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DIN TÂRGU JIU

"CONSTANTIN BRÂNCUȘI" UNIVERSITY
OF TÂRGU JIU

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POLITICAL BUDGET CYCLES: EVIDENCE FROM TURKEY

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Abstract

The theorical literature on "Political Business Cycles" presents important insights on the extent to which politicians attempt to manipulate government monetary and fiscal policies to influence electoral outcomes, in particular, with the aim of re-election. In recent years "Political Budget Cycles" is the one of the most important topics in Political Business Cycles literature. According to Political Budget Cycles Theory, some components of the government budget are influenced by the electoral cycle and consequently an increase in government spending or decrease in taxes in an election year, leading to larger fiscal deficit. This incumbent's fiscal manipulation is a tool that governments possess to increase their changes for re-election. In this paper we investigate the presence of Political Budget Cycles using a data set of budget balance, total expenditure and total revenue over the period 1994–2012. Our findings suggest that incumbents in Turkey use fiscal policy to increase their popularity and win elections, therefore fiscal manipulation was rewarded rather than punished by Turkish voters. The meaning of this result is that Political Budget Cycles Theory is valid for Turkey between 1994 and 2012.

Keywords: *Political bussiness cycles, political budget cycles, johansen cointegration method, Turkey.*

Clasificare JEL: D72, E62, H62

1. Introduction

The possibility that politics could affect economy had been ignored before 1960s. After classic economists, this issue has been searching for the interaction between politics and macroeconomics. By this way, the truth that a government policy is one of the most important factors affecting economy was comprehended. One of the reasons for this truth is that distribution which is between present and future welfare is usually based on government decisions. If this issue is checked for the other important reason, governments' role is very important on elections and so on voter's decision. To do this, incumbents use economical instruments like monetary and fiscal policies to increase their chances for the election (Snowdon & Vane, 2005). The phenomenon of manipulation of the economy by incumbent for electoral purpose is called as Political Business Cycles (PBC) (Kächelein *et. al*, 2008). Therefore PBC is the economy's fluctuation around its long run way that is generated by political system. PBC's workspace can be described like that how interest groups and political pressures within a country influence its macroeconomic performance (Gautier, 2003). In the general sense, PBC suggests that incumbent governments manipulate the economy for political reasons, in particular for winning elections. In PBC literature, it is argued that incumbent governments manipulate the economy to build up better economic conditions in the pre-election period with declining unemployment and increasing growth rates of the economy and inflation to enhance the likelihood of re-election. According to the PBC theory, post-election periods experience contraction in the economy to offset the adverse impact of expansionary policy in the pre-election period (Asutay, 2004).

The PBC literature has been developed since mid-seventies (Snowdon & Vane, 2005) and it hosts the relationship between politics and economics as a lower branch of the public choice (Sezgin, 2010). The emergence and development process of political business cycles theories could be divided into 3 main periods; pre-1950, 1950-1980,

and post-1980. In the first period covering the years before 1950, the studies by *Kalecki (1943), Akerman (1946, 1947), Ben-Porath (1975), Hubka and Obermann (1977), MacCracken (1977) and Tufte (1978)* pioneered the emergence of political business cycle theories (Paldam, 1997: 342). Post-1950 literature developed in two stages. The first one is *Traditional Political Business Cycles Models*, which commenced to blossom in mid-seventies. Main argument of these models is that incumbent parties attempt to manipulate the economy systematically using the exploitable Philips curve. The first part of traditional models is made up of Traditional Opportunistic Political Business Cycles Theory emphasizing the "*opportunistic*" behavior of policy makers (Nordhaus, 1975, Lindbeck, 1976). According to these models politicians do not have own political choices, but prefer policies that would result in their election (or reelection) when making political decisions. Nordhaus' (1975) traditional political business cycle model predicts a rapid growth and low unemployment in pre-election periods and an increase in inflation and economic stagnation in the post-election periods independent of governments' political orientations (Nordhaus, 1975; Nordhaus, 1989). Literature forming the second part of the traditional models that is Traditional Partisan Political Business Cycles Theory focuses on the "partisan" purposes of policy makers. The literature premeditates that left-wing parties tackle unemployment instead of inflation, while the right-wing parties concentrate on inflation more. Hibbs' (1977) this partisan model focuses on systematical and continuous fluctuations in inflation/unemployment combination caused by the political parties of different ideologies (Hibbs, 1977).

The second development stage for political business cycle theories in mid-1980's was a *game-theory approach* to the positive theory of politics. During this period *Cukierman and Meltzer (1986), Rogoff and Sibert (1988), Rogoff (1990) and Persson and Tabellini (1990)* presented Rational Opportunistic Political Business Cycles Theory, while *Alesina (1987)* developed Rational Partisan Political Business Cycles Theory. *In both rational models, differing from the pre-1980 traditional models, it has been assumed that the constituency was rational*. In this respect, this second-generation of political business cycle models differs from the pre-1980 literature. Primarily, the assumption of rationality, even though it could not completely resolve the regular political business cycle fluctuations, could minimize the strength and determination of the fluctuations. Thus, the *real financial activity* becomes less sensitive to *financial (monetary) politics* and it prevents the constituency to be *continuously and systematically deceived* by the government parties before every election (Alesina & Roubini, 1990). In Rational Opportunistic Political Business Cycles Theory that stresses the limited validity of the Phillips curve relation, the constituency attempts to maximize their benefits using the knowledge they possess (Alesina *et al.*, 1997). According to the rational model, as long as they understand the intentions of the government, none of the financial agents would encounter a systematical manipulation of the economy before the elections as proposed by the traditional model as well (Rogoff & Sibert, 1988).

Alesina (1987) and Alesina and Sachs (1988) moved towards the partisan theory of the political business cycle theories and concentrated on the effects of unexpected politics (Alesina *et al.* , 1993). Thus, in their study based on Hibbs' (1987) model that states *parties prefer different policies since they exhibit different formations*, Alesina (1987) and Alesina and Sachs (1988) proposed the Rational Partisan Political Business Cycles Theory, which entails the rational expectations of macroeconomic policies using the data for the USA during the Second World War (Alesina *et al.* , 1997; Alesina & Sachs, 1988). Rational Partisan Political Business Cycles Theory states that the rational and intelligent constituency perceives the differences between the parties correctly and vote accordingly. Thus, it implies that initially the possibility of a direct and predictable influence of fiscal policies (monetary policies) on financial activity decreases and the rational constituency could not be systematically deceived (Alesina & Roubini, 1990).

In recent years "*Political Budget Cycles Theory"* is the one of the most important topics in PBC literature. Because of the importance of this, we test "Political Budget Cycles Theory" for the case of Turkey using a data set of budget balance, total expenditure and total revenue over the period 1994–2012. The rest of the paper is structured as following. Section 2 Political Budget Cycles Theory, Section 3 Turkey's Fiscal Policy Background. Afterwards Section 4 discusses data and research methodology and summary of our findings and finally Section 5 presents a conclusion.

2. Political Budget Cycles Theory

The claim that some components of the government budget are influenced by the electoral cycle and consequently an increase in government spending or decrease in taxes in an election year, leading to larger fiscal deficit is called Political Budget Cycles Theory. This incumbent's fiscal manipulation is a tool that governments possess to increase their changes for re-election (Youssef, 2012). In a nutshell, Political Budget Cycle Theory is used to describe a cyclical fluctuation in fiscal policies induced by the timing of elections. Government's opportunistic behaviour like incumbent politicians, regardless of their ideology, try to use expansionary fiscal policies before elections to please the voters, maximize their popularity and increase their re-election chances can be seen among the direct cause of political budget cycles (Efthyvoulou, 2010). The signaling model that political budget cycle arises due to information asymmetries about the incumbent's competence in administering the production of public goods is submitted by Rogoff (1990).

According to this model observed pre-election expenditures may serve as signal of the incumbent's competence. Voters are initially uninformed about the type of incumbent, whereas the incumbent knows his own type. This means that the incumbent has a temporary information advantage over voters, in this sense that he sees his competence shock contemporaneously (Rogoff, 1990).

According to another political budget cycles model that is Shi and Svensson's (2006) moral hazard model, voters are rational and understand the incumbent's incentive to increase the deficit before an election. Also governments are more rational actors than voters, they will comply with the voters' expectations and indeed increase the deficit. The main idea in this model is that voters expect increases in deficit before the election. In this circumstance, the questions that whether incumbent will increase the deficit or not, and what it will spend the borrowed funds on, become very important. If voters do not observe an increase in government expenditures, they will assume that the resources were spent inefficiently (Shi & Svensson, 2006; Hanush, 2010).

In recent years, political budget cycles are in different political and institutional contexts have been explored that are conducive to pre-electoral deficits. Among these Brender and Drazen's (2005) work that concentrated on the level of democracy of countries, has made a very important place in the Political Budget Cycles Literature. They found evidence supporting political budget cycles, and underlined that these results are largely driven by "new democracies". Fiscal manipulation may work in "newer democracies", because the polity is inexperienced with electoral politics and may lack the necessary information to properly assess and evaluate fiscal manipulation (Brender & Drazen, 2005). In other words democratic political institutions would provide political incentive structures able to induce better policy choices. Elections prompt accountability in two ways. Firstly, elections provide political competition and help governance to be more efficient by alleviating the moral hazard issue and they mitigate the adverse selection phenomenon (Vergne, 2009). According to Brender and Drazen (2005), when newer democracies are removed from their sample, fiscal cycle disappears, as a result fiscal manipulation is not statistically significant for established democracies. They argue that in order to maintain popular support for democracy, it is critical for governments operating in new, fragile and unconsolidated democracies to deliver good economic results or at the very least have the appearance of so doing. Thus political budget cycles are vital to the survival of democracy and the consequently characteristic of democratically fragile countries (Peters, 2010). Like Brender and Drazen (2005), Gonzalez (2002) also asked that whether a country's time-varying degree of democracy affect the way in which economy policy is conducted prior the elections. To answer this question, Gonzalez (2000) used Mexico's fiscal policy between 1957- 1997. Her econometric model's estimation reveals that government strongly and systematically used public spending in infrastructure and current transfers. In addition, the other one of the most important findings of her work is that there is a link between the degree of democracy and the magnitude of election cycle. Moreover, her theoretical framework suggests that an increasing level of democracy is likely to increase the country's level of transparency. This is in turn may reduce the incumbent's incentive to produce pre-election cycles (Gonzalez, 2002). Likewise Akhmedov *et al.* (2002) who have used comprehensive list of Russia's regional monthly panel data between 1996 and 2001, found that the magnitude of the cycles decreases with education, urbanization, computerization and the freedom of media as well as with time. This informational symmetry, rationality and maturity of democracy are very important factors influencing electoral cycles (Akhmedov *et al*., 2002). In a nutshell, according to the Persson and Tabellini (2002) and Brender and Drazen (2005)'s perspectives, existence of political budget cycles are more likely in "young" or "new" democracies compared to the "established" democracies (Klompt & Haan, 2012).

The literature on political budget cycles is vast. For example; Alt and Lassen (2006) use a sample of 19 OECD countries in 1990s, they identify persistent pattern of electoral cycles in lower transparency countries while no such cycles can be observed in higher transparency countries. Furthermore they find political budget cycles are larger in politically more polarized countries (Alt & Lassen, 2006). Mink and Haan (2006) use a multivariate model for 1999–2004 and various election indicators and they find strong evidence that, since the start of the Stability and Growth Pact, fiscal policy-makers in the euro area have pursued expansionary policies before elections. In an election year the budget deficit increases (Mink & Haan, 2006). Faal (2007) test the political budget cycles in Papua New Guinea with quarterly time series data and he finds a clear pattern emerges of pre-election manipulations of fiscal policy by incumbent governments, mainly in the form of increased development spending and overall primary expenditure, followed in some cases by retrenchment in post-election periods (Faal, 2007). In another study Guo (2009) test the political budget cycles for Chinese counties from 1997 through 2002. His panel data analysis shows that growth in local government spending per capita is the fastest during a leader's third and fourth years in office in other words the political budget cycles is valid for Chinese countries (Guo, 2009). Efthyvoulou (2010) investigates the presence of political budget cycles in the European Union using a data set encompassing all 27 current member states over the period 1997-2008, and analyzes what may explain their variability across countries and over time. Conditioning on partisan considerations and several socio-economic variables he finds evidence in favor of a systematic electoral cycle in fiscal policy. Furthermore he finds that political budget cycles are much larger in the Eurozone countries than in the countries that have not yet adopted the euro (Efthyvoulou, 2010). Lami and Drani (2013) test the political fiscal cycles

for Hungary. In their study they find clear empirical evidence of fiscal expansion before elections and contractions after elections in Hungary. Because according to their findings incumbents in Hungary are engaged in opportunistic political fiscal cycles by embracing expansionary fiscal policy before parliamentary elections, and also their findings suggest that political fiscal cycles in Hungary may be an underlying factor contributing to the accumulation of public debt (Lami & Drani, 2013). Klompt and Haan (2013) use data for 65 democratic countries over 1975–2005 in a semi-pooled panel model and find that in most countries fiscal policy is hardly affected by elections (Klompt & Haan, 2013). Lastly Alesina and Paradisi (2014) present evidence of political budget cycles on Italian cities. They find that the evidence on cycles is especially strong in the South of Italy. This is consistent with models which suggest that lower levels of civicness are associated with less controls of politicians who can then engage in strategic manipulations of policies (Alesina & Paradisi, 2014).

3. Data and Empirical Analysis

In this study, we investigate the presence of Political Budget Cycles in Turkey. So three models were set up to test the effect of election periods on budget balance, budget revenues and budget expenditure. In the first model the relationship between election periods and budget balance, in the second model the relationship between election periods and budget expenditure, in the third model the relationship between election periods and budget revenue were analysed by using the data of 1994:Q1–2012:Q2 periods. From the variables, budget balance (*B*); budget expenditure (E); budget revenues (R) and trade openness variables (*O*) as explanatory variable in models were used by proportioning to Gross Domestic Product. The election dummy which was used in the study, includes five general elections held on the 24th December, 1995, the 18th April,1999, the 3rd November, 2002, 22nd July, 2007 and 12th June, 2011 in 1994:Q1–2012:Q2 periods of the study. B, E and R variables were obtained from Electronic Data Delivery System of Central Bank of Turkish Republic (http://evds.tcmb.gov.tr/), trade openness variable was obtained IMF data database IFS (International Financial Statistics).

3.1. Method

In order to analyse the effect of election periods on budget balance, budget revenues and budget expenditure in Turkey, VAR (vector autoregressive) based Johansen cointegration method was used. The reason for using this cointegration method is that it allows us to analyze the effect of elections on fiscal variables. In another words we analyze the incumbent's behaviour during elections about fiscal policy by this method.

Cointegration analyses firstly found by Engle and Granger (1987) were later improved by Johansen (1988) and Johansen and Juselius (1990). Johansen approach can be explained by handling the process of a *p.* degrees vector autoregressive:

$$y_t = A_1 y_{t-1} + ... + A_p y_{t-p} + Bx_t + \varepsilon_t \qquad (1)$$

Here y_t represents a *k* vector of *I(1)* variables which are nonstationary in level, x_t represents a *d* vector of deterministic variables and ε_t represents innovation vector. When the first difference of vector autoregressive process is taken in equation (1):

$$\Delta y_t = \pi y_{t-1} + \sum_{i=1}^{p-1} \tau_i \Delta y_{t-i} + Bx_t + \varepsilon_t \qquad (2)$$

$$\pi = \sum_{i=1}^{p} A_i - 1 \quad \text{ve} \quad \tau_i = -\sum_{j=i+1}^{p} A_j \qquad (3)$$

Cointegration hypothesis defined here as a reduced rank of π matrix is expressed as $\pi = \alpha\beta'$. α and β' represent (kxr) dimensioned and r ranked two matrices. *r* shows cointegration number (rank), β' shows cointegration vector indicating the long term effects in balance relationships of variables, α shows the adaptation speed in error correction

model. According to this, in Johansen method π matrix is estimated from an unrestricted VAR and the validity of the conditions indicated with the reduced rank of π is tested. The rank of π matrix is found with the help of trace statistics (λ_{trace}).

The advantage of Johansen cointegration method is the use of level values of series, thus the series contain much information as possible. However, the most important restriction of Johansen method is the necessity of being stationary of the series to be included in analysis at the same level (Johansen, 1988).

3.2. Preliminary Tests

It is supposed to carry out some pre-tests and operations to make an analysis by Johansen method based on VAR model. Firstly stationary degree of series were searched by Dickey Fuller (Augmented Dickey Fuller: ADF) unit root tests was applied. Unit root test results are presented in Table 1.

Table1. ADF Unit Root Test Results

Variables	Test Stat.	Critical Values		
		(1%)	5%	10%
B	-1.6267[4]	-3.5285	-2.9041	-2.5895
ΔB	-4.5149[3]*	-3.5285	-2.9041	-2.5895
E	-1.2567 [4]	-3.5285	-2.9041	-2.5895
ΔE	-3.8556[3]*	-3.5285	-2.9041	-2.5895
R	-1.2328[4]	-3.5285	-2.9041	-2.5895
ΔR	-4.0140[7]*	-3.5285	-2.9041	-2.5895
O	-2.4229[4]	-3.5285	-2.9041	-2.5895
ΔO	-3.6575[10]*	-3.5285	-2.9041	-2.5895

Note: Δ symbol shows that first difference of variables is taken. The values in [ ]; shows the optimal lag length for ADF test determined according to Akaike information criterion (AIC) determined by using Newey-West criterion. Constant model is used for all variables in the level value and first differences of series. *;shows 1% significance level.

According to the ADF test results presented in Table 1, all variables are not stationary in level value in 1% significance. When the first-order difference of series is taken, it becomes stationary. Meanwhile, it was determined that all series are I(1). Therefore, necessary precondition for cointegration is provided.A suitable lag number is needed to practice Johansen method. A lot of criteria are used to determine the lag length in literature. Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), Hann Quin Information Criterion (HQ) and Final Prediction Error (FPE) are the most commonly used ones (Johansen, 1995; Enders, 1995). In this study, during the determination of the lag length, LR, FPE, AIC, SC and HQ are used. Lag length test is presented in Table-2.

Table2. Determination of Lag Length

Models		LR	FPE	AIC	SC	HQ
B_t=*f(O_t ,K)*	Lag	3	4	4	0	3
E_t= *f(O_t ,K)*		4	4	4	3	4
R_t = *f(O_t ,K)*		4	4	4	3	4

Although the appropriate lag lengths for models are obtained with VAR models, the known assumptions of error term cannot be ensured since all of the LM possibility values are not greater than 0.01 in none of the related lag length. Therefore, VAR models whose lag lengths are greater, were tested by estimating and the most appropriate lag lengths were given in Table 3. H_0 hypothesis without autocorrelation is accepted in these lag lengths. Nonetheless, whether there is a heteroscedasticity problem in this lag or not was searched with White test and joint probability value was greater than 0.01 as can be seen in Appendix 1. According to this, H_0 hypothesis without heteroscedasticity problem cannot be rejected. (H_0 hypothesis is accepted.)

Table 3. Determination of Lag Lenght

Models	Lag	Autocorrelation Test	Heteroscedasticity Test
$B_t=f(O_t,K)$	7	0.153	0.320
$E_t=f(O_t,K)$	8	0.070	0.376
$R_t=f(O_t,K)$	6	0.892	0.028

According to the Table 3, it was seen that considering the lag length 7 in the model that B_t and O_t variables were used, 8 in the model that E_t and O_t variables were used and 6 in the model that R_t and O_t variables in order was appropriate. As can be seen in Appendix 1, there was not autocorrelation and heteroscedasticity problem in the models having this lag length.

3.3. Cointegration Test

According to Table 1, since all variables are I(1), co-integration relationship between series are possible to be searched via Johansen method. In order to determine the existence of cointegration and the number of vectors the necessary trace (λ_{trace})values test results are presented in Table 4.

Tablo 4. Cointegration Test Results

Models	Null Hypothesis (Ho)	Alternative Hypothesis *(H1)*	Eigenvalue	Trace	Critical Value (5%)	Decision
$B_t=f(O_t,K)$	λ_{trace} test			λ_{trace}value		Cointegration
	r = 0	r> 0	0.2690	38.2961	29.7970	
	r< 1	r> 1	0.2252	17.2980	15.4947	
$E_t=f(O_t,K)$	λ_{trace} test			λ_{trace}value		Cointegration
	r = 0	r> 0	0.3766	51.1230	29.7970	
	r< 1	r> 1	0.2668	20.3996	15.4947	
$R_t=f(O_t,K)$	λ_{trace} test			λ_{trace}value		Cointegration
	r = 0	r> 0	0.0788	18.3449	15.4947	
	r< 1	r> 1	0.0012	0.26666	3.84146	

According to λ_{trace} statistics in Table 4, the null hypothesis (r = 0) having no co-integration relationship between variables is refused to the alternative hypothesis (r > 0) having a co-integration relationship between variables. Because λ_{trace} value is higher than 5% critical value. In this case, it has to be accepted the existence of at least one co-integration relationship at 5% critical value.

The existence of co-integration between series can be seen as an evidence of the effect of elections on budget balance, budget revenue and budget expenditure. However, this is not enough alone, so it should be looked at co-integration equations showing long term equilibrium relationship by normalizing the co-integration vector elements in models.

3.3.1. Long Term Analysis

Long term cointegration coefficient among series were estimated, cointegration equation with estimated coefficients were constructed and long term relationship between variables was presented in Table 5.

Tablo 5. Cointegration Equations and Long Term Coefficients

Models	***Long Term Cointegration Equations***			
			O	***K***
Model 1	Normalized cointegration coefficients (β′)	1.0000	-55.3631 (47.8662)	102.1801 (22.8671)
	Cointegration Equation	***B*=-21.42+55.36.*O*-*102.18.K***		
Model 2	Normalized co-integration coefficients (β′)	1.0000	114.880 (20.0855)	-9.3643 (11.4472)
	Cointegration Equation	***E*=58.90-114.88.*O*+*9.36.K***		
Model 3	Normalized co-integration coefficients (β′)	1.0000	84.5539 (19.7681)	10.4082 (9.8208)
	Cointegration Equation	***R*=44.35-84.55.*O*-*10.40.K***		

Note: The values in paranthesis show the standard errors.

Cointegration equations in Table 5 show the long term relationship. When we look to the equations of the first model, election dummy serial is in negative relationship with budget balance serial and it confirms our theoretical expectations. When we look to the equation of the second model, we can see that election dummy serial has a positive effect on budget expenditure, in other words incumbents increase the budget expenditure in election periods in Turkey. The negative effect of trade openness serial on budget expenditure in second model is another finding. However, in the third model the finding that election dummy serial and trade openness serial have a negative effect on budget revenues was obtained. This means that incumbents decrease the budget revenues in election periods in Turkey. The effect of election dummy on budget balance is bigger when we compared with budget revenue and budget expenditure. According to these results we can easily say that incumbents increase the budget expenditure and budget balance in elections periods in Turkey because of economic manipulation of fiscal policy. This means that political budget cycles theory is valid for Turkey between 1994 and 2012.

3.3.2. Error Correction Model

In order to search for the short term dinamics of budget balance, budget revenue and budget expenditure series acting together in long term, vector error correction (VEC) model is predicted.

$$\Delta B_t = \alpha + \sum_{1}^{m} \beta_i \Delta B_{t-i} + \sum_{i=0}^{m} \beta_i \Delta O_{t-i} + \sum_{1}^{m} \gamma_i \Delta K_{t-i} + \delta ECT1_{t-1} + u_t \quad (4)$$

$$\Delta E_t = \theta + \sum_{1}^{m} \pi_i \Delta E_{t-i} + \sum_{i=0}^{n} \varphi_i \Delta O_{t-i} + \sum_{1}^{n} \psi_i \Delta K_{t-i} + \phi ECT2_{t-1} + \varepsilon_t \quad (5)$$

$$\Delta R_t = \omega + \sum_{1}^{p} \rho_i \Delta R_{t-i} + \sum_{i=0}^{p} \tau_i \Delta O_{t-i} + \sum_{1}^{p} \vartheta_i \Delta K_{t-i} + \delta ECT3_{t-1} + u_t \quad (6)$$

Where $ECT1_{t-1}$ $ECT2_{t-1}$ and $ECT3_{t-1}$ is Error Correction Terms which are one term lagged of error terms series obtain long term analysis. *m, n* and *p*; are optimum lag length. Error correction models were estimated and coefficients of error correction term obtained models and diagnosis test results presented in Table 6.

Table 6. Coefficient of Error Correction Models and Diagnosis Tests

Models	*Coefficient of ECT_{t-1}*	*t-stat.*	R^2	$\overline{R}^2$	*F-stat.*
$B_t=f(O_t, K)$	-0.024	-1.61*	0.72	0.57	5.05
$E_t= f(O_t, K)$	-0.093	-1.44*	0.87	0.79	11.06
$R_t = f(O_t, K)$	-0.092	-2.10**	0.85	0.79	14.64

Note: * and ** shows respectively, 10% and 5% signifinance level.

According to Table 6, the coefficients of error correction term (EC_{t-1}) is negative in models and it is statistically significant. When these terms are negative, short term deviations converge the equilibrium, in other words it shows that error correction mechanism works. This means for the political budget cycle literature that the effect of elections on budget balance, budget expenditure and budget revenue disappears over time. Thus, it is fair to say that cycles in budget balance, budget deficit and budget revenue arising from the elections are sizeable and short-lived on average.

4. Conclusions

In this paper, we tested for existence of political budget cycles in Turkey. According to our results the elections that have been made in Turkey between 1994- 2012, increased budget deficit and budget expenditure. Moreover like Krueger and Turan (1993) and Klompt and Haan (2012), we found that effects of elections on budget deficit are bigger than budget expenditure. This means that incumbents in Turkey use fiscal policy to increase their popularity and win elections, therefore fiscal manipulation was rewarded rather than punished by Turkish voters. In addition, our findings also revealed that fiscal manipulation is used more broadly in "new democracies" where it may work because of lack of experience with electoral politics or lack of information that is available in the established democracies. This refers that our results are consistent with Brender and Drazen's (2004) hypothesis that existence of political budget cycles are more likely in "young" or "new" democracies.

In addition to all these, we observed that short term deviations from budget balance, budget expenditure and budget revenue converge the equilibrium, in other words it shows that error correction mechanism works. This means for political budget cycle literature that the effects of elections on budget balance, budget expenditure and budget revenue disappears over time. Thus, it is fair to say that cycles in budget balance, budget deficit and budget revenue arising from the elections are sizeable and short-lived on average.

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