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Fiscal Policy and Capital Market Performance: Evidence from EU Countries from Central and Eastern Europe

Gabriela-Victoria ANGHELACHE[1]
Stela JAKOVA[2]
Dumitru-Cristian OANEA[3]

[1]*PhD Professor, Bucharest University of Economic Studies, Bucharest, Romania,*
[1]*E-mail: gabriela.anghelache@gmail.com*
[2,3]*PhD Student, Bucharest University of Economic Studies, Bucharest, Romania,*
[2]*E-mail: stelajakova@gmail.com*, [3]*E-mail: oanea.cristian@gmail.com*

Abstract *The aim of this paper is to analyze the relationship between fiscal policy and capital market performance in 6 European Union (EU) countries from Central and Eastern Europe, for period 2004 – 2015. In order to understand very well the relationship between the analyzed indicators, we searched in both directions: the effects of fiscal policy on capital market performance and also the effects of capital market performance on fiscal policy. For Czech Republic and Slovakia we found that there is a bilateral relationship between fiscal policy and capital market performance. In Bulgaria we found that the fiscal policy affects the capital market return, while in Poland we obtain that the capital market return affects the fiscal policy. For the other 2 countries, Hungary and Romania, we didn't find any significant influence between the variables.*

Key words Fiscal policy, capital market, financial crisis

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1. Introduction

Capital markets have a multidimensional role to play in connection with governmental policies decision making. On the other hand, capital prices reflect economic developments to a great extent and thus can be considered by fiscal policy authorities in the conduct of policy decisions. In this regard, capital market performance not only responds to fiscal policy decisions and affects the economy, but also provides feedback to private sector's expectations about the future course of key macroeconomic variables. Regarding fiscal policy, its contribution to the performance of capital market is defined an important tool to influence the economy through changes in taxation and spending, which are considered in many studies as proxy for fiscal policy (Tavares and Valkanov, 2003; Alesina *et al.*, 1999; Afonso and Sousa, 2009, 2011, 2012) has a large control over the macroeconomic variables, especially in crisis context.

The aim of this paper is to examine the effects of fiscal policy on capital market performance from Central and Eastern Europe for the period 2004-2015 and also the opposite impact of capital market effect over the fiscal policy, taking into account also the financial crisis effect.

This paper is organized as follows: section 2 reviews the literature on the relationship between fiscal policy and capital market including crisis context. Section 3, describes the methodology used, showing the panel of data selection process and characteristics of our sample, section 4 is reporting the results. Finally, in last section we present the conclusions of our study.

2. Literature review

Performance-related papers are based on different category of financial markets investigating the linkage between budget and capital market and their determinants with major effects in the economic activity. Frequently is paid attention in motivating investors to invest in reasonable levels of taxation and the overall stability of the tax regime.

Anghel (2015) analyzing the efficiency of capital market in the Central and Eastern Europe countries, mentioned that the success of investors is strongly related to the technical indicators which provides specific information to trade on capital markets and their CEE economic returns depends on the market in which one investor invests and this seems to be more efficient in developed countries. Pastor and Veronesi (2010) demonstrated that government policy affects the future especially for the agents in the capital market. They revealed that a policy change influences negative the future expected value of stock returns and when this change is accompanied with uncertainty this means a risk in the capital market, which will induce to smaller interest rates and a decrease in the investments made by firms.

In order to analyze the role of government fiscal policy in attracting the investors in market Karlygash (2013) and Riascos and Vegh (2003) have found that exist a gap according to the limit of accessing the foreign capital market where public investment is the most volatile component. Their findings suggests that by introducing a limit in deficit, as an optimal policy, would be preferred a cut in public investment and a raise of taxes to a cut in current spending. In developed countries the situation is opposite. In their papers, Afonso and Sousa (2012) and Ardagna (2009) using quarterly data for U.K., U.S., Italy and Germany, revealing the importance of fiscal policy on capital market demonstrated that a budget deficit cause the increase of interest rates leading a reduction in the capital invested and slowing the economic and capital market growth. Also Afonso and Sousa (2009, 2011, 2012) by examining the relationship between governmental spending and revenue and asset and capital markets, including and excluding the government debt effect, their researches pointed out: first, a positively effect of governmental expenditures on price level for U.K and Italy and a negative one for Germany and U.S and a negative effect on stock prices and a positively one on housing prices; second, a negatively impact of governmental revenue on price level, a negative effect on housing prices for Italy and U.S and a positive one for U.K and Germany.

Also Dromel (2007) demonstrated how fiscal policy can affect economic growth to capital market imperfections showing how the labour income taxation and transfers, in long run, impact the GDP, investment and interest rates to temporary and permanent productivity shocks. He stated that fiscal policy parameters are able to rule out the crisis regimes circumstances. Alesina *et al.* (1999, 2012) using a panel data for OECD countries revealed a negative effect especially of the public wage, as a component of governmental spending, over the private investment. According to them a cut of taxes effect on investment are to much lower than a cut of governmental spending which lead to an increase of investment and this effect is more larger when is introduced a cutting of government wages. Tavares and Valkanov (2003) tested Ricardian Equivalence for a quarterly panel of data, analyzing the taxes and government spending impact over stocks, government bonds, and corporate bonds. They found that for given public spending levels, there is no significant effect on stock and bond returns. They also concluded that an increase of tax has a significant negatively effect which induce lower market returns. Moreover, from a Ricardian perspective (Barro, 1974, 1979) fiscal policy is impotent and as such will have no effect on capital markets. In the other hand, Perotti (2004), using Vector Autoregressive he studied the effect of fiscal policy on GDP, inflation and interest rates in 5 OECD countries. Using as proxy for fiscal policy spending and taxes he summarized that does not exist an evidence that explain if a cut of taxes has a larger impact in compare with spending shocks and this effect is weaker over the economic growth which in post 1980 is negative especially over the private investment. He also mentions that spending is positively impact on interest rates in post -1980.

Estimating the effects which cause changes on fiscal policy Keigo *et al.* (2014) demonstrated that after the investors' initiatives and the economic activity are demoralized by budget deficit, central bank can influence the level of investment taking place in a country by altering interest rates and taxes (cut) and increasing the economic growth. As many other researches, Jansen *et al.* (2008), Schabert (2003), Chatziantoniou *et al.* (2013), Laopodis (2009), Bekhet and Othman (2012) and Baroian (2014) demonstrated that for accelerating the capital market performance the long run relationship between stock returns and fiscal and monetary measures play an important role, except that fiscal policy analysis matters, Afonso and Sousa (2011) concluded that fiscal policy effects are very weakly and may have impact over the monetary variables which the latter have impact on capital market performance. Gonogor and Bresfelean (2011) also review studying this relation in condition of crisis period across the European Union, demonstrated that capital markets performance is strong influenced by reducing corporate taxes, inflation and interest rates.

On the other hand, exchange rates lead to stronger financial markets and consequently, stronger capital markets.

Furthermore, Agnello *et al.* (2015) pointed out the way how capital market affects the fiscal policy demonstrating that it has an impact on fiscal variables when it is occurred an increasing of stock prices. This means, a direct impact which induce a raising of taxes related to capital gained and fiscal revenue and an indirect impact raising householder' income, private consumption and the growth, reducing interest rate. Likewise, Montasser *et al.* (2015) showed that asset prices affect fiscal policy mainly through the revenue channel. In other words, capital gains influence related taxes and wealth and rate applied to this income will affect the consumption and further the governmental revenue.

3. Methodology of research

The link between fiscal policy and capital market performance will be analyzed based on the following two models: first model will explain the impact of public expenditures and revenues over selected indices returns and the second model will capture the effects of capital market performance of the analyzed countries over fiscal policy as were further discussed in the literature by Laopodis (2007). Due to fact that, in our sample we include also the financial crisis period, we will extend the models by introducing a dummy variable which will represent the financial crisis period (similar as in the literature Dornean, 2014).

Model 1 shows the influence of fiscal policy on indices returns of selected countries and it is given by equation (1) while model 2, which highlights the capital market performance influence to fiscal policy, is given by equation (2):

$$R_{y,t,q} = \alpha_{y,0} + \alpha_{y,1} \cdot FisPol_{y,t,q} + \alpha_{y,2} \cdot CRISIS \cdot FisPol_{y,t,q} + \alpha_{y,3} \cdot R_{y,t,q-1} + \varepsilon_{y,t,q} \quad (1)$$

$$FisPol_{y,t,q} = \beta_{y,0} + \alpha_{y,1} \cdot R_{y,t,q} + \beta_{y,2} \cdot CRISIS \cdot R_{y,t,q} + \beta_{y,3} \cdot R_{y,t,q-1} + \omega_{y,t,q} \quad (2)$$

Where:

$R_{y,t,q}$ and $R_{y,t,q-1}$ is the indices returns for country *y* for year *t* and quarter *q* and *q-1*;

CRISIS.$FisPol_{y,t,q}$ - effects of fiscal policy during financial crisis period for country *y*;

CRISIS.$R_{y,t,q}$ - represent the effect of capital market performance of country *y* during financial crisis period;

$FisPol_{y,t,q}$- fiscal policy represented by government revenue or expenditure for year *t*, country *y* and quarter *q* (calculated as percentage from GDP);

$\alpha_{y,0}$, $\alpha_{y,1}$, $\alpha_{y,2}$, $\alpha_{y,3}$, $\beta_{0,y}$, $\beta_{y,1}$, $\beta_{y,2}$, $\beta_{y,3}$ – represent the model's parameters for country *y* and

$\varepsilon_{y,t,q}$, $\omega_{y,t,q}$, – error terms of the model for country *y*. Model estimation using last square method (LS) will be done in two steps, by using both government revenue and government expenditure as proxies for fiscal policy. This approach was chosen due to a high correlation between revenues and expenditures, in order to prevent the multicollinearity in the regression model.

4. Data and descriptive statistics

Sample used in the analysis is formed by main six stock market indices from European Union countries located in Central and Eastern Europe, namely: BET for Romania, BUX for Hungary, PX for Czech Republic, SAX for Slovakia, SOFIX for Bulgaria and WIG for Poland.

Data for capital markets are available for the period 2004-2015 based on the sources presented in table 1. Indices values were denominated in EURO, using the official exchange rates from European Central Bank. Quarter data for government revenue and expenditure, computed as percentage of GDP has been obtained from Eurostat database.

Table 1. Data sources for used indicators

Indicator	Country	Link
BET	Romania	http://www.bvb.ro/FinancialInstruments/Indices/IndicesProfiles.aspx?i=BET
BUX	Hungary	http://bse.hu/menun_kivuli/dinportl/downloadable/nonrealtimehistdata
PX	Czech Republic	http://ftp.pse.cz/Info.bas/Cz/px.csv
SAX	Slovakia	http://www.bsse.sk/bcpben/Trading/Indices/SAXIndex.aspx
SOFIX	Bulgaria	http://www.bse-sofia.bg/?page=IndexProfile&code=SOFIX
WIG	Poland	http://www.investing.com/indices/wig-historical-data
Revenue	All	http://ec.europa.eu/eurostat/web/national-accounts/data/main-tables
Expenditure	All	http://ec.europa.eu/eurostat/web/national-accounts/data/main-tables

Source: Authors calculation

We calculated the quarter indices return based on initial and final prices index for each quarter. The values for indices returns are calculated based on following formula (3):

$$R_{y,t,q} = \frac{P_{y,f} - P_{y,i}}{P_{y,i}} \cdot 100 \quad (3)$$

Further, in table 2 we present the main descriptive statistics for the analysed indicators, for two main periods: full sample (2004Q1 – 2015Q4) and for crisis period (2008Q1 – 2012Q4). We adopt this way of structuring the data in order to be able to see also the financial crisis effect over the selected indicators.

Table 2. Descriptive statistics

Country	Period	Indicator	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis
Bulgaria	Full sample	Expenditures	37.1%	36.6%	54.4%	27.6%	5.8%	0.9387	4.0866
		Revenues	36.8%	35.9%	46.7%	29.6%	4.3%	0.2812	2.0949
		Market return	1.5%	1.9%	34.6%	-54.7%	17.2%	-0.4427	4.2759
	Crisis period	Expenditures	36.4%	34.9%	52.3%	28.9%	5.9%	0.9817	3.7874
		Revenues	35.1%	33.9%	43.5%	29.6%	4.5%	0.6608	2.2440
		Market return	-5.4%	-6.8%	34.6%	-54.7%	20.8%	-0.1515	3.3905
Czech Republic	Full sample	Expenditures	42.1%	42.3%	50.1%	36.2%	2.5%	0.1503	4.3457
		Revenues	39.6%	39.7%	43.0%	35.1%	1.6%	-0.5533	3.4354
		Market return	1.5%	1.9%	32.5%	-34.6%	12.4%	-0.2169	4.0698
	Crisis period	Expenditures	42.8%	42.9%	50.1%	37.2%	2.6%	0.5607	4.6748
		Revenues	39.1%	39.4%	41.8%	35.1%	1.8%	-0.6630	3.0431
		Market return	-1.1%	-0.2%	32.5%	-34.6%	16.5%	0.0285	2.8355
Hungary	Full sample	Expenditures	49.6%	49.1%	59.0%	45.6%	3.0%	0.9406	3.7441
		Revenues	45.0%	44.7%	49.4%	39.8%	2.5%	-0.2362	2.4126
		Market return	2.6%	2.9%	57.0%	-40.9%	17.0%	0.2209	4.5978
	Crisis period	Expenditures	49.6%	49.1%	54.2%	46.0%	2.6%	0.3964	2.2489
		Revenues	45.5%	44.7%	48.6%	42.0%	1.8%	0.2363	2.1545
		Market return	0.0%	-0.8%	57.0%	-40.9%	22.8%	0.4224	3.5396
Poland	Full sample	Expenditures	43.6%	43.6%	47.8%	41.0%	1.6%	0.4977	2.6931
		Revenues	39.5%	39.5%	45.5%	34.1%	2.3%	-0.1543	3.0856
		Market return	2.6%	3.9%	33.3%	-40.4%	13.9%	-0.4941	4.0426
	Crisis period	Expenditures	44.2%	44.0%	47.8%	41.8%	1.8%	0.4667	2.3068
		Revenues	39.0%	39.6%	43.5%	34.1%	2.4%	-0.3216	2.5553
		Market return	0.4%	0.8%	33.3%	-40.4%	18.7%	-0.2513	2.7062

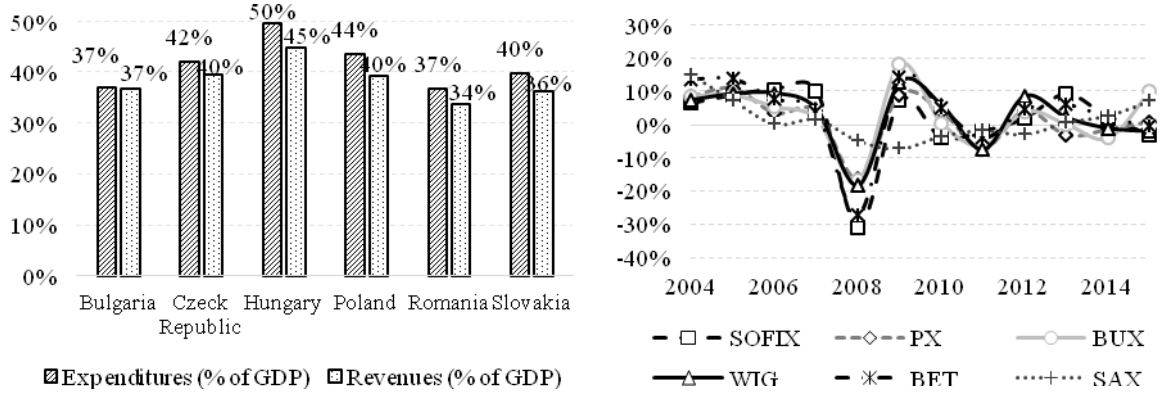
Country	Period	Indicator	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis
Romania	Full sample	Expenditures	37.0%	36.1%	49.9%	28.1%	5.2%	0.3908	2.4220
		Revenues	33.8%	33.4%	42.3%	26.0%	4.2%	0.3741	2.1716
		Market return	3.4%	2.6%	46.1%	-36.6%	18.2%	-0.0859	3.1556
	Crisis period	Expenditures	39.5%	38.9%	49.9%	30.2%	5.2%	0.2332	2.3021
		Revenues	33.6%	32.6%	42.3%	26.0%	5.0%	0.4219	2.0088
		Market return	-1.4%	0.0%	46.1%	-36.6%	23.8%	0.1617	2.0990
Slovakia	Full sample	Expenditures	40.0%	40.3%	49.1%	32.9%	3.6%	0.0801	2.4957
		Revenues	36.3%	36.3%	42.1%	31.4%	2.4%	0.0305	2.4538
		Market return	1.4%	0.8%	39.9%	-20.8%	10.6%	1.5763	7.4814
	Crisis period	Expenditures	40.7%	41.5%	49.1%	33.7%	4.1%	-0.0341	2.3448
		Revenues	35.5%	35.3%	38.3%	32.7%	1.8%	0.0572	1.5991
		Market return	-3.9%	-4.0%	8.8%	-20.8%	7.1%	-0.3276	2.9454

Source: Authors calculation

Based on the results, we are able to see that the average percentage of expenditures from GDP for the analysed period varies between 37% in Bulgaria and Romania to 50% in Hungary. For the revenues part, we have similar situation, because the minimum average percentage of revenues from GDP is recorded by Romania (34%), while the maximum average of revenues as percentage from GDP is recorded for Hungary (45%).

More clear evolution of the average percentage for governmental expenditures and revenues from GDP can be seen in the figure 1. In the same time, we also are able to see the evolution of the capital market performance by countries, between 2004 and 2015. Of course, we are able to see that financial crisis had a significant impact on capital market, because all markets from the region recorded a negative return in 2008.

The effect of financial crisis on governmental expenditures and revenues is the expected one, namely the percentage of governmental expenditure from GDP recorded an increase during financial crisis, while the revenues recorded a decrease in the value for almost all countries.



Source: Authors calculation

Figure 1. **Average revenue and expenditures by countries and evolution of capital market return**

Based on the estimated regression models we want to understand the relationship between fiscal policy and capital market performance, so we applied Augmented Dickey-Fuller test and Phillips-Perron test in order to see if the series are stationary. According to the results presented in table 3, at least one test confirms that the series are stationary.

Table 3. **Stationarity Test Results**

Country	Variables	H_0: I(1)	
		ADF test	PP test
Bulgaria	Expenditures (% of GDP)	-3.42**	-7.09***
	Revenues (% of GDP)	-2.17	-5.34***
	Market return - SOFIX	-5.09***	-5.09***
Czech Republic	Expenditures (% of GDP)	-1.88	-6.77***
	Revenues (% of GDP)	-0.16	-5.41***
	Market return - PX	-4.68***	-5.11***
Hungary	Expenditures (% of GDP)	-2.60*	-6.39***
	Revenues (% of GDP)	-2.36	-3.56**
	Market return - BUX	-6.19***	-6.15***
Poland	Expenditures (% of GDP)	-1.20	-3.89***
	Revenues (% of GDP)	-1.99	-8.37***
	Market return - WIG	-4.99***	-4.96***
Romania	Expenditures (% of GDP)	-1.17	-5.17***
	Revenues (% of GDP)	-4.15***	-11.74***
	Market return - BET	-5.81***	-5.80***
Slovakia	Expenditures (% of GDP)	-2.60*	-5.73***
	Revenues (% of GDP)	0.59	-4.43***
	Market return - SAX	-3.07**	-4.20***

*,**,*** - Indicates significant at the 0.1 level, 0.05 level and 0.01 level

5. Results

Table 4. Effect of fiscal policy on capital market – regression model estimation

Market index – dependent variable	Country	Constant	Fiscal policy	Fiscal Policy × Crisis	Index *(q-1)*	R-squared
Expenditures model	Bulgaria	0.3057* (0.1497)[a]	-0.6750* (0.4001)	-0.2846** (0.1347)	0.1791 (0.1455)	0.2137
	Czech Republic	0.0398 (0.3167)	-0.0341 (0.7645)	-0.0715 (0.0909)	0.2207 (0.1498)	0.0748
	Hungary	0.1892 (0.4237)	-0.2943 (08501)	-0.0885 (0.1034)	0.0514 (0.1518)	0.0244
	Poland	-0.0966 (0.5649)	0.2944 (1.3109)	-0.0676 (0.0995)	0.2592* (0.1486)	0.0881
	Romania	-0.0206 (0.2097)	0.2238 (0.5935)	-0.1911 (0.1605)	0.0920 (0.1533)	0.0517
	Slovakia	0.1477 (0.1531)	-0.2824 (0.3899)	-0.1480* (0.0753)	0.3289** (0.1407)	0.2846
Revenues models	Bulgaria	0.2651 (0.2191)	-0.5447 (0.5707)	-0.3516** (0.1545)	0.0996 (0.1558)	0.1716
	Czech Republic	0.8268* (0.4327)	-2.0071* (1.0840)	-0.1277 (0.0927)	0.1984 (0.1426)	0.1457
	Hungary	0.0127 (0.4755)	0.0629 (1.0588)	-0.0870 (0.1143)	0.0601 (0.1528)	0.0185
	Poland	0.1008 (0.3549)	-0.1749 (0.8870)	-0.0764 (0.1064)	0.2557* (0.1494)	0.0893
	Romania	-0.0127 (0.2156)	0.2134 (0.6340)	-0.2049 (0.1640)	0.0888 (0.1532)	0.0545
	Slovakia	0.2627 (0.2199)	-0.6162 (0.5981)	-0.1989** (0.0845)	0.3465** (0.1418)	0.2885

[a] – (standard errors in parentheses)
*,**,*** - Indicates significant at the 0.1 level, 0.05 level and 0.01 level

Table 5. Effect of capital market on fiscal policy – regression model estimation

Fiscal policy – dependent variable	Country	Constant	Index *(q)*	Index × Crisis	Index *(q-1)*	R-squared
Expenditures model	Bulgaria	0.3712*** (0.0091)[a]	-0.0910 (0.0851)	-0.0021 (0.1112)	0.0612 (0.0517)	0.0779
	Czech Republic	0.4225*** (0.0037)	-0.1039* (0.0560)	0.1300* (0.0656)	0.0215 (0.0299)	0.0914
	Hungary	0.4970*** (0.0046)	-0.0094 (0.0502)	0.0005 (0.0592)	-0.0173 (0.0266)	0.0129
	Poland	0.4353*** (0.0026)	0.0199 (0.0344)	-0.0280 (0.0398)	0.0048 (0.0185)	0.0125
	Romania	0.3758*** (0.0082)	-0.1069 (0.0774)	0.1383 (0.0928)	-0.0473 (0.0422)	0.0743
	Slovakia	0.3955*** (0.0057)	-0.0027 (0.0650)	-0.2428* (0.1272)	0.0206 (0.0548)	0.1098
Revenues models	Bulgaria	0.3660*** (0.0070)	0.0234 (0.0655)	-0.0573 (0.0856)	-0.0139 (0.0398)	0.0201
	Czech Republic	0.3972*** (0.0023)	0.0922** (0.0356)	0.0848* (0.0417)	0.0059 (0.0190)	0.1337
	Hungary	0.4524 (0.0037)	-0.0523 (0.0399)	0.0711 (0.0470)	-0.0248 (0.0211)	0.0713
	Poland	0.3939*** (0.0035)	0.0633 (0.0466)	-0.0897* (0.0540)	-0.0147 (0.0251)	0.0683
	Romania	0.3391*** (0.0069)	-0.0058 (0.0648)	0.0193 (0.0777)	-0.0141 (0.0353)	0.0055
	Slovakia	0.3616*** (0.0038)	-0.0079 (0.0433)	-0.0461 (0.0848)	0.0677* (0.0365)	0.0869

[a] – (standard errors in parentheses)

*, **, *** - Indicates significant at the 0.1 level, 0.05 level and 0.01 level

The empirical part of this paper contains two stages: in first stage we estimated the regression model expressed by equation (1) through which we analyzed the effect of fiscal policy has on capital market performance, and in the second stage we estimated the regression model expressed by equation (2) through which we analyzed if capital market performance has an impact on fiscal policy.

The results for stage 1 are presented in table 4. Based on these results we can see that the fiscal policy has a significant negative impact only in Bulgaria and Czech Republic for the full period of time, while during the financial crisis period, the fiscal policy has a negative impact also in Slovakia.

The results for stage 2 are presented in table 5. Based on these results we can see that the capital market performance has a significant negative impact on the governmental expenditure in Czech Republic and a positive impact on the revenues in the same country for the full period of time.

Moreover, during the financial crisis, the capital market performance has a significant impact on fiscal policy in Poland and Slovakia. The summary of these relationships between fiscal policy and capital market performance is presented in table 6.

Table 6. Summary of the relationships between fiscal policy and capital market

Relationship	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia
Fiscal policy → capital market	Yes**	Yes*	No	No	No	Yes**
Capital market → fiscal policy	No	Yes**	No	Yes*	No	Yes*

*, **, *** - Indicates significant at the 0.1 level, 0.05 level and 0.01 level

Of course this relationship must be understood by taking into account the taxation level of the personal and corporate income. The persons or corporation who has capitals will obtain an income from

this financial instrument based on market performance, and further the tax rate applied to this income will affect further the governmental revenue.

The table 7 and table 8, present the evolution of personal income tax rate and also the corporate income tax rate for the period 2004 – 2015, which is our analyzed period.

Table 7. Personal income tax rate (%)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	29	24	24	24	10	10	10	10	10	10	10	10
Czech Republic	32	32	32	32	15	15	15	15	15	22	22	22
Hungary	38	38	36	40	40	40	40.6	20.3	20.3	16	16	16
Poland	40	40	40	40	40	32	32	32	32	32	32	32
Romania	40	16	16	16	16	16	16	16	16	16	16	16
Slovakia	19	19	19	19	19	19	19	19	19	25	25	25

Source: Eurostat (2014), *Taxation trends in the European Union*, Luxembourg: Publications Office of the European Union, ISSN 1831-8789, p. 32

Table 8. Corporate income tax rate (%)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	19.5	15	15	10	10	10	10	10	10	10	10	10
Czech Republic	28	26	24	24	21	20	19	19	19	19	19	19
Hungary	17.6	17.5	17.5	21.3	21.3	21.3	20.6	20.6	20.6	20.6	20.6	20.6
Poland	19	19	19	19	19	19	19	19	19	19	19	19
Romania	25	16	16	16	16	16	16	16	16	16	16	16
Slovakia	19	19	19	19	19	19	19	19	19	23	22	22

Source: Eurostat (2014), *Taxation trends in the European Union*, Luxembourg: Publications Office of the European Union, ISSN 1831-8789, p. 36.

Even if, we are able to see changes in the value of these two main tax rates, the effect of these changes is not significant on the capital market, because in 2 countries, Hungary and Romania, we were not able to find any relationship between fiscal policy and capital market performance.

6. Conclusions

The main purpose of this paper was to analyze the relationship between fiscal policy and capital market performance for 6 EU countries from Central and Eastern Europe: Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovakia, taking into account the period 2004–2015, including the period of financial crisis.

We used quarter data for governmental expenditures and revenues as percentage from GDP for selected countries and period. We highlighted that the average percentage of expenditures from GDP for the analysed period varies between 37% (Bulgaria and Romania) to 50% (Hungary), while the revenues varies between 34% (Romania) and 45% (Hungary).

Even if for the period 2004–2015 the highest capital market return is recorded by BET (3.4%), followed by WIG and BUX (2.6% for both), during the financial crisis the best performance of the capital market is recorded by Polish capital market with an average of 0.5%, while the other market from the region have recorded a decrease.

Based on our results, we were able to find a bilateral relationship between fiscal policy and capital market return only for Czech Republic and Slovakia. In the same time for other 2 countries we found only a unilateral relationship: Bulgaria – fiscal policy affects the capital market return, and Poland – capital market return affects the fiscal policy. For the last 2 countries, Hungary and Romania, we didn't find any significant influence between fiscal policy and capital market performance.

Even if, during the analysed period there were some changes in the value of personal income tax rate and corporate income tax rate, the effect of these changes is not significant on the capital market, because in Hungary and Romania, we were not able to find any relationship between fiscal policy and capital market performance.

The regression model might have some limitations due to small sample size of only 48 quarter data, over period 2004 – 2015, for each country.

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