Tax Policy Efficiency and Macroeconomic Stabilization

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Abstract: The world today and the contemporary economic system are characterized by two perspective trends – globalization and regional integration. For the past few years, we have also experienced a long-lasting economic crisis, which is spread all over the world. Taking into consideration the slow rate of economic growth, the necessity of active participation of the government in the economy and the use of fiscal policy for economic regulation is even more tangible. In this respect, a topical issue is to what extent the use of effective tax policy will be successful in achieving sustainable economic development and stable economic growth and in building a competitive economy.

In the present research the object of analysis is fiscal policy and its subject – the perspectives and opportunities concerning public revenues. The main goal is to evaluate the connection between taxes and economic growth using comparative analysis between Bulgaria and the other new Member States of the European Union (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia and Romania). The purpose is to justify the necessity of public revenue optimization to the level ensuring the highest economic growth.

Keywords: public revenue; tax policy; government deficit; government surplus; economic growth; optimal level.

JEL: H50; H54; H56

Introduction

Economic growth over the last years has been slow. This fact presents a real challenge concerning public finances. The aim of all European governments is to optimize public revenue and to make tax policy more effective. The problem of the present day is their management and the common mechanisms of economic growth in the context of a globalizing economy at the beginning of XXI century. The necessity of government participation in the economy as well as the limits of such participation is one of the main questions and the object of theoretic and empiric economic analyses.

There are a number of opinions concerning the decrease or increase of public revenues share in the Gross Domestic Product. A matter of dispute is also whether a certain increase of public revenues will induce higher real economic growth. Over the last years, the prevailing position has been that the state has passed over the boundaries of efficient intervention (using public spending and taxation policy) in the free market mechanism. A report by the World Bank "Fiscal Policy and Economic Growth, Lessons for Eastern Europe and Central Asia" states: "the thesis is confirmed – more efficient public spending, lower fiscal deficits and the broader introduction of flat taxes could increase economic growth"[1].

Another analysis[2] focuses on the equal decrease of public spending and taxes which is going to bring considerable benefit to the population of the industrialized countries. According to the author the situation at the moment can be called "fiscal churning" because people paying taxes and those receiving social benefits from the state in most cases are one and the same people. He estimates that the useless public spending in the analyzed countries is several percentage points of GDP.

The relationship between public deficit and economic growth[3] is analyzed using data about fiscal policy connected with cases of fiscal stimuli and with cases of fiscal adjustments in OECD countries during the period 1970 – 2007. Fiscal stimuli based upon tax cuts are more likely to increase real economic growth than those based upon spending increases. As for fiscal adjustments those based upon spending cuts and no tax increases are more likely to reduce deficits and

1 Gray, Ch., Lane, T., Varoudakis, A. Fiscal Policy and Economic Growth, Lessons for Eastern Europe and Central Asia. The World Bank, Washington D.C., 2007.

2 Palda, F. Fiscal Churning and Political Efficiency. //Kuklos, vol. 50, issue 2, 1997.

3 Alesina, A., Ardagna, S., Large Changes in Fiscal Policy: Taxes versus Spending. National Bureau of Economic Research, 2009.

debt over GDP ratios than those based upon tax increases. In addition, adjustments on the spending side rather than on the tax side are less likely to create recessions.

Taxation and Economic Growth

The debate concerning the interaction between taxation and economic growth has a long-lasting history. According to some analyses[4] the tax structure affects economic growth. Using pooled cross-selection data from twenty three OECD countries the author finds evidence that the different kinds of taxes have different effects on the real economic growth. The most harmful effect on growth has the tax progressivity. There is some empirical evidence that tax progressivity, measured in terms of the long-run income elasticity of tax revenue, is associated with low economic growth. Specifically the proportion of tax revenue raised by taxing personal income has a negative correlation with economic growth.

The impact of tax policy on economic growth[5] inside an endogenous growth model can give rise to long-term real growth which depends on the differences in the taxation. The analysis found out that higher marginal shares of taxes have a negative impact on the economy of the various countries. They state that a slightly progressive taxation system has a positive impact on growth. Those countries which maintain the increase of the revenue rate in compliance with the increase in the income rate reach higher rates of economic growth.

Research in the theory of the connection between taxes and real economic growth is on condition. Long ago, Thomas Hobbes described people's lives without government intervention as "nasty, brutish and short"[6]. He defends the thesis that laws and order in all countries should be provided by the government. Some government functions, such as the defense of citizens and their private property, as well as an effective and working legal system should stimulate economic growth. In other words, the ensuring of property rights, the fulfillment of contracts and a stable currency system can lay foundations for a normally functioning free market system.

According to most recent analyses, tax increase and having broader part of the resources in the hands of the politic power, not in the hands of the market mechanism, leads to negative economic growth. The basic reason[7] is that the greater part of people's and firm's incomes is taken by the government in the form of taxes, the less their stimuli to work harder, to take risks and to increase their qualification is. The loans, taken by the government lead to decrease in private investments, because these loans reduce the finance resources, to which firms have access due to higher interest rates. Even if the effectiveness of the tax policy is not reduced, the transfer of finances from private to public sector has a negative impact on the economic growth.

Taking into consideration the slow rate of economic growth, the necessity of adequate tax policy which aim is macroeconomic stabilization is obvious. The question is concerning the success using tax revenues and low fiscal deficits in order to achieve intelligent, sustainable and incorporated economic growth and to build up competitive economy. In this respect, it is necessary to conduct research into the connection between public revenues and economic growth using comparative analysis between Bulgaria and other new Member States of the European Union as regards the following two indices. The aim is to compare total public revenues and real economic growth. Detailed data on total public revenues in percent of GDP of the analysed countries for the period 2005 – 2014 are given in Table 1. Data on real economic growth during this period in the same countries are given in Table 2.

4 Widmalm, Frida. "Tax Structure and Growth: Are Some Taxes Better than Others?" Public Choice, 107 (3–4), 2001.

5 Poulson, Barry W., Kaplan. Jules G. State Income Taxes and Economic Growth. Cato Journal, Vol. 28, No. 1 (Winter 2008).

6 Hobbes, Thomas. Leviathan. New York, NY: 1651, chapter XIII, http://oregonstate.edu/instruct/phl302/texts/hobbes/leviathan-c.html#CHAPTERXIII

7 Browning, Edgar, K. The Marginal Cost of Public Funds.//Journal of Political Economy, 84, p. 283-298, 1976.

Table 1. Tax revenues (% of GDP) 2005/2014 r.[8]

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average*
Bulgaria	37,8	35,5	38,5	38,5	35,4	33,4	32,1	34,0	36,9	36,3	35,8
Cyprus	37,1	37,8	40,9	39,5	36,8	37,5	36,8	36,1	36,5	40,4	37,9
Czech Republic	38,7	38,5	39,3	38,1	38,1	38,6	40,2	40,5	41,3	40,6	39,4
Estonia	35,1	36,5	36,8	37,1	43,9	40,7	38,6	38,8	38,1	38,7	38,4
Hungary	41,7	42,3	45,0	45,1	46,1	45,0	44,3	46,3	47,0	47,4	45,0
Latvia	33,8	35,5	33,3	33,1	34,5	36,2	35,6	36,1	35,9	35,6	35,0
Lithuania	33,7	34,0	34,4	35,0	35,8	35,4	33,5	33,0	32,9	34,1	34,2
Malta	39,6	39,7	38,9	38,4	38,6	37,9	38,3	38,9	40,0	41,9	39,2
Poland	40,5	41,1	41,2	40,8	37,9	38,1	38,8	38,9	38,4	38,8	39,5
Romania	32,3	33,1	35,4	33,2	31,5	32,7	33,7	33,3	33,0	33,5	33,2
Slovakia	36,7	35,0	34,2	34,3	36,1	34,5	36,4	36,0	38,4	38,9	36,1
Slovenia	43,6	43,0	42,1	42,5	42,3	43,6	43,4	44,4	45,3	44,8	43,5

*The average value is author's calculation Notice: The given actual data is up to 30.09.2015

Tax revenues in the analyzed countries are identical and their average value is between 35,8% of GDP in Bulgaria, 35% in Lithuania, 39,2% in Malta, 37,9% in Cyprus, 38,4% in Estonia and 39,5% in Poland. In Romania and Slovenia tax revenues are accordingly 33,2% and 43,5% of GDP. In the Czech Republic tax revenues are – 39,4%, in Lithuania – 34,2%, and in Hungary is tax revenues' maximum – the average value is 45% of GDP. The data from the same table show that the taxes in Bulgaria are exceptionally low (their average value is 35,8% of GDP). Bulgaria is on one of the last places among the analyzed countries. Tax revenues in Bulgaria are on their minimum in year 2011, when they are only 32,1%. Tax revenues minimum is during the apogee of the world's economic crisis. During all of the analyzed years, except year 2010 and year 2011, tax revenues in Bulgaria are above 34% of GDP and in year 2007 and 2008 tax revenues reach 38,5% of GDP. The highest average tax revenues are in Hungary. During the last two years of the analyzed period they are above 47% of GDP. The lowest tax revenues level is in Romania, as during year 2009 they reach their minimum – only 31,5% of GDP. As a whole, the value of the tax revenues is constant during the analyzed ten years in all of the countries.

Table 2. Real economic growth (in percentage points) during the period 2005/2014[1]

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average[9]
Bulgaria	6,4	6,5	6,4	6,2	-5,5	0,4	1,8	0,6	0,9	1,7	2,54
Cyprus	3,9	4,1	5,1	3,6	-1,9	1,1	0,4	-2,4	-5,4	-2,3	0,62
Czech Republic	6,8	7,0	5,7	3,1	-4,7	2,7	1,8	-1,0	-0,9	2,0	2,25
Estonia	8,9	10,1	7,5	-3,7	-14,3	2,3	9,6	3,9	0,8	2,1	2,72
Hungary	4,0	3,9	0,1	0,9	-6,8	1,3	1,6	-1,7	1,1	3,6	0,8
Latvia	10,1	11,2	9,6	-3,3	-17,7	-0,3	5,3	5,2	4,1	2,4	2,66
Lithuania	7,8	7,8	9,8	2,9	-14,8	1,4	6,0	3,7	3,3	2,9	3,08
Malta	3,7	2,9	4,3	4,1	-2,7	2,3	1,6	0,6	2,4	-	2,13
Poland	3,6	6,2	6,8	5,1	1,6	3,9	4,5	2,0	1,6	3,4	3,87
Romania	4,2	7,9	6,3	7,3	-6,6	-1,6	2,3	0,6	3,5	1,8	2,57
Slovakia	6,7	8,3	10,5	5,8	-4,9	4,2	3,0	1,8	0,9	2,4	3,87
Slovenia	4,0	5,8	6,9	3,6	-8,0	1,4	0,7	-2,5	-1,1	2,6	1,34

http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG

8 Eurostat: http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics

9 The average arithmetic value of the real economic growth is author's calculation.

The analysis of the connection between tax revenues and economic growth on the basis of comparative analysis between Bulgaria and the eleven new Member States of the European Union according to these two indexes is necessary. For the purposes of our analyses we compare total tax revenues and real economic growth. The data concerning real economic growth in the analyzed countries during the period 2005 – 2014 are given in Table 2. Tax revenues in Hungary are the highest one and the reached real economic growth is one of the lowest – only 0,8%. According to the tax revenues level Slovenia holds the second place – their average level is 43,5% and their highest level is in year 2013 – 45,3%, when the realized economic growth is only 1,1%. Other Central European countries – Poland and the Czech Republic – also report high tax revenue levels as percentage of GDP, accordingly 39,5% and 39,4% and their economies have average real economic growth rate of 3,67% and 2,74%. The level of tax revenues in Malta is also comparatively high – 39,2% of GDP and the real economic growth rate (average value) over the analyzed ten years is the lowest one – 1,55%. The smallest amplitude between the highest and the lowest point of economic growth is in Cyprus – the average growth rate is 1,84% and the level of tax revenues in the same state is around 37,9% of GDP.

The Baltic States (Lithuania, Latvia and Estonia) have the highest amplitude in terms of the realized economic growth rate. The amplitude in Latvia is almost 30%, with the growth rate reaching 11,2% in 2006 and changing to an economic decline of 17,7% just three years later. Economic growth is realized when tax revenues is 35,5% of GDP, and decline is evident when tax revenues is – 34,5% of GDP. In 2007, Lithuania realized economic growth of 9,8%, while the level of tax revenues was as low as 34,4%, and in 2009 – the economy declined by almost 15%, while the tax revenues to the government rose by 1% and reached 35,8%. The clear facts for Estonia are as follows – when tax revenues is 43,9% economic decline is 14,3% in 2009.

The same three countries, realizing one of the lowest tax revenues as a percentage of GDP over the analyzed ten years, are the countries with comparatively the highest average economic growth during the same time period. In Lithuania, the level of tax revenues was 34,2% and the average real growth rate of the economy was one of the highest – 3,08%. In Estonia and Latvia, the average tax revenue level during the period 2005 – 2014 was 38,4 and 35% of GDP and the rate of real economic growth was respectively 2,72% and 2,66%.

Romania has one of the lowest levels of average tax revenues during the same period – only 33,2%. The realized economic growth rate is in the golden middle – 2,57%. Comparing the economic growth realized in the analyzed twelve countries, Slovakia and Poland hold the first place – 3,87%. In these countries, growth is realized when the average level of tax revenues is accordingly – 36,1% and 39,5% of GDP. In Bulgaria, the average level of tax revenues during the analyzed period is 35,8% of GDP and the economic growth rate is 2,54%. The highest rate of economic growth in Bulgaria was 6,5% (during the period of 2005 – 2007), when the level of tax revenues was about 37,8 % of GDP in 2005, only 35,5% in 2006 and as high as 38,5 in 2007. Public revenues in Bulgaria during the last three years are less than 37%, but our country also had too modest economic growth – less than 1% in 2012 and 2013.

Conclusion

The main conclusion from the completed comparative analysis of total public revenues and real economic growth in the twelve European countries is as follows: higher public revenues as a percentage of GDP, as well as progressive tax levels, do not guarantee the achievement of high real economic growth. The highest real economic growth rate (over 3%) during the analyzed period is realized in the countries which have moderate levels of tax revenues).

The detailed analysis of the achieved results concerning the dependence between tax revenues (% of GDP) and the realized real economic growth rate reveals the following tendencies:

Firstly. The increase in total tax revenues (% of GDP) caused the decrease in economic growth in each of the analyzed twelve countries;

Secondly. There is an obvious negative tendency concerning economic growth rate when progressive tax scales are applied.

Thirdly. The most important thing is effective tax policy and maximum tax collection.

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