

UDC 336.5:338.121(497.7)"2005/2013"  
Original scientific paper

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**CAPITAL EXPENDITURES AND THEIR IMPORTANCE FOR  
THE ECONOMIC GROWTH IN THE REPUBLIC OF  
MACEDONIA**

**Abstract**

This paper considers the public expenditures in the Republic of Macedonia, especially the capital expenditures and their structure in the period from 2005 – 2013. The analysis identifies and explains their effects on economic growth in the country. Most of the public expenditures in the Republic of Macedonia consist of current expenditures, transfers, purchase of goods and services, while the share of capital expenditures is low. There is a trend of slight increase of capital expenditures but they are mostly financed through borrowing, which decreases their impact on the economic growth. The analysis indicated that the reform of the public expenditure structure in the country is necessary, as the public expenditures grow slower compared to GDP growth. The reforming measures should aim to increasing the capital expenditures, especially those that refer to investments that drive economic growth.

**Key words:** Fiscal Policy, Public Expenditures, Capital Expenditures, Economic Growth, Republic of Macedonia

**JEL classification:** E62, H5, H50, O110, P240

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## **1. Classification of public expenditures**

The public expenditures have various classifications. Their classification allows better analysis of the nature, functions and importance of public expenditure. Also, it facilitates their planning, reporting and control. Public expenditures have similar characteristics in any fiscal system, either in developed economies or developing countries. Thus, costs can be regular or extraordinary, depending on the time when they occur; personal and material in respect of the object of spending, whether they are intended for salaries and benefits for employees in public administration or related to purchases of goods and services to carry out public functions. All expenditures are realized as Government expenditures and expenditures of local governments.

The most important classification of public expenditures is their division on productive public expenditures and transfers. The classification comes from the English theorist Arthur Pigou<sup>3</sup> who divided expenditures to real (current) and transfers. In recent times, this division has been expanded to real, investment and transfer public expenditures.

The current and investment expenditures compose the group of productive expenditures. The proper quantification and targeting of productive expenditures is a powerful tool of the state to encourage economic activity and promote economic growth. In the category of productive expenditures, investment expenditures are known as capital expenditures. Capital expenditures contribute to economic activity and realization of higher GDP. Indirectly, they provide an increase of public budget revenues through taxation on the conducted works. Their presence is of particular importance in the fiscal system when the economy is in recession.

The transfer expenditures are productive expenditures too, but they do not affect directly the real GDP. However, there are indirect positive effects on the economy through income redistribution. The transfer expenditures provide translocation of the funds from national budget to actors on national or local level, thereby increasing their ability to satisfy their needs.

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<sup>3</sup>Arthur Pigou, *A Study in Public Finance*, 1928, [www.questia.com/read/30362402/a-study-in-public-finance](http://www.questia.com/read/30362402/a-study-in-public-finance)

## **2. The economic effects of public spending**

The public policy analysis pays special attention to determining the impact of public expenditures and income redistribution on economic stabilization (stable prices and full employment), the improvement of foreign trade, maintaining a stable exchange rate and encouraging economic growth. Special importance is given to government decisions and the impact of the state as a market participant. Taxation is one of the ways through which the state directly affects economic activity. Another way is through public spending. Public procurement for the functioning of the state apparatus, such as materials and equipment costs, wages of the administration, transfers, interests and repayment of public loans affect aggregate demand and aggregate supply. Public purchases of the state, in particular of information technology and electronics, pharmaceutical products (in countries with compulsory health insurance), weapons and ammunition, military vehicles (aircraft, submarines, ships and automobiles), as well as products from the aeronautical industry (satellites, spacecraft and equipment) directly increase the aggregate demand.

In addition, public expenditures have indirect influence, too. Administration salaries and various types of transfers also influence the aggregate demand through increase of the purchasing power of their recipients. However, there are monetary aspects in the economy that affect the trend of public expenditures. The level of public spending is determined by the level of supply and demand in the economy, which is under influence of inflationary and deflationary movements in the economy.

Another important aspect that should be analyzed with regards to the public expenditures is their financing. In the case when public expenditures exceed public revenues, financing of the excess of the budget spending could be done by taking loans at home and/or abroad or by issuing T-bills. Both cases rely on borrowing, which could have very demanding and far-reaching implications in the future. On the other hand, higher public expenditures result in increased aggregate demand, which disturbs the macroeconomic balance, leads to inflation and rise of the public debt in the economy. In the case when public expenditures are lower than public revenues, the budget is in surplus. This could have positive effects only if the economy is in expansion. Otherwise, this condition has many negative aspects. Reduced public spending reflects into lower total aggregate consumption. This leads to reduced economic

and investment activity, deflation and lower interest rates, which negatively affect the economic growth.

Proper management of the public expenditures is crucial, as there are many multiplicative effects of public investment. Public investment primarily cause an increase in employment and national income and result in increased engagement of the production factors available in the country (capital, raw materials and labor). Implicitly, higher production have positive influence on income and aggregate demand. In addition, the investment in infrastructure, science and education, new knowledge and technology, health, environment and other areas of public interest contribute to the overall economic development of the country. In this respect, identification of the priorities for public spending must be done according to the needs and specifics of the country. There are evident differences between the priorities of public expenditures, among developed, developing and underdeveloped economies. Developed economies give priority to science and technology, human resource development and social welfare. Other countries mostly face lack of resources for such expenditures and mostly have current costs and expenses in their national budgets.

### **3. The structure and characteristics of public expenditures in the Republic of Macedonia**

The volume of public expenditure in the Republic of Macedonia is determined each year following the procedure and conditions established by law.<sup>4</sup> The classification of expenditures in the national budget includes public expenditures of the central government, public expenditures of local authorities, transfers of social security funds, health fund, as well as other transfers relevant for conduction of state's functions. The amount of total public expenditures depends on the scope of the legally defined functions and responsibilities of the state, its institutions and the policy of financing of the public expenditures at the national level.

The public expenditures in the Republic of Macedonia for the period 2005-2014 are presented on the Table 1. The relative share of each category into the public expenditures is presented on Table 2.

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<sup>4</sup> Budget Law, Official Gazette no. 79/93, 3/94, 15/99 and 11/2001

**Table 1** Total Public Expenditures in the Budget of the Republic of Macedonia for the period 2005-2014

- In million denars

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Budget Expenditures	100219	105744	117436	140265	139393	142692	148649	155840	159505	168063
1. Current Expenditures	90027	96478	103695	120201	125965	127358	130939	137083	142894	150440
Wages and Salaries	22835	23421	23607	20828	22699	22638	23147	22714	22566	23096
Goods and Services	12984	12927	14813	18749	16220	14681	13958	14652	14877	15467
Transfers	51597	56607	62401	77980	84601	86865	90363	95501	100845	106787
2. Interests Payments	2611	3137	2874	2644	2445	3174	3471	4216	4606	5090
3. Capital Expenditures	10192	9266	13741	20064	13428	15334	17710	18757	16611	17623

Source: Statistics of the National Bank of the Republic of Macedonia,  
<http://www.nbrm.mk/?ItemID=709DEDEDF66C8544A9F4A27DBF6EDA07>

As evident from the data, transfers are the most important category into the structure of public expenditures in the Republic of Macedonia over the analyzed period (2005-2014). The relative share of transfers ranged from 51,48% in 2005 up to 63,54% in 2014 (Table 2), indicating continuously rising trend. Also, the absolute value of transfers rose by 106% over the period 2005-2014 (Table 1). Another category which takes significant proportion of total public expenditures is related to wages and salaries. The share of this category in the total expenditures noted a declining trend over the period, falling from 22,79% in 2005, 15,57% in 2011 and down to 13,74% in 2014 (Table 2). However, the absolute value of the wages and salaries have not changed significantly over the period.

**Table 2** Structural Share of the Public Expenditures in the Budget of the Republic of Macedonia for the period 2005-2014

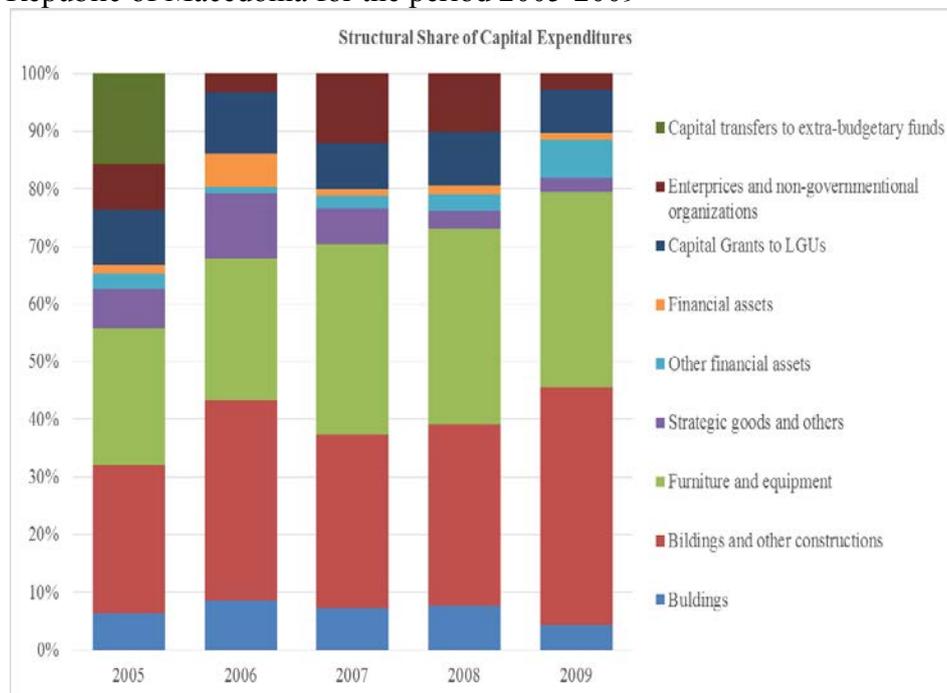
- %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1. Current Expenditures	89,83	91,24	88,30	85,70	90,37	89,25	88,09	87,96	89,59	89,51
Wages and Salaries	22,79	22,15	20,10	14,85	16,28	15,86	15,57	14,58	14,15	13,74
Goods and Services	12,96	12,22	12,61	13,37	11,64	10,29	9,39	9,40	9,33	9,20
Transfers	51,48	53,53	53,14	55,59	60,69	60,88	60,79	61,28	63,22	63,54
2. Interests Payments	2,61	2,97	2,45	1,89	1,75	2,22	2,34	2,71	2,89	3,03
3. Capital Expenditures	10,17	8,76	11,70	14,30	9,63	10,75	11,91	12,04	10,41	10,49

Source: authors calculations according to the official data from the Statistics of the National Bank of the Republic of Macedonia, [www.nbrm.mk](http://www.nbrm.mk)

The most remarkable changes into the absolute value of the structure of public expenditures was noted in the category of capital expenditures. The allocations for this category increased by 73% over the period 2005-2014 (Table 1). On the other hand, the share of capital expenditures rose from 10.2% in 2005 up to the highest level of 14.30% in 2008 and have later stabilized to around 10.5% in 2014.

**Figure 1** Structural Share of Capital Expenditures of the Budget in the Republic of Macedonia for the period 2005-2009



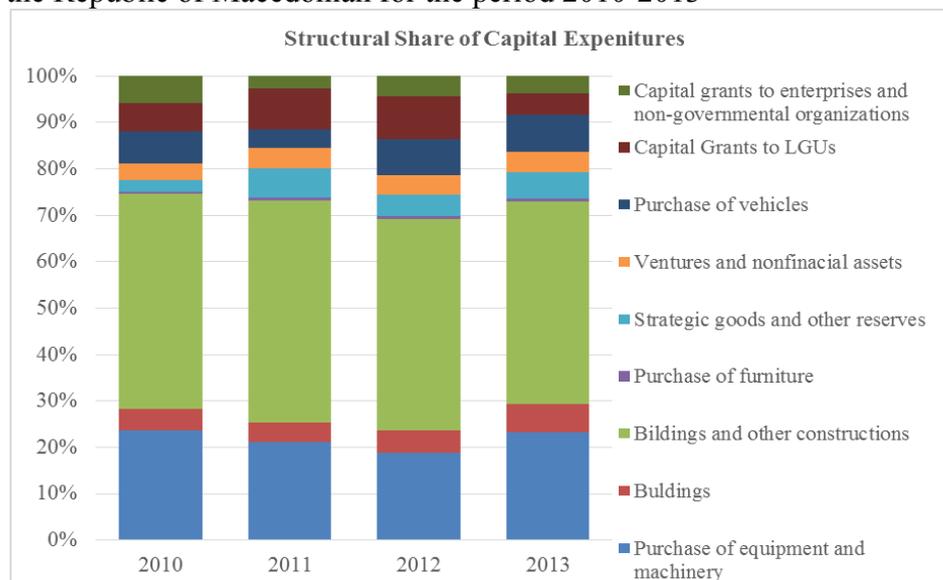
Source: Final Statement of the Budget of the Republic of Macedonia, Official Gazette of the Republic of Macedonia number 25/2007, 111/2008, 112/2008 and 119/2010

Given the significant increase of the capital expenditures in absolute terms, as well as their impact on the economy discussed in the previous section, we would provide further analysis of their structure. The available data for the structure of the capital expenditures in the Republic of Macedonia are classified in two periods: 2005 - 2009 (Figure 1) and 2010 - 2013 (Figure 2). These data refer to the structure of realized expenditures in the Central Budget of the Republic of

Macedonia. The difference between the two periods is attributable to the legal changes of the classification of costs under capital expenditures.<sup>5</sup>

The analysis referring to the period 2005-2009 indicate largest share of the category buildings and other constructions in the capital spending, ranging from 25,84% in 2005 up to 41,29% in 2009 (Figure 1). No changes of classification of this cost occurred between the analyzed periods, so the data for two periods are fully comparable. The category buildings and other constructions has been also dominant into the period 2010-2013 (Figure 2). Its largest share of 48% in total capital expenditures was registered in 2011. The referent values for 2012 and 2013 were 46% and 42%, respectively.

**Figure 2** Structural Share of the Capital Expenditures in the Budget in the Republic of Macedonian for the period 2010-2013



Source: Final Statement of the Budget of the Republic of Macedonia, Official Gazette of the Republic of Macedonia number 138/2011, 114/2012, 157/2013 and 107/2014

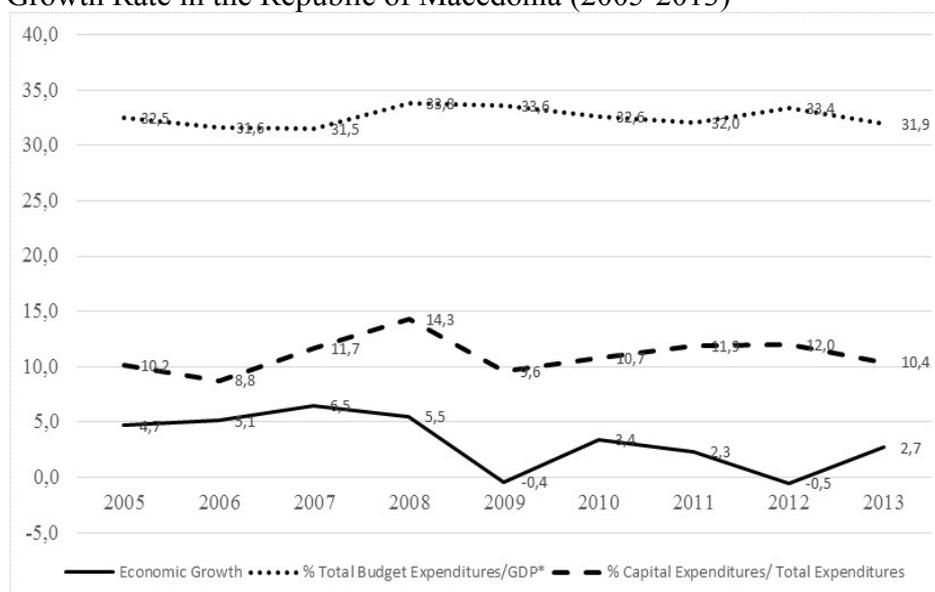
Another category that have absorbed significant part of the capital expenditures is related to purchase of furniture and equipment. This category is not fully comparable for the two analyzed periods, as the

<sup>5</sup> Pursuant to Article 13 paragraph 3 of the Budget, on June 9, 2009 the Minister of Finance adopted a new Regulation on classification of expenditures, which is applied from January 1, 2010. According to this regulation, capital expenditures are detailed divided in specified capital expenditures subcategories.

Regulation of 2009 introduced division of these expenditures in three separate subcategories: purchase of vehicles, purchase of furniture and purchase of equipment and machinery. This share in the period which is taken in consideration presents simple sum of the previously mentioned subcategories and it is around 30%. More precisely, 23,61% in 2005, 33,9% in 2008, 27,13% in 2012 and 31,06% in 2013. These expenditures are increasing the public spending, but because they are unproductive spending, they are not encouraging the investment activity.

The structure of public expenditures provided above indicates certain increase of the capital expenditures, but their impact on the economic growth has not been significant. On the contrary, the level of public expenditures in GDP in the analyzed period did not register notable changes (Figure 3). There has been certain increase of the level of the economic growth, too, but the public expenditures have not significantly boosted the growth.

**Figure 3** Trend Line of Share of Public Expenditures in GDP, Share of Capital Expenditures in Total Government Expenditures and Economic Growth Rate in the Republic of Macedonia (2005-2013)



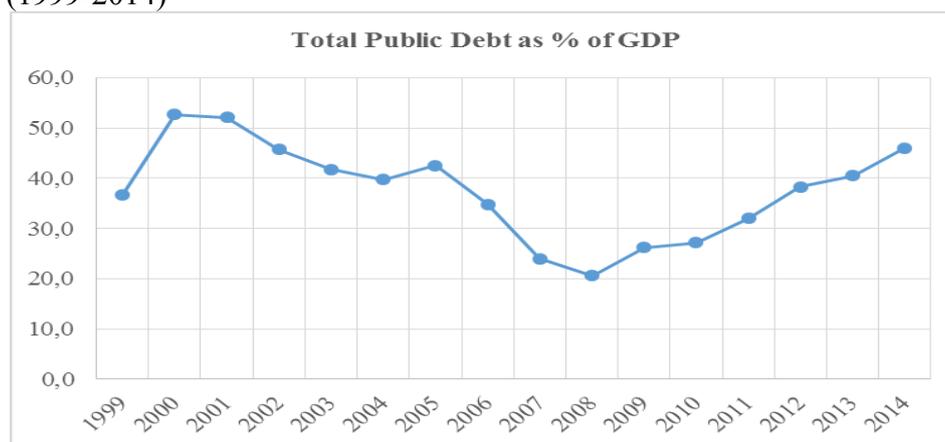
\*- the calculations are made using the official data for realized total government expenditures from the Final Statement of the Budget of the Republic of Macedonia published in the Official Gazette of The Republic of Macedonia

Source: authors calculations according to the official data from the Statistics of the National Bank of the Republic of Macedonia, [www.nbrm.mk](http://www.nbrm.mk); Official Gazette of The

Republic of Macedonia, number 25/2007, 111/2008, 112/2008, 114/2009, 114/2012, 157/2013 and 107/2014; Statistical Yearbooks 2005, 2006, 2007, 2008, 2009 and 2010; <http://www.stat.gov.mk/pdf/2014/3.1.14.06.pdf>; State Statistical Office of the Republic of Macedonia, Statistical Review: National Economy and Finances, no. 3.4.14.04/793 (2014), <http://www.stat.gov.mk/pdf/2014/3.1.14.06.pdf>

In a situation when there is no significant impact of the public expenditures on the economic growth, the question that arises from these analyses is how the increased levels of expenditures are financed. Given the structure of the national budget, it may be concluded that the increased capital expenditures are financed with increased borrowing. Confirmation of this could be found in the increased public debt. The Chart 4 presents the changes in public debt expressed as a share of GDP. The share of public debt in GDP increases in the same years when the capital expenditures rise.

**Figure 4** Total Public Debt as % of GDP in the Republic of Macedonia (1999-2014)



Source: Annual Report on Public Debt Management of the Republic of Macedonia, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, Ministry of Finance of the Republic of Macedonia, [www.finance.gov.mk](http://www.finance.gov.mk)

However, the increase of the public debt in the Republic of Macedonia coincides also with the global economic and financial crises from 2008. There is a continuous trend towards increasing of public debt as a percent of GDP in developed, as well as in developing countries. The measures of fiscal policies that increase expenditures, especially capital expenditures directly affect the level of public debt. In the case of Macedonia, the stock of public debt is not a large percentage of the GDP, and therefore, it could be argued that it is not posing threat to the

economy, but the rapid rate of increasing the public debt is alarming. Therefore, more attention should be paid to fiscal consolidation and boosting of economic activity.

#### 4. Comparative analyses of the public expenditures in the Republic of Macedonia and other countries

More clear perception about the public expenditures in the Republic of Macedonia and their importance could be made by comparison with the state of affairs in other countries. In this respect, very important indicator is the percentage of public expenditures as share of real GDP. The Table 3 presents the share of public expenditures of GDP in some selected countries, including EU members and countries from the region.

**Table 3** Public Expenditures Share of GDP

Country	- Expense In % of GDP*												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	39,5	39,6	39,2	39,6	42,3	38,6	38,0	37,5	37,5	38,4	38,8	37,5	38,3
Belgium	42,1	42,7	41,1	42,3	40,6	43,3	40,0	39,9	41,4	44,0	42,7	43,6	44,8
Bosna and Hercegovina	na	na	na	35,6	33,5	33,6	34,8	36,9	38,6	40,6	39,9	38,8	39,8
Bulgaria	30,5	29,7	31,0	32,0	32,9	31,2	29,8	29,0	28,9	30,7	30,3	30,3	31,3
Croatia	38,7	37,0	35,7	34,7	34,7	34,2	33,5	33,8	34,1	36,4	37,4	36,8	36,6
Czech Republic	30,8	32,5	34,3	34,3	32,5	33,0	32,7	31,1	31,3	34,5	34,0	33,6	33,1
Denmark	33,9	33,6	33,5	34,1	33,6	31,9	31,1	34,9	35,6	40,8	41,1	41,8	43,1
Estonia	29,4	27,8	27,6	27,6	27,4	26,6	26,3	26,2	30,3	35,7	33,9	31,2	30,9
Finland	34,0	33,2	34,4	35,0	34,8	34,9	34,4	32,7	33,5	38,2	38,4	38,0	39,1
France	43,2	43,5	44,5	44,9	44,4	44,7	44,0	43,3	43,6	46,9	48,3	46,4	47,0
Germany	30,8	30,3	30,8	31,3	30,2	30,3	29,0	27,8	27,9	30,8	31,1	28,6	28,3
Greece	42,6	42,1	41,4	40,5	41,0	41,4	41,1	43,3	46,2	50,7	49,3	52,8	53,8
Hungary	41,3	41,0	43,0	42,9	41,9	42,1	43,6	42,9	44,5	45,3	44,0	45,3	43,5
Macedonia	na	na	na	na	na	28,9	29,6	29,3	30,6	31,3	30,1	29,0	29,4
Serbia	na	na	na	na	na	na	na	36,8	38,0	38,0	38,7	37,6	39,2
Slovenia	38,1	39,0	38,3	38,6	38,5	39,0	38,0	35,1	36,6	41,2	41,7	42,5	42,3
Romania	na	na	25,8	23,5	23,2	24,0	25,3	26,1	33,1	44,7	40,4	35,2	33,6
Turkey	25,0	24,8	25,7	25,4	25,8	na	na	na	31,2	37,7	35,4	33,3	33,6

\*- Expense is cash payments for operating activities of the government in providing goods and services. It includes compensation of employees (such as wages and salaries), interest and subsidies, grants, social benefits, and other expenses such as rent and dividends.

Source: International Monetary Fund, Government Finance Statistics Yearbook and data files, and World Bank and OECD GDP estimates; data.worldbank.org (31.8.2015)

As evident from Table 3, the share of public expenditures in GDP in the Republic of Macedonia<sup>6</sup> was 28,9 % in 2005, with changing trend in the upcoming years. More specifically, it rose to 31,3% in 2009, then down to 30,1% and 29% in 2010 and 2011, respectively and 29,4% in 2012. If we compare these data with the share of public expenditures in GDP in the developed and developing countries, we can conclude that the share of public expenditures in GDP in Macedonia is lower than in most of other countries, and, arguably, below the level that ensures optimal satisfaction of the public needs funds. Therefore, in Bosnia and Herzegovina, the public expenditures amount to around 40% of GDP in the analyzed period while in Serbia, the share varies from 36,8% in 2007 to 39,2 in 2012. Countries like Romania, Bulgaria, Czech Republic, Estonia, Turkey, Slovenia and Croatia have similar share of public expenditures in GDP such as the previously mentioned countries. On the other side, the level of public expenditures in GDP in developed countries is higher. According to the data from the countries included in Table 3 Austria, Denmark, Finland, Germany, France and Greece have share of public expenditures of minimum 40% of GDP.

In accordance to the previous discussion about the increased level of capital expenditures in the Republic of Macedonia and their link to the economic growth, it would be interesting to look at the data about economic growth in other countries. The table 4 presents the growth rate in previously discussed countries.

As shown in the Tables 3 and 4, the countries with higher public expenditures as share of GDP usually have higher growth rates. As argued above, the capital expenditures have positive impact on the economic growth in the country, but also the increased level of GDP and economic growth rate has positive influence on the level of total expenditures. The analyses of the public expenditures in the Republic of Macedonia lead us to the conclusions that increased expenditures did not indicate increased economic activity. The public expenditures are mostly consumption, instead of investment oriented, resulting into increasing budget deficit.

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<sup>6</sup>For the comparability of the results we use the shares that were calculated considering the methodology of the expenditures of the World Bank

**Table 4 Economic Growth Rate**

Country	GDP Growth (annual %)*														
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Austria	3,4	1,4	1,7	0,8	2,7	2,1	3,4	3,6	1,5	-3,8	1,9	3,1	0,9	0,2	0,3
Belgium	3,6	0,9	1,6	0,9	3,4	1,9	2,6	3,0	1,0	-2,6	2,5	1,6	0,1	0,3	1,1
Bosna and Hercegovina	5,5	4,4	5,3	4,0	6,1	5,0	6,2	6,8	5,4	-2,9	0,7	1,0	-1,2	2,5	1,2
Bulgaria	6,0	3,8	4,5	5,4	6,6	6,0	6,5	6,9	5,8	-5,0	0,7	2,0	0,5	1,1	1,7
Croatia	3,8	3,4	5,2	5,6	4,1	4,2	4,8	5,2	2,1	-7,4	-1,7	-0,3	-2,2	-0,9	-0,4
Czech Republic	4,3	3,1	1,6	3,6	4,9	6,4	6,9	5,5	2,7	-4,8	2,3	2,0	-0,8	-0,7	2,0
Denmark	3,7	0,8	0,5	0,4	2,6	2,4	3,8	0,8	-0,7	-5,1	1,6	1,2	-0,7	-0,5	1,1
Estonia	9,7	6,2	6,1	7,5	6,5	9,5	10,4	7,9	-5,3	-14,7	2,5	8,3	4,7	1,6	2,1
Finland	5,6	2,6	1,7	2,0	3,9	2,8	4,1	5,2	0,7	-8,3	3,0	2,6	-1,4	-1,3	-0,1
France	3,9	2,0	1,1	0,8	2,8	1,6	2,4	2,4	0,2	-2,9	2,0	2,1	0,2	0,7	0,2
Germany	3,0	1,7	0,0	-0,7	1,2	0,7	3,7	3,3	1,1	-5,6	4,1	3,6	0,4	0,1	1,6
Greece	4,0	3,7	3,2	6,6	5,0	0,9	5,8	3,5	-0,4	-4,4	-5,4	-8,9	-6,6	-3,9	0,8
Hungary	4,2	3,7	4,5	3,8	4,8	4,3	4,0	0,5	0,9	-6,6	0,8	1,8	-1,5	1,5	3,6
Macedonia	<b>4,5</b>	<b>-3,1</b>	<b>1,5</b>	<b>2,2</b>	<b>4,7</b>	<b>4,7</b>	<b>5,1</b>	<b>6,5</b>	<b>5,5</b>	<b>-0,4</b>	<b>3,4</b>	<b>2,3</b>	<b>-0,5</b>	<b>2,7</b>	<b>3,8</b>
Serbia	7,8	5,0	7,1	4,4	9,0	5,5	4,9	5,9	5,4	-3,1	0,6	1,1	-1,0	2,6	-1,8
Slovenia	4,2	2,9	3,8	2,8	4,4	4,0	5,7	6,9	3,3	-7,8	1,2	0,6	-2,6	-1,0	2,6
Romania	2,1	5,7	5,0	5,2	9,1	4,3	8,7	6,3	7,9	-6,8	-0,9	2,3	0,4	3,5	1,8
Turkey	6,8	-5,7	6,2	5,3	9,4	8,4	6,9	4,7	0,7	-4,8	9,2	8,8	2,1	4,2	2,9

\*-Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Source: World Bank national accounts data, and OECD National Accounts data files

Therefore, the growth of public expenditure should be addressed to the increased capital investment as investments in infrastructure, science and education, new knowledge and technology, health, environment and others public investments that positively affect the economic activity. That would also contribute to higher ability of the state to allocate more funds to the capital expenditures, oriented towards boosting economic growth.

## Conclusion

The majority of public expenditures in the Republic of Macedonia consists of current expenditures, transfers to other levels of government and expenditures for purchasing goods and services, while capital expenditures are insignificant. This means that public expenditures have

predominantly fiscal nature, instead of supporting role to economic growth and development. The share of current expenditures is dominant, while the share of capital expenditures is minimal, although their share in total expenditures in the analyzed period in the country has increased. Compared to other countries, the share of public expenditures in GDP in the Republic of Macedonia is lower, and implicitly, below the level that ensures optimal satisfaction of the public needs. In this regard, the reform of the structure of public expenditures in the country is necessary, in terms of enhancing the development role of the public expenditures. Therefore, the measures must be targeted to increasing the capital expenditures towards investment in infrastructure, science and education, new knowledge and technology, health, environment and other areas crucial for ensuring economic development of the country.

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