



## SUSTAINABILITY IN FISCAL POLICY IN BOOM AND RECESSION-THE CASE OF ROMANIA

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### Abstract

*This paper examines the interrelated aspects of the recent economic and fiscal crisis – such as the GDP growth, budgetary deficit and public debt, fiscal policy and austerity measures in Romania by comparing the different effects caused by different fiscal policies within a boom period and a downturn period.*

*The paper reveals that the boom period is characterized by tax rate cuts and rising of expenditures and the downturn period, by the increasing of fiscal burden and sharply reducing the government spending. In this perspective, the aim of this paper is to provide some empirical basis for the argument that pro-cyclical fiscal policy does not assist in dampening the GDP shocks.*

**Keyword:** fiscal policy, pro-cyclical, counter-cyclical, GDP growth

**JEL Classification:** E62, E63

### I. Introduction

The present paper is based on the idea that fiscal policy is a GDP determinant, having an important role in government policy, which represents the main conclusion of our previous research.

By using the rights incentives, fiscal policy can have longer-term effects. In part, the effectiveness of using fiscal policy for balancing the macroeconomic output gap depends on policy makers' ability to correctly time policy changes and on the impact that

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fiscal policy's changes have on the economy. Fiscal policy also influences confidence with important, immediate and future effects on the households and businesses decisions. Governments are free to use both discretionary and non-discretionary fiscal policies.

Our previous papers also point out that it is through fiscal policy that Automatic Fiscal Stabilizers have their largest effect on macroeconomic output (i.e. GDP). An efficient fiscal policy must give priority to sustainability over time, also being able to adapt the budget balance to the economy movements. The Automatic Fiscal Stabilizer can be a byproduct of tax systems or government spending system, which can have a different set of objectives relative to cyclical stabilization, depending of the policy maker ability. In this way, the fiscal policy may reduce or delay the responsiveness of the economy to shocks.

Compared to the large literature on determinants of economic growth, there has been less research on the pro-cyclical behavior of macroeconomic aggregates in developing countries.

Given the importance of the public sector in contemporary market economies, understanding the fiscal policy as a factor underlying the cyclical dynamics of macroeconomic aggregates can make a valuable contribution to the design of stabilization program being a necessary condition for a satisfactory positive theory of business cycles.

Nevertheless, we agree with Dima et al. (2013, p.88), who state that under certain conditions, "improvements to the design of public institutions, well-conceived and implemented policies and increases in the accountability and credibility of public authorities can boost economic output."

In this perspective, the paper intends to explore the behavior of fiscal policy over the business cycle in Romania, in order to provide some empirical basis for the argument that pro-cyclical fiscal policy does not assist in dampening the GDP shocks. The main objective of this paper is to characterize, explain and compare the cyclical proprieties of fiscal policy in Romania in boom and recession. According to our study, fiscal policy is likely to be a pro-cyclical and not a stabilizing force in Romania.

The paper is structured as follows: Section 1 presents a brief literature review regarding the behavior of fiscal policy over the business cycle. Section 2 presents the data and study methodology. Section 3 provides a brief characterization of Romanian fiscal policy suggesting its pro-cyclicity during 2005-2011, using IMF, Eurostat and



Romanian Ministry of Finance - statistical data. Section 4 focuses on the results of the study and the last section concludes.

## **II. Literature review**

According to the literature, pro-cyclical fiscal policy means the policy which is expansionary in booms and contractive in recessions, being generally regarded as potentially damaging for welfare (Serven, 1998; World Bank, 2000; IMF, 2005). Keynes (1936) defined a contractive fiscal policy as a government policy of reducing spending and raising taxes. The above cited studies argue that pro-cyclical fiscal policy raise macroeconomic volatility, depress investment in real and human capital, hamper growth, and harm the poor. The literature underlines that output and government spending is co-integrated, implying a long-term relationship between government spending and output. (Akitoby et al., 2006; Christiano et al. 2011). According to the same authors, if government spending increases when there is a positive output gap (i.e., output is below its potential), then spending is counter-cyclical; if potential output were observable or easy to estimate, one could define counter-cyclical as an above-average spending to output ratio whenever output was below its potential. (Akitoby et al., 2006). In this perspective the existing empirical literature provides weak support for developing countries and stronger support for industrial countries.

There are a number of definitions of “counter-cyclical” fiscal policy in the literature. Consistent with a Keynesian perspective, Kaminsky, Reinhart and Vegh (2004) and Talvi and Vegh (2005) define fiscal policy to be counter-cyclical if government spending rises in recessions and tax rates fall. Adopting a neoclassical perspective, Alesina, Campante, and Tabellini (2007) define as counter-cyclical “a policy that follows the tax smoothing principle of holding constant tax rates and discretionary spending as a fraction of GDP over the cycle”.

Beginning with Keynes (1936) a lot of researchers recommend the countercyclical fiscal policy arguing its stabilizing effects (Cohen and Follette, 2000; Taylor, 2000). According to Baldacci et al., (2009), counter-cyclical fiscal policies are able to reduce the crisis duration by almost one year. There are also researchers who argue that in economic downturns, countercyclical policies increase government indebtedness, raising future debt service obligations underlying that counter-cyclical is a necessary but not a sufficient condition for sound macroeconomic policy (Gordon and Leeper, 2005). Some researchers



suggest that the governments of most countries are not following a Keynesian counter-cyclical fiscal policy (Battaglini and Coate, 2008).

Comparing data sets containing a broad sample of developed and developing countries, a lot of researchers argue that fiscal policy tends to be counter-cyclical for developed economies and pro-cyclical for developing countries. (Alesina et al., 2007; Kaminsky et al., 2004; Talvi and Vegh, 2005; Woo, 2006).

Regarding the procyclical character of fiscal policy in emergent countries, the literature points to the weakness of automatic stabilizers and the procyclical bias of discretionary policies of those countries, caused mainly by the low tax elasticity, the low share of taxes to GDP, the large proportion of fixed expenditures and the general absence of (expensive) unemployment insurance (BIS, 2003; Kraay and Servén, 2008). Some authors have stressed different linkages between corruption and fiscal policy in developing countries. (Alesina and Tabellini, 2005; Ilzetzki et al., 2008).

According to a study made by the Bank for International Settlements, the standard theoretical Keynesian case for using countercyclical fiscal policy is not always applicable in emerging economies subject to large shocks, as small, or even negative fiscal multipliers may result if confidence is damaged and interest rates rise, crowding out domestic investment (BIS, 2003). By using econometric tools, some researchers find evidence that in some European Union new member states, fiscal consolidation made economies grow faster already in the short term, explaining the effects of fiscal contraction on private consumption and investment – whether the latter were boosted or restrained - through so called non- Keynesian effects (Rzońca and Ciżkowicz, 2005). The authors claim that the source of the non-Keynesian effects is said to be the fall in enterprises' costs brought on by reducing government expenditure. As a result, business profitability increases, and secondly, their competitiveness on international markets goes up, concluding that the governments in question gain credibility and attract foreign direct investments, since they are in a better position to pay their bills.

Reviewing the literature in the field it can be concluded that there is no consensus yet about what should be the appropriate role of fiscal policy over the business cycle in emergent countries, during a boom or recession.



### III. Data and methodology

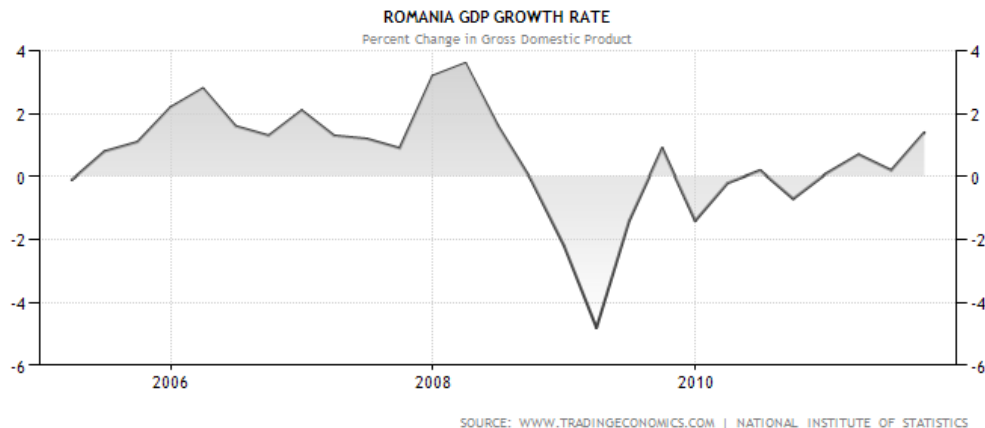
Based on the empirical literature on the cyclicity of fiscal policy which focuses on the correlation of tax rates level and government spending, with changes in GDP, the present paper first studies the existing evidence and then develops the theory's implications for these correlations. Finally, the paper discusses the consistency of the theory's implications with the existing evidence and identifies other cyclicity predictions that might be studied in future work. The empirical analysis is conducted with a data set covering Romania for two different periods: (i) 2005-2008, a boom period and (ii) 2009-2011, a downturn period. The paper's empirical strategy consists of two stages: it first estimates the cyclicity of fiscal policy and then moves on looking at how cyclicity is affected by different factors.

Data is obtained from IMF, Eurostat and Romanian Ministry of Finance.

### IV. Comparing fiscal policy in boom and recession: the case of Romania

Since 2005, Romania has undergone a full economic cycle, ended with the recession from 2009 to 2011, preceded by the overheating during 2007-2008 as shown in figure 1.

**Figure 1-** Romania GDP Growth Rate (Percent Change in GDP) during 2005-2011





According to some researchers, since 1990, in Romania, the design of fiscal policy was almost entirely discretionary type. (Dinga, 2009; Talpoş and Avram, 2011). Among the factors that have led to the predominance of discretionary fiscal policy in Romania, the authors pointed out the political reasons (Dinga, 2009; Dima et al., 2010; Talpoş and Avram, 2011). Studying the political-budgetary cycles, Talpoş and Avram, 2011 (2011: 7) argue the preponderance of political factors during 1990-2010 in Romania, concluding that fiscal and budgetary tools have been used by the government to influence mainly the electors.

Comparing public policies in terms of their use by politicians as tools for discretionary manipulating the economy Talpos and Avram conclude on the prevalence of using fiscal policy compared to the use of monetary policy, the latter being under the control of the central bank, which enjoy a degree of independence in relation to the executive. (Talpoş and Avram, 2011: 10)

#### **IV.1. Evidence from the boom period**

Between 2005 and 2008 Romania had one of the largest economic growth in Europe. In order to accelerate economic growth, the government has chosen to reduce taxes starting with 1st January 2005. 2005 is the year of introducing the flat tax in Romania which mainly meant a smaller corporate tax rate, from 25% to 16% and a smaller individual income tax, from the progressive rate varying depending on the size of salaries between 18% and 40% to 16% rate (flat tax rate) applied no matter the income size. It was in fact a fiscal relaxation in order to increase the net income for boosting the purchasing power to stimulate demand and attract FDI.

The statistics reveal that Romania's impressive annual GDP growth averaging 6.43% between 2005 and 2008 (as shown in figure 2 and figure 3) has gone hand in hand with rising budget expenditures which have doubled in nominal terms, as shown in table 1.

**Table 1-** Evolution of Real GDP and Real Expenditures in Romania during 2005-2008

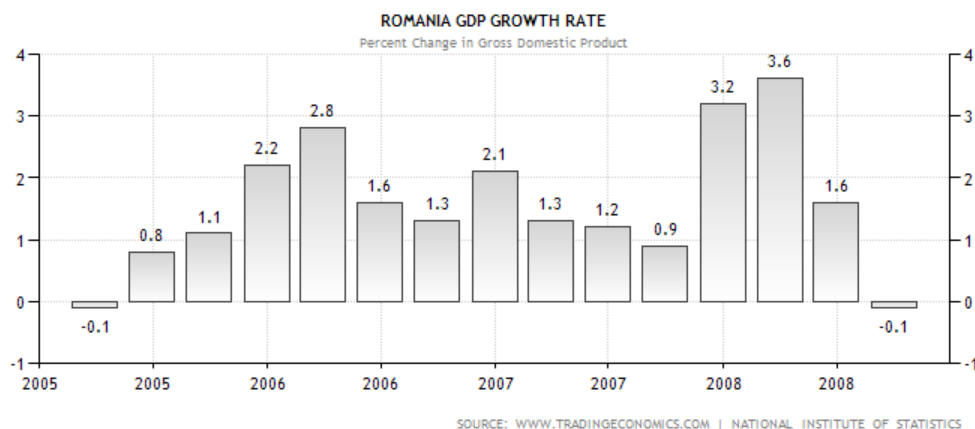
Year	2005	2006	2007	2008
Real GDP (millions RON)	288.000	342.400	363.971	514 700



Real GDP growth (% yoy)	4.2	7.9	6.3	7.3
Real expenditures (millions RON)	101.000	112.626	136.556	202.277
Real expenditures growth (% yoy)	na	11.5	21.2	48

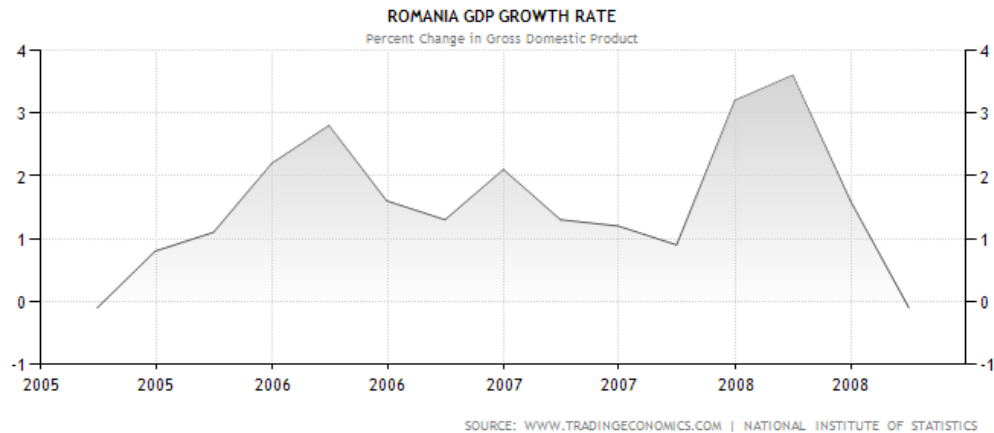
Source: Data provided by IMF, Eurostat and Romanian Ministry of Finance

**Figure 2-** Romania GDP Growth Rate (Percent Change in GDP) during 2005-2008





**Figure 3-** Romania GDP Growth Rate (Percent Change in GDP) during 2005-2008

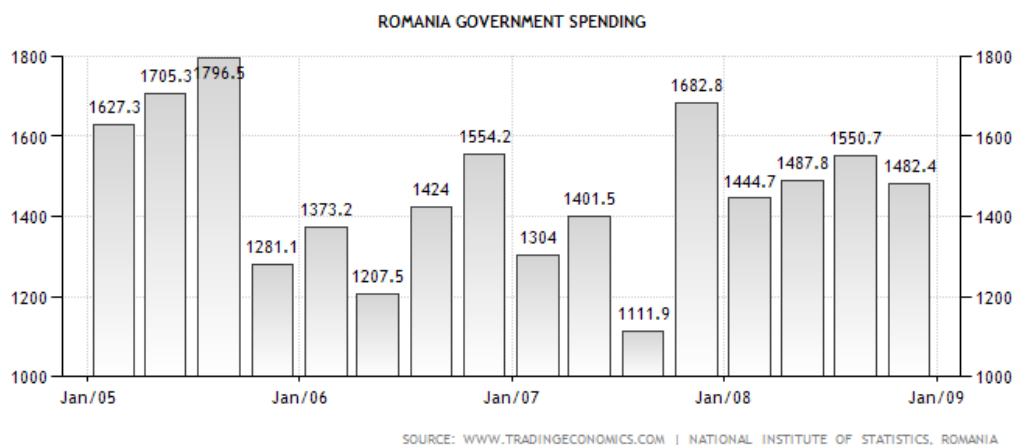


In Romania, the enforcement of the flat tax of 16% in 2005 led, on average term, to the evidence of an economic growth. According to our previous research, this growth was determined by three causes: (i) the emergence of a part of the dark economy, (ii) the increase of the private consumption due to high net salaries, (iii) the increase of the investments made by companies. However, because of the high growth of expenditures in the upturns period (as shown in figures 4 and 5), too little space for maneuvering fiscal policy remained at the start of the economic crisis.

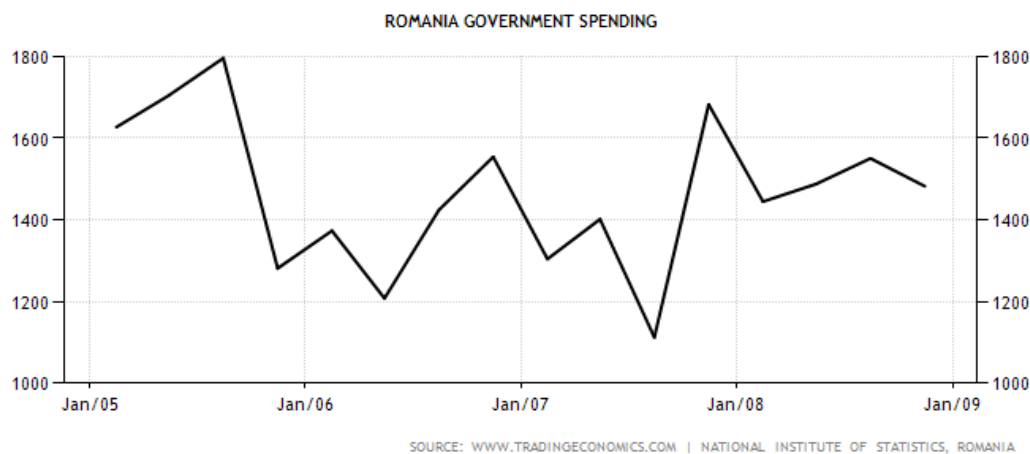




**Figure 4-** Romania Government Spending (million RON) during 2005-2008



**Figure 5-** Romania Government Spending during 2005-2008



#### IV.2 Evidence from the downturn period

The effects of the financial crisis had reached Romania by the end of 2008. As shown in table 2 and figure 6 and 7, the GDP decreased strongly between 2009 and 2011.

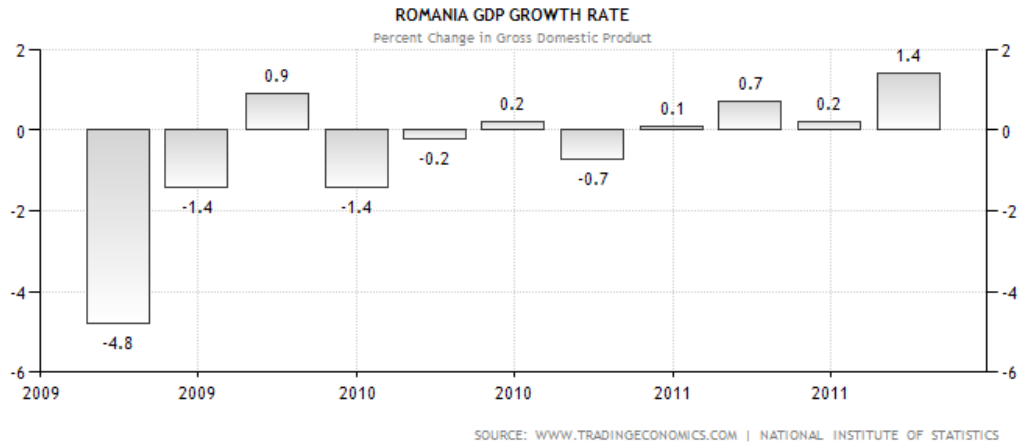


**Table 2-** Evolution of Real GDP in Romania during 2009-2011

Year	2009	2010	2011
Real DGP (million RON)	501 139	494.624	506 990
Real DGP growth (% yoy)	-6.6	-1.3	2.5

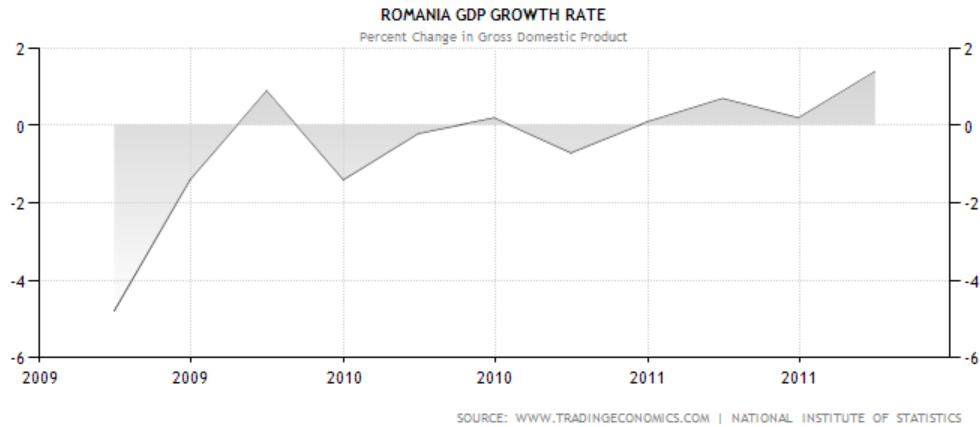
Source: Data provided by Eurostat and Romanian Ministry of Finance

**Figure 6-** Romania GDP Growth Rate (Percent Change in GDP) between 2005-2008



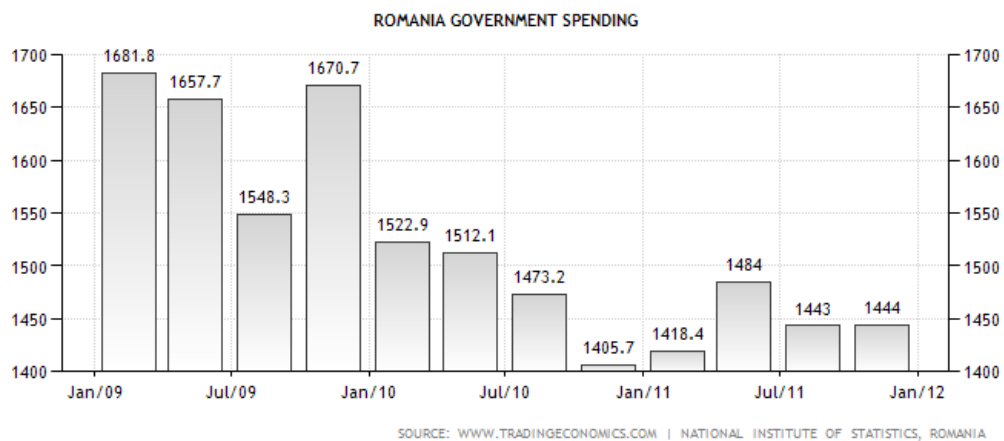


**Figure 7-** Romania GDP Growth Rate (Percent Change in GDP) between 2005-2008



As the economic downturn was set to be particularly severe, in 2009 the government chose to enact sizeable fiscal restraints driven by spending cuts and increasing fiscal burden, particularly through the introduction of the lump tax rate called the minimum tax and reduction of some fiscal deductibility, resulted in lower expenditures on goods and services by 12.6% and lower public investment by 13.3%, as shown in figures 8 and 9.

**Figure 8-** Romania Government Spending (million RON) during 2009-2011



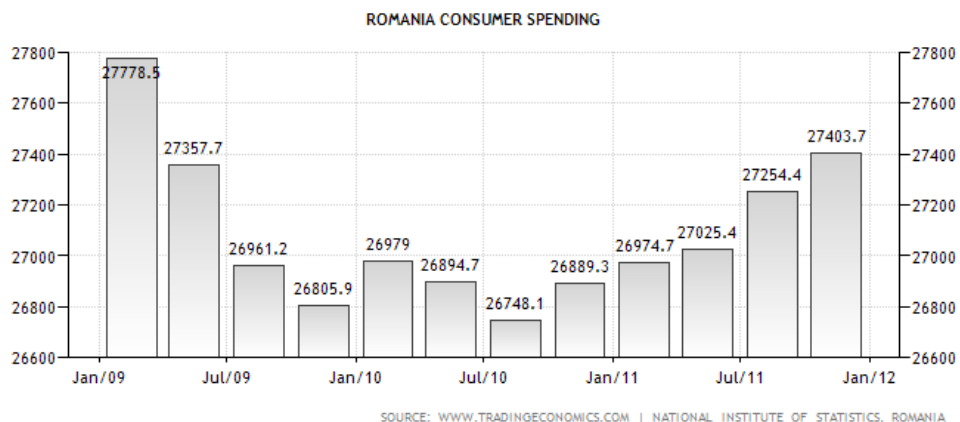


**Figure 9-** Romania Government Spending during 2009-2011



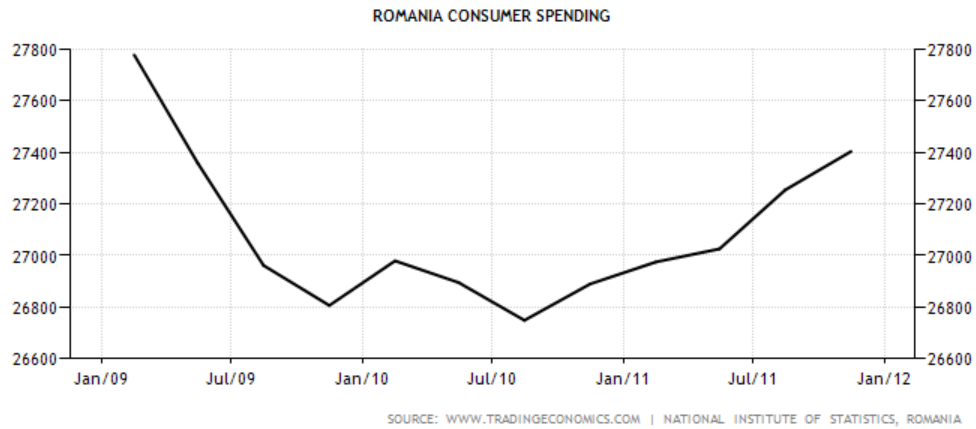
During 2010, the fiscal policy becomes even more restrictive through measures such as sharp reduction by 25% in the public sectors salaries, cutting by 15% the unemployment benefits and increasing by 5% the VAT rate. These fiscal measures continued in 2011 resulting in a contraction of the demand for goods, services (as shown in figures 10 and 11) and implicitly banking loans.

**Figure 10-** Romania Consumer Spending (million RON) during 2009-2011





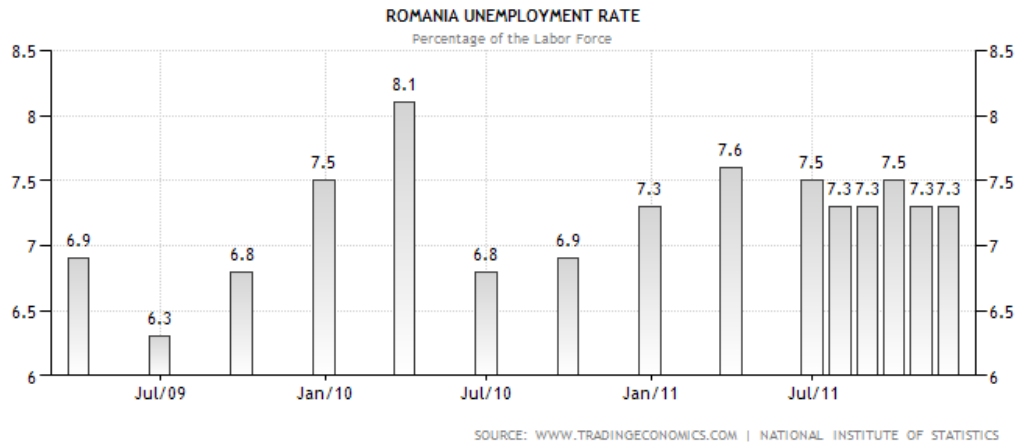
**Figure 11-** Romania Consumer Spending during 2009-2011



The lump-sum tax led to an avalanche of companies which suspended operations or applied for dissolution or voluntary cessation. According to data provided by National Trade Register Office, the number of companies which suspended their activity rose almost 11 times in the first half of 2009, compared to the corresponding period of 2008. The number of companies which suspended their activity rose to 80.013 from 6.698 in January-June 2008, 112.893 compared to 9.186 during January-September 2008 and totalizing 134.400 in 2009. Another 66.400 companies have chosen to suspend the activity in 2010. However, this phenomenon is considered by businesspeople to be a positive consequence of the lump-sum tax. The companies have chosen to suspend the activity instead of paying the lump-sum tax. As a consequence, the unemployment rate increased sharply during the analyzed period as shown in figure 12.



**Figure 12-** Romania Unemployment Rate during 2009-2011 (percentage of the Labor Force)



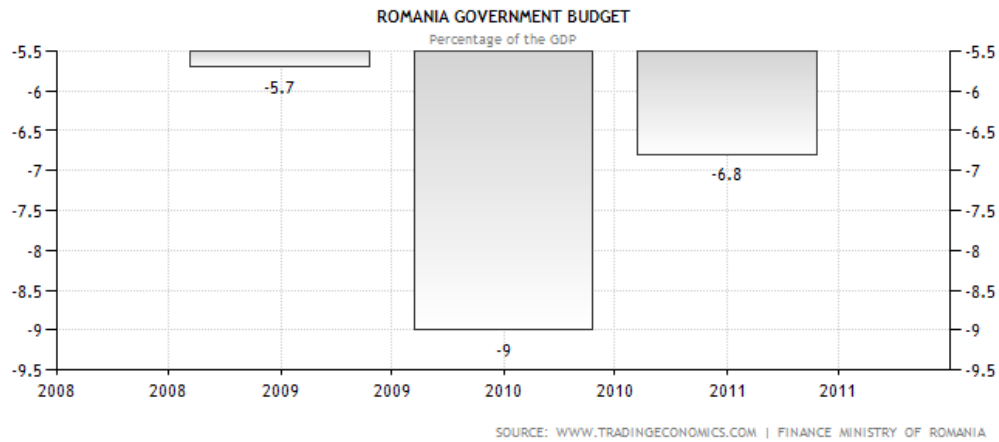
Tightening taxation in crisis times definitely leads to unemployment and unemployment leads to lower standard of living for population. Unemployment means not only that the state does not collect tax and contributions to special funds, but also increases the costs of granting state unemployment fund.

In crisis time, Romania's fiscal strategy is based not on incentives to business, but on the increasing of the fiscal burden for better financing the budget in order to keep the deficit at lower limits. CAS's growth by 3.3% in 2009, increasing ahead of time the excise duty on tobacco and spirits, introducing the lump tax, increasing Vat rate by 5% and growth of local taxes are attempts to collect as much, without regard to the needs of the business environment facing crisis.

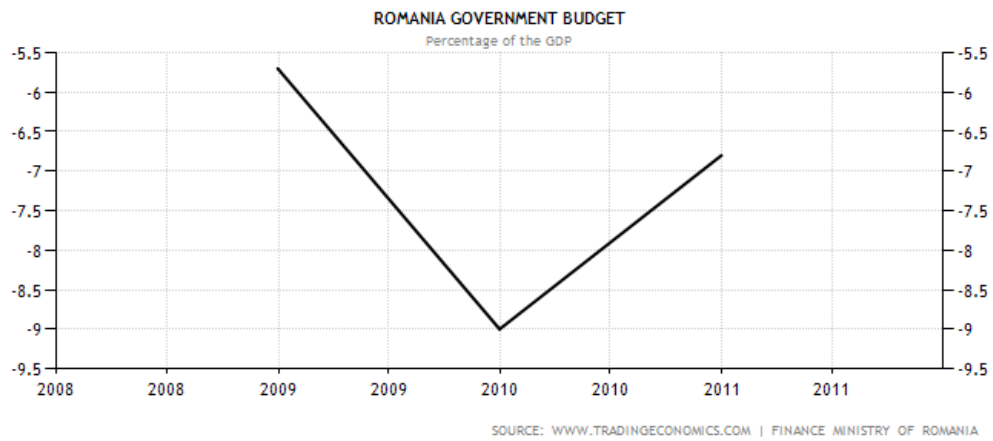
By increasing taxation and reducing expenditures over the recession time, the government was expected to improve the budget balance, which, on contrarily suffered a deep fall as shown in figures 13 and 14.



**Figure 13-** Romania Government Budget during 2009-2011 (percentage of the GDP)



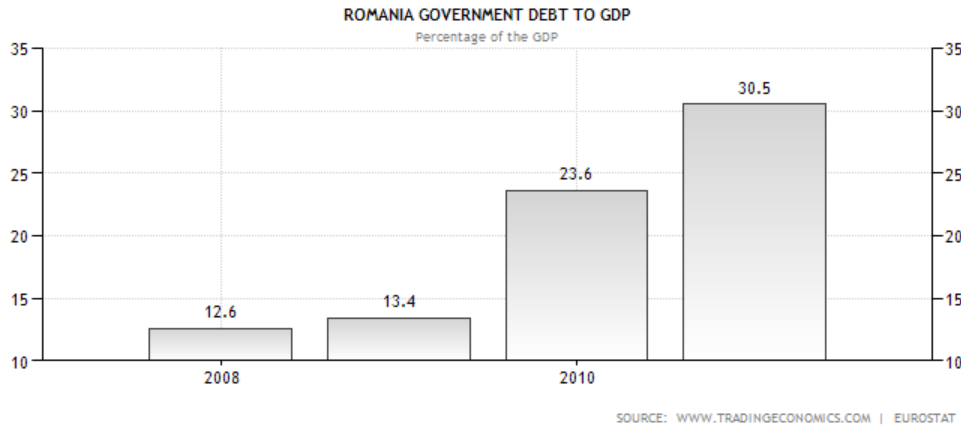
**Figure 14-** Romania Government Budget during 2009-2011 (percentage of the GDP)



As a logical consequence, the Government debt increases strongly as shown in figure 15.



**Figure 15-** Romania Government Debt to GDP during 2009-2011 (percentage of the GDP)



Due to its negative effects, the government renounced at the minimum tax starting with 1 October 2010.

## V. The study results

The present study shows that there are strong evidences regarding the pro-cyclical character of fiscal policy in Romania. The existing evidence reveals that taxation and government consumption tends to be pro-cyclical in both boom and recession period. The evidence that the paper points out is consistent with the existence of pro-cyclicality in taxation and government spending in Romania, resulting in increasing spending and reducing tax rates in upswing and reducing spending and raising taxes in downturn.

A question arises from such an evolution: “Why Romania could not promote a countercyclical fiscal policy?” The answer which results from this study is that Romania has made large fiscal adjustments during the expansion periods, opposite to the findings of the researchers, which recommend fiscal consolidation processes in good times and not during bad times when they might play some role in smoothing output declines. Logically going on, another question arises from this answer: “Why has the government made such fiscal adjustments during 2005-2008 despite the specialist’s recommendations?” According to the literature, the pro-cyclical character of fiscal policy is highly correlated with the weak quality of public institutional design in a country, especially with the high





level of corruption (Dima et al., 2010 and 2013). Logically going on, the next question refers at the level of corruption in Romania during 2005-2008. The answer can be found in the studies coordinated by Johann Graf Lambsdorff which provide the overall extent of corruption (frequency and/or size of bribes) in the public and political sectors and include an assessment of multiple countries during 1998-2011. According to the scientific studies in the field of corruption, in Romania, the Corruption Perceptions Index (CPI) based on scores provided by experts as risk agencies/country analysts is very low, as shown in table. 3.

**Table 3-** The evolution of the CPI (Corruption Perceptions Index) in Romania during 2005-2008

Year	CPI	The place in the top	Countries above (place in top)	Countries bellow (examples)
2005	3	85	Iceland (1), Finland (2), Germany (16), Hungary (40), Bulgaria (55)	Moldova (88), Ukraine (107), Afghanistan (117), Russia (126), Bangladesh (the last-158)
2006	3.1	84	Iceland (1), Finland (1), Germany (16), Hungary (41), Bulgaria (57), Moldova (79)	Ukraine (99), Russia (121), Bangladesh (158), Haiti (the last-163)
2007	3.7	69	Denmark (1), Finland (1), Iceland (6), Germany (16), Hungary (39), Bulgaria (64)	Moldova (111), Ukraine (118), Russia (143), Somalia (the last-179)
2008	3.8	70	Denmark (1), Sweden (1), Finland (5), Iceland (7), Germany (14), Hungary (47)	Bulgaria (64), Moldova (109), Ukraine (134), Russia (147), Somalia (the last-180)

Source of data: [http://archive.transparency.org/policy\\_research/surveys\\_indices/cpi/](http://archive.transparency.org/policy_research/surveys_indices/cpi/)

CPI Score relates to perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt). As it results from table 3, CPI for Romania evolved between 3 and 3.8 in the considered period, which represent a low level of CPI, closer to 0 (highly corrupt) than 10 (highly clean). Based on our study results and the above evidence, we can conclude that the poor



quality of the public institutional design, especially the high level of corruption, represents the main determinant of the pro-cyclical character of fiscal policy in Romania.

## **VI. Conclusion**

According to our study, the evidence supports claims that Romanian fiscal policy is pro-cyclical and hence destabilizing over the analysing period.

Based on this paper and our previous research regarding automatic fiscal stabilizers and discretionary fiscal policy we can conclude that fiscal pro-cyclicality in Romania arises from both the weakness of automatic stabilizers and the pro-cyclical bias of discretionary policies as a result of weak quality of the public and political sectors.

While many countries are coming up with stimulus packages to fight the crisis, tax reforms are an obvious element of fiscal incentives and are indeed expected to be effective at stimulating the economy. The sustainability in fiscal policy is based on the system capacity to increase the public institution credibility, to develop the tax base, to stimulate the economy, to stimulate interest in investment, to create an open business environment, friendly and stable. The GDP is a consequence. It grows the more businesses are flourishing.

This study shows that the government is far from having applied the best fiscal policy. As a consequence Romania should drastically re-evaluate its fiscal policy in a way which includes among its features transparency, responsibility and clear operating mechanisms. As the pro-cyclicality reduces de effectiveness of the Automatic Fiscal Stabilizer, it is very important to avoid the pro-cyclicality in fiscal rule design. In the author's opinion only non-discretionary fiscal policy through Automatic Fiscal Stabilizers can provide a faster decision making process, shielded from political interference, which ensures a timely fiscal response adapted to the movement of the business cycle. In this way, fiscal consolidation processes in good times might play some role in smoothing output declines.

Finally, there is ample space for future research on the pro-cyclicality of Romanian fiscal policies and the way to counter-cyclicality. Considering useful to make an explicit assessment of sustainability in fiscal policy, in future paper, we intend to simulate a model to generate a deeper understanding of the relationships implied by the model and the factors that determine the degree of cyclicity of the fiscal variables in Romania.



Another issue that warrants further research is how IMF-supported economic reforms, with their emphasis on fiscal reforms, have affected the pro-cyclical behavior of fiscal policy in Romania.

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