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Title: An Evaluation of the Greek Austerity programs

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Abstract

The problem of Greek macroeconomics lay between the structural inefficiencies, the way development was comprehended and the way trade was carrying out in the context of the single market. The programs of fiscal and economic consolidation, introduced by the IMF, European Commission and ECB, embarked a new period for Greece characterized by continuous straggles and dilemmas. The main neoclassical approach provided by Troika for debt crisis in the case of the Greek economy seems to face significant obstacles.

The present study is an assessment in the evaluation of the imposed austerity programs. The progress of the Greek deficit and debt represent crucial elements in this effort. Moreover the study of other economic indicators such as GDP and employment depicts the existing tendency in the Greek economy. Furthermore, the structural reforms consist another important part of the same discussion. Prior to all these, the determinants of the economic crisis will be briefly deployed and the main points of the implemented austerity measures will be presented more analytically.

Key words: Greek economy, austerity, adjustment programs, fiscal consolidation, structural reforms, deficit, GDP

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1. Introduction

The present study is an assessment on the programs of domestic devaluations that were implemented by the inclusion of the memoranda between the Greek government and the European Comission, ECB and IMF, in the Greek legislation (Monastiriotis, 2011; Theodoropoulou& Watt, 2011). The so far performance of the programs exhibits low correlation to the initial targets bringing the Greek economy into stagnation and the prospects of recovering into declining (European commission, 2013; IMF, 2011a; IMF, 2011b; IMF, 2012; IMF, 2013a; IMF, 2013b). However, the political statements try to confound the generalized disappointment by introducing the Greek success story and the possibility of primary surplus in the budget of 2013. At the same time it is leaked that another memorandum between the Greek government and the Troika might be unavoidable, since the Greek economy is assumed to be incapable to finance its domestic and foreign liabilities after the end of the present financial support.

For these reasons is of the outmost importance to examine the status of the Greek economy that would indicate the actual possibilities for recovery or further recession. This will be accomplished through the examination of the determinants in order to understand how the crisis was formed and enhanced. At this point, two levels of analysis will be attempted: the domestic distortions and the process of the European integration. All together exemplify the configuration of the crisis and enable the link with the treatment and its correspondence.

Thereafter, will be introduced the total of the legislation that validate the implication of the fiscal consolidation programs. The analysis is mainly distinguished in three parts, as many the memoranda implemented are. After the presentation of the changes provoked, by referring the certain laws introduced in the Greek legislation there will be an overview in order to sum up the novelties of the consolidation program and how they were reflected in the annual budgets. This implies a first inquiry in the way austerity programs affect the economy.

The study conclude examining the effects observed in the national accounts, in the progress of the national debt and deficit, in the significance of the current account balance, in the level of unemployment and in the accomplishment or not of the structural reforms. The evidence mainly derives from the publications of the Ministry of Finance and IMF and the basic methods of analysis is based in the consideration of the tendency exhibited in the macroeconomic data and other kind of output along with the level of convergence or divergence to the original targets.

2. The determinants of an inevitable economic crisis.

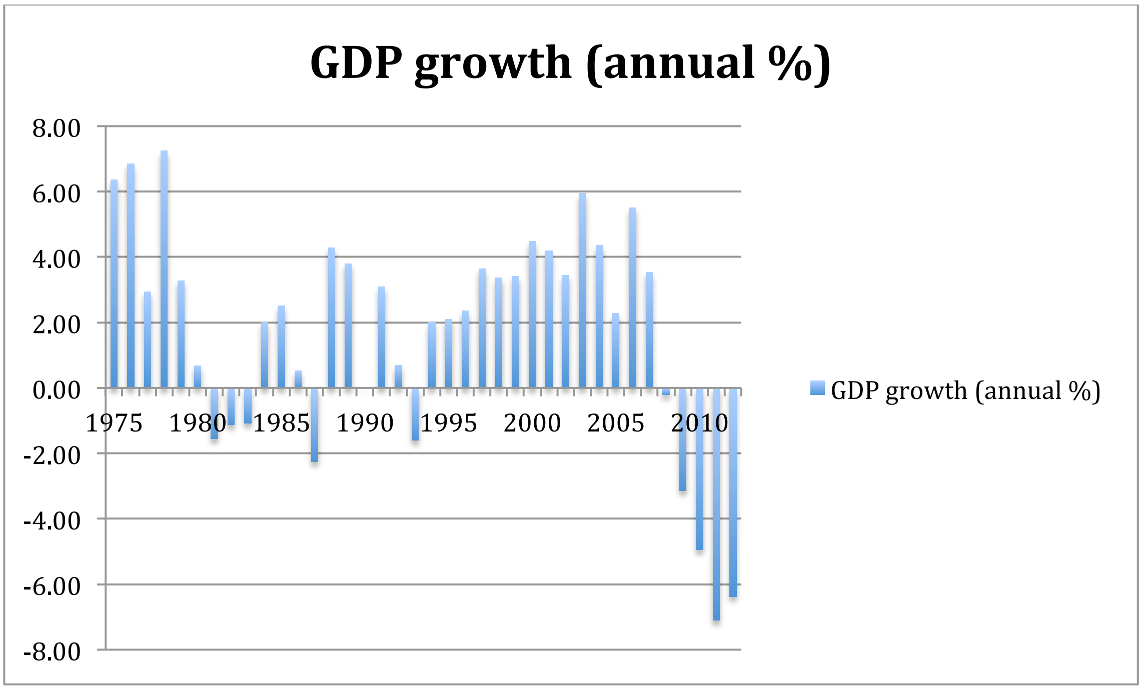
The crisis that burst in 2009 due to the revision of the statistical data of the state's macroeconomic accounts led to a series of packages of fiscal and economic consolidation (Kotios, 2011; Matsaganis & Leventi, 2011). However, this scenario was more than expected. For the last decades Greece exhibited imbalances in the economic performance (Katsimi & Moutos, 2011) that were eventually burst in the second year of the global economic crisis. Although the economic crisis in Greece does not have the same roots with the bubble crisis of the US real estate sector, it provides some explanations about the time coincidence and the way the crisis in the Greek economy was initially driven.

In this section, the Greek economic crisis will be approached through the analysis of the causal factors. This is a crucial assessment in order to identify the determinants and to understand the behavior of the crisis, which brings Greece in the fifth year of recession in the time of writing. The determinants of the Greek crisis will be approached by the analysis of the way the economic imbalances evolved over time and the way they were fueled trough the domestic governance and the process of European integration.

2.1 The domestic distortions and the pre-crisis economic governance

The analysis of the Greek economic imbalances is a part of a vivid discussion that evolved in public over the last years of the crisis due to the implementation of the fiscal consolidation programs and the emerged social complaints. However, the roots of the economic predicaments are going back some decades (Stathakis, 2010), since they are intertemporal phenomena preserved by the two political parties that were toggled in the government.

The years after the end of '67-'74 dictatorship in Greece were characterized by an intensive boost of the economic activity (Moutos & Tsitsikas, 2010). By 1980 Greece exhibited a notable economic growth with an ensuing positive impact in the employment and other key economic indicators. However, the entrance in the EU in 1981 and the simultaneous winning of PASOK in the same year's election signaled a different trajectory in the performance of the Greek economy.

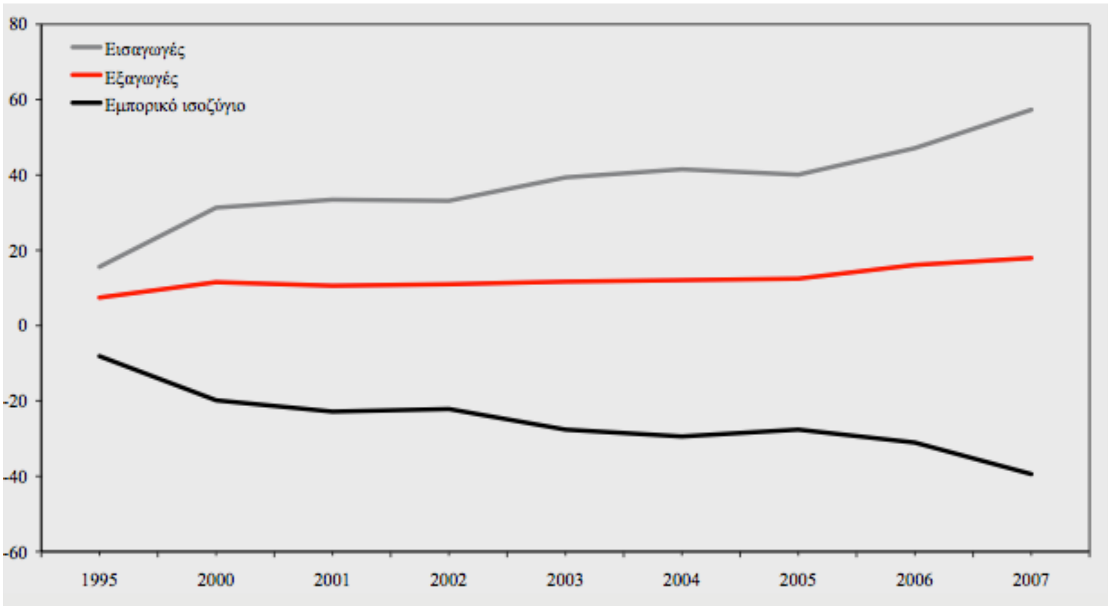


Graph 1: Greek growth rates evolution

Source: Worldbank

The socialistic profile of the government that was formed in 1981 and the positive conditions in the Greek economy derived by the previous good performance allowed an expansionary fiscal policy. That tendency can be summarized in a tremendous expansion of the public sector combined with a lavish macroeconomic management and public savings elimination (Moutos & Pechlivanos, 2013). Therefore, the public budget constantly exhibited a deficit that should be balanced by trade balance surplus.

However, the Greek weak productive structure was incapable to respond to the single market's competition. Greek productive structure was based mainly on micro-enterprises in the tourism sector and in agriculture while the tertiary sector was dominated by the public enterprises (Petrakos, 2013). These facts explain the restrained competitive capacity of the Greek economy that along with the increased tendency to consume more than Greek economy was able to produce concluded to trade balance deficit and restraint of savings. Moreover the membership in the European Union facilitated borrowing due to the low interest rates.

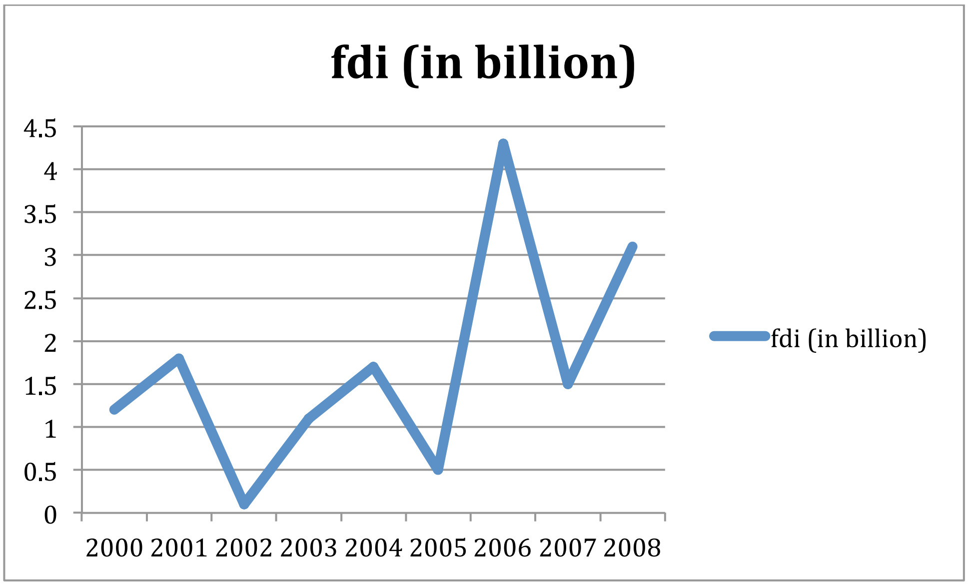


Graph 2: Imports, exports and trade balance
Source: Economou et al (2010)

Furthermore, as Moutos (2013 & Pechlivanos, 2013) argue the increase of trades' union power and the politicalization of the bureaucracy system played a significant role in the economic mismanagement as well. Above all, the most significant asset of the meager growth performance in Greece is the enhancement of the clientlism and corruption (Monastiriotis et al, 2013).

Other important points in the economic performance of Greece are summarized in the reduction of the taxes on capital, extravagant military expenses, Olympic games cost (Tsakalotos, 2010) and great evasion due to the absence of a competent tax administration and sufficient legislation (Stathakis, 2010). All these facts advocated that the development trajectory of Greece took part from the mid 90's and lasted for about ten years was excessively unsustainable.

At the time European North made improvements in its competitiveness by programs of strictly balanced budgets (De Gtauwe & Yuemei, 2013; Lapavitsas et al, 2010;Tsakalotos, 2010), Greece was turned into an extremely unattractive for foreign investments country (Kotios, 2011). The contrationary fiscal policy implemented, as a Maastricht's Treaty outcome, was undermined by an expansionary balance of payments. The demand was constantly kept above income fueling the German's surpluses and the domestic deficits (Tsakalotos, 2010). However the nominal growth rates exhibited a Greek success that despite all the involved contradictions managed to create positive expectation with regard to convergence.



Graph 3: FDI
Source: Economou et al (2010)

However, the lying inefficiencies behind the success story of Greece led to the reduction of primary surpluses right after 2004 and deficit increase in 2008 (Christodoulakis, 2011). The synchronous social unrest (December 2008) caused a serious political instability. Therefore, the government was in power was unable to implement an austerity program according to the imperatives of European economic policy. Moreover, the forthcoming elections increased further, as always do, the public expenditures. Therefore in 2009 the status of the state's macroeconomic image got much worse.

The several revisions of the deficits and the government acceptance for the misreported data (Matsaganis & Leventi, 2011; Monastiriotis, 2011) stumbled on the international economic discomfort. The Greek inaccuracy, due to the extravagant accumulation of debt considered as unsustainable, along with the EU inaction, due to the lack of its political integration (Krugman, 2012a) and its incapacity to exercise a relaxed monetary policy (Arghyrou & Tsoukalas, 2011) caused a catastrophic delay in decision-making (Christodoulakis, 2011). This led to a credibility and liquidity crisis, succeeded by spreads increase and the possibility of a Greek default (Monastiriotis, 2011, Varoufakis and Holland, 2010). In 2010 the European Commission with the contribution of the ECB and IMF agreed on a Greek financial support program and provided a 110 billions loan calming down the bond holders and provoking a series of domestic challenges (Christodoulakis, 2011, Monastiriotis et al, 2013) that will be analytically discussed in the ensuing chapters.

2.2 The European integration process.

The causes of the Greek economic crisis can also be found in the process of European integration. The inefficiencies in the architecture of the European Union and the policy responses at the emerged challenges formed at a certain level the springboard of the current crisis.

The initial venture of the European integration stimulated the favorable conditions in the trade and increasing returns of scale economies and set common policies in the production and agriculture. The first enlargement took place in 1973 and soon after, in 1975 European Regional Development Fund (ERDF) was established as the main financial mechanism for providing social and economic cohesion and correcting the imbalances among European regions (Europa, 2010). Greece was the tenth member state that joined the union and its accession signaled the second enlargement, towards south Europe that was integrated by having Spain and Portugal joining the community in 1986.

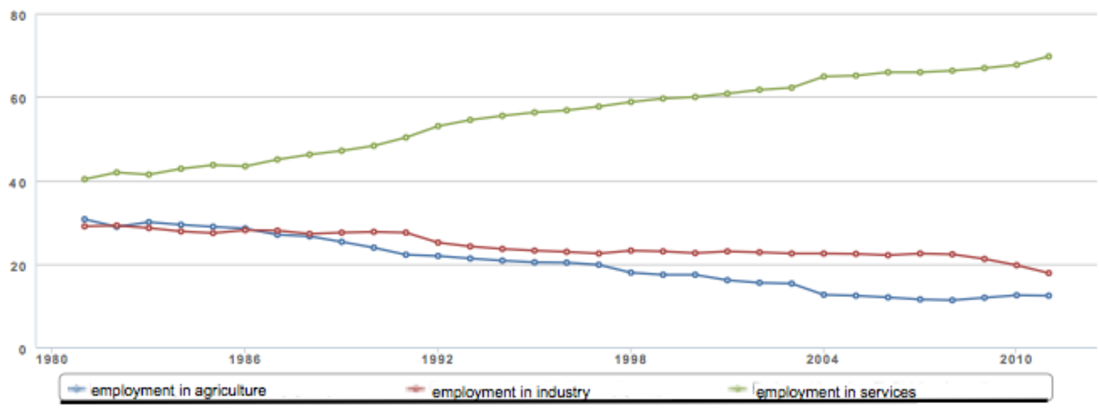
The presence of European Union in the Southern European countries requested for a different approach on the integration of the single market, since the performance and the production structure of the South diverged a lot from the countries of the European North. This turned the EU from a homogeneous Union into a diversified group of countries with dissimilar structure in their national economies and great variation in their performance. Further enlargements towards the EU of 27 magnified the imbalances in the European economy and implied cohesion policy as the key factor for addressing the emerged inequalities.

The formation of the European Union is based on the integration of the single market and on the increasing regional disparities among European territory (Petrakos et al, 2005). Regional inequalities create an uneven space in the European territory that is highly polarized between core and periphery regions (Rodriguez-Pose & Fratesi, 2003; Psycharis & Petrakos, 2004). Moreover the cumulative nature of the followed development plans reinforced the pattern of geographical inequalities, as “growth requires a minimum threshold of resources and activities to take place” (Petrakos et al, 2005). In this context Greece followed the pattern of very centralized economic activities, mostly in Attika and Thessaloniki, initiating a period of growing regional inequalities (Petrakos & Saratsis, 2000; Petrakos, 2004; Petrakos & Artelaris, 2008).

Greece having most of its regions categorized as “Objective 1” is considered to be favored with regard to the funds received. However, the tendency of their low contribution in a sustainable development strategy seems to be confirmed (Rodriguez-Pose & Fratesi, 2003). It should be mentioned that not only European architecture but also inefficiencies in the domestic administration and corruption led to inadequate exploitation of the European assistance.

It is also a matter of great significance to recognize the nature of economic activities developed. Rodriguez-Pose and Fratesi (2003) note that the process of European integration favors concentration of economic activities in the core of EU while periphery regions are specialized in low value added activities. In the case of Greece a recent study confirms this point by proving that the growth of value added in most of the Greek regions is negative (Petrakos et al, 2012). Therefore multipliers effect is crucial to evaluate the contribution of certain economic activities in the development process. A multiplier rating lower than [1] can address an activity as one that reinforces the process of surplus transfer. However, it is difficult to collect that kind of data.

Moreover, the European persistence on one or two priority areas aided a model of development based on “one size fits all” that underestimated the specific capabilities and constraints of each economy. The result of this approach can be found in the deconstruction of the national production structure in a quite ‘violent’ way (Stathakis, 2010). After all, the performance of the Greek production sectors produced failing expectations for development (Petrakos & Psycharis, 2004).



Graph 4: Evolution of the Greek production structure
Source: Worldbank

On the other hand, the Greek incapacity in the production was aggravated by the increasing demand for consumption (Tsakalotos, 2010). This tendency followed an asymmetric adjustment process that created the ensuing contradiction: the North European countries spent very little as a ratio to their output while the Southern ones, like Greece, had a quite bigger ratio (De Grauwe&Yuemei, 2013). This biased integration led to unbalance accounts and stimulated the debt (Lapavitsas et al, 2010). IMF, which became an expert at bail out in order to keep global accumulation on track (Harvey, 2006) was the only solution in the context of the dominant political system and memorandum of May became the adjustment to the economic reality (Kotios, 2011).

2.3 The crisis evolvement

Along with the domestic inefficiencies and the European asymmetries, the financial sector had a discrete role in the evolvement and management of the Greek crisis. Although the Greek economy was considered to be sheltered from the global crisis due to its low involvement in the markets, however the markets through the rating agencies accelerated the progress of the crisis (Petrakos, 2013) and the "financialization" of the economy (Lapavitsas, 2011) let the markets to drive the Greek crisis by the bonds transactions (De Grauwe & Yuemei, 2013).

The economic crises are categorized into three generations in the academic literature. The first one is implied by Paul Krugman (1979), who advocates that crises are provoked by speculative attacks that reverse the national expectations. These attacks are arisen by the dramatic increase on a currency demand that depletes government reserves on foreign currency in order to defend the exchange rates (Karfakis, 2010). According to Kohler (2012) the case of Krugman's first generation currency crisis matches with the competition between US and Eurozone's markets. The rational euro investors try to avoid the loss in US dollar value by betting against euro. However in this case the crisis bursts not at the time ECB's reserves are depleted but when it comes to decide whether strict monetary policy should be followed or not.

As Arghyrou and Tsoukalas (2011) note, the timeline of events that resulted in the discussed crisis can be summarized in the markets confidence loss against Greek bonds that raised spreads and activated the factors of the first generation crisis. However, the ascending crisis in the Greek economy cannot be solely explained by Krugman's theory on the first generation currency crisis inadequate and revealed the contribution of other factors on that (Arghyrou & Tsoukalas, 2011).

Similarly, the second-generation currency crisis, developed in a model of Obstfeld (1996), explains partly the determinants of the Greek crisis (Arghyrou & Tsoukalas, 2011). In this case, government chooses between defaulting and preserving the peg in order to balance credibility cost. However, peg is endogenous to private sector and its abandonment causes deviations from equilibrium.

Various models represent the third generation currency crisis. In short, it relates the banking sector failures with government debt that its cyclical persistence may lead to a default risk. In Greece, bonds were part of a risky project that under no reforms, no real EU convergence and no crisis management mechanisms, forced bond prices to downscale (Arghyrou & Tsoukalas, 2011). The approach of the third generation currency crisis provides the policy choices as the main determinants of crisis's burst.

All these depict a regime that generates design flaws with sudden liquidity losses (Varoufakis & Holland, 2012). The borrowing transactions created an excessive debt for Greece that was no EMU mechanisms to correct (Mayer et al, 2012) and became unsustainable under the pressure of the international markets (Stathakis, 2010). The old inefficiencies were obscured by the temporary convergence but were eventually burst bringing the failures of financial system, EU integration process and domestic distortions to real economy.

Moreover the overall inefficiencies took part in the European financial and economic integration process overlooked the default risk derived from the great imbalances among countries (Mayer et al, 2012). Finally, the refusal of Germany for a Greek bail out (Arghyrou & Tsoukalas, 2011) along with the EU and Greek delay to respond in the initial crisis' signals (Chrhristodoulakis, 2011) indicate that there could exist a policy response that could give a different swift in the ensuing events. Greek debt crisis is the outcome of a series of mainly policy and economic failures that co-exist as inherent ingredients in the process of capital accumulation, European integration and in the long run inefficiencies in Greek governance.

3. Review of the austerity legislation

Greece belongs to those EU member states that received one of the greater packages of external assistance (Theodoropoulou & Watt, 2011) and at the same time was subjected in a program of extended reforms that can be compared to the ones that Marshal plan imposed (Monastiriotis, 2013). The program implemented on May 2010 introduced a period of social and political challenges caused by the actions for regaining competition through deflating economy by reducing nominal wages and prices (Theodoropoulou & Watt, 2011). In exchange, Greece was provisioned loans of financial support in order to avoid the danger of a possible default that would cause greater imbalances in the Eurozone and spread of the crisis to other member states' economies.

However, there are many economists who disclaim the arguments of the above position. Varoufakis (2010), Lapavitsas et al (2010) address different options in order to counter the prevailing crisis. Proceeding in a Greek default and turning back to national currency or putting greater efforts on the negotiations with Troika could lead to more viable solutions for Greece, as they argue. On the other hand many others claim that austerity and the memoranda between the Greek government and the creditors was the one and only solution (Christodoulakis, 2011; 2013; Kotios, 2011; Monastiriotis, 2011; Monastiriotis et al, 2013).

Apart from the discussion about the possible policy options prior to the implementations of the austerity measures, which constitutes a discrete survey, it is also a matter of great significance to define the way austerity affected the Greek macroeconomics. Hence, it should be examined which was the aim of the discussed measures, in which economic theory they are based, in which context they should be implemented and how Greek real economy interacted with them. In order to be able to do so, it is mandatory to recognize the novelties induced in the Greek legislation through the austerity program.

3.1. The first memorandum- the first adjustment program

The first memorandum between the Greek government and the "Troika" was voted by the Greek parliament on May 2010. It was supported merely by PASOK, the party in power. All of the opposition parties vote against while PASOK itself lost some of its coherence. Four months earlier the Greek prime minister made a declaration in the World Economic Forum in Davos, about the economic predicaments country was going through and just a month before the first memorandum became part of the Greek legislation, he announced the need for economic assistance provided by IMF and EU.

The first memorandum was incorporated into the Greek legislation and had a series of other laws that actually applied its directives. The novelties induced were mostly about the reduction of the public expenditures that aimed to be reduced even more in a three-years long plan. Revenues were also contributing in stabilizing current account balances by introducing a more profitable tax system and creating collateral revenue sources. At that time the estimated gained financial advantages were grouped between revenue side and expenditure side as in the following table.

	Revenue side (% of package)	Expenditure side (% of package)
2010	48	52
2011	55	45
2012	44	57
2013	0.1	99
Total	43	57

Table 1: The distribution of measures between revenues and expenditures
Source: Theodoropoulou and Watt (2011)

First thing required according to the 2010 memorandum was to count up the total number of all public servants (Law 3845, 2010). This necessity signified a total decomposition existing in the sphere of public administration. It also asked for emergency measures to support the vulnerable social groups that would be less resilient in the process of fiscal consolidation and economic reforms (Law 3845, 2010). In the context of austerity, the welfare provision took place through the donation of vouchers for entering in the labor market (Law 3845, 2010).

This regulation aimed to grant employers for hiring extra working force being unemployed rather than expend in non-productive activities. This is a significant neoliberal approach that assumes that the provision of welfare payments for unemployment is considered as an incentive for not working. However, the implementation of this act deregulated the labor law as it suppressed further the wages.

In addition, it provoked Greek state's decoupling from the obligations of social provision.

Further distortion in the labor market caused by the 8% reduction of wages, allowances and severance payments, limiting Christmas bonus at 500 euros, Eastern bonus and holiday bonus at 250 euros for public servants while the reductions were even higher for the pensioners (Law 3845, 2010). It is also worth mentioning the freezing of legal annual salary raise that was validated through the national collective bargaining agreement (Law 3871, 2010).

Moreover it was also agreed to "decongest" public sector following the rule of "one employment for every five retirements" (Law 3845, 2010) and 50% reduction on the employees of fixed-term contracts in the public sector (Law 3986, 2011). Furthermore, the labor time was set at 40 hours per week increasing the weekly working time 2,5-10 hours without giving a proportional raise in the salaries. In addition, the surplus personnel in the public sector would be set in labor reserve receiving the 60% of its previous salary (Law 3986, 2011).

All these consent to a smaller public sector and to the elimination of its expenditures in order to combat the increasing deficits. According to the neoliberal view on the state, its role is to provide public goods and to correct market imperfectness. When the state has limited competences its functions should be constrained in the preservation of the macroeconomic stability and countering poverty (Thirlwall, 1996). In other words "the state should rather be the steersman than the rower" (Thirlwall, 1996). Therefore, its restrained presence should leave space for the development of private initiative as the flagship of efficiency in the economic activities.

The first Memorandum, based on these principles implied a plan of excessive privatizations (Law 3845, 2010), which was hindered due to indecision, political cost (Christodoulakis, 2011) and lack of experience and a previously existing legislative context. Law 3986 (2011) tried to counter this shortcoming introducing TAIPED (Hellenic Republic Asset Development Fund) a body for operating the privatizations by preparing and executing all the required actions (Law 3985, 2011; Law 3986, 2011).

Further injections in the market were provided by the raise in the limit of collective dismissals from 20 to 150 and in the firms with more than 200 employers from 2% to 5% (Law 3863, 2010), extended in the trial period from 2 to 12 months that a firm can dismiss its personnel without being obligated to give severance pay, and the provision of just the 80% of the salary for employing the youth until the age of twenty-four (Law 3845, 2010). Other similar measures are the 20% reduction for the overtime pay (Law 3863, 2010) and the abolition of overtime pay for part-time workers with working time less than 20 hours per week (Law 3899, 2010).

Theses regulations derived from the agreement between the Greek government and Troika are based on the neoliberal theory. According to this point of view, the reduction of the labor cost can enhance labor demand (Tsoulfidis, 2008) and combat unemployment. In this context, the Bolkestein directive was also adopted in the Greek legislation through the Law 3844 (2011) for the linearization of the closed professions.

On the revenue side, the first memorandum implement the raise of VAT taxation up to 23%, induced increased excise duties' rates and extraordinary lump sum contribution for incomes greater than 100.000 euros annually varying from 4% to 10 % (Law 3845, 2010). This program aimed on a 4% increase in the revenues by 2013 and a 7% reduction on public expenses by the same year (Law 3845, 2010).

The overall measures depicted 2,5% of GDP and were planned to reduce 2009's deficit to 8,1% in 2010. The measures according to the first memorandum would be increased to 4% in 2011 and follow a downward turn in 2012 reaching 2,5% of GDP and 2% in 2013.The first memorandum consists of a frontloaded economic program that would gradually be smoothened in order to cope with the expecting fatigue. Positive growth rates were assessed by 2012, lowering deficit under 3% by 2014 and exhibiting 5% current account surplus by 2020 (Law 3845, 2010). However, the targets related to the post 2010 period were revised according to the requirements of the subsequent agreements.

The fiscal consolidation would be managed according to the voted legislation (Law

3845, 2010) through the implementation of a sustainable income policy and reduction of the insurance provision. For this reason it was also crucial to merge public bodies and cut social expenses. Health sector was also subject to reforms changing the pattern of medicals prescriptions' writing and execution. The reforms in the health sector would be integrated by the return of all the relevant responsibilities in the Ministry of Health and also by the mergence of relevant funds and by the simplification of the fragmented health sector (Law 3845, 2010).

Moreover it was also scheduled to decouple health sector from retirement (Law 3845, 2010) and to merge the different insurance funds into three that would link the contribution with provision (Law 3845, 2010; Law 3865, 2010). Since the reserves of insurance funds were vanished due to the chronic mismanagement (Vasilakis, 2012) insurance funds used part of the annual budget resources contributing in the deficit increase. Therefore, the first memorandum apart from pensions reduction rose the retirement age at 65 and announced future adjustments according to the variation of the life expectancy indicators (Law 3845, 2010; Law 3863, 2010;Law 3865, 2010).

The tax system reform aimed to the expansion of the tax base and the implementation of criterions of gradual taxation (Law 3845, 2010). Other objectives are summarized in combating tax evasion, since Greece has a significant economic drain due to the magnitude of grey economy, issuing of VAT receipts and establishing evidence on living standards (Law, 3845, 2010)

Besides, the financial and banking sector was considered as reliable due to the enhancement of its capital position providing 3,8 billion euros in 2009 that encouraged its position and cover the required capital adequacy (Law 3845, 2010). However the diminishing profitability set in danger the current capital position of the Greek banking system. Therefore, the first memorandum introduced the Fund of Financial Stability in order to monitor progress in the Greek banks capital position and to undertake prevention measures (Law 3845, 2010).

3.2 The second memorandum- the second adjustment program

The second memorandum was confirmed on January of 2012 by Papadimos government, supported by the two greater parties, PASOK and New Democracy and also by the nationalist party of LAOS. It was a consequence of several failures in the implementation of the first consolidation program mainly related to fiscal policy, privatizations and structural reforms. In more details the so far progress indicated

Fiscal policy	Partially observed	The agreed fiscal consolidation measures were partially implemented. The end-December quarterly performance criteria on the cash general government primary deficit and the state primary expenditure were respected. There was some reduction in the stock of arrears owed to suppliers. The ESA-based 2011 deficit exceeded the ceiling established at program inception, although only slightly above the projection of the previous review.
Privatization and structural fiscal reforms	Partially observed	The quantitative cumulative criterion on privatization receipts for end- December was missed by a small margin; several transactions for 2012- 13 are under preparation. Further measures have been adopted in relation to the fight against tax evasion and public finance management, and restructuring of public enterprises. However, the fight against tax evasion cannot yet be considered as successful, and there were delays in several specific revenue administration measures. Likewise, several measures to strengthen public financial management were missed. There were also issues in healthcare reform, and the framework law on supplementary pensions.
Financial sector policy	Largely observed	Payments into the intermediate account of the Hellenic Stability Fund continued according to plans until end-2011. A detailed diagnostic of loan portfolios of banks was prepared. The State increased the ATE share capital. Governance rules were reviewed in preparation of the post-PSI bank recapitalization.

Growth-enhancing structural reforms	Partially observed	After attempting a dialogue with social partners, the Government adopted several labor market measures, including a reduction in minimum wages and changes in wage bargaining. Progress in several other areas has been slower, in particular on business environment related measures and the opening of the energy market.

Table 2: First adjustment program failures and achievements
Source: European Commission (2012)

Therefore, the second memorandum depicts an updated version of the first one. It was justified as a reform for promoting three key issues for a new loan contract that would provide a first payment of 37,5 billion euros, for the Greek PSI and for the recapitalization of the Greek banks. However apart from these, the second memorandum reset regulations for the labor market and the revenue policy.

In more details after the payment of 35,7 billion euros there would be a restructuring of debt and interest payment until the PSI, which signifies a program of Greek bonds exchange. In the causal report, the second memorandum addressed financial assistance facility agreement between the European Fund of Financial Stability, Greek Republic and Greek Central Bank. The discussed agreement aimed on new financial liabilities of the Greek state about 30 millions euros, excluding interests, for financing the PSI and reduction of the Greek debt analogous to the nominal value of the Greek bonds. Moreover it was planned a temporary raise in the Greek debt until the PSI for rebuying the Greek bonds that were hold in the European Fund of Financial Stability and for paying the interests.

It was also requested 23 billions euros to be donated for banks recapitalization and the loss of bonds haircut in the Insurance Funds. This would be counterbalanced by the creation of a fund that transect parts of public property as reimbursement.

As far considers reforms in the labor market Law 4046 (2012) promoted a reduction of 22% in the basic income, from 751 euros to 586 euros gross, and 32% for the youth under the age of 25 with practice contracts diminishing the salary from 751 to 511 euros gross. This change required merely one-sided actions. According to the Cabinet Decision n.6 (2012) all salary raises were frozen until unemployment fell under the 10%

threshold. Exception in this regulation was the salary raise due to the raise of total working years.

Moreover the second memorandum aimed on the 15% reduction of marginal labor cost during the fiscal consolidation program (Law 4046, 2012) and assessed on being in compliance with the labor cost of other countries, which are under programs of fiscal consolidation (Law 4046, 20102). Temporary employment was also established through the removal of restrictions that were relevant with the legal form of the corporation that stimulated that kind of activities (Law 4038, 2012).

Moreover, Law 3986 (2011) was modified through the expansion of reserve labor system for all the public sector personnel with contracts of indefinite duration and the ones being in the pre-retirement period (Law 4024, 2012). Their position was abolished and the employees set on labor reserve either they were to be fired, or paid 60% of their salary for 24 months until being fired if not been absorbed from other public bodies.

Security in the wok was also abolished according to the required minimum standards introduced by the Law 4052 (2012). Moreover, labor dispute was to be resolved through the Labor Referee if only both sides agree to act so (Cabinet Decision n.6, 2012). Refereeing had to resolve solely issues related to the basic salary agreements considering at the same time the economic status and the competitiveness of the firm and also the marginal labor cost reduction needed (Modification of Law 3899, 2012).

In addition, the Business Contracts was agreed to override the Collective Bargaining Agreements (Law 4024, 2012). The pertinent Minister also lost its competence to expand Collective Bargaining Agreements in order to counterbalance the lack of any kind of collective agreements. Furthermore, it was also consented to diminish the duration of bargaining agreements application after the dismissal, from six to three months with the obligation of paying solely the basic salary and no more than four bonuses (Cabinet Decision n.6, 2012). The duration of Collective Bargaining Agreement was set at three years long but the possibility of bargaining privately the labor contracts was also introduced (Cabinet Decision n.6, 2012).

A total of regulation related to the way union activities were exercised was also confirmed. The Union could be replaced by the agreement of 60% of the stuff in matters of new Collective Bargaining Agreement confirmation (Law 4024, 2011). The process of Union's formation was also simplified and accelerated (Law 4024, 2012) and the employees right for discussion and information was also regulated according to 2009/38 European Directive (Law 4052, 2012)

The permanency in the public sector was abolished through the Cabinet Decision n.6 (2012) and government gave its commitment for 150.000 staff reduction by 2015. On the contrary unemployment planned to be combated by the introduction of Social Co-operatives in the Greek legislation (Law 4019, 2011). The aim of this venture was to involve in the market the vulnerable parts of the society in an active way (Law 4019, 2011). Moreover, European Funds were to be stimulated for creating labor supply for public benefit work, exercised in local administration bodies (Law 4024, 2011)

National health system reforms continued by reducing 1 billion euros the health expenses for the private health sector. The profit rate of the pharmacies was 15% reduced and 5% reduced for the pharmaceuticals wholesale (Law 4046, 2012). Internal auditors were to be placed in the public hospitals and the use of generic medicines was promoted (Law 4046, 2012). Public supplying had to be recorded in an online platform in order to be monitored for corruption and overpricing avoidance.

Insurance Funds were also subjected to further reforms. The existing Insurance Funds were merged into one for reducing the previous running and wage cost at least 30% (Law 4046, 2012). Subsidiary pensions had to be reduced in order to eliminate the increasing deficits in the Insurance Funds. Pension computerization was induced and lump sum given as retirement allowance that exceeded the total employees' contributions had to be returned (Law 4046, 2012). On the contrary, the social contributions to IKA (Institute of Social Insurance) were 5% reduced.

Privatization of the Greek public property was set in front again aiming 50 billion euros pour into state funds. Therefore, DEI (Public provision of electricity) and DEPA (Public gas corporation) were the first public enterprises to get privatized. At the same time the public transportation increased its tickets by 25%. Other state bodies with great social significance but with little contribution to growth were decided to close down such as the Organization for Workers Residence (Law 4046, 2012).

It was also aimed to increase tax revenues by the abolition of previous tax exemptions, revisal of private real estate value, intensifying the audits of high incomes and setting strict penalties for tax liabilities (Law 4046, 2012). On the other hand, it was decided to close down about 200 tax offices and to replace tax payments by making remittance (Law 4046, 2012). The performance of every tax office would be publicized online, in order to engage them with the national targets (Law 4046, 2012).

Closed professions were subjected to liberalizations, first implementation of the measure affected taxi driving (Law 4046, 2012). Other structural reforms promoted by the second memorandum that had to do with the efficiency of judicial system by setting timelines and relieving judges from certain liabilities (Law 4046, 2012).

3.3 The third memorandum- the mid-term plan for 2013-2016

The third memorandum was induced after two elections that took place on May and June 2012 that designated New Democracy as the leading party in the trilateral government that was formed. The political milieu was subject to major changes that shrank PASOK, turned SYRIZA, a left-wing party of limited influence, into the main opposition party and also brought right extremists in the parliament.

The previous programs of fiscal adjustment plan had to be revised due to the unexpected intensity of the recession. In this direction, the program extended for two more years reducing the measures at 11,5 billion for the period 2013-2014 instead of 20,5 that was originally planned to set (Memorandum of Understanding, 2012). As been declared in the Memorandum of Understanding (2012) between the Greek government and Troika, the extension of the program would secure the fiscal position of the Greek economy and would mitigate the impact of the taken measures. In addition, the targets of the Memorandum of Understanding (2012) about the primary balance were set at 0%, 1.5%, 3% and 4.5% of GDP for the four-year period 2013-2016, respectively.

However, this extension should not discourage the efforts needed. Hence the measures of fiscal adjustment remained frontloaded and would credit 1,5% of GDP improvements at the primary balance in 2013 (Memorandum of Understanding, 2012). The needed measures for the period 2013-2014 for the revised primary balance targets in the central macroeconomic scenario amounted to €9.2 billion and €13.5 billion, respectively.

In more details, the targets on the aspired targets on public revenues are depicted in the following table

	2013 forecast	2014 forecast	2015 forecast	2016 forecast
I. Revenues	50.821	49.564	48.309	48.050
1.Net revenues of the regular budget	45.685	44.972	45.249	46.299
a.Regular revenues	47.114	46.250	47.370	48.459
1.Direct taxes	20.117	19.439	19.729	19.863
2.Indirect taxes	24.604	24.378	25.001	25.732
3.European deliverability	236	163	217	217
4.Non tax revenues	2.157	2.270	2.423	2.647
b.Non regular revenues	1.386	1.357	757	791
c. Tax refunds	2.901	2.865	2.899	2.972
d. Revenues from assigning permissions or licensing	86	230	21	21
2. Revenues from Budget of public Investments	5.136	4.592	3.060	1.751

a. European inputs	4.936	4.392	2.860	1.551
b. Own Resources	200	200	200	200
II. Expenditures	60.307	56.586	56.586	56.384
1. Expenditures of the regular budget	53.457	49.886	49.886	49.684
a. Primary expenditures	44.750	41.421	40.834	40.689
1. Wages and pensions	18.599	18.077	17.881	17.768
2. Social insurance and health care	14.969	12.701	12.086	11.791
3. Function and other kind of expenditures	6.305	6.012	6.136	6.147
4. Credits	3.777	3.511	3.531	3.783
5. Non distributed expenses	0	0	0	0
6. Reserves	1.100	1.120	1.200	1.200
b.1. Sureties to General government	558	494	397	440
2. Sureties other than to General government	469	268	225	158
c. Interests	6.400	6.900	7.200	7.300
d. Expenditures of EFSF loan disbursement	130	110	80	50
e. Hospital payments for previous liabilities	400	400	400	400

f. Expenditures for military procurement	750	583	750	647
2. Budget of Public Investments	6.860	6.700	6.700	6.700
III. Deficit of State Budget	-9.480	-7.312	-8.277	-8.334
% GDP	-5,52%	-4,0%	-4,4%	-4,2%
III. A. Primary outcome	-3.086	-412	-1.077	-1.034
National auditing adjustments of central government	-2.912	-3.330	-3.369	-1.5776
Deficit of Central Government according to ESA95	-11.219	-8.736	-9.474	-7.728
Balance of Organization of Local Administration according to ESA95	589	795	908	950
Balance of OKA according to ESA95	2.730	2.787	1.601	2.225
Deficit of General Government according to ESA95	-7.900	-5.154	-6.965	-4.552
% GDP	-4,3%	-2,8%	-3,7%	-2,3%
Primary outcome of General Government according to ESA95	489	4.471	3.692	6.350

%GDP	0,3%	2,4%	2,0%	3,2%
GDP	183.049	182.682	187.810	196.552

Table 3: 2013-16 budget forecast
Source: Law 4127 (2013)

The program implied a plan of two years period frontloaded measures of 13,5 billion (Law 4093,2012; Law 4127, 2013). The fiscal adjustment was constructed by 10,5 billion that derive from expenditures reductions and another 3 billion generating from tax revenues (Law 4093,2012; Law 4127, 2013). In 2013 9,2 billion of the total amount of measures was agreed to be implemented (Law 4093,2012; Law 4127, 2013). The wages and pensions were subjected to measures of 6,6 billion (Law 4093,2012; Law 4127, 2013) setting also a stipulation for their extension in case of deviating from the fiscal targets (Law 4093,2012).

On the other hand, it was also agreed to undertake equal measures, in case of achieving the targets. In each case, recession was assessed to be about 4,2% for the year 2013. The program was pre-required in order Greek government disbursed 31,5 billion and channel them to the Greek economy.

In more details, as far considers the wage and pension expenditure in the public sector would be reduced to 1,1 billion and 4,8 billion, respectively (Law 4127, 2013). This would be achieved by abolishing the Christmas, Easter and holiday bonuses for both salaried and pensioners (Law 4093, 2012) which were estimated at 430, 6 millions (Law 4127, 2013). Special wage professions (public health system doctors, academics, high priests, civilian personnel in ministries and decentralized administration, diplomatic corps, military commanders) were subjected to public sector's unitary paying and their allowances were also cut (Law 4093, 2012) saving 264,1 millions for 2013 (Law 4127, 2013). Remunerations of elective personnel in local administration were also agreed to be 50% reduced and the representation expenses were also completely abolished (Law 4093, 2012).

In addition, the public sectors pensions that were paid simultaneously with the other remuneration were 70% cut (Law 4093, 2012). The second main pensions had to be cut about 20-30%, according to the level of the pension (Law 4093, 2012). All the pensions higher than 1000 euros were to be cut 5%, higher than 1500 euros were to be cut 10% and higher than 2000 euros were to be cut 15%. The 13th and 14th pensions were abolished (Law 4093, 2012). Furthermore, all the pensions received, from the ETEA fund, by ex unionists were also to be abolished unless this was the only pension received (Law 4093, 2012).

The retirement age was raised by two years and the EKAS (allowance for the low pensioners) agreed to be received after the age of 65 (Law 4111, 2013). Moreover, the retirement lump sum, was to be cut from 2%, for the metal workers, to 63,91%, for the employees in pharmaceutical work (Law 4093, 2012). The retirement lump sum received from 2014 and on, would be reconsidered in a new technical base (Law 4093, 2012) according to the sustainability of the funds. Pensioners who received their retirement lump sum after 1995 were to be burdened with a 3% tax on their basic pension (Law 4093, 2012).

All insurance contributions, for those been insured before 1993 were raised (Law 4093, 2012). This would generate some 608 millions (Law 4127, 2013). Social allowances of uninsured elders were cut from 30 to 50 euros, depending on the value of the property they owned and the eligibility age raised to 67 (Law 4093, 2012). Special unemployment allowances were abolished preserving merely those for long-run unemployment with income less than 10.000 euros per year (Law 4093, 2012).

In the health sector the reforms continued for the mergence of all insurance funds into EOPYY- National Organization for Health Care (Law 3054, 2012). The promotion of generics was to be achieved by the medicine prescription according to the active substances and not certain medicinal products (Law 4052, 2012; Law 4093, 2012; Law 40172, 2013). The claw-back was established at 2,4 millions for 2013 and also the institutional context for this mechanism was to be set (Law 4093, 2012, Law 2045, 2013). Moreover the function cost of the public hospitals would be reduced at 29,3 millions for 2013 and the implementation of the new healthcare map would reduce 36 millions the hospital expenses (Law 4093, 2012; Law 4127, 2013).

The public education was subjected to 24,3 millions cuts through the mergence of various university departments or closures (Law 4093, 2013; Law 4127, 2013, Law 129, 2013). In addition through the reduction of the collateral academic staff another 8,9 millions would be saved (Law 4127, 2013). In the secondary education the reduction of the non-regular staff would be achieved by the increase of the teaching hours in order to save 41,2 millions (Law 4127, 2013). Other cut expenses related to the education provision were amounted at 62,1 millions.

On the other hand lifelong learning was legislated though the changes implemented in the institutional context for the establishment and operation of the private educational institutions (Law 4093, 2012; Law 4111, 2013). The Law 3696 (2008) was abolished in order to settle the private colleges as institutions of higher education (Law 4093, 2012). These regulations were part of the market empowering plan that was integrated by a series of reforms.

In addition the Law 4046 (2012) was complemented by the regulations referred to the formation of the basic salary in the private sector. Therefore, for the employees above the age of 25 the basic salary was fixed at 586,08 euros, for the employees under the age of 25 the basic salary was fixed at 510,95 euros and also the amounts of wage increases according to the yeas of previous employment were settled (Law 4093, 2012).

Moreover, the employer is obliged to inform the employee for its dismissal from 1 to 4 months period before, depending on the years of employment (Law 4093, 2012). In any other case, the employer is enforced to pay the redundancy compensation, which is also calculated according to the years of employment and varies from 1 to 12 salaries (Law 4093, 2012). The overtime is considered as part of the regular working hours if does not exceeds two hours per day and 120 hours per year (Law 4093,2012).

In addition, the Law 4093 (2012) introduced legislative intervention to remove the restrictions that still exist in the professions of auditors, consultants and accountants, temporary employment agencies, real estate agents, actuaries, tourist guides, dockers, private providers of primary health services, customs agents, owners of kiosks and canteens in public spaces, tourist agencies, primary and secondary private schools, foreign language schools, vocational training institutes, post secondary education training centers and press distribution agencies.

As far concerns trade the minimum space requirement to permit the sale of food was repealed. General stores were allowed to sell other products apart from food subject to sanitary conditions. Supermarkets were also allowed to sell prepackaged meat, cheese and fish products for infants. The markets working hours for the employees, as defined in Law 1037 (1971), were detached from the operating hours of the businesses. The "breaking" of the shift is allowed for all retail outlets, including those operating in continuous time. The transport of perishable goods in public use trucks agreed to be operated under the same conditions with trucks of private use (Law 4093, 2012).

Tickets of OASA-Athens Urban Transport Organization and OSE TRAINOSE-Company of Railway Services Provision were increased to 25% (Law 4093, 2012). DEI- Public Provision of Electricity tariffs were to be increased as well in the beginning of 2013, excepting merely the vulnerable social groups. The salaries of DEI were planned to be reduced, as the Greek government had to compare the total compensation of DEI- Public Provision of Electricity employees with 'best practices' of other European companies producing and distributing electricity. The changes promoted in OASA, OSE and PPC were part of a program for the restructuring of DEKO- Public Companies for Common Wealth, of 132 millions total value (Law 4127, 2013).

All these done, Greek government would conduct a plan for the restructuring of DEI-Public Provision of Electricity intending to prepare PPC for its privatization and to make it competitive compared to other companies in the deregulated electricity market (Law 4093, 2012). The target for privatizations was revised at 25 billions introducing in the program the states properties in the area of Elliniko and Marousi (law 4093, 2012). Moreover the Program of Public investments would be 300 millions reduced, and stabilized at 6,8 billions for 2013 (Law 4127, 2013).

Another major sector in the revenue side is the tax reforms. Therefore, according to the

Law 4172 (2013), the taxation of the self-employed (freelancers and sole proprietorship) increased by revising the tax rate and the criteria that form the taxation. Moreover, the tax base broadened by removing tax deductions of mortgage interest, house rents and insurance premiums (Law, 4172, 2013). The scale in the income tax (38%, 40% and 45%) was abolished and substituted by a unitary weight of 35% (Law, 4172, 2013).The solidarity levy was customized and extended until 2018 (Law, 4172, 2013). It was also agreed to form a single tax rate for corporate profits at 35% in order to be aligned with the maximum tax rate of the individuals income tax bracket (Law, 4172, 2013). The overall tax system reform was expected to collect about 23 millions for 2013 and another 825 millions until 2015 (Law 4127, 2013).

The presumptive taxation of farmers was repealed and replaced by a single income tax rate of 6% on the actual income verified by the account books and records (Law 4172, 2013). The reduction in the tax refunds and in the subsidies of petrol's excise duty of the farmers would save 152,1 and 129,5 millions, respectively (Law 4127, 2013). About 237 millions would be gained from the increase of the tax on deposits' interest from 10% to 15% (Law 4127, 2013).

Other measures that targeted to increase revenues by tax implementation are the fee for the legal action that aimed to collect a 50 millions annually, the rise in tobacco excise duty saving at the same time 186 millions (Law 4127, 2013). Moreover the reform in the ships' taxation according to their capacity would generate some 80 millions (Law 4127, 2013).

The greater reforms derived from the third memorandum are related to the changes in the legislative context that ensures the permanence of employment in the public sector. The commitment of the Greek government to minimize the public sector in order to become more flexible and efficient required the dismissal of 150.000 public servants by 2015 (Law 4093, 2012). These numbers would arise from the public personnel's retirements and closure of inefficient or damaging public corporations and bodies.

In the later case the staff of the closed down public services would be introduced into a program of 'labor mobility' that affects 2000 employees in 2012 and another 25.000 in

2013 (Law 4093, 2012; Law 4127, 2012; Law 4172, 2012). The program involves the labor's reserve for maximum one year until another position in the public sector would be available, receiving at that time the 60% of the wage (Law 4093, 2012; Law 4127, 2012; Law 4172, 2012). In any other case the employment would be automatically dismissed (Law 4093, 2012; Law 4127, 2012; Law 4172, 2012).

3.4 A synopsis of the four-years austerity measures

In this section will be examined how the austerity measures that derived from the memoranda's legislation were reflected in the annual general government's balance sheets. In this sense, there will be a comparison between the planned performance and the occurred one by featuring the revenue and the expenditure accounts, their shortcomings and the cases that exceeded the targets. Linking the performance with the measures set will assess this effort.

As discussed in the previous chapters, the first memorandum and the succeeded legislation set upward revised targets related to the revenues and limitations in the expenses of the state budget. However, for a series of reasons -referred to underestimating the dynamics of the Greek grey economy and fiscal multipliers, domestic and foreign political unwillingness and incompetence- targets considered being incompatible with the Greek reality. As already mentioned, another two memoranda followed, with collateral measures, in order to revise the deviations from the original program.

The annual targets and attainments as described in the state budgets and reports are illustrated on the table bellow, accompanied by the percentage of their accomplishment.

2010	ATTAINMENTS	% of Accomplishment	2011	ATTAINMENTS	% of Accomplishment	2012	ATTAINMENTS (estimation)	% of Accomplishment (estimation)	2013	ATTAINMENTS (forecast)	% of Accomplishment (forecast)

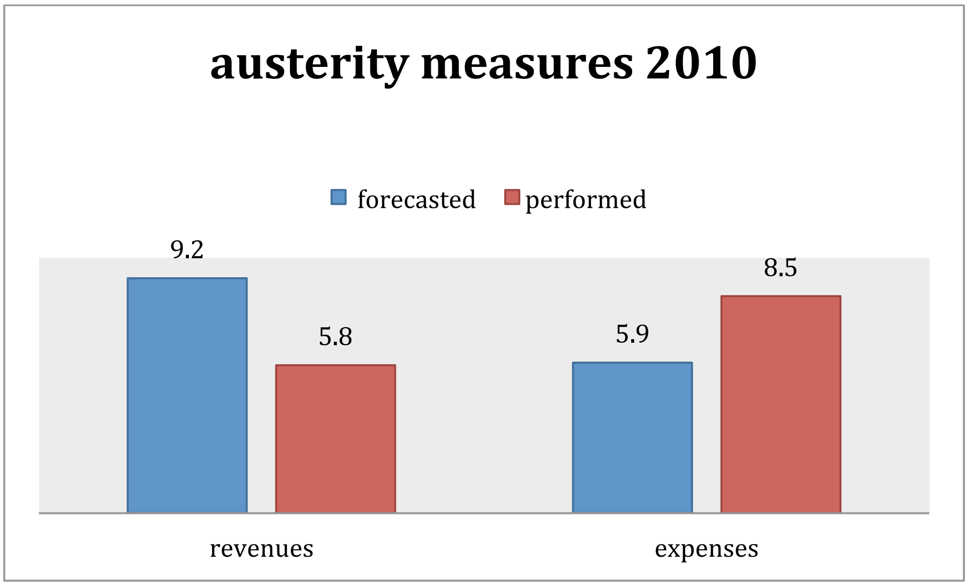
I. REVENUES	58382	53956	92.42%	59482	55263	92.91%	56159	52393	93.29%	51458	51863	100.79%
1. REGULAR BUDGET NET REVENUES	55124	50856	92.26%	55560	51490	92.67%	51409	47706	92.80%	463321	46727	10.09%
2. REVENUES OF PUBLIC INVESTMENTS PROGRAM	3258	3100	95.15%	3922	3773	96.20%	4750	4687	98.67%	5136	5136	100.00%
II.EXPENSES	81010	77381	104.69%	80399	77885	103.23%	70297	68705	102.32%	62652	60307	103.89%
1. REGULAR BUDGET EXPENSES	71810	69098	103.92%	71839	71442	100.56%	62997	61855	101.85%	55802	53457	104.39%
2. PUBLIC INVESTMENTS PROGRAM	9200	8283	111.07%	8500	6443	131.93%	7300	6850	106.57%	6850	6850	100.00%
III. BALANCE OF STATE BUDGET	-18691	-23425	79.79%	-20857	-22622	92.20%	-14138	-16312	86.67%	-11194	-8444	132.57%
% GDP	-8%	-10.30%	78.60%	-9.10%	-10.85%	83.87%	-6.90%	-8.40%	82.14%	-6.10%	*No data*	*No data*
GDP	231000	227318	98.41%	228408	208,532	91.30%	206319	194003	94.03%	183049	*No data*	*No data*

Table 4: Comparison between 2010-2013 budgets
Source: Ministry of Finance (2012a; 2012b)

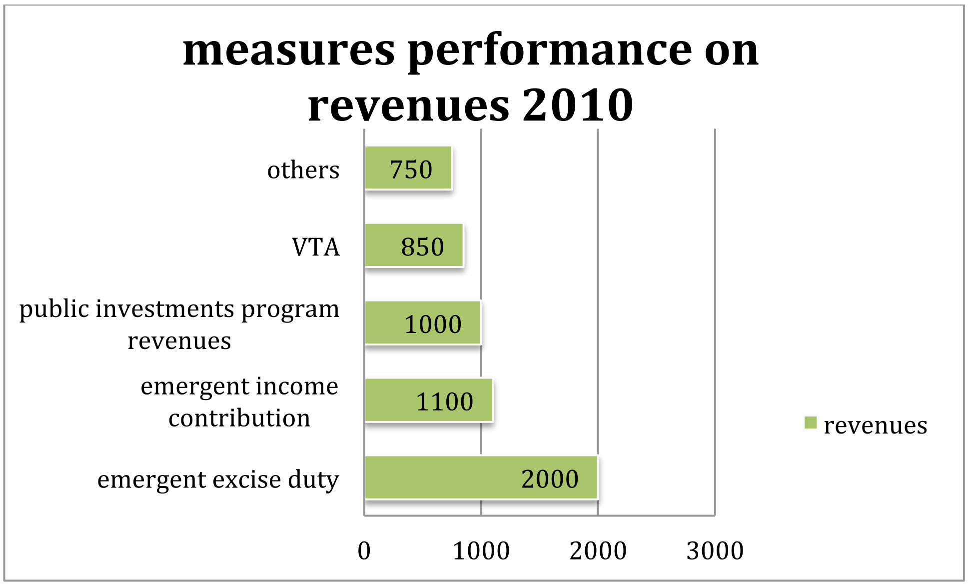
The budget of the year 2010 was conducted before the implementation of the package of the austerity measures that were required for the finance agreement between the Greek government and Troika. However, the budget of the year 2010 that was confirmed on December of 2009 was completely circumvented by the implementation of the bailout program and its macroeconomic context (OEE, 2010). Moreover a revised budget in compliance with the emerged economic milieu was never structured, as it should be according to the Law 2362 (1995) (OEE, 2010).

The first memorandum aimed to generate a favorable economic milieu for starting up and developing entrepreneurial activities, drawing investments and promoting exports (Preliminary Draft of 2011 Budget, 2010). Moreover the program targeted at the absorption of EU structural funds, reform of public procurement and public supply, employment enhancement though the provision of incentives, market liberalization and rationalization of the public bodies function (Preliminary Draft of 2011 Budget, 2010). These targets were formed in the revision of the 2010 budget upgrading the initial plan. However, it was more than certain that the negative conditions of the Greek economy would not assist achieving the over-optimistic targets that were already set by the initial budget forecast (TEE, 2010).

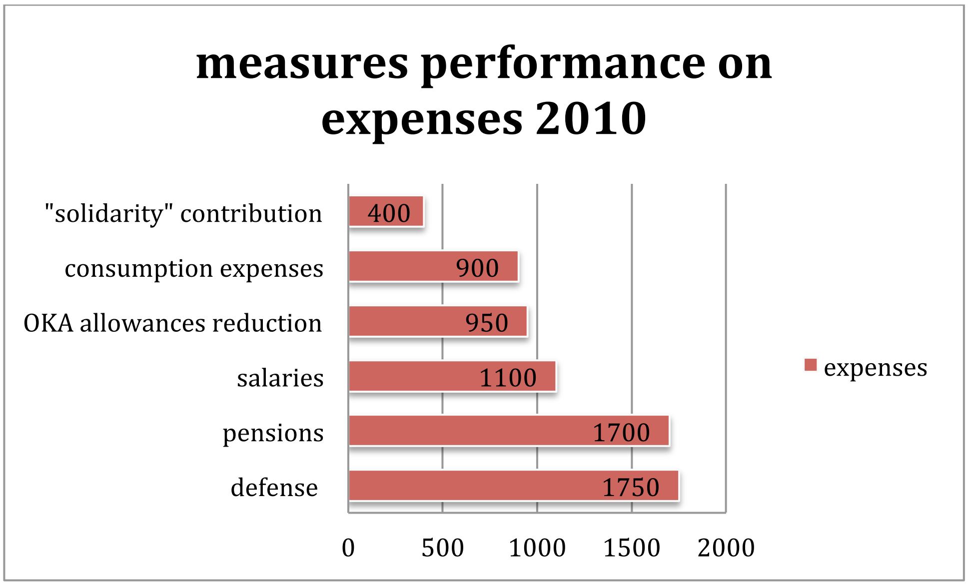
The performance of the implemented measures is depicted in the figures bellow.



Graph 5: Amount of revenues and expenses measures, forecasted and performed
Source: Ministry of Finance (2010)



Graph 6: Measures performance on revenues
Source: Ministry of Finance (2010)



Graph 7: Measures performance on expenses
Source: Ministry of Finance (2010)

The direct taxes underachieved creating a gap in the revenues that was partly covered by the raise of the indirect taxes. Therefore, the expansion of the direct taxes' coefficient did not have a positive linear effect on the revenues. The reduction of the economic activities caused by the pro-cyclical policies implemented restrained the income levels that did not managed to achieve the direct taxes' targets (OEE, 2011).

In the expenditure side of the regular 2010 budget, salaries and pensions that are considered as inelastic spending held the greater part. The bigger reduction in the public expenses was executed in the sector of the social provision while the expenses related to the interests payment increased by 8% compared to 2009 (OEE, 2011).

As far concerns Public Investment Program, great reductions compared to former years were also occurred. Although, spending in this sector is assumed to create a counter-cyclical trajectory that may put the economy on a possible development plan (Maraveyas, 2013). The cuts in the Public Expenditure Program enhanced the recession pattern and contributed in the reduction of GDP further than the one forecasted. However, according to IMF's Third Review On Stand-By Arrangement (2011a) the annual 2010 budget that was formed according to the implemented economic program was executed sufficient well. The shortcomings observed are referred to issues of time delays, tax mechanisms inefficiencies and privatizations underachievement (IMF, 2011a).

The performance of the 2011 Greek economy was based on the reforms of the first memorandum and the revision of the economic targets as been declared in the mid-term plan of 2011 summer. 2011 economic plan was implemented in a context of severe recession. Therefore, as been mentioned in the fifth report of IMF about the Greek economy's performance (2011b) audits in revenues that come from large taxpayers and high-wealth individuals have fallen behind schedule. Also, reforms for removing barriers in order to make effective the tax administration were also behind schedule. The revenues from direct tax collection were reduced compared to 2010 attainments and 2011 forecast. The expansion of the tax base and the changes in the taxation criteria for the freelancers predicted an increase in the revenues of income taxes that was not eventually accomplished. On the other hand the direct taxes on property exceeded the set targets due to the implementation of the emergent tax through DEI bills (Ministry of Finance, 2012b)

Indirect taxes were also underachieved by 12.97%, which is attributed to VAT, transaction taxes, indirect consumption taxes and custom taxes (Ministry of Finance, 2012b). On the contrary, non-tax revenues increased over the forecast's targets due to including revenues from the forfeiture of guarantees in the budget, the sale of non-listed companies, the assigning of licenses and royalties of the public sector, the reserve of the Deposit Fund inclusion and the "Response To The Financial Crisis" project (Ministry of Finance, 2012b).

Public Investments Program revenues were 3.8% increased. European Funds were the main funding sources of the program while the credit revenues were 74.22 % decreased compared to the forecast (Ministry of Finance, 2012b). The expenses of the regular budget diverged from the initial target by 19%, which is attributed to the increase of the loans service expenses (Ministry of Finance, 2012b).

Moreover, according to IMF's fifth report (IMF, 2011b) the privatization plans were advancing, but sales have been slow to materialize and the promoted structural reforms have not yet delivered the expected results, in part due to a disconnect between legislation and implementation. The latter is evident in issues related to

- Collective bargaining
- Liberalizing restricted professions
- Fast-track investment procedure (IMF, 2011b)

However the deficit behaved better than in the last year but still diverging from the initial target.

The budget of 2012 was revised according to the new memorandum on February 2012. The revenues forecasted to be less compared to the previous years budget expectations and the expenses were restrained even more. In addition, the overall balance would be increased and the primary as well. Moreover the Organizations of Social Insurance were expected to have a deficit in their accounts due to the limited revenues they were about to receive (Ministry of Finance, 2012a).

In more details the revenues received are bellow the total of revenues planned due to the recession that was greater than forecasted. The revenues from direct taxation were increased mainly because of the real estate taxation (Ministry of Finance, 2012a). The deviations from the targets observed are the outcomes of the extension of the period that tax declarations were submitted (Ministry of Finance, 2012a). Indirect tax revenues fell under the targets as also non-regular revenues did due to the transaction of public property to TAIPED (Ministry of Finance, 2012a).

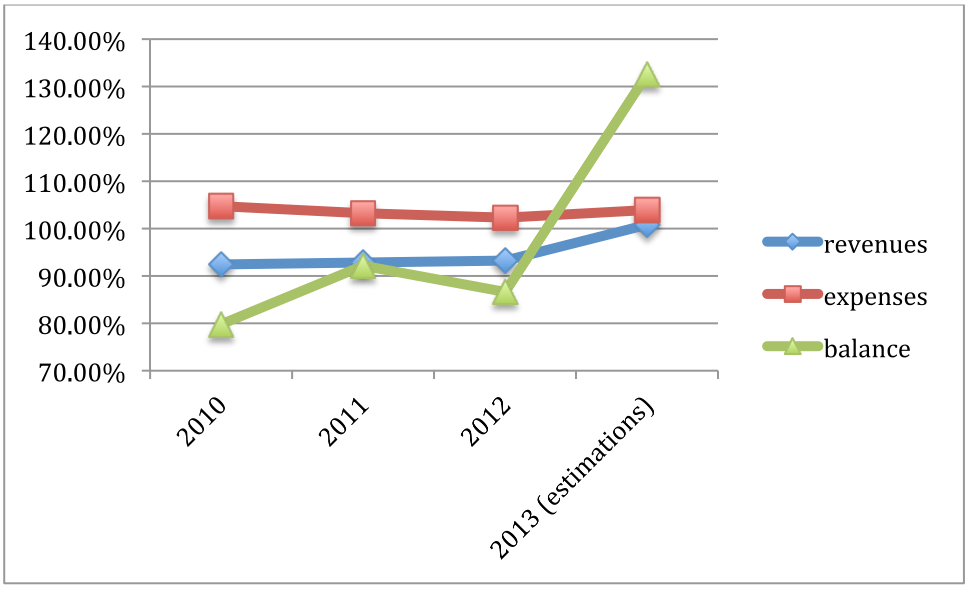
The expenses of the regular budget decreased due to the reduction of the defense expenses and the payments to health care institutions (Ministry of Finance, 2012a). Moreover primary expenses were also decreased due to the reduction of the labor cost in the public sector (Ministry of Finance, 2012a).

The so far published data in the July's 2013 newsletter of the budget execution provide that the process of revenues collection and expenses is close to the forecasted targets and may succeed even better performance by the end of the year (Ministry of Finance, 2013). However, according to a current report of IMF (IMF, 2013a) the overall financial arrangement is subject to many failures as the value of fiscal multipliers was initially underestimated. This led to later revisions that quadrupled them. Actually, as been stated in the 2012 World Economic Outlook (IMF, 2012) "the fiscal multipliers tend to be higher when household are liquidity constrained and monetary policy cannot provide any offset".

Moreover the position of IMF is empowered by the conviction that the divergence from the targets set is the outcome of delays and deviations in the implementation process from the program requirements as in the case of public servants' dismissals and privatizations (IMF, 2012 October). However, there is another position that assumes that the failures of the economic program promoted by Troika and agreed by the Greek government has inherent inefficiencies as it is based in pro-cyclical economic policies that deepen the recession. A significant example of this point is the cut provoked in the Public Investments Program, which is a main factor in the GDP function. Moreover, Public Investments Program receives even greater importance in times of economic crisis since it boost the weak economic activity. In addition the failures in the program of privatizations is attributed to the negative economic milieu, which derives by the unstable economic position of Greece due to the ever growing huge debt as a ratio to GDP and the fiscal adjustment mechanism that implements a series of austerity measures (Holland & Portes, 2012; Krugman, 2012b).

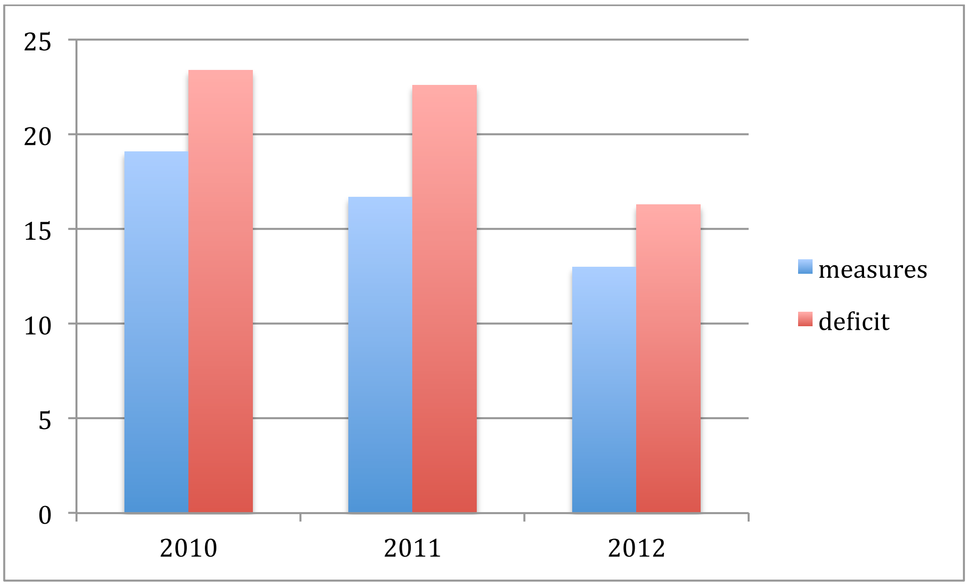
All different approaches about the deepening of the economic crisis convert to the point that the basic problem of the Greek economy is the weak productive base. Moreover, it is also argued that the reconstruction of the Greek production system was never part of Troika's economic program or constrained annual budgets since they used to follow a top-down approach rather than composing it with the requirements of a bottom-up one (OEE, 2010).

Therefore, it is crucial before proceeding in the section that analyzes the impact of the implemented to have an overall glance at the program trajectory. The deviations from the verified revenues of the yearly budget are 7% on average bellow the implemented targets. The loss derived from the revenues failures is replaced by the further cut in the state expenses, which are constantly overachieved. However, in the verified annual reports on the state budget, the divergence in the balance is always greater than the shortcoming of the revenues. On the contrary, according to the last published report on 2013 state budget, the revenues and the expenses recorded converge to the ones forecasted while state balance rises well above to the one predicted.



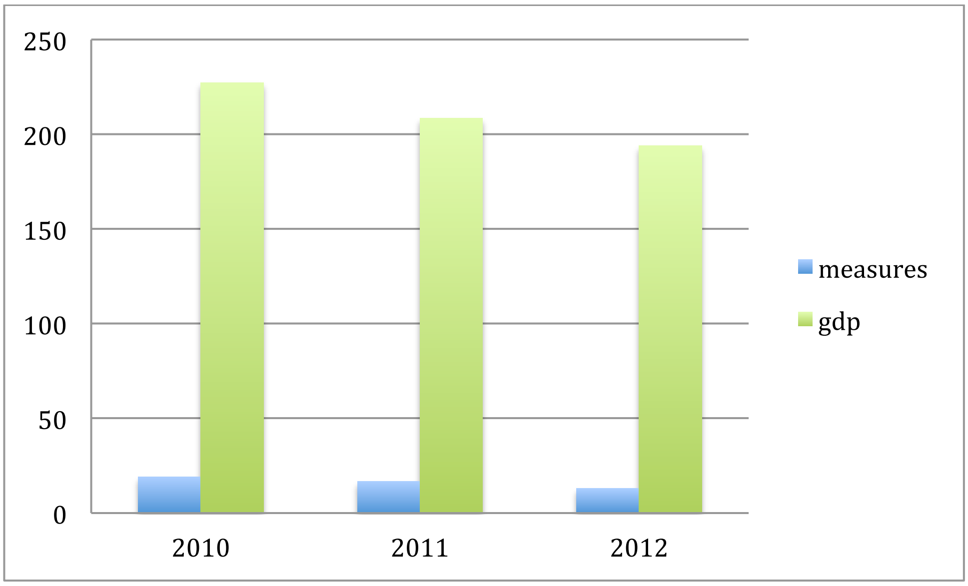
Graph 8: Deviations of the verified data from the planned ones
Source: Ministry of Finance (2013)

Another crucial comparison directly related to the implemented measures derived from the economic memoranda is the one between depicted in the following figure between the total amount of the austerity measures and the state deficit. As it seems in the last three years, as confirmed by the annual reports, the state deficit is constrained. Moreover, it is observed a common tendency between the balance of the state and the total amount of the implemented austerity measures.



Graph 9: Comparison between measures and deficit
Source IMF (2013a)

Additionally, the deficit reduction provoked by the economic programs' requirements came along with the reduction of the Greek GDP signifying that although the implementation of the austerity measures was frontloaded the decline of GDP became more intense in recently.



Graph 10: Comparison between measures and GDP
Source IMF (2013a)

3. Gauging the efficiency of the memoranda in a macro-economic context.

The economic crisis burst in the US real estate sector, due to the provision of high risked mortgages, was initially assumed to be constrained in US economy and the economies were linked to it. However, the great instability caused in the financial markets, unleashed the profit seeking market actions. Suddenly, investors who were thankful for purchasing "Greek debt at more or less the same yield as that of Germany and other countries demanded substantially higher interest rates to hold Greek government bonds" (Theodoropoulou & Watt, 2011). As well, banks adopt the same behavior and acted as investors that "rushed to dump Greek assets, threatening the banking system, not only in Greece but also Europe-wide, with a renewed crash" (Theodoropoulou & Watt, 2011).

Therefore, the increasing transaction of CDS led to an unsustainable debt, which was over 100% of GDP for the last twenty years (Christodoulakis, 2011) that forced a sudden turnaround from stimulus to austerity in the spring of 2010 (Theodoropoulou & Watt, 2011). Issues relevant to European delay and unwillingness, Greek incapacity and long-run structural inefficiencies in the economy and administration, and the inherent attributes of European architecture conclude to the first memorandum between the Greek government and the EU, ECB and IMF, also known as Troika.

In this chapter will be discussed the effects in the Greek economy in the post-2010 period, derived from the implied austerity measures of fiscal consolidation and structural reforms in the Greek economy. The measures taken were part of a very strict program that decided by the EU, ECB and IMF and agreed by the Greek government in three memoranda so far. These programs are blamed for following a pro-cyclical rather than counter-cyclical trajectory in the economy. Therefore, this approach is fundamental in order to understand the reasons that deepened recession in Greece. It is also a crucial assessment for further research on the possible policy responses to combat recession and find a way out.

3.1 The Greek deficit and debt.

As it is already discussed the crisis in the Greek economy burst after the dispute of Greek Statistical Authority on the validity of deficit measures, on October of 2009. Soon after the revision of the economic data revealed that the deficit was significantly higher than was initially premised. Namely, the revision proved that the deficit was 15.4% of GDP instead of 13.6%. This increase was in line with some 36.15 million that derive from taking into account the deficit of the public corporations, the adjustment of the accounts of Local Administration and Social Insurance Organizations and the reduction of 2009 GDP.

The modification of the deficit concluded to the revision of the government's debt as well. Therefore, the debt was increased to 298 billions or 126.8% of GDP. This signified a 11,4% increase compared to the 115,4% that was originally estimated. The magnitude of the deficit, which was accompanied by a huge debt made the burden of the Greek economy no longer viable. In the neo-classical economics the deficit and the debt reflect the state of economic instability (Tsakalotos, 2010) that were actually over the threshold of 3% and 120%, respectively. Thereafter the markets speculations put pressure on Greek bonds and incited issues related to Greek liability on debt service (Stathakis, 2010).

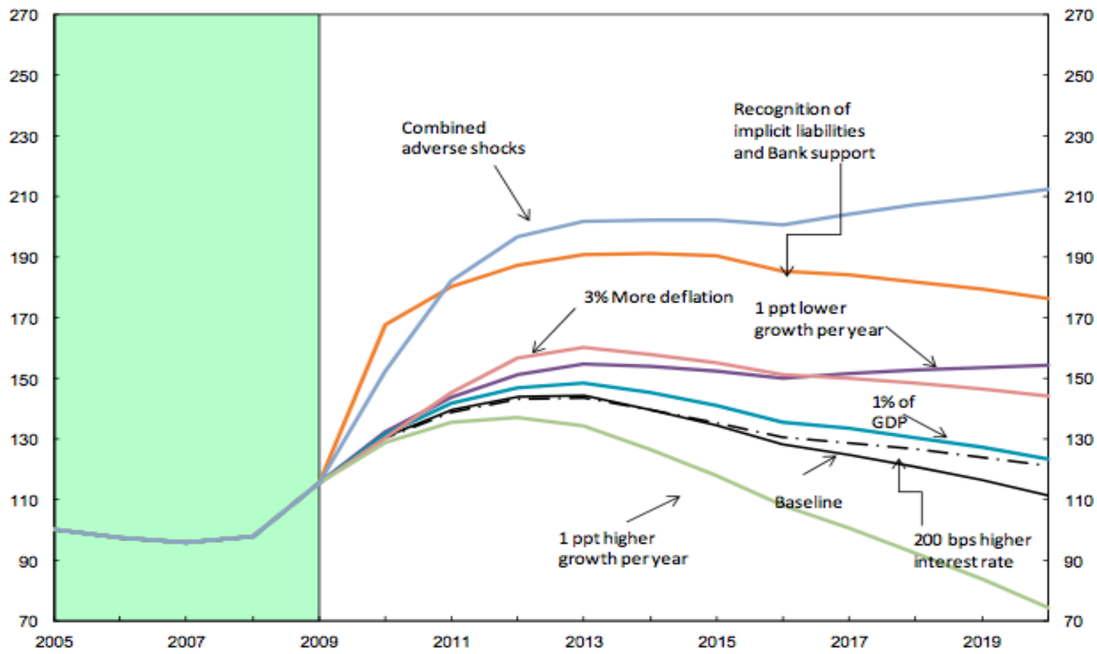
Therefore, it is crucial for the present assessment to examine the way deficit and debt, as the substantial accounts of the economy, behaved under the stretch of the rescue packages' implementation. The Greek economy along with the intertemporal inefficiencies, underwent the paradox of the insistent excessive deficit and debt albeit the implementation of a series of contractive fiscal adjustment programs since the accession in the Euro area (Stathakis, 2010).

In brief, the stabilization programs of 1985-87, 1990-93, 1996-2000 and 2005-2007 never managed to counter the root causes of macroeconomic imbalances and inclined steadily to the 2009 outburst.

Graph 11: Evolution of the Greek debt and deficit until the time of the crisis
Source: Ameco

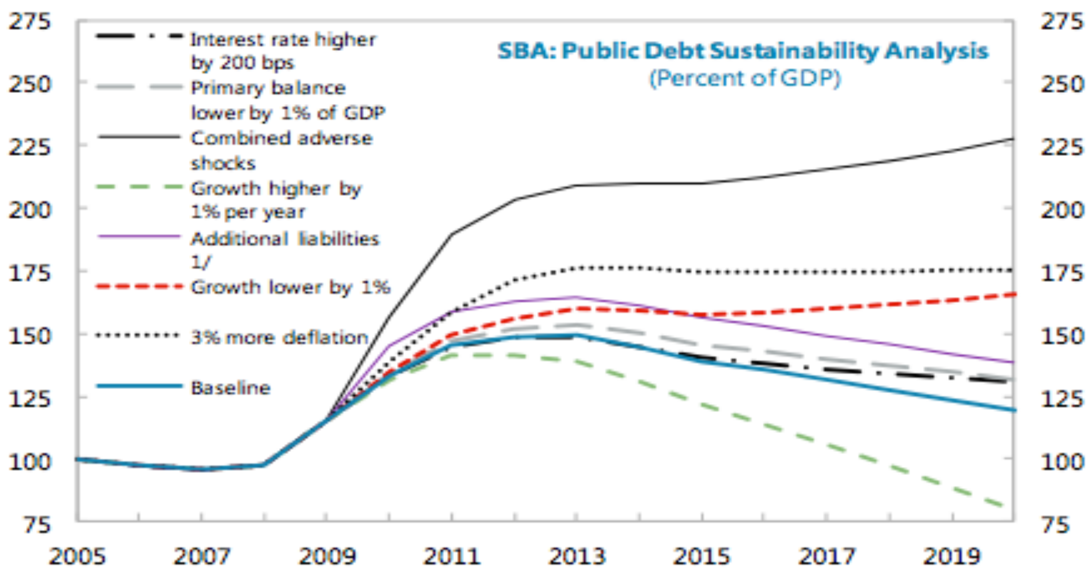
Apart from the short period that coincided with the joining in the Eurozone and the post-Olympic Games period, the tendency of the deficit was always following the ever-growing trajectory of the debt. In order to understand the behavior of the macroeconomic accounts, with respect to the measures of austerity that were set in the post 2009 period, it is mandatory to decompose the structure of debt and deficit and analyze their interdependencies.

The basic macroeconomic definition for the debt of a country involves all of the public sector liabilities including all levels of government of a state: government, regions, municipalities etc. The extraordinary high levels of Greek debt tried to be limited by the first rescue pack confirmed by the Greek parliament on May 2010. The initial plan of the Greek debt progress is spotted in the following figure, which is demonstrated in the First Review Under the Stand-By Arrangement (IMF, 2010). The baseline represents the initial expectations adjusting its trajectory in case unplanned events occurred.



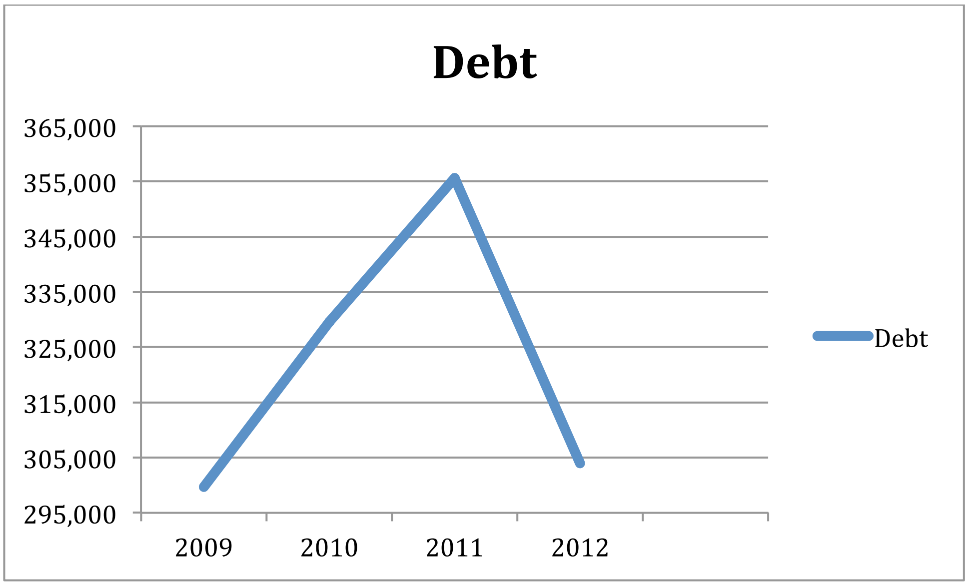
Graph 12: Public Debt Sustainability Analysis-a (in percent of GDP)
Source: IMF (2010)

However the initial expectations about the trajectory of the Greek debt were revised upward in the Ex Post Evaluation of Exceptional Access under the 2010 Stand-By Arrangement (IMF, 2013a).



Graph 13:Public Debt Sustainability Analysis-b (in percent of GDP)
Source: IMF (2013b)

On the contrary, the Greek public debt as an absolute number reflects a steeper trajectory in the turning point of the curve, as it seems in the figure bellow.



Graph 14: Debt in absolute terms
Source: PDMA (2013)

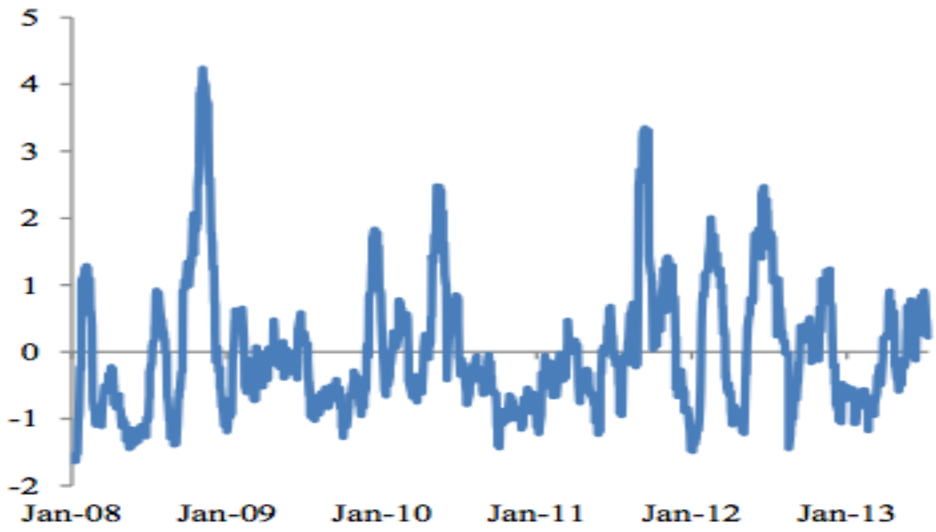
This is due to the 2012 PSI of 50% in the Greek bonds that was agreed in the European Summit in October of 2011. The impact expected initially was counted at about 100 billion since the loans from Greece's financial partners, bonds holding by ECB, Treasury Bills and Securitized loans –the official sector- were excluded from the deal. However, the haircut provided severe costs that had to be compensated through the recapitalization of the banking sector and Insurance Funds and remittance for the losses in the Bank of Greece and in various insurance corporations (SEV, 2011). Albeit the Greek PSI reduced the Greek debt by 87 billion (Ministry of Finance, 2012), there was a vivid discussion about the inadequate outcomes of that option of debt operation.

First of all the PSI failed to achieve the initial target of 100 billion debt reduction. This is maybe due to mis-estimations in the amount of bonds held in the banking sector, which after the first announcemnt for a Greek PSI in 2011 summer made a haste to buy Greek bonds sold at 30% of their nominal price (Varoufakis, 2012)[1]. Moreover, excluding the debt of the official sector, the debt haircut had very little to contribute in making the Greek debt sustainable, since it could not reach levels under 120% of GDP. Therefore, an OSI is suggested as a more viable solution towards debt sustainability (Barrionuevo et al, 2012). In addition, the issuance of jointly and severally issued

[1] This means that any haircut in the bonds smaller than 70% would be profitable

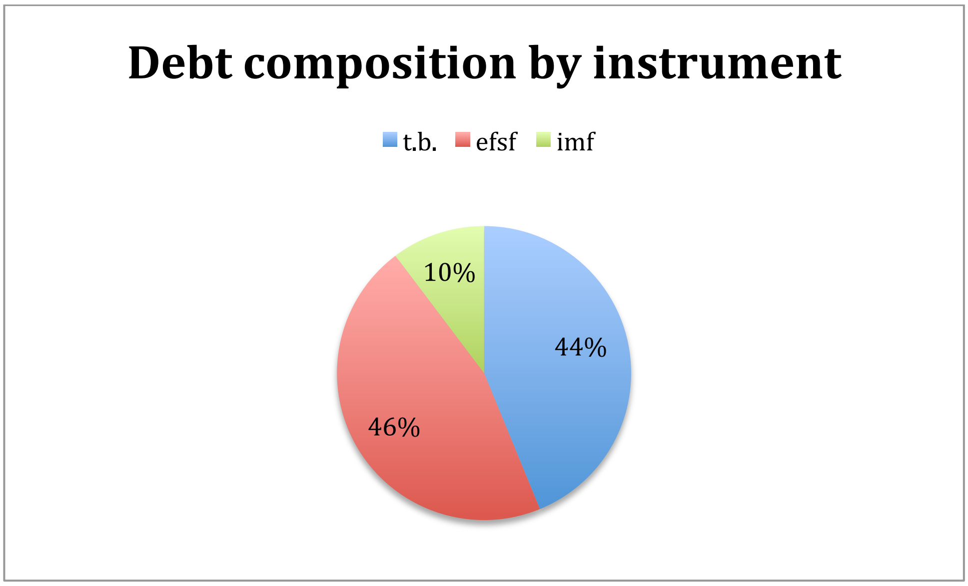
eurobonds could surpass all kinds of shortcoming derived from such an operation, but Germany would not let this happen (Varoufakis, 2012)

Furthermore, the PSI did not manage to restore credibility (see figure bellow) in the Greek economy. On the contrary, it provoked a circle of increased anxiety for further instability and low trustworthiness that discourage investment. This fact is also verified in the high interest rates, that despite their reduction, they remain in high levels (Ministry of Finance, 2012) that imply fears of a possible default.

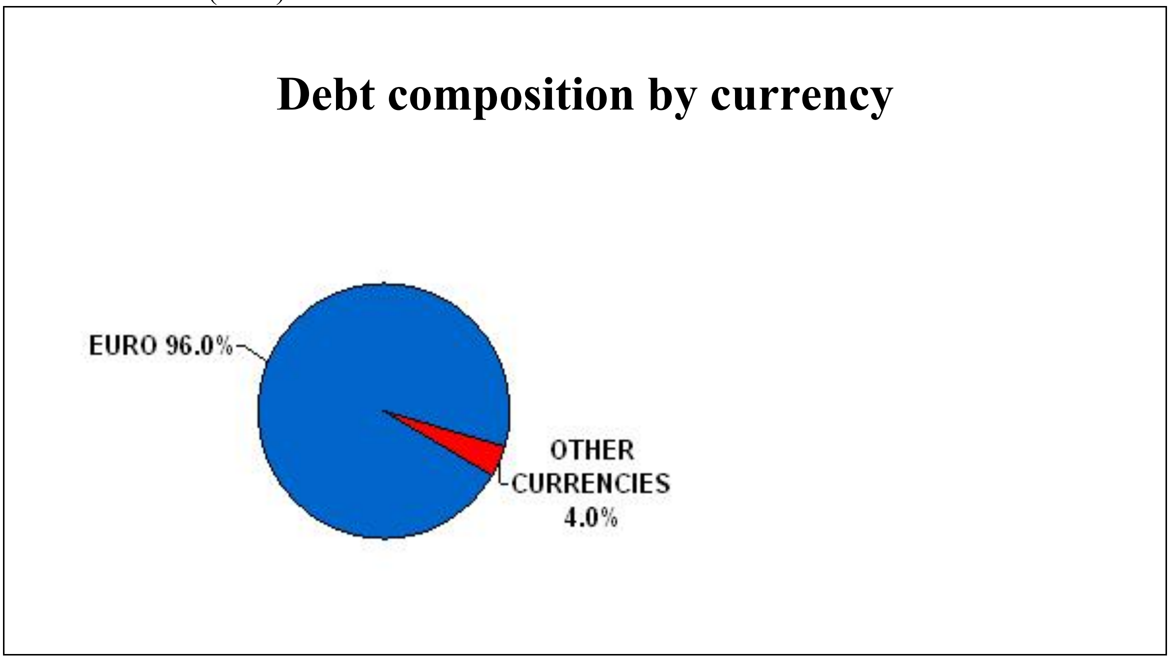


Graph 15: Greek credibility
Source: European Commission (2013)

The composition of Greek public debt at the moment is heavily relied on EFSF loans and treasury bills according to data derived from the Public Debt Management Agency (PDMA, 2013). Although the greater part of the debt is obtained in euros, it is considered as foreign debt. This fact implies that in case of absence of inherent asymmetries in the architecture of the monetary union, the magnitude of Greek debt crisis could be constrained to some level.



Graph 16: Debt composition by instrument
Source: PDMA (2013)

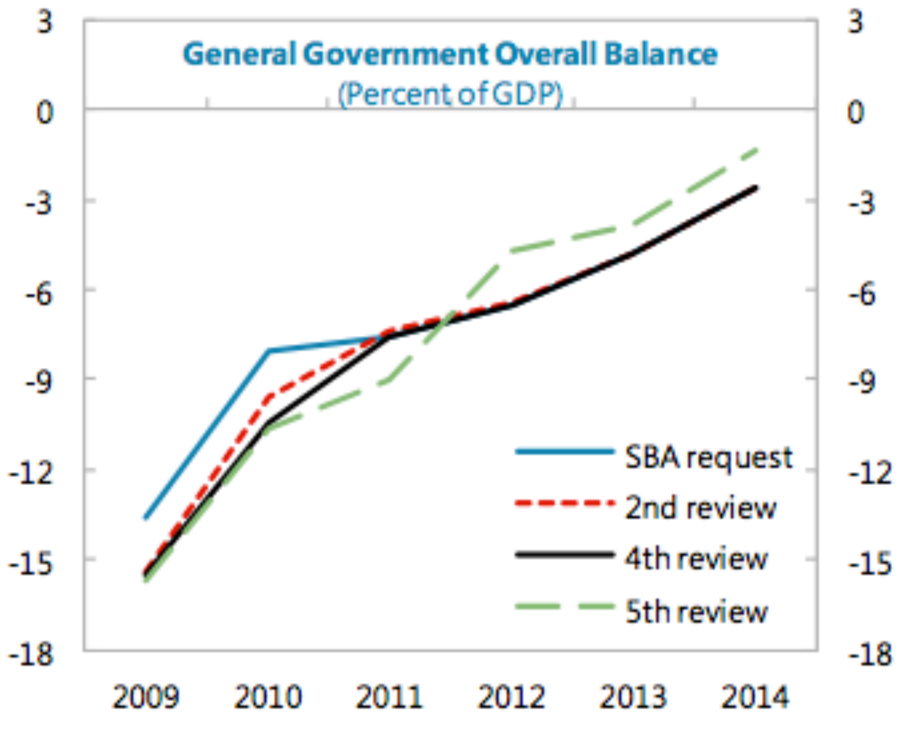


Graph 17: Debt composition by currency
Source: PDMA (2013)

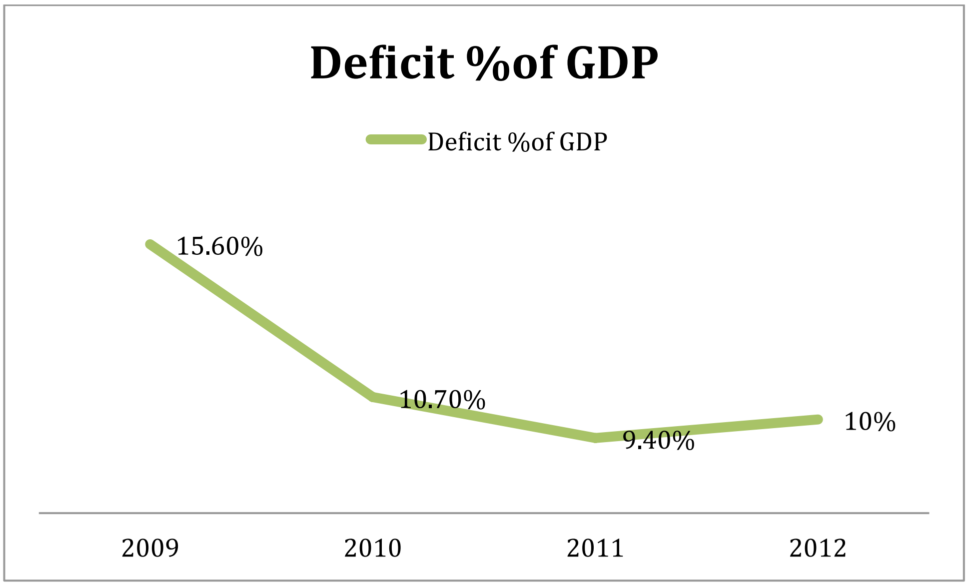
The progress of the debt reduction is depending on the progress of the deficit. Therefore, the permanent positive rates of Greek deficit forced the debt, as expected, in incredible high levels. This trajectory assumed to be interrupted by the implementation of a program of fiscal and economic consolidation in order to make the Greekdeficit constrained and the Greek debt viable. The main identity of public deficit implies that deficit is the sum of domestic savings, state annual budget balance and current account balance.

The contractionary economic policy followed targeted primarily in limiting the centrals government's deficit, suppressing budget and current account deficit. This policy temporarily would increase Greece's foreign debt due to the loans received but as mentioned before, in the mid-term the debt was expected to be sustainable. The debt would return to the previous levels after the stabilization of the deficit and restore the national credibility in order to be likely for Greece to borrow from the markets without Troika's support.

Debt increase rebutted the initial projections, due to matters related to the greater recession than expected, which will be analyzed later. However, the deficit progressed closer to the original targets without having great revisions in the original forecast. Yet, after 2011 the deficit declined in a higher pace than expected.



Graph 18: Public Deficit Sustainability Analysis (in percent of GDP)
Source: IMF (2013a)

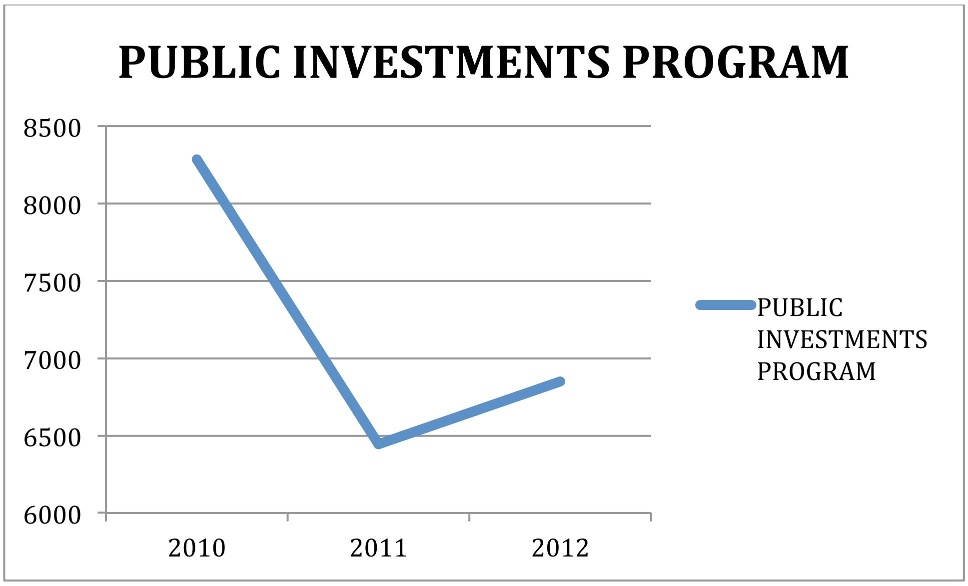


Graph 19: Deficit as % of GDP
Source: PDMA, (2013)

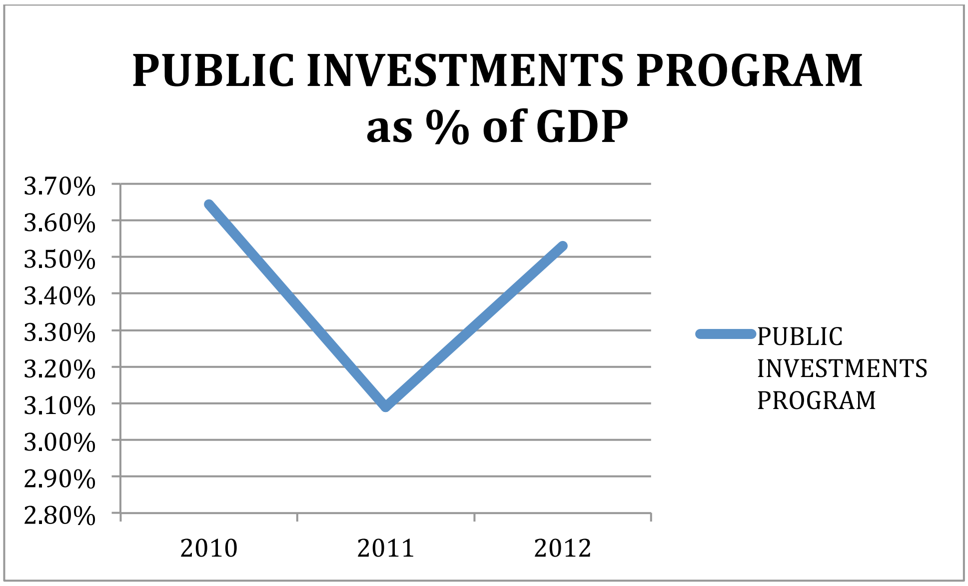
The deficit of the state annual budget, compromised the lack of growth, as reflected in the collection of revenue, simply by expanding the cuts in the public expenses in order to remain in the context of the targets set. This act was inevitable, since the accomplishment of the Troika's requirements about the level of the budget deficit were indisputable as they occured the pre-conditions for the disbursement of the loans payments.

Therefore, the austerity measures implemented did not manage to meet the problem of Greek budget deficit that is summarized in the stagnation of revenues (Tsakalotos, 2010) but assisted in preserving the problem by setting inflexible quantitative targets. This fact sets under question the sustainability in the revenue-less reduction of the deficit.

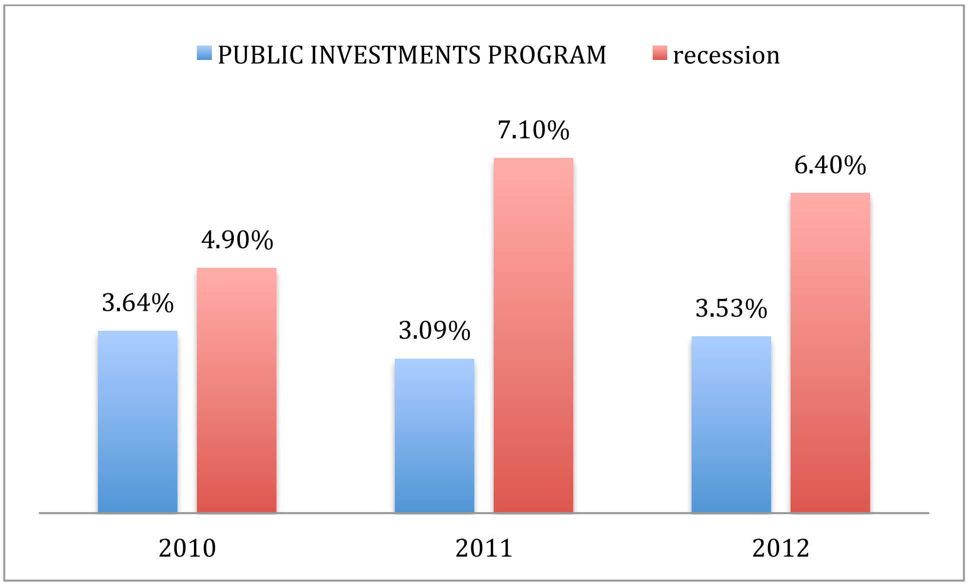
According to N. Roubini (2004) the solvency of one state's economy is depending on the size of the deficit compared to GDP and whether the reduction occurred due to the public investment cuts or not. Hence, it is preferable to preserve a deficit that finances long-run domestic investment because it construct a solid base for national productive capacity and also enhances its competence to service the debt in future times (Roubini, 2004). The cuts in the Public Investment Program were severe in absolute terms but as a GDP ratio had smoother adjustments remaining in inversely proportional to the negative growth rates.



Graph 20: Public investment in absolute terms
Source: Ministry of Finance (2012b)



Graph 21: Public investment as a% of GDP
Source: Ministry of Finance (2012b)

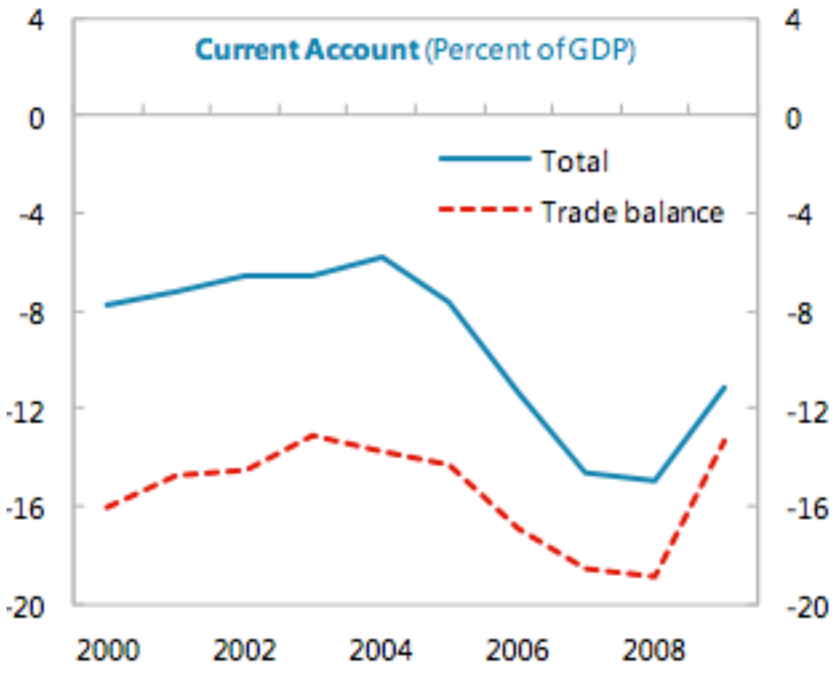


Graph 22: public investment compared to recession
Source: Ministry of Finance (2012b)

Frieden et al (1998) suggest that the combination of mild monetary relaxation with a tax rate hike is the optimum option for a sustainable deficit reduction if an absolute monetary relaxation or unsustainable degrowth of opponent economies are not an option. Coenen et al (2012b) state that if the burden of the deficit service is transferred to household through tax increase will have a more modest effect on the output. However, this should be planned under the estimation of Laffer curve effect. This means, that if tax revenues are not adequate, maybe a tax rate increase is not the solution.

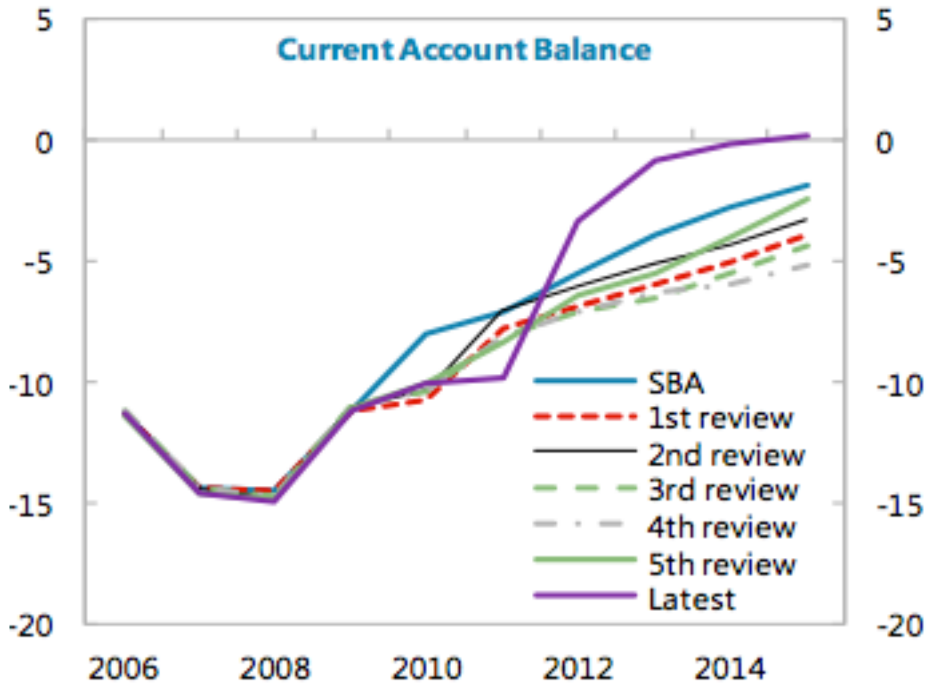
Indeed, as been several times mentioned, there is a severe Greek incapacity in the collection of tax and in the construction of a solid tax system. Until the time of writing, tax administration is incapable of confirming and clearing more than 15% of tax declaration, bringing additional delays in the revenues collection. Additionally the Greek grey economy of one year is estimating on dozens of billion. Consequently, maybe a more viable solution for deficit decline is the reform of taxation and public administration system than implementing multiple times higher tax rates.

Another issue of interest in the discussion of deficit reduction is the study of the current account balance. The current account balance indicates whether an economy is in deficit or in surplus by estimating the trade balance in goods, services or latent economic flows. The deficit in these accounts is balanced by burden the financial account balance (Polito & Wickens, 2013).

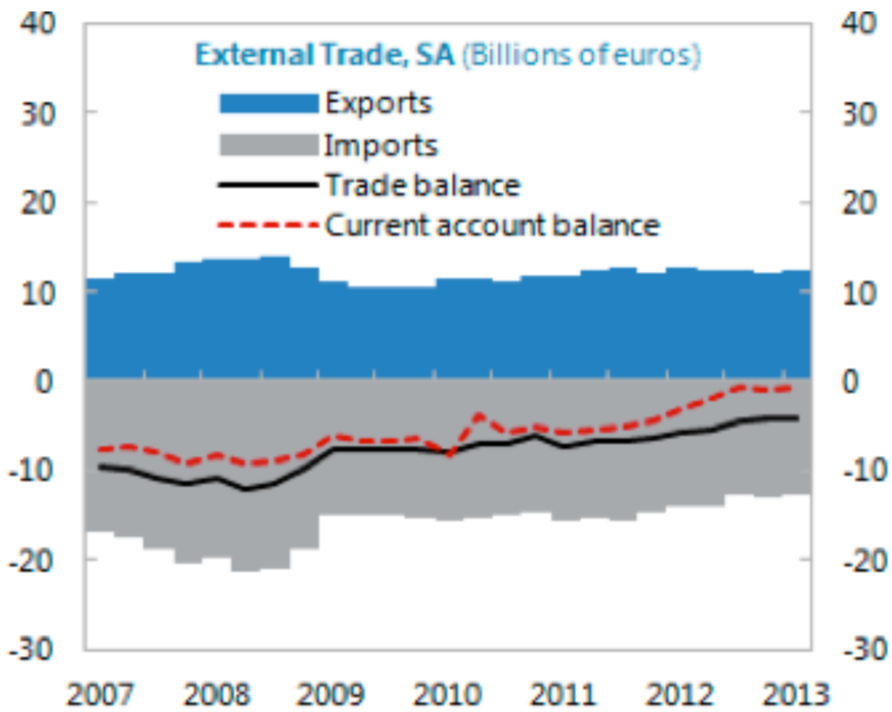


Graph 23: Current account balance
Source: IMF (2013a)

The austerity measures through the policy of deflation and domestic devaluation tries to narrow the domestic demand that affects the trade balance. The intertemporal Greek trade deficit contributed in the debt and was increase by foreign financial inflows since the domestic savings were inadequate to cover the internal needs for consumption and investment. The several projections about the progress of the current account balance were more pessimistic than the rates accomplished. However, the over achievement of the targets may derives from the great reduction in the imports rather than an adequate increase in exports.



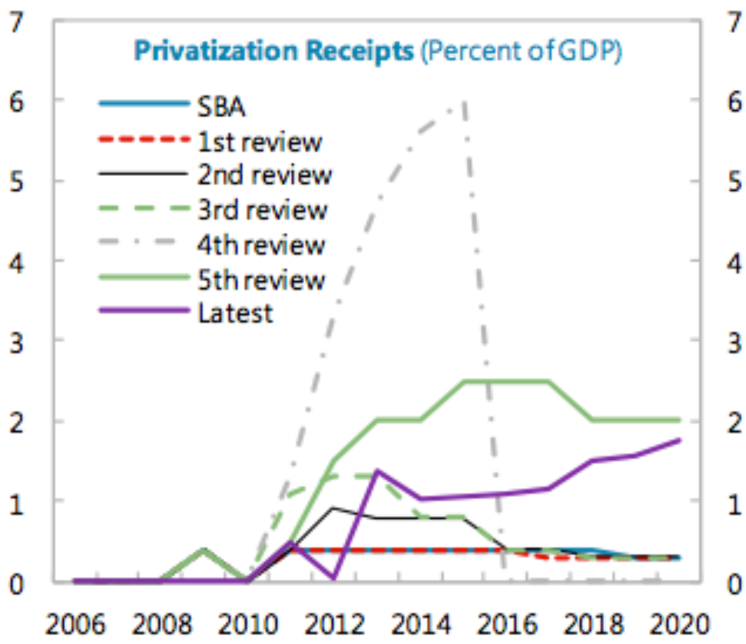
Graph 24: Current account balance revisions
Source: IMF (2013a)



Graph 25: Trade balance
Source: IMF (2013b)

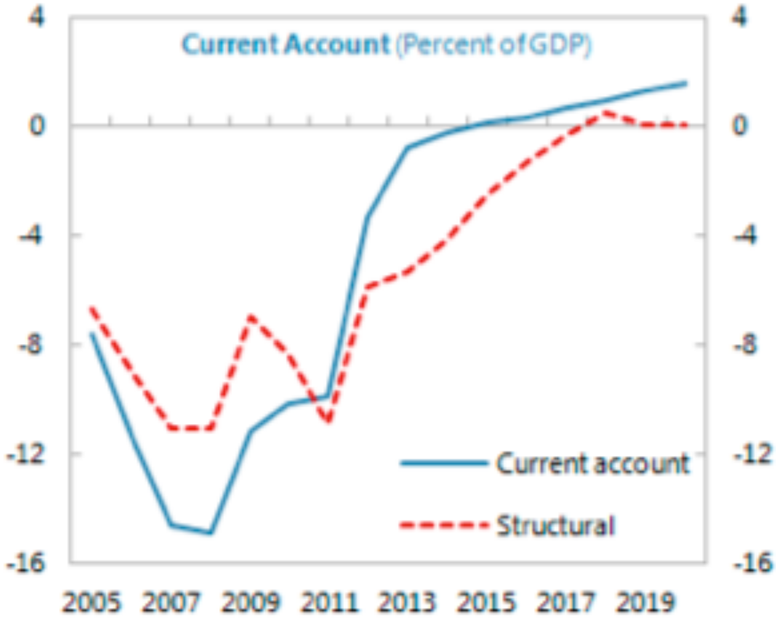
This fact is mainly attributed to the limited competitiveness of the Greek economy albeit the great reductions in wages and labor cost in general. The negative economic milieu provided by the permanent discussion about a possible Grexit or the need of another haircut enhanced the sense of economic instability. Moreover, as the capital and financial balance ought to offset the deficit in the current account, it should be studied the potential of the former account. CFB is parted from the direct investment, the portfolio investment and the reserve assets

The drawing of FDI was well bellow an adequate level since the progress of privatizations and profession liberalization was excessively discouraging.



Graph 26: Revisions of privatizations program
Source: IMF (2013a)

Therefore, the deficit was compensated by the transaction of bond and other equities titles. Eventually the forecast for the current account is to meet positive levels after 2013.



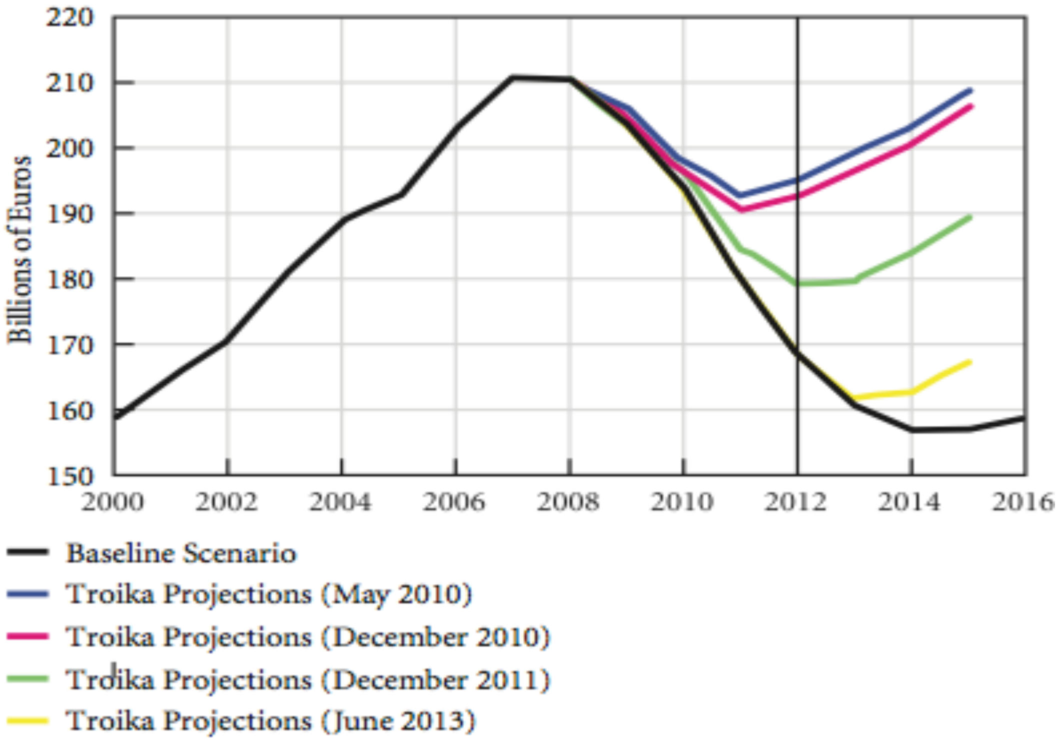
Graph 27: Current account forecast
Source, IMF (2013b)

3.2 GDP and Employment

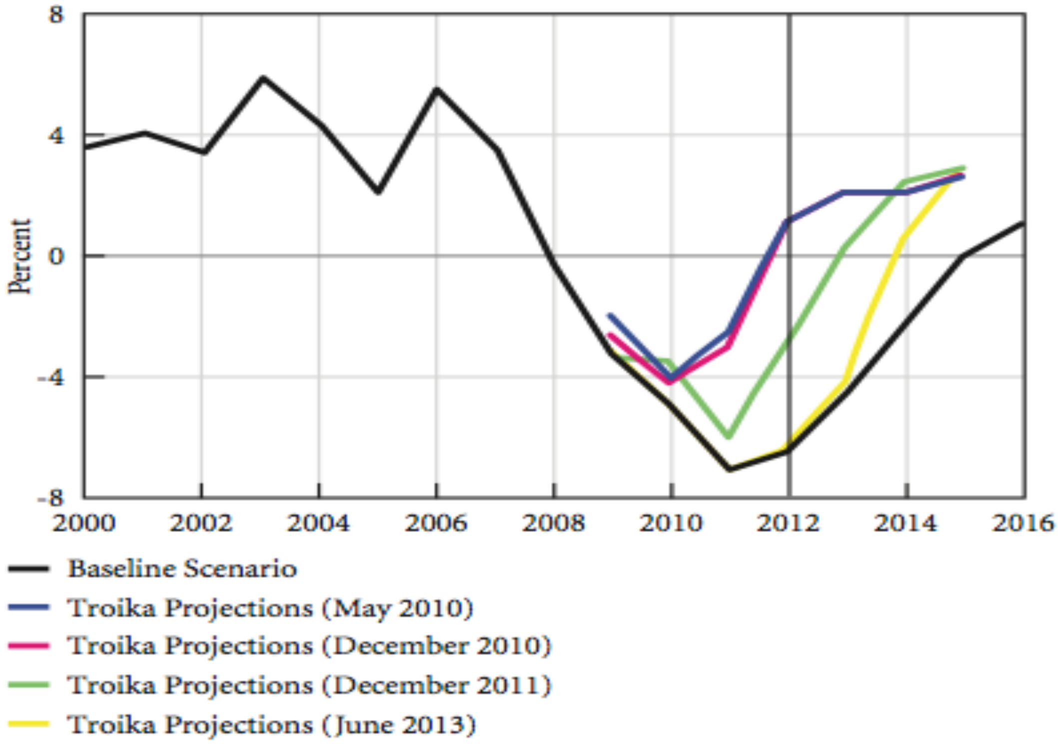
The gross domestic product (or GDP) is the sum of all products and goods produced within an economy, expressed in monetary units. In other words, GDP represents the total value of all final goods (tangible and intangible) produced within a country in one year. However, austerity is clearly contractionary in bad economic times by means that reflect in GDP performance. Effectiveness of consolidation measures is diminished at present as it significantly aggravates the impact in terms of average output declines (Holland & Portes, 2012).

The progress of GDP is crucial for the performance of the Greek economy as it represents the most significant national account (Katsibris, 1999). In terms of expenses the GDP function is equal to the total sum of the private consumption expenses, the gross investment expenses (public and private), public consumption expenses and net exports of goods and services. These expenses reflect the overall amount of national annual expenses. The hysteresis in these accounts was provoked by the implementation of the packages of fiscal tightening that suppressed them resulting in negative growth rates.

IMF (2013a) embraces that the initial counting of fiscal multipliers on the austerity measures was underestimated. This fact led to greater rates of recession and constraint GDP more than originally meant to be. Van Reenen (2013) notes that in times of economic imbalances fiscal multipliers are much higher than in normal times and contraction provides to be quite damaging in such cases. Moreover, according to Aslund (2013) "there is a habitual tendency of fund programs to be over-optimistic on growth until economy reaches on bottom and thereafter to underestimate the recovery". Therefore, this tendency is evident in the constant revisions of Troika's foresightedness due to the unrealistic estimations of fiscal multipliers on spending cuts and tax increases (Papadimitriou et al, 2013).



Graph 28: Real GDP (2005=100)
Source: Papadimitriou et al (2013)



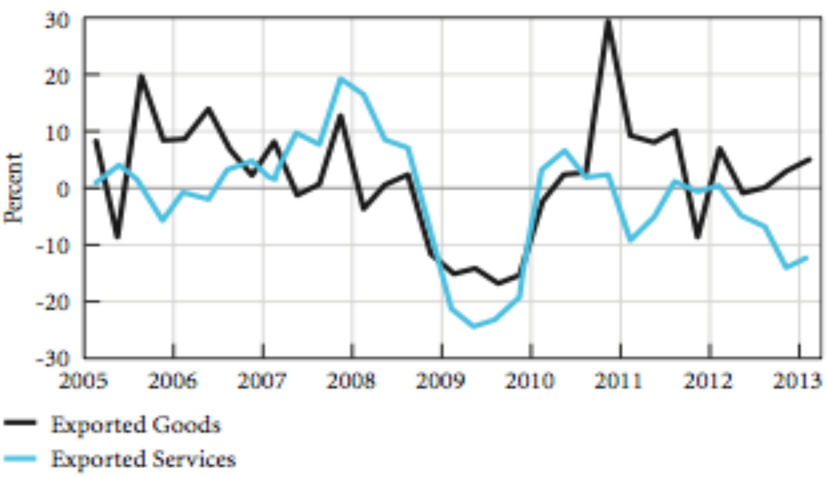
Graph 29: Real GDP Growth Rate
Source: Papadimitriou et al (2013)

In this context, Coenen et al (2012b) advocate that there are complementarities between public and private investment that signifies the existence of greater multipliers effect in the public cuts. The multipliers on investment tend to have stronger effects on the long run. On the contrary, Coenen et al (2012b) detect that the multipliers between public and private consumption tend to diminish in time. This points out that an adjustment in government investment signals an equivalent response of private sector obtaining obvious results in the growth rates and in the GDP performance as in the case of Greek economy.

Moreover, no incentive for investment exists in an economy subject to IMF financial mechanism that no government can independently exercise bilateral agreements of any kind (Arghyrou & Tsoukalas, 2011). This means that the multipliers on public investment affect in part the investment in the private sector. The latter, is simultaneously subject to matters related to the business environment and to the progress of structural reforms. This is why, IMF although the acknowledgement about multipliers underestimation, insists that the continuous failing in GDP performance projections is rather due to the inefficiencies and delays in the structural reforms required. Actually, it is difficult to distinguish in which level fiscal multipliers or lack of structural reforms reinforced the shortcomings in the expected growth rates.

In addition the private consumption is quite restrained albeit the linkage with the public consumption cuts is proved to be weak (Coenen et al, 2012b). At this point the Permanent Income Hypothesis (Friedman, 1957) don't seem to be confirmed since the intensity of consolidation through the wages devaluation and the tremendous tax increase, reduced more than 30% the income constraint. In addition, the limited confidence and the expectation for the economy to get worse suppress even more the consumption.

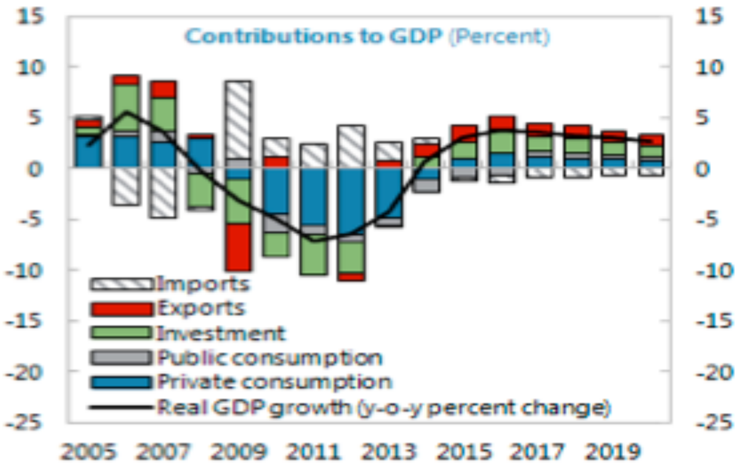
As far concerns gross exports, as a component of GDP, there is a little pick mainly attributed to tourism (IMF, 2013b). However, the expected performance in the export sector couldn't be achieved although the severe programs of domestic devaluation that were implemented in order to enhance the competitiveness (Weisbrot & Modecino, 2012). Furthermore, no program of domestic deflation cannot be successful, regarding the growth performance restoration, as long as the same policy is obtained by all trade partners (Van Reenen, 2013). This means that domestic devaluation in Greece has no gains if not accompanied by domestic revaluation in trade partners economies (De Grauwe &Yuemei, 2013).



Graph 30: Real Growth Rate of Exports

Source: Papadimitriou et al (2013)

Albeit the shortcomings in all factors of GDP, the IMF expectations are positive regarding the future GDP progress and its contributions (IMF, 2013). However, the constant incapacity of Troika to make projections that converge to the actual achievements tends to bring into question the validity of IMF's claims on GDP.

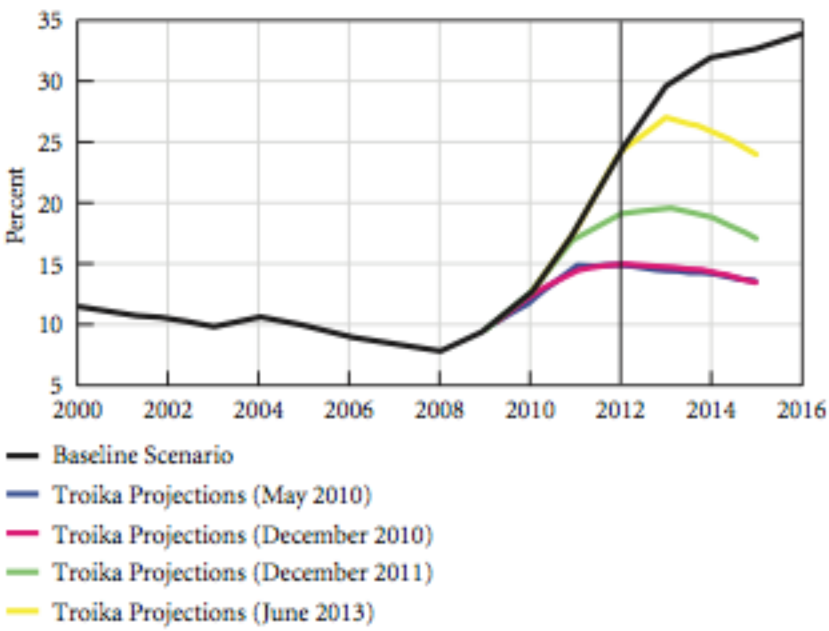


Graph 31: Contributions to GDP progress
Source: IMF (2013b)

The so far GDP performance signifies a continuous fall in employment since the former cannot grow fast enough in order to arrest a downward turn in labor market providing at the same time the highest level of unemployment in the industrialized world (Papadimitriou et al, 2013). According to the heterodox notion unemployment demonstrates a successful capitalistic economy (Varoufakis, 2007) since it works as a "redistributive" tool in periods of economic crisis (Moutos & Tsitsikas, 2010). However the pre-crisis rates of unemployment cannot be explained as an outcome of capitalism's success in Greece. Rather the opposite. Since 90's the time unemployment started to rise, coincided with lower than before growth rates (Moutos & Pechlivanos, 2013) that signifies weak economic performance and lower rates of accumulation.

The Greek unemployment, which was intertemporally beyond European average, was mainly reinforced by the structural inefficiencies in the Greek economy. The causality of this phenomenon is heavily attributed to the lack of adaptation in the adjustments provoked in the nature of the labor market and to the inflexibility that could not ease the clearance in the labor market (Borjas, 2003). Indeed the Greek welfare state was fragmented with special profession and employees (Stathakis, 2010) that provided stiffness in the labor market similar to the one of the post-socialists economies. Other similarities between the Greek and NMS's labor market are found in the way the production structure proved to be inefficient in the single market's competition and raised unemployment (Kalioras et al, 2008).

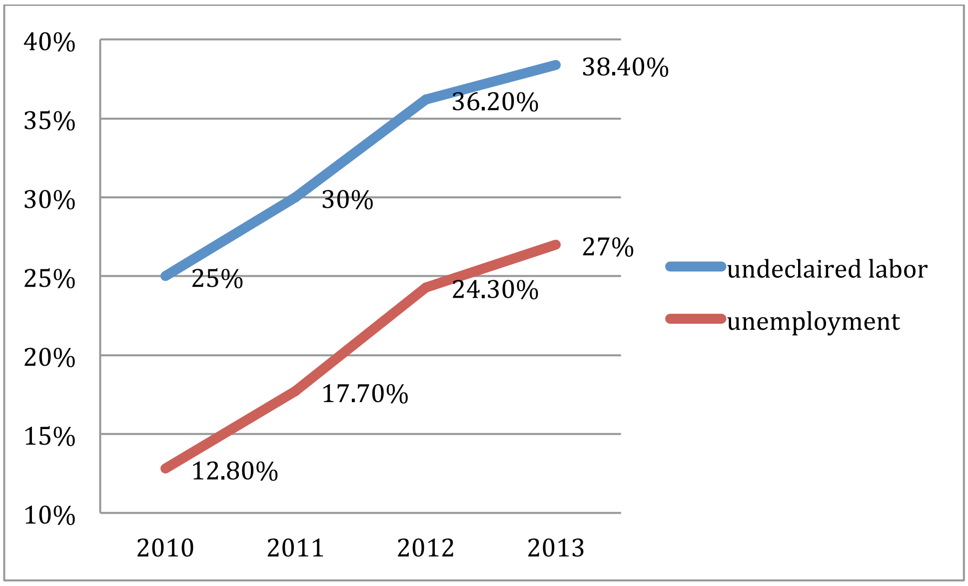
The lack of competition exhibits an internal asymmetry in the way the EU integrated. The limited labor mobility, compared to the US could not reverse the ever-growing tendency of unemployment. Therefore, the program of internal devaluation was expected to reinforce the competitiveness through the suppression of wages and prices, as already mentioned before. However the persistency of unemployment implies that the competitiveness may depends stronger to other factors than labor cost. In that way the pro-cyclical policies for competitiveness enhancement reinforced recession providing even more unemployment.



Graph 32: Unemployment rate
Source: Papadimitriou et al (2013)

By all means, labor market was subject to very violent changes, regarding to the implementations of laws (Law 3986, 2011) that diminished wages, abolished allowances, increased working time, and eased dismissals. The former institutional context of Greece although was quite protective, however was constantly biased. Therefore, after the collapse of all the previous firewalls, major potentials emerged for decreasing unemployment. The market could supply labor in much lower cost, regarding basic salary, dismissal facilitation, cuts in insurance cost, and also part of undeclared labor (such as overtime work) became legal pushing grey economy into some limits.

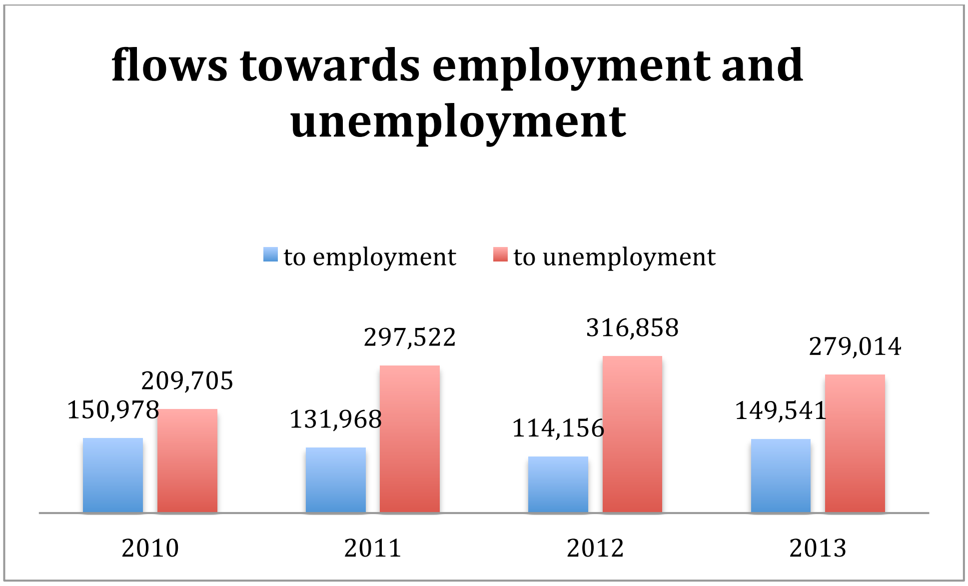
However, the undeclared labor tended to increase, which is interpreted in tax and insurance looses up to 3.35 billion for 2013 (INE-GSEE, 2013), and unemployment increase, which also provokes great costs for economy and for the expected recovery. On the other hand unemployment itself could not be diminished due to the lack of a coherent pattern of strong growth that would create demand and generate labor supply (Weisbrot & Modecino, 2013).



Graph 33: The evolution of the undeclared labor and unemployment in 2010-2013 period
Source: INE-GSEE (2013)

It is worth saying that the unemployment has been more severe in the regions that were more industrialized and concentrated most of the economic activities of the country (INE-GSEE, 2013). This signifies that the kind of economic activity that sustains is related to low specialization, mostly in the primary sector and in tourism. Moreover, the excessive young unemployment lays in the fact that the high-qualified human capital is without work subject. This fact along with the great detachment between education and production, one of the constant milestones in labor markets inefficiencies, consist of the main factors of young unemployment.

However, the policy for employment enhancement could not deal with that successful and only the existence of family networks and the expansion of mini-jobs make the young unemployment for a little more tolerated (Annunziata, 2013). The deficit in the balance between employs and dismissals has a strong persistency that after a pick observed in 2012 took a downward turn. However this should be examined in parallel with the occurred immigrants flows that are mainly directed toward Germany and other European countries. More specifically, according to OECD (2013) data flows were about 23 000 to Germany, 6 000 to the United Kingdom, 2 400 to the Netherlands, and 1 000 to Sweden in 2011. These numbers were increased by 70% for Germany and 40% for Sweden for 2012 (OECD, 2013).



Graph 34:Flows towards employment and unemployment
Source: INE-GSEE (2013)

Another crucial element in the discussion about unemployment is the long run unemployment that eliminates the gains of the employment balance and the odds for a short-term recovery. Long periods of unemployment demolish the existing human capital. After all, the more than 1 million lost jobs is a heavily recessionary attribute that can lead the economy to a vicious stagnation since the unemployment limitation to less than 10% will need more than 20 years to be accomplished (INE-GSEE).

3.3 Structural reforms

The promotion of the structural reforms was a basic requirement in the program of fiscal consolidation in order the changes could perform efficiently. As most of the targets were underachieved Greek authorities took the blame for not responding to the mandatory changes in the way the Greek state functions, regarding matters of closed professions, privatizations etc. (Christodoulakis, 2011; IMF, 2013a). The Greek modern state –basically after 1974- along with the Greek economy, were constructed based on the principles of unconditional fiscal expansion and a thick institutional context, which was characterized by obscurity and overlaps.

However, the most crucial reforms for Troika were to shrink public sector in order to become flexible, cheaper, more competitive and efficient. The flagships of this effort were reflected in the programs of privatizations, closure of public bodies, abolishment of permanency in the public sector and cuts in the public sector's labor and function cost. The derived targets managed to be met in part or with delay while some others are still not accomplished. In more details the program of structural reforms, distinguished between fiscal and competitive reforms, is exhibited in the table below referring the main actions, in chronological order, whether they were met or not or met with delay.

Structural benchmarks	**Status**
Fiscal action	
1. Reduce public wage bill by cutting bonuses/allowances; and pension bonuses (except minimum pensions).	met
2. Increase standard VAT rate from 21 to 23 percent and reduced rate from 10 to 11 percent and excise tax rates on alcohol, tobacco, and fuel with a yield of at least €1.25 billion in the remainder of 2010.	met

3. Appoint staff team and leader in GAO responsible for general government in-year cash reporting.	met
4. Adopt and start to implement a reorganization of sub-central government with the aim to reduce the number of local administrations and elected/appointed officials (Kalikrates).	met
5. Submit to parliament amendments to Law 2362/1995 to (i) require the MoF to present a three-year fiscal and budget strategy, (ii) introduce top down budgeting with expenditure ceilings for the State budget and multi-year contingency margins, (iv) require a supplementary budget for any overspending above the contingency, (v) and introduce commitment controls. The amended law should be immediately effective, including in the context of the 2011 budget.	met
6. The National Actuarial Authority to produce a report to assess whether the parameters of the new system significantly strengthen long-term actuarial balance.	met with delay
7. Adopt a comprehensive pension reform that reduces the projected increase in public spending on pensions over the period 2010-60 to 21⁄2 percent of GDP.	met
8. Establish a commitment register in all line ministries and public law entities. Begin publishing monthly data on general government in-year fiscal developments (including arrears).	met
9. Publish 2009 financial statements of the ten largest loss-making public enterprises, audited by chartered accountants, on the official website of the Ministry of Finance.	met

10. Put in place an effective project management arrangement (including tight MOF oversight and five specialist taskforces to implement the anti-evasion plan to restore tax discipline through: strengthened collection funds—of the largest debtors; a reorganized large taxpayer unit focused on the compliance of the largest revenue contributors; a strong audit enforcement and recovery of tax arrears—coordinated with the social security program to defeat pervasive evasion by high-wealth individuals and high income self-employed, including prosecution of the worst offenders; and a strengthened filing and payment control program.	met
11. Publish a detailed report by the ministry of finance in cooperation with the single payment authority on the structure and levels of compensation and the volume and dynamics of employment in the general government.	met with delay
12. Adopt new Regulation of Statistical Obligations for the agencies participating in the Greek Statistical System.	met with delay
13. Pass legislation to: (i) streamline the administrative tax dispute and judicial appeal processes; (ii) remove impediments to the exercise of core tax administration functions (e.g. centralized filing enforcement and debt collection, indirect audit methods, and tax returns processing); and (iii) introduce a more flexible human resource management system (including the acceleration of procedures for dismissals and of prosecution of cases of breach of duty).	met with delay
14. Appointment of financial accounting officers in all line ministries and major general government entities (with the responsibility to ensure sound financial controls).	met with delay

15. Publish the medium-term budget strategy paper, lying out time-bound plans to address: (i) restructuring plans for large and/or lossmaking state enterprises; (ii) the closure of unnecessary public entities; (iii) tax reform; (iv) reforms ot public administration; (v) the public wage bill; and (vi) military spending.	met with delay
16. Articulate a strategic plan of medium-term revenue administration reforms to fight tax 3 evasion.	met with delay
17. Publish three consecutive months of consistent arrears and consolidated general government fiscal reports (excluding small local governments).	met with delay
18. Adopt the necessary changes to enact the plan to reform the general government personnel system.	met with delay
19. Parliament to approve medium-term budget strategy (MTFS).	met
20. Government to legislate key fiscal-structural reforms in an MTFS Implementation Bill	met
21. Government to enact legislation in the context of MTFS implementation (phase II) to: (i) introduce pension adjustment bill stipulating freezes through 2015, introducing individual social security numbers, caps, means testing, and rationalizing benefits of pension funds; (ii) introduce single public pay scale bill, temporarily freeze automatic progression, and halve productivity allowance; and (iii) close 40 small public entities, merge 25 more small entities, and close an additional 10 large entities under line ministries and in the social security sector	met with delay

22. Government to achieve quantitative targets set under its anti-tax evasion plan.	n.a.
23. Government to complete key actions to implement the various measures approved in the context of the first MTFS reform bill and anticipated in the second set of reforms bills (Annex I), including the reform of the public sector wage grid and the closure and/or merger of extra- budgetary funds.	n.a.
24. Government to enact spending reductions (including pensions and earmarked spending and advanced removal of the heating fuel subsidy); revenue measures (including reducing PIT thresholds and reductions).	n.a.
25. Parliament to approve a tax reform package, including [(i) a simplification of the code of Books and Records, (ii) the elimination of several tax exemptions and preferential regimes under the corporate income tax and the VAT; (iii) simplification of the VAT and property tax rate structures; and (iv) a more uniform treatment of individual capital income].	n.a.
26. Government to undertake a thorough review of public expenditure programs to identify [3] percent of GDP in additional measures (including a 1 percent of GDP buffer of potential additional measures).	n.a.
Competitiveness reforms	
1. Prepare a privatization plan for the divestment of state assets and enterprises with the aim to raise at least 1 billion euro a year during the period 2011-2013.	met
2. Table legislation to reform the system of collective bargaining,	met

including to eliminate the automatic extension of sectorial agreements to those not represented in negotiations, and guarantee that firm level agreements take precedence over sectorial agreements without undue restrictions.	
3. The Council of Ministers to adopt a comprehensive privatization plan through 2015.	met
4. Parliament to approve privatization and real estate development strategy.	met
5. Government to legislatively establish a Privatization Agency (a private law vehicle into which privatizable assets will be transferred to be sold).	met
6. Government to (i) shift a second group of assets into the privatization fund covering transactions to be completed through end-2012 (Annex II); and (ii) appoint legal, technical, and financial advisors for 14 projects to be completed by end-2012.	n.a.
7. Government to enact legislation to (i) allow worker representatives to negotiate both special and regular firm-level agreements; (ii) suspend the "favorability clause" in wage negotiations until at least 2015; and (iii) suspend until at least the end of 2014 the possibility to extend sectorial agreements to parties not represented in the negotiations.	n.a.
8. Government to screen specific service sector legislation and repeal or modify unnecessary and outdated regulations to ensure full consistency with the new law liberalizing all professions and income-generating economic activities.	n.a.

9. Government to enact legislation to (i) reduce the employers' share of social security contributions, including by rationalizing and consolidating small earmarked funds and broadening the base and (ii) improve the administration of security contribution collections, including by combining collection functions.	n.a.

Table 5: Structural reforms progress
Source: IMF (2013a)

With regard to the fiscal reforms only 11/26 were met while 10/26 were met with delay and the rest 5 were not accomplished. As far concerns the competitiveness reforms the outcomes indicate that 5/9 were met 4/9 were not accomplished. These results do no provide a specific profile of the targets were met or met with delay but describe the general incapacity of the Greek state to respond to the program properly.

The level of the divergence from the initial goals is multiple times greater then the divergence occurred in the budgetary or in the macroeconomic targets (see chapter). In this sense there are many who claim that the programs if were implemented as initially that would be a sizeable effect in the output (Christodoulakis, 2011, Coenen et al, 2012a;Coenen et al, 2012b; IMF, 2013a). Moreover, this perspective comprehends structural reforms as the basic asset of consolidation programs. Alesina and Giavazz (2013) state that the right question is not "how far" austerity measures go but "how" they go far enough.

On the other hand, the IMF itself set the question whether the reforms should be implemented more gradually and not that frontloaded (IMF, 2013a). Van Reenen (2013) assumes that the structural reforms should be implemented in a long-term project towards the enhancement of competition and growth. The logic under this assumption may lay in the dynamic nature of an economy suppressed due to contractionary programs. Therefore, the structural reforms should have a supportive role in the economic restoration rather than put further pressure on the downside trajectory of the economy. Structural reforms indeed is the key for the last decades' economic inefficiencies (Stathakis, 2010) but how realistic is to deal with them in a couple of years? Moreover, the structural reforms in the current programs have little to say about how the country can create its new productive structure overlooking the structural dimension of the national productive base (OEE, 2011).

4. Concluding remarks

Economic crisis burst in 2009 in the Greek economy after the multiple revisions of the state's economic data. At the same time great unbalances and uncertainties provoked in the financial markets after the bubble of the US real estate and the collapse of Lehman Brothers. These facts along with the great influence of the financial markets and rating agencies in the real economy due to their capacity to generate future events constituted a very bad time coincidence for the Greek economy's predicaments.

The Greek debt surpassed the 120% as a ratio to GDP and the deficit proved to be more than 15%, well above the threshold of 3%. These elements designated that the Greek economy was unsustainable. Therefore, markets reacted through the toxic bonds transactions and the rating agencies downgraded Greek credibility. Borrowing was no more feasible for the Greek state, which faced a severe liquidity problem.

At this point there were only two options: either to default or to enter a financial mechanism. The latter was chosen as more viable solution for the Greek and European economy. This brought the first memorandum that induced a program of fiscal consolidation in order to suppress aggregate demand. Indeed, Greek economy exhibited a demand greater than its competence to produce. Moreover, its weak productive structure that was anything than competitive in the single market could not reach an adequate level of exports and FDIs. In addition, the public sector was quite expanded, without being productive or functional due to the system of clientism and corruption that generated and preserved it. Therefore, the Greek economy was steadily generating trade and budget deficits that were financed by reinforcing debt.

Troika and the Greek government agreed on a contractionary program, in exchange of financial support, that would firstly diminish state's deficit and balance debt in the medium term. In order to achieve these targets, a series of austerity measures were set related to public expenses cuts, privatizations and tax raise. Furthermore, structural reforms were also considered of great importance in order to deregulate the domestic market and enhance Greek economy's competitiveness. Most of them were unrealistic, like the 50 billion privatization plan, while others were mandatory with or without Troika's presence.

However, the over-optimistic targets were proved wrong soon after and a second stand-by adjustment agreement took place along with the European concurrence for a Greek PSI. The reports on the Greek progress detected a constant divergence from the program goals despite the almost 90 billion debt reduction and the sufficient performance of the deficit. Consequently in the late 2012 came a revision of the second adjustment program with a mild privatization program and a greater push for structural reforms.

As it seems, Troika did not manage to deal with the inherent inefficiencies of the Greek state and economy. Structural reforms could not be implemented in their greater part due to the ingrained linkage between political authorities and state mechanisms. Government was both unwilling and incapable to provide large-scale changes that would deregulate the market. Tax evasion was also impossible to be restrained due to the absence of adequate institutional context, monitor mechanisms and human resource. Therefore, the tax revenues deficit was counterbalanced by the tax rate increase and public cuts that burdened mostly the salaried employees, the pensioners and those in need of social services.

The program of the privatizations proved to be a completely disaster. The amount of 50 billion was heavily unrealistic for a state that the only experience had in public property transactions was gained in cases such as "Vatopedi". Moreover, no plan was conducted in order create a list of selling properties based on a development plan and their added value. Moreover, the great uncertainties derived by the constant changes in the taxation system, bureaucratic obstacles, government's interdependency on Troika and political instability could not form a positive business milieu that would draw investment.

Despite the failures observed, the Greek deficit was eventually restrained creating hopes for a possible primary surplus in 2013. However, this was achieved by an asymmetric distribution of the measures, as mentioned before, mainly due to policy failures. This fact emerges serious questions about the sustainability of this achievement. For example the trade deficit was diminished due to imports reductions than exports increase, proving two things. First of all, the Greek economy did not enhance its competitiveness despite the domestic devaluation took place. Secondly, the domestic devaluation program cannot be sufficient if all Europe follows similar policies that do not allow absorbing some extra foreign output. Therefore, De Grauwe and Yuemei (2013) suggest the implementation of a simple rule ordering that every country with stabilized debt ratios can have an adjustment program of domestic revaluation in order to offset the deflationary stimulus of others.

Moreover, the front loaded nature of the program generated continuous severe shocks in the Greek economy. Recession was quite larger than was initially planned. This is an outcome of Troika's underestimations on the fiscal multipliers and on government's incapacity to provide the needed reforms. Greek economy lost a major part of its output because of the tremendous cuts in the public sector, which was the greater producer, and the strong linkage between public spending and private investment. Therefore, the contractionary policy in the public cuts along with the absence of a coherent national development plan provided a loss greater than 30 billion in the period of memoranda exercise that led to deeper recession.

In addition, the extended recession had a notable impact in the employment. Unemployment was almost tripled and the unemployment of the youth surpassed 50%. Despite the significant reduction in the labor cost unemployment continued to get magnified. Labor market was subject to great deregulations, inducing the model of mini-jobs and flexible employment conditions. However, it is apparent again the grievous absence of program for the reconstruction of the production base. On the contrary, Greece is experiencing a bout of "brain drain". All these together generate various doubts about the way growth can be restored without jobs and without the most qualified human resource.

Until now, the two stand-by adjustments programs and their revisions deliver very little of their initial goals provoking at the same time an excessive social and economic discomfort. Greek society can give no consensus for the promoting changes since the trust to the political system has been raptured. The government's incapacity, until now to provide justice and evenly distributed burdens creates unfavorable conditions for any kind of adjustment. Moreover, the so far performance does not create expectation for a sustainable development trajectory.

The programs set reforms that have mainly direct macroeconomic impact, disregarding the further implications provoked. In addition, they are considered far from the Greek reality, requiring unfeasible goals. Structural reforms, albeit it is difficult to evaluate since most of them are not implemented, ask for general regulations with no focus in sectors with comparative advantage. However, Troika insists that no design error is more responsible for the programs failures than the incapacity to implement them as they are. Nevertheless, this position misread the inherent drawbacks of the program and gives no hope for their reconsideration.

The Greek memoranda depict an austerity experiment in the western capitalism derived by the rigorous adherence of Europe –mainly Germany- to a strict monetary policy. This standpoint overlooks for the European roots of the Greek crisis derived by an internal asymmetry in the European architecture. The deflationary programs in the European South enhance this asymmetry and generate fears for the common future.

Therefore, crisis could be resolved if only Europe get ready for the next step of political integration. This may be hard in times of uncertainty that states tend to nave-gaze. However, it presents the most radical proposal so far, even more radical from suggestions for a default and a Grexit as a crisis resolution, because it gets the idea of a collective response to the crisis. However, Europe's blind eyes raise great discomfort related not only to the economic failures but also to the expanding signs of Weimar's fragile democracy.

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