

**A FINANCIAL ANALYSIS OF PUBLIC FINANCES IN GREECE**

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**Abstract**

*In this paper, there will be an attempt to present, analyze and understand the course of public finances in Greece for the period 2008 to 2012. Seven indicators were used that analyze and describe the evolution of structural characteristics of public finances. Greece is a country, which was facing problems with its public finances several years before the crisis. Following a series of downgrades of its economy and after long pressures, the country entered the European Financial Stability Fund (EFSF) in order to avoid the visible spectrum of default. In order to succeed the reduction of fiscal deficit, measures of cutting expenses were introduced. Although Greece joined the EFSF, the debt continued to grow at the same pace. This happened because Greece continued to borrow to meet its obligations.*

*Keywords: Greek crisis; financial analysis; growth rate; public debt; fiscal balance; balance of payments; interest rate; inflation*

**INTRODUCTION**

Greece is considered one of the most developed economies in the world. Located in 42nd place in terms of per capita GDP, it is a core member of the euro monetary union from 2002 and is an important economy of Europe. However is also a country with chronic problems that revolve around the high levels of public debt and the overall poor image of its public finances? In 2008, 28 billion Euros were provided to in order to maintain liquidity. The crisis became apparent in 2009. Firstly because Greece is a "closed" economy and thus is not directly influenced by international developments and secondly because the credit crisis evolved to debt crisis. The second reason has to do with the evolution of the crisis from credit to debt crisis. The trigger

was the Dubai a country directly dependent on foreign investment in the construction sector, in November 2009 was affected deeply by the crisis. The government after the bankruptcy of the firm DubaiWorld asked semester freeze its debt obligations, declaring automatically inability to meet its obligations. This fact has led markets to turn to the economic situation of the sovereigns. At that time the new elected government of Greece announced the actual data for the country's fiscal situation. As a result Greece, because of the terrible situation of its public finances considered the weakest link in the Eurozone. The reason this happened was because it was presented the real picture of public finances, after many years of falsifications. The fact that worsened the fiscal situation in Greece was numb dealing from the officers of both Greece and European Union. This stance led the country into a continuous barrage of credit downgrades. Rating agencies lowered the daily credibility of Greek bonds, leading to an increase in interest rates as well as rising fears of an impending default. In 2010 the country was in a very bad situation because the increase of interest rates was continuing. The government in order to appease the pressure from both the markets and the rest of the Eurozone, they took measures that included wage freezing, cuts and tax increases. These measures did not persuade the markets for the efficiency that would have on the reduction of fiscal deficit. The result was as time went on the interest rate to rise continuously. The deterioration of the climate for Greece led the government to request the activation the newly established European Finance Support Fund (EFSF). EFSF was consisted by the European Union, the European Central Bank and the International Monetary Fund. By entering EFSF, the country will borrow only from there, staying away from the markets with the commitment to impose an austerity package followed by a reform package in order to reduce the fiscal deficit and become a competitive country. A memorandum was signed, providing to Greece loans of 110 billion Euros over the next two years at an interest rate of 5.5%. In May announced the first measures to reduce the fiscal deficit were implemented. The measures that were implemented in 2010 although reduced the deficit, it was evident that the targets for 2011 could not be achieved. The great tax evasion, the large public sector (where there was no substantial effort in order to be reduced) and the continuously production of deficits brought again the country forward to a stalemate. In July during the EU summit, it was decided the reduction of Greek debt with private sector involvement (PSI) by 20%. In August of the same year was once again a divergence in goals (1.7 billion) of cost reduction and revenue growth. Once more the Greek government was forced to take fiscal measures collecting revenues from the taxpayers. In late October it was decided the ratification of a new loan agreement, which provided further lending to Greece by the EFSF the sum of 130 billion Euros and the Greek debt haircut, with the participation of the private sector (Private Sector Involvement, PSI) to around 50%. The new loan agreement and the haircut were not ratified in 2011, due to political unrest. In 2012, the Greek parliament passed two austerity packages. Both were designed to reduce the country's

fiscal deficit to honor its commitments at the agreed timetables. The research aims to analyze the impact on public finances for the examined period of 2008 to 2012.

## **METHOD & TOOLS**

The methodology used in this research is the financial analysis. The data for this analysis were taken from the Bank of Greece, Hellenic Statistical Authority (ELSTAT), Eurostat, the European Central Bank (ECB) and the Organization for Economic Co-operation and Development (OECD). The financial analysis will be presented below is for the following financial ratios:

### **Growth Rate (%GDP)**

Economic growth rate is the course in the market value of the goods and services produced by an economy over a period of time. It is equally measured as the percent rate of increase in real gross domestic product, or real GDP.

### **Public Debt (% GDP)**

Public debt is the total debt of the general government (central government, regions, and municipalities) of a country and it is expressed in monetary units as a percentage of GDP. Public debt is created when state expenditure (private and public) exceed the total production. Consequently the government, in order to be able to fulfill its obligations, primarily increases tax revenues and then borrows money by issuing and selling government bonds or proceeds in privatizations. Therefore the public debt is liabilities of the state, as a result of borrowing through various ways of refinancing. Public debt is divided into internal and external debt. The public debt ratio expressed, as a percentage of GDP is a typical indicator that examines the sustainability of a country's economy.

### **Fiscal Balance (% GDP)**

The fiscal balance is another assessment criterion of the image of a country's public finances. The fiscal deficit or surplus presents a picture of the economy within the period of one year. If expenditures outweigh revenues then the economy at the present time has a deficit. The government's revenue comes mainly from taxes and exports of the country. The expenditures include government spending on current goods and services (public consumption), the cost of public investment (infrastructure investment or research expenditure) and expenditure on transfer payments (unemployment benefits, pensioners etc.). To calculate the indicator of fiscal balance at first will have to calculate the indicators of revenue and expenditure of an economy. If the indicator is positive then the economy has a budget surplus and if the indicator is negative then the economy has a deficit.

### **Balance of Payments (% GDP)**

The balance of payments shows the inflows and outflows of capital that is recorded receipts and payments carried out by one country with the rest of the world in one-year period. The indicator of the balance of payments is crucial for a country's economy as it affects in shaping the image of the national income (supply and demand of the local currency), national spending and the position of the country's economy in the world. Therefore the indicator of balance of payments (% GDP) shows the level of international competitiveness of a country.

### **Long-Term Interest Rate**

The public sector bonds are bonds issued by the public sector of the country. The reasons for bond issuance by governments are usually for services of public spending (social spending, defense spending, and wage costs) and the financing of public debt. Bonds are issued in foreign or local currency. In the past government bonds were risk-free bonds, because governments could devalue their currencies or raise taxes to buy off the bond at maturity. After the crisis in the Eurozone and the downgrading of the United States creditworthiness, government bonds have lost part their credibility. The interest rate of the bond is set by the stock market. The level of interest depends on the rating of the creditworthiness of each country's, its competitiveness, its solvency as well as the current political situation in conjunction with the economic policy, which is followed.

### **Inflation**

Inflation is the level of purchasing power in a country within the period of one year. Inflation takes positive or negative values. The term "inflation" is used to refer to the increase of the money supply (expansionary monetary policy or monetary inflation). Furthermore is a monetary phenomenon, which is not directly affects, the real economy (public expenditure, private investment and private consumption). Also the increase in inflation is due to two main factors the increase in demand and supply. Inflation of a country is measured by comparing the total of goods at two time points within a year and calculates the increase or decrease in the cost of products, irrespective of the increase or decrease of product quality.

These indicators will help us understand the public finances of Greece.

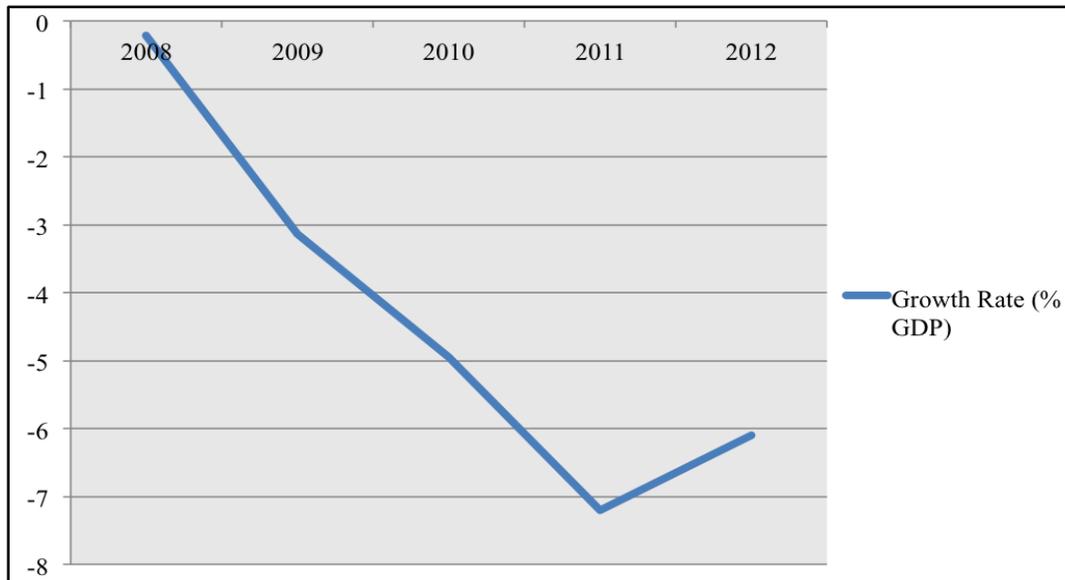
## **ANALYSIS & FINDINGS**

### **Growth Rate**

In 2008, the Greek economy entered into a recession mainly due to the slowdown in construction activity, which previously held a significant share of the Greek economy and the lack of liquidity of banks as a result of the credit crisis. The recession continues be present in 2009, especially after the discovery of the actual fiscal data. The years 2010 and 2011 due to

measures to reduce spending and increase government revenue and in conjunction with the political uncertainty in the country, the recession deepens even more because the country was highly dependent to public investment for its growth, reaching in 2011 its lowest point at 7.1%. The slowdown in the Greek economy is continued in 2012 with less frequency compared to the previous period.

Figure 1: Growth Rate (%GDP)

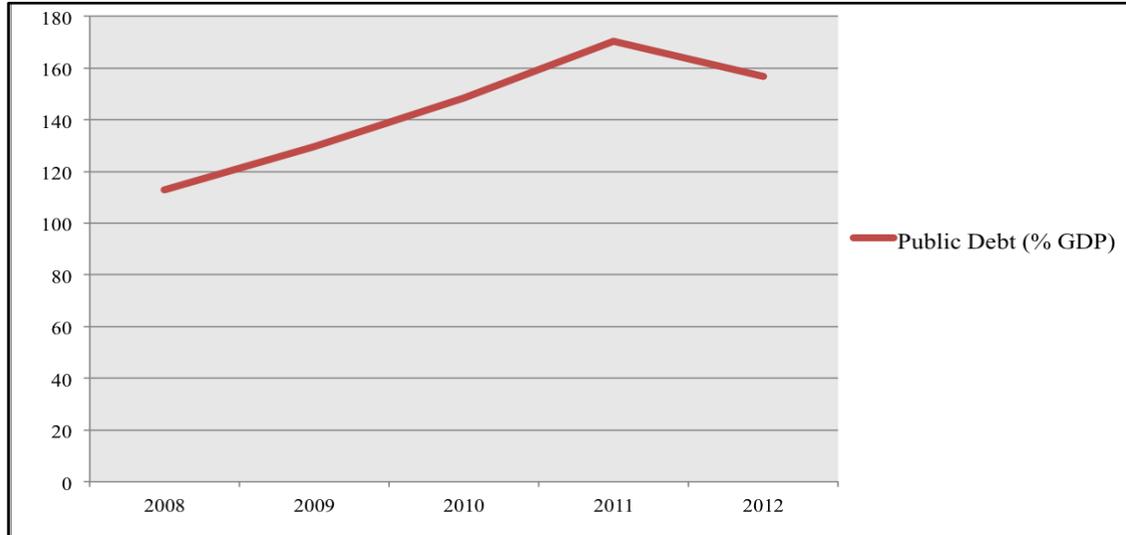


Source: Eurostat, Real GDP Growth Rate

### Public Debt

Even before the crisis, Greece's public debt was in high percentage. Since the 70s the debt increases continuously with minimal fluctuations from time to time. During the 70s the borrowing grew at unprecedented rates. At the 80s, public debt increased primarily due to the payment of amortization of the previous period and secondarily due to the social reforms that have occurred in the country. In the early 1990s, the Greek State borrowed with the highest annual rate, due to the Treaty of Maastricht, which forbade any other form of money creation apart from borrowing. In the mid 90s there was an attempt to reduce public debt. From the 2000s onwards, the attempt to reduce public debt abandoned. As shown in figure 2, public debt continues to grow. Even after the signing of the loan agreement (2010) the debt continues to grow, as the reduction of deficits and needs of Greece is still being done through lending. Worth mentioning is that the growth rate of public debt is the largest compared to previous periods due to the conditions of the loan agreement. The only difference is that the lending was not done by the markets, but from the EFSF. The only period which is indicated a reduction of public debt is the year 2012, because of the debt reduction with the involvement of private sector (PSI).

Figure 2: Public Debt (%GDP)

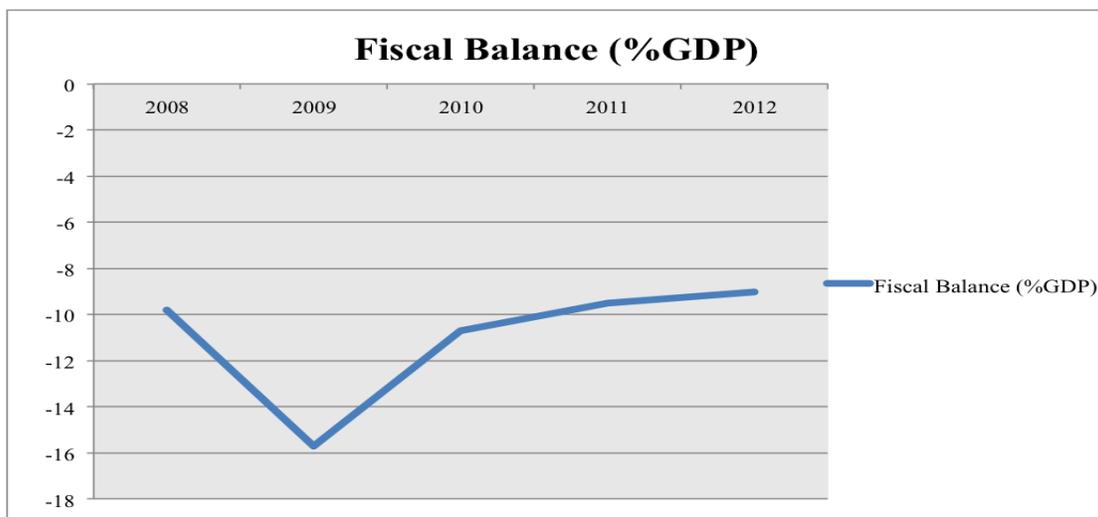


Source: Eurostat, General government gross debt% of GDP and million EUR

### Fiscal Balance (% GDP)

What is noticed is the massive increase in the deficit during the years 2008 and 2009 due to the inactivity of the government but also because of the added costs to the deficit that were not added to the previous years (mainly public health expenditure) as shown in Figure 3. In 2010 there was a serious effort to reduce the deficit by the government due to the country's accession to the EFSF, with the deficit be reduced from 15.7% to 10.7%. From 2011 onwards there was a very small deficit reduction both because of the unrealistic targets which were set and, secondly, due to the lack of government planning. The fiscal deficit is still high compared to the target of 3% set for all Eurozone members.

Figure 3: Fiscal Balance (%GDP)

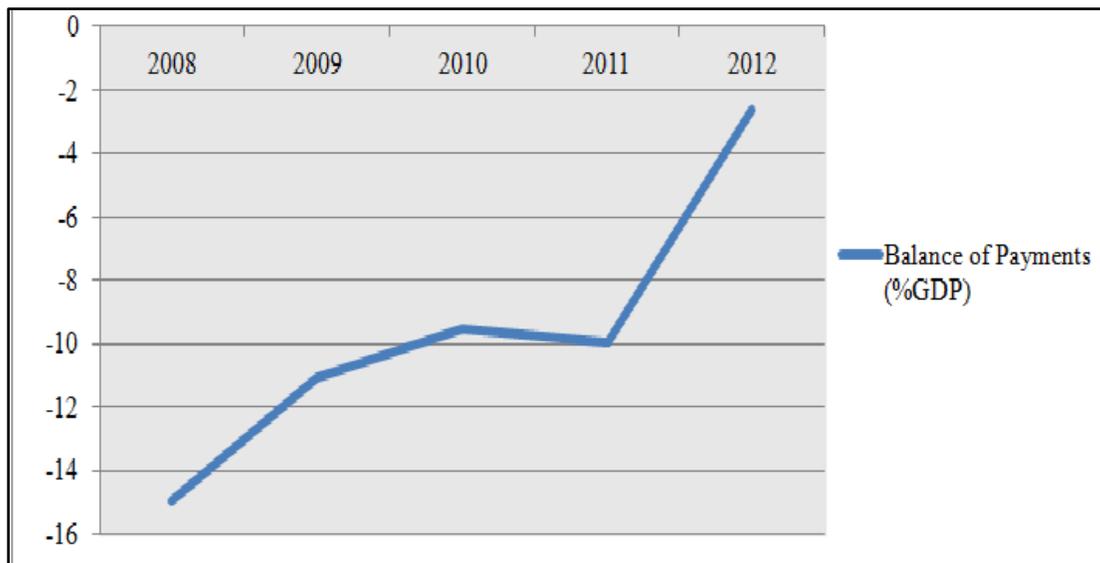


Source: Eurostat, General government deficit/surplus % of GDP

### Balance of Payments (% GDP)

Figure 4 presents the course of balance of payments for the examined period. For all the period Greece has negative balance of payments. What is noted is a drastic reduction in the balance of payments deficit in 2008-2009 fell to -14.9 from -11.1. The years 2009-2010 deficit again notes a significant decrease of 1.54%, while the period from 2010 to 2011 the decrease which occurred was 0.39%. The biggest drop in the deficit is in 2011-2012 where it fell by 7.29 points. It is evident that over time the economy tends to be more competitive than it was in the years before the crisis.

Figure 4: Balance of Payments (GDP)

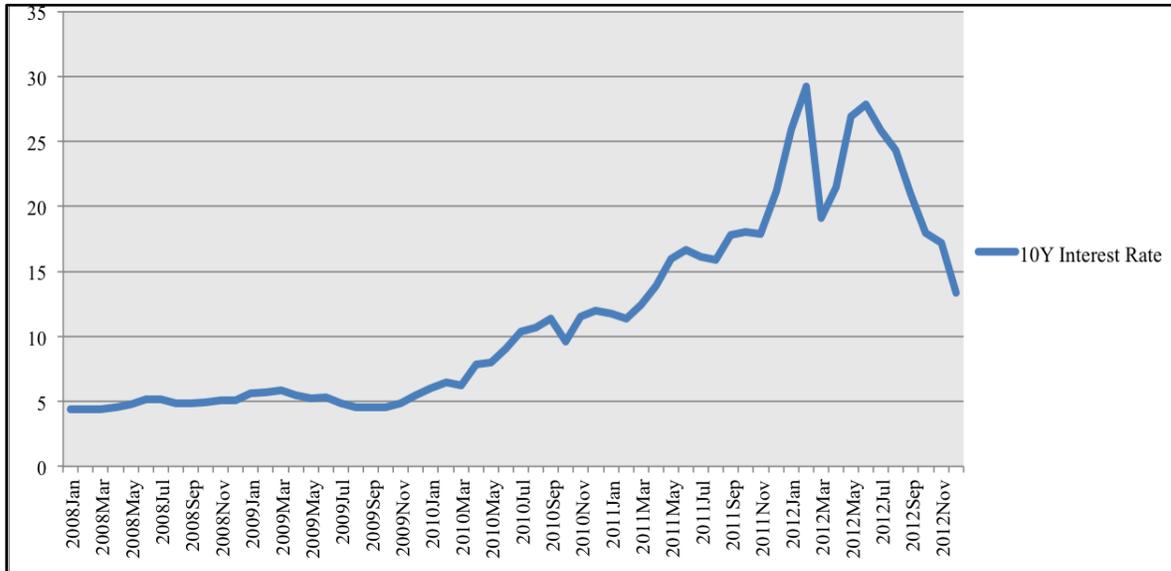


Source: OECD, Balance of Payments (MEI): Current Account Balance as a % of GDP

### Long-Term Interest Rate

Figure 5 shows the course of Greece's ten-year interest rate. As observed during the first two years Greece was borrowing at relatively low interest rate having some marginal fluctuations. From 2010 as uncertainty grew and affected the country's credibility, the interest rate increased. The Greece entering EFSF automatically stayed outside of the markets, as it would not borrow from them anymore. The continuous upward trend, which records the interest rate since Greece joined the EFSF, enables us to understand that the uncertainty not only have not disappeared but is still growing. In February 2012, the interest rate records its peak value reaching 29.24%. The reason was the public debt haircut that was seen by the markets as default. The interest rate continues throughout the year be at prohibitive levels as Greece is not considered reliable because of the political instability and the overall poor image of public finances.

Figure 5: Long-Term Interest Rate



Source: European Central Bank, Statistical Data Warehouse

**Inflation**

Figure 6 shows the inflationary trends for the years 2008-2012. In 2008 is noted a major increase in inflation influenced by the rise in food prices and the skyrocketing price of oil. The first half of 2009 the upward trend in inflation continues, but the second half is recorded a huge drop. In 2010, inflation rises due to continuous price increases of products by tax increases. In 2011, although there was an upward trend, inflation fell from 4.7% in 2010 to 3.1%. The main reason was the rising of unemployment by 7 percentage points. From 2011 until the end of the period is noticed a continuous decline in inflationary pressures because unemployment is still growing rapidly.

Figure 6: Inflation



Source: Hellenic Statistical Authority- Consumer prices, Consumer Price Index (CPI)

## CONCLUSIONS

Studying the public finances of Greece we come to the following conclusions. The increase in public debt occurs for years because of long-term mismanagement of public finances. Mismanagement is translated into the enlargement of public sector through hiring of client list character, harming in this way the state. Furthermore there are cases of corruption between government officials and private companies interests. As a result the country grows poorer by many billions, closing agreements much greater than their actual cost. Another important factor, which contributes to the increase of public debt, is the constantly rising tax evasion, which is a chronic problem in Greece, and is costing the state billions. In 2009 tax evasion ranged to 23 billion Euros. At this point it is worth to take into account the specific category of taxpayers who enjoy the privilege of tax exemptions. A typical case is the sector of Greek ship-owners that is not taxed from 1967, as well as the property of the Greek Church. The unfortunate is that even with the inclusion of the country in the international financial control efforts that were made concerned policies related to cuts and tax collection, leaving untouched the large public sector. Privatizations were a long commitment towards European partners who never applied drastically. The challenge for Greece in order to be able to borrow from the markets and be able to cover a large part of its needs without borrowing is the total reorganization of the state apparatus in conjunction with a national plan for the reconstruction of the economy and a new agreement for the payment of debt obligations putting a clause repayment when the economy is positive growth.

## REFERENCES

- European Central Bank. Statistical Data Warehouse. Selected Search Results. (March 19, 2014). Retrieved from [http://sdw.ecb.europa.eu/browseTable.do?node=SEARCHRESULTS&REF\\_AREA=168&q=greece+interest+rate&sf12=4&SERIES\\_KEY=229.IRS.M.GR.L.L40.CI.0000.EUR.N.Z&DATASET=4&periodSortOrder=ASC](http://sdw.ecb.europa.eu/browseTable.do?node=SEARCHRESULTS&REF_AREA=168&q=greece+interest+rate&sf12=4&SERIES_KEY=229.IRS.M.GR.L.L40.CI.0000.EUR.N.Z&DATASET=4&periodSortOrder=ASC)
- European Commission. (2012). The Second Economic Adjustment Programme for Greece. ECONOMIC AND FINANCIAL AFFAIRS. European Commission: European Economy. Occasional Paper.
- Eurostat. General government deficit/surplus % of GDP. (March 19, 2014). Retrieved from <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tec00127&plugin=1>
- Eurostat. General government gross debt% of GDP and million EUR. Percentage of GDP. (March 19, 2014). Retrieved from <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsdde410&plugin=1>
- Eurostat. Real GDP Growth Rate. Percentage change on previous year. (March 19, 2014). Retrieved from <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115>
- Hellenic Statistical Authority. (ELSTAT). Consumer prices > Consumer Price Index (CPI) - National Index - Dec 2008. Statistical Themes. (March 19, 2014). Retrieved from [http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p\\_param=A0515&r\\_param=DKT87&y\\_param=2008\\_12&mytabs=0](http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A0515&r_param=DKT87&y_param=2008_12&mytabs=0)

Ministry of Finance. (2010). Memorandum of Understanding between the European Commission Acting on Behalf of the Euro- Area Member States and Hellenic Republic. Greece Memorandum of Economic and Financial Policies. Ministry of Finance: Hellenic Republic.

Ministry of Finance. (2011). Medium Term Financial Strategy 2012-2015. Draft Law. Ministry of Finance: Hellenic Republic.

OECD. Organization for Economic Co-operation and Development. Balance of Payments (MEI): Current Account Balance as a % of GDP. Stat Extracts. (March 19, 2014). Retrieved from [http://stats.oecd.org/Index.aspx?DataSetCode=MEI\\_BOP](http://stats.oecd.org/Index.aspx?DataSetCode=MEI_BOP)