

# **The Greek Debt Crisis: Origins and Implications**

by

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## **Abstract**

This paper presents and critically discusses the origins and causes of the Greek debt crisis and its implications for the euro currency. In the aftermath of the 2007-2009 financial crisis the enormous increase in sovereign debt has emerged as an important negative outcome, since public debt was dramatically increased in an effort by the US and the European governments to reduce the accumulated growth of private debt in the years preceding the recent financial turmoil. Although Greece is the country member of the eurozone that has been in the middle of this ongoing debt crisis, since November 2009 when it was made clear that its budget deficit and mainly its public debt were not sustainable. As a result of this negative downturn the Greek government accepted a rescue plan of 110 billion euros designed and financed by the European Union and the IMF. This initial rescue plan has not be proved sufficient and it has been recently complemented by further austerity programmes and a fiscal consolidation plan have been put forward and are to be implemented until 2020 coupled with a 50% haircut on the 205 billion euros value of the Greek sovereign bonds held by the private sector .

**Keywords:** Greek debt crisis, fiscal easiness, over-consumption, current account deficit

**JEL classification:** F34, G01, G15

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## 1. Introduction

The financial crisis that unfolded in mid-2008 led to a dramatic increase of public debt in many advanced economies. During the recent months, we have seen the transformation of the 2007 US subprime mortgage loan market crisis into a sovereign debt crisis in the eurozone.<sup>1</sup> This overwhelming increase in the public debt has been to some extent the outcome of the effort by the governments to reduce the private debt that was accumulated during the years preceding the recent financial turmoil (De Grauwe, 2010a). Based on the *ECB Quarterly Euro Area accounts* for the years 1999 – 2010, a number of observations can be made. First, there are periods during which private debt increased substantially in the eurozone whereas there are other periods that private debt has been reduced with a great speed. Second, during periods of economic booms, private debt has risen by an accelerating rate. Third, for the whole period the increase in private debt was substantially greater than the percentage increase of public debt. Fourth, during the 2005-2007 economic boom there is an average annual increase in private debt of the eurozone countries of approximately 35% of GDP. In contrast during the years of economic recession 2008-2009, private debt slows down and public debt growth accelerates (De Grauwe, 2010a).<sup>2</sup>

The Greek debt crisis that began in late 2009 was followed by respective fiscal and banking crisis in Ireland, Portugal, Spain and recently Italy. The entry of Greece in the euro area and the adoption of euro in 2001 gave to the economy a reduction in interest rates never experienced before. Following the announcement of the Greek government in 1994 that it intended to take the necessary steps to fulfil the Maastricht criteria in order to bring Greece in the euro area by 2001 the nominal interest rate on

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<sup>1</sup> Reinhart and Rogoff (2009, 2010) provide an excellent analysis of the recent financial crisis. They also provide evidence on the issue of growth in periods of rising debt.

<sup>2</sup> Fisher (1932) argued that there is a trade –off between private and public debt. When the government tries to reduce the private debt this leads to an increase of the public debt.

10-year Greek government bonds declined from about 20 per cent to 3 and a half percent in 2005. As the Greek financial crisis erupted in late 2009, interest rates began to rise substantially with the 10-year government bond yield increasing to almost 27 per cent at the beginning of November 2011 (see Hardouvelis, 2011a, b).

The adoption of the euro gave several benefits to all its members, particularly to countries like Greece with historical high levels of inflation and lack of economic policy credibility. Thus, the introduction of the euro supported by the monetary policy of the ECB led to a reduction of inflation and inflation expectations in countries with high inflation experience and thus reducing the uncertainty resulted by inflation distortion. Furthermore, the low inflation environment and the associated reduction in nominal interest rates, by increasing the ability to borrow and lend at longer horizons, led to an increase in private investment and robust real growth rates of 3.9 per cent per year over the period 2001-2008. This high real growth rate was stimulated by consumption spending, housing investment and business investment. In addition, the adoption of the euro led to the reduction of exchange-rate uncertainty and finally the reduction in the nominal interest rates and risk premia led to the reduction of the costs of servicing the public-sector debt and facilitating fiscal adjustment leading to resource allocation to other uses. During the period prior to the entry of Greece in the EMU the interest-rate spreads between 10-year Greek and German government bonds were reduced drastically from 1,100 basis points in early 1998 to about 100 basis points one year before the entry. Following the entry in the eurozone the spreads fell to 50 basis points whereas during the period 2002 until the end of 2007 the spreads fell even further ranging from 10 to 30 base points (see Gibson *et al.*, 2012; Hardouvelis, 2011a, b).

Unfortunately, the Greek governments of the period 2001-2009 did not take advantage of the low inflation environment and they ran fiscal deficits of 6 per cent of GDP on the average while they also increased the share of the government spending in the economy (Antzoulatos, 2011). Thus, when the negative effects of the 2007-2009 financial turmoil reached the eurozone and worries over the fiscal problems of Greece and other European countries started to emerged then it was made clear that two hidden problems of the Greek economy remained unaddressed were brought to the surface emphatically once again. The tranquil years of 2001-2009 have led the markets to ignore these two fundamental problems of the Greek economy. As Gibson *et al.* (2012) argue the markets partially made the successive Greek governments to believe that the low interest-rate environment would be a permanent feature of the Greek economy. Their econometric evidence shows that the drastic reduction in interest-rate spreads occurred over the 2001-2009 period were not justified by the country's fundamentals. In contrast, they detect an overshooting of the spreads relative to fundamentals when the Greek financial crisis broke up. Gibson *et al.* (2012) argue that such a bias effect could be subject to a "peso problem".

## **2. Unsustainable Fiscal and External Imbalances**

The financial crisis brought to the surface the two long time existing macroeconomic imbalances and structural weakness of the Greek economy. During the last three decades the Greek government has run excessive budget deficits. Focusing on the period 2001-2009 (i.e. after the adoption of the euro) the data on fiscal deficits as well as on the government expenditures we conclude that they have been rising as percentages of the GDP whereas the government revenues as percentage of GDP decline continuously during this period. Two features regarding

fiscal policy are worth noting: First, despite the robust growth rate that the Greek economy experienced and the favourable macroeconomic environment, the Greek governments were not successful in reducing the budget deficits below 3% of GDP in line with the requirements of the Stability and Growth Pact. As a result of such fiscal easiness Greece was under fiscal control by EU since 2004 with a short break in 2007. The fiscal situation deteriorated dramatically in 2008 and 2009; second, over the whole period fiscal policy was pro-cyclical. Thus, expansionary fiscal policy was mainly expenditure-driven rising at the end of 2009 to over 50% of GDP. Economic agents formed optimistic expectations about future income, which given the low interest rate environment, led to further borrowing and thus consumption. During this period private and government consumption reaches 90 percent of GDP the highest rate compared to EU-27, USA, Japan and other developed countries. Fiscal deficits and consequently increased public debt is a feature of the Greek economy which dates back in the late 1970s and its evolution is independent of the political regime. Up to 1980 public debt was only 25% of GDP and external borrowing was only made for investment purposes. Then, when the socialist government came in power in 1981 this picture changed completely since external borrowing was used to boost consumption in an effort to raise the living standard of Greeks. By the end of the 1980s the debt/GDP ratios has reached 80 per cent. This upward trend continued during the period of political turmoil of 1990-1993 and the conservative government in office. The period 1994-1999 highlights a period of steady public debt to GDP ratio of 110% when the new socialist government put in force a stabilization programme in an effort to meet the Maastricht criteria. The years 1999-2004 marks a period of falling debt/GDP ratio attributed to the high growth rate of the Greek economy. This falling trend continued with the conservative government since growth stimulated by the

major infrastructure built required to support the hosting of the 2004 Athens Olympic Games and additional financial flows transferred from the E.U. The last period of sample beginning 2007 showed a dramatic increase in borrowing that resulted to a rise of the debt to GDP ratio to 130% (see Kouretas and Vlamis, 2010). However, given that when joining the eurozone Greece gave up the conduct of monetary and exchange rate we would expect that fiscal policy would be counter-cyclical in nature in order to act as automatic stabilizer in the presence of country-specific shock. Therefore, the pro-cyclicality of the fiscal policy could be considered as a major source of shocks (Antzoulatos, 2011; Gibson *et al.*, 2012; Hardouvelis, 2011a,b).

The lack of competitiveness of the Greek economy is an even more acute problem. This is a chronic problem that dates back to the 1970s. The loss in competitiveness is reflected in the huge current account deficit. During the period 2001 to 2009 both inflation and wages increases, adjusted for productivity changes exceeded the average increases in the rest of the euro area. During this period competitiveness, as measured by consumer prices, declined by 20% while when measured by unit labour costs, it declined by 25%. A more striking stylized fact was the during this period wages appreciated in real terms by 5.5% in the tradeables sector and by a huge 16.5% in the non-tradeables. Therefore, it is clear that the adjustment of international competitiveness of the Greek economy should mainly come from internal devaluation in non-tradeables (given that external devaluation is not an option) which will lead to a reallocation of resources to tradeables resulting to an export-led growth. The relatively high growth rates combined with falling competitiveness led to an increase of the current account deficit increased from 7% of GDP in 2001 to 14.5% of GDP in 2008. Finally, the external debt of Greece rose from 94% in 2003 to approximately 200% at the end of 2010 which implies that the substantial interest

payments to foreign holders of Greek financial assets have led to a deterioration of the income account deficit and thus the deficit of current account. (Bank of Greece reports, 2010, 2011a, 2011b; Bank of Greece's Governor Speech, 2010)

The Greek economy's imbalances are the most profound in the eurozone several other euro area countries, namely Ireland, Portugal, Spain and currently Italy have experienced similar problems which are also based on fiscal laxity and loss of international competitiveness and in some cases as well as on problematic financial sectors. An examination of the twin deficits relation for the eurozone reveals that the fiscal imbalance is more important for the majority of the countries-members. Greece and Portugal they have the largest government deficits and current account deficits, but Ireland does not suffer from either problem and Spain mainly suffers from loss in competitiveness, (Hardouvelis, 2011a,b).

### **3. Public sector inefficiencies and low entrepreneurship motives**

There are several other features of the Greek economy that need to be discussed as they are related to the low productivity of the Greek economy and the distortions that exist in the private sector which over the last three decades led to a dramatic decline of the output production of the manufacturing and industrial sector of the economy.

As we mentioned above, the real appreciation of wages in the non-treadable sector (i.e. public sector, construction etc.) coupled with a dramatic increase of public sector employees not only in the General government but also in municipalities and public welfare companies (which until very recently the Greek state held at least 51% of the shares). Such a combination led to a reallocation of capital and labour away from the private sector and especially from export oriented sectors leading to the loss

in competitiveness and the increase in the current account deficit. The private sector was in most cases tied closely with the public sector as most of business contracts were in fact given by the government. This deteriorated the competitiveness of the Greek economy since the private sector learnt to depend mainly on government projects of any kind and less on its efforts for research and development, innovation of products and export oriented production. Furthermore, as Katsaitis and Doulos (2009) show that the large amounts of funds transferred from EU to Greece had also adverse effects on private investment. They argue that the impact of EU structural funds on a country's FDI depends crucially on the institutional quality of the receiving countries: High quality institutions have a positive effect whereas low quality institutions have a negative impact. Thus, crowding out of private investment was observed in Greece from EU funds. This outcome is supported by the evidence on the level of institutional quality in the EU-16 countries provided by Jurdin and Cuckovic (2009). Greece was ranked 15<sup>th</sup> with only Italy being worse in institutional quality with an index value 80 well below the EU-16 average of 100. It is also interesting to note that the index of institutional quality deteriorated steadily since 2006.

Two additional facts for the Greek economy are crucial in understanding the need for structural changes that must be imposed if a sustainable growth must be achieved and the debt repayment becomes sustainable as well. First, the crucial issue of tax evasion as a result of the huge shadow economy. The tax system as well as the overall attitude of certain professional groups of the Greek society who systematically avoid declaring their true income is one of the main sources of the fiscal deficits. This fact is well documented by Dell' Anno *et al.* (2004) whereas Schneider *et al.* (2010) provide evidence that the size of the shadow economy is as high as 30% of GDP and

Greece is ranked 24<sup>th</sup> among the OECD countries. Second, a study by the European Commission Entrepreneurship's Survey published in December 2009 provided evidence on the attitude of Greeks towards entrepreneurs and entrepreneurship. Based on the answers of the people questioned it is shown that the positive answers on the questions "Entrepreneurs think only about their wallet" and "Entrepreneur exploit other people's work" were more than those given in communist China. This negative attitude can be partially attributed to the political parties either conservative or socialists over the last thirty years which by increasing the size of the public sector and the high wage level they offered to the government employees relatively to the private sector made the average person to search for a job in the public sector where payment is not linked to productivity. A political system operating on a trade off of vote for jobs has made severe damage on the competitiveness of the Greek economy. Further evidence based on the World Bank indices show that a high degree of difficulty for entrepreneurs to start up their business due to bureaucratic obstacles that further inflate corruption (Greece is ranked 109<sup>th</sup> among all countries). However, as we already explained the private sector has its share of blame in this negative situation.

Tepe (2009) provides evidence for the EU-16 on public spending and employment in the public evidence and Greece is by far the country that during the 1995-2005 period experienced the highest growth increase in public spending and public administration employment which resulted to a gigantic public sector. Furthermore, Heipertz, and Ward-Warmedinger (2007) and Afonso *et al.* (2008) provide evidence on the inefficiency in public social spending for the EU-16 by comparing the change in Gini coefficient between 1980, 1990 and 2000. The main result regarding Greece is that despite the enormous public spending inequality has not diminished over the period

1980-2000 make stronger our argument regarding the inefficiency of the Greek public sector. Porter *et al.* (2007; 2008) summarize the situation by comparing the relationship between business competitiveness and income measured in PPP-adjusted GDP per capita for 2006. Greece is an outlier with a 30.000 per capita income and substantially low business competitiveness and this is an incompatible result. This evidence highlights a non sustainable standard of living based on extensive borrowing. Based on this competitiveness index the choice for the Greek economy to regain competitiveness is either an internal devaluation or a long-run growth based on FDI and in general increase in fixed capital through an increase of investment.

#### **4. Summary and concluding remarks**

The Greek sovereign debt crisis is expected to have far reaching implications for the mechanisms of the eurozone as well as for the European Union. Over consumption financed by increasing borrowing over the 1980-2009 period, current account deficits and government budget deficits are the main sources of the current dramatic state of affairs of the Greek economy. This downturn in the Greek economy was further fuelled by an extremely large and inefficient public administration sector. The current debt crisis has shown that a reform of current EU mechanisms must be put in force, otherwise the stability of the eurozone will be jeopardised and the euro currency itself will be negatively affected.

#### **References**

- Afonso, A., L. Schuknechtand and V. Tanzi, 2008, Income distribution, determinants and public spending efficiency, ECB Working Paper, No. 861.
- Antzoulatos, A., 2011, Greece in 2010: A tragedy without(?) katharsis, Department of Banking and Financial Management, University of Piraeus, mimeo.

Bank of Greece, 2010, The Greek economy stabilisation programme: Main points on the support mechanism, mimeo.

Bank of Greece, 2011a, Fiscal developments and outlook, Fiscal Affairs Division, mimeo.

Bank of Greece, 2011b, Greek banking sector-key developments, mimeo.

De Grauwe, P., 2010a, The start of a systemic crisis of the Eurozone?, Vox, 1-6.

ECB, 2010, *Quarterly Euro Area Accounts*, September.

European Commission's Entrepreneurship Survey, "Culture of Entitlement and Dependence on the State, December 2009.

Fisher, I., 1932, *Booms and Depressions: Some First Principles*, New York: Adelphi Company.

Gibson, H.D., S.G. Hall and G.S. Tavlás, 2012, The Greek financial crisis: growing imbalances and sovereign spreads, *Journal of International Money and Finance*, forthcoming

Hardouvelis, G.A., 2011a, The Greek and European crisis and the new architecture of the eurozone, *Economy and the Markets Bulletin*, EFG Eurobank.

Hardouvelis, G. A., 2011b, The Greek crisis, its resolution and implications for the EU and beyond, Joint Vienna Institute, mimeo.

Heipertz, M. and M. Ward-Warmedinger, 2007, "European economic and social models: who does well in what and why?" *mimeo*, paper presented at the German Presidency Conference on Fiscal Policy Challenges in Europe, Berlin, 23 March.

Jurlin, K. and N. Cuckovic, 2009, Comparative Analysis of the Quality of Institutions in the European Countries, presented at the XVIIth Scientific Conference on Growth and Development Patterns: The Role of Institutions in a Comparative Perspective University of Perugia Thursday 25 – Saturday 27 June 2009.

Katsaitis, O. and D. Doulos, 2009, The impact of EU structural funds, *Kyklos*, 62, 563-578.

Kouretas, G.P. and P. Vlamis, 2010, The Greek crisis: causes and implications, *Panoeconomicus*, 57, 391-404.

Porter, M. E., C. H.M. Ketels and M. Delgado-Garcia, 2007, "The Microeconomic Foundations of Prosperity: Findings from the Business Competitiveness Index." In *Global Competitiveness Report 2006-2007*, edited by Augusto Lopez-Claros, Michael E. Porter, Xavier Sala-i-Martin and Klaus Schwab. Palgrave Macmillan, 2006.

Porter, M. E., M. Delgado-Garcia, C. H.M. Ketels and S. Stern, 2008, "Moving to a new Global competitiveness index" Chs. 1.2 of *Global Competitiveness Report 2008/2009*, 43-63. Geneva: World Economic Forum (WEF), 2008. Lopez-Claros, A., M. Porter, X. Sala-i-Martin, and K. Schwab, 2008, *Global Competitiveness Report 2007-08*. World Economic Forum 2007.

Reinhart, C.M. and K.S. Rogoff, 2009, The aftermath of financial crises, *American Economic Review Papers and Proceedings*, 99, 466-472.

Reinhart, C.M. and K. S. Rogoff, 2010, Growth in a time of debt, *American Economic Review Papers and Proceedings*, 100, 573-578.

Schneider, F., A. Buehn and C. E. Montenegro, 2010, Shadow Economies all over the World: New Estimates for 162 Countries from 1999 to 2007, mimeo.

The Greek economic crisis and the euro, 2010, Speech delivered by George Provopoulos, Governor of the Bank of Greece, International Conference on Financial and Economic Crisis-The Return to Stability.

Tepe, M., 2009, Public administration employment in 17 OECD nations from 1995 to 2005, REC-WP 12/2009 Working Papers on the Reconciliation of Work and Welfare in Europe

Tsoumas, C., 2010, A Roadmap to the Greek crisis, Department of Banking and Financial Management, University of Piraeus, mimeo.

[www.Alphaville.FT.com](http://www.Alphaville.FT.com)

World Bank, 2011, Report on Ease of Doing Business.