

POLITICAL ECONOMY OF GOVERNMENT SPENDING: EVIDENCE FROM TURKEY



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ABSTRACT

The scope of government spending has been continuously expanding beyond its traditional functions in many countries. Therefore, it will be useful to clarify the driving forces behind the expanding government spending. The goal of this study is to investigate the impacts of economic and political factors on government spending by using the Turkish annual data for the period of 1980-2012. We use the Engle-Granger cointegration analysis and employ an error correction model to examine the relationship between government spending and economic and political factors, namely GDP growth rate, unemployment rate, trade openness, literacy rate, democracy scores, and corruption. Estimation results indicate that political factors along with economic variables have significant impacts on Turkey's government spending both in the short run and long run.

Keywords: Government Spending, Political Economy, Corruption, Engle-Granger Cointegration, Error Correction Model

KAMU HARCAMALARININ POLİTİK EKONOMİSİ: TÜRKİYE ÖRNEĞİ

ÖZ

Kamu harcamaları, bir çok ülkede geleneksel fonksiyonlarının ötesinde sürekli artmaktadır. Bu yüzden, artan bu kamu harcamalarının ardındaki sürükleyici güçleri açılığa kavuşturmak faydalı olacaktır. Bu çalışmanın amacı, Türkiye'nin 1980-2012 dönemi yıllık verilerini kullanarak ekonomik ve politik faktörlerin kamu harcamaları üzerine etkilerini araştırmaktır. Ekonomik ve politik

faktörler (büyüme oranı, işsizlik oranı, dışa açıklık, okur-yazarlık oranı, demokrasi ve yolsuzluk) ile kamu harcamaları arasındaki ilişkiyi incelemek için Engle-Granger eşbütünlük analizi ve hata düzeltme modeli kullanılmıştır. Test sonuçları ekonomik değişkenlerle birlikte politik faktörlerin de Türkiye'nin kamu harcamaları üzerinde kısa ve uzun vadeli etkileri olduğunu göstermektedir.

Anahtar Kelimeler: Kamu Harcamaları, Politik Ekonomi, Yolsuzluk, Engle-Granger Eşbütünlük, Hata Düzeltme Modeli

INTRODUCTION

The role of government in economy has been continuing to be discussed for many years. Researches conducted show that the core functions of public sector could be financed by less than 15% of GDP. For instance, countries like Sweden, having quite large government sector, spend no more than 15% of GDP. In OECD countries, government expenditure was 27% of GDP in 1960 while this ratio had increased to %47 by 2012. This increase in government spending indicates that the scope of the public economy has been expanding beyond its traditional functions. (Gwartney et. al., 1998:164-168)

In the literature, there are so many studies that explain the source of this expansion by political or economic factors separately. For Turkey case, on the other hand, there is no such study that analyzes the correlation between government expenditures and wide range of variables including both economic and political determinants. So this study will be a guide for the future researches, since, to the best of our knowledge, this is the very first study to investigate such a wide range of variables under a single roof in the case of Turkey.

The aim of this study is to analyze the impacts of economic and political factors on government spending by applying time series analysis of co-integration and Engle Granger error correction model for the period of 1980-2012 in Turkey. By this way, we have investigated both short run and long run relationship among the series. Also government spending in Turkey with unique characteristics, such as no clear distinction among the Turkish political parties (regardless of whether they are left or right), in the sense of their economic point of view, has been interpreted from both theoretical and empirical aspects.

The study is organized as follows. Section 1 is the introductory part. Following section, Section 2 comprises theoretical background and section 3 includes the literature review of empirical studies. The next section, presents the descriptions and sources of data. In section 5, the model used in the analysis and methodology of time series

applied for our model will be explained in detail. In section 6 the estimation results obtained from tests will be interpreted. The last section concludes.

1. POLITICAL ECONOMY OF GOVERNMENT SPENDING

Theoretical background of political economy is based on public choice theory. According to Buchanan (1979) public choice approach tries to connect economy with political sciences. Main assumption of the theory is that all actors such as voters, politicians, bureaucrats etc. pursue their self-interest. So politicians try to be re-elected while voters desire to maximize their own interest just like the market mechanism including consumers and producers. Starting from this point of view, various models with assumptions of the opportunistic politician and short-sighted voter have been developed (Imbeau and Chenard, 2002:6)

In the literature, most known hypothesis is the swing voters hypothesis, claiming government gives a greater share of the pie to the voters who do not decide to vote for which political party, in order to “buy” their votes. In other words, vote seeking politicians increase the spending to win these indifferent or swing voters. (Larcinese vd., 2010:144)

In the related literature, another important figure is Adolph Wagner, German economist, formulating as “law of expanding state expenditures” in 1883. The main point of his work is, for any country regardless of the socio-economic and political structure, the government expenditure inevitably increases as GDP rises. He claims that government actions have to broaden by force of industrialization, development of the social structure and infrastructure. Pressure for social progress increases state activity and thus public expenses rise. (Akalın, 1986:144-145) Fundamentally both Buchanan and Wagner support the idea of manipulation of fiscal policy by policymakers trying to get re-elected. Similarly, political business cycle models put forward this manipulation.

Opportunistic political business cycles, developed by Nordhaus (1975), simply are expansions in economic activity induced by an opportunistic politician before an election in order to increase his chances of re-election. Moreover, according to Partisan theory, ideology of the party in government has also an impact upon government expenses. The idea behind it is that “political parties typically weight nominal and real economic performance differently, with left-party governments being more inclined than right-party ones

to pursue expansive policies designed to yield lower unemployment and higher growth, but running the risk of extra inflation". (Hibbs, 1994:1) Accordingly, Granados (2003) notes that "in countries with left-wing governments, the average share of public investment to GDP between 1993-1997 was almost half a point higher than the average public investment in countries with right-wing governments" (Granados, 2003:29). As a reason of this, he states that left wing parties, within the scope of equality, redistribution, social payments to unemployed people and interventionist supply-side policy, promote higher government expenditures in economy. Right wing parties, on the other hand, prefer run balanced and small budget. Also, Hibbs (1978) notes that strike activity decreased in European nations where social democratic and labor parties increased their representation in cabinets in the 1930s and 1940s because of the propensity of the leftist parties to provide funding for new and expanded welfare programs. This caused a much larger portion of the national income to flow through the public sector.

2. LITERATURE REVIEW

There are many studies on the impacts of economic and political factors on government spending. Most of them have investigated the relationship between government spending and economic growth across countries. In his study, Terzi (1998) analyzes the relationship between government spending and growth for the Turkish economy, covering the period of 1938-1995. He applies cointegration analysis and finds the causality relationship between government expenditures and growth. Using Granger causality method, Şahin and Özenç (2007) conduct a study analyzing the effects of public expenditures on the variables of GDP, inflation, and unemployment within the period of 1988-2006. They conclude that there is bidirectional causality between public expenses and GDP but no causal relationship between unemployment and government spending, contrary to what is believed since the common view is that broadening public sector increases unemployment. First, expanding public sector crowds out private investments and thus decreases productivity, technical progress, and international competition, resulting in unemployment (Alesina and Perotti, 1997). Next, and more importantly, larger public sector is a growing tax burden, which reduces growth and thus increases unemployment by decreasing profitability of private investment (Alesina et. al, 2002). Accordingly, in their study, using panel estimation method, Daveri and Tabellini (1997) find that higher labor taxes have been shifted onto higher real

wages leading to rise in labor cost and thus decline in labor demand increases unemployment.

Furthermore, Lindbeck (1975) claims that governments can dampen the effects of the open economy on production, employment, and consumption by increasing the scope of the public economy. He also notes that the growth of social insurance and tax systems represent “built-in stabilizers” which allow policy makers to “smooth out” the peaks and valleys of business cycles. Similarly, according to Rodrik (1996), there exists a positive correlation between trade openness and size of its government since a broader public sector provides stabilization, especially if country is indurable against foreign shocks like the terms of trade risk.

As is theoretically well known, the level of corruption is growing as the government intervention in the economy is more extended. Yet, the empirical results on this issue are ambiguous. Ioan (2009) analyzes relation between corruption and political and economical determinants, considered the period of 1996-2008 and a sample of 135 countries. Using panel estimation method he concludes that the increase in corruption is the result of the augmentation of government intervention in economy. Also, Elliot (1997), in his study including 83 countries, finds a positive relationship between corruption and government spending (as a percentage of GDP) with simple estimation and correlation coefficient comparing. On the other hand, Karagöz and Karagöz (2009) use cointegration analysis and could not find any causality relation between government spending and corruption for Turkey.

To best of our knowledge, the only study about the relationship between government spending and literacy rate, is the research, titled “Does High Government Spend on Education Mean More Literacy?”, conducted by India Spend for ten countries. This study demonstrates there exists a positive correlation between government spending and literacy rate.

Plümper and Martin (2002) conduct a research about the relations between democracy, government expenses, and economic growth and reach the conclusion that there is a significant and positive correlation between democracy level and government spending. They suggest that autocratic governments tend to over-invest in rent-seeking activities whereas pure democracies have an incentive to over-invest in public goods. Profeta et. al. (2013) perform pooled OLS regression in their study and conclude that there is a positive relationship between total government spending and democracy index for different countries, in their research.

3. DEFINITIONS OF VARIABLES AND THE DATA SOURCES

GDP data is the growth rate of GDP at current prices. Trade openness (OPEN) is measured by the foreign trade volume as a share of GDP, that is, $(X+M)/GDP$ where X and M are export and import respectively. Dependent variable, G data is the growth rate of government expenditure at current prices. G, GDP, and OPENNESS series are obtained from "World Development Indicators" published by the World Bank.

In order to measure democracy (DEM), we use Freedom House's "Freedom in The World" data which is comparative assessment of global political rights and civil liberties. Political Rights and Civil Liberties are measured on a one-to-seven scale, with one representing the highest degree of Freedom and seven the lowest. For the ease of interpretation of the regression results, the original scores are rescaled by subtracting them from 7 so that higher values of the scores indicate higher level of democracy, i.e., the rescaled scores range from 1 (least democratic) to 7 (most democratic).

As a measure of corruption (COR), we use Corruption Perception Index (CPI) data obtained from Transparency International. As Bağdigen and Beşkaya (2005:36) pointed in their study, the data are drawn from multiple surveys and ranked according to countries' perceived level of corruption. The data of CPI has been updated annually since 1995. However, for the period 1980-94, the indices of corruption data are not available annually, but surveyed average data are available for the period 1980-85 and 1988-92 compiled by Transparency International. The missing data are for the years 1986, 1987, 1993, and 1994.

As we use time series analysis, it is necessary to apply time series data as many years as possible. To overcome such a problem, Wang (2001:112-3), Bağdigen and Beşkaya (2005:36) and Beşkaya and Bağdigen (2008:74) apply average index of CPI. To do so, they calculate missing years by applying previous and following two years average data. Similar to the methods of calculation suggested by these studies, we also preferred to calculate CPI for missing years 1986, 1987, 1993, and 1994 by applying previous and following two years' available CPI data .

In the original of the CPI data, the indexes range from 0 (most corrupt) to 10 (least corrupt). For the ease of interpretation of the regression results, the original indexes are rescaled by subtracting them from 10 so that higher values of the index indicate higher

corruption, i.e. the rescaled index range from 0 (least corrupt) to 10 (most corrupt).

Literacy rate (LIT) data are obtained from the Turkish Statistical Institute (TUIK). For the period of 1980-2004, TUIK has taken address based census once every five years. For the remaining years, we have rearranged the data by indexing with the population growth in mentioned years. UNEMP is the unemployment rate obtained from the Turkish Statistical Institute (TUIK).

4. TE MODEL AND METHODOLOGY

4.1. Model

We analyze the impacts of economic and political factors on government spending. For this purpose, we use the following regression model:

$$G_t = c_0 + c_1GDP_t + c_2UNEMP_t + c_3OPEN_t + c_4LIT_t + c_5DEM_t + c_6COR_t + c_7D1 + c_8D2 + c_9D3 + u_t \quad (1)$$

where G, GDP, UNEMP, OPEN, LIT, DEM, and COR denote the government spending, growth rate, gross domestic product growth rate, unemployment rate, trade openness, literacy rate, democracy scores, and corruption perception index respectively. D1 as a dummy variable has been created to identify crisis years. As is known, during crisis years, governments tend to rise expenses (D1=1, for the following year of crisis period in order to see the effect of crisis on macroeconomic variables clearly and 0 otherwise). D2 is another dummy variable indicating the regime (D2=1, for the democratic regime and 0 for the totalitarian regime under military tutelage, i.e. military coup). Dummy variable (D3) designed to reflect Partisan Theory that ideology of the political party in government has an impact on government spending. (D3=1, for the years with left wing political parties as the ruling party and 0 otherwise.) Respective coefficients are denoted by c_1 , c_2 , c_3 , c_4 , c_5 , c_6 , c_7 , c_8 and c_9 . Constant term and error term are represented by c_0 and u_t respectively.

4.2. Methodology

In regressing a time series variable on another time series variable(s), stochastic or deterministic trends may lead spurious regressions, uninterpretable student-t values and other statistics, goodness of fit measures which are 'too high' and, as a rule, make regression results rather difficult to evaluate (Gujarati, 2004). In the

sense of overcoming such problems the concept of 'cointegration' introduced by Granger (1981) is a real breakthrough in the time-series econometrics. Cointegration analysis allows nonstationary data to be used so that spurious results are avoided. In this case, technique we use for our model is the two-step cointegration analysis since the data series used in model may cause a spurious regression.

To test for stationarity, we use augmented Dickey-Fuller (ADF) t- statistics for the unit root tests (Dickey and Fuller, 1979). The ADF test is carried out by estimating the following regression:

$$Y_t = \beta + \delta Y_{t-1} + \sum_{i=1}^m \alpha_i \Delta Y_{t-i} - \tau + \varepsilon_t \quad (2)$$

where ε_t represents a pure white noise error term and where β and m stand for constant and lag length respectively. Required number of lagged difference terms to eliminate the autocorrelation between values of error term is determined according to Schwarz information criterion (SIC).

All variables used in our model are integrated of order one, $I(1)$, which means that they are non-stationary in levels but they become stationary after first differencing. Table 1 shows the ADF - t values for all variables.

Table 1. ADF-t Values for Unit Root Tests

| At Levels, I(0) | | | At First Differences, I(1) | | |
|-----------------|--------------|-------------------------|----------------------------|--------------|-------------------------|
| Variables | ADF-t values | Lag Length ¹ | Variables | ADF t-values | Lag Length ¹ |
| G | -1.688325 | 0 | ΔG | -6.429432 | 0 |
| GDP | -1.589623 | 0 | ΔGDP | -5.324408 | 0 |
| UNEMP | -2.384426 | 0 | ΔUNP | -4.885638 | 0 |
| OPEN | -2.796572 | 0 | $\Delta OPEN$ | -6.857761 | 0 |
| LIT | -3.609921 | 0 | ΔLIT | -4.114674 | 0 |
| DEM | -2.931547 | 0 | ΔDEM | -7.099801 | 0 |
| COR | -0.665190 | 0 | ΔCOR | -3.958314 | 0 |

** : Significant at 1% level. All critical values are based on MacKinnon (1996) critical values.

1: Lag lengths are chosen according to Schwarz information criterion (SIC).

Any equilibrium theories that involve these variables require the existence of a combination of the variables to be stationary. Otherwise, any deviation from equilibrium will not be temporary and also, as mentioned before, the results obtained could be misleading

or even completely spurious. So the most appropriate way to overcome this problem is to apply cointegration analysis.

4.2.1. Cointegration Tests

The simple idea behind cointegration is that if two or more series move closely together in the long-run, the difference between them is constant. In this context, we perform Engle and Granger (1987) type of cointegration test, a two-step procedure that identifies long run relationship between two nonstationary variables. First, static long-run equation is estimated as follow:

$$G_t = c_0 + c_1GDP_t + c_2UNEMP_t + c_3OPEN_t + c_4LIT_t + c_5DEM_t + c_6COR_t + c_7D1 + c_8D2 + c_9D3 + u_t \tag{1}$$

Next, the residuals from equation (1), e_t , are tested for stationarity. The regression to be estimated is:

$$\Delta e_t = \alpha + \beta e_{t-1} + \sum_{i=1}^k \gamma_i \Delta e_{t-i} + \varepsilon_t \tag{3}$$

If the series e_t is stationary by the ADF tests, i.e., integrated of order zero $I(0)$ which means a linear combination of $I(1)$ variables is stationary then the variables are said to be cointegrated.

Table 2. ADF-t Value for Cointegration Test from Static Long-run Regression

| Regression | ADF-t values | Lag Length ¹ |
|------------|--------------|-------------------------|
| Equation 1 | -4.745862* | 4 |

*: Significant at 1% level. All critical values are based on MacKinnon (1996) critical values.

1: Lag lengths are chosen according to Schwarz information criterion (SIC).

Table 2 shows the first part of our analysis ensuring cointegration for the Equation 1 at 1% significance level. That means the long-run regression of our model is cointegrated by the Engle Granger test. We could, thus, apply error correction model, which is the second step, to examine short run equilibrium. Long run and short run regression estimates as a part of two-step cointegration analysis we have applied, and some critical statistics are summarized in Table 3 and results will be discussed in a later section.

Table 3. Estimation Results of Cointegrated Regression and ECM

| Cointegrated Regression | ECM | Estimates of Coefficients | T-Values of Estimates | R^2 , DW, F-Statistic |
|--|--|--|--|--|
| $G_t = c_0 + c_1GDP_t + c_2UNEMP_t + c_3OPEN_t + c_4LIT_t + c_5DEM_t + c_6COR_t + c_7D1 + c_8D2 + c_9D3 + u_t$ | - | $c_0 = -85.34524$ $c_1 = 0.791579$ $c_2 = -4.618785$ $c_3 = -1.497490$ $c_4 = 1.920744$ $c_5 = -12.93100$ $c_6 = 11.25644$ $c_7 = 11.02333$ $c_8 = 2.330008$ $c_9 = 5.209538$ | -1.157878 4.456363** -1.351349 -2.281462* 2.210517* -2.804668* 1.492295 0.979203 0.279845 0.455680 | $R^2 = 0.869288$ DW=2.273545 F= 16.99556 |
| - | $\Delta G_t = re_{t-1} + c_0 + c_1\Delta GDP_t + c_2\Delta UNP_t + c_3\Delta OPEN_t + c_4\Delta LIT_t + c_5\Delta DEM_t + c_6\Delta COR_t + c_7D1 + c_8D2 + c_9D3 + \varepsilon_t$ | $r = -0.952471$ $c_0 = -0.066137$ $c_1 = 0.511642$ $c_2 = 0.794952$ $c_3 = -0.386704$ $c_4 = 1.308569$ $c_5 = -13.56257$ $c_6 = 3.887238$ $c_7 = 5.044095$ $c_8 = -1.609096$ $c_9 = -4.192082$ | -4.081207** -0.007023 2.319273* 0.285700 -0.472173 0.392332 -2.824203* 0.375039 0.557280 -0.174038 -0.436099 | $R^2 = 0.656311$ DW=1.517731 F= 4.010179 |

Notes: one star (*), and double star (**) indicate significance at 5% and 1% levels, respectively.

4.2.2. Error Correction Model (ECM)

The concept of error correction refers to the adjustment process between short run disequilibrium and a desired long run position with a self regulating mechanism. An ECM corrects for any disequilibrium between variables that are cointegrated, because the sequence of the discrepancy between observed and equilibrium states tends to decay to its mean, which is zero (Engle and Granger, 1987). So the ECM specification provides the means by which the short-run observed behavior of variables is associated with their long-run equilibrium growth paths.

As we find that all variables in our model are cointegrated, there is a long-run relationship among the variables although there may be disequilibrium in the short-run. So the error term can be used to tie the short-run behavior of explained variable (in this case, it is government spending growth) to its long-run value. (Gujarati, 2004:824) According to the Granger Representation theorem, when variables are cointegrated of $I(1)$, i.e., are stationary in their first differences, there must also be an error correction model (ECM) that describes the short-run dynamics or adjustments of the cointegrated variables towards their equilibrium values. In our case, Engle and Granger cointegration test we applied gives proper result for estimating also the ECM.

The short term dynamics of the relationship between them can be described by the following error correction model:

$$\Delta G_t = r e_{t-1} + c_0 + c_1 \Delta GDP_t + c_2 \Delta UNEMP_t + c_3 \Delta OPEN_t + c_4 \Delta LIT_t + c_5 \Delta DEM_t + c_6 \Delta COR_t + c_7 D1 + c_8 D2 + c_9 D3 + \varepsilon_t \quad (4)$$

where c_0 denotes constant and e_{t-1} represent the lagged residuals from Equation 1 (long-run regression), or error correction term. Note that the estimated coefficient r in the short-run equilibrium should have a negative sign and be statistically significant. Note also that, the coefficient should take a value between -1 and 0 since the error term coefficient indeed represents speed of adjustment and the value of coefficient tells us the percent of correction happening in first to going by this meaning the coefficient should not be smaller than -1 . According to the Granger Representation Theorem, negative and statistically significant r is a necessary condition for the variables in hand to be cointegrated. In practice, this is regarded as a convincing evidence and confirmation for the existence of cointegration found in the first step. Combinations of the two steps then provide a model incorporating both the static long-run and the dynamic short-run components.

5. INTERPRETATION OF ESTIMATION RESULTS

In this paper, firstly, stationarity properties of the data and the order of integration of the data are empirically investigated by the Augmented-Dickey Fuller (ADF) test. The test results show that all the variables are stationary in first differences. In this sense, lag length and ADF t -values related each variable are listed in Table 1. Since the variables are integrated of $I(1)$, it becomes possible to apply

cointegration test for the regression model (equation 1). As can be seen Table 2, estimated residuals from long run regression is found stationary providing cointegration relation at %1 significance level. Since required condition for ECM is provided short run impact of economic and politic factors on government spending is analyzed I the next step. Estimation results of cointegrated regression and error correction model are reported in Table 3.

As can be seen from the table, error correction coefficient, r , has the expected negative value of -0.952 , and it is significant at 1% level. The value is less than one, which implies that error correction mechanism works well, and hence, any divergence from long-run equilibrium corrects almost %95 in the following periods.

Estimates of coefficients from the cointegrated regression shows that there is a negative relationship between G and three variables, namely $UNEMP$, $OPEN$, and DEM in the long run. Estimation results of the ECM, however, reveals that there is inverse relationship between G and two variables, namely $OPEN$ and DEM , in the short run. Furthermore, GDP , $OPEN$, LIT , and DEM are significant at 1% and 5% levels in the long run whereas GDP and DEM are significant at 5% level in the short run. Some critical values from the table 3 could be interpreted. For instance, R^2 of 0.869 means that almost 87% of variation in the government expenditure is explained by the independent variables. The DW value of 2.273 obtained from the long run equation implies that we could reject null hypothesis of positively correlated disturbance term in the cointegrated regression. Also, the F-value of 16.99556 indicates that all the coefficients are jointly significant at 1% level.

As far as sign and significance of the variables are considered, coefficient of GDP growth rate is positive and significant both long and short run equations. In view of literature, this makes sense in theory because of Wagner's Law, which simply claims there has been considerable increase in revenue to the governments due to the economic developments over the years, there by leading to a boost in public expenditure.

In the cointegrated regression, there is a positive relationship between $UNEMP$ and G whereas in the ECM relation is negative. Normally it could be explained by that the higher government expenditure is the higher burden of tax, and high taxes could lead to decrease in profitability of private sector and cause to unemployment in the long run. But in this case coefficient of $UNEMP$ is not significant at even at 10% level both regression, so it doesn't give a reliable result.

Comparing the long run equation with the short run one from the table, it could be seen that coefficient of trade openness is negative in both and significant only in former. In the ECM, it is not significant which means there is no relationship between G and $OPEN$ in the short run. Despite the result of Turkey case, according to literature, more open countries has larger government expenditure to protect themselves against risks of international competition. For Turkey, it could be said that foreign capital inflow decreases government spending since enlargement of private sector crowds out public sector, and also removing barriers to foreign trade (such as tariff) may result in more narrow government sector. Thus effects reveal in the long term.

Coefficient of LIT obtained from is positive both long run and short run regression and significant in only former. Positive relationship of literacy rate and government spending is sensible since public investment on education leads to increase in literacy rate. Also, the long run significance shows that these investments bring results in long term.

Coefficient of democracy index is negative and significant in both long run and short run equation. Negative relationship of G and DEM could be explained by political business cycle approach that opportunistic governments intervene in the economy to increase their chances of re-election. Theoretically, if the level of democracy, i.e. political participation, rises then populist policies of governments increase spending.

Coefficients of COR obtained from both regression are positive expectedly. According to literature, less government intervention in economy decreases corruption since if the government has broad authority in some place then corruption like bribery and unearned income grows up. Yet, the coefficient of corruption perception index is insignificant so we could not rely on this coefficient.

Dummies $D1$, $D2$, and $D3$ are all insignificant statistically in both regressions, i.e. short run and long run. $D1$ represents dummy variable for crisis years in Turkey. Being insignificant of it means that government expenditure does not change dramatically for crisis periods. $D2$ stands for dummy variable for the regime. Accordingly, totalitarian regime, which stands for military coup, could not lead a structural break in economic policy in Turkey. $D3$ devotes dummy variable for political stance of ruling party. In literature, political view of ruling party determines economic policy and size of government both theoretically and empirically. Dummy $D3$, however, indicates that Partisan Theory is not valid for Turkey. This can be explained by the

fact that, as opposed to western political parties, there is no clear distinction among the Turkish political parties (regardless of whether they are left or right), in the sense of their economic point of view.

6. CONCLUSION

In this study, using time series analysis to the Turkish data for the period of 1980-2012 we analyze both long-run and short-run relationships between government spending and various measures of economic and political factors. Our estimation results shows that a rise in GDP growth rate, literacy rate, and corruption level increase government spending in the long run. The short run estimates of error correction model shows that economic and political factors used in our model behave as same as they do in the long run. One exception of this is unemployment rate. In the short run, there exists a positive relationship between unemployment rate and government expenditures which means a rise in unemployment rate decreases public spending.

Consequently, our study shows that political factors along with economic variables have some significant impacts on Turkey's government spending. This issue is crucial in some ways like each extra unnecessary expenditure of government will return to citizens as an extra tax burden. For example, this paper reveals that to avoid unnecessary spending of government, corruption level must decrease in Turkey since redundant public expenditure resulting from corruption affects citizens eventually in terms of tendency to illegal production methods or decrease in productivity caused by tax burden. Other than that more effective policies against unemployment are necessary to keep the reasonable level of public sector in the long run. Policy makers usually take into account just economics side for a country's sake. Political factors, on the other hand, stay in the background but we show that some political factors could be equally important for an economy in many aspects. So, in the future, policymakers should take political parameter of the country into consideration when they are determining the fiscal policy. This is the best possible way to achieve economic or political success.

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