Financial, Public Economics

Fiscal Policy in the European Union – Present and Perspectives

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Abstract: This article analyzes the main trends of fiscal policy in the European Union, following the economic crisis impact and fiscal policy measures that were applied in this economic context. The study is focused in a few key areas: the evolution of fiscal policy captured by indicators measuring tax burden, public sector size analysis by quantifying public expenditure share in GDP and the evolution of budget deficits. Finally, the study watched correlations between fiscal policy and macroeconomic developments, identifying trends and anticipating possible solutions of fiscal policy to achieve the required coordinates of fiscal governance in the European Union. For realizing this study we use annual data from Eurostat Database for 2000-2010 for EU countries. The major findings of the study are the negative impact of the size of public sector on economic growth for EU and also for Romania and the increase of the tax revenue if the economic growth rates increase.

Keywords: fiscal policy; economic growth; budget deficit;

JEL Classification: E62; H3; H61

1. Introduction

In this article we try to realize an analysis of fiscal policy at European Union level through the most relevant indicators: the tax burden, public sector size and budget deficit. We followed the evolution of these indicators since 2000 for revealing the government fiscal policy outcomes in the European Union countries. Also the impact of economic crisis is analyzed considering the major changes determined by the economic crises on fiscal policy in many countries, like VAT increase with important consequences on the public budget and on the households revenues. The economic crises brought huge budget deficits and the needs of financing this deficit through the public indebtedness.

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The objective of this paper is to realize an analysis of fiscal policy evolution for revealing the causes of actual budget deficit and to express possible solutions for the fiscal discipline required by the European Union.

Recently was adopted by twenty-five European leaders the Treaty on Stability, Coordination and Governance aimed at strengthening fiscal discipline. The most important elements of this Treaty include a requirement for national budgets to be in balance or in surplus, a criterion that would be met if the annual structural government deficit does not exceed 0.5% of GDP at market prices. According to European Commission this balanced budget rule must be incorporated into the member states' national legal systems, preferably at constitutional level, within one year after the entry into force of the treaty. In the event of deviation from this rule, an automatic correction mechanism will be triggered.

Previously many studies identifies the state of public finance in EU countries and try to find the impact of the fiscal policy on economic growth, but without considering this new requirement for the budget deficit. We try to consider this new threshold of the budget deficit for the future trend of the fiscal policy in EU countries.

This study is based on a descriptive analysis of figures and indicators provided by Eurostat Database and also build an econometric correlation between some variables through regression equations.

Realizing this correlation we have some important results: the increase of public sector has a negative impact on economic growth and also a huge deficit is specific for a recession period. The actual fiscal policy promoted by EU countries results in huge deficits and is based on indebtedness. What are the solutions in this context for realizing the structural deficit which does not exceed 0.5%?

For all EU countries even if there are part of euro zone or not the solution is decreasing the public sector reducing the public expenditures and to have in the near future an efficient public sector. There are reduced possibilities to increase tax revenues because we have some factors like unemployment which doesn’t have a favorable effect on tax receipts. Also even if many EU countries increase the VAT, there are important decreases of labor force taxation and corporate tax. Other countries like Romania have important deficits of the Social Security Budget.

According to European Commission estimations, the value of the fiscal stimulus package adopted by the Euro Area reaches 2% of GDP (1.1 % in 2009, 0.8% in 2010). For 2009, the most consistent “fiscal package” was adopted by Spain (2.3% of GDP), Austria, Finland, and Malta (over 1.5% of GDP). Greece and Italy did not adopt the discretionary policy in order to avoid the increase of the governmental deficits (Sabau-Popa & al., 2011).

Fiscal policy is a component of economic policy representing financial support to implement other policies. Fiscal policy involves the use of public spending, taxation and borrowing to influence both production and economic activity and employment. It is important to note that some changes in fiscal policy affect both the demand and aggregate supply. Fiscal policy has traditionally been seen as a demand management tool. This means that changes in public expenditure, direct and indirect taxation and the budget balance can be used to influence economic growth. Keynesian School sustain that fiscal policy can have powerful effects on aggregate demand, output and employment, if it is used when economic needs require such action.

Monetarists economist on the other hand, consider that government spending and tax changes can only have a temporary effect on aggregate demand, output and creating new jobs and that monetary policy is a more effective way. Expansionary fiscal policies can be applied when economic performance and economic growth are in decline, for helping the recovery of economy. In these cases governments may apply measures to increase public spending, accompanied by reduction of compulsory levies in order to stimulate aggregate demand and influence private consumption and investment.

Contractionary fiscal policies target is reducing aggregate demand during the boom, when is recording a too rapid growth of production and signs of overheating. Regulator is based on the expected impact that reducing aggregate demand through a policy of reducing income available for private investment and consumption, by increasing tax levies on the public budget, while public spending cuts, will result in a reduction in production and supply counteracting trends overheating.

Concerning the area of fiscal policy, a government art is not to exceed the psychological line of demarcation between the tax burden that taxpayers can support and maintain equity between different social groups (Cliche, 2009).

2. Review of Literature

An important study concerning the effects of fiscal policy in euro area and US is realized by Burriel at al. (2009). This study continues past literature, analyzing the effects of fiscal policies in euro area viewed as a whole in this respect, taking into account a database of fiscal variables with quarterly values between the 1981 - 2007.

Following the same line with previous analyzes, it was found that GDP and inflation increased in response to government spending shocks, despite the fact that GDP multipliers are generally very similar in both cases, and a small volume. However, it was shown that the multipliers of GDP are rising steadily since 2000,

both in the Eurozone and the US, which may link with the "superabundance of global economies."

On the other hand, government spending shocks have a higher level of persistence in the U.S., which can be due to a huge amount of military spending. The impact on private investment is not so homogeneous: if the government spending or net taxes are higher there is a negative impact in the US, whereas in the EMU only tax increases seem to lead to a negative reaction of private investment.

Myles (2007) try to highlight the role of taxation in particular on economic growth based on econometric models. This study was an econometric modeling of economic growth rate, using various calculation models, to highlight the variables that influence economic growth. There is no empirical evidence that aggregate data rate of growth would be in some way related to the tax. But there is evidence that growth rate is higher when corporate taxes are lower. Any increase of the personal income tax will affect the growth rate by influencing the decision to choose entrepreneurship.

Karras et al. (2009), realizes an analysis for 19 European states estimating the effects of taxation change on increase of real GDP, based on annual data 1965 - 2003. The empirical results show that an increase in taxes has a negative and persistent effect on GDP per capita. Effect size is determined by "tax shock", and it is estimated that a tax receipt share in GDP increase of 1% will lead to a decrease in real GDP by 0.5% to 1.2%. This estimate is lower than that of Romer and Romer (2007), the estimated effect of 3%, but "fiscal shock" presented by them was very different from here, they account for aggregate GDP rather than per capita. Following this study has shown that an increase in taxes has a clear negative impact on aggregate GDP, consumption and investment. The tax change on investment is more pronounced than for the other two indicators.

Afonso et al. (2009) try to identify the macroeconomic effects of fiscal policy using a Bayesian Structural Vector Autoregression approach for US, UK, Germany and Italy. They found that government spending shocks, in general, have a small effect on GDP. The results of this study reveals that the government spending shocks have, in general, a small effect on GDP.

The impact of public expenditures and taxation on economic growth is also debated by Gerson (1998). Government expenditures on health, education, and infrastructure should have a positive impact on growth on long term view as productive expenditures. On the other hand, the taxation impact is net identified.

According to Lee et al. (2005) higher corporate tax rate have a negative impact on economic growth, while the personal tax rate have an unclear impact. If the corporate tax rate is reduced with 10 percentage points the economic growth will increase with 2 percentage points.

3. Methodology

The government use taxation for various purposes: first of all for financing the public expenditures, or for assuring a degree of redistribution of incomes through (progressive income taxation). Also, the stability of economy and the resource allocation can be realized using taxation. Negative externalities can be solved using as a main tool some taxes.

Even if taxation can't be neutral, at the same time, taxes should not be distortive for economic growth. In this context we try to emphasize the impact of fiscal policy on economic growth in EU, more specific the correlation between the effects of fiscal policy and the economic growth rate. In the European Union the state intervention is quite powerful and it is sustained through a high level of taxation. The tax harmonization was the major trends of EU fiscal policy, but after the crisis we have a new trend –fiscal consolidation for reducing the level of public deficit and public debt. Fiscal policy is very important for the economic growth, because many taxes have a distortionary impact. If the rates are increase or decreased we have some transmissions channels of this fiscal policy measures in the economy. If the government intend to stimulate the investment has to decrease corporate tax rate. For the public budget this means a decrease of tax receipt, but only on the short term, because on the long term any increase of investments means new jobs, new incomes for household, increase of the consumption and finally an increase of economic growth. And we have an increase of the tax receipts for the budget.

In the next figure we try to reflect the transmission channels of fiscal policy. The changes of tax rates are used as leverage to stimulate the economic growth. If the evolution of GDP is positive it is expected an increase of tax receipts for the public budget. In this context the government can decide to spent more.

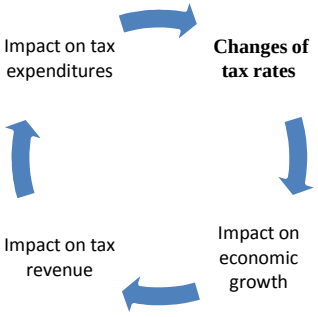

Figure 1.

Global indicator which reflects the fiscal policy is the tax burden measured through total tax receipt as percentage in GDP. This ratio is relevant from macroeconomic perspective because reveals the government success in collecting taxes and also the perception of tax burden for contributors. There is a huge difference between the average for EU and Romania concerning the level of this indicator, more than 10 percentage points. At first site we can say that in Romania the level of tax burden is the lowest comparative with EU countries, but in fact we have a higher tax burden.

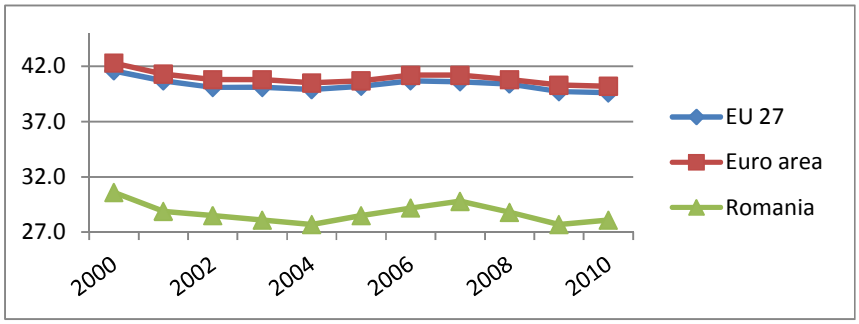

Figure 2. Fiscal burden in EU and Romania as % in GDP

Source: own calculations based on Eurostat Database

The explanation is because the collecting tax receipt is very low we have only apparently a low tax burden. Also, the tax evasion is very high and the underground economy hides the potential tax receipts. More than that, the physical person must support a higher tax burden comparative with companies.

In Romania the consumption and labor are highly imposed comparative with capital. Increasing the VAT rate was a necessary measure for reducing the budget deficit, but for the consumers the impact was a huge decrease of the purchasing power. More than that the VAT rate increase from 19% to 25% leads to inflation increase. (Mara et al, 2011)

The majority of EU countries choose to increase VAT for reducing the budget deficit in 2009 and 2010. But this measure is not enough because the level of public expenditures continues to be very high as we can see in the next figure. The largest gap was in 2009 and only after this year the level of public expenditures start to decrease.

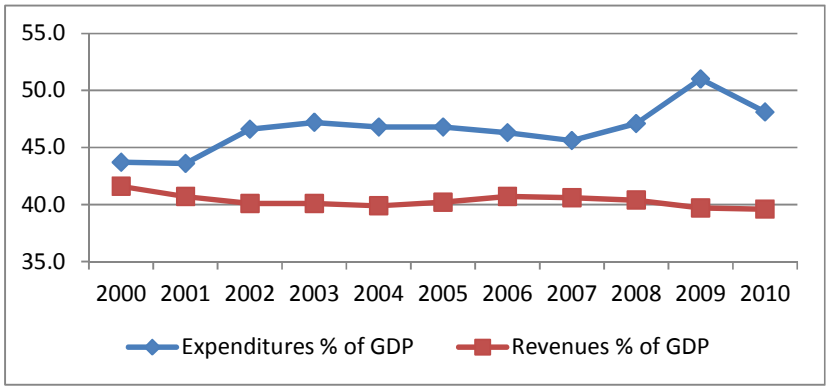

Figure 3. The evolution of public expenditures and revenues

Source: own calculations based on Eurostat Database

The size of the public sector can be expressed by the level of public expenditures. In the last few years the public sector increases, especially in 2008 and 2009. The most important increase is registered for the social protection; for instance in 2007 is 17.6% from GDP and goes to 20% GDP. Another important category of public expenditures is health and also we have an increase from 6.7% in 2007 to 7.5% from GDP, according to data provided by Eurostat Database.

We will continue our approach by presenting the evolution of public sector in the EU and Romania measured using the share of public spending in GDP. For the EU there is a general trend roughly constant until 2007, and then we have a strong growth determined by the economic crisis began. In Romania the situation is much different from the EU, as public spending starts increasing since 2005. To note that after 2009 the trend is declining in both the EU and Romania.

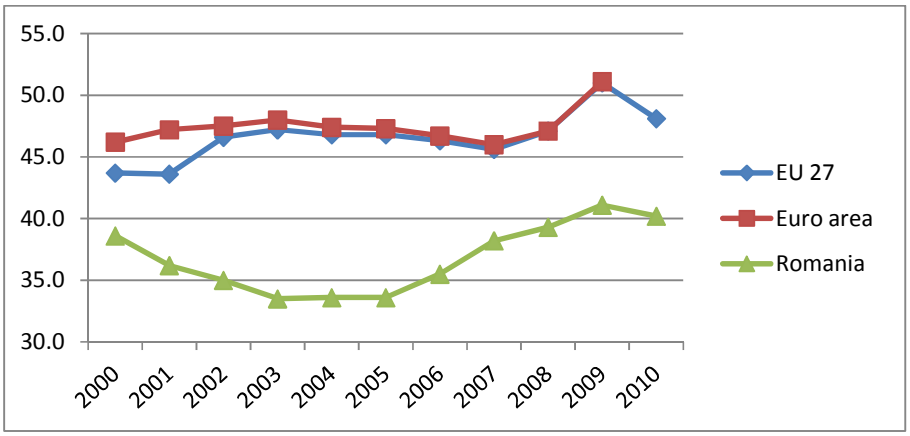

Figure 4. The size of public sector (Total general government expenditure as % in GDP)

Source: own calculations based on Eurostat Database

The results of the fiscal policy are reflected in the budget deficit evolution. Because in Romania have an uncontrolled growth in public spending since 2005, the repercussions are reflected in the continuous increase of the budget deficit, which in 2009 reached a record level of 9% of GDP, exceeding the EU average of 6%. The year 2010 is marked by a strong deficit reduction both in EU and Romania and we have similar data almost 6%.

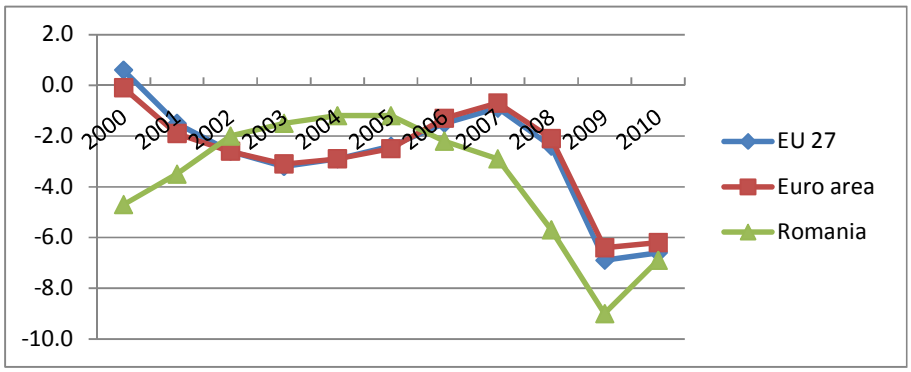

Figure 5. Net lending (+)/Net borrowing (-) under the EDP (Excessive Deficit Procedure) Percentage of GDP

Source: own calculations based on Eurostat Database

This budget deficit decrease continued in 2011 in Romania although we have no available data in this graph, due to austerity fiscal policies applied by reducing

public expenditure and increase of taxes: VAT, excises, taxes on property or introducing new taxes and also due to economic growth registered.

4. Results

In this section our study tries to identify macroeconomic correlation between fiscal policy and economic growth rate. For EU, we consider the average for all 27 countries. Also we test these correlations for Romania for the same period of time.

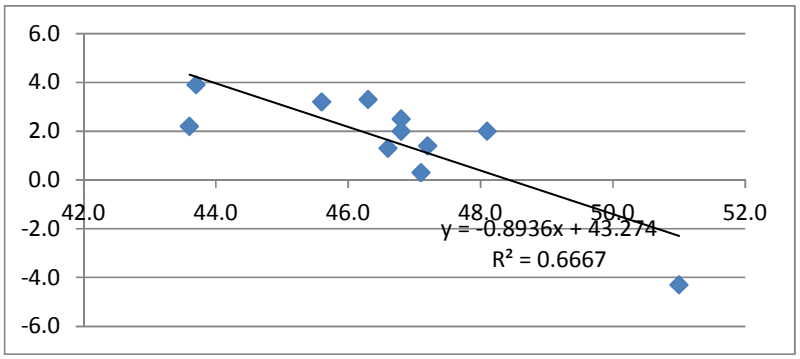

Figure 6. Correlation between the size of public sector and economic growth rate for EU (2000-2010)

Source: own calculations based on Eurostat Database

In this case there is an indirect correlation between the size of the public sector and the economic growth rate, if the public expenditures are increased with 1%, the result is a decrease for economic growth rate with 0.89%. The link between the two variables is quite strong, revealed by correlation coeficient of 66%. Based on the graph we can write the regression equation:

EGR=-0.893PS+43.27

where:

EGR = economic growth rate

PS =the size of public sector expressed through the share of public expenditures in GDP

For Romania for the same time we find an indirect correlation but not so powerful like for EU, only in proportion of 43%.

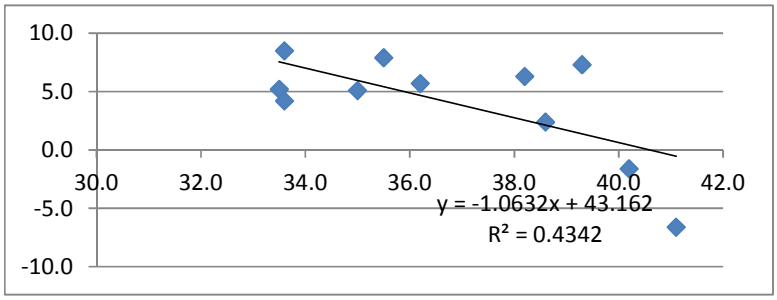

Figure 7. Correlation between the size of public sector and economic growth rate for Romania (2000-2010)

Source: own calculations based on Eurostat Database

The tax burden is another important macroeconomic indicator which reflects the results of the tax policy. Some tax reductions are used for stimulating the economic growth, but for the budget these tax cut mean less tax receipt. This decrease of tax receipts is only on the short term because on the long term when economy is growing there are many revenues encashed for the budget.

So, the expected result is an increase of tax revenue when there is an economic boom. This hypothesis is confirmed by the next figure, thus we have a direct correlation between tax revenue and economic growth rate. These variables are correlated in a proportion of 33% for the analyzed data in European Union.

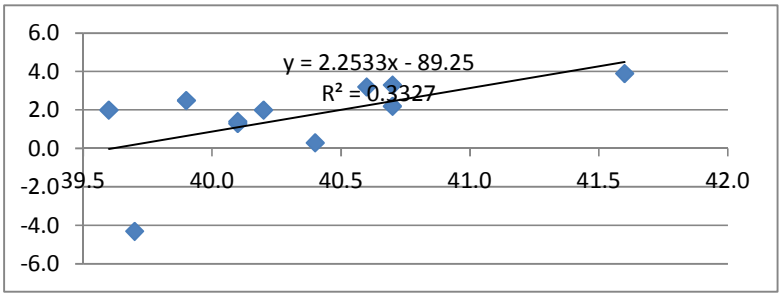

Figure 8. Correlation between the tax burden and economic growth rate for EU (2000-2010)

Source: own calculations based on Eurostat Database

As an exception for Romania are not the same results like for EU. In this case we don't have a linear correlation, we can find only a polinomyal regression of second degree. The correlation is indirect and quite weak comparative with EU correlation. This means that even before 2008 in Romania was registered economic growth, the level of revenue collection for the budget was very low because of tax evasion and underground economy.

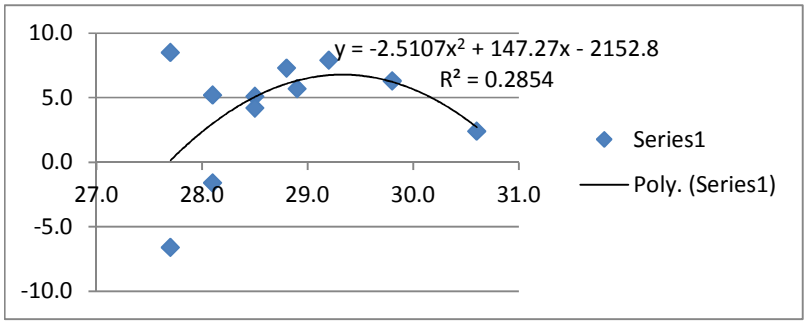

Figure 9. Correlation between the tax burden and economic growth rate for Romania (2000-2010)

Source: own calculations based on Eurostat Database

The economic crisis impact on the budget deficit had an unexpected magnitude for all EU countries. For avoiding this magnitude in the future, recently the 25 EU countries signed the Treaty on Stability, Coordination and Governance aimed at strengthening fiscal discipline and introducing stricter surveillance within the euro area, in particular by assuring the balance of the budget. According to European Commissions the key elements of this fiscal agreement include a requirement for national budgets to be in balance or in surplus, a criterion that would be met if the annual structural government deficit does not exceed 0.5% of GDP at market prices.

In the next figure we try to reveal the indirect correlation between economic growth and budget deficit because the budget deficit is counted with the sign "minus" and these variables are correlated of 52%.

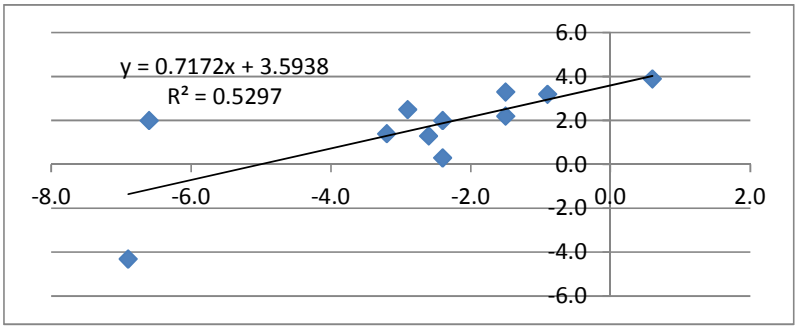

Figure 10. Correlation of budget deficit and economic growth rate for EU (2000-2010)

Source: own calculations based on Eurostat Database

The similar results are registered for Romania, but with a powerful correlation, almost 65%. This means that as we see from descriptive statics starting with the economic crises our budget deficit increase more than the EU average.

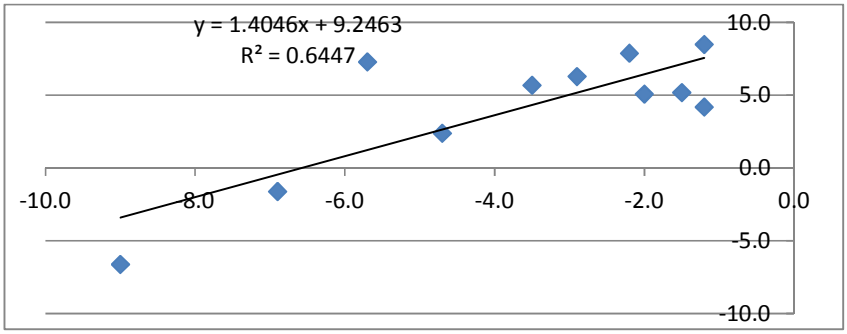

Figure 11. Correlation of budget deficit and economic growth rate for Romania (2000-2010)

Source: own calculations based on Eurostat Database

For Romania this huge budget deficit from the time crises determined an increase of the public debt as percentage from GDP from 12.8 in 2007 to 34% in 2011.

5. Conclusion

The main conclusion of this study is the fact that in economic crisis times the fiscal policy has to be well managed because otherwise the budget deficit can became overwhelming and the risk of increase the public debt can't be avoided. Is strongly recommended for the governments to use some fiscal measures for stimulating the economy and approve increases only for productive public expenditures. In this category of productive expenditures we consider the most important the infrastructures expenditures. Other proper measures it will be increases of tax rate only for non-distortionary taxes and decreasing the public expenditures or if this is not possible to have a more efficient public sector.

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