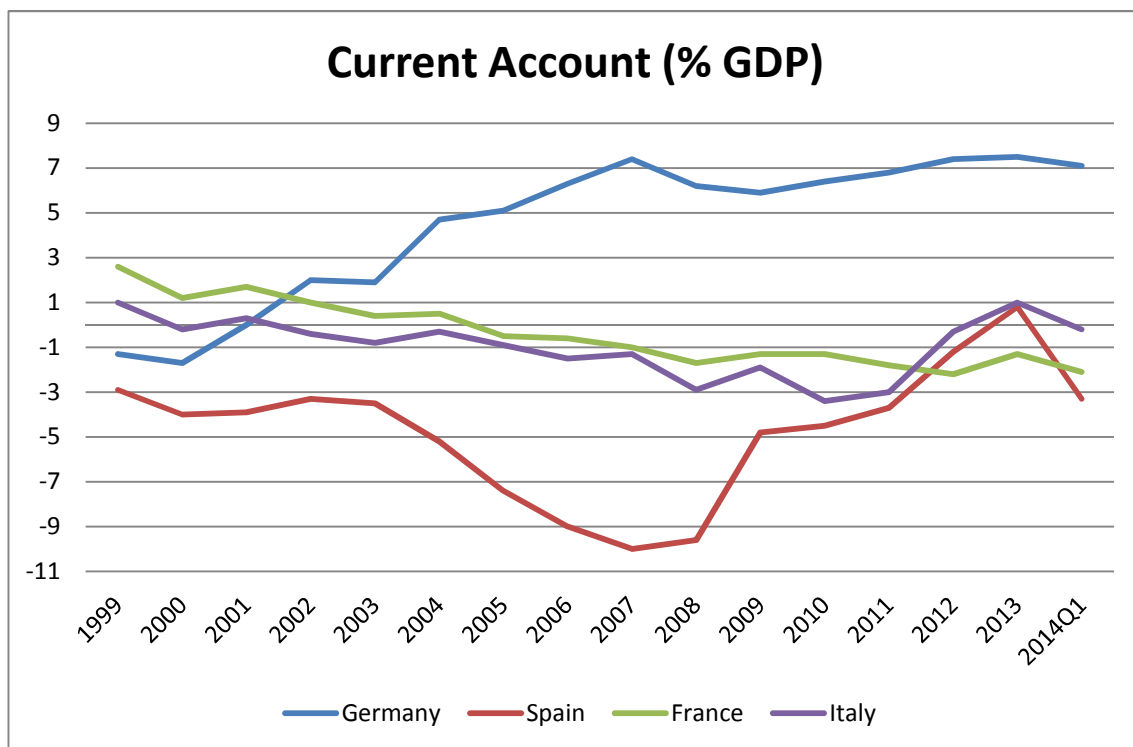
Source: BIS and AMECO

As for the current account balance, which corresponds to a country's financial capabilities when it has a surplus (an excess of savings over investment) or to its financial needs when it has a deficit (a level of investment greater than savings), Figure 47 shows that from 1999 (the year of the introduction of the euro) the surplus was greatest in Germany (with some fluctuations) reaching 7% of GDP at the end of the period. Germany has gradually become more and more a creditor state. Meanwhile, France's current account balance has deteriorated slowly (with some fluctuations). From a surplus of 2.6% in 1999, the country went into deficit in 2005 and the balance currently stands at around -2% of GDP. In the case of Italy, the current account balance has also followed a deteriorating trend (with some fluctuations); finding itself in constant deficit until 2012 (more than 3% of GDP in 2010 and 2011). Italy has finished the period with a slightly positive balance. Thus, both France and Italy have gradually become debtor states. As for Spain, even in 1999 the country had a current account

deficit and this was set to grow in the period of economic expansion (based on the housing and financial bubbles) due to the high import growth (which increased at a faster rate than GDP). This growth in imports and the increasing debt of the private sector were financed primarily with funds from abroad, and Spain recorded a historic current account deficit of -10% of its GDP in 2007.

With the onset of the crisis, and with it the application of a policy of "internal devaluation" (due to the existence of the euro), i.e., its austerity policies, Spain began to cut its imports significantly together with some reduction in private sector borrowing abroad. Consequently, the current account balance, albeit still negative, gradually recovered until 2013 when it became a surplus. However, these first signs of a possible recovery have once again caused imports to rise and in the first quarter of 2014 (latest available data) the current account balance was back in deficit. Whatever the case, Spain is undoubtedly a debtor state.

Figure 47.- Current Account Balance



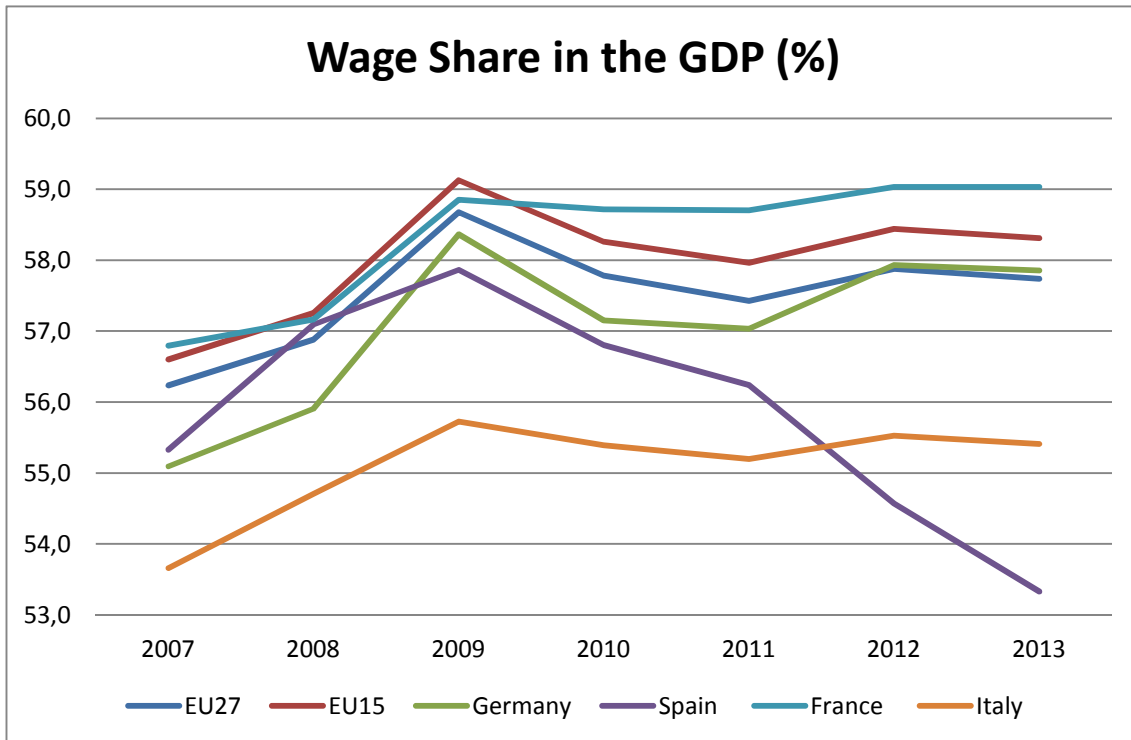
Source: Eurostat

The idea was introduced above that one of the main causes of the current crisis has been the growing inequalities in the distribution of income and wealth since the 1980s. This has led to a crisis of the middle classes, exaggerated social differences hampering social cohesion, with a consequent upsurge in poverty.

The evolution in the share of wages in the GDP (Figure 48) is a good indicator of this. From a maximum in 1976 of 67.9%, the trend since then has been downward, with some fluctuations, so that the share currently stands at 53.3%. Since the onset of the

crisis, the majority of countries and groups of countries considered have been able to maintain their share of wages in the GDP, with the exception of Spain, which, as with its nominal unit labour costs, has suffered a fall from 57.9% in 2009 to 53.3% in 2013, and is currently the country with the lowest percentage share of wages in the GDP.

Figure 48.- Wage share of GDP

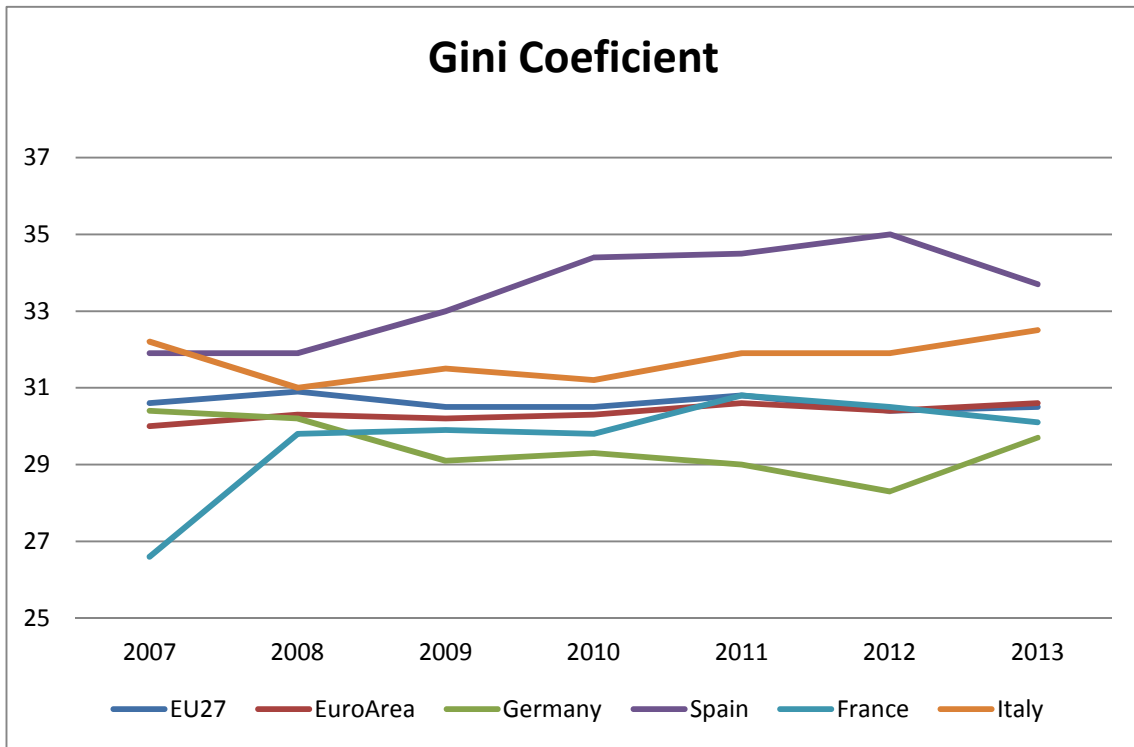


Source: AMECO

There are various ways of approaching inequalities of income distribution but among the most frequently used are the Gini coefficient and the S80/S20 ratio, i.e., the ratio between the total income received by the 20% of the population with the highest income and the income received by the 20% of the population with the lowest income. In both cases, as the values of the ratios rise, the greater are the inequalities in income distribution.

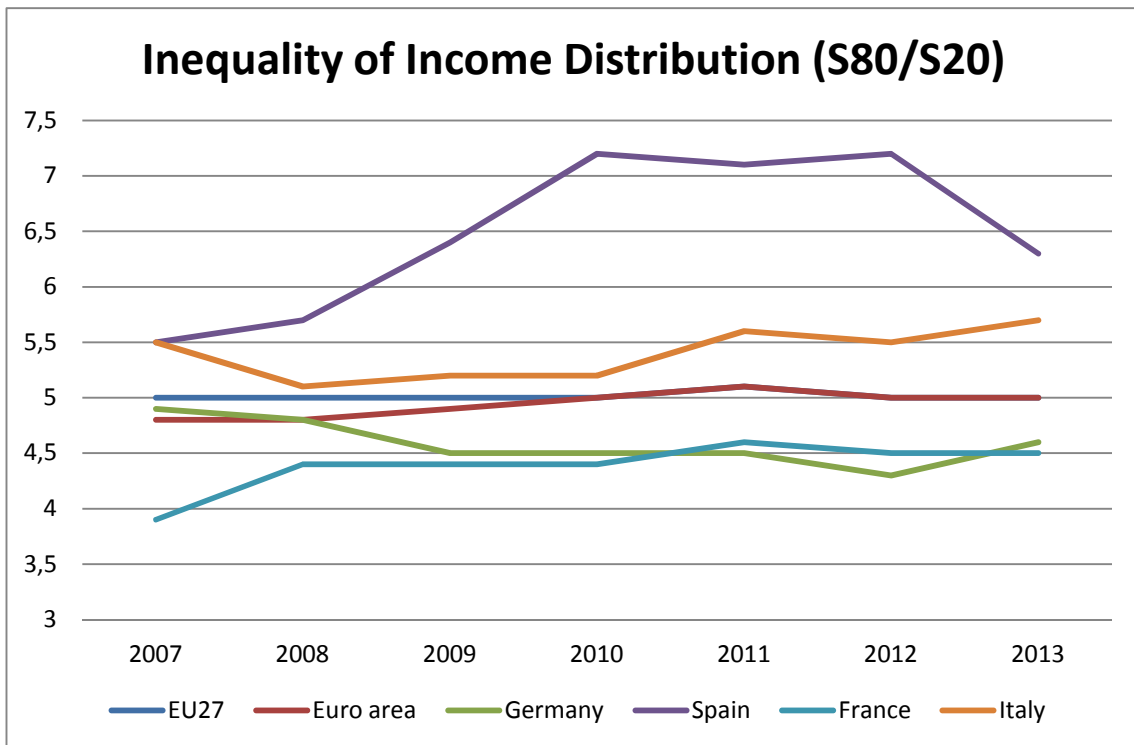
Among the countries and groups of countries considered, Spain presents the greatest disparities in income distribution when applying these two indicators. Spain's Gini coefficient (see Figure 49) is the highest among these countries during the period 2007-2013 and it is also the one that presents the highest rate of growth after France. Likewise (see Figure 50), Spain's S80/S20 ratio is also the highest of the countries considered and the one that presents the fastest growth in the crisis period: the wealthiest 20% (S80) that earned 5.5 times more than the poorest 20% (S20) in 2007 earned 7 times more between 2010 and 2012 (although this figure seems to fall somewhat in 2013).

Figure 49.- Gini Coeficient



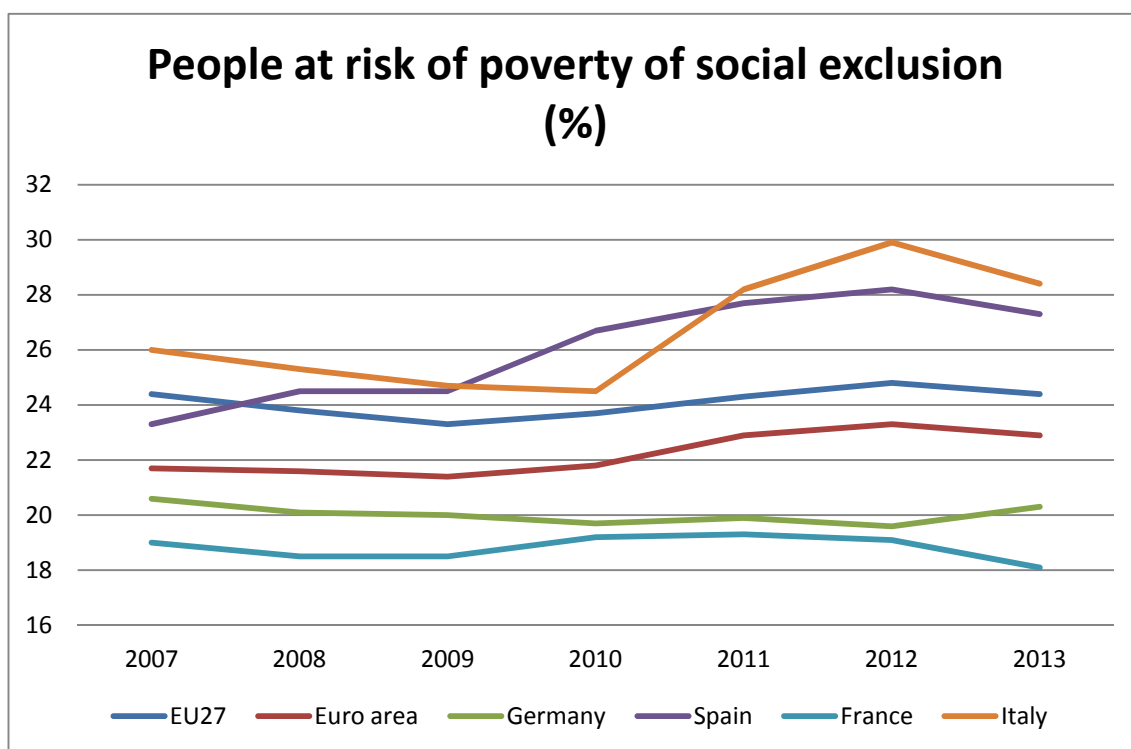
Source: Eurostat

Figure 50.- Inequality of income distribution



Source: Eurostat

Figure 51.- People at risk of poverty or social exclusion



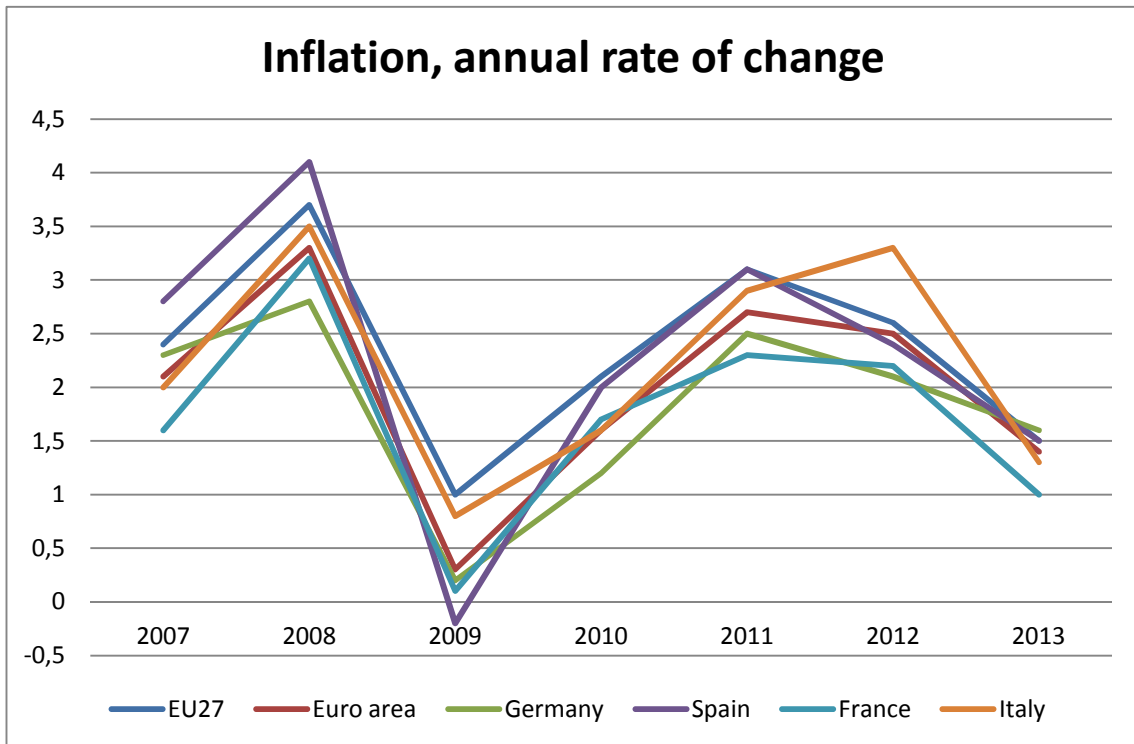
Source: Eurostat

Inequalities in income distribution have another consequence: the growth of poverty and social exclusion. As Figure 51 shows, the percentage of the population at risk of poverty or social exclusion in Spain has increased from 23.3% in 2007 to 27.3% in 2013. Of the countries considered only Italy presents a slightly higher share. However, in the period under consideration, Spain is the country in which this indicator has increased most (17.2%) followed by Italy and the euro area, while in Germany and France the risk has fallen slightly.

Inflation in the period 2007-2013 (see Figure 52) has followed a fairly similar pattern in all the countries or groups of countries considered: following a rise in 2008, inflation dropped sharply in the year in which the crisis hit hardest (2009). Thereafter, inflation climbed steadily until 2011 (2012 in Italy), falling since then to a level between 1 and 1.6% in all countries in 2013. However, Spain is where inflation rose highest in 2008 and where it fell furthest in 2009. It then rose again above 3% in 2011 but in 2013 it occupies the same level as in the countries of the EU-27 and the euro area.

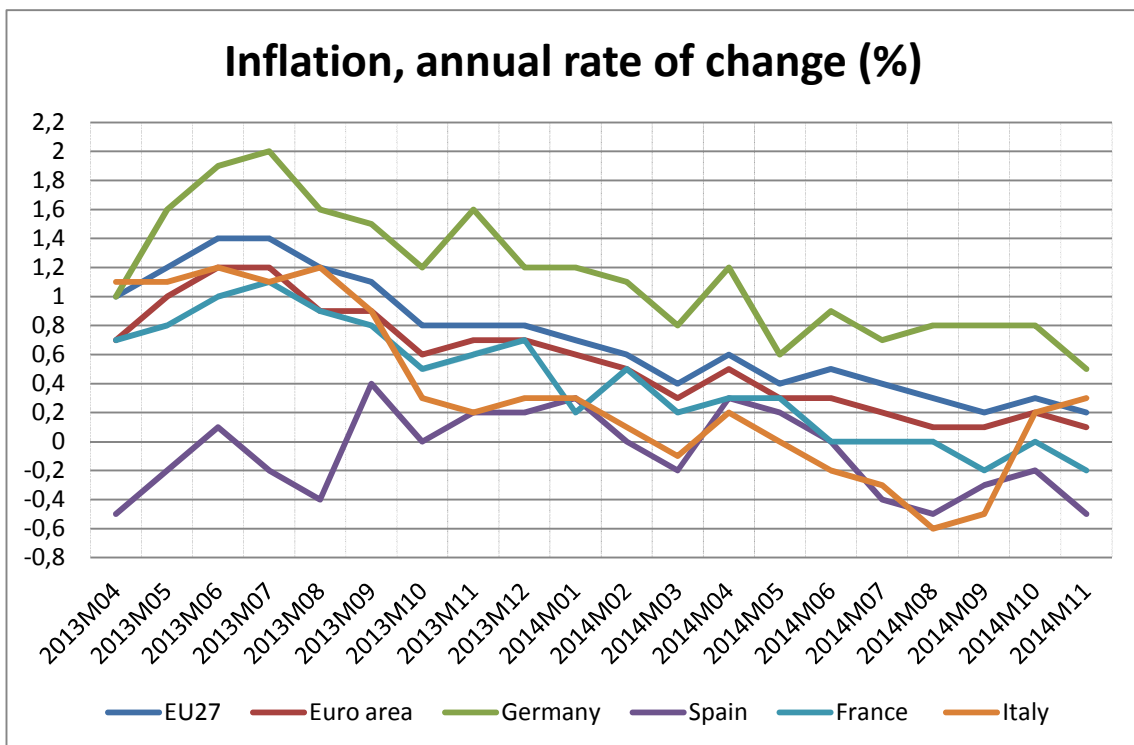
The most interesting trend, however, is the recent evolution in inflation. Thus, every month since April 2013 (Figure 53) there has been a general decline in prices in all the countries of the EU27 and the euro area, but most notably in Spain, Italy and France. In fact, over the last 20 months in Spain prices have risen at an annual rate below 0.4%, while in the last 12 months they have remained stagnant or have presented negative growth (including over the last five months). More specifically, in June 2014 prices grew by 0% and in the following five months they have presented negative growth.

Figure 52.- Inflation



Source: Eurostat

Figure 53.- Inflation, current period



Source: Eurostat

In other words, at present we can conclude that Spain (and other countries both in the eurozone and outside this area) is in a deflationary situation. Prices are falling with all the dangers and problems that this can represent for an economy.

3. Is Spain heading for a recovery?

During the last five quarters the Spanish economy has not been in recession, that is, since the third quarter of 2013. Spain's GDP is growing, only very slightly, but there is growth. Even the forecasts seem to indicate, at a time when all the talk is of a possible "triple-dip recession" throughout the eurozone, that the Spanish economy is set to grow by 1.2% in 2014, a rate that is higher than the mean for the eurozone and similar to the mean for the EU as a whole.

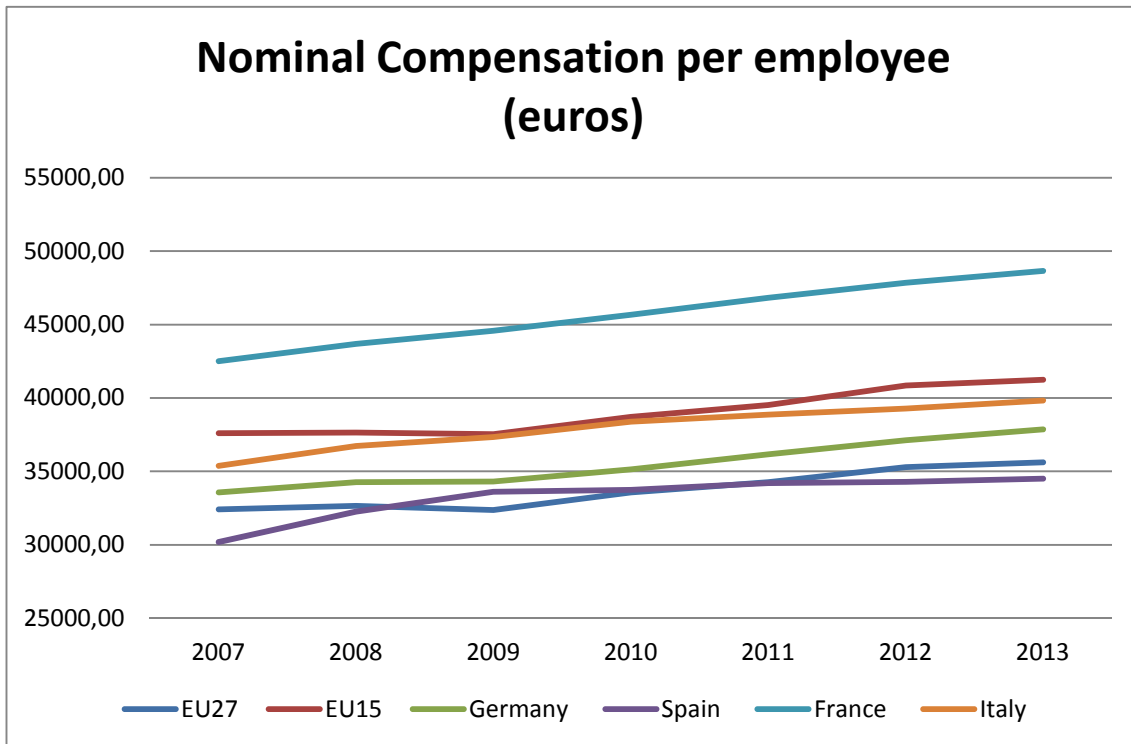
At the same time, the number of unemployed and the unemployment rate have started to fall. According to the Labour Force Survey (LFS), in the third quarter of 2014, in one year the number of unemployed had fallen by more than 500 thousand people and the unemployment rate had been cut by 2%. However, over the last year employment has only grown by around 274,000 people, since the active population (which has gradually fallen over the last seven quarters) has also fallen by 242,000 people. Today unemployment stands at 5.4 million people – the lowest figure since the fourth quarter of 2011 – and the unemployment rate stands at 23.7% – the second highest after Greece and well above the European average and the Eurozone average.

Based on these figures, the Spanish government, along with the European Commission and the IMF, have begun to speak of the great success story of the Spanish economy and of the effective policies they have promoted and implemented: they see this as evidence that competitiveness can be restored within the eurozone, and that it can start to grow again, based above all on increased exports, implementing policies of "internal devaluation" and fiscal consolidation, i.e., high wage cuts and, at the same time, cutbacks in public spending. Furthermore, the Spanish economy is being held up as an example, as a model, of what other economies, particularly Italy and France, should do if they want a return to prosperity.

From a critical perspective, it is claimed that this is a mercantilist ("beggar-thy-neighbour") strategy, like the one implemented by Germany some years ago, and that it is not possible to apply it simultaneously in all European countries or throughout the eurozone, because there will always be winners and losers. Moreover, question marks hang over just how long it can be applied in a country without destroying the European social and economic model of the welfare state, which took so many years to build.

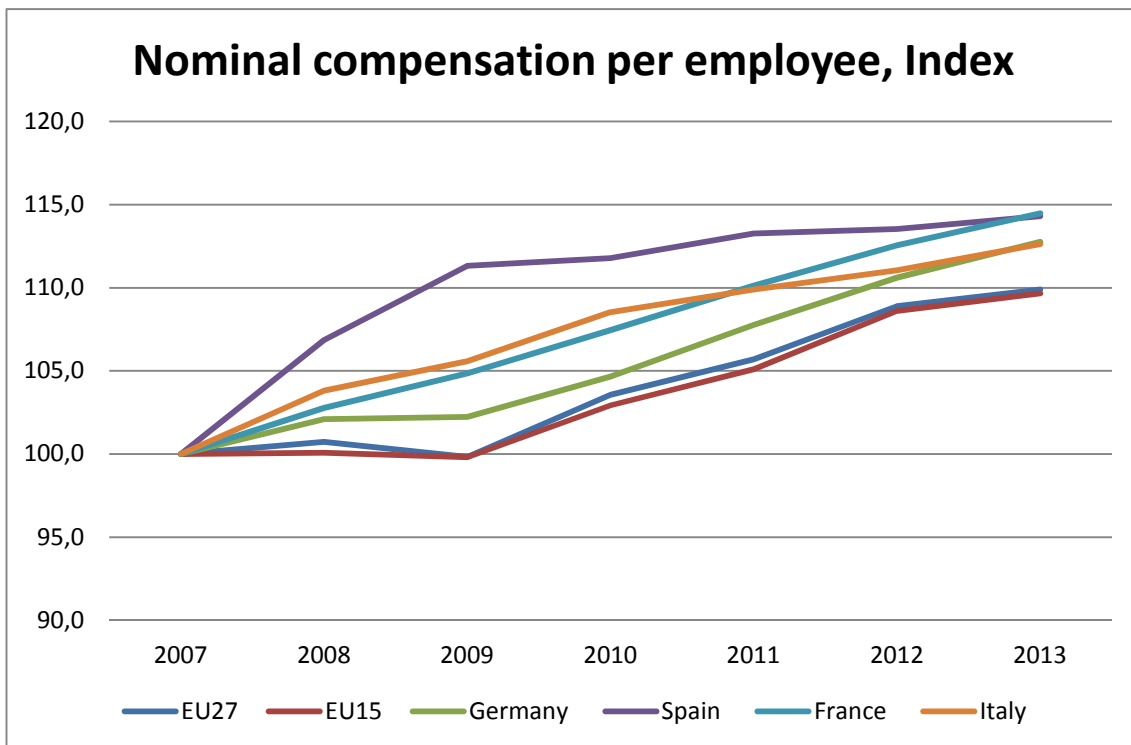
Moreover, not everything seems to be working so wonderfully. First, the Spanish economy is dangerously close to falling into a deflationary spiral. For more than a year now (April 2013), the CPI has stood at around 0% and over the last five months it has presented negative growth. Second, in early 2014, the current account balance was once again showing a deficit, which is typical of a recovering economy in which imports start to increase at a faster rate than the corresponding growth in exports. All this without mentioning that unemployment, which while falling, is still very high, with youth unemployment well above 50% and long-term unemployment above 60%. This means that in many households there is no net income and that poverty has reached very high levels.

Figure 54.- Wages, nominal compensation per employee



Source: AMECO

Figure 55.- Wages, nominal compensation per employee, Index



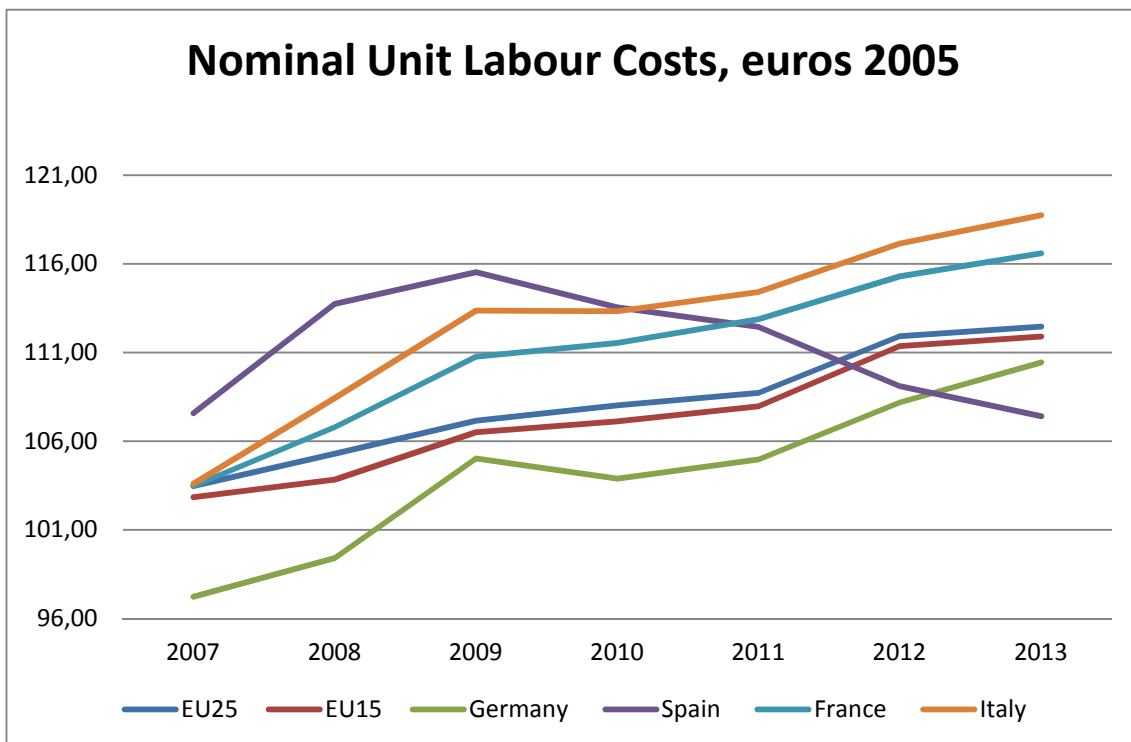
Source: AMECO

How then can we explain this supposed recovery? The claim is that this "miracle" of the Spanish economy has been achieved thanks to the austerity policies, to the "competitive devaluation", to the labour market "reform", which has succeeded in moderating wages, and to the cuts in the public spending, which have paved the way for the necessary fiscal consolidation. Here, there can be little doubt that there has been a very severe "reform" of the labour market, which has meant cuts in wages, a significant reduction in unit labour costs for companies, a reduction in firing costs and a decrease in unemployment benefits, together with greater flexibility for companies in all collective bargaining procedures. For a comparison with the Greek case, see Papadimitriou and al. (2014).

Thus, during the crisis period, wages (including social contributions) – "the nominal compensation per employee" – in Spain have been the lowest of the major countries of the EU-15, situating themselves around the EU-27 mean and well below the mean of the EU-15 (see Figure 54). However, they have experienced the most growth (14.3%) in the period, along with France's, but at the same time they have also shown the most moderate growth since 2009 (Figure 55).

As for nominal unit labour costs ("the ratio of compensation per employee to the real GDP per person employed"), these grew significantly throughout Europe until 2009 and since then they have continued to grow, albeit moderately. The differentiating factor is that since 2009 they have fallen markedly (-7.6%) in Spain and as of 2013 the costs are the lowest of all the countries (or groups of countries) considered (Figure 56).

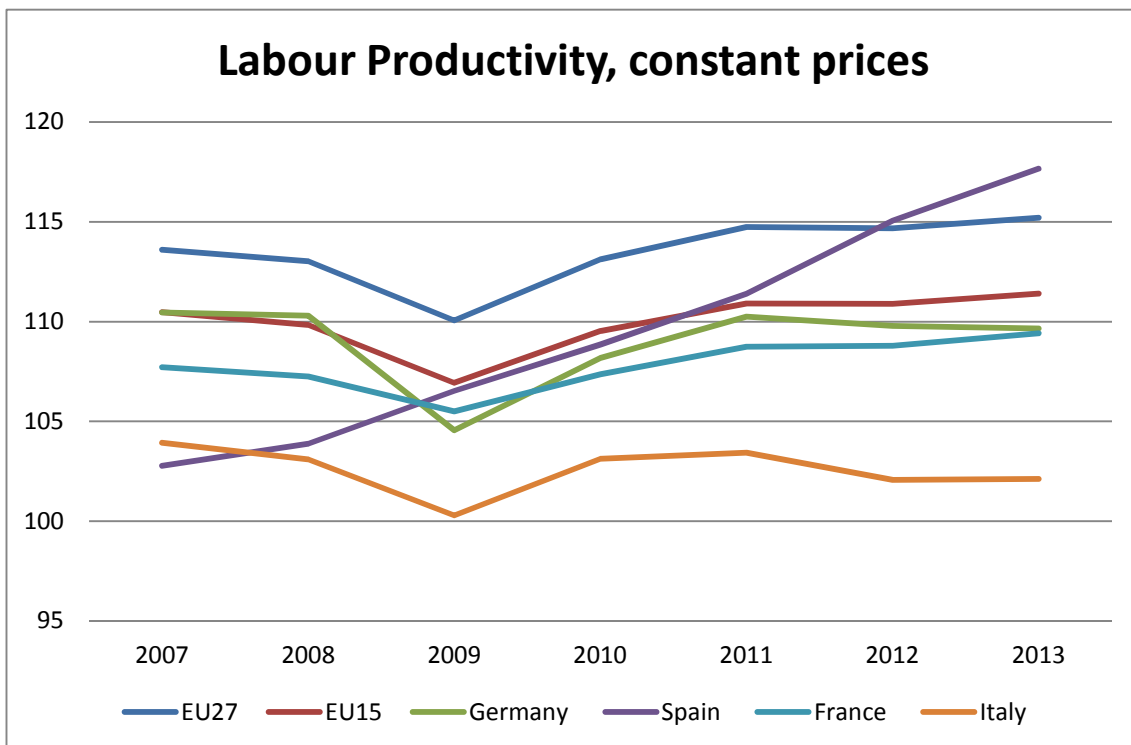
Figure 56.- Nominal Unit Labour Costs



Source: AMECO

A fact that, given the moderate wage growth since 2009, can be explained mainly by the evolution of labour productivity ("the real GDP per employed person") which has risen sharply in Spain since the onset of the crisis (+14.5%), while in other countries or groups of countries it has stayed unchanged, risen very slightly or, even, in the case of Italy decreased (see Figure 57). As we have seen above, this large relative growth in Spain's labour productivity can be explained mainly by the large loss of jobs and the consequent increase in the number of unemployed and in the unemployment rate since the beginning of the crisis (see from a neoclassical perspective Hospido and Moreno-Galbis, 2015).

Figure 57.- Labour productivity at constant prices



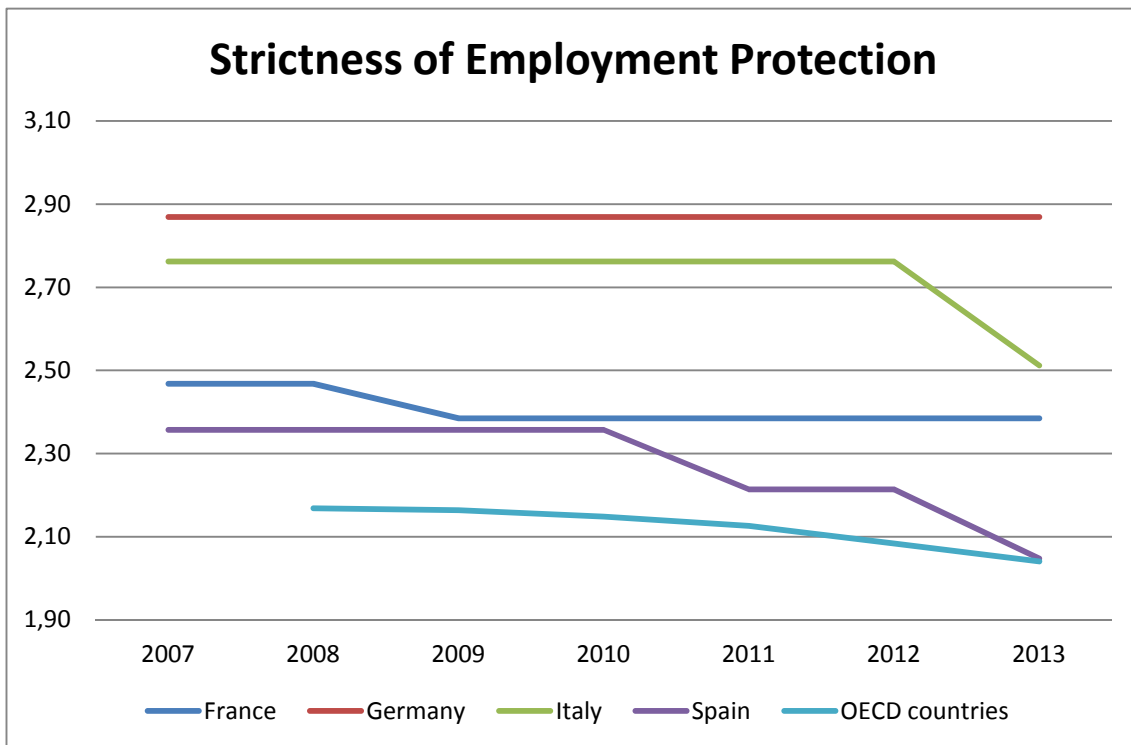
Source: AMECO

At the same time, the OECD indicators of employment protection legislation ("the strictness of employment protection legislation, EPL) in the Spanish economy have fallen (since the labour market has become increasingly more flexible) and currently coincide with the average values for OECD countries, but well below those of the main countries in the eurozone (see Figure 58). It should be stressed, however, that until 1994 this indicator had been much higher in Spain than in these other countries. In short, since 1995, the gradual liberalization of the Spanish labour market has placed it on a par in terms of flexibility (low employment protection legislation) with the average for the OECD countries and at a much higher level of flexibility than that prevailing in Germany, France and Italy.

As De Grauwe (2012) points out, the internal devaluation in the peripheral countries of the eurozone, and in Spain in particular, has been very intense. Moreover, a

comparison with the countries at the core shows that the burden of the adjustments to improve the imbalances in the eurozone between creditor and debtor states has been highly asymmetric, with the peripheral countries being the ones that have had to suffer almost exclusively these adjustments, as has happened in other fixed exchange rate regimes, including that of Bretton Woods and the European Monetary System. Some believed that the European Monetary Union and the euro would change this behaviour, but it has not worked out like that: the adjustment process has been as asymmetric as in the other fixed exchange rate regimes.

Figure 58.- Strictness of Employment Protection



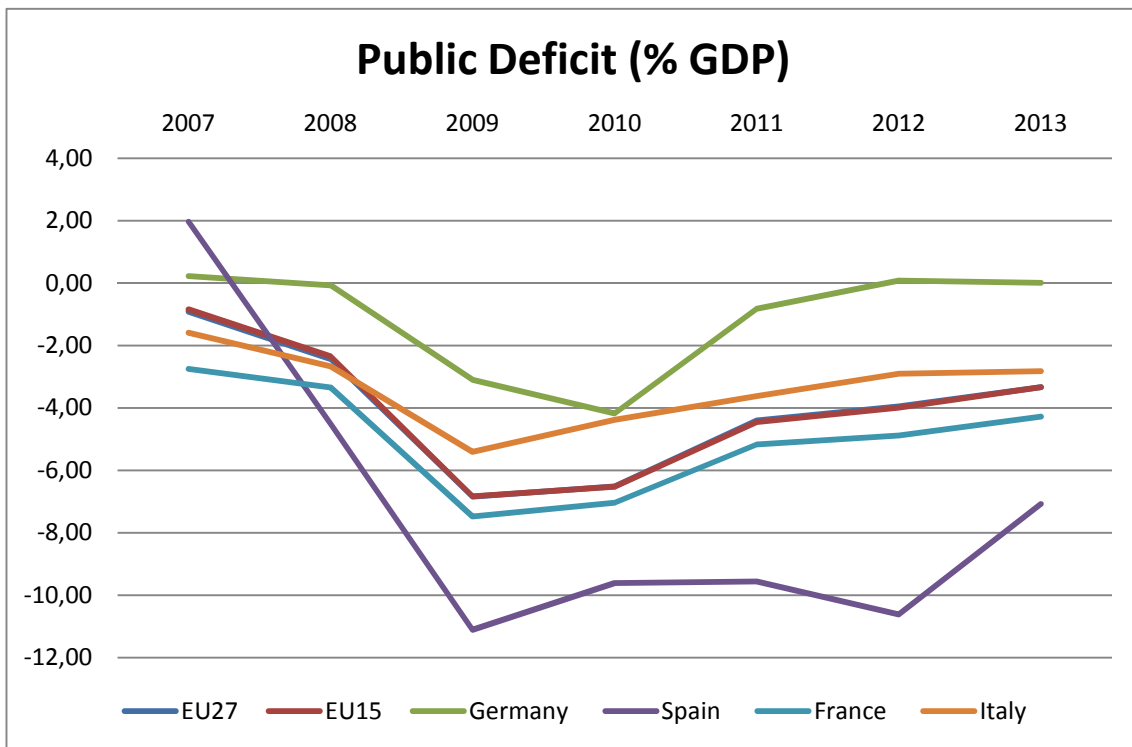
Source: OCDE

Theoretically, the other element characterising the austerity policies has been the cuts in public spending designed to facilitate fiscal consolidation, with the consequent reduction in public deficit and public debt to the levels established by the Fiscal Stability Treaty (the so-called "fiscal compact") of the countries of the European Union: ceilings on the budget deficit of 3% of GDP and on the structural deficit of 1% if the ratio of public debt to GDP does not exceed 60%. There is no doubt that many public services (education, health, social services, among others) have had to accept major cuts; however, public deficit has withstood these attempts at reduction and the public debt to GDP ratio has increased constantly. And from the onset of the economic crisis, Spain has not fulfilled by a long way the criteria established in the "fiscal compact", to the surprising condescension of the European Union.

It seems particularly clear that, besides the labour market reform, an important element in accounting for the recent moderate growth in GDP growth and the slight

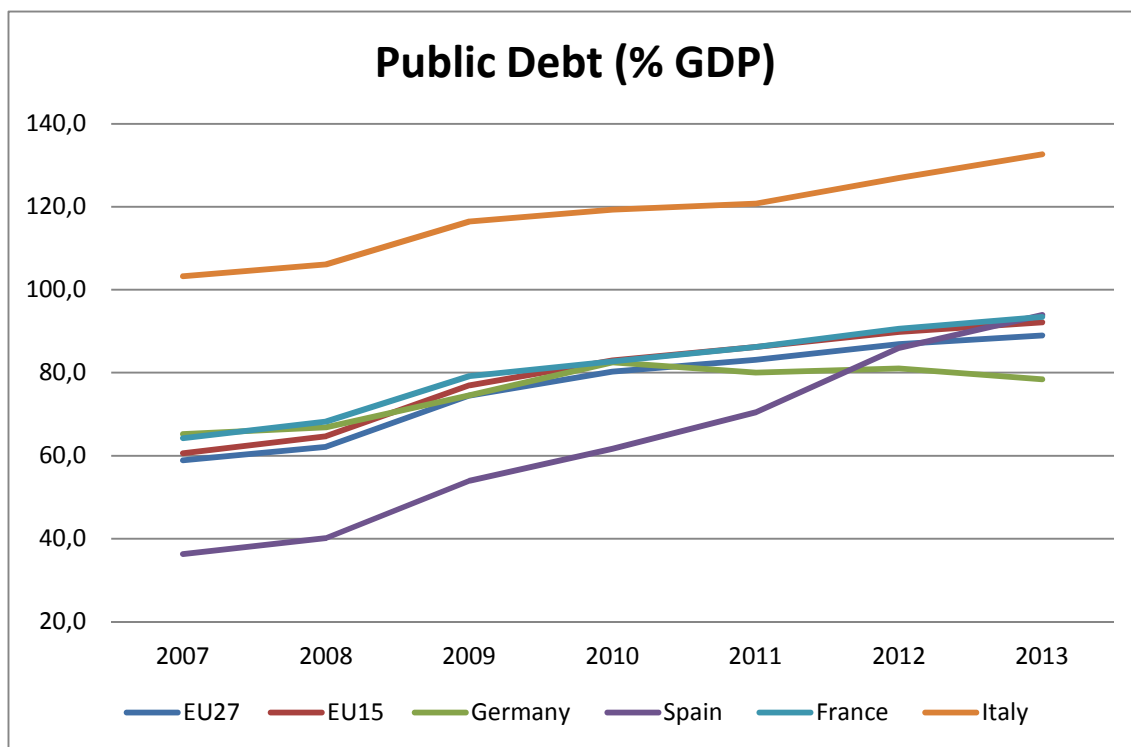
fall in the number of unemployed (and the rate of unemployment), is the sizeable public deficit that has maintained the Spanish economy in recent years. Contrary to the official line, in recent years Spain has implemented an expansionary fiscal policy, which has given some support to the domestic demand or that, at least, has prevented it from falling further. As can be seen in Figure 59, the deficit of the Spanish economy has, since 2008, been much higher than the mean of the EU and the euro zone, as well as that of the larger countries in this area. And in any case, it is well above the 3% established in the "fiscal compact". At the same time, and because of the high public deficit, the public debt to GDP ratio has also increased significantly and continuously (see Figure 60), reaching values since 2010 in excess of the 60% established in the "fiscal compact" and today it has almost reached 100% of GDP.

Figure 59.- Public Deficit



Source: AMECO

Figure 60.- Public Debt



Source: AMECO

4. Some conclusions and suggestions

"EMU is no cure for problems with the balance of payments"
Anthony P. Thirlwall, 1991

Spain's per capita GDP underwent great growth in the period 1960-73, followed by a downturn during the subsequent crisis that lasted until 1985. This was followed by a period of new growth, albeit more moderate than that experienced in the 60s, between 1986 (the year that Spain entered the European Economic Community) and 1993 (when the European Monetary System was hit by crisis). A period of similar growth was recorded between 1994 and 2007, before the country was hit by the recession in 2008. Interestingly, the growth in per capita GDP was almost 50% higher in the period 1986-99 (from the year Spain joined the EU until the introduction of the euro) than in the period from the introduction of the euro until the end of this period of growth (2000-07).

There can be little doubt that the Spanish economy is experiencing its most far-reaching crisis since the 1936-39 civil war, a crisis that given its intensity and duration can be compared to the impact in Spain of the Great Depression of the 1930s. In the current crisis, as in the crisis of 1929, per capita GDP remains some seven years on at a level that is between 6 and 8% below that recorded when the crisis broke out. The intensity and duration of the current crisis has had a massive influence on unemployment, increasing poverty and threatening public finances (public deficit and public debt) with total collapse.

Following Spain's entry into the European Union (1986), labour productivity grew much more slowly than it had previously, despite the significant growth in per capita GDP in these periods. However, it has risen significantly in the current period of crisis as per capita GDP has fallen markedly. If we examine what happens when the economy grows before (1986-99) and after (2000-2007) the existence of the euro, it can be seen that productivity grew in the first period at a rate that was almost three times that of the second period. In other words, it is clear that in times of crisis, the decline in per capita GDP and the increase in labour productivity in Spain occur as a result of a significant decrease in the employment to total population ratio. And as the total population has not undergone very substantial changes, the ratio has fallen because of the large decline in the employed population and, hence, of the large increase in the number of unemployed and in the unemployment rate.

From the perspective of sectorial balances, between 1980 and 1991 (when the Spanish economy was emerging from a major crisis that had lasted from 1973 to 1984) it was the deficit in the public sector that was the main contributor to the growth in aggregate demand and in GDP. Later, in the period 1984-87, the external sector made a positive contribution, at a time when the private sector remained indebted (with savings outstripping investments). This was the state of affairs until 1985 when the private sector began investing again, although its investments did not overtake savings. During the 1992-93 crisis, the public sector deficit once more made an important contribution to growth in aggregate demand and GDP (a situation that

would last until 1998). Meanwhile the private sector initiated a deleveraging process that lasted until 1995 and the balance in the foreign sector improved thanks to successive devaluations of the peseta, an improvement that would last until 1997. With the onset of a new period of growth (1994-95), the private sector began to borrow more and more (its investments outstripping savings) to fund expansion, reaching a maximum of 12% of GDP in 2007. This borrowing was financed by progressive external sector indebtedness which reached a historical record of 10% of GDP in 2007; meanwhile, the public sector, which had to fulfil the Maastricht criteria in order to enter the euro, was gradually reducing its borrowing until it actually achieved a surplus between 2005 and 2007. With the onset of the crisis in 2008 everything changed again: the private sector began to deleverage very quickly and since 2009 its savings were once again higher than investments. The same occurred with the balance of the foreign sector, which gradually cut its borrowing (with a big drop in imports) until it had established a small surplus in 2013. Thus, the public sector has gradually started to borrow again in order to hold aggregate demand at minimal levels, and since 2008 it has had to face growing deficits, with historical highs, which, despite the austerity policies, are very difficult to reduce as efforts are made to achieve fiscal consolidation and to meet the criteria of the "fiscal compact".

The first most striking feature of Spain's balance of payments is the strong correlation between the behaviour of the current account balance and the balance of goods and services, especially until 1999, the year of the introduction of the euro, because until that time the deficit of the balance of property income had been offset by the surplus in the balance of transfers. Second, in most years both the current account balance and the balance of goods and services presented a deficit, except that is in the early seventies, 1978-79, 1984, 1986, 1997 and the 2012-13. Third, after 1999 (the year of the introduction of the euro) foreign borrowing increased gradually with a large and growing deficit in the current account balance up to 2007 (coinciding with the period of expansion of the Spanish economy), while the deficit in the balance of goods and services also grew, albeit not so strongly, and therefore both the balance of property income and the balance of transfers presented a deficit. With the onset of the 2008 crisis, due in the main to the large fall in imports, the balance of goods and services improved rapidly, the balance of property income improved slightly, while the balance of transfers remained constant. At the same time, the balance of the current account improved which, in common with the goods and services balance, presented a small surplus in 2013. The austerity policies implemented in Spain, which although unsuccessful in ending the crisis, stemming the loss of jobs and making significant inroads into public deficit and debt, have on the contrary been able to improve the situation in the foreign sector.

Since 1980 the Spanish public sector has normally been in deficit, with the exceptions of the years 2005, 2006 and 2007. The deficit was of particular concern in the early 1980s (at the end of the crisis that had begun in 1973), during the crisis of the early nineties (coinciding with the crisis of the European Monetary System) and, above all, during the current crisis that began in 2008. In the current crisis, Spain's public deficit has reached a historical high, and the depth of the crisis is such that, despite the austerity policies applied, it is very difficult to make a significant reduction (and even

when applying the criteria of the "fiscal compact") in the aforementioned deficit. If we analyze the evolution in Spain's public debt as a percentage of GDP, a significant increase can be seen in the latter part of the 1973-1985 crisis. In 1991 it was almost at the same level as in 1986, but after the 1992-93 crisis (coinciding with the crisis in the European Monetary System) it rose again significantly until 1996. Thereafter, and coinciding with the economic expansion and a continuous reduction in the public deficit, the ratio of public debt to GDP fell until 2007, when it stood at just 36.3% of GDP. With the onset of the current crisis, the public deficit increased significantly, and it continues to do so on a year-to-year basis, so that the public debt to GDP ratio today is higher than 96%.

The balance of the private sector as a percentage of GDP was positive – i.e., savings were higher than investments – from 1982 to 1998 (except in 1989), with an increasing trend from 1981 to 1985, a decreasing trend from 1986 to 1989, a period of relative stability until 1992, and an upward surge until 1995. Between 1996 and 2007, however, the balance presented a marked downward trend, and after 1999 (the year of the introduction of the euro) the balance became negative until 2008, with a historical low of -12% of GDP in 2007. That is, in the period of expansion, investments grew much faster than savings (eventually outstripping them) in the private sector, and so it was gradually forced to borrow. To do so it had to call on another sector to finance it – in this case, as we have seen, the foreign sector. With the onset of the crisis, the private sector began to deleverage very quickly and after 2009 savings once again gained the upper hand over investments (as a percentage of GDP) and with a growing trend the following years. Finally, we need to emphasise the importance of private debt (measured both in absolute terms and as a percentage of GDP) in the Spanish economy. It is critical to note that it is much higher than public sector debt and that it has grown spectacularly since 1996. Between 1986 and 1992, private debt stood at slightly above 70% of GDP, in 1992 and 1993 it increased by almost 15% (the time of the crisis of the European Monetary System and the devaluation of the peseta) and by 1996 it had reached 87 % of GDP. Since that time there has been a spectacular growth of more than 190% reaching 223.3% of GDP in 2010. In 2011 it began to decline but it continues to represent a huge percentage share of GDP.

Since 2008 the Spanish economy has suffered the effects of a major crisis, with a sharp drop in its GDP and per capita GDP, against a backdrop of significant economic imbalances and severe structural problems. Spanish GDP at constant prices and per capita GDP in real terms are the lowest of the largest countries in the eurozone (Germany, France, Italy). Moreover, between 2007 and 2013 they have tended to follow a downward trend – a fall of 6.3% since the onset of the crisis, which is less than the downturn suffered by Italy but more than that of the means of the EU-27 and the EU-15 and more than that of France and Germany.

Despite the fall in real per capita GDP since the onset of the crisis, there has been spectacular growth – 13.6% – in labour productivity in Spain during this same period. Meanwhile, labour productivity in other countries or groups of countries has increased only very slightly and it has even fallen in Germany and Italy. In other words, it is clear that the decline in per capita GDP has occurred as a result of a significant fall

in the employment/total population ratio. And as the total population has not undergone very substantial changes, the ratio has fallen as a result of the marked decline in the employed population and, hence, the large increase in the number of unemployed and in the unemployment rate (see from a neoclassical perspective Hospido and Moreno-Galbis, 2015).

Spain's unemployment rate was more or less at the level of that of the other countries or groups of countries considered in 2007 (8.3%), but in the intervening years it shot up dramatically so that by 2013 it stood at 26.4%, more than twice the rate of the rest of countries where it also increased slightly. However, Spain's rate is five times that of Germany's. Patrick Artus (2014) estimates that it will take the Spanish economy in the region of 25 years to get its labour market back to pre-crisis levels.

In the last three years of economic expansion (2005, 2006 and 2007), the Spanish economy presented a public sector surplus; however, with the appearance of the crisis the public deficit grew rapidly peaking at 11% in 2009. Thereafter, the deficit remained high, finishing 2013 at 7.1% of GDP. As a result, Spain's public debt as a % of GDP, which was at a very low level in 2007 (at 36.3%), has increased much more rapidly and is currently in excess of 96%. As Paul Grauwe (2014) notes, although the interest rate on Spanish government bonds has fallen thanks to the OMT (Outright Monetary Transactions) operations implemented by the European Central Bank since mid-2012 (which have improved the situation of the aforementioned public debt), this does not mean that they have made the situation sustainable. Indeed, in a situation in which the currency (the euro) cannot be devalued, Spain will face grave difficulties in turning its public debt around and will be obliged to introduce even stricter austerity policies. This is turn will further reduce the nominal rate of GDP growth plunging the country into a vicious circle that will be extremely difficult to break.

Spain's private debt (206.9% of GDP in 2013) is more than twice that of public debt. This places it well above private debt levels in France, the eurozone, Germany and Italy. Beyond doubt, the Spanish economy's private debt, albeit in decline since 2011, has been one of the main causes of the crisis and remains one of the most important problems to be faced (Keen, 2015).

Thus, the total debt (public and private) in the Spanish economy, which in 1999 accounted for 175.3% of the GDP began to grow a lot and extremely rapidly from 1990 up to a 302.3% of the GDP in 2012 (300.8% in 2013). Patrick Artus (2014) has estimated that in order for Spain to return to a more or less normal situation, the economy would need about 5 years of deleveraging for the public debt and about 14 years for the private debt. Moreover, De Grauwe and Ji (2013) have calculated that Spain would need from between 12 and 25 years to halve its debt levels. Likewise, Eichengreen and Panizza (2014) conclude that debt sustainability would require governments to run large primary budget surpluses (in many cases over 5%) for ten years, which while not entirely unknown would be exceptional.

As for the current account balance, since 1999 (the year of the introduction of the euro) the surplus was greatest in Germany (with some fluctuations), reaching 7% of

GDP at the end of the period. Thus, Germany has gradually become more and more of a creditor state. Meanwhile, in Spain, which started with a deficit in its current account balance in 1999, the deficit has become larger and larger in the period of economic growth (based on the housing and financial bubbles), due to high import growth (which increased at a faster rate than GDP). This growth in imports and increasing private sector indebtedness were financed primarily with funds from abroad, and Spain recorded a historic current account deficit of -10% of its GDP in 2007. With the onset of the crisis, and with it the application of a policy of "internal devaluation" (due to the existence of the euro), i.e., its austerity policies, Spain began to cut its imports significantly together with some reduction in private sector borrowing abroad. Consequently, the current account balance, albeit still negative, gradually recovered until 2013 when it became a surplus. However, these first signs of a possible recovery have once again caused imports to rise and in the first quarter of 2014 (latest available data) the current account balance was back in deficit. Whatever the case, Spain is undoubtedly a debtor state (along with Italy and France).

One of the main causes of the current crisis has been the growing inequalities in the distribution of income and wealth since the 1980s. This has led to a crisis of the middle classes, exaggerated social differences hampering social cohesion, with a consequent upsurge in poverty. Thus, the share of wages in the GDP, which peaked in 1976, has since then tended to decrease, so that today it stands at 53.3%. Spain's Gini coefficient is the highest among the countries considered during the period 2007-2013 and it is also the one that presents the highest rate of growth after France. Likewise, Spain's S80/S20 ratio is also the highest of the countries considered and the one that presents the fastest growth in the crisis period: the wealthiest 20% (S80) that earned 5.5 times more than the poorest 20% (S20) in 2007 earned 7 times more between 2010 and 2012 (although this figure seems to have fallen somewhat in 2013). Inequalities in income distribution lead to a growth in the rate of the population at risk of poverty or social exclusion which in Spain has increased from 23.3% in 2007 to 27.3% in 2013.

Inflation rose in 2008, before falling sharply in the year in which the crisis hit hardest (2009). Thereafter, inflation climbed steadily until 2011, falling since then significantly until settling at the present level. If we consider the evolution of inflation every month in Spain, since April 2013, over the last 20 months prices have risen at an annual rate below 0.4%, while in the last 12 months they have remained stagnant or have presented negative growth (including over the last five months). More specifically, in June 2014 prices grew by 0% and in the following five months they have presented negative growth. In other words, at present, we can conclude that Spain (and other countries both in the eurozone and outside this area) is in a deflationary situation. Prices are falling with all the dangers and problems that this can represent for an economy.

Finally, during the last five quarters the Spanish economy has not been in recession, that is, since the third quarter of 2013. Spain's GDP is growing, only very slightly, but there is growth. At the same time, the number of unemployed and the unemployment rate have started to fall: in the third quarter of 2014, the number of unemployed fell by more than 500 thousand people and the unemployment rate by 2%. However, over

the last year employment has only grown by around 274,000 people, since the active population has also fallen by 242,000 people. Today unemployment stands at 5.4 million people – the lowest figure since the fourth quarter of 2011 – and the unemployment rate stands at 23.7%.

Based on these figures, official sources have begun to speak of the great success story of the Spanish economy: they see this as evidence that competitiveness can be restored within the eurozone, and that it can start to grow again, based above all on increased exports, implementing policies of "internal devaluation" and fiscal consolidation, i.e., high wage cuts and, at the same time, cutbacks in public spending. Furthermore, the Spanish economy is being held up as an example, as a model, of what other economies, particularly Italy and France, should do if they want a return to prosperity. From a critical perspective, it is claimed that this is a mercantilist ("beggar-thy-neighbour") strategy, like the one implemented by Germany some years ago, and that it is not possible to apply it simultaneously in all European countries or throughout the eurozone, because there will always be winners and losers. Moreover, question marks hang over just how long it can be applied in a country without destroying the European social and economic model of the welfare state. In fact, Artus (2014b) has recently spoken of how this situation can be debilitating for other countries, such as France and Italy, if not to the whole of the eurozone.

Moreover, not everything seems to be working so wonderfully. First, the Spanish economy is dangerously close to falling into a deflationary spiral. Second, in early 2014, the current account balance was once again showing a deficit, which is typical of a recovering economy in which imports start to increase at a faster rate than the corresponding growth in exports. All this without mentioning that unemployment, which while falling, is still very high, with youth unemployment well above 50% and long-term unemployment above 60%. This means that in many households there is no net income and that poverty has reached very high levels.

The claim is that this "miracle" of the Spanish economy has been achieved thanks to the austerity policies, to the "competitive devaluation", to the labour market "reform", which has succeeded in moderating wages, and to the cuts in the public spending, which have paved the way for the necessary fiscal consolidation. Here, there can be little doubt that there has been a very severe "reform" of the labour market, which has meant cuts in wages, a significant reduction in unit labour costs for companies, a reduction in firing costs and a decrease in unemployment benefits, together with greater flexibility for companies in all collective bargaining procedures

Thus, during the crisis period (2007-13), wages in Spain have been the lowest of the major countries of the eurozone, situating themselves around the EU-27 mean and well below the mean of the EU-15. But, at the same time, they have also shown the most moderate growth since 2009. As for the nominal unit labour costs, these increased until 2009 but then decreased steadily and significantly (-7.6%) and as of 2013 they are the lowest of all the countries (or groups of countries) considered. A fact that, given the moderate wage growth since 2009, can be explained mainly by the evolution of labour productivity, which has risen sharply in Spain since the onset of the

crisis (+14.5%). This relative growth can in turn be accounted for mainly by the large loss of jobs and the consequent increase in the number of unemployed and in the unemployment rate since the beginning of the crisis. At the same time, the OECD indicators of employment protection legislation ("the strictness of employment protection legislation, EPL) in the Spanish economy have fallen (since the labour market has become increasingly more flexible) and currently coincide with the average values for OECD countries, but are well below those of the main countries in the eurozone. However, here, we should bear in mind the criticism that the aggregate unit labor costs have received as the measure of the competitiveness of the economy and the fact that in the peripheral European countries the problem is not so much that labor costs are expensive but that the lack of competitiveness is related to the productive structure of these countries and, therefore, to the type of products that they are able to export (Felipe and Kumar, 2011; Felipe and Kumar 2014).

However, as De Grauwe (2012) points out, the internal devaluation in the peripheral countries of the eurozone, and in Spain in particular, has been very intense. Moreover, a comparison with the countries at the core shows that the burden of the adjustments to improve the imbalances in the eurozone between creditor and debtor states has been highly asymmetric, with the peripheral countries being the ones that have had to suffer almost exclusively these adjustments, as has happened in other fixed exchange rate regimes, including that of Bretton Woods and the European Monetary System. Some believed that the European Monetary Union and the euro would change this behaviour, but it has not worked out like that: the adjustment process has been as asymmetric as in the other fixed exchange rate regimes (De Grauwe, 2015b).

Theoretically, the other element characterising the austerity policies has been the cuts in public spending designed to facilitate fiscal consolidation. There is no doubt that many public services have suffered significant cutbacks; however, the public deficit has withstood these attempts at reduction and the public debt to GDP ratio has increased constantly. And, significantly, from the onset of the economic crisis, Spain has not fulfilled by a long way the criteria established in the "fiscal compact", to the surprising condescension of the European Union. It seems particularly clear that, besides the labour market reform, an important element in accounting for the recent moderate growth in GDP growth and the slight fall in the number of unemployed (and the rate of unemployment), is the sizeable public deficit that has characterised the Spanish economy in recent years. Contrary to the official line, in recent years Spain has implemented an expansionary fiscal policy, which has given some support to the domestic demand or that, at least, has prevented it from falling further.

The external sector has played a very important role in the Spanish economy, often financing its own growth, especially, for example, in the last period of expansion between 1994 and 2007. However, at the same time, it has often been a major constraint on growth, since in the long term no country can grow faster than a rate that is compatible with the external current account balance, unless of course it was able to finance its growing public deficit (and public debt), something that, in principle and in general, is impossible (Thirlwall, 1979; Thirlwall, 2002; Thirlwall, 2011; Thirlwall, 2013). Moreover, the growing foreign private debt has been a primary cause of the

great crisis that has afflicted Spain and the other European countries of the periphery since 2008. A large private debt related to the existence of large imbalances between debtor countries (in the periphery) and creditor countries (Germany and the other countries in the core); the increasing importance of the role of finances in the economy – since the liberalization and deregulation of the financial system – which have facilitated the process of indebtedness (Chen et al., 2012); the growing imbalances in the distribution of income and wealth have led to a crisis among the middle classes forcing them to borrow more and more to maintain their standard of living; and the economic policies of "internal devaluation" (given the impossibility of devaluing the euro) which have created a vicious circle of austerity, lack of growth, unemployment, public deficit and public debt (Soy, 2013; Soy, 2014a; Soy, 2014b).

The causes of the crisis have been neither the public sector deficit nor the failure to implement "structural reforms" in the public sector (Bagnai, 2014a; Bagnai 2014b). No less a figure than the vice president of the European Central Bank has recognized as such: rising private debt levels and the lack of prudence and efficiency on the part of the creditors that caused this situation are at the root of the crisis in Europe (Constâncio, 2013). In such circumstances, policies of "internal devaluation" offer no solution but rather, as we have just seen, create a vicious circle of increasing austerity, or give rise to a mercantilist ("beggar-thy-neighbour") policy, such as the one Germany has been implementing for years or the one that Spain more recently has sought to introduce. However, such an approach is not applicable in all countries and, moreover, it can be detrimental to the interests of others, including France and Italy, even undermining their economies (Artus, 2014b). The existence of a fixed exchange rate (the euro) together with a centralized monetary policy and decentralized fiscal policies do not create more discipline but rather run the risk of encouraging "free riding" and may lead to the necessary reforms being postponed (Granville, 2013; Fernández-Villaverde et al., 2013). Yet, believing that the solution to the crisis faced by the countries of Europe is simply a matter of revoking the austerity measures and promoting expansionary policies, as advocated by some centre-left political forces and their "spin doctors" in academia and the media, is just a dream. The existence of the euro – which means countries have neither their own currency nor the instruments (exchange rate policy, monetary policy, fiscal policy) needed for implementing their own sovereign economic policy – makes this impossible: it is what Thirlwall has referred to as "the folly of the euro" (Thirlwall, 1998). In fact, an expansionary policy in the peripheral countries, in a situation of fixed exchange rates (because of the existence of the euro), would result in the increasing their imports from the core countries – as much for reasons of the competitiveness of the products as for their respective production structures and the type of products that they produce and are able to export – and, consequently, they would quickly face problems of current account imbalances (Bagnai, 2012; Bagnai, 2014a; Bagnai, 2014b). The story, however, would be very different if it were Germany and the other core countries that implemented an expansionary policy (Elekdag and Muir, 2014).

Thus, policies to overcome the current impasse need to consider how to solve the problem that the euro and the Economic and Monetary Union have come to represent for the countries of Europe (Soy, 2014b). The euro is a major problem, especially for

the peripheral countries, in terms of it being a valid and appropriate instrument for achieving the ultimate goal of the economic and political union of Europe. Moreover, the theoretically unrivalled alternative of the political union (and, hence, fiscal and budgetary union), seems very difficult to achieve. Yet, continuing in the present situation, one in which we have been immersed for more than six years now, will mean having to face increasing economic, social and political risks, which hardly seems sustainable. Given the dramatic reality of the situation in which the peripheral countries of the euro area currently find themselves, it is surprising that few attempts have been made to contrast the consequences of continuing in this situation with those of the dismantlement or dissolution of the system (or indeed the exit of one or more countries from the euro zone), by conducting a thorough cost-benefit analysis (Nordvig, 2013). Some argue that a programme of quantitative easing in the eurozone – which would be possible without any fiscal transfers between countries if well implemented (De Grauwe and Ji, 2015) – could significantly improve the situation, although it is also believed that debt relief will be necessary for the peripheral countries, especially for Greece (De Grauwe, 2015a).

One possibility would be the controlled or uncontrolled exit of one or more countries from the eurozone and the Economic and Monetary Union (Sapir et al., 2013). The official stance here is that this alternative is not feasible as it would generate many problems for the European economies and it would jeopardise not only the euro and the Economic and Monetary Union but also the future of Europe's political union. There is no doubt that such a scenario would be highly complex, requiring major negotiations and agreements throughout the process of transition. Yet the fact that it is complex does not mean that it is impossible or unnecessary. In fact, over the last hundred years almost seventy monetary unions around the world have failed and the members have had to return to the old situation or begin a new system. Some speak of the controlled dissolution of the euro (and of the return to national currencies in the medium term) but implementing a programme of controlled segmentation to facilitate the transition and to guarantee its sustainability. There would be two possible courses of action during the transition: one, the exit of Germany and its northern neighbours from the euro, which would provisionally serve as the currency of the peripheral countries and probably France, and which would quickly depreciate against the currency (or currencies) of the northern countries; and, two, the temporary coexistence of two euros, one strong – that of the creditor/core countries – and one weak – that of the debtor/peripheral countries. The latter is what has been proposed in the European Solidarity Manifesto (2013) (see also Kawalec and Pytlarczyk, 2013). Consequently, the possibility of some kind of dismantlement or dissolution of the euro, which is clearly a highly complex question, is an alternative that seems feasible in the coming years.

An interesting proposal has recently been made about what should be done to overcome the crisis the European countries, and especially those in the periphery, are facing (Bagnai, 2014a; Bagnai 2014b; Soy 2014b): first, exiting from the euro and recovering control of exchange rate policy, as a pre-condition for recovering sovereignty and democracy, which would be accompanied, at first, by a devaluation and temporary capital controls; second, the central bank would cease to be an

independent body and return to being an instrument of the executive, the banks would specialize once more (commerce and industry) and there would be a re-regulation of the financial system to limit its powers in the economy; third, regaining full control of fiscal policy so as to be able to implement countercyclical policies; fourth, granting a key role to incomes policy so as to maintain real wages (in line with the evolution of labour productivity) and the purchasing power of the middle and popular classes and so as to restore a better balance in the distribution of income and wealth; fifth, an international trade policy based on the principle that the persistent imbalances in the external current account balance must be fought symmetrically, whether there are deficits or surpluses.

Bearing in mind that the current crisis is not a public debt crisis but one of external private debt, it seems logical that the priority should be the management of foreign trade (the balance of payments) and not the management of public budget balances. In other words, the economic policy should strive for equilibrium in the balance of payments (what has been referred to as the "External Compact") rather than equilibrium in the public sector balances (which is what the "Fiscal Compact" has tried to do, without much success) (Bagnai, 2012; Bagnai, 2014a; Bagnai 2014b). In fact, the proposal that international trade ought to be balanced, besides being logical, is not new: it was proposed by Keynes at Bretton Woods for the "International Clearing Union" and the "bancor", and underpinned in part the International Monetary Fund and even the European Monetary System. And it is also what Meade (1957) later proposed to ensure that economic integration might work, namely, that the participating countries, both those with an external surplus and those with an external deficit, commit themselves to internal macroeconomic stabilization policies; that the adjustments in the exchange rate be made in a regime of free fluctuation and in a symmetrical way: appreciation/depreciation of the currency of countries with surplus/deficit; and, that there be a mechanism to provide foreign exchange reserves to the countries with deficits so that they could manage the adjustment processes without suffering any trauma. In other words, Meade argued that a coordinated policy and a symmetrical exchange rate between countries were necessary to fight against the persistent imbalances in the balance of payments (in cases of deficit as well as in cases of surplus), because the compatibility of free trade and full employment can only be guaranteed if all the members of a free-trade zone have their own balance of payments, in the medium and long term, in equilibrium with those of the rest of the world (Meade, 1957). In short, the possibility should be considered of making the real exchange rate of the currency the main instrument (or at least a very important one) of macroeconomic policy (Frenkel and Rapetti, 2014).

5. Bibliography

- AMECO (2014): "Annual macro-economic database", **European Commission, DG ECOFIN**, Brussels.
- Artus, Patrick (2014a): "Southern euro-zone countries: Even if there is no accident and no new crisis, a return to normal will take a very long time", **Flash Economics. Economic Research**, n° 246, April 3rd, Natixis.
- Artus Patrick (2014b): "Euro-zone countries are weakening one another", **Flash Economics. Economic Research**, n° 965, December 9th, Natixis.
- Bagnai Alberto (2012): **Il tramonto dell'euro. Come e perché la fine della moneta unica salverebbe democrazia e benessere in Europa**, Imprimatur editore, Reggio Emilia.
- Bagnai Alberto (2013): "Unhappy families are all alike: Minskyan cycle, Kaldorian growth, and the Eurozone peripheral crises", **a/simmetrie working paper, n° 1**, July.
- Bagnai, Alberto (2014a): "Un *external compact* per rilanciare l'Europa", **a/simmetrie working paper, n° 1**, May
- Bagnai Alberto: (2014b): **L'Italia può farcela. Equità, flessibilità, democrazia. Strategie per vivere nella globalizzazione**, ilSaggiatore, Milano.
- Banco de España: "Estadísticas. BIEST, Sistema de búsqueda de información estadística", **Banco de España Eurosistema**, Madrid.
- Bank of International Settlements (2014): "Long Series on Credit to the Private Non Financial Sector", **BIS**, Geneve, Switzerland.
- Benigno, Pierpaolo & Ricci, Luca Antonio & Surico, Paolo (2010): "Unemployment and Productivity in the Long Run: the Role of Macroeconomic Volatility", **IMF Working Paper, WP/10/259**, November.
- Bolt, J. and J. L. van Zanden (2013). The First Update of the Maddison Project; Re-Estimating Growth Before 1820. **Maddison Project Working Paper 4**, January.
- Botta Alberto (2014): "Structural asymmetries at the roots of the eurozone crisis: what's new for industrial policy in the EU?", **PSL Quarterly Review, vol. 67, n° 269**, p. 169-216.
- Brada Josef and Bah El-hadj (2014): "Growing Income Inequality as a Challenge to 21st Century Capitalism", **a/simmetrie working paper, n° 2**, May.
- Cesaratto, Sergio (2014): "Balance of payments or monetary sovereignty? In search of the EMU's original sin - a reply to Lavoie", **a/simmetrie working paper, n° 6**, December.
- Chen Ruo, Milesi-Ferretti Gian-Maria, Tressel Thierry (2012): "External Imbalances in the Euro Area", **IMF Working Paper, WP/12/236**, September.
- Cingano, F. (2014), "Trends in Income Inequality and its Impact on Economic Growth", **OECD Social, Employment and Migration Working Papers, No. 163**, OECD Publishing
- Clemons, Steve & Vague, Richard (2012): "How to predict the next financial crisis", **<http://debt-economics.org/read.php>**
- Constâncio Vitor (2013): "The European Crisis and the Role of the Financial System" **Speech at the Bank of Greece Conference "The Crisis in the Euro Area"**, Athens, May 23rd.

- De Grauwe, Paul (2015a): "Debt relief for Greece is necessary to avoid a crisis in the Eurozone", *EUROPP, European Politics and Policy, The London School of Economics and Political Science*, January 12th.
- De Grauwe, Paul (2015b): "Secular stagnation in the Eurozone", *VOX CEPR's Policy Portal*, January 30.
- De Grauwe, Paul (2014): "Revisiting the pain in Spain", *VOX CEPR's Policy Portal*, July 7th.
- De Grauwe, Paul (2012): "In search of symmetry in the eurozone", *CEPS Policy Brief, Nº 268*, Brussels, May.
- De Grauwe, Paul (2011): "The Governance of a Fragile Eurozone", *CEPS Working Document nº 346*, Brussels, May.
- De Grauwe, Paul and Ji, Yuemei (2015): "Quantitative easing in the Eurozone: It's possible without fiscal transfers", *VOX CEPR's Policy Portal*, 15 January.
- De Grauwe, Paul and Ji, Yuemei (2013): "The Legacy of Austerity in the Eurozone", *CEPS Commentary*, 4 October.
- Dew-Becker Ian and Gordon Robert J. (2012): "The Role of Labor-Market Changes in the Slowdown of European Productivity", *Review of Economics and Institutions, Vol. 3, Nº 2*, Spring.
- Eichengreen Barry and Panizza Ugo (2014): "Can large primary surpluses solve Europe's debt problem?", *VOX CEPR's Policy Portal*, July 30.
- Elekdag, Selim and Muir, Dirk (2014): "Das Public Kapital: How Much Would Higher German Public Investment Help Germany and the Euro Area", *IMF Working Paper, WP/14/227*, December.
- European Solidarity Manifesto (2013): "European Solidarity in the face of the eurozone crisis: Controlled Segmentation of the Eurozone in order to Preserve the Most Valuable Achievements of European Integration", *European Solidarity Manifesto*, Brussels, January 24th, <<http://european-solidarity.eu/esm.php>>.
- Eurostat (2014): "European Statistics Database", **European Commission**, Luxembourg
- Felipe, Jesús and Kumar Utsav (2011): "Do some countries in the Eurozone need an internal devaluation? A reassessment of what unit labour costs really mean", *VOX CEPR's Policy Portal*, March 31st.
- Felipe, Jesús and Kumar Utsav (2014): "Unit labor costs in the eurozone: the competitiveness debate again", *Review of Keynesian Economics, Vol. 2 Nº 4*, Winter, p. 490-507.
- Fernández-Villaverde Jesús, Garicano Luis, Santos Tano (2013): "Political Credit Cycles: The Case of the Eurozone", *Journal of Economic Perspectives, vol. 27 (3)*, p. 145-166, Summer.
- Frenkel Roberto, Rapetti Martin (2009): "A Developing Country View of the Current Global Crisis: What Should Not Be Forgotten and What Should Be Done", *Cambridge Journal of Economics*, 33, p. 685-702.
- Frenkel Roberto and Rapetti Martin (2014): "The real exchange rate as a target of macroeconomic policy", *MPRA Paper No. 59335*, October 21st, CEDES, University of Buenos Aires.
- Frenkel, Roberto (2014): "What have the crisis in emerging markets and the Euro Zone in common and what differentiates them?", *ITF, Iniciativa para la Transferencia Financiera nº 67*, Buenos Aires.

- Godley Wynne and Lavoie Marc (2012): **Monetary Economics. An Integrated Approach to Credit, Money, Income, Production and Wealth**, Second Edition, Palgrave Macmillan.
- Gordon, Robert J. (2004): "Is There a Trade-off between Unemployment and Productivity Growth" a Gordon, Robert J. (2004): **Productivity Growth, Inflation and Unemployment. The Collected Essays of Robert J. Gordon**, Cambridge University Press.
- Gosh Atish R., Ostry Jonathan D., Qureshi Mahvash S. (2014): "Exchange Rate Management and Crisis Susceptibility: A Reassessment", **IMF Working Paper WP/14/11**, January.
- Gosh Atish R., Qureshi Mahvash S., Tsangarides Charalambos G. (2014): "Friedman Redux: External Adjustment and Exchange Rate Flexibility", **IMF Working Paper WP/14/146**, August.
- Granville Brigitte E. (2013): "The Current Eurozone - an Impediment to Critical French Reform", **CGR Working Paper 42**, Centre for Globalisation Research, Queen Mary, University of London.
- Hein Eckhard (2012): "Finance-dominated capitalism, re-distribution and the financial and economic crisis: a European perspective", **Institute for International Political Economy, Working Paper nº 14**, Berlín.
- Hellebrandt Thomas (2014): "Income Inequality Developments in the Great Recession", **SOEppapers on Multidisciplinary Panel Data Research, nº 644**, at DIW Berlin.
- Hospido Laura and Moreno-Galbis Eva (2015): "The Spanish Productivity Puzzle in the Great Recession", **Working Paper Series, nº 1501**, Banco de España, Madrid.
- INE (2014): "INEbase, operaciones estadísticas", **Instituto Nacional de Estadística**, Madrid.
- IMF (2014a): "International Financial Statistics", International Monetary Fund.
- IMF: (2014b): "World Economic Outlook Database", International Monetary Fund, October.
- Karabarbounis Loukas and Neiman Brent (2013): "The Global Decline of the Labour Share", **NBER Working Paper Series nº 19136**, Cambridge MA, June.
- Kawalec, Stephan and Pytlarczyk, Ernest (2013): "Controlled dismantlement of the Eurozone: A proposal for a New European Monetary System and a new role for the European Central Bank", **National Bank of Poland, Working Paper nº 155**.
- Keen, Steve (2014): "Hard Evidence: are we facing another financial crisis?", **The Conversation**, 18 November.
- Keen, Steve (2015): "Outlook 2015. Global Debt Deflation & Manipulated Asset Markets", **IDEAeconomics Research Paper**, 2015/01.
- Landmann Oliver (2004): "Employment, productivity and output growth", **Employment Trends Unit, Employment Strategy Department, ILO, 17**.
- Lavoie Marc and Zezza Genaro, Edited by (2012): **The Stock-Flow Consistent Approach. Selected Writings of Wynne Godley**, Palgrave Macmillan.
- Léon-Ledesma Miguel A. (2002): "Accumulation, innovation and catching up: an extended cumulative growth model" **Cambridge Journal of Economics**, 26, p. 201-216.
- Maddison Project (2014): "Maddison Project Database".
- Meade James E. (1957): "The Balance-of-Payments problems of a European Free-Trade Area", **The Economic Journal**, 67, p. 379-396.

- Nordvig Jens J. (2013): **The Fall of the Euro. Reinventing the Eurozone and the Future of Global Investing**, New York: MacGrawHill.
- OCDE (2014): "Indicators of Employment Protection", **OECD StatExtracts**, Paris.
- Papadimitriou Dimitri B. and Zezza Genaro (2012): **Contributions in Stock-flow Modeling. Essays in Honor of Wynne Godley**, Palgrave Macmillan.
- Papadimitriou Dimitri B., Zezza Genaro, Duwicquet Vincent (2012): "Current Prospects for the Greek Economy. Interim Report", **Levy Economics Institute**, September.
- Papadimitriou Dimitri B., Nichoforos Michalis and Zezza Genaro (2014): "Is Greece Heading for a Recovery?", **Strategic Analysis, Levy Economics Institute**, December.
- Pérez-Caldentey Esteban and Vernengo Matías (2012): "The Euro Imbalances and Financial Deregulation: A Post-Keynesian Interpretation of the European Debt Crisis", **Levy Economics Institute, Working Paper N° 702**, January.
- Robinson Joan (1956): **The Accumulation of Capital**, Macmillan London; 3rd edition in 2013, Palgrave Macmillan, London.
- Saka Orkun & Fuertes Ana-Maria & Kalotychou Elena (2014): "ECB Policy and Eurozone Fragility: Was de Grauwe Right?", **CEPS Working Document n° 397**, Brussels, June.
- Sapir Jacques, Murer Philippe, Durand Cedric (2013): **Les scénarii de dissolution de l'euro**, Paris, Fondation Res Publica.
- Soy, Antoni (2013): **Sortir de l'euro per sortir de la crisi? Europa i Catalunya davant la crisi financera i la crisi de l'euro**, Viena Edicions, Barcelona.
- Soy, Antoni (2014a): "La crisis del euro y su futuro", **Revista de Economía Crítica**, n° 17, segundo semestre, págs 4-19.
- Soy, Antoni (2014b): "L'euro, un mal negoci", **Revista Econòmica de Catalunya**, n° 69, juliol, págs 24-31
- Taylor Lance (1998): "Capital market crisis: liberalisation, fixed exchange rates and market-driven destabilization", **Cambridge Journal of Economics**, 22, p. 663-676.
- Thirlwall Anthony P. (1979): "The Balance of Payments Constraint as an Explanation of International Growth rate Differences", **Banca Nazionale del Lavoro Quarterly Review**, March.
- Thirlwall Anthony P. (1991): "EMU is no cure for problems with the balance of payments", **Financial Times**, October 9th.
- Thirlwall Anthony P. (1998): "The Folly of the Euro", **Window on Work N° 4**. An earlier version appeared in **The European Journal**, March 1998.
- Thirlwall Anthony P (2002): **The Nature of Economic Growth**, Edward Elgar, UK and USA.
- Thirlwall Anthony P. (2011): "Balance of payments constrained growth models: history and overview", **PSL Quarterly Review**, vol. 64, n° 259, p. 307-351.
- Thirlwall Anthony P. (2013): **Economic Growth in an Open Developing Economy. The Role of Structure and Demand**, Edward Elgar, UK and USA.
- Vague, Richard (2014a): "Government Debt Isn't the Problem—Private Debt Is", **The Atlantic**, September 9th
- Vague, Richard (2014b): **The Next Economic Disaster. Why It's Coming and How to Avoid It**, University of Pennsylvania Press.
- Wray, Randall L (2009): "The Rise and Fall of Money Manager Capitalism: a Minskian Perspective", **Cambridge Journal of Economics**, 33, p. 807-828.

- . Wray, Randall L (2011): "Lessons We Should Have Learned from the Global Financial Crisis but Didn't", *Levy Economics Institute Of Bard College, Working Paper, nº. 681*, New York, August.

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