

The Impact of Economic Factors on Voter Preferences: The Case of Turkey

Ekonomik Faktörlerin Seçmen Tercihlerine Etkisi: Türkiye Örneği

Barış ARMUTCU
b.armutcu@msn.com
<https://orcid.org/0000-0002-4865-026X>

Received : 05.12.2021
Revised : 17.12.2021
Accepted : 26.12.2021
Type of Article : Research

Ahmet TAN
Asst. Prof., Iğdır University
ahmet.tan@igdir.edu.tr
<https://orcid.org/0000-0001-9972-4372>

Keywords:

*Economic Voting,
Voter Behaviour,
Turkey Voter
Behaviour,
ARDL and Toda
Yamamoto Causality
Test*

ABSTRACT

The current study investigates the relationship between the votes of political parties and per capita gross domestic product, unemployment and inflation rates in Turkey for the years between 1990 and 2019. ADF, PP and Carrion-i-Silvestre unit root tests with structural breaks were used to determine the degree of stationarity of the variables. Maki cointegration test and ARDL bounds test were used under multiple structural breaks to determine the cointegration and short and long-term relationships between the variables. Finally, Toda Yamamoto Granger causality test was used to determine the causality relationship between the variables. The results revealed that per capita gross domestic product positively affects the vote rates of political parties in the short-term, and inflation affects the vote rates of political parties negatively in the long-term. As a result of the Granger causality test, a one-way causality relationship was determined between inflation and the vote rates of political parties. According to this result, it is seen that the increase in the inflation rate causes a decrease in the vote rates of political parties in Turkey. Another important finding is that the unemployment rate has no effect on the vote rates of political parties.

Anahtar Kelimeler:

*Ekonomik Oylama,
Seçmen Davranışı,
Türkiye Seçmen
Davranışı,
ADRL ve Toda
Yamamoto
Nedensellik Testi*

ÖZET

Bu makale 1990-2019 yılları için Türkiye’de siyasi partilerin oyları ile kişi başı gayri safi yurt içi hasıla, işsizlik ve enflasyon oranları arasındaki ilişkiyi incelemektedir. Değişkenlerin durağanlık derecelerini belirlemek için ADF, PP ve Carrion-i-Silvestre kırılmalı birim kök testleri kullanılmıştır. Eşbütünleşme ve değişkenler arasındaki kısa ve uzun dönem ilişkilerini belirlemek için çoklu yapısal kırılmalar altında maki eşbütünleşme testi ve ARDL sınır testinden yararlanılmıştır. Son olarak değişkenler arasındaki nedensellik ilişkisinin tespiti için Toda Yamamoto Granger nedensellik testi kullanılmıştır. Sonuçlar, kısa dönemde kişi başı gayri safi yurt içi hasılanın siyasi partilerin oy oranını olumlu etkilediğini ve uzun dönemde ise enflasyonun siyasi partilerin oy oranını olumsuz etkilediğini ortaya koymaktadır. Granger nedensellik testi sonucunda, enflasyon ile siyasi partilerin oy oranı arasında tek yönlü bir nedensellik ilişkisi tespit edilmiştir. Bu sonuca göre, enflasyon oranındaki artış Türkiye’de siyasi partilerin oy oranlarının azalmasına neden olduğu görülmektedir. Elde edilen diğer bir önemli bulgu ise, işsizlik oranının siyasi partilerin oy oranları üzerinde bir etkisinin olmadığıdır.

1. INTRODUCTION

Today, the importance of voter preferences in the determination of political power within the scope of political marketing is increasing with each day. The determinants of factors that affect voter preferences seem to be a controversial issue in the literature. Voter preferences may differ from country to country depending on the level of development and growth of countries. However, as seen in many studies today, the most influential factors on voter preferences are related to economic changes (Erdoğan, 2013: 27-28). The relationship between economic factors and voter preferences is referred to as economic voting theory in the literature (Erikson, 1989; Nannestad and Paldam, 1994).

According to economic voting theory, voters reward the political parties having good economic performance with their votes at the ballot box, while they punish poor economic performance (Lewis-Beck, 1990). While making this decision, voters first support the political party that benefits them the most, with a sense of self-interest (Kramer, 1971: 132; Çinko, 2006: 102-104). Secondly, voters vote for political parties that they believe can overcome economic problems by evaluating the past and future performances of political parties (Downs, 1957; Lau and Redlawsk, 2006: 182; Fair, 1978: 158-160; Erdoğan, 2004: 105).

The use of economic variables that can be easily accessed and evaluated by voters in studies conducted in this context increases the reliability of the results to be obtained. Among these variables, the variables of per capita gross domestic product, unemployment and inflation rates are widely utilized in the literature (Powell and Whitten, 1993: 396; Lewis-Beck and Paldam, 2000: 119-120). Although there are many studies in the literature under the name of economic voting theory, economic shocks, political shocks and structural breaks in the model, which are thought to have an effect on per capita gross domestic product, unemployment rate, inflation rate and the vote rates of political parties, have been ignored.

In this connection, in the current study, the effects of the per capita gross domestic product, unemployment and inflation rate variables on the rate of votes received by political parties were investigated. In this context, there is no study to the best of our knowledge that uses the variables used in the current study together, taking into account the structural breaks in Turkey, and investigates the causality relationships between the variables together with short and long-term coefficient estimation. In this respect, the current study is important in terms of determining the economic variables that are effective in the preferences of voters in Turkey in a concrete way and thus helping fill that gap in the literature.

2. LITERATURE REVIEW

In studies investigating the effects of economic voting theory or of economic variables on the vote rates of political parties, it is seen that the effects of economic variables on the vote rates of political parties have been generally examined. This situation may differ depending on the development level of countries and voters, and consistent results cannot be obtained. For this reason, studies conducted under the theory of economic voting and studies examining the effects of economic variables on the vote rates of political parties will be included here.

The studies by Downs (1957), Mueller (1970), Goodhart and Bhansali (1970), Kramer (1971), Stigler (1973), Arcelus and Meltzer (1975), Hibbs (1977), and Fair (1978) are the seminal studies conducted within the framework of the Theory of Economic Voting. In the research methods used in these studies, it is generally argued that economic factors affect voter preferences. In this connection, voters affected by economic factors punish or reward the political party in the current government with their votes in the elections. When the relevant studies in the literature are examined, it is seen that the findings obtained yield different results from each other. This may be due to different observation intervals, different data sets, different econometric methods and countries with different levels of development.

According to the study of Downs (1957), voters take into account their personal economic interests while exhibiting their voting behaviours. In addition, another important finding in this study is that voters hold the party in government directly responsible for the changes in their personal economic situations. The study by Kramer (1971) supports this finding of Downs. In Kramer's study, it was determined that the economic changes in the USA have a significant effect on voter preferences. Another remarkable finding in this study is that voters are extremely sensitive to the changes in their personal income levels and they exhibit voting behaviour accordingly.

Bulutay and Yıldırım (1969) examined the relationship between voters' voting behaviour and personal income increases. According to the results obtained in the study, it was concluded that the economic performance of the governments is the most important factor affecting the voting behaviour of voters. Arcelus and Meltzer (1975)

examined the effects of the unemployment and inflation variables on the congress elections held in the USA between 1896 and 1970 with regression analysis. As a result of the analysis, it was determined that only inflation among the macroeconomic variables affects voter preferences and participation rates. Lewis-Beck (1986) investigated the effects of economic conditions on votes in the study they conducted in England, France, Germany and Italy. As a result of the analyses made, it was determined that the economic conditions are important on the voting behaviour of voters in these countries. In addition, another important finding in the study is that European voters make their voting decisions by conducting past and future-oriented analyses.

In their study, Kim and Fording (2001) investigated the reason for the changes in voter ideology by using economic indicators of 13 countries between 1952 and 1989. As a result of this study, it was determined that voter ideology is significantly affected by economic changes. In addition, while it was determined that the biggest effect on the change in voter ideology is inflation, no significant relationship was found between unemployment and economic growth and voter ideology. Stevenson (2001) found in his study on 14 countries that voter preferences shifted to the left with economic growth and to the right during the recession. However, in the study, it was determined that while the voter ideology is in the same direction with GDP and growth rates, it has an inverse correlation with inflation and unemployment rates.

Markussen (2008) conducted a study to investigate the effect of economic changes on the political sensitivities of voters in OECD countries. As a result of the study, it was determined that economic growth within the scope of political sensitivity shifts the preferences of voters to the left. In the study of De Neve (2009), the effect of changes in the economy on voter behaviour and ideology was investigated. As a result of the analysis, it was determined that the voter ideology is affected by the growth rate, inflation, unemployment, income growth rate, military expenditures and changes in the inequality index.

In their study, Dean and Croft (2009) found that the voters make decisions according to their own interests and that they make a cost-benefit analysis while determining which party to vote for. Çınar (2010) determined that the most important macroeconomic variable affecting voter preference is inflation. Kapusizoğlu (2011) investigated the behaviour of voters against economic crises. As a result of this study, it was determined that economic crises are an important factor in voter preferences. According to the study of Başlevent and Kirmanoğlu (2016), economic conditions are an important factor in the party preferences of voters. Eroğlu (2019) examined the effect of economic growth on the vote rates of political parties. As a result of the study, it was determined that domestic economic growth has a positive effect on the vote rates of the party in the current government.

3. MODEL AND DATA

Given the delineations in the introduction and literature review sections, it can be argued that the vote rates of political parties are affected by positive and negative developments in economic factors. Vote rates of political parties can be defined as a function of per capita gross domestic product, unemployment and inflation rates. The time series form of the model used in the current study can be expressed as follows;

$$\ln VOT_t = \beta_0 + \beta_1 \ln GDP_t + \beta_2 \ln UNE_t + \beta_3 \ln INF_t + \vartheta_t$$

In this time series model, $\ln VOT_t$ represents the votes of political parties, $\ln GDP_t$ represents per capita gross domestic product, $\ln UNE_t$ represents the unemployment rate, $\ln INF_t$ represents the inflation rate calculated by using the consumer price index (CPI), which measures the rate of change of consumer goods and services over time and μt represents the error term. Since the results of the growth rates yield more reliable results than the linear forms, the percentage growth rates of all the series were used in the current study. The data used consist of observations between 1990 and 2019. The series used in the study were obtained from the Supreme Election Council (SEC), World Development Indicators (World Bank), International Financial Statistics (IMF) and Turkish Statistical Institute (TSI) database.

4. METHODS AND FINDINGS

In the current study, the effects of per capita gross domestic product, unemployment and inflation rates on the vote rates of political parties were investigated. In this context, unit root tests, cointegration analysis tests, short and long term-coefficient estimation tests and causality test were used to examine the relationship between

variables in the study. A four-stage process was followed for the analysis of the created time series model. First, unit root tests were performed to determine the stationarity of the variables. Secondly, cointegration tests were carried out considering structural breaks. Third, short and long-term coefficient estimation was made with the autoregressive distributed lag bounds test. Finally, the causality test was conducted to determine the causality relationship and its direction between the variables.

In this context, first of all, in order to make the cointegration relationship between the variables and to make the short and long term coefficient estimation, it is necessary to determine the variables' degree of stationarity. To this end, Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests were used. In the ADF and PP unit root test assumption, in the H0 hypothesis, it is accepted that the series has a unit root, that is, the series is not stationary, while in the H1 hypothesis, it is decided that the series is stationary, that is, it does not have a unit root (Tekbaş, 2020: 99). If the series is not stationary, the unit root analysis is continued by taking the difference of the series. The results of ADF and PP unit root tests that do not take into account structural breaks are shown in Table 1.

Table 1. Unit Root Tests without Structural Breaks

Augmented Dickey-Fuller (ADF) Test				
Variables	Level		First Differences	
	Constant	Constant and Trend	Constant	Constant and Trend
VOT	-0.876 (0.781)	-2.608 (0.279)	-5.736 (0.000)	-5.573 (0.000)
GDP	-5.660 (0.000)	-5.640 (0.000)	-9.248 (0.000)	-9.080 (0.000)
INF	-4.486 (0.001)	-2.309 (0.414)	-2.218 (0.204)	-3.731 (0.037)
UNE	-1.030 (0.728)	-2.222 (0.460)	-4.771 (0.000)	-4.757 (0.003)
Phillips-Perron (PP) Test				
Variables	Level		First Differences	
	Constant	Constant and Trend	Constant	Constant and Trend
VOT	-0.889 (0.777)	-2.649 (0.263)	-5.744 (0.000)	-5.583 (0.000)
GDP	-5.755 (0.000)	-6.689 (0.000)	-22.352 (0.000)	-25.181 (0.000)
INF	-0.888 (0.777)	-1.877 (0.639)	-5.435 (0.000)	-5.334 (0.000)
UNE	-1.058 (0.718)	-2.216 (0.463)	-4.903 (0.000)	-4.989 (0.002)

Note: The values specified in parentheses are the values of prob.

According to the results of the ADF and PP unit root tests shown in Table 1, the VOT, INF and UNE variables are with the unit root at level values; that is, they are not stationary. For these variables, the H1 hypothesis was rejected and the H0 hypothesis was accepted. When the first difference of the VOT, INF and UNE variables was taken, it was determined that they are not with the unit root, that is, they are stationary. In this context, the H0 hypothesis was rejected and the H1 hypothesis was accepted. The GDP variable was found to not contain a unit root at both the level value and the first difference value, that is, it is stationary. For the GDP variable, the H0 hypothesis was rejected at the level value and the H1 hypothesis was accepted.

In addition, the CS multiple structural break unit root test, which was developed by Carrion-i-Silvestre et al. (2009) and allows structural breaks related to the variables examined, was used. This test detects break points using the Bai and Perron (2003) algorithm with the help of the quasi-GLS (Generalized Least Squares) method.

CS is based on the test statistics they developed while examining the unit root test under structural breaks. When the test statistics calculated in the CS test are less than the critical value at the 5% significance level, it is accepted that there is a unit root under the structural breaks (H0 hypothesis). If the calculated test statistics are greater than the critical value at the 5% significance level, it is accepted that there is no unit root under structural breaks (H1 hypothesis). The results of the CS test are shown in Table 2;

Table 2. Carrion-i-Silvestre et al. (2009) Unit Root Test Results

Variables	P_T	MP_T	MZ_α	MSB	MZ_t	Break Dates (3)
<i>VOT</i>	16.25 [5.72]	17.22 [5.72]	-11.00 [-31.55]	0.21 [0.12]	-2.31 [-3.95]	1992; 1998; 2001
<i>UNE</i>	6.22 [4.61]	6.23 [4.61]	-22.27 [-27.69]	0.14 [0.14]	-3.33 [-3.68]	1993; 1996; 2007
<i>GDP</i>	2.00* [5.94]	2.03* [5.94]	-98.02* [-31.79]	0.07* [0.12]	-6.98* [-3.97]	2001; 2004; 2009
<i>INF</i>	4.43* [5.45]	4.45* [5.45]	-40.24* [-31.54]	0.11* [0.12]	-4.48* [-3.94]	1994; 1998; 2005
ΔVOT	3.93 * [6.22]	3.86 * [6.22]	-51.97 * [-30.99]	0.09 * [0.12]	-5.07 * [-3.91]	-
ΔUNE	4.26 * [5.54]	4.47 * [5.54]	-20.45* [-17.32]	0.15 * [0.16]	-3.19 * [-2.89]	-
ΔGDP	1.20 * [6.02]	1.18 * [6.02]	-161.39 * [-31.01]	0.05 * [0.12]	-8.97 * [-3.89]	-
ΔINF	3.77 * [4.61]	3.78 * [4.61]	0.04 [-27.69]	1.16 [0.14]	4.90 [-3.68]	-

Note: The numbers in brackets are critical values generated with bootstrap at 5 percent level, * indicates significance at 5 percent level.

Table 2 shows the results of the Carrion-i Silvestre (2009) multiple structural break unit root test based on quasi-GLS. According to the results of the CS unit root test, three important break points were determined for each variable within the scope of the time span examined. As can be seen in Table 2, the VOT and UNE variables are not stationary at their level values and are stationary when the first difference is taken. The GDP and INF variables were determined to be stationary at both level values and first difference values. When some break points of the vote rates of political parties are evaluated, it is seen that the 1997 break point may be due to the effect of the post-modern coup occurring in Turkey with the decisions made by the NSC (National Security Council) on 28 February 1997. The break point in the votes of political parties in 2001, on the other hand, refers to the great political instability and political crisis in Turkish politics, which started with the debate between then-President Ahmet Necdet Sezer and then-Prime Minister Bülent Ecevit at the NSC meeting on February 19, 2001. It is seen that the 2001 break point in the GDP variable may be caused by the global economic crisis in 2001, the 1998 break point in the INF variable may be caused by the Russian crisis, and the 2007 break point in the UNE variable may be caused by the great economic recession that started in the USA in 2007 and affected the whole world until 2009. From this point of view, it is seen that the break points determined by the CS test have successfully detected many important internal and external political and economic events in Turkey during the examined period.

In the presence of structural breaks, the results obtained in the cointegration tests that examine the long-term relationship between the variables, as in the unit root tests, may yield biased results (Westerlund and Edgerton,

2006). In addition, for the analyses made on non-stationary time series to be significant and reflect the real relationships, there should be a cointegration relationship between the series (Gujarati, 1999: 725-726). Considering all these assumptions, in order to test the cointegration relationship in the current study, the cointegration test developed by Maki (2012) and which takes structural breaks into account internally was used. The Maki (2012) structural break cointegration test allows up to five structural breaks. The hypotheses for the Maki cointegration test are; H0: There is no cointegration under structural breaks, H1: There is cointegration under structural breaks. The results of the Maki (2012) structural break cointegration test are shown in Table 3.

Table 3. Maki (2012) Cointegration Test Under Multiple Structural Breaks

Test Statistics	Critical Value			Break Dates
	(%1)	(%5)	(%10)	(5)
-20.088***	-6.784	-6.250	-5,976	1994, 1997, 2000, 2005, 2009

Note: *, **, *** indicate the existence of cointegration relationship at the significance level of %1, %5, %10, respectively. Model 1, which gave the most significant result, was used in the analysis. Break dates are structural break dates determined internally by the test. Critical values are taken from the study of Maki (2012).

As can be seen in Table 3, the test statistics calculated is -20.008. Since this test statistics value is smaller than the critical values calculated at the 5% significance level, it is accepted that there is a cointegration relationship between the variables. According to the test results obtained, the H0 hypothesis was rejected and the H1 hypothesis was accepted. In addition, the five structural break dates detected by the Maki cointegration test are shown in Table 3.

The break date in 1994 seems to be related to the 1994 economic crisis, the break date in 1997 seems to be related to the effect of the post-modern coup that took place with the decisions of the National Security Council on February 28, 1997, the break date in 2000 seems to be related to the 1998 Russian crisis and the delayed effect of two very large earthquakes in Turkey in 1999, the break date in 2005 seems to be related to the effect of the economic recession after the excessive foreign exchange outflow in Turkey, and the 2009 break data seems to be related to the lagged effect of the 2008 global crisis.

After determining the cointegration relationship between the vote rates of political parties and per capita gross domestic product, unemployment rate and inflation rate, the autoregressive distributed lag bounds test (ARDL) was used to estimate the short and long-term coefficients. When the diagnostic test results of the autoregressive distributed lag bounds test model were evaluated, it was found that there is no variance problem in the model according to the Breusch-Pagan-Godfrey and ARCH test, that there is no autocorrelation in the model according to the Breusch-Godfrey LM test, that the error term is normally distributed according to the Jarque-Bera test, that the model is constructed according to correct specifications and that the calculated F bond value is significant at the level of 5% (Tekbaş and Oğuz, 2020: 145).

In this connection, ARDL test can be performed to determine the long and short-term relationships between the series. ARDL test results are given in Table 4. The break dates determined in Maki (2012) cointegration test were included in the analysis as dummy variables in ARDL test (DUM1:1994, DUM2:1997, DUM3:2000, DUM4:2005 and DUM5:2009).

Table 4. Short and Long-Term ARDL Cointegration Coefficients Results

ARDL Short-Term Coefficients				
Dependent Variable: VOT				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
CointEq(-1)	-1.037455	0.142240	-7.293709	0.0000*
D(UNE)	-0,485192	0.467874	-1.037014	0.3173
D(GDP)	0.221695	0.085360	2.597172	0.0211**
D(İNF)	0.091019	0.057783	1.575176	0.1375
D(DUM 1)	0.506554	3.149153	0.160854	0.8745
D(DUM 2)	12.105213	3.093503	3.913108	0.0016**
D(DUM 3)	-3.122324	2.637408	-1.183861	0.2562
D(DUM 4)	-7.569492	2.579007	-2.935041	0.0109**
D(DUM 5)	5.305814	2.609897	2.032959	0.0615***
ARDL Long-Term Coefficients				
Dependent Variable: VOT				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
UNE	-0.767918	0.548724	-1.399460	0.1834
GDP	0.129445	0.171931	0.752889	0.4640
İNF	-0.479533	0.102536	-4.676734	0.0004*
DUM 1	-0.499685	4.258839	-0.117329	0.9083
DUM 2	7.545964	4.577912	1.648342	0.1215
DUM 3	-1.800367	4.019707	-0.447885	0.6611
DUM 4	-11.108926	4.591601	-2.419401	0.0297**
DUM 5	2.594105	2.640444	0.982450	0.3426
C	63.309145	10.837090	5.841895	0.0000*

Note: DUM1:1994, DUM2:1997, DUM3:2000, DUM4:2005 and DUM5:2009 dummy variables indicating the breaks in the given years. *, **, *** indicate the significance of the series at the levels of 1%, 5%, 10%, respectively.

As can be seen in Table 4, per capita gross domestic product affects the vote rates of political parties in a positive and statistically significant way in the short-term. It is seen that an increase in per capita gross domestic product in a short term will increase the vote rates of political parties. This might be because voters positively evaluate any increase in their personal incomes that may occur in a short-term, but they become insensitive to the increase in their personal incomes in a long-term. In the short-term, the DUM2 and DUM5 dummy variables have a positive effect, while the DUM4 dummy variable has a negative effect on the vote rates of political parties. In the long-term, a relationship was found between the inflation rate and the vote rates of political parties. An increase in the inflation rate decreases the vote rates of political parties in the long-term. However, it was determined that only the DUM4 dummy variable has a negative effect on the vote rates of political parties in the long-term. After estimating the short and long-term coefficients of the variables, the causality relationship between the variables was investigated with the Toda-Yamamoto Granger causality test. The results of the Toda-Yamamoto Granger causality test are given in Table 5.

Table 5. Toda-Yamamoto Granger Causality Test Results

Dependent Variable	VOT	UNE	GDP	İNF
VOT	-	0.844 (0.6556)	1.151 (0.5622)	11.958 (0.0025) ***
UNE	0.168 (0.9190)	-	0.641 (0.7255)	3.666 (0.1599)
GDP	0.036 (0.9819)	3.623 (0.1634)	-	1.266 (0.5309)
INF	0.912 (0.6338)	0.068 (0.9662)	1.525 (0.4664)	-

Note: *, ** and *** indicate statistical significance at 10, 5 and 1 percent levels respectively. Numbers in brackets are prob. values.

According to the results of the Toda-Yamamoto Granger causality test in Table 5, there is a one-way causality relationship from only the inflation rate to the vote rates of political parties. While this one-way relationship, which is determined from the inflation rate to the vote rates of political parties, is statistically significant at the 5% level, the coefficient of this relationship was determined to be 11.958. On the other hand, a causality relationship from per capita gross domestic product and unemployment rate to the vote rates of political parties could not be determined. The results obtained when per capita gross domestic product, unemployment rate and inflation rate are dependent variables are not statistically significant, and there is no causal relationship between these variables.

5. CONCLUSION AND DISCUSSION

The current study examined the relationships between the vote rates of political parties and per capita gross domestic product, unemployment rate and inflation rate in Turkey for the years between 1990 and 2011. In order to analyze this relationship, firstly, the degree of cointegration of the variables was determined with unit root tests. Secondly, the cointegration relationship between the variables was investigated with the Maki cointegration test, which takes into account structural breaks internally. Third, the autoregressive distributed lag bounds test (ARDL) was used to determine the short and long-term coefficients of the variables. Finally, the Toda-Yamamoto Granger causality test was used to determine the causality and direction of causality between the variables. On the basis of the results of the analyses, it was determined that the VOT and UNE variables are stationary at the first difference $I(1)$, while the GDP and INF variables are stationary at the level values $I(0)$. According to the cointegration test under multiple structural breaks, there is a cointegration relationship between the variables and they move in the same direction in the long-term. On the other hand, according to the ARDL bounds test results, there is a statistically significant and positive relationship between per capita gross domestic product and the vote rates of political parties in the short-term. However, in the long-term, there is a statistically significant and negative relationship between the inflation rate and the vote rates of political parties. Finally, the results of the causality test have revealed that there is a one-way Granger causality relationship from the inflation rate to the vote rates of political parties in Turkey.

The one-way causality relationship between the inflation rate and the vote rates of political parties indicates that the economic policies to be made towards inflation will affect the vote rates of political parties. Based on this finding, it can be said that Turkish voters will punish political parties with their votes at the ballot box in the face of negative inflationary policies. In fact, the results obtained from the long-term coefficient estimation support this finding because the negative developments in the inflation rate do not directly affect all voters at the same time, reducing their quality of life. The finding of the current study that the high inflation reduces the vote rate of the ruling party concurs with the findings reported by Lewis-Beck (1990), Durr (1993), Stevenson (2001), Kim and Fording (2001), De Neve (2009), Markussen (2008), Adaman et al., (2001), Chappel and Veiga (2000), Ercins (2007), Armutcu and Tan (2021) and Çarkoğlu (1997).

On the other hand, it can be said that voters reward political parties with their votes at the ballot box in the short-term, in the face of positive developments in per capita gross domestic product. This shows that voters will continue to support the political party in the current government due to a sense of self-interest and an increase in

their personal income in the short-term. The finding of the current study that the increasing per capita gross domestic product increases the vote rate of the ruling party is similar to the findings reported by Kramer (1971), Kim and Fording (2001), Nordhaus (1975), Tuft (1980), Bulutay and Yıldırım (1969), Başlevent, Kirmanoğlu and Şenatalar (2009), Çarkoğlu (1997), Akarca and Tansel (2006), Akarca and Tansel (2009) and Fair (1996).

Another important finding of the current study is that the unemployment rate does not have an effect on the preferences of voters, both in the causality analyses and in the short and long-term coefficient estimates. The reason for this might be that the unemployment rate does not affect all voters at the same time and at the same rate, and it may be due to the successful economic policies applied to the unemployed citizens in Turkey. When all these findings are evaluated, it is seen that the economic voting theory is valid in Turkey. It is suggested to political parties and policy makers in Turkey that they take into account the factors of inflation and per capita GDP within the scope of political marketing and that they can maintain or increase their votes with successful campaigns and policies.

REFERENCES

- ADAMAN, F., ÇARKOĞLU, A. and ŞENATALAR, B. (2001)., “*Hane Halkı Gözünden Türkiye’de Yolsuzluğun Nedenleri ve Önlenmesine İlişkin Öneriler*”, **TESEV Yayınları**, No:24, İstanbul.
- AKARCA, A. T. and TANSEL, A. (2009) “*Social, Political and Economic Determinants of Turkish Voter Choice in the 2002 Parliamentary Election*”, **Economic Research Forum**.
- AKARCA, ALİ T. and TANSEL, A. (2006), “Economic Performance and Political Outcomes: An Analysis of the Turkish Parliamentary and Local Election Results Between 1950 and 2004”, **Public Choice**, 129(1-2), ss. 7-105.
- ARCELUS, F. and MELTZER, A. H. (1975), “*The effect of aggregate economic variables on congressional elections*”, **American Political Science Review**, 69 (04), ss. 1232-1239.
- ARMUTCU, B. and TAN, A. (2021), “*The Effect of Economic Voting Theory on Voter Preference within the Scope of Political Marketing*”, **International Journal of Business & Economic Studies, Year: 2021, Vol: 3, No: 1, pp.55-64**.
- BAI, J. and PERRON, P. (2003), “*Computation and Analysis of Multiple Structural Change Models*”, **Journal of Applied Econometrics**, S. 18, s. 1-22.
- BAŞLEVENT, C. and KIRMANOĞLU, H. (2016), “*Economic voting in Turkey: perceptions, expectations, and the party choice*”, **Research and Policy on Turkey**, 1(1), ss. 88-101.
- BAŞLEVENT, C., KIRMANOĞLU, H. and ŞENATALAR, B. (2009), “*Party preferences and economic voting in Turkey (now that the crisis is over)*”, **Party Politics**, 15(3), ss. 377-391.
- BULUTAY, T. and YILDIRIM, N. (1969), “*Türk Seçmenlerinin Oy Verme Eğilimlerinde İktisadi Sebeplerin Üzerinde Bir Deneme*”, **SBF Dergisi**, 23/4 (1968), ss. 7-42.
- CARRION-I-SILVESTRE, J. L. KIM, D. and PERRON, P. (2009), “*GLS-based unit root tests with multiple structural breaks under both the null and the alternative hypotheses*”, **Econometric Theory**, 25(6), 1754–1792.
- CHAPPEL, H. W. and VEİGA, L. G. (2000), “*Economic and Elections in Western Europe: 1960-1997*”, **Electoral Studies**, 19: 183-97.
- ÇARKOĞLU, Ali (1997), “*Macro Economic Determinants of Electoral Support for Incumbents in Turkey, 1950–1995*”, **New Perspectives on Turkey**, 17, ss. 75-96.
- ÇINAR, A. (2010) , “*Ekonominin seçmen ideolojisi üzerine etkisi: Türkiye örneği*”, **Doktora tezi**, DEÜ Sosyal Bilimleri Enstitüsü.
- ÇİNKO, L. (2006) , “*Seçmen Davranışları İle Ekonomik Performans Arasındaki İlişkilerin Teorik Temelleri Ve Türkiye Üzerine Genel Bir Değerlendirme*”, **Ankara Üniversitesi SBF Dergisi**, 61 (01) , ss. 103-116.
- DE NEVE, J. E. (2009), “*Ideological Change and the Economics Voting Behavior in the 1920-2008*”, **Annual Meeting of the American Political Science Association and LSE Political Science and Political Economy Seminar**.

- DEAN, D. and ROBIN, C. (2009), "*Reason and choice: A conceptual study of consumer decision making and electoral behavior*", **Journal of Political Marketing** 8: 130-146.
- DICKEY, D. A. and Fuller, W. A. (1981), "*Distribution of the Estimators for Autoregressive Time Series with a Unit Root*", **Econometrica**, 49, ss.1057-1072.
- DOWNS, A. (1957), "*An Economic Theory of Democracy*", **New York: Haper & Row Collins Pub.**
- DURR, R. H. (1993), "*What Moves Policy Sentiment?*", **The American Political Science Review**. Vol 87. No 1. ss. 158-170.
- ERCINS, G. (2007), "*Türkiye'de Sosyo-Ekonomik Faktörlere Bağlı Olarak Değişen Seçmen Davranışı*", **CÜ İktisadi ve İdari Bilimler Dergisi**, 8(2), ss. 25-40.
- ERDOĞAN, E. (2013), "*Denklemleri Gözden Geçirmek: Türkiye Bağlamında Partizanlık ve Ekonomik Oy Verme Hipotezi*", **İktisat İşletme ve Finans**, 28(325), 27-60.
- ERDOĞAN, S. (2004), "*Siyaset-Ekonomi İlişkileri*", **Değişim Yayınevi**, İstanbul.
- ERIKSON, R. S. (1989), "*Economic conditions and the presidential vote*," **The American Political Science Review**, 567-573.
- EROĞLU, M. H. (2019), "*Economic voting and relative importance of domestic and international reference points*", **Doctoral Thesis**.
- FAIR, R. C. (1996), "*Econometrics and presidential elections*", **Journal of Economic Perspectives**, 10(3), ss. 89-102.
- FAIR, R. C. (1978) "*The effect of economic events on votes for president*", **The Review of Economics and Statistics**, ss. 159-173.
- GOODHART, C. A. E. and Bhansali, R. J. (1970), "*Political Economy*," **Political Studies**, 18, ss. 43-106.
- GUJARATI, D.N. (2012). "Temel Ekonometri" Basic Econometrics, (çev.) Şenesen, Ü & Günlük Şenesen, G., İstanbul: **Literatür Yayınları**. ss. 725-726
- HIBBS, D. A. (1977), "*Political Parties and Macroeconomic Policy*", **American Political Science Review**, 71(04), ss. 1467-1487.
- KAPUSIZOĞLU, M. (2011), "*Ekonomik Kriz, 2002 Seçimleri ve Seçmen Tercihi*", **Sosyal ve Beşeri Bilimler Dergisi**, 3(2), ss. 121-131.
- KİM, H. and FORDING, R. C. (2001), "*Voter Ideology, the Economy, and the International Enviroment in Western Democracies, 1952-1989*", **Political Behavior**, Vol:23, No:1, ss. 53-73.
- KRAMER, G. H. (1971), "*Short-term fluctuations in U.S. voting behavior, 1896-1964*", **American Political Science Review**, 65: ss. 131-143.
- LAU, R. R. and REDLAWSK, D. P. (2006), "*How voters decide: Information processing in election campaigns*", **Cambridge University Press**.
- LEWIS-BECK, M. S. and Paldam, M. (2000), "*Economic Voting: An Introduction*", **Electoral Studies**, 19 (2-3) ,113-121. [http://dx.doi.org/10.1016/S0261-3794\(99\)00042-6](http://dx.doi.org/10.1016/S0261-3794(99)00042-6).
- LEWIS-BECK, M. S. (1990), "*Economics and Election: The Major Western Democrades*", **The University of Michigan Press**.
- LEWIS-BECK, M. S. (1986), "*Comparative Economic Voting: Britain, France, Germany, Italy*", **American Journal of Political Science**, 30(2), ss. 315-346.
- MAKI, D. (2012), "*Tests for cointegration allowing for an unknown number of breaks*", **Economic Modelling**, 29(5), 2011-2015.
- MARKUSSEN, S. (2008), "*How the Left Prospers From Prosperity*", **European Journal of Political Economy**, 24. ss. 329-342.
- Mueller, J. E. (1970), "*Presidential Popularity from Truman to Johnson*", **American Political Science Review**, 64: ss. 18-34.

- NANNESTAD, P. and PALDAM, M. (1994), “*The VP-function: A survey of the literature on vote and popularity functions after 25 years*”, **Public Choice**, 79(3), 213-245.
- NORDHAUS, W. (1975), “*The Political Business Cycle*”, **Review of Economic Studies**, 42, ss. 1969 – 1990.
- PESARAN, M. H. and SHIN, Y. (1995), “*An autoregressive distributed-lag modelling approach to cointegration analysis*”, **Econometric Society Monographs**, 31, ss. 371- 413.
- PHILLIPS, P. CB. and PERRON, P. (1988), “*Testing for Unit Roots in Time Series Regression*”, **Biometrika**, 75, ss.335-346.
- POWELL, G. B. and WHITTEN, G. D. (1993), “*A Cross-National Analysis of Economic Voting: Taking Account of the Political Context*”, **American Journal of Political Science**, 37/2, ss. 391-414.
- STEVENSON, R. T. (2001), “*The Economy and Policy Mood: A Fundamental Dynamic of Democratic Politics?*”, **American Journal of Political Science**. Vol: 45. No: 3. ss. 620-633. <http://www.jstore.org/stable/2669242>.
- STIGLER, G. (1973), “*General Economic Conditions and National Elections*”, **American Economic Review Papers and Proceedings**, 63, ss. 160 – 167.
- TEKBAŞ, M. (2020), The Relationship Between Export Diversification and Economic Development In Turkish Economy, Erdoğan, S., Akalin, G. (Ed), **Different Aspects of Economic Development**, 1. Edition, Ankara.
- TEKBAŞ, M. and OĞUZ, İ.H., (2020), Krizden Çıkış için Yenilikçi Yaklaşım: Beşeri Sermaye, Teknolojik Gelişme ve Üretkenlik, Bulut, Ö.U. and Aykırı, M. (Ed), **Ekonomik Krizler Ve Yenilikçi Yaklaşımlar Teoriden Uygulamaya**, 1. Edition, Konya.
- TODA, H. Y. and YAMAMOTO, T. (1995), “*Statistical Inference in Vector Autoregressions with Possibly Integrated Processes*”, **Journal of Econometrics**, 66, ss. 225-250.
- TUFTE, E. R. (1980), “*Political Control of the Economy*”, **Princeton University Press**, Princeton, NJ. <https://books.google.com.tr/books?id=XApC8GX0F4MC>.
- WESTERLUND, J. and EDGERTON, D. (2006), “*Simple Tests for Cointegration in Dependent Panels with Structural Breaks*”, Lund University, Department of Economics, **Working Papers**, No: 13.