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## **Borrowing Cost as a Crucial Factor for Sustainable Fiscal Consolidation & for Exiting the Current Crisis**

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***Abstract:***

*The Greek fiscal crisis which is evidenced in a sharp deterioration of public finances resulting in the highest public deficit and debt in the E.U. makes even more urgent the necessity to make accurate assessments of the problem so as to apply the appropriate policy measures. After repeated downgrades by all rating agencies in a period of a few months, along with the loss of access to financial markets in spring of 2010, the unaffordable cost of borrowing due to record high spreads, reached such levels that the necessary fiscal adjustment is now nearly impossible. The international support mechanism created by the IMF, European Commission & ECB in order to avoid sovereign default, and preserve Greece's position as a member of the Euro-zone, was an urgent and necessary step. Besides the policy measures stated in the memorandum of understanding, which are an attempt to correct years of structural imbalances in Greek public finances, borrowing cost become a crucial factor for achieving the above targets.*

*In this paper we try to present and explore the evolution of borrowing cost from Greece's entry to the Euro-zone until the end of 2009 and its severe deterioration afterwards. As will be shown, at the close of 2009, borrowing cost became one of the most crucial component in restoring fiscal consolidation and discipline. The spill-over effects of the borrowing cost on the private sector- crowding out effects- following the loss of access to international financial markets by domestic banks, will be investigated. Also, necessary preconditions for sustainable markets and E.U. enforced fiscal discipline by appropriate policy measures to restore market's confidence and reduce borrowing cost, will be discussed.*

***Key Words:*** Banks Fiscal Consolidation. Public Debt, Yield Differentiation, Borrowing Cost

***JEL Classification:*** E43, E62, F34, H63

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## **1. Introduction**

The worst economic crisis of the Greek economy after World War II, is continuing to deepen for the second consecutive year. In an international relatively favorable economic environment, Greece is the only euro zone country in such a deep recession and lasting debt crisis. The persistent fiscal crisis continues to have severe implications for the whole economy, creating also significant contagious negative effects for the rest of euro zone. Despite the first and second bailout economic packages, no signs of recovery, fiscal consolidation and debt stabilization conditions appear in a context of very poor results of implemented policies.

The country's return to financial markets seems also to be impossible for the upcoming years, a factor with significant implications for the economy's financing, public and private.

By this paper, we aim to explore the role of the borrowing cost as a determinant factor in the country's current fiscal stance and crisis conditions. In section 2, we present shortly the main points of a process which led to current crisis and also the main characteristics of a precise diagnosis of 'double deficit-double crisis' affecting the borrowing cost. In this context, in section 3, we present through historical data, the evolution of interest expenditures during the period before the country's membership in the euro zone, as well as during the period as a euro zone country until the fiscal crisis. Interest expenditures reflect the role of two factors, the country's borrowing cost and debt level, and also show their importance as a determining factor of fiscal deficit and the related necessary primary surpluses for its reduction.

During the country's effort to enter the euro zone, the improvement of macroeconomic fundamentals and significant fiscal consolidation associated with structural reforms, led to repeated upgrades by all rating agencies. Also, the good prospects from entering the euro zone, achieving the A levels of credit rating that is the most important factor for borrowing cost, resulted in significant reduction and convergence of interest rates as for all European countries.

Determinant factors for spread differentiation, revealed their importance during the economic crisis and caused wide deviations that are described in section 4.

In the case of Greece, these factors in combination with inappropriate fiscal management, led to current borrowing crisis as it is shown in the related figures. In section 5, the effects of the borrowing crisis are discussed in the wider economy, by crowding out effects and also the basic preconditions and policy mixed guidelines for exiting the debt and borrowing crisis, according to the existing debt theory. The relevance of the importance that borrowing cost plays in today's fiscal and economic conditions, can be a helpful instrument for planning the appropriate policies to tackle the worst crisis in the country after World War history. In our conclusions, we point out the urgency of a comprehensive plan for reform and development, based

on new philosophy, culture and parameters, implemented by credible practices, surprising the markets positively by its measurable fiscal and economic results.

## **2. On the Determinants of the Current Greek Debt and Borrowing Costs**

Exploring the factors lying behind today's high indebtedness of the Greek economy, we have to go back to the expansionist policies of the eighties. During the 1980's, public spending soared from 29% to 48% of GDP and deficits averaged 10% of GDP. Public debt, as a percentage of GDP, tripled from 28% in 1980 to 89% in 1990 (Dimitriou K. et al 2011). This fast increase of debt/GDP rate approximating 100% in 1993 decelerated during the rest of the period and remained on average at this level for almost 15 years until 2005. This was due to the relatively weak implementation of fiscal adjustment policies and mainly due to sufficient rates of growth.

A stabilized debt/GDP ratio around such levels associated with relatively high rates of growth – double than the euro zone average – seems that it does not cause significant crowding out effects or affecting negatively markets' perception on borrowing cost. Public debt and deficits have negative effects as to GDP and lead to crowding out once a certain threshold of debt is reached (Gong G. et al 2001).

The interest payments on debt rising to 10% of GDP in 1990, was the main factor of worsening deficits. It remained at this level until the end of the 1990's, when it started to reduce due to lowered borrowing cost caused by lower interest rates and credit spreads.

This was one of the main benefits of the country's positive prospects when entering the euro zone.

Since 1994, the country's fiscal adjustment efforts resulted in primary surpluses for all the following years until 2002. Primary surpluses turned into deficit in 2003, due to the financial needs of the Olympic Games and remained at such low levels until 2008 when they began to increase rapidly. After the year 2000, due to euro rates, interest expenditure decreased and remained for the whole decade on average under 5% of GDP, constituting around 80% of public deficit. Before the start of the financial crisis on 2008, the Greek public deficit remained higher than the related Maastricht requirements, while Greece entering the euro zone, met all those criteria except that of total government debt. (Dimitriou K. et al 20011.) Within an environment of high rates of growth, on average 3.9%, almost twice than that of euro area which was 2%, the public deficit was manageable and broad opportunities existed to reduce the high public debt. There was much time for necessary structural reforms in order to reduce deficit and debts. Instead of this, because of economic, political and institutional factors which resisted to reforms, the country's adjustment to the euro zone, has been delayed or canceled (Michelis L. 2011).

Greece entered the recent crisis due to the above factors, with persistent deficits and deteriorating public finance. Public deficits reached and remain at double digit levels. The combination of widening external imbalances due to weak competitiveness, poor business environment, inflation exceeding the euro zone average and severe widespread structural backwardness, the Greek economy entered in today's 'twin deficits-twin crisis' (Bank of Greece 2009).

The twin deficits, public and current account (also double digit) accumulated the twin debts. Huge and explosive three-digit public debt and fast increasing external debt has been created. The latter, was due to insufficient domestic savings to finance the growing private and public debt, making the growing external financing necessary.

Due to political inability to take sufficient and necessary policy measures, as it happened in other euro zone countries, the record-high spreads and interest rates led to unaffordable borrowing costs. The result was a dynamic feedback spiral of a borrowing crisis, during which, the country lost access to financial markets.

### **3. Interest Payments in Greek Fiscal Balances historically**

Since the mid 1980's interest payments represent the major component of fiscal deficit. From this period, interest payment began to constitute more than 50% of the country's fiscal deficit for all the following years until today. In some cases they reached 100% of public deficit and in years with primary surpluses, they overcame this level. Of the last 30 years, the country achieved primary surpluses only in 9 years, the period before entering the euro zone.

It seems a very difficult task for fiscal management, to create the necessary primary surpluses – total expenditure excluding interest, minus total revenue – facing the already relative to euro zone high level of interest payments as a percentage of GDP.

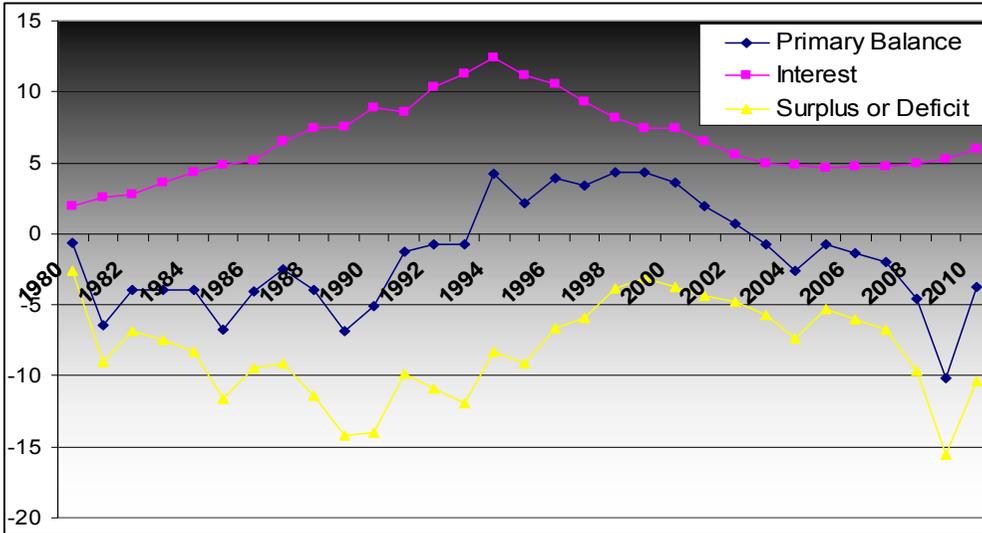
The relative level, has been always over double the euro zone average as it is also the same percentage as the military expenditure. These two fiscal expenditures, are unproductive in nature and have been together higher than the public expenditures for education and health having some important repercussions for the Greek fiscal consolidation and management. This factor, necessitates a very efficient fiscal management and discipline, in order for the country to meet its institutional obligations in euro zone, and secure the refinancing of its high deficit and debt.

Instead of this, fiscal policy moved mainly towards the other direction, dominated by political and institutional factors, that some times caused fiscal irresponsibility. As we are going to discuss later, without sufficient rates of growth and under stagnation conditions, a fiscal crisis is the most natural result.

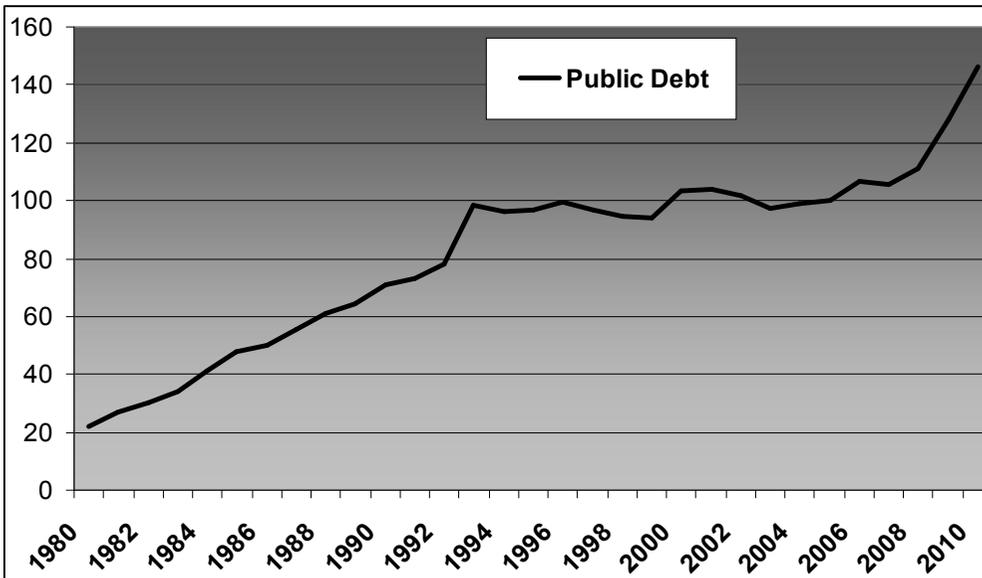
Because of the inability to create the sufficient primary surpluses to tackle such levels of interest payment, the debt dynamics become explosive under crisis conditions.

In Figure 1 and 2 below, we present the evolution and importance of interest payment for the related fiscal components discussed above.

**Figure 1. Primary balance, interest expenditure, Fiscal Balance as % of GDP.**



**Figure 2. Public Debt as % of GDP**



**Sources:** Based on data presented in the Appendix.

According to the above historical data, interest payments have to become the most crucial component of the fiscal balance. Except the level of accumulated outstanding debt, the above data reveal the importance of interest rates, the average rate of interest is also the most crucial component for refinancing the increasing public debt. During the country's participation in euro zone, for the same level of debt/GDP, the lower Euro area interest rates resulted in a significant reduction of interest payments, compared with the periods before.

A high dependency ratio to debt dynamics also exists during the recent crisis conditions. The fast increasing interest for refinancing the debt was not sustainable without the three-part mechanism.

#### **4. Greece's Borrowing Cost in the Eurozone**

As it has been presented in the above Figures 1 and 2, the country's relative higher interest expenditure in the period before Euro zone entrance was mainly due to higher interest rates for the financing of debt. Because of this, for similar levels of public debt, the interest payments were significantly higher than the Euro zone period of lower interest rates. This was one of the most important benefits after the country's participation in the monetary stability environment of euro, and an opportunity for fiscal consolidation and debt reduction.

By adopting the euro, Greece borrowed monetary credibility from other countries like Germany and the Euro zone participation resulted in an almost automatic upgrading of credit rating for all countries joining the Euro (Michelis L. 2011).

The borrowing cost that these countries faced in international financial markets lowered and converged significantly. Correlated to this, euro area yield spreads have largely converged in a process that started well ahead of the introduction of the euro in January 1999 (Barrios et al 2009).

Financial markets' perceptions for fiscal discipline according to Stability Pact and adjustment to the monetary union's principles about participating countries have eased other factor determining a particular country's credit rating. Higher credit ratings have translated into lower country spreads and at the same time responded to domestic improving macroeconomic fundamentals.

- There are three determinants of yield spreads in the euro area:
- The credit risk dependant on default risk.
- The liquidity risk, where the national bond markets in euro area differ in terms of liquidity.

The changes in risk aversion associated with willingness of investors to take risk (Barrios S. et al 2009).

But despite the above tendencies, the euro area government bond market remains fragmented from the issuing side where each member state issues its own government debt, with also distinctive differences on the size of markets and the credit quality of bonds. After 2005, a moderate reversal in yield differentials between the lower euro-area government debt issuers Greece, Italy, Portugal and Germany (the benchmark country) could be observed (Barrios S. et al 2009).

Differences in liquidity, or unobservable fiscal fundamentals and incomplete fiscal consolidation, can explain these differences and necessitates further convergence of debt-to-GDP ratios.

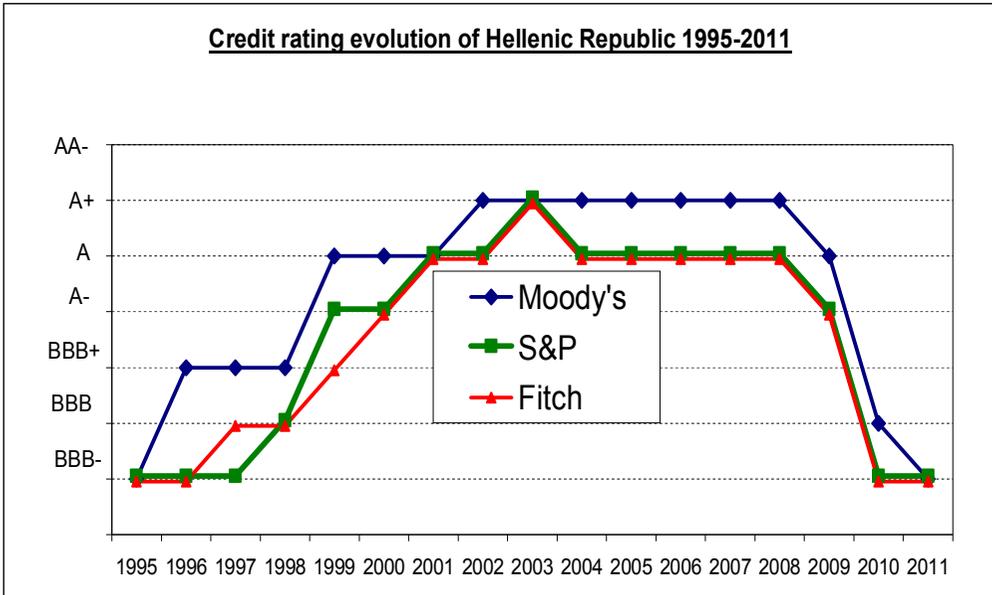
Yield differentials would be important policy indicators, imposing market discipline on fiscal policy and work as a deterrent for irresponsible fiscal policies (Codogno L. et al 2003). Since the beginning of the financial market turbulence in mid-2007, government bond spreads differences across countries widened and imposed higher relative financial costs. Government bond spreads increased rapidly during the financial turmoil in the euro-area that in general attributed to solvency and liquidity risks. Empirical findings suggest that the expected Debt-to-GDP ratios explains a major part of the differences in bond yields in the euro area between 2003 and the unfolding of the financial crisis (Abman Ch. Et al 2011).

In this context, determinants such as those mentioned above, can explain the evolution of Greece's credit rating, interest rates, spread convergence and differentiation during euro entrance until the financial crisis.

In figure 3, we present the continuous upgrading after 1995 of the credit rating by the three rating agencies, Moody's, Standard & Poors and Fitch, reaching at the end of the 1990's the zone A level.

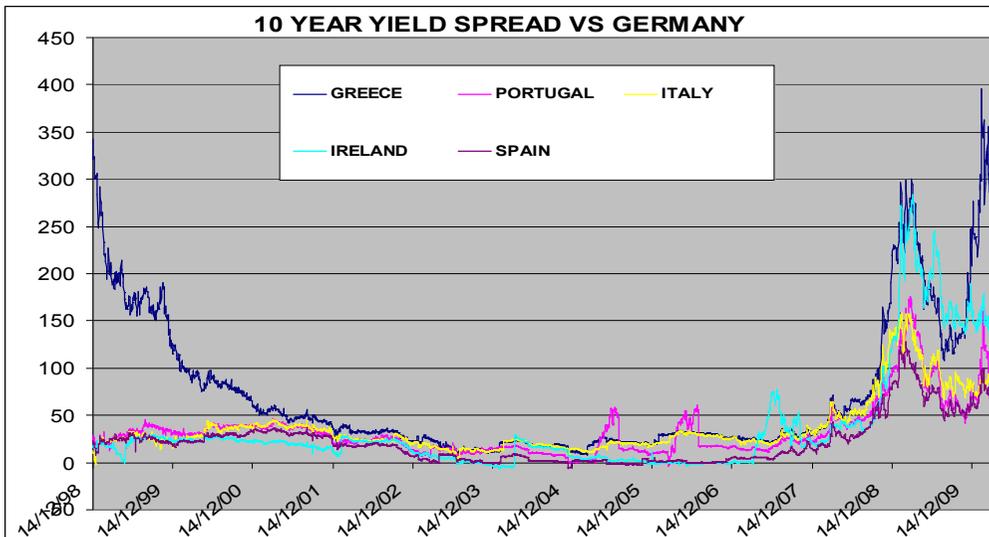
This was mainly the result of the country's significant adjustment efforts to join the EMU, that has been recognized by rating agencies. In the zone A near to other European countries Greece remains until the end of 2009, when it was affected by the financial crisis. Due to the political inability to take sufficient and necessary measures, and repeated downgrading by all rating agencies, markets reacted sharply by fast increase in credit spreads of Greek bonds. What has been achieved in this field after five years of effort, has been lost in five months.

Figure 3. Credit Rating Evolution of the Hellenic Republic



As it is presented in figure 4, the record-high spreads due to downgradings reached lower levels than the country's credit ratings in 1995, making the borrowing cost unaffordable. Due to this, the country lost access to financial markets, facing default risk and exit from euro zone.

Figure 4. Ten Year Yield Spread vs Germany



Source: Bloomberg Financial Services.

## **5. Borrowing Cost and Exiting from the Current Crisis**

### ***5.1 On the Effects of Borrowing Cost***

As it appears from the above figures, in the last decade Greece missed the opportunity to improve its public finance by exploiting low interest rates in order to reduce public deficit and debt. This opportunity evaporated through irresponsible fiscal policies and public sector's expansion according to the needs of the Greek 'clientalist' political system. By the same irresponsible behavior, the Greek political system dominated by populist policies without stability culture, faced the financial crisis being unable to take and implement necessary adjustment measures. The total loss of monetary credibility and markets' punishment resulted in the rocket-high yields on government bonds spreads and CDS (Credit Default Swaps).

This unaffordable borrowing cost and lost access to financial markets led the country to a 'death spiral' of government insolvency.

In order to avoid sovereign default and widespread risk of contagion to other European countries, and also preserve Greece's position in the euro zone, a financial and support mechanism from EU, ECD and IMF created on May 2010, which approved a three-year €110 billion bailout loan for the country, plus an added €10 billion for the safety of the banking system.

Greece would pay roughly 5% interest rate and in a strong conditionality program laid out in Memorandum of Understanding (IMF 2010) agreed to reduce public deficit to 3% of GDP by 2014, stabilize the level of public debt as a percentage of GDP, and implement at the same time the necessary structural reform. The agreement projected the achievement of necessary primary surpluses to stabilize debt, restore confidence by credible and measurable financial results through appropriate policies, making possible the country's return to financial markets by 2013. By avoiding the country's default and significant spillover effects to the rest of the region, the rescue mechanism cannot avoid a general increase in the risk premium and raised interest rate for both government and private bonds, in countries relying heavily on external financing.

The higher sovereign risk premium caused an increase in economy-wide interest rates (European Economy 2010).

The lost access to financial markets by domestic banks relying only to ECB's financing facilities and domestic reduced savings, leads to a sharp decrease in private borrowing and an increase of interest rates. Through this risk premium channels, significant crowding-out effects on the real economy take place in this period, affected also by distortionary taxes included in the adjustment program (Theodoropoulos S. 2011).

Higher interest rates crowd out investment and consumption, undermine competitiveness and have negative impacts on GDP and at the same time increase interest expenditure, necessitating higher primary surpluses to achieve the aim of fiscal consolidation. In these circumstances the borrowing cost becomes a crucial factor for the success of the whole effort.

### **5.2 Preconditions for Successful Fiscal Consolidation**

The 'growth and growth-enhancing' items are a crucial factor for sustainable consolidation and debt reduction. A tax system more 'growth-friendly' to minimize the long-run crowding out caused by increased distortionary taxes for higher debt servicing costs, is also an important precondition. But there is broad consensus that expenditure-based consolidations have a better chance of succeeding than the ones that are primary tax based (European Economy 2010). Also recent research shows the higher probability of success of expenditure-based consolidations focusing on cuts to primary expenditure. Fiscal consolidation and long term financial sustainability will also need to go hand in hand with important structural reforms. They are important preconditions for restoring the lost confidence and credibility among financial markets, affecting positively the borrowing cost for public and private sector by lowering the high risk premium. The sustainable fiscal consolidation conditions are presented in the following formula, based on underlying debt theory.

**Debt stabilizing conditions:** 
$$\mathbf{b = (i - g)k}$$

Where:  $b$  = Primary budget surplus or deficit (excluding interest)

$i$  = Nominal average interest rate for public debt

$g$  = Nominal rate of growth

$k$  = Outstanding debt/GDP at the beginning of the period

One year later, Greece failed to meet the objectives of the program and it has been apparent that the country will also not be able, during the three years time, to achieve these targets, gain access again the financial markets and return to them for its debt financing.

All the above items of stabilization conditions, one year later are evolving negatively. No primary surplus achieved, while budget deficits remain in double digit levels and according to the latest estimates of the European Commission (September 2010) they are going to be 9.5% for 2011 and 9.3% for 2012.

The record-high spreads and CDS spreads, have been worsening following continuous downgrades which reached default levels. The severe recession becomes even worse and the public debt dynamics explosive. Facing the same risk and for the same reasons, the EU/ECB/IMF, on June 21st 2011, decided a new bailout package for Greece, giving much more time for exiting the current crisis.

The main points of this package include: Extension of the debt payment period, involvement of EMS and EFSF mechanisms, debt rollover, debt restructuring or haircut, voluntary involvement of private sector, massive privatization program, lower interest rates and severe austerity measure aiming to achieve public deficit targets. With this package, Greece has been secured from markets' vulnerability and record-high unaffordable borrowing cost. The reduced

average interest rate for the whole debt, is approximately 5% and is a little higher than the pre-crisis period.

In today's unsustainable debt dynamics and size, this borrowing cost necessitates a primary surplus that Greece has never achieved even in periods of high rates of growth.

During today's double crisis and after-war deepest recession, debt stabilization, fiscal consolidation and exiting the current crisis seems impossible. The elimination of public sector's size by reducing its primary expenditures and massive privatization program, combined with structural reform in the wider economy, are crucial preconditions for return to positive rates of growth, viability and success of the implemented program. As already the markets' perception about debt restructuring and haircut is that it should be over 40% for sustainability, this is also a necessary precondition. On the basis of the above formula, different scenarios and combinations for stabilization and sustainability of the debt, can be scheduled and targeted.

But the success of all the above bailout packages and programs, needs decisions and implementation, fiscal measurable results, on which until now despite the use of carrot and stick – liquidity support or thread of default – have poor results.

Political personnel dominated by populist attitudes, lacking efficiency, stability and euro zone principles culture, is the main obstacle in the whole effort for exiting the current crisis. It makes it much more painful, longer than otherwise and totally uncertain about the successful end. As long as the country's most important institutional and political problem remains, the exit from the current crisis is a very difficult task.

## **6. Conclusions**

Greece's debt and borrowing crisis that caused the worst and continuous deepening after-war economic recession, is a result of applied fiscal policies and management of the public sector. The roots and determinants lying behind these policies at different extents, are political and institutional factors, attitudes lacking stability and credibility culture, populist and practices of the "clientelist" system. These factors can explain in the highest degree the country's mountainous debt, the missed opportunities after entering the euro zone to achieve its reduction by taking the necessary measures in the face of fiscal crisis, to exploit the massive financial aid and over time to implement appropriate policies for fiscal consolidation and restart of the economy.

The borrowing cost connected with the country's return to financial markets, arises as a crucial factor, not only for debt stabilization but also for the whole economic restart. According to underlying theory presented above, every scheduled scenario for sustainability except the lowering of borrowing cost, has to rely in any

case on positive rates of growth and in today's situation also on an additional haircut for the explosive dynamics of public debt.

In a well-planned, comprehensive program for national economic restoration, the reduction of public sector's size, the implementation of structural reforms in the wider economy, can restore the lost confidence and credibility, and also exploit the country's huge resources and human capital as well as the now generally depressed economic potential. After ten years of participation in the Euro zone the opportunities exist and the country can remain in the Common currency area. By appropriate implemented policies, the painfulness and the length of time for adjustment process can be reduced substantially.

But the viability and the successful end of this effort, depends decisively on factors mentioned above: on the establishment of a Euro zone culture, on planning and implementing the adjustment policies.

Borrowing cost is always strongly related to credibility of applying such policies by the debtor.

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## Appendix

## FISCAL ITEMS AS % OF GDP

YEAR	Primary Balance	Interest	Surplus or Deficit	Public Debt of GDP
1980	-0.60	2.00	-2.60	21.90
1981	-6.40	2.60	-9.00	26.90
1982	-4.00	2.80	-6.80	30.10
1983	-3.90	3.60	-7.50	34.20
1984	-4.00	4.30	-8.30	41.20
1985	-6.70	4.90	-11.60	47.70
1986	-4.10	5.20	-9.40	49.80
1987	-2.50	6.50	-9.10	55.80
1988	-4.00	7.40	-11.40	61.20
1989	-6.80	7.50	-14.20	64.20
1990	-5.10	8.90	-14.00	71.00
1991	-1.30	8.60	-9.90	73.40
1992	-0.70	10.30	-10.90	78.30
1993	-0.70	11.30	-11.90	98.20
1994	4.20	12.40	-8.30	96.40
1995	2.20	11.20	-9.10	97.00
1996	3.90	10.50	-6.60	99.40
1997	3.40	9.30	-5.90	96.60
1998	4.30	8.20	-3.80	94.50
1999	4.30	7.40	-3.10	94.00
2000	3.60	7.40	-3.70	103.50
2001	2.00	6.50	-4.40	103.70
2002	0.70	5.60	-4.80	101.70
2003	-0.70	5.00	-5.70	97.40
2004	-2.60	4.90	-7.40	98.90
2005	-0.70	4.60	-5.30	100.30
2006	-1.40	4.70	-6.00	106.80
2007	-2.00	4.80	-6.70	105.80
2008	-4.60	5.00	-9.60	110.90
2009	-10.20	5.30	-15.50	127.90
2010	-3.70	6.00	-10.40	146.50

**Sources:** European Economy: Statistical Annex. Eurostat., Bank of Greece