

## Political Business Cycle on the Agricultural Supports in Turkey

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### **Abstract**

*This study investigates whether there is a political business cycle (PBC) on the agricultural supports in the Turkish economy. In this respect, we investigate the policies of different Turkish governments for the agricultural supports measured by the producer support estimates for the period 1986-2011. To this end, first the series for the producer support estimates are filtered by the Hodrick-Prescott filter, and then an econometric model is employed to estimate the effects of a set of explanatory variables including the economic crisis, the opportunistic and the partisan characteristics of the incumbent parties. Our results provide limited support for the opportunistic type PBC. Moreover, it seems that some Turkish governments have created the partisanship type PBCs.*

**Keywords:** *Agricultural Supports, Turkish Politics, Political Business Cycles, Opportunistic and Partisanship Business Cycles*

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## 1. Introduction

This study aims to contribute to the issue of political business cycles on agricultural supports in the Turkish economy. The political business cycles, hereafter referred to as PBC, are widely defined as the fluctuations in economic variables around their long-run path created by incumbent parties.

The reason behind these fluctuations stems from the nature of the incumbent parties' utility function which is influenced by two main factors. First, the political parties, in general, are ideological entities, and therefore, when they are in office their behavior can be quite issue-oriented based on their policy priorities. Second, as the main actors of electoral system, they have often re-election considerations. In order to increase their chance of re-election, the incumbent parties tend to implement populist pre-election moves. These two distinct incentives that the incumbent parties face have constituted the core of PBC studies.

Therefore, following the works of Nordhaus (1975) and Hibbs (1977), the fluctuations in the PBC literature have been examined under two types of cycles based on the different incentives that the incumbent parties have: "opportunistic type" and the "partisan type". According to Nordhaus (1975), the opportunistic cycles exist due to the opportunistic behavior of incumbent parties whose only interest is their re-election. On the other hand, Hibb's (1977) partisan cycles arise due to the fact that different parties have different priorities. Later both types of cycles are examined together in the work of Sieg (2006).

The literature that examines the existence of PBC for different policy variables is vast. Major line of research centers on country case studies that focus on PBCs by evaluating macroeconomic variables mostly for developed countries. Some of these studies can be listed as follows: Frey and Schneider (1978a) and (1978b) focuses on the PBCs related to inflation, unemployment and growth of nominal consumption and income for the USA and UK, respectively. Similarly, McCallum (1978) investigates the impact of PBC on unemployment using seasonally adjusted US data. Golden and Poterba (1980) analyzes the ability of incumbent presidents to improve their popularity ratings by creating PBC on monetary and fiscal tools. Ito (1990) investigates the relationship between the timing of elections and PBCs in Japan. PBC case studies are also extended to developing countries. For example, Chowdhury (1993) tests the presence of PBC theory for India relating the behavior of Indian cabinets to the timing of parliament elections.

Recent literature focuses on cross-country PBC studies as a result of increased availability of statistical data for large samples of countries. Andrikopoulos (2001) and Block (2002) for instance look at PBC with a regional perspective. Alesnia et al (1991) and Alesnia and Roubini (1992) tests whether timing of elections and of government changes affect the level of a set of variables including growth, unemployment and inflation for 18 OECD countries. They find some evidence in support of the opportunistic and partisan type PBC. Similarly, more recent works

such as Brender and Drazen (2005 and 2008) investigate the opportunistic PBCs in the cross-country context. Their findings suggest that the election-year budget deficits reduce the chance of re-election in developed countries. Additionally, low inflation has an effect only on the voters of developed countries. Their results also reveal that higher growth rate influences the likelihood of re-election positively in developing countries. However, the authors find that the voters in those countries evaluate the incumbent party's economic growth performance over its term in the office rather than during the election year.

There are PBC analyses for the Turkish economy that utilizes macroeconomic variables including inflation, gross national product, public expenditure, budget deficiency, M1 money supply, income tax and defense expenditure. It can be said that the PBC analysis for Turkey is mainly undertaken for the opportunistic type PBCs. Çarkoğlu (1995) examines the opportunistic type PBC for the variables including agricultural support prices, monetary policy, budget deficits, inflation, unemployment and real GDP. Sezgin (1997) finds evidence that Turkish governments attempted to affect election result by increasing budget deficits during election years. Ergun (2001) investigates whether Turkish governments applied opportunistic fiscal or monetary policies to affect the results of elections for the period of 1987-1999. The author contends that Turkish government used fiscal and monetary policies to create opportunistic type PBC. Similarly, Telatar (2003) tests political surfing and manipulability hypotheses using a data set for the 1986-1997 period. The author finds that governments used money supply and government expenditures to affect the results of elections. According to Parlaktuna and Bahçe (2006), the PBCs in Turkey are mostly affecting the monetary variables such as inflation and consumer prices. Özkan and Tarı (2010) and Karakaş (2013) are two other studies that focus on opportunistic type political cycle. Savaşan and Dursun (2006) examine the opportunistic PBC through municipality spending by focusing on somewhat different modeling framework from existing research. Karagol and Turhan (2008) investigate the relationship between external debt, defense expenditures and political business cycles in Turkey for the period 1960–2002. This study highly deviates from existing research because it is the only study that mainly focuses on the partisan type PBC.

An important observation is that interest groups and their political influence have crucial importance in the PBC analysis. Although the farmers make up the large part of the voters in the Turkish case, not much attention has been devoted to the PBC on agricultural supports. Gurkan and Kasnakoglu (1991) analyze the variations in the extent of protection in agricultural price supports in Turkey for the period of 1962-1983. They find that the agricultural sector is less protected during times of military regimes compared to the times of democratic practices. That is to say, the authors find some support for political business cycle on agricultural sector in Turkey. Çarkoğlu (1995) shows that cotton and wheat producers receive higher support prices in election years. However, no other major crop follows such a pattern. Another study focusing on the PBC analysis on agricultural sector is the

Turkish Industrialists' and Businessmen's Association (TÜSİAD) 2005 Report. In this report, the relationship between the election time and the percentage of producer support estimates (PSE) is examined and interpreted. The authors measure the percentage of PSE as the ratio of the PSE to the value of total gross farm receipts, which is equal to the value of total farm production (at farm gate prices) plus budgetary support. One of their conclusions is that the incumbent parties create opportunistic cycles on agricultural supports before the upcoming elections. However, their result relies on the simple covariance analysis and their study ignores the effect of partisan type PBC on agricultural supports.

The objective of this study is to extend the existing literature on the question of whether the incumbent parties create an opportunistic and/or partisan type of PBC on agricultural supports in the Turkish economy during the 1986-2011 period. The present study empirically examines both the opportunistic and partisan types of PBCs on agricultural supports. Our research question is whether the opportunistic and partisan characteristics of the incumbent parties affect the economic fluctuations of the PSE indicator or not.

The remainder of this paper is organized as follows. Section 2 discusses the Turkish agricultural policies and politics. We provide an overview for the post-1980 Turkish political structure and agricultural policies in this section. Section 3 examines the method and the model, Section 4 presents results and discussions, and Section 5 concludes.

## **2. Turkish Party System in Post-1980 Period and Agricultural Policies**

### **2.1 Political Party System in the Post-1980 Period**

Before we start our analysis, let us first turn our attention to the key characteristics of Turkish political system for the post-1980 military coup period. It is possible to say that, in general, Turkey has had a deeply segmented political party system along the left and the right ends of the political spectrum. This fragmentation makes the Turkish party politics a complex structure with various dimensions. Specifically, this segmentation in party politics not only has produced an increased size in party system, but also created discontinuity in Turkish political life depending on the electoral volatility. As a result, different political parties had an opportunity to become an incumbent party in last three decades.

Following the 1980 military coup, eight general elections have been held. The right wing parties are the winners in seven out of eight elections. Only left wing party that won the election was the Democratic Left Party (DSP) in the 1999 general elections.

Motherland Party (ANAP) won the 1983 and 1987 general elections under the leadership of Turgut Özal who became the President during his second term in the office as the Prime Minister. Following Özal, Yıldırım Akbulut and Mesut Yılmaz served as Prime Ministers, respectively.

With the 1991 general election, the coalition government period started. The winner of the general election of 1991 was the True Path Party (DYP). However, DYP had to form a coalition government with Social Democrat Populist Party (SHP). Süleyman Demirel, the leader of DYP, was the Prime Minister of the government. Following the death of Turgut Özal, Süleyman Demirel won the 1993 presidential election and his vacancy was filled by Tansu Çiller, who was the first and only female Prime Minister in the history of Turkey.

In the 1995 general elections, the Welfare Party (WP) won the elections and formed a coalition government with DYP which was the third party in this election. The leader of Welfare Party, Necmettin Erbakan, became the Prime Minister.

1999 general election led another coalition government to Turkey. Leading party of the race was Democratic Left Party (DSP) under the leadership of Bülent Ecevit who had to form a coalition government with ANAP and the Nationalist Movement Party (MHP).

It can be said that the voters held existing political parties responsible for the 2001 catastrophic economic crises, and therefore elected a newly founded party, Justice and Development Party, as ruling party in 2002 general election. First, for a short time the Prime Minister was Abdullah Gül, who would become the President later. Then, Recep Tayyip Erdoğan became the Prime Minister after a constitutional amendment in 2003. Erdoğan took the position until his victory in the 2014 Presidential election. During this time period, AKP won the general elections of 2007 and 2011.

## **2.2 Turkish Agricultural Policies**

Historically, the agricultural sector had been the largest employer. This continued until the last ten years in Turkey. As the country has developed, the relative importance of agriculture has declined. For instance, according to the World Bank statistics, Turkey's agricultural employment share in total employment decreased from 45% in 1985 to 24.20% in 2011.

Due to the large population employed in agricultural sector, the supports allocated to this sector have been historically important. The agricultural supports dated back to 1932 as the support purchases in the Turkish economy. As stated by Karluk (2007), the government introduced floor prices in the wheat market by affecting the trade conditions in favor of farmers. This policy was extended in the following years for other crops including tea leaf, sugar beet, tobacco, olive oil, cotton and its associated products such as cotton seed and sunflower.

Later the fertilizer subsidies and seed benefits were added to the agricultural supports in the subsequent years. The decisions of 24 January 1980 had limited the support purchases only to wheat, barley, rye, corn, rice, oat, tobacco, sugar beet, poppy and chickpeas. However, the decisions of 5 April 1994 narrowed the support purchases only to the product groups of cereal, poppy, sugar beet and tobacco.

As stated by Acar and Bulut (2010), the Turkish agricultural policy till 1990's could be evaluated as protective, intervening and supportive. However, the agricultural supports and their budget burden were held responsible for the economic crises in 1990's. Without doubt, the high level of disguised unemployment and low productivity in the agricultural sector were the main points of criticism.

In a general setting, the Turkish agricultural policies and politics relationship can be evaluated in Becker's (1983) modeling framework that postulates a nonlinear relationship between the size of the sector and the supports they receive from the ruling party. According to this model, as the size of sector increases, their political power and lobbying activities also expand, and as a result, the rate of supports they receive increases. However, after an optimum level of the sector size, coordination problems would arise and other groups may start to oppose to the supports provided. This in turn undermines the capacity of the interest group to capture gains from the ruling party. Thus, there is an optimum level of the size of the sector beyond which supports start to decrease. It is not surprising that the agricultural sector in Turkey historically was above its optimum size. However, with the policies implemented since the 1990s, the size of the agricultural sector started to decrease along with agricultural supports. This result is consistent with Civan (2010) who found empirical evidence supporting Becker's (1983) model for the agricultural subsectors in Turkey. It is noteworthy that this shifts in structure of agricultural sector and agricultural supports would affect the long run tendencies rather than short run components.

As observed by Acar and Bulut (2010), the effects of economic crises and the pressure from the international organizations including the International Monetary Fund (IMF), the World Trade Organization (WTO) and the World Bank, required Turkey to exert a policy shift in agricultural sector. In this respect, the support purchases policies had been eliminated and consequently new policy instruments such as Direct Income Support, Premium Payments, Milk Premium, Tea Support, Farmer Transition Payments, Cereal Premium, Mohair Support, Silk Cocoon Support and Export Refunds had been put into force after 2001.

Another important policy instrument was the Agricultural Reform Implementation Project (ARIP). The purposes of ARIP can be summarized as follows: i) to decrease the burden of agricultural supports on the government budget; ii) to implement direct income support for accelerating the agricultural development; iii) to increase the crop variety in order to reduce the production of the crops with supply surplus iv) to empower and reorganize agriculture sales cooperatives. Farmer record system is used as the basic instrument for realizing these purposes.

Note that the ARIP was revised in 2005 in order to encourage the production of alternative crops especially to substitute hazelnut and tobacco. The main objective of the ARIP was to integrate the Turkish agricultural system with that of the European Union by simplifying agricultural subsidies. In this project, the short run transition losses of the farmers resulting from the change in the support system

were prevented by compensation policies financed by the World Bank. Furthermore, these projects also included structural policy arrangements including the uprooting of crops with supply surplus such as hazelnut and tobacco. Historically, supply surpluses in those products had been a direct consequence of high subsidy policies.

In this study, we are constrained with the time period of 1986-2011 due to data availability issues. We used the PSE as the main indicator to investigate possible PBC behavior on Turkish agricultural supports. Note that PSE is not the unique indicator to measure direct income supports. Indeed OECD (2004) produces several indicators of agricultural support including consumer support estimate (CSE) or total support estimate (TSE) along with PSE. However, in this study we used PSE since it is far more relevant for farmers' objectives compared to alternative indicators.

OECD (2000) defines the PSE as "an indicator of the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers, measured at farm gate level, arising from policy measures, regardless of their nature, objectives or impacts on farm production or income." According to the OECD, PSE measures the level of supports arising from agricultural policies relative to a situation without such policies i.e., when producers are subject only to general policies (including economic, social, environmental and tax policies) of the country. The PSE is a general concept implying that any costs associated with those policies and that are incurred by individual producers are not deducted. The PSE includes implicit and explicit transfers. Subsequently, the percentage PSE is defined as the ratio of PSE to the value of total gross farm receipts, which are measured by the value of total farm production (at farm gate prices) plus budgetary support. In short, PSE shows the annual monetary transfers arising from farmer support policy measures, based on criteria such as the quantity of a commodity produced, the amount of inputs used, the number of animals kept, the area farmed, or the revenue or income received by farmers.

### **3. Method and Model**

The dependent variable is the economic fluctuation in the PSE series. This is obtained by the Hodrick-Prescott (HP) filter based on the Ravn-Uhlig smoothing parameter. The underlying assumption for the HP filter is that an economic variable has two components: the trend and the cycle.

The trend is a long-run component of an economic variable while the cycle is a short-run component. If these components can be separated from each other, then the economic fluctuation on an economic variable can be identified as the cycle component. However, selection of the smoothing parameter ( $\lambda$ ) is a subjective process.

Although many research studies take the smoothing parameter as 1600 for

quarterly data, there is no consensus on parameter selection while using annual and monthly data (Maravall-del Río, 2007). In the literature, many different levels of smoothing parameter are proposed for annual data. For example, Baxter and King (1999) use  $\lambda=10$ , Cooley and Ohanian (1991) take it as  $\lambda=400$  whereas the EU Central Bank uses the value  $\lambda=100$ . According to Ravn-Uhlig (2002), the smoothing parameter must be  $\lambda=6.25$  for annual data structure.

The use of many alternative values for the smoothing parameter implies that there is subjectivity in the measurement of economic fluctuation. The fluctuation produced by the HP filter is not beyond such subjectivity. The criticisms of Cogley and Nason (1995), Harvey and Jaeger (1993), and King and Rebelo (1993) support this claim. In spite of all these criticisms, the IMF and the OECD use fluctuations produced by the HP filter in their studies. This plays an important role in making the HP filter the most popular one amongst its alternatives. According to the HP filter,

$$y_t = C_t + G_t \quad (1)$$

where  $y_t$  is the economic variable,  $G_t$  is the trend component,  $C_t$  is the cycle component or the economic fluctuation on the economic variable. Some versions of this model can be found in the works of Hodrick and Prescott (1997), Schlicht (2004) and Guay and St. Amant (2005).<sup>1</sup>

The trend and the cycle components come from different sources. As stated by Nordhaus et. al. (1989), the trend component ( $G_t$ ) reflects the long run developments while the economic fluctuation or cycle component ( $C_t$ ) represents the opportunistic and partisan-type PBC, the external or internal shocks, and the changes in competences.<sup>2</sup> The external shocks include hurricanes, droughts, foreign wars, and revolutions; the internal shocks include sudden changes in inflation or budget deficits.

In order to separate  $C_t$  and  $G_t$  components, we collect observations  $y_1, y_2, \dots, y_T$  for the periods  $1, 2, \dots, T$ . The trend component  $G_t$  is obtained by the HP filter. Specifically,  $G_t$  can be obtained from  $y_t$  by minimizing the following penalty function given in equation (2):

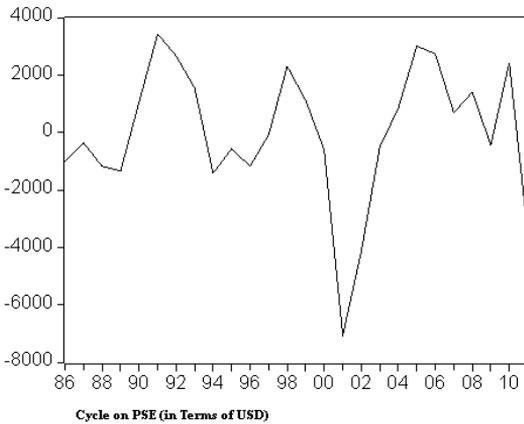
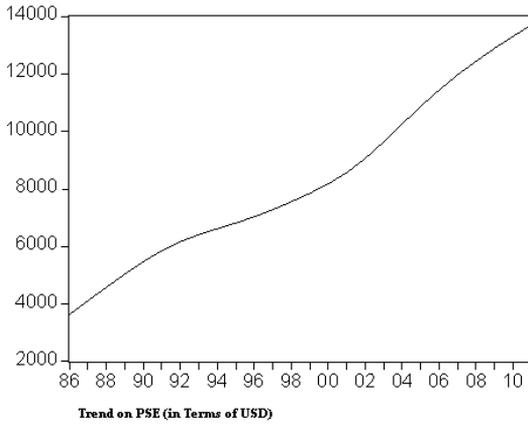
$$\sum_{t=1}^T (y_t - G_t)^2 + \lambda \cdot \sum_{t=3}^T [(G_t - G_{t-1}) - (G_{t-1} - G_{t-2})]^2. \quad (2)$$

Then, the  $C_t$  component is obtained by subtracting  $G_t$  from  $y_t$ . Figure 1 summarizes the political trend  $G_t$  and the political business cycle  $C_t$  in the PSE for the given period.

<sup>1</sup>Caleiro (2009) names the trend component as growth.

<sup>2</sup>According to Rogoff and Sibert (1988), competence refers to the property of governments, who perform their duties in accordance with the cost minimization principle.

## Political Business Cycle on the Agricultural Supports in Turkey



**Figure 1: Trend and PBC in the PSE in Terms of USD**

Finally, by using the cycle output of the HP filter as the dependent variable of our econometric specification; our model can be built as:

$$\log C_t = \alpha + \delta \text{Crisis} + \sum_{i=1}^5 \beta_i \text{OPP PARTY}_{it} + \sum_{i=1}^5 \gamma_i \text{PAR PARTY}_{it} + \varepsilon_t \quad (3)$$

where  $\delta$ ,  $\beta_i$  and  $\gamma_i$  are estimated parameters for  $i=1, \dots, 5$ , and  $\varepsilon_t$  denotes the white noise for time period.

Without question, the ARIP is one of the main policy instruments for agricultural supports in Turkey for the period 2001-2008. However, the ARIP has been designed as a long run policy instrument. The project should hence show its influence on the trend component not on the short run fluctuations of  $C_t$ . Therefore, the ARIP

variable is not included in the empirical model as the objective of the analysis which is to study the fluctuations on the PSE.

Turkish economy had experienced major economic breakdowns during the 1994 and 2001 crises. In addition, the economy had gone through contractions in 1999 and 2009. *Crises* is introduced as a dummy variable to control for the economic downturns in 1994, 1999, 2001 and 2009. This variable takes the value of 1 for the crises years and it is set equal to 0 for the remaining years. It is expected to have a negative coefficient.

It is common in the PBC literature to control for the opportunistic behavior with a dummy variable that takes on a value of 1 for the election year and 0 otherwise. This approach can be useful for countries whose political system depends mainly on a competition between two mainstream parties. However, it is not quite practical in the Turkish case due to the fragmented nature of the political system. Most of the general elections that have been held for the time period between 1986 and 2011 resulted in replacement of the incumbents as discussed above. Additionally, most of the incumbents could never seize the opportunity to be elected again. Therefore, an approach that introduces a dummy variable for the election years can be misleading in the Turkish case. Importantly, such an approach would not control opportunistic behavior of different political parties; indeed, it will provide information regarding whether the incumbent parties have created an opportunistic cycle on average or not. One solution for the given problem would be to create a different opportunistic behavior dummy for each incumbent party. In this respect, we have created five dummies, denoted by *OPP PARTY*, for five different incumbent parties. For the year in which a general election was held, the corresponding incumbent party's dummy variable takes the value of 1 and 0 otherwise. If the coefficient for any of *OPP PARTY* variables is positive and statistically significant, then we can conclude that the corresponding incumbent party tends to affect the elections by using budget expenditures.<sup>3</sup>

*PAR PARTY* represents a partisanship variable for a specific incumbent. The first partisan model considered herein is provided by Nordhaus (1975) and Hibbs (1977). In the work of Nordhaus (1975), voters are assumed to be homogenous. Later, Hibbs (1977) relaxes this assumption. Serletis and Afxentiou (1998:29) state that,

*"In more accepted partisan models, such as Hibbs (1977), if the politicians are ideological, then they represent the interests of different pressure groups and, when in office, follow policies that are favorable to their supporting groups."*

According to Hibbs (1977), the PBC exists because one party's loss is the other party's gain. Suppose that an ideological party's priority is achieving low inflation at

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<sup>3</sup>The focus here is only the general elections since the local candidate may matter in the local elections.

the expense of high unemployment while the other's is vice versa. If "the enemy number one of the country" is inflation from the viewpoint of an ideological party, then it prefers to implement contractionary economic policies.<sup>4</sup> On the other hand, if "the enemy number one of the country" is unemployment for another ideological party, then that party prefers to conduct expansionary economic policies when it is incumbent. When the power shifts between such parties, this creates an ideological type (or a Hibbs type) PBC. According to Hibbs (1977), the elections are between the left and the right wing parties in general. However, other expressions are possible. For instance, the elections are between the Democrat Party and the Republican Party in the USA whereas they are between the socialist parties and conservative parties in European countries.

There are a few ways to represent partisanship in an econometric model. One possibility is to use a dummy variable that equals to 1 for wing X and 0 for the other. According to Alesina et al (1991), such an approach has little practical value in the European countries. A synonymous approach in the USA would be to define the Democratic Party as equal to 1 and the Republican Party as equal to 0.<sup>5</sup>

However, this approach can be problematic in the Turkish context for several reasons. First, the Turkish political party system shows a quite heterogeneous structure even within the parties from the right wing of the political spectrum. Although Motherland Party, True Path Party, Welfare Party and Justice and Development Party are all right-wing parties, both their party stance on various issues and party voter profiles are quite different from each other on various grounds.

Second, our dataset, and perhaps also voter preferences in Turkey, does not allow us to use left wing/right wing distinction in detecting partisanship behavior since this approach reduces sample variability a lot in the Turkish political life. As discussed above, a left wing party was the winner party only once in the last seven general elections covering the time span of our dataset. Additionally, Democratic Left Party's term in office was a coalition government with two right-wing parties; and therefore, it is not clear to what extent this party was successful in implementing its priority policies.

Most notably, many political scientist reject the left wing/right wing distinction in the Turkish political system. For example, Küçükömer (1994) departs from the typical left/right wing model by evaluating the Turkish political system through dividing the country along the Islamist/Occidental axis. In addition, Mardin (1975) analyzes the Turkish political system as central parties and peripheral parties' axis. Similarly, Secor (2001) argues that Turkish democracy is shaped according to the axis of clerical parties and secular parties in the 1990's. Parallel to these views, we avoid using a dummy variable for right and left wings in the

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<sup>4</sup>See Lindbeck (1976:13) for policy priorities.

<sup>5</sup>See Hibbs(1977) and Alesina and Sachs (1988).

representation of partisanship in this study. The figurative variable approach also provides similar qualitative results.<sup>6</sup>

Therefore, the partisanship variable of this study is measured as a prime minister's office-days ratio in a given year. Hence, this variable takes the values as 0/365, 1/365, ..., 365/365 depending on the numbers of days spent in office. This method of measurement is also considered under the coalition governments since the party of the prime minister is assumed to be responsible for the public welfare.<sup>7</sup> The following partisanship variables are defined for the 1986-2011 period: under the rule of Motherland Party (PAR ANAP), True Path Party (PAR DYP), Welfare Party (PAR RP), Democratic Left Party (PAR DSP) and Justice and Development Party (PAR AKP). These variables represent the percentage of days spent in office in a year by the Prime Ministers: Turgut Özal + Yıldırım Akbulut + Mesut Yılmaz, Süleyman Demirel + Tansu Çiller, Necmettin Erbakan, Bülent Ecevit, Abdullah Gül + Recep Tayyip Erdoğan, respectively.

#### 4. Results and Discussions

The main objective of this paper is to explain the political business cycles in the PSE in the case of Turkey. To accomplish this, the Equation (3) is estimated. The estimates of the specified model are reported in Table 1.

Following White (1980), a heteroscedasticity consistent matrix estimator of the covariance matrix is used to obtain unbiased standard errors. As shown in Table 1, DW denotes that there is no serial correlation.

Our model reveals that the economic crises have a negative effect on the PSE. This is not particularly surprising. During economic crises, the governments reduce the supports they provide to the agricultural sector.

Our estimates reveal that Turkish incumbent parties generally do not tend to produce opportunistic cycles. In other words, it seems to be the case that the most of the incumbent parties do not create opportunistic behavior, except for the Welfare Party (RP) which comes from an Islamist tradition. The first time in the history of Turkey, a political party from Islamist orientation won the election in 1995. The Welfare Party, which was the winner of election, also happened to be the most unwanted political party due to its Islamic roots in the country at the same time. As a result, this victory was not sufficient to form the government at first. The Party needed to wait until the collapse of fragile True Path Party (DYP) and Motherland Party (ANAP) coalition in 1996 to become a coalition partner with DYP. Therefore, it is not particularly surprising that RP's incentives and policies deviate from competing political parties of the time.

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<sup>6</sup>Figurative variable takes the values 1, 2, 3, 4, 5 for the extreme left, left, central, right, extreme right parties, respectively. See Karagol and Turhan (2008) and Kollias, Manolas and Paleologou (2004) for detailed discussion.

<sup>7</sup>See Akarca and Tansel (2007).

**Table 1. Estimates***Dependent Variable: the economic fluctuation of the PSE in thousands of USD*

Variable	Parameter Estimates (standard errors)
Constant	-0.157 (0.099)
Crises	-0.648*** (0.179)
OPP ANAP	0.190 (0.151)
OPP DYP	-0.233 (0.235)
OPP REFAH	1.256*** (0.311)
OPP DSP	-0.168 (0.230)
OPP AKP	-0.219 (0.147)
PAR ANAP	0.327*** (0.133)
PAR DYP	0.335** (0.147)
PAR RP	-0.124 (0.298)
PAR DSP	-0.114 (0.177)
PAR AKP	0.300** (0.121)
R-Squared	0.82
Akaike	-0.25
Schwarz	0.33
DW	2.11

Notes: The numbers within the parenthesis are standard errors. \*, \*\*, \*\*\* indicate significance levels at 1%, 5% and 10%, respectively.

This finding is surprising as one would expect to see more intensive opportunistic behavior on the side of political parties. However, one interpretation would be that people may realize the opportunistic behavior of political parties and may punish them for their populist behavior. With this in mind, political parties may not be following opportunistic behavior.

At this point, one may argue that the period under consideration coincides with a general characteristic of the Turkish economy. For most part of the period, Turkey signed IMF standby agreements and implemented contractionary fiscal policy

measures as a contingent for IMF supports. For the last decade, under the ruling of AKP, Turkey continued following a strict fiscal policy approach similar to the IMF period. Hence, the incumbent parties did not have the conditions to follow a politically opportunistic behavior. This may seem a plausible claim at first; however, we need to state that this strict fiscal policy would affect the trend component, not the cycle component by making such an argument invalid.

Table 1 shows that the estimates for the parameters of partisanship variables are all significant except for the Welfare Party (RP) and Democratic Left Party (DSP). Based on our estimates, ANAP, DYP and AKP seem to have created positive PBC on the agricultural supports while RP created a negative PBC. One possible explanation for the positive and significant coefficient on the partisanship variables for Motherland Party and True Path Party is that the political competition those parties engaged to become the largest party in the right wing of the political spectrum. However, the incentives of those parties to create positive PBC are quite different than each other due to the nature of the political game taking place between them.

The reason behind the intense political competition can be explained through the image of the True Path Party that was known as the farmer's party in small towns. Karpas (2009) states that the roots of this image goes back to 1950 election in which the Democrat Party was the winner. Süleyman Demirel is known as the possessor of this political heritage, therefore the True Path Party is accepted as the farmer's party. Therefore, it is natural for the True Path Party to create positive PBC in favor of the agricultural sector.

Additionally, the True Path Party's image advantage is perhaps one of the reasons why also the Motherland Party needs to create positive PBC. This is quite interesting because the Motherland Party was founded around the ideas that are based on the concepts of profitability, productivity and rejection of populist policies. However, the Motherland Party developed tendencies toward populist policies with the elimination of the political prohibition on Süleyman Demirel.<sup>8</sup> This implies that the Motherland Party needed to attempt being a farmer's party in the competition against the True Path Party. This result can be evaluated as the empirical evidence in favor of the observations made by Sarıbay (2001).

Our results show that the Welfare Party (RP) and Democratic Left Party (DSP) did not create any PBC on the agricultural supports. This is not particularly surprising when one considers the "Stability Program" in 1997 being declared by Welfare Party and the structural reforms on the economy under DSP ruling. Following the measures introduced by the "Stability Program" and structural economic reforms, we can conclude that those two parties implemented contractionary policies that are not favoring the agricultural sector. This policy choice was also due to the reaction of people against the high subsidies to the agricultural sector provided in the previous periods.

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<sup>8</sup>This prohibition was due to the September, 12 Military Regime.

A positive PBC sign is observed during the AKP ruling in the last decade. AKP period is characterized with stable macroeconomic conditions and a declining share of agricultural sector in total employment. It is fair to say that during most of its ruling time, AKP didn't face the fiscal constraints similar to the ones faced by the previous ruling parties. It is noteworthy that the AKP has been quite successful expanding its voter base during its period. The AKP has accomplished to attract former center-right voters along with Islamist and nationalist voters. This consensus has given the AKP to the most powerful position in the late Turkish political life compared to its preceding ruling parties. This powerful position could have provided AKP with the opportunity to provide supports to the desired sectors such as construction and agriculture.

## 5. Conclusion

The primary objective of this paper is to examine the political business cycle (PBC) on the agricultural supports in Turkey for the period 1986-2011. The PBC here is taken as both opportunistic and partisanship behavior of incumbent parties. With this objective, first the series for the producer support estimates are filtered by the Hodrick-Prescott filter, and then an econometric model is employed to estimate the effects of a set of explanatory variables including the economic crisis, the opportunistic and the partisan characteristics of the incumbent parties. Our findings show that with the exception of the Welfare Party, the incumbent parties have not created opportunistic type PBC in the time span of our dataset. Although this result may seem surprising at first glance, it seems to reflect the reaction of other groups to the supports provided to specific interest groups and strict fiscal policy constraints faced during last three decades. In addition, among the incumbent parties, Motherland Party (ANAP), True Path Party (DYP) and Justice and Development Party (AKP) created positive political business cycles on the agricultural supports in Turkey.

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