

# Journal of Business, Economics and Finance Year: 2016 Volume: 5 Issue: 1



# FISCAL POLICY AND GROWTH: COMPERATIVE ANALYSIS OF RUSSIA AND THE OTHER POST SOVIET UNION COUNTRIES

#### DOI: 10.17261/Pressacademia.2016116557

#### Eda Balikcioglu

Kirikkale Uiversity. edabalikcioglu@kku.edu.tr

#### ABSTRACT

After the seperation of the Soviet Union and the transformation of the economic systems from socialism to capitalism, public policies of old Soviet Nations have also changed. Among these countries, Russia has a special importance due to its economic and fiscal potential and in terms of its inheritance of a strict centralist system. On the other hand, aftermath of the scatter of Soviet Union in 1991, Russia met two important economic crises. This study aims to investigate Russian economic and fiscal performance in 1992-2014 after the disintegration and also to compare Old Soviet Nations including 12 countries by using dynamic panel data analysis with the variables of GDP growth, inflation, unemployment, current account balance, public revenues, public expenditures, primary balance, budget balance and public debt. Finally, the study examines the effect of public policies during the transition period on economic growth.

**Keywords:** Economic growth, fiscal policy, public expenditures, primary balance, budget balance, public debt. **JEL Classification:** O40, H60, H20

#### **1. INTRODUCTION**

Fiscal policy gained importance after the Great Depression with regard to Keynesian politics. Fiscal policy is an important determinant of growth in developing countries due to tightening or expansionary effects on the economy. From this point of view, the relationship between fiscal policy and growth has been widely discussed in the literature. The regarding literature pays a special attention to the transition economies which face with rising public debt as an instrument of fiscal policy.

More clearly, after the demolition of Berlin Wall in 1989, the Soviet Union was dissolved; and consequently after the seperation of the Soviet Union, the economic system in Russia and other post-Soviet economies shifted from socialism to free market economy. In this respect, numerous extensive reforms have been implemented in order to ensure macroeconomic stability. In addition, privatization efforts have also been rapidly put underway. Afterwards of the dissolution, governments prepared lots of reforms. The aim of this transition was to reconstruct the economic conditions of the states. In the Post Soviet countries and specifically in Russia, reforms that aimed at growth and fiscal discipline have been carried out in order to ensure macroeconomic stability and fiscal discipline. In this respect; strategic plans, multi-annual budgeting, and medium term plans have been implemented (Glazev and Fetison, 2014: 70). However, at the end the politics that implemented in these states was not satisfying enough and many unforeseen political and social factors occured (Sancak&Karaman, 2014:3). As a result of the reforms requiring high government expenditures, the public debt problem has arised.

In this regard, this study aims to investigate relationship between fiscal policy instruments and growth of Post Soviet Union Countries. The remainder of the paper is organized as follows: First section examines the overview of Post Soviet Union countries after the dissolution. Second section reviews the literature and the final section analyses the relationship between fiscal policy and growth. As a result of the study negative correlation was found between growth and public debt. According to these results, the contribution of this study to literature is to decrease public debt ratios for the growth process in Russia and the other Post Soviet Union countries.

## 2. OVERVIEW OF POST SOVIET UNION COUNTRIES AFTER THE DISSOLUTION

After the seperation of the Soviet Union and the transformation of the economic systems from socialism to capitalism, public policies of old Soviet Nations have also changed. But the transition period has been compulsive and long. All of the countries overcame this period formidably. In Table 1, the transition periods from socialism to capitalism are shown for Post Soviet Union countries.

Countries	Start Recession	Finish Recession	Duration
Azerbaijan	1989	1995	7 years
Belarus	1990	1995	6 years
Georgia	1989	1994	6 years
Kazakhstan	1989	1995	7 years
Kyrgyz Republic	1991	1995	5 years
Moldova	1990	1999	10 years
Russia	1990	1998	9 years
Tajikistan	1989	1996	8 years
Turkmenistan	1989	1997	9 years
Ukraine	1990	1999	10 years
Uzbekistan	1991	1995	5 years

Table 1: Socialism to Capitalism Transition Periods of Countries

Source: (Mickiewicz, 2005: 21)

Firstly, Moldova and Ukraine have the longest transition time of 10 years. They are followed by Russia and Turkmenistan with 9 years, 8 years for Tajikistan and 7 years for Azerbaijan and Kazakhstan. In addition, Belarus and Georgia completed this transition in 6 years and the most fastest transition time belongs to Kyrgyz Republic and Uzbekistan with a period of 5 years.

Among these countries Russia has a special importance due to its economic and fiscal potential which possesses prominent rich oil reserves. Hence, while the increase in oil prices lead to direct growth in economy, decrease in oil prices cause recession. With regards to this situation, table 2 indicates, the growth, inflation, unemployment and current account balance for Russia in the 1993-2000 period

	1993	1994	1995	1996	1997	1998	1999	2000
GDP	-8.700	-12.700	-4.100	-3.608	1.381	-5.345	6.351	10.046
Inf	874.622	307.634	197.471	47.742	14.767	27.675	85.742	20.776
Unmp	5.285	7.233	8.534	9.606	10.819	11.889	13.001	10.591
Curact	1.414	2.833	2.221	2.769	-0.020	0.081	12.565	18.036
Buddef	-8	-11.5	-5.9	-8.5	-7.4	-3.4	2	7.6

Table 2: Overview of Russian Economy (1993-2000)

Source: IMF World Economic Outlook Databases, 2015.

In table 2, the growth rate, which was around 9% in 1993, became still more than -5% during 1998 which was also a year of economic crisis. However, after the crisis, the growth rate increased to 10%. While the rate of inflation was nearly 900%, it has decreased to 20% in year 2000. Unemployment rate and current account deficit show an increasing trend with the years.

Russia encountered two major crisis during the transition period. The first one is the crisis in 1993 which was triggered by the transition itself, and the second one is the foreign debt crisis which emerged in 1998. The main

problem of Russian economy before 1998 was budget deficit and discontinuity of financial and real sector. At the basic structure of the monetary and financial policies implemented in Russia lie the goals such as the ensuring of the macroeconomic stability, decreasing the rate of inflation to reasonable levels, decreasing the interest and budget deficits, a credible currency, and a demand level that matches the supplies. But the distrust of financial markets brought about 1998 crises. In addition three main factors engendered the crises. Firstly, political instability, second, budget deficits and third one is the ability of government (Snelnikov et.al, 2006:38). After the crisis, an extensive package of economic reforms is administered in the country. Besides risen petroleum product prices leads to attainments of these reforms. (Sancak&Karaman, 2014:9).

r									
Years	GDP	İnf	Unmp	Rev.	expd	buddef	pridef	debt	curact
2000	10.046	20.776	10.591	36.169	32.840	3.329	7.614	59.859	18.036
2001	5.091	21.461	8.939	36.917	33.712	3.205	5.849	47.613	11.069
2002	4.744	15.783	8.000	36.994	36.272	0.721	2.778	40.305	8.436
2003	7.253	13.666	8.200	36.375	34.928	1.447	2.996	30.359	8.229
2004	7.151	10.887	7.700	36.647	31.746	4.902	6.038	22.316	10.067
2005	6.388	12.683	7.100	39.703	31.563	8.140	8.938	15.912	11.050
2006	8.153	9.679	7.000	39.476	31.115	8.361	8.914	10.504	9.325
2007	8.535	9.007	6.000	40.208	34.224	5.984	5.983	8.607	5.489
2008	5.248	14.108	6.200	39.172	34.298	4.875	5.075	7.978	6.258
2009	-7.800	11.654	8.200	35.044	41.354	-6.310	-6.640	10.627	4.121
2010	4.500	6.854	7.300	34.620	38.042	-3.422	-3.299	11.346	4.423
2011	4.300	8.443	6.500	37.264	35.726	1.538	1.835	11.641	5.107
2012	3.400	5.068	5.500	37.709	37.290	0.419	0.718	12.666	3.537
2013	1.300	6.763	5.500	36.926	38.207	-1.281	-0.910	14.028	1.642
2014	0.622	7.824	5.108	37.142	38.332	-1.190	-0.752	17.920	3.091

Table 3:	Overview	of Russian	Economy	(2000-2014)
10010 01	010101010	01 110351011	LCONONI	

Source: IMF World Economic Outlook Databases, 2015.

Table 3 shows, the macroeconomic and financial indicators in Russia for the period after the year 2000. A closer examination of the Russian economy in the post-2000 period reveals that there is a sharp decrease in growth rate after the crisis of 2008, and accordingly there is increase in the budget deficit, primary deficit and debts. The reason behind the vulnerability of Russia to crisis is the fact that the crisis affects the oil prices. As stated in the introduction of this study, while the country's economy and especially growth rate show positive improvements when the oil prices increase, the decrease of the oil prices have negative impact on the country's economy. Although tight fiscal policy and the economic reforms have improved the situation, the role of international oil prices and the real exchange rate in Russia's growth dynamics remain a main policy and a subject of lively debate (Rautava, 2004:316)

The public debt is inclined to decrease while the debts of the private sector have the tendency to increase. The reason behind this is the fact that the investment policies have been altered since 2010 (Zamaraev et.al., 2014:24).

Table 4: Post Soviet Unio	n Countries GDP and	Public Debt Performances	(2011-2014)
---------------------------	---------------------	--------------------------	-------------

	GDP			PUBLIC DEBT				
	2011	2012	2013	2014	2011	2012	2013	2014
Azerbaijan	0.1	2	5.8	2.8	10.1	11.6	13.8	16.4
Belarus	5.5	1.7	1	1.6	45.9	38.5	38.3	37.9
Georgia	7.2	6.4	3.3	4.7	29.8	30	32.2	35.1

Kazakhstan	7.5	5	6	4.3	10.4	12.4	12.9	15.1
Kyrgz Rep.	6	-0.9	10.5	3.6	49.4	49	46.1	53
Moldova	6.8	-0.7	9.4	4.6	24.1	24.5	23.8	31.5
Russia	4.3	3.4	1.3	0.6	11.6	12.7	14	17.9
Tajikistan	7.4	7.5	7.4	6.7	35.4	32.4	29.2	28.2
Turkmenistan	14.7	11.1	10.2	10.3	10	18.1	21.1	16.8
Ukraine	5.5	0.2	-0.02	-6.8	36.8	37.5	407	71.2
Uzbekistan	8.3	8.2	8	8.1	9.1	8.6	8.3	8.5

By contrast the other post soviet nations, Russia's performance in 2008 crises is not impressive. Russia's level of output is smaller than others and also life expectancy, human development index and fiscal performances(Popov, 2008: 249). Tablo 4 shows GDP and public debt performances of Post Soviet Union Countries. Georgia, Turkmenistan, Uzbekistan, Tajkistan's growth performance seems impressive. But on the other hand Russia, Ukraine, Belarus and Ukraine's GDP performances are not succeed. And the public debt datas indicates that in generel except Tajiksistan public debts increases, growth rates are decreases. In view of the circumstances GDP and Public debt determinants affects in Post Soviet Nations from the perod of 2011-2014.

# **3. LITERATURE REVIEW**

There are several studies with the relationship with growth and fiscal policy. But the emprical literature of growth and fiscal policy of Russia and the other Post Soviet Countries is limited. In the literature mostly finds strong effect between growth and fiscal policy. Firstly, endogenous growth models Ram (1986), Summers and Heston(1988), Barro(1990) find positive relations with growth and government expenditures. Engen and Skinner(1992) attain strong and negative effect between public expenditures and taxes and growth with the sample of 107 countries for the period of 1970-1985 using regression analysis. Easterly and Rebelo (1993) investigate 125 countries from 1970-1988 employing regression analysis and their results has a strong association between growth and fiscal structure. In their study Kneller et. al.(1999) examine 22 OECD countries from the period of 1970-1985 using panel analysis and in contribute to the literature that taxes and government expenditures impacts on economic growth. Table 3 classifies regarding literature with samples and methods.

Author	Sample	Method	Result
Engen and Skinner(1992)	107 countries 1970-1985	Regression analysis	Strong and negative effect between public expenditures and taxes and growth
Easterly and Rebelo (1993)	125 countries 1970-1988 period	Regression analysis	Strong association between growth and the fiscal structure
Kneller et.el.(1999)	22 OECD countries 1970-1985 period	Panel data analysis	Taxes and government expenditures impress economic growth
Benos (2009)	14 EU countries 1990-2006	Dynamic Panel Data Analysis	Positive effects of taxes and public expenditures on growth.
Reinhart and Rogoff (2010)	44 countries for 1946- 2009	Panel threshold analysis	High debt levels lead to small growth
Kumar and Woo(2010)	38 advanced and emerging economies 1970-2007 period	Panel data analysis	There is a negative impact of debt and growth
Wu, Tang and Lin(2010)	182 countries	Panel Granger Causality	Results supports

#### Table 5: Literature Study

	1950-2004	method	Wagners Law and government expenditure is helpful to economic growth
Acosta-Ormaechea and Yoo (2012)	69 countries during the period 1970-2009(21 high income, 23 middle-income and 25 low-income countries)	Pooled Mean Group Estimation(PMG)	Income taxes has a negative relationship with growth but on the other hand property taxes and VAT has a positive relations of growth
Cottarelli and Jaramillo (2012)	G7 countries in 2011	Cross section regression analysis	There is a correlation with growth and fiscal policy in small term but on the other hand there is not a relation in long run.
Panizza and Presbitero (2012)	2003-2008	Instrumental variable approach	High debts do not causes low growth
Baum, Checherita and Rother (2013)	12 euro area countries 1990-2010 period	Dynamic threshold panel analysis	High debt is a negative effect on growth
Dalic (2013)	New member states of EU, over the period of 1999-2010	Panel data analysis	Fiscal policy is not strongly affects the growth performance.
Acosta-Ormaechea and Morozumi (2013) 56 countries (14 low-, 16 medium-, and 26 high- income countries), 1970- 2010		GMM analyses	Public expenditures has a positive effects on growth
Afonso and Jalles (2014)	155 non developed and developed countries, between 1970-2008 period	Panel data analysis	Revenues are not significant but public expenditures has negative effects on growth
Mohammadi and Ram (2015)	6 East African countries 1960-2008	Panel cointegration analysis	In Japan and Korea fiscal polisy effect growth rate contrary to Malaysia, the Philippines, Singapore and Thailand, there is not a relation.

In the recent literature, Benos (2009), examine 14 EU countries from 1990 to 2006 applying dynamic panel data analysis and accordingly finds positive effects of taxes and public expenditures on growth. Wu, Tang and Lin(2010) support Wagner's law and add government expenditure is helpful to economic growth. They used granger causality analysis in 1950-2004 period on 182 countries. In their study Acosta-Ormaechea and Yoo (2012) conclude that income taxes has a negative relationship with growth but on the other hand property taxes and VAT has a positive relations of growth. Acosta-Ormaechea and Morozumi (2013) examine 56 countries with their income structures by using the same method of this study GMM and denote the positive

effects of public expenditures on growth. Afonso and Jalles (2014) also emphasize the public expenditures is the determinant of growth apply panel data analysis to 155 developed and nondeveloped countries betweeen 1970-2008 years. Mohammadi and Ram (2015) analyse 6 East African countries between 1960-2008 using panel cointegration analysis and as a result they support, in Japan and Korea fiscal polisy effect growth rate contrary to Malaysia, the Philippines, Singapore and Thailand, there is not a relation.

On the other hand, there is a small group of studies that find no relationship on fiscal policy and growth. As an example of, Dalic (2013) investigates the effect of fiscal policy on growth and in conclusion imply that there is not any effect on growth on new member states of EU from 1999-2010 as the studies; Durevall and Henrekson (2011), Bergh and Henrekson (2011).

### 4. DATA AND METHODOLOGY

This study investigate Russian economic and fiscal performance between 2000-2014 years and also to compare Post Soviet Nations including 11 countries by using dynamic panel data analysis with the variables of GDP growth, inflation, unemployment, current account balance, public revenues, public expenditures, primary balance, budget balance and public debt. Finally, the study examines the effect of public policies during the transition period on economic growth. The datas are taken from IMF World Economic Outlook Databases.

Variables	Definitions
GDP	Growth
inf	Inflation(CPI)
Unmp	Unemployment
Expd	Public expenditure/GDP
buddef	Budget deficit/GDP
primdef	Primary deficit/GDP
pubdebt	Public debt/GDP
Curac	Current account deficit/GDP

**Tablo 6: Variable Definitions** 

Source: IMF, World Economic Outlook, Database, 2015

Growth is affected by the previous growth performance of economy so that it has dynamic structure. Due to this, in this study dynamic panel analyses is used since static analysis leads to biased and inconsistent estimators.

The Arellano–Bond (1991) estimator sets up a generalized method of moments (GMM) problem in which the model is specified as a system of equations, one per time period, where the instruments applicable to each equation differ (for instance, in later time periods, additional lagged values of the instruments are available). The unobserved panel data correlated with the lagged dependent variables, making standart estimators inconsistent.

It uses the lagged level variables as instruments. The instrumentation is actually undertaken on a on eper time basis and in so doing the sample length is not reduced. The instruments called as GMM-style instruments. In case of samples with small numbers of time series observations, there is an alternative approach in studying with the dynamics. This method allows a dynamic specification in differences, with a lagged dependent variable. Adaptation of an instrumental variable method is essential in this approach. Because differencing induces a bias in the coefficient on the lagged dependent variable, due to the correlation between it and the unobserved fixed effects in the residual.

The panel data model with no regressors:

 $y_{it} = \ell y_{it-1} + u_{it}$ 

First diffrence to eliminate individual effects in model:

 $y_{ii} - y_{ii-1} = \ell(y_{ii-1} - y_{ii-2}) + (u_{ii} - u_{ii-1})$ 

 $(u_{it} - u_{it-1})$  is MA(1) unit root. We examine this relationship, ex, t=3:

$$y_{i3} - y_{i2} = \ell(y_{i2} - y_{i1}) + (u_{i3} - u_{i2})$$

In this case the valid instrument is  $y_{i1}$  and correlated with  $y_{i2} - y_{i1}$  and not correlated with  $u_{i3} - u_{i2}$  (Baltagi, 1996:127).

If we define the matrix of instruments Z = [Z1, Z2, ..., ZN] and the moment conditions we can proceed to obtain the Arellano-Bond GMM estimates. The estimation procedure is conducted in two steps. The first step in the procedure estimates the following equation using the GLS procedure:

 $Z'\Delta Y = Z'\Delta_{-1\phi} + Z'\Delta X\beta + Z'\Delta u$ 

And the GMM estimator computed as:

$$\hat{\delta}_{GMM} = (\Delta X ' Z (Z ' \Phi Z)^{-1} Z ' \Delta X)^{-1} (\Delta X ' Z (Z ' \Phi Z)^{-1} Z ' \Delta Y)$$

#### **5. FINDINGS AND DISCUSSIONS**

In this study first of all 2 models are estimated by using two different samples due to data availability., In Model 1, the effect of inflation, public expenditures, public revenues, budget deficits, public debts and current account balances on GDP of Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine are estimated and In model 2, the effect of inflation, unemployment, public expenditures, public revenues, budget deficits, primary deficits, public debts and current account balances on GDP of Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia and Ukraine are examined. Results are shown two different analyses which are Pooled OLS and Arellano Bond GMM.

	Model 1	Model 2			
	GDP				
gdp	0.000***	0.000***			
	(5.56)	(4.48)			
inf	0.555	0.556			
	(0.59)	(-0.39)			
unmn		0.083*			
unnp	-	(-1.75)			
rovonuo	0.256	0.329			
revenue	(-1.14)	(-0.98)			
0.20	0.373	0.506			
ехр	(0.89)	(0.67)			
buddof	0.256	0.976			
buuuei	(1.14)	(0.03)			
nrimdof		0.395			
prinder	-	(0.85)			
nubdabt	0.133	0.121			
pubdebt	(-1.51)	(-1.56)			
curac	0.835	0.708			
curac	(0.21)	(-0,38)			
N	154	112			
Prob>F	0.0000	0.0000			

#### Table 7: Pooled OLS Results

Note: \*\*\*,\*\*,\*shows 1%, 5%, 10% statistically significant or not, N number of observation and in paranthesis t statistics

As seen in the Pooled OLS results in table 7, while one period of delay in growth is significant in 1% level according to model 1, according to model 2, there is a correlation of 1% and 10% between growth and the variables of one period of delay in the growth and unemployment respectively. Fiscal variables show no meaningful impact on the determination of growth. As mentioned before, growth is affected by the previous growth performance of economy so that it has dynamic structure. Due to this, dynamic panel analyses is used since static analysis leads to biased and inconsistent estimators. Arellano Bond Gmm results are shown in table 8;

	Model 1	Model 2	
	GDP		
CDD	0.001***	0.074	
GDP	(3.19)	(1.78)	
inf	0.775	0.051*	
INI	(-0.29)	(-1.95)	
		0.618	
unmp	-	(0.50	
	0.029**	0.185	
revenue	(-2.19)	(-1.33)	
0.710	0.172	0.756	
ехр	(1.32)	(0.31)	
huddof	0.056	0.904	
buddel	(1.91)	(-0.12)	
nrimdof		0.326	
prinder	_	(0.98)	
nubdebt	0.022	0.000***	
publicbl	(-2.59)	(-3.71)	
curac	0.0871	0.849	
culac	(-0.16)	(-0.19)	
Ν	143	104	
Sargan Test	118.0361	90.7262	
2.order	0 2805	0 5030	
Autocorrelation	0.3635	0.3035	
Sample	11	8	

#### Table 8: Arellano Bond Dynamic Panel Estimations

Note: \*\*\*,\*\*,\*shows 1%, 5%, 10% statistically significant or not, N number of observation and in paranthesis z statistics.

In Table 8, Sargan and Auto-correlation test statistics at the last two columns indicate that the utilized instruments are suitable and that the null hypothesis of "there is no 2nd degree auto-correlation" is not rejected, respectively. Examination of the analysis results indicate that according to model 1, one period delay of the growth, revenue and public debt are significant at 1% and 5% respectively; and according to model 2, the inflation and public debt variables are correlated at a level of 1% and 5% respectively. According to the results of the analysis, there is a negative correlation between growth and public debt in accordance with the relation between the growth and fiscal variables used in the study. In conclusion, increasing public debt in Russia and the other Post Soviet Nations decrease their growth rates<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Consistent with the regarding literature (Reinhart and Rogoff , 2010; Kumar and Woo, 2010; Baum, Checherita and Rother; 2013).

#### **6. CONCLUSION**

During the period after the demolition of the Berlin Wall in 1989 and dissolution of the Soviet Union, a number of states emerged. The common characteristic of these states is that they replaced the old socialist system with the market economy almost in a decade. Accordingly, each state has suffered through a challenging transition period. Some have survived through this period taking less damage, while others have faced numerous difficulties. This study examines the growth and fiscal performances during this period, and indicates the reverse correlation between growth and public debt.

The most notable of these countries is Russia which possesses prominent rich oil reserves. Russia has completed its transition period in 9 years and has undergone two major crisis in 1993 and 1998 during this period. Especially after the 1998 debt crisis, public debt has become an important indicator for growth performance in Russia. In this respect, in order to ensure the fiscal discipline in Russia, attempts have been carried out to implement strategic planning, multi-annual budgeting and medium term spending system.

In conclusion, fiscal policy implementations are much more effective rather than macroeconomic policies to improve the growth performance of Russia and the other Old Soviet countries.

#### REFERENCES

Acosta Ormaechea, S. L., & Yoo, J. (2012). "Tax Composition and Growth: A Broad Cross-Country Perspective."

Acosta-Ormaechea, M. S., & Morozumi, A. (2013). "Can a government enhance long-run growth by changing the composition of public expenditure?" (No. 13-162). International Monetary Fund.

Afonso, A., Jalles, J. (2014). "Causality for the government budget and economic growth", Applied Economics Letters, 21 (17), 1198-1201.

Arellano, M., & Bond, S. (1991). "Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations", The review of economic studies, 58(2), 277-297.

Baum, A., Checherita-Westphal, C., & Rother, P. (2013). "Debt and growth: New evidence for the euro area", Journal of International Money and Finance, 32, 809-821.

Baltagi, B., (1996). Econometric Analysis of Panel Data, John Wiley.

Barro, R. (1990). "Government Spending in a Simple Model of Endogenous Growth", Journal of Political

Economy. 98 (5), 103-S125.

Benos, N., (2009). "Fiscal Policy and Economic Growth: EmpricalEvidende From EU Countries", MPRA Paper.

Bergh, A., Henkerson, M., (2011)." Government Size and Growth: A Survey and Interpretation of the Evidence", Journal of Economic Surveys. 25 (5), 872–897.

Cottarelli,C., Jaramillo, L.,(2012)." Walking Hand in Hand: Fiscal Policy and Economic Growth in Advanced Economies, IMF Working Paper, WP/12/137.

Dalić, M. (2013). "Fiscal policy and growth in new member states of the EU: a panel data analysis". Financial theory and practice, 37(4), 335-360.

Durevall, D., and Henrekson, M., (2011). "The Futile Quest for a Grand Explanation of Long-Run Government Expenditure". Journal of Public Economics, Vol.95, Issues 7-8, 708-722.

Easterly, W., & Rebelo, S. (1993). "Fiscal policy and economic growth". Journal of monetary economics, 32(3), 417-458.

Engen, E. M., & Skinner, J. (1992). "Fiscal policy and economic growth" (No. w4223). National Bureau of Economic Research.

Glaz'ev, S., & Fetisov, G. (2014). "On a Strategy for Steady Development of the Russian Economy". Problems of Economic Transition, 56(12), 63-76.

Kumar, M. S., Woo, J., (2010). Public debt and Growth. IMF working paper, wP/10/174, Washington.

Mickiewicz, T.M. (2005). "Post-Communist Recessions Re-examined". School Of Slavonic&East European Studies Working Paper (55)

Mohammadi, H., Ram, R., (2015). "Economic Development and Government Spending: An Exploration of Wagner's Hypothesis During Fifty Years of Growth In East Asia", Economies, Vol 3, Issue 4, 150-160.

Panizza, U., & Presbitero, A. F. (2012)." Is high public debt harmful for economic growth?." VoxEU. org, 22.

Rautava, J. (2004). "The role of oil prices and the real exchange rate in Russia's economy—a cointegration approach". Journal of comparative economics, 32(2), 315-327.

Popov, V., (2008). "Resurgent Russian Economy: Putin's Policy without Putin", International Journal, Spring, 247-261.

Ram, R. (1986). "Government Size and Economic Growth: A New Framework and some Evidence from

Cross-section and Time-series Data", American Economic Review. 76 (1), 191–203.

Reinhart, C. M., & Rogoff, K. S. (2010). "Growth in a Time of Debt (Digest Summary)". American Economic Review, 100(2), 573-578.

Sancak, E., Karaman, S.C., (2014). "Developments In The Russian Economy In The Post-Soviet Era". Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 19(4).

Sinelnikov, S., & Batkibekov, S. (2006). "Fiscal Policy and International Cooperation in the Russian Federation". Problems of Economic Transition, 49(2), 34-70.

Heston, A., and Summers, R., (1988). "What We Have Learned about Prices and Quantities from International Comparisons: 1987," American Economic Review, American Economic Association, vol. 78(2), 467-73.

Wu, S. Y., Tang, J. H., & Lin, E. S. (2010). "The impact of government expenditure on economic growth: How sensitive to the level of development?". Journal of Policy Modeling, 32(6), 804-817.

Zamaraev, B., Kiiutsevskaia, A., Nazarova, A., & Sukhanov, E. (2014). "The Slowdown of Russian Economic Growth". Problems of Economic Transition, 57(3), 13-56.