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"EMPIRICAL EVIDENCE OF POLITICAL BUDGET CYCLE" CASE OF ALBANIAN BUDGET REVENUE

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Abstract

Elections in politics serve as the major pillar of democracy. This paper gives an overview of the Albanian government's behavior before and after elections. In this study we investigated the impact of the elections to the state budget revenues in the case of Albania, as a country with a young democracy. The methodology followed to achieve the target relied on theoretical proposals formulated by Brender and Drazen (2005) and by Shi and Svensson (2006). Time series regression was used to check the hypotheses raised. The data included in the analysis are from the first quarter of 2000 to the fourth quarter of 2015.Referring to the case of budget revenues, empirical analysis shows that Albania is on political budget cycle before and during the elections to the budget revenue.

Keywords: Elections, budget revenue, fiscal policy, political budget cycle, Albania

INTRODUCTION

Theoretical and empirical research on political budget cycles is surveyed and discussed. Significant political budget cycles are seen to be primarily a phenomenon of the first elections after the transition to a democratic electoral system. Political budget cycles are cycles in some component of the government budget induced by the electoral cycle. More specifically, the term most often refers to increases in government spending or the deficit or decreases in taxes (including changes relative to long-term trends) in an election year which are perceived as motivated by the incumbent's desire for re-election for himself or his party. Though political budget cycles may be seen as just one type of political cycle in macroeconomic variables. Most researches on cycles in economic variables induced by elections now focuses on budget cycles, and it is useful to study such cycles independent of political cycles in economic activity (the political business cycle). This paper draws its ideas from this strand of literature, the one that focuses on the manipulation of the fiscal policy.There are two main (and contradictory) views of pre-electoral fiscal manipulation. One is that politicians may be expected to engage in such manipulation and that empirically is widespread. A simple argument supporting this view is that voters like low taxes and high government expenditures, and vote for incumbents who provide them. Opportunistic incumbents will therefore use expansionary fiscal policy before elections to increase the probability of re-election.Hence, the alternative view is that voters (especially in developed countries) are 'fiscal conservatives' who punish rather than reward fiscal manipulation. Evidence, discussed in greater detaisl below, suggests that this is the case in developed countries with established democracies. A second argument is that if voters respond to good economic conditions by being more likely to vote for the incumbent, he will use expansionary fiscal policy to try to manipulate macroeconomic outcomes and provide higher growth. Hence, expansionary fiscal policy will help on incumbent's reelection prospects. A more sophisticated argument on why rational voters may respond to pre-electoral fiscal expansions is that they have imperfect information about candidates' abilities or about the environment, and that fiscal expansion signals of incumbent's ability or some other characteristics which voters value, so that it is effective in gaining votes. This was first formalized in the work of Rogoff (1990). The government could increase its spending before elections, by incurring debt, and after being reelected (or elected), it would contract the economy in order to repay its debt. This idea is based on the paper from Shi and Svensson (2006) and attempts to implement a similar analysis in the case of Albania. Thus, the question that this paper answers is whether there have been political budget cycles in Albanian government's revenue in the past decade.

LITERATURE REVIEW

Political elections are considered as the backbone of democracy. Many authors have analyzed elections in democratic countries, mainly as a disciplinary instrument (Barro 1973; Ferejohn, 1986). There is a very extensive literature that sees the elections as a cause of business cycles in the economy (Nordhaus, 1975; Hibbs, 1977 and Alesina, 1987). Another approach to political business cycles has Rogoff (1990), which explains that even if voters do not wake up in the short-term economic reality, since they have no information on the ability of policy makers would consider political business cycles as a show of government competence. Following this logic, but this time studying political cycles of business in developing countries and those in transition, Brender and Drazen (2005) and Shi and Svensson (2006), argue that in the new democracies voters are more likely to political business cycles, due to the lack of experience that voters have about the existence of political budget cycles.In their study these authors in addition to lack of information, noticed the lack of transparency in terms of the transition countries.The reliance of this result on voters' lack of information is consistent with Brender and Drazen's (2005a) empirical finding of no statistically significant aggregate deficit or expenditure cycle in established democracies, where voters may be well-informed about fiscal outcomes. Gonzalez (2002) and Shi and Svensson (2002) extend the Rogoff model to study the effect of transparency on the magnitude of fiscal cycles. The basic result is that the higher the degree of transparency, the lower is the amount of distortion away from the first best in the political budget cycle. Shi and Svensson include a similar measure of transparency. Shi and Svensson further argue that, while the proportion of uninformed voters – who may be influenced by fiscal manipulation – is initially large, it is likely to decrease over time, thus decreasing the magnitude of budget cycles. They create a measure of the availability of information and show that as voters become more informed the magnitude of the cycle decreases. A key innovation of Shi and Svensson (2002) is that the policymaker chooses fiscal policy before he knows his competence level, so that all 'types' choose the same level of expansion. This model focuses on moral hazard rather than signalling, as the other models do. An implication is a cycle in the aggregate deficit.In support of the same line is the approach of Alt and Lassen (2006).More recently, a number of papers have argued that, while these cycles are stronger in developing countries, they characterize democracies at all levels of economic development, and even non-democracies. Shi and Svensson (2002) find that, in a large panel of both democracies and non-democracies over the period 1975–95, the government deficit rises significantly in an election year in both developing and developed countries.Persson and Tabellini (2003) restrict their sample to a group of 60 democracies from 1960 to 1998. They find a political revenue cycle (government revenues as a percentage of GDP decrease before elections), but no political cycle in expenditures, transfers, or the overall budget balance across countries or political systems. They argue that the electoral system (proportional versus majoritarian) and the governmental system (presidential versus parliamentary) is a key determinant of the nature of the cycle across countries. Doležalová (2011) and Klomp and Haan (2012) applied the model proposed by Brender and Drazen (2005) with some modifications, and they found that in most of the examined countries fiscal policy is hardly affected by elections.The topic of Political Cycles in Albania has attracted immense attention in the recent years as the public becomes more aware of the government's behavior, especially before and after elections. Scientific research on this topic is still in its early stages due to the lack of data (Imami & Lami, 2006; Kächelein, Imami, & Lami, 2008; Kächelein, Imami, & Lami, 2009; Kächelein, Lami, & Imami, 2010; Imami, Lami, & Kächelein, 2011). Kächelein et al. (2009) and Imami and Lami (2006) draw the same conclusions: There is a statistically significant increase of public expenditures before elections aiming at reducing unemployment and increasing output, in order to please the voters. Regarding the macroeconomic outputs, we have found, evidence of political business cycle in GDP and unemployment but not in inflation. (Imami & Lami, 2006, p. 1). All of these studies conclude that the political cycles are present in Albania. These studies provide a clearer picture of the problem under analysis. They have a similar focus as the one of this paper.

METHODOLOGY

This study uses data from the Bank of Albania. The time span includes the elections that have taken place between 2000 and 2015. The data included in the analysis are from the first quarter of 2000 to the fourth quarter of 2015. As such there are 60 periods included. The methodology followed to achieve the target relied on theoretical proposals formulated by Brender and Drazen (2005) and by Shi and Svensson (2006). Time series regression was used to check the hypotheses raised. The data include the revenues by the government in each period of the time span,the export to import ratio and gdp to population ratio. Finally, a set of dummy variables are built in order to account for the months prior and after the elections. The main models that this paper uses control for the change in the revenue due to the general economic performance of the economy and for the influence of the election timing. The first specification is as follows:

$$Revenue_t = \beta_0 + \beta_1 AR(4) + \beta_2 Ex\,\mathrm{Im}_t + \beta_3 PREEL_t + \beta_4 POSTEL_t + \varepsilon_t \qquad (1)$$

In this specification,*βi*are the corresponding parameter; *Revenue*$_t$ refers to the government revenue; *ExIm*$_t$is the quarterly ratio of export to imports; *t* indicates time; and ε_t represents the error term of the stochastic process. *AR*(4) refers to a forth- order autoregressive *(AR)* process, and its specific calculation is $u_t = \rho_1 u_{t-1} + \varepsilon_t$. *PREEL* is a binary variable that accounts for the three quarters before elections (including the quarter of elections) in the year that they have taken place. As such, this variable is 1 when it is three quarters before elections (including the quarter of elections) and 0 otherwise. Finally, *POSTEL* is a binary variable that accounts for three quarters after elections (including the quarter of elections) in the year that they have taken place. This variable is 1 when it is three quarters after elections and 0 otherwise. If the analysis shows that β_3 *and* β_4 arestatistically significant, then the political budget cycles exist in Albania.In this dissertation is intended to be traced political budget cycles. If revenues to the state budget perform a certain behavior whenever elections have taken place, then this means that the revenues in the state budget appear political budget cycles. To check this an econometric model is estimated below:

$$Revenue_t = \alpha_0 + \sum_{\substack{i=1 \\ j=1}}^{2} \alpha_{i,t}\, Revenue_{i,t-j} + \delta \begin{cases} PREEL_t \\ EL_t \\ POSTEL_t \end{cases} + \underbrace{\sum_{i=1}^{p} \chi_i X_{i,t}}_{control} + AR(4) + \varepsilon_t \qquad (2)$$

This regression is estimated three times: for the variable *PREEL* which refers to the fact thatthis variable takes the value 1for three quarters before the elections (including elections quarter), for the variable EL, which is used only when we want to catch the effects for the quarter of elections and for the variable POSTEL which takes the value 1 for three quarters after elections (including elections quarter).

ANALYSIS AND FINDINGS

This section of the paper summarizes the findings of the main econometric analysis conducted on the political cycles in Albania. The econometric models explained in the previous section offer the possibility to test the main hypothesis of the study. Detailed results for each regression are given in Table 1. which reviews the results of three variations of specification (1) for *Total revenue*. The first model (Model 1) provides information about the case when in the regression we set only the variable *PREEL*, which means that three quarters before the elections, (including elections quarter), are marked with 1, while all others are marked with 0. The coefficient next to *PREEL* variable has a negative sign(-0.0100), which means that total revenue decreases in the period before elections. Near this coefficient has a *, which means that the variable PREEL is statistically significant with a statistical confidence level of 90%. This proves the presence of political budget cycles in total revenues of the state budget. So, elections exert negative pressure in the collection of revenues of the state budget. The total income of the previous period are statistically significant with a statistical confidence level of 99%, while the income of the previous two quarters are statistically insignificant. Regarding macroeconomic variables, one has a positive sign and is also statistically significant, while the other is negative and insignificant. Thus, GDP variable is related to the income of the state budget (0.5369), as expected, it is even statistically significant with a statistical confidence level of 99%. In contrast, the ratio of exports to imports has negative sign (-0.0600) and is statistically insignificant. The last two coefficients are included in the regression analysis just because the component AR (4) is included. Both coefficients have positive result and statistically significant with a statistical confidence level of 99%.

Table 1.The effect of elections on Total Revenues

	Model 1		Model 2		Model 3	
C	-0.9220		-1.0645		-0.9975	
PREEL	-0.0100	*				
EL			-0.0220	**		
POSTEL					-0.0037	
log(revenue (-1))	0.5398	***	0.4907	***	0.5415	***
log(revenue (-2))	-0.0239		-0.0262		-0.0724	
log(gdp_n)	0.5369	***	0.5983	***	0.5877	***
eks_imp	-0.0600		-0.1015		-0.0844	
AR(4)	0.9990	***	0.9990	***	0.9989	***
SIGMASQ	0.0009	***	0.0008	***	0.0009	***
R-squared	0.9979		0.9980		0.9977	
F-statistic	3601.0		3767.4		3376.1	
Prob(F-statistic)	0.0000		0.0000		0.0000	
Durbin-Watson stat	2.1613		2.0995		2.0938	
Inverted AR Roots	1		1		1	
	-.00+1.00i		-.00+1.00i		-.00+1.00i	
	-.00-1.00i		-.00-1.00i		-.00-1.00i	
	-1		-1		-1	

Dependent Variable: log(ardh_tot)

Method: ARMA Maximum Likelihood (OPG - BHHH)

Sample: 2000Q3 2015Q4,

Included observations: 62

Coefficient covariance computed using outer product of gradients

* level of confidence 90%, ** level of confidence 95%, *** level of confidence 99%.

The second model (*Model 2*) provides information about the case when in the regression we set only the variable *EL*, which means that in the quarter of elections the coefficientnext to *EL*variable has a negative sign (-0.0220), which means that total revenue decreases during the election period. This proves the presence of political budget cycles in total revenues of the state budget. Near this coefficient has a **, which means that the variable *EL* is statistically significant with a statistical confidence level of 95%. This proves the presence of political budget cycles in total revenues of the state budget. So, elections exert negative pressure in the collection of revenues of the state budget. The total income of the previous period are statistically significant with a statistical confidence level of 99%, while the income of the previous two quarters are statistically insignificant. Regarding macroeconomic variables, one has a positive sign and is also statistically significant, while the other is negative and insignificant. But what happens after the elections? The third model provides information about the case when in the regression we set only the variable *POSTEL*, which means that three quarters after the elections, (including elections quarter), are marked with 1, while all others are marked with 0. The coefficient next to *POSTEL* variable has a negative sign (-0.0037), which means that total revenue decreases in the period after elections. Near this coefficient we don't have any *, which means that the variable *POSTEL* is statistically insignificant. This proves the non-existence of political budget cycles in total revenues of the state budget, in the period after the elections. The other coefficients of model 3 are almost the same as model 1 and 2. The last part of the table provides additional statistical information, such as the R-squared, the Durbin-Watson statistic, the F-statistics test, and the inverted AR roots for the AR(p) component that is used in the regressions. In addition, the inverted AR roots do not exceed unity; thus, *AR*(4) is stationary. Based on the Durbin-Watson statistic, one can say that forth order autocorrelation is not present in any of these models.

CONCLUSIONS

Referring to the case of budget revenue, empirical analysis shows that Albania is on political budget cycle before and during election periods. Moreover, noted that budget revenues decreases before and during the elections. Negative sign between periods of elections and revenues found in the case of post-election periods, but this connection was not statistically significant. This means that in the Albanian economic reality budget revenue decreases before and during election periods, but we can't say the same for the postelection period. Other variables included in the analysis reflect the same relationship and importance in each regression.These results are primarily important for the Albanian public. This public has become more informed in the last decades. This study adds to this informing process and provides insights for the voters. Furthermore, the results of the study are relevant for the international observers as well. They monitor the behavior of the Albanian government and decide on the membership of Albania into major agreements and unions. As such, this paper helps them understand the level of maturity of the Albanian democracy. Finally, this paper adds to the growing literature on the political budget cycles in developing countries.Limitations of this research are mainly related to the size of the database. Albania is a country with no more than 25 years of opened market economy system. Except number of years, there is a further limitation associated with the availability of data needed to investigate political economic cycles. Despite the number of years is 25, it is still difficult to find data in the years prior to the opening of the economy.

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