European Journal of Science and Theology, June 2012, Vol.8, Supplement 1, 37-51

IS FISCAL POLICY ENHANCING OR RETARDING GROWTH? EVIDENCE FROM THE EUROPEAN EMERGING ECONOMIES

Emilia Câmpeanu[*] and Delia Cataramă

Bucharest University of Economic Studies, Piata Romana 6, Room 1104, Bucharest, 010374 Romania

(Received 17 April 2012, revised 18 April 2012)

Abstract

Facing the current economic and fiscal crisis governments must know how to react in order to attenuate its negative effects. Therefore, governments have to rely their decisions of fiscal policy to enhance economic growth. Paper aim is to analyse if fiscal policy is growth enhancing or retarding based on European emerging economies (Bulgaria, Romania). The results are useful for the identification of the adecquate guvernment measures in order to stimulate the economy.

Keywords: Economic growth, fiscal policies, emergent European countries

1. Introduction

It is a well-known and accepted fact that the fiscal policies have an influence on gross domestic product (GDP) and growth. When an impulse has to be given to the economic growth, it is very important to understand the mechanism by which the fiscal policies affect growth. Thus, it is important to have knowledge on: i) the theoretical background on which the economic growth theories are based; ii) the identified and proved effects of the above theories; iii) the transmission channels of fiscal policies. All these must be accompanied by quantitative, qualitative and empirical analysis, capable to indicate the sense, the magnitude and the moments when fiscal policies effects impact on the economic growth.

The descriptive and econometric analyses are based on variables capable to best describe fiscal policies and economic growth. However, it still remains unanswered the question on which are the indicators that best describe the fiscal policies? The literature indicates some answers, considering that the indicators that may be used for showing the behaviour of fiscal policies are: i) budgetary

[*] E-mail: emilia.campeanu@fin.ase.ro; telephone: +40213191900 int. 264; fax: +40213191899

revenues, total and split into categories (direct taxes, indirect taxes, social contributions, other revenues; discretionary revenues, non-discretionary revenues, other revenues); ii) budgetary expenses, total and split into categories (current expenses, capital expenses; productive expenses, non-productive expenses, other expenses; consumption expenses, investments); iii) the budget balance. These variables may be presented in real values, real values per capita, as well as cyclically adjusted values which are no longer affected by the temporary fluctuations caused by the economic cycle. When considering the cyclically adjusted revenues and expenses, only the discretionary part of the fiscal policies is considered, meaning that part which may be influenced by the public policy-maker. The cyclically non-adjusted revenues and expenses include also the automatic stabilizers part, besides the discretionary part.

This paper analyses how the fiscal policies enhance growth or, au contraire, decelerate growth, using the case of European emergent countries (Bulgaria, and Romania), which were strongly affected by the economic crises which started in 2008. Although many governmental measures were taken, restarting economic growth is a very slow and long process, due to the poor functioning of the economic growth's engines. The research is structured on five sections. After this first introductive section, the second section presents a review of economic growth as an objective, while the third section focuses only on the ability of fiscal policies to generate growth. The fourth section presents an econometric analysis while the fifth section concludes.

2. Economic growth as an objective

The economic growth was identified by many authors as only one figure: GDP growth ratio. Others considered that this figure alone may not express all aspects of such a complex process as economic growth. The polish economist Grzegorz Kolodko built a macro-economic pentagon using five indicators that could capture the macroeconomic stability [1]. Among them growth ration of GDP was considered the first. But is one figure capable to express such a complex concept as an economic growth? In Table 1 we present the visions of the international institutions on the economic growth, as an objective of public policies.

Thus, economic growth does not mean only GDP growth.

But how do the fiscal policies influence growth? The next section tries to make a literature review on economists' answer to this question.

3. Literature review on how fiscal policies influence growth

Two questions raised and still raise debates within economists:

1. How is economic growth influenced by fiscal policies?
2. Which are the transmission channels of fiscal policies' effects?

Table 1. Economic growth as a major policy objective: an international overview.

The level	The economic growth as a major policy objective: types and procedures	
European Union [2]	Smart growth	Improving EU performances by:
		- education (encouraging people to learn, study and develop their skills)
		- research/innovation (developing new products/services which generate growth and jobs and help address social challenges);
		- digital society (using information and communication technologies)
	Sustainable growth	- building a competitive economy, with low carbon emissions and using resources in an efficient and stable manner
		- protecting the environment, reducing emissions and preventing biodiversity loss;
		- capitalising on Europe's leadership in developing new green technologies and production methods
		- introducing efficient smart electricity grids;
		- harnessing EU-scale networks to give our businesses (especially small manufacturing firms) an additional competitive advantage
		- improving the business environment, in particular for SMEs
		- helping consumers make well-informed choices.
	Inclusive growth	- raising Europe’s employment rate – more and better jobs, especially for women, young people and older workers
		- helping people of all ages anticipate and manage change through investment in skills & training
		- modernising labour markets and welfare systems
		- ensuring the benefits of growth reach all parts of the EU
The Central European Bank [3]	Sustainable and noninflationary economic growth	The Central European Bank has as main objective, besides price stability, sustaining general economic policies within EU for achieving its objectives as regards the “sustainable and noninflationary growth” and a “high level of occupancy”
The European bank for Reconstruction and Development [4]	Forecasts economic growth in European emergent countries	Makes and adjusts periodically forecasts for economic growth in the European emergent countries

Organization for Economic Co-ordination and Development (OECD) [5]	Powerful and sustainable economic growth	OECD monitors regularly the economic growth models in the member states. This involves valuation of output and of trends of productivity growth. OECD makes an annual report 'Going for Growth' which indicates the evolution of structural policies and priorities of structural reform in the context of sustaining economic growth in OECD countries and the main emergent countries (Brazil, China, India, Indonesia, Russia, South Africa)
The World Bank [6]	Economic growth for reducing poverty	Research and assistance programs focused on identifying the contribution of institutional polices and structures on growth and global economic performance. These are the premises of reducing global poverty.

3.1. The transmission channels of fiscal policies' effects

We shall start with the second question. The European Commission makes a periodic study of 'Public Finances in EMU' and in the 2008 version there is a suggestive figure on the transmission channels of fiscal policies effects on economic growth.

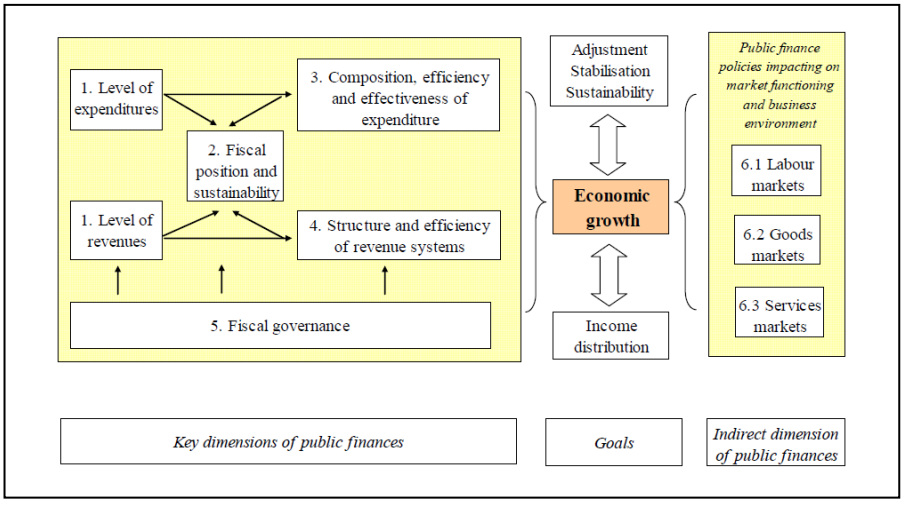

Figure 1. Transmission channels of fiscal policy's effects on economic growth from the perspective of public finance's quality [7].

Zagler and Durnecker [8] appreciate that "the quality of public finances should be evaluated by its capacity to soften output's fluctuations" This underlines the necessity that the fiscal policy to transmit its effects on economic growth.

Also, fiscal policies transmit their effects on economic growth by influencing: i) the average level of education of work-force through public investments in human capital (the budgetary expenses for education and culture) capable to lead to social benefits for the entire society; ii) the productivity of the physical capital, as the state has to assure the basic social and economic infrastructure which allows private sector to activate; iii) the quality of physical capital or work-force supply, so as the state, by its policies to minimize the gap between the supply and demand of capital and work-force.

As Gerson [9] mentions, it is about the impact which transmits rather by allocating public resources for investments and human capital than by the aggregate supply of work-force and capital.

However, other authors mention that the fiscal policies transmit their effects through the aggregate demand and supply.

The influence on the aggregate demand is sent through two transmission channels: (i) trust in governmental measures and (ii) interest rate. The trust in governmental measures depends on the perception that changes today will not affect negatively the revenue of tomorrow. Under the conditions of a high trust in the government, the governmental measures of reducing budgetary spending and/or increasing taxes may lead to anticipations of future higher revenues which will induce higher consumption and, thus, higher aggregate demand. The reduction of the interest rates on public loans has the same effect on consumption and aggregate demand.

The influence on the aggregate supply is sent through the labour market. This transmission channel for the fiscal policies' effects on economic growth is analysed by the neoclassical theory which sees the economic growth as exogenous. This theory is based on the neoclassical model proposed by Solow [10] and Swan [11] and improved by Diamond [12], Solow [13], Romer [14], Lucas [15], Bernheim [16], Chatterjee [17], Barro and Sala-i-Martin [18], Barro [19], McGrattan and Ohanian [20].

3.2. How is economic growth influenced by fiscal policies?

There are three main theories that describe the role of the state in the economy: Neoclassical theory, Keynesian theory, Ricardian theory.

The Neoclassical theory considers that fiscal policies constrain the economic activities of the private sector by crowding-out effects [21]. The view of the neoclassical theory is that any expansionist fiscal policy (cutting taxes of increasing expenses) leads to high prices and high interest rates which refrains the activity of the private sector.

The Keynesian theory supports the active role of the fiscal policies. A restrictive fiscal policy (cutting expenses, increasing taxes) has a crowding-in effect, as the governmental measures generate lower interest rates, with positive consequences on investments.

The Ricardian theory shows the neutrality of fiscal policies, stating that any governmental measure will not produce effects on economy as the consumers base their consumption decisions on their permanent revenue and not on the available revenue which is sensible to the change of fiscal variables. Also, the consumers have a long-term perspective, which makes that any fiscal relaxing decision of today generates additional savings, as the consumers understand that lower taxes today means higher taxes tomorrow [22].

The influence of fiscal policies on economic growth may also be captured by using macro-economic models. A review of these models is made by Campeanu [23].

The next section makes an empirical study on the effects of the fiscal policies on economic growth, taking the following steps for studying: i) the statistical profile of economic growth in the considered European emergent countries (Bulgaria and Romania); ii) the profile of the fiscal variables, GDP and growth; iii) the relationship between fiscal variables and growths; iv) the investigation of how fiscal policies enhance or retard economic growth based on Bulgarian and Romanian economies that are the last acceded countries in European Union with the status of emerging economies.

4. Database, methodology and results

For an overview of economic growth in the emerging EU countries surveyed (Bulgaria, Romania) in a global context, it is analyzed the statistical profile of the main variable of the study which is economic growth. Table 2 presents some statistical indicators of economic growth given the data availability for the period 1990-2010 using the World Bank database.

The profile analysis on the global economic growth indicates that the most important economic growth was recorded in 2000 for most developed countries, respectively in 2006-2008 for developing countries and emerging economies (Figure 2). In the case of Bulgaria and Romania there is an alternation periods of negative economic growth (1990-1992, 1996-1997, 2009) with positive growth (1993-1995, 1998-2008, 2010). In these times of economic decline, Romania had the lowest negative real GDP in 1991 (value being -12.9%) compared with -9.1% in Bulgaria, in 1990.

Also, the dynamics of real GDP during 1990-2010 indicates that the most important change has been rising in Romania (6.5 pp), while developed countries there has been downward (Figure 3). Per whole period remains positive growth rate (average of 0.3 pp).

In a world in permanent connection and constantly evolving, is relevant the Romania's position is the relevant groups of countries to see the national economic growth as percent of international. The results are surprising because it enables to keep pace with international context. For example, to the global economy, Romania's economic growth was 41.4% during 1990-2010, only 22.5% respectively in 2010.

Table 2. Statistical profile of economic growth (1990-2010).

Country code	Average	STDV	Dynamic 1990-2010	Max		Min	
				Value	*Year*	*Value*	*Year*
EMU	1.8	1.8	-1.6	3.8	*2000*	-4.3	*2009*
EU	1.9	1.8	-0.7	3.9	*2000*	-4.3	*2009*
EUEE	1.1	5.7	7.9	7.8	*2008*	-10.7	*1991*
OEC	2.1	1.7	-0.1	4.0	*2000*	-4.0	*2009*
LDC	4.6	2.3	3.9	8.0	*2007*	0.6	*1992*
LIC	4.0	2.0	3.0	6.4	*2006, 2007*	-1.2	*1992*
LMC	4.8	1.8	3.2	7.9	*2007*	1.7	*1991*
OED	2.1	1.7	0.0	4.1	*2000*	-4.0	*2009*
WLD	2.7	1.5	1.3	4.3	*2000*	-2.3	*2009*
BG	1.0	5.7	9.3	6.7	*2004*	-9.1	*1990*
RO	1.1	6.5	6.5	9.4	*2008*	-12.9	*1991*

Source: own investigation based on World Bank data.
Note: EMU = Euro Area; EU = European Union;; EUEE = European Union emerging economies (EU members since 2007; OEC = High income: OECD; LDC = Least developed countries: UN classification; LIC = Low income; LMC = Lower middle income; OED = OECD member states; WLD = World; BG = Bulgaria; RO = Romania.

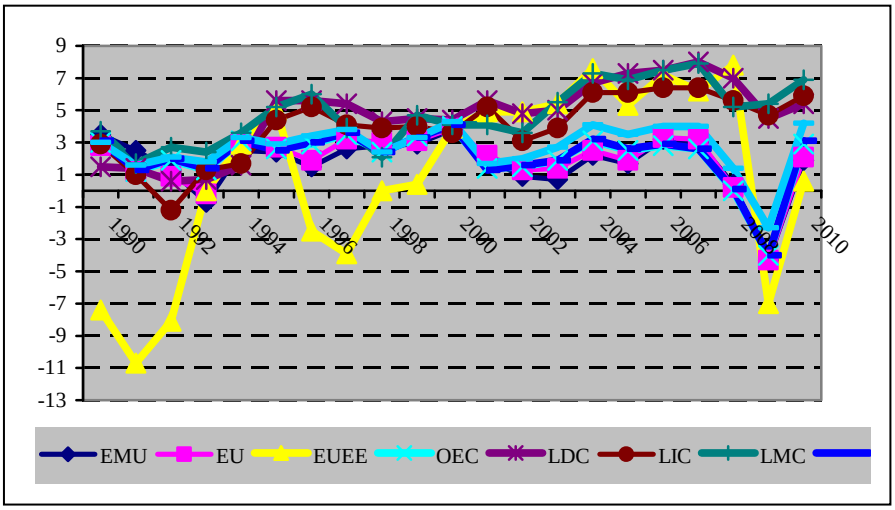

Figure 2. Evolution of the economic growth for countries groups (1990-2010), source: own investigation based on World Bank data.

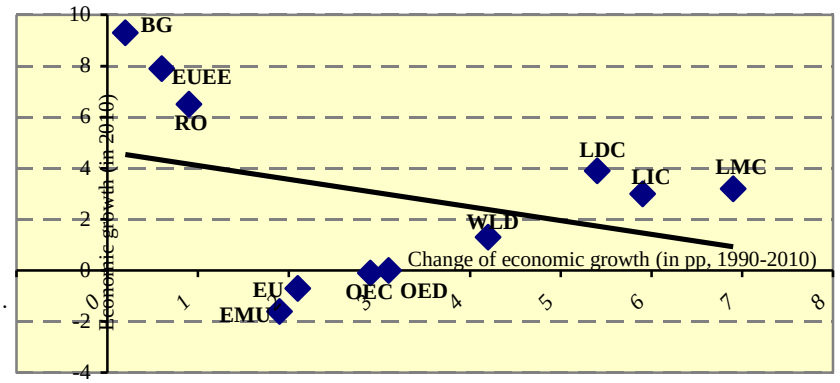

Figure 3. Dynamic of economic growth (1990-2010), source: own investigation based on World Bank data.

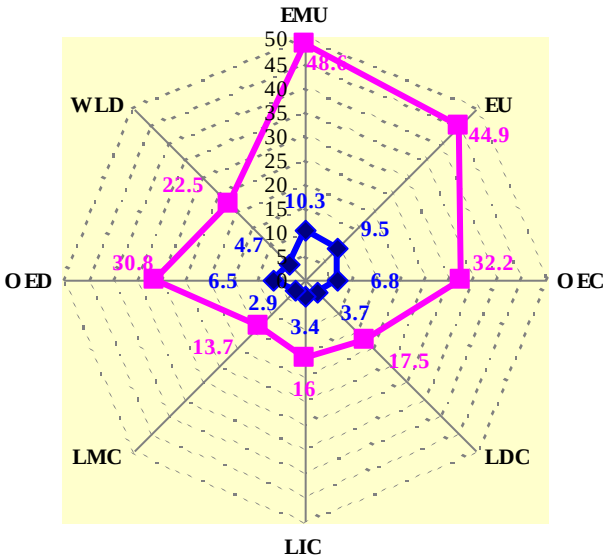

Figure 4. Growth in Bulgaria and Romania (% of international growth) (2010), source: own investigation based on World Bank data.

Dynamics of real GDP during 1990-2010 indicates that the most important change has been rising in Bulgaria (9.3 pp), while in developed countries there has been downward (Figure 4). The growth rate remains positive over the entire period (average of 0.3 pp).

In a world in permanent connection and constantly evolving, is relevant the Bulgaria and Romania position in the countries groups to identify the economic contribution of each state to the international growth (Figure 4). The results are surprising because it enables to keep pace with international context.

For example, to the global economy, Romania's economic growth was 41.4% during 1990-2010, only 22.5% respectively in 2010.

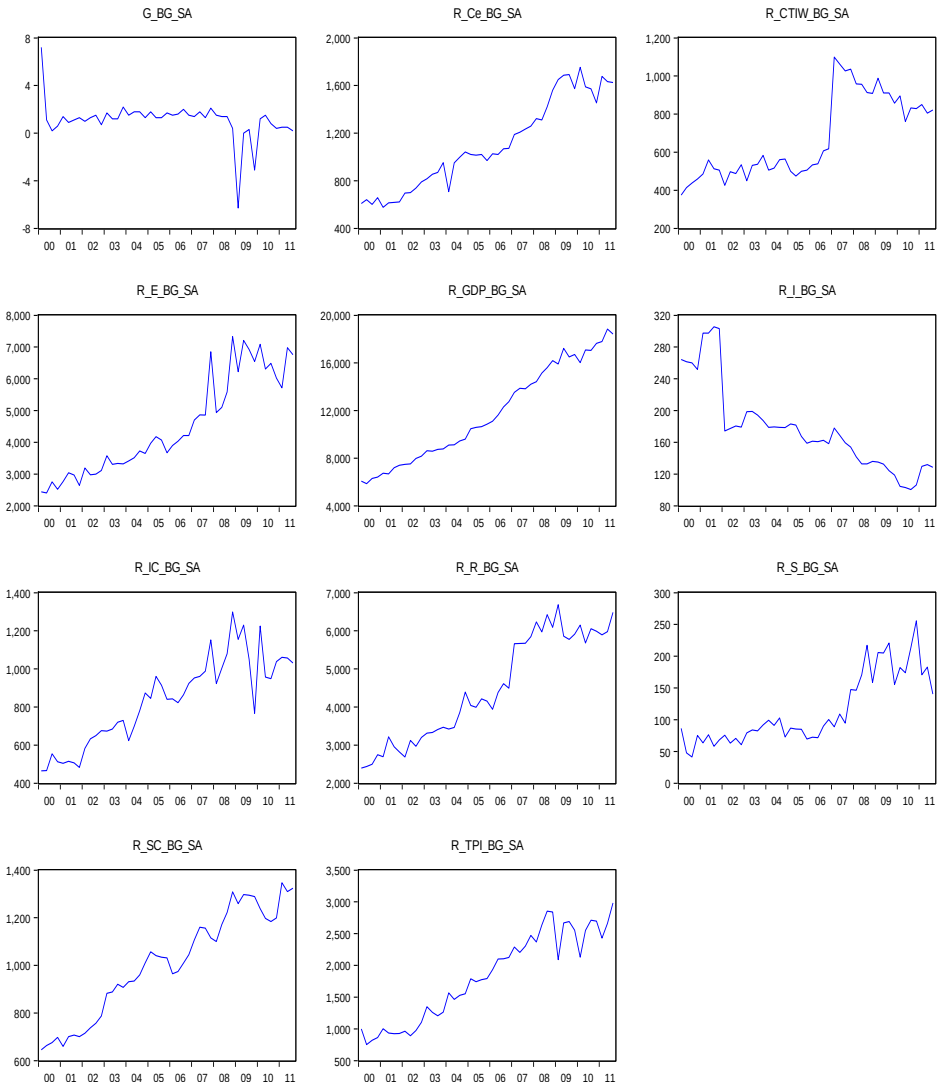

Figure 5. Evolution of the variables – Bulgaria's case (2000Q1-2011Q3)

To answer to the key question of the paper shall analyze the statistical profile of the variables used, namely: total general government expenditure, intermediate consumption, compensation of employees, subsidies, interest, total general government revenue, current taxes on income and wealth, taxes on production and imports, social contributions, real GDP growth rate. The data are expressed in real terms calculated based on the Harmonized Indices of Consumer Prices (HIPC). Harmonized Indices of Consumer Prices (HICP) is

calculated by the authors based on monthly data for HICP from the Eurostat database and their frequency is quarterly (2000Q1-2011Q3). The variables expressed in real term are calculated by divided their absolute value to HICP. Also, the all the quarterly data are seasonally adjusted using the specific technique provided by Eviews7 software (http://www.eviews.com/EViews7/ev7main.html). The evolutions of the used variables are indicated in Figures 5 and 6.

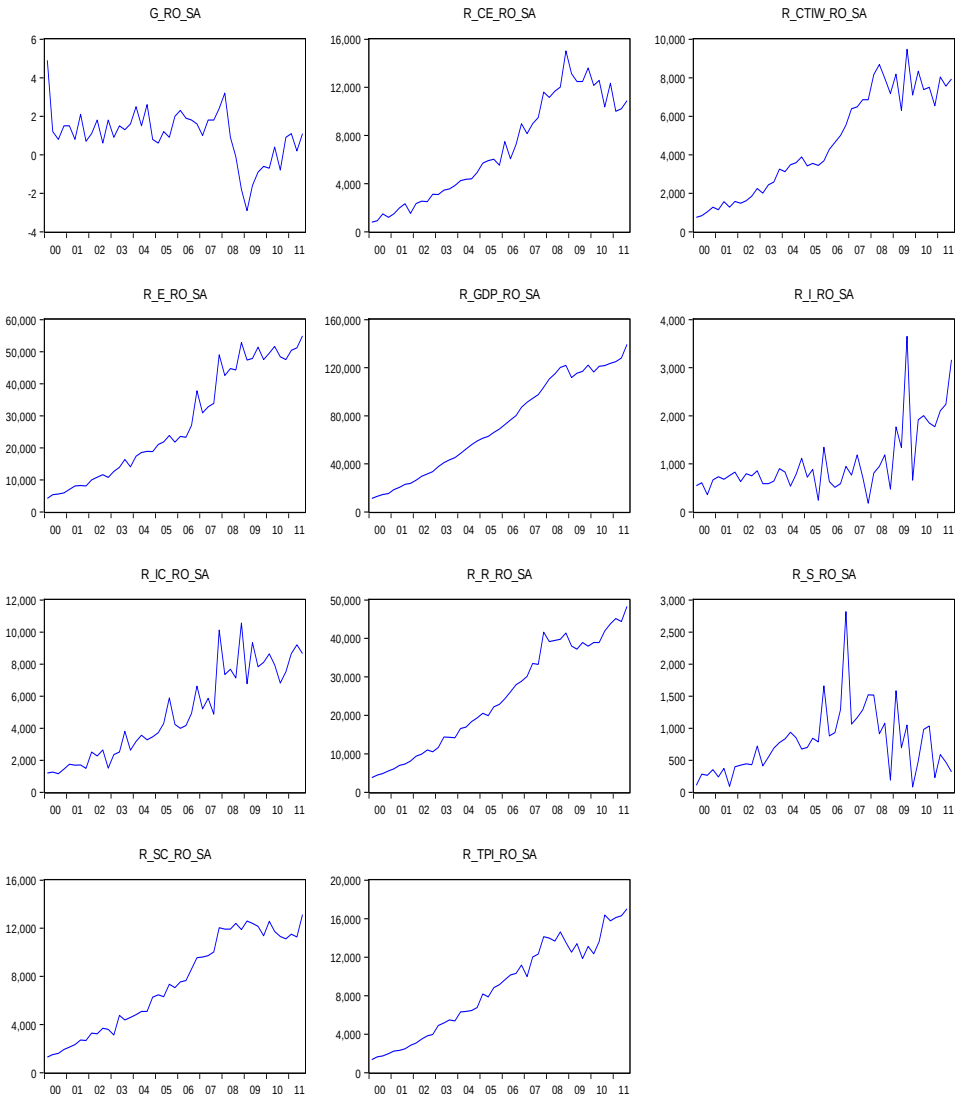

Figure 6. Evolution of the variables – Romania's case (2000Q1-2011Q3).

Table 3. Results of the regression.

Dependent variable	Independent variables	Coefficients	R-squared
G_BG_SA	**G_BG_SA(-1)**	0.4262*** (0.0982)	0.714564
	DR_CE_BG_SA(-1)	-0.0031* (0.0017)	
	DR_CTIW_BG_SA(-1)	0.0032** (0.0016)	
	DR_I_BG_SA(1)	-0.0116** (0.0061)	
	DR_IC_BG_SA	0.0058*** (0.0011)	
	DR_S_BG_SA(-2)	-0.0086* (0.0060)	
	DR_SC_BG_SA(-2)	-0.0082* (0.0041)	
	DR_TPI_BG_SA	0.0040*** (0.0007)	
	C	0.4773*** (0.1776)	
DG_RO_SA	**DG_RO_SA(-1)**	-0.3507** (0.1376)	0.408359
	DR_CE_RO_SA(-1)	-0.0002* (0.0001)	
	DR_CE_RO_SA(-2)	-0.0003* (0.0001)	
	DR_CTIW_RO_SA(-3)	-0.0005* (0.0002)	
	DR_I_RO_SA(-3)	0.0010*** (0.0003)	
	DR_S_RO_SA(-2)	0.0004* (0.0003)	
	DR_TPI_RO_SA	0.0003* (0.0002)	
	C	0.0236* (0.1481)	

Source: own investigation using Eviews7; Sample (seasonally adjusted): 2000Q1-2011Q3; included observations: 45 after adjustments.

Note: G_*X*_SA = real GDP growth rate for country *X*; DG_*X*_SA = dynamic of real GDP growth rate for country *X*; DR_CE_*X*_SA = dynamic of real compensation of employees for country *X*; DR_CTIW_*X*_SA = dynamic of real current taxes on income, wealth for country *X*; DR_I_*X*_SA(1) = dynamic of real interest for country *X*; DR_IC_*X*_SA = dynamic of real intermediate consumption for country *X*; DR_S_*X*_SA = dynamic of real subsidies for country *X*; DR_SC_*X*_SA = dynamic of real social contributions for country *X*; DR_TPI_*X*_SA = dynamic of real taxes on production and imports for country *X*; C = constant; absolute value of Std. Error appears in parentheses; *** denotes significance at 1 percent, ** significance at 5 percent and * significance at 10 percent; by green colour are indicated general government expenditure components; by blue colour are indicated general government revenue components.

The data are integrated of order 1 (I(1)) that imposed the need to use the dynamic of the variables and not their level. The exception is the economic growth in Bulgaria that is integrated of order 0 (I(0)). In order to identify if the fiscal policy is growth enhancing or retarding, it was used ordinary least squares (OLS) in order to indicate the sign, dimension of the impact. The results are presented in Table 3.

In Bulgaria case, over all, fiscal policy can enhance the economic growth (positive relationship between fiscal variables and growth) with 0.7 percent based on taxes on production and imports, current taxes on income and wealth and growth (if indicated fiscal variables increase with 1 percent than growth increase with 0.7 percent). The negative relationship between social contributions and growth is not surprising because any increase of contributions has a direct impact on disposable revenue which affects consumption and then growth. On government expenditure side, the negative relationship between growth and most of the expenditure indicates that over all expenditure retard growth with almost 2.3 percent (if compensation of employees, interest and subsidies increase with 1 percent than growth decrease with 2.3 percent). Exception is represented by the intermediate consumption where the growth enhancing is almost 0.58 percent.

Table 4. Fiscal policy measures that enhance or retard economic growth.

Country	**Growth**		*Observation*
	enhancing	**retarding**	
Bulgaria	↑ **TPI** & **IC**	↓ **TPI** & **IC**	instantaneous reaction
	↑ **CTIW** & ↓ **CE**	↓ **CTIW** & ↑ **CE**	delayed reaction with 1 quarter
	↓ **SC** & **S**	↑ **SC** & **S**	delayed reaction with 2 quarter
	↓ **I**	↑ **I**	1 quarter forward reaction
Romania	↑ **TPI**	↓ **TPI**	instantaneous reaction
	↓ **CE**	↑ **CE**	delayed reaction with 1 quarter
	↑ **S** & ↓ **CE**	↓ **S** & ↑ **CE**	delayed reaction with 2 quarter
	↑ **I** & ↓ **CTIW**	↓ **I** &↑ **CTIW**	delayed reaction with 3 quarter

Source: own representation based on the investigation results.
Note: TPI = taxes on production and imports; CTIW = current taxes on income, wealth; SC = social contributions; IC = intermediate consumption; CE = compensation of employees; S = subsidies; I = interest.

The results reveal that the Bulgarian economy is based on consumption and therefore the effect of any movements of social contributions has to be attenuated by taxes on income and wealth. It is interesting that the government

policies in Bulgaria are focused on stimulating working in order to preserve the disposable income no matter the government action on taxation.

In Romania, the results indicate that social contributions and intermediate consumption are not statistically significant. Therefore, these variables were not included in equation. An instant positive reaction comes from the taxes on production and imports whose growth with 1 percent generates a dynamic growth increase with 0.3 percent. On the other hand, current taxes on income and wealth produce a decrease but the reaction is delayed with 3 quarters. On expenditure side, the results indicate a positive impact on growth that comes only from the subsidies and interest with a delayed of two and three quarters (see the Table 2). Compensation of employees has an important effects on economic growth with a delayed of 1 and two quarters as a direct consequences of the wages payment manner in the budgetary system.

Synthesising the investigation results, in Table 4 are indicated the fiscal policy measures that enhance or retard the economic growth.

Knowledge of these measures is useful to know what tools governments should use to boost growth. Growth ensures in the medium-term the reduction of public debt with positive consequences on the sustainability of public finances [24, 25].

5. Conclusions

It is extremely important for an emergent economy such as Romania and Bulgaria that fiscal policies function as engines for economic growth. It is proven that these two countries have: (i) poor economic performances shown by the low level of the global competitiveness (Romanian score is 4.08 in 2011, rank 77th out of 142 countries with 10 positions lower than in 2010; Bulgaria score is 4.16 in 2011, rank 74th out of 142 countries with 3 positions lower that in 2010 [26]; ii) high degree of fiscal risk and macro-financial risk (aprox. 0.7 according to the European Commission [27]); iii) high exposure to external risks and fiscal risks [28].

Therefore, in order to analyze how fiscal policy can enhance economic growth it is considered quarterly data (seasonally adjusted) from Eurostat expressed in real terms. The results are quite interesting because the fiscal relaxation and the expenditure increase are the prerequisite for growth. The tax reduction regarding income and wealth assure an increase of consumption through the effects of disposable revenue increase. Also, taxes on production and imports induce immediately a positive effect on growth which is true taken into consideration that the considered EU emerging countries base their economic development especially on consumption.

On expenditure side, compensation of employees enhance economic growth only in the context of a descendent evolution despite the fact that the impact if observed on growth after almost 2 quarters.

In a surprising way, the interest must be reduced in order to enhance economic growth in Bulgarian economy, while increasing in Romanian's case. This can be argued by the fact that public indebtedness is greater in Bulgaria than in Romania.

Also, intermediate consumption and social contributions have different effect on Bulgarian economic growth while in Romania it does not have any effects.

Synthesizing the results it can be said that the findings are quite interesting because the fiscal relaxation and the expenditure increase are the prerequisite for growth both in Bulgaria and Romania case.

Acknowledgement

The contributions of Emilia Campeanu to this paper are an integral part of post-doctoral research topic 'The effects of fiscal and budgetary policies on the economy' which is supported from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 'Performance and excellence in postdoctoral research in Romanian economics science domain' (contract no. 0501/01.11.2010).

References

[1] G.W. Kolodko, *The World Economy and Great Post-Communist Change*, Nova Science, New York, 2006, 195.
[2] ***, *Europe 2020*, European Commission, Brussels, 2010, available at http://ec.europa.eu/europe2020/index_en.htm.
[3] H.K. Scheller, *The European Central Bank - History, role and functions*, European Central Bank, Frankfurt, 2006, 49.
[4] ***, *EBRD revises down growth forecast for emerging Europe*, European Bank for Reconstruction and Development, London, 2008.
[5] ***, *Economic Policy Reforms 2012. Going for Growth*, OECD, Paris, 2012.
[6] ***, *Macroeconomics and Growth*, World Bank, Washington, 2012, available at http://econ.worldbank.org/external/default/main?menuPK=477883&pagePK=64168176&piPK=64168140&theSitePK=477872.
[7] ***, *Public Finances in EMU – 2008*, European Commission, Brussels, 2008,132.
[8] M. Zagler and G. Dürnecker, Journal of Economic Surveys, **17(**3) (2003) 397.
[9] P. Gerson, Working papers of the International Monetary Fund, **WP/98/1** (1998).
[10] R.M. Solow, Quarterly Journal of Economics, **70(1)** (1956) 65–94.
[11] T.W. Swan, Economic Record, **32(2)** (1956) 334.
[12] P.A. Diamond, The American Economic Review, **55(5)** (1965) 1126.
[13] R.M. Solow, Review of Economics and Statistics **39(3)** (1957) 312.
[14] P.M. Romer, Journal of Political Economy, **94** (1986) 1002.
[15] R.E. Lucas, Journal of Monetary Economics, **22** (1988) 3.
[16] B.D. Bernheim, Journal of Economic Perspectives, **3(2)** (1989) 55.
[17] S. Chatterjee, Journal of Public Economics, **54** (1994) 97.

[18] R. J. Barro and X. Sala-i-Martin, *Growth Models with Exogenous Saving Rates (the Solow–Swan Model)*, in *Economic growth*, 2nd edn., M.I.T. Press, Cambridge, 2003, 672.
[19] R.J. Barro, Quarterly Journal of Economics, **114(4)** (1999) 1125.
[20] E.R. McGrattan and L.E. Ohanian, *Does Neoclassical theory account for the effects of big fiscal shocks? Evidence from World War II*, Research Department Staff Report, Federal Reserve Bank of Minneapolis, Minneapolis, 2008, 315.
[21] W.H. Buiter, Journal of Public Economics, **7(3)** (1977) 309.
[22] R.J. Barro, The Journal of Economic Perspectives, **3(2)** (1989) 37.
[23] E. Câmpeanu, Analele Universitatii de Vest din Timisoara. Economics Science Series, **17** (2012) in press.
[24] A. Stoian, *A Retrospective Approach on Government Response to Increasing Public Debt: Empirical Evidence for European Countries*, Universidade Portucalense, Centro de Investigação em Gestão e Economia (CIGE), WP 15, 2011, available at http://wwwa.uportu.pt/siaa/Investigacao/WP_15_2011.pdf.
[25] L. Braşoveanu, *Size and quality of public sector and economic growth changes occurring in the former communist EU countries*, Universidade Portucalense, Centro de Investigação em Gestão e Economia (CIGE), WP 17, 2011, available at http://wwwa.uportu.pt/siaa/Investigacao/WP_17_2011.pdf.
[26] ***, *The global competitiveness report 2011–2012*, World Economic Forum, Geneva, 2011, 544.
[27] ***, *Public finances in EMU 2010*. *European Economy 4*, European Commission, Brussels, 2010, 292.
[28] E. Câmpeanu and E. Pădurean, Journal of International Scientific Publication: Economy & Business, **5(3)** (2011) 476.