Political Budget Cycles. Evidence from Romania

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Abstract

Political budget cycle (PBC) refers to the cyclical fluctuation of fiscal policies determined by political cycles, respectively by the time of elections.. More precisely, it consists in the opportunistic behavior of governments, of politicians, regardless of their ideology, who try to use fiscal-budgetary policies to increase their chances of re-election. Using the Generalized Model of Moments, this article analyzes the impact of the political cycle on the budgetary and fiscal policy in Romania in the period 2006-2022. The results of the empirical model show a positive link between the political cycle and expenditures, which means that politicians use an opportunistically expansionist spending policy in election years to gain advantages for themselves and/or the parties they belong to. Also, the constructed model shows a negative connection between the political cycle and the national budget revenues.

Key words: political cycles, political budget cycles, budget policy, fiscal policy, Generalized Model of Moments (GMM)
J.E.L. classification: C68, C33, D72, E62, H61

1. Introduction

All aspects of economic life and more are influenced by government policies, which are, in fact, materialized in public policy decisions. Although the normative aspects of public investment criteria have been extensively studied, there are few theories that predict government investment behavior when governments are constrained by political realities. It was the basis of the reasoning of the political budget cycle research.

The political budget cycle (PBC) is used to describe a cyclical movement of fiscal policies driven by the election cycle (Efthyvoulou, 2012). Most of the time, this political budget cycle means increasing government spending or deficits, but it can also refer to decreasing taxes collected in an election year, actions determined by the incumbent's desire to be re-elected him or his party.

The direct cause of PBC lies in the opportunistic behavior of governments: incumbent politicians, regardless of ideology, use expansionary fiscal policies before elections to please voters, to increase their popularity and thus their chances of being re-elected.

The existence of the electorally motivated spending policy is still discussed and investigated in the specialized literature.

Downs (1957) first described the reciprocal relationship between economic strategies and political choices.

Nordhaus (1975) introduces the term *political business cycle*, investigating the behavior of political decision-makers during elections, in a simple model of intertemporal choice in which macroeconomic decisions are made in a political framework. In contrast to the political economic cycle literature – where formal models preceded empirical testing – regarding political budget cycles, much empirical research is based not on explicit models but on conceptual arguments. In this case, formal models were later developed to demonstrate the concordance between the existence of cycles and rational voters.

Two key issues are raised in the existing empirical studies. The first of them refers to the existence of political budget cycles in an enough country. Empirical studies show us that this is not reflected in the aggregate budget (national/general budget), except in the new democracies. The second problem, which is the basis of the first, is whether the manipulation of fiscal-budgetary policies is an effective tool in obtaining votes. Existing empirical studies do not support the idea that spending cuts in an election year bring more votes for the incumbent. This article studies the political budget cycle at the national level in our country, through an empirical analysis, looking for evidence, in the national budget. The article is structured in five parts. After the introduction, the review of specialized literature in the field is addressed. In the third part, the data and the method used in the empirical analysis are presented. The next section presents the results of the analysis, and the entire approach ends with the conclusions that are drawn.

2. Literature review

The issue of the impact of the political budget cycle on various budgetary (or fiscal) indicators is discussed more at the national level. This impact refers to the possibility of manipulation of budgetary (or fiscal) policy by political incumbents, during elections, to increase their own chances of being re-elected. This manipulation can be done, for example, by allocations in the field of expenditure categories.

The political business cycle is usually perceived as a relationship between the regular use of fiscal instruments for re-election purposes by political incumbents (Bojar, 2017).

In literature, we find the following approaches related to the problem of the political budget cycle. First, it is about the opportunistic approach, formulated by Nordhaus (1975) who introduced the term political economic cycle. In their research, Castro and Martins (2015), specify, regarding this, that politicians do not have policy preferences, so they act "opportunistically" by selecting the policies that maximize their electoral support (p.3).

Another important approach concerns the ideological orientation of the government. Hibbs (1977) thus introduces the partisan theory, which depends on the ideological orientation of the government. According to Bove et al. (2017), left governments, during their tenure, will engage more in income redistribution and more expansionary policies than right governments.

According to the same study published by Castro and Martins (2015, p. 3), previously cited, the difference between the two theories lies in the moment of generating the effect. There is partisan model that generates policy effects after the elections, and the opportunistic model that generates policy effects before elections.

Versions of these theories emerged in the 1980s and 1990s, and analyzed the hypothesis that voters form their expectations rationally. In a research framework that considers competence and asymmetric information as key elements, both partisan rational models (Alesina, 1987; Alesina and Sachs, 1988) and opportunistic rational models (Rogoff and Sibert, 1988; Rogoff, 1990) have as a result reducing the ability of politicians to induce political cycles.

Research has shown that in developed countries partisan behavior is more frequent (Alesina et al., 1997), while in developing countries opportunistic behavior occurs much more often (Brender and Drazen, 2009 and Shi and Svensson, 2006).

In terms of the level at which research focused on political budget cycles has been conducted and the results obtained, the main scope of the research mirrors its existence at the level of national government, e.g. Efthyvoulou (2012), Enkelman and Leibrecht (2013), Bojar (2015), Klein and Sakurai (2015), Castro and Martins (2015), etc. At the level of local public administration, the political budget cycle is investigated in several countries, e.g. an analysis is provided on a sample of municipalities in Colombia (Drazen and Eslava, 2010), Israel (Baskaran, 2015), Spain (Balaguer-Coll et al., 2015), Greece (Chortareas et al., 2016), Denmark (Aaskoven, 2017), districts in Indonesia (Sjahrir et al. 2013), cities in West Germany (Furdas et al., 2015), etc.

There are also several studies, both at the national and multinational level, that have demonstrated the existence of a relationship between elections and fiscal policy manipulations.

Regarding studies conducted at multinational level, such as those for EU member states, Andrikopoulos et al. (2004) did not find a direct relationship between the electoral cycle and fiscal manipulations, Mink and de Haan (2006) concluded that there is an increase in the budget deficit in election years and a significant effect on fiscal aggregates. Efthyvoulou (2012) concludes that EU governments tend to generate opportunities for political budget cycles and that these are much more significant in euro area countries.

Persson and Tabellini (2002) highlight in their research the institutional features, showing that the form of government (presidential or parliamentary) and electoral rules (proportional or majoritarian) affect the configuration of budget cycles.

3. Research methodology

3.1. Data

To analyze potential policy-driven changes in budget indicators, we used a series of annual data for seven budget indicators, as defined and found in Romania's state budget law, over the period 2006-2022. These seven indicators that must be taken into account to analyze the impact of policy cycles on budgetary (fiscal) policy are total public revenues, current public revenues, fiscal revenues, total public expenditures, current public expenditures, subsidies granted, but also insurance and protection expenditures social.

The resulting panel includes several economic, socio-economic and political variables. Government fiscal policy data and statistics on economic results are obtained from the consolidated general budgets published on the website of the Ministry of Finance, as well as from the database of the National Institute of Statistics of Romania available online.

The data on the demographic variables are extracted from the online version of the database of the National Institute of Statistics of Romania.

Since Romania is a semi-presidential country from the point of view of the form of government, the data of the presidential elections that took place during the analyzed period were considered. Information on election dates, form of government and government position on a left-right scale is taken from national electoral legislation, the online database of the Permanent Electoral Authority and supplemented, where necessary, by the author's personal research.

3.2. Empirical Model Specification

To estimate the relationship between elections and the fiscal behavior of incumbent politicians, we used an adapted empirical model based on the models found in the research of Shi & Svensson (2002, 2006), Persson & Tabellini (2002) and Efthyvoulou (2012). The dynamic panel data model is estimated using the Generalized Method of Moments (GMM) framework and takes the following form:

$$Y_t = \sum_{j=1}^{p} \alpha_p Y_{t-1} + \beta * X_k + \gamma * GROWTH + \delta * ELECTION + \mu_t + \varepsilon_t \qquad (1)$$

where

Y_t - is a dependent variable of the unit cross section at time t,

Y_{t-1} - is a lagged dependent variable,

X_k - is a vector of control variables,

GROWTH - is the GDP growth rate

ELECTION - is an independent explanatory variable that captures the choice effect,

μ_t - variable capturing specific unobserved effects

ε_t - is an error term.

To capture the persistence of fiscal variables, the dynamic model is used (Chortareas et al., 2016). The Generalized Method of Moments is preferable to be used for small or medium time series to avoid the problems of unobserved region-specific country effects and bias caused by the lagged dependent variable (Shi and Svensson, 2006).

As dependent variables, we use seven fiscal policy instruments, all calculated as a share of GDP and expressed as percentages, namely: total public revenues (TREV), current public revenues (CrREV), tax revenues (TTAX), total public expenditures (TEXP), current public expenses (CrEXP), grants granted (GRANTS), but also insurance and social protection expenses (SAEXP).

Our control variables include the level of development (LnGDPt), as measured by the logarithm of real GDP, two demographic variables representing the percentage of the population aged 15-64 and 65+ (PROP1564t and PROP65t), and finally the government's position on a left-right scale

(EXECRLCt), measured by a dummy variable that equals -1 for left-wing governments, 0 for center-right governments, and +1 for right-wing governments. The situation in Romania regarding the positioning of the government and the years of the presidential elections is presented in Table no. 1. We note that the situation is particular because there were years when the government was led by the coalition formed by both the center-right and the center-left parties. For the periods when the government was led by this political quality, the dummy variable was considered to be equal to 0 (see Table no. 1).

Table no. 1. Dummy variable to control the positioning of the government (EXECRLC) and the electoral variable (ELECTION) in Romania during the period 2006-2022

YEAR	EXECRLC	ELECTION
2006	1	0
2007	1	0
2008	1	0
2009	0	1
2010	0	0
2011	0	0
2012	0	0
2013	0	0
2014	-1	1
2015	-1	0
2016	-1	0
2017	-1	0
2018	-1	0
2019	-1	1
2020	1	0
2021	1	0
2022	0	0

Source: author's personal research

These aforementioned control variables were used in studies such as Cameron (1978), Rodrick (1998), Persson and Tabellini (1999), Perotti and Kontopoulos (2002), Hibbs (1977) and Alesina (1987) and were found to be correlated with the results of fiscal policy. Furthermore, the GDP growth rate (GROWTH) is also used to capture fluctuations in fiscal policy induced by the domestic business cycle.

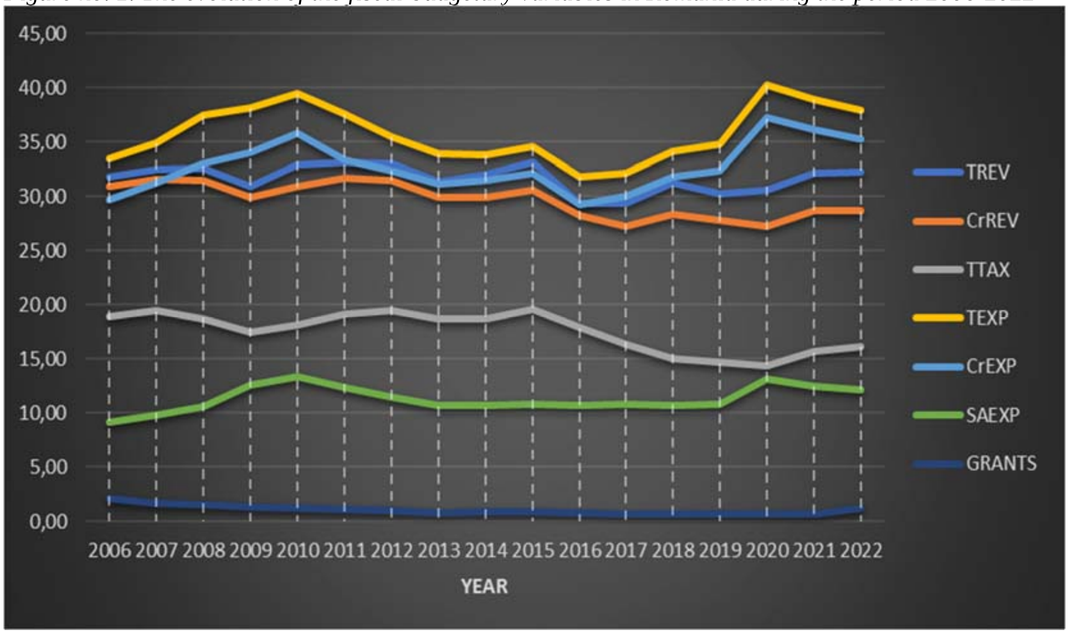
The electoral variable (ELECTIONt) encodes the year in which the executive is elected. In other words, it is equal to 1 in years of legislative elections in parliamentary countries and in years of presidential elections in presidential countries, and 0 in all other years.

This article does not consider the scenario where the effects of fiscal policy cycles are found in pre-election years. For this, another model built for the years before the presidential elections in Romania would have been needed.

4. Findings and Discussions

Figure 1 shows the evolution of the 7 dependent variables taken into account in the empirical model throughout the analyzed period (2006-2022) in order to capture their evolution in the electoral years, but also in the pre-electoral ones, as well as their evolution in depending on the positioning of the government (left-right).

Figure no. 1. The evolution of the fiscal-budgetary variables in Romania during the period 2006-2022



Source: author's own processing data from budget execution available online on: https://mfinante.gov.ro/domenii/bugetul-de-stat/informatii-executie-bugetara

As can be seen from figure no. 1, the variables that could be influenced by the political decision-makers in office to obtain competitive advantages in the elections, have, with some exceptions, the same trend in the analyzed period.

Presidential elections in Romania, during this period, took place in 2009, 2014 and 2019. Regarding the evolution of incomes, they recorded higher values in the years immediately following the elections, and this cannot be correlated with the government's positioning at that time (center-right, coalition or Centre-left). An exception to this trend is recorded by current and fiscal revenues in 2020, but this evolution can be attributed to the lockdown caused by the Covid-19 pandemic, when, in addition to the suspension of many economic activities, a series of measures to protect the private economic environment. Expenditure elements recorded smaller or larger increases in election years (from 0.10% of GDP, up to almost 2% of GDP social insurance) compared to previous years, but, as in the case of revenues, they have recorded higher increases in the post-election years, and these too cannot be correlated with the government's positioning. The biggest increases were recorded in 2020 (3% increase in social insurance spending as a share of GDP), but it cannot necessarily be correlated with the post-election year, but rather with the situation created by the measures taken in the context of the pandemic of Covid-19.

Table no. 2. The results of the dynamic panel data estimations by GMM for the dependent variables, the explanatory variable political cycle is expressed as an election year

	TREV	CrREV	TTAX	TEXP	CrEXP	SAEXP	GRANTS
GROWTH	-2,8730	-1,0899	-0,3815	-16,7946	-16,2803	-12,1156	0,1050
LNGDP	4,5679	3,8022	1,9202	7,4963	7,1495	3,4219	0,0220
PROP1564	0,0013	0,0006	0,0015	0,0031	0,0027	0,0020	0,0012
PROP65	0,5276	0,6414	0,5439	0,5706	0,4206	0,2463	0,0772
EXECRLC	0,1053	-0,1602	-0,3646	2,1060	1,8228	0,4072	0,0926
ELECTION	-1,1272	-0,8402	-1,6055	0,5000	0,2897	-0,2036	0,0280
Adjusted R-squared	0,685502	0,0712	0,3289	0,6083	0,6341	0,5807	0,7128

Source: author's computation

The expectation of a positive and significant relationship between GDP and total and current expenditures is supported by the results obtained. GDP growth creates additional financial resources, and authorities are free to use them for their own purposes, unlike allocated grants, although subsidies also increase revenue.

Except social security spending, empirical research shows us a positive relationship between the political cycle, expressed, in this case, as the election year, and spending, and a negative relationship between income and the political cycle.

In other words, in Romania, during the analyzed period, political decision-makers use the opportunistic deviation during the electoral period by increasing total expenses, current expenses and subsidies.

Table no. 3. Matrix of correlations between the political cycle and the dependent variables

	ELECTION	**TREV**	**CRREV**	**TTAX**	**TEXP**	**CREXP**	**SAEXP**	**GRANTS**
ELECTION	1.000000	-0.222814	-0.145578	-0.155750	**0.035212**	**0.016864**	- 0.021761	**0.114873**
TREV		1.000000	0.820057	0.582395	0.409257	0.304315	0.118880	0.398727
CRREV			1.000000	0.868942	0.119791	-0.098879	-0.160734	0.659074
TTAX				1.000000	-0.251676	-0.421643	-0.355848	0.527208
TEXP					1.000000	0.957422	0.817941	0.094597
CREXP						1.000000	0.862582	-0.139699
SAEXP							1.000000	-0.292925
GRANTS								1.000000

Source: author's computation

In table no. 3, the areas highlighted in bold, show a positive correlation between the national political cycle variable and the dependent variables of the econometric model. The area highlighted in blue shows the highest value of positive correlation coefficients.

The correlation matrix shows us a positive link between the political cycle and the budgetary elements of expenses except for social insurance, which are not influenced by the opportunistic choices during the electoral period of the political decision-makers in office. This category of expenses is not used as an element of manipulation by politicians to obtain competitive advantages in elections.

5. Conclusions

The present article addresses the issue of political budget cycles in Romania, using annual statistical data for a period of 17 years (2006-2022) in which 3 rounds of presidential elections took place.

The article aims to analyze, using the Generalized Method of Moments, the influence of political decision-makers' manipulations on budgetary (or fiscal) variables to obtain competitive advantages for them or the parties they belong to, in the election process.

The evolution of the 7 dependent variables used in the model (TREV, CrREV, TTAX, TEXP, CrEXP, SAEXP and GRNATS) all reported as a share in GDP, shows us a more pronounced increase in them in the post-electoral years, rather than in the electoral ones , with the exception of 2020, which coincides with the outbreak of the Covid-19 epidemic. There is no correlation between the evolution of these indicators and the positioning of the Romanian government (left, right or center), captured in the model by the EXECRLC dummy variable, which was assigned values of -1 for center-left governments, 0 for coalitions of government and +1 for center-right governments, related to the situation in our country.

The results show us a negative relationship between the political cycle, captured in the previously presented model, by the ELECTION variable and the revenues recorded in the budget execution of each of the 17 years analyzed. Also, using GMM, the model returns positive results between the political cycle and budget expenditures (TEXP, CrEXP and GRANTS), except for social security expenditures. In other words, incumbent political decision-makers opportunistically use various elements of spending in election years to obtain electoral advantages for themselves and the parties they belong to, regardless of their position (left or right).

A possible econometric problem that arises here is that treating all executive elections as predetermined may bias our estimates of election cycles. Also, for more conclusive results, the time horizon should be extended, or other budget variables dependent on the political cycle could be used in the empirical model, such as the expenditure elements found in their functional structure, but also the deficit or the net loans.

6. References

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