Is Turkish Electorate Homo-economicus?

Ismail H. GENC, Hasan SAHIN, Selahattin BEKMEZ

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Abstract

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Introduction

The likely impact of economic variables on political decision-making has been the subject matter of a large volume of scholarly research for both the US and many other countries[1]. Although it has been anecdotally recognized that the economic issues tend to occupy a significant portion of the political debate in at least politically stable economies, the empirical evidence together with a consistent theory seems to be hard to come by. In other words, most of the literature argues that voters are not indifferent to economic policies. And politicians are aware of that. But an empirically testable theory agreed upon by the researchers in the field is yet to come.

In this paper, we investigate the economic behavior of the Turkish electorate, who are the self-interested voters, in casting their votes during elections with the help of a simple comparison exercise based on measurable macroeconomic variables, which indicate the welfare of the voters. We also test several other relevant hypotheses such as voter myopia, and government intermingling with the upcoming elections. We postulate that the electorate may prefer to look at several criteria in making their

[1] Corresponding author. Please address correspondence to: Dr. Selahattin Bekmez, Mugla University, (I.I.B.F. – Iktisat Bolumu), Faculty of Economic and Administrative Sciences, Kotekli, Mugla / Turkey Phone: (252) 223 8003 Ext: 4533 Fax: (252) 223 8004 Email: sbekmez@yahoo.com

decisions such as comparing the current welfare level to the previous period's welfare, or to the initial welfare level which prevailed in the first year of the government, or to an average welfare level, or comparing the average welfare level to the initial welfare level.

The participants of the political process make their decision based on their well-being during the reign of the government in power on the voter side. If the electorate is "no worse off" in the election year than before, they will cast their vote in favor of the government, or else they will choose an opposition party.

Additionally, if the electorate chooses a party based on a comparison of final (election year) welfare level to that of the previous year, this would indicate that the electorate has a short memory. Behavior compatible with other criteria outlined below is considered as a sign of a longer voter memory.

By using data on election results and various real income variables between 1950 and 1991, we show that the criteria we develop can predict the outcome of all elections in Turkey. In the remainder of the paper, we lay out the theoretical underpinnings of the economic criteria possibly to be employed in making decisions in the political process as well as the politicians' behavior. Then following sections include a discussion on the empirical methods, and a brief discussion on the data. We present our findings before concluding our research in the last section.

The Theoretical Model

We model the Turkish elections as a two-choice phenomenon, that is, the voter can vote for the incumbent party (the sitting government) or the opposition party. Given that usually only one of the two major political parties won the majority of the electoral vote cast, it is a reasonable assumption to think that the race is between two significant choices when it comes to elections: Vote for the incumbent party or put the alternative party to the office. Other than the military coup periods, it is usually the same parties that run for the elections throughout the sample period considered in this study. Even soon after the impact of the military rule came to an end, the same old parties reemerged under different names, but under the leadership of the same (or like-minded) politicians. A similar modeling is Fair (1978) paper in which the US presidential elections are laid out as a binomial decision variable.

One of the common features of almost all election papers is a voting behavior function, which is a function of certain explanatory variables. As in Fair (1978), we postulate the behavior of the *self-interested* ith voter at elections held at time t, V_{it}, as

$$V_{it} = \begin{cases} 1 & if\, U_{it}^{O} < U_{it}^{G} \\ 0 & if\, U_{it}^{O} > U_{it}^{G} \end{cases} \tag{1}$$

where U_{it}^{O} (U_{it}^{G}) represents the expected future utility of the ith voter if the opposition (incumbent party, i.e. the sitting government) wins[2]. Hence, the voter casts his or her vote for the incumbent party if that party is expected to provide him or her with a larger benefit for the upcoming period in which the elected party will hold the office. The incumbent party wins the right to stay in the office after the elections if the total number of votes cast in its favor is larger than the votes cast for the opposition.

The other important feature of the models in the literature is the way the expectations are formed. Some of the studies assume that the voters are fully informed while some others assume the possibility of less than perfect information being existent among the voters regarding the understanding of the policies of the government (or opposition parties/candidates). The political promises made by the candidates also make the environment much cloudier. That is because all the parties running for elections promise a bright future if elected. This increases the cost of obtaining right information when information is needed the most, i.e. the time of elections. The brightness, however, may be stated in terms of less unemployment rate, lower inflation rate and/or higher income levels, which are all observable at the end of the office term.

We assume that the voter uses an empirically observable criterion such as employment or inflation rates to gauge the success of the incumbent party. The choice of the criterion from among the observable economic variables mitigates the information problem. This assumption is in line with the so-called *Responsibility Hypothesis*, which argues that the voters hold the government responsible for the economic development. Even if people do not know/understand the economic policies, they do care about economic conditions. The argument agrees with the theory of rational political behavior as in Down (1957), in which the voter maximizes a utility function broadly defined.

Our voter has rational expectations rather than the adaptive ones even if he or she basis his or her decisions on the past performances of the government/candidate. Because the voter immediately corrects his/her errors committed in the previous election time rather than gradually learns from his or her mistakes. Our model mimics the behavior of the voter represented in Stigler (1973) and Kramer (1971)'s first model. Kramer (1971) also models the behavior of the voter who has less than perfect information, but uses relatively recent information about the government actions to gauge the performance success. Other than the comparison time is concerned, our model can be adjusted to comply with that modeling, too.

Given the discussion above, we assume that our voter prefers to vote for the incumbent party, V_{it}=1, at elections held at time t if that party/candidate seemed to have improved the well-being of the voter in question. An improvement in the past is construed to be an evidence for the capacity of the incumbent; hence it constitutes a reason to vote for the sitting government. Under these circumstances the voter behavior function is revised in the following way[3]:

$$V_{it} = \begin{cases} 1 & if\, W_{is} < W_{it} \\ 0 & if\; W_{is} > W_{it} \end{cases} \tag{2}$$

where W_{ij} is the welfare of the ith voter at time j. Also notice that s<t, that is, the voter compares his or her current welfare, which is measured in some economic standards, to his or her previous welfare. The current government, which is running for elections at

time t, has been in the office for a period no longer than t-s. In the spirit of the marginal analysis, we assume that the welfare function is twice continuously differentiable and strictly concave. This implies that the so-called *less fortunate* would be easier to please with smaller favors compared to the more well-to-do members of the electorate. Also assuming that the political establishment knows this information, and given the fact that a larger portion of the population is among the less fortunate, it pays to play to the hands of the mass majority for the political parties, more so for the party in power, to influence the election results.

We characterize the welfare criterion as a function of real income, i.e. $W=W(Y/P)$, where Y stands for the nominal income and P for the average price level. Under fairly general conditions, it is possible to generate a welfare function, as specified above, derived from a utility maximizing economic agent's problem within the general equilibrium sense. Then the welfare function can be a counterpart of the indirect utility function expressed in terms of decision variables. This implies that the yardstick used in measuring the government’s performance is a function of the ratio of the levels of the economic variables.

The literature is also in disagreement as to how to enter an economic variable into an empirical estimation model, though most of it considers a version of real income, GDP growth rate, inflation level, or a combination thereof as possible formats. Even tough we agree that it may make a difference within the econometric estimation framework, the level of an economic variable and its rate of change basically provide the same information *given* an initial level of the variable in question since

$$\begin{aligned} W(Y_t/P_t) &= W[(Y_{t-1}/P_{t-1})\{(1+g_Y)/(1+g_P)\}] \qquad (3) \\ &= W[(Y_{t-1}/P_{t-1})\{-g_{unemp}/(1+g_P)\}] \end{aligned}$$

where g_Y refers to the growth rate of nominal income, g_P the inflation rate and g_{unemp} to the unemployment growth rate. Given the functional characteristics of the welfare function, it is clear that a higher income growth rate is desirable while increases in inflation and unemployment rates are not, ceteris paribus. In other words, the higher level of real income is compatible with lower levels of unemployment or inflation rates, or with higher level of real income growth rate.

Kramer's second model, as well as many other studies, assumes that voters have short memories, a phenomenon known as voter's myopia. Because the average voter does not invest much time into understanding/finding out government policies and their impacts on economic events. That is why, recent events play a greater role in determining as to where one would vote. One of the probable culprits which leads to the conclusion of the existence of myopic voters in many studies can be attributed to the inaccurate estimation techniques[4] due to, mainly, the measurement problems associated with the way voter expectations are formed, and entered into the empirical analyses. In practice, most of the research such as Burn and Mitchell (1946), Goodhart and Bhansali (1970), Miller and Mackie (1973) is carried out in some sense of autoregressive processes. In a recent study, Khemani (2001) finds that a model, which assumes voter's myopia is inconsistent with the empirical findings within the context of India's state elections, where quite a few of *technically* uninformed voters participate. Likewise, Panzer and Paredes (1991) find that the Chilean voters have "good memory" in remembering the past when they go to elections.

In this research, we look at several criteria along different time horizons preceding the current elections, i.e. elections held at time t. The test for voter myopia in our study can be stated as follows: If the electorate chooses a party based on a comparison of the current (election year) welfare level to that of the previous year, this would indicate that the electorate has a short memory (myopic voters). On the other hand, the behavior compatible with other criteria is considered as the sign of a longer voter memory.

Before we close the theoretical section, the last but not the least point to mention is the role of the government in trying to influence the election results in its own favor. This is so because the opportunistic policy makers try to maximize their popularity or probability of reelection by implementing the populist policies as in Nordhaus (1975), Lindbeck (1976), Cukierman and Meltzler (1986), Rogoff and Sibert (1988), Rogoff (1990), Persson and

Tabellini (1990). This is called *(Rationalistic) Opportunistic Policy Maker Behavior*. In this line of research, the politician is assumed to do all he or she can to win the elections with no principals to stick with. Nordhaus (1975) summarizes the Political Business Cycle produced by the opportunistic policy maker as: pre-electoral high growth and low unemployment, increasing inflation around the election time and post-election recession, regardless of the political orientation of the incumbent party[5]. Rosenberg (1992) shows that the opportunistic politicians seeking reelection make a conscience effort, which is statistically significantly different from the effort of non-reelection seekers, to sway the public sentiments in his or her favor[6].

We will employ a very simplified approach to lay the theoretical ground to analyze the opportunistic policy maker's behavior with the help of the national income identity, which is given in real terms at time t as

$$\frac{1}{P_t}Y_t = \frac{1}{P_t}(C_t + I_t + G_t + X_t - M_t) \tag{4}$$

where capital letters stand for nominal variables, which are made real by being deflated with a price level P_t. Specifically, Y refers to the nominal income, C to the private consumption, I to the private investment, and X-M to the net export. We will do several simplifying assumption to keep the analysis rather manageable with no loss of generality:

Since Turkey was rather a closed economy for most of the period under investigation, we may do away with the international aspects of the identity. Furthermore, we may assume that private consumption and investment are a function of private disposable income, which is the residual income after the taxes are paid off,

$$(C_t + I_t) = f(Y_t - T_t) \equiv \delta_t. \tag{5}$$

Then the national income identity reduces to

$$\frac{1}{P_t}Y_t = \frac{1}{P_t}(\delta_t + G_t) \quad . \tag{6}$$

The government wishing to intervene with the elections tends to increase government spending before election, ceteris paribus. For political reasons, it is obvious that the government will not adopt a policy to finance government spending by raising taxes. Additionally, we suppose at this point that the price level does not change, maybe due to some Keynesian type rigidities. We may expect to see a positive change in δ although it is not germane to the analysis here. We call this process a short run phenomenon. Hence, the resultant national income level is given by

$$\frac{1}{P_t}Y_{t+1} = \frac{1}{P_t}(\delta_{t+1} + G_{t+1}) \tag{7}$$

It is clear that the growth rate of real income in the short run, g_y, equal the growth rate of the nominal income, i.e.,

$$g_y = \frac{Y_{t+1}}{Y_t} - 1 \tag{8}$$

Since the new income level exceeds the previous one, income level tends to grow before elections thanks to an increase in government spending. Nevertheless, it is well known in the economics profession that even the Keynesian rigidities are bound to relax in the long run where price level will adjust upward. Where price level stops depends on the theory you adopt, but it is commonly accepted that the next price level will be larger than the initial one. This period, in our analysis, takes place after the elections. One justification for an increase in the price level could be government's need to finance its previous overspending, which may be at least partially offset by monetization. Government may also resort to increase taxes for the same reason. The post election growth in real income could easily be obtained as

$$\hat{g}_y = \frac{P_t Y_{t+1}}{P_{t+1} Y_t} - 1 \tag{9}$$

The difference between the two grow rates is

$$g = g_y - \hat{g}_y = \left(1 - \frac{P_t}{P_{t+1}}\right)\frac{Y_{t+1}}{Y_t} \tag{10}$$

which is positive under given conditions. This expression says that an increase in government in the current period to be financed later either via monetazation of higher taxes yields larger national income growth in the short run than in the long run.

As a simplification of our analysis within the Turkish context, where government plays a very significant economic role, we assume that the changes in national income are thanks to government actions, i.e. government policies regarding government spending, taxes and monetization. Hence, we would expect to see higher income level growths before elections in comparison to post-election real income growth levels.

The Empirical Methodology

No generality is lost by assuming that all voters have the same preference distribution; hence a representative voter may be used to illustrate the behavior of the whole electorate body. This simplifies the voter behavior equation to $V_t=V_{it}$ for an election held at time t. The representative voter may prefer to look at several criteria in making his or her voting decision. For example, comparing the current welfare level to the previous period's welfare; or to the initial welfare level which prevailed in the first year of the government; or to an average welfare level; or comparing the average welfare level to the initial welfare level.

The following notation will be helpful for the rest of the paper:

Welfare at the initial period: $W_0=W(Y_0/P_0)$

Welfare at the current (election) year: $W_t=W(Y_t/P_t)$

Average welfare for a government reign: $W^{*}=\sum W(Y_t/P_t)/n$, where n stands for the number of years the current government has been in power. W is the welfare function or some positive monotonic transformation of it.

The possible criteria to use in election decisions may be stated as follows:

Criterion 1: If $W_t>W_0$, government wins, otherwise the opposition wins. This criterion assumes that the voters compare the economic level they started with the current government to where they ended during the reign of that government.

Criterion 2: If $W_t>W^{*}$, government wins, otherwise the opposition wins. According to the postulate of this criterion, voters care about how well they fared during the reign of the sitting government on the average, irrespective of occasional bumps and hikes. Today (the current election year) is the reference point.

Criterion 3: If $W^{*}>W_0$, government wins, otherwise the opposition wins. Voters care about how well their economic welfare is improved during the reign of the government on the average, irrespective of occasional bumps and hikes. Where they started, i.e. the initial period in which the government was elected to power, is the reference point.

The simplest possible welfare function can be formed as a function of the (natural log) of (per capita) real income[7].

We try to discover a common pattern in voting behavior, if any, among the Turkish electorate. As stated earlier, if the electorate chooses a party based on a comparison of the time t welfare level to that of the previous year, this would indicate the myopic characteristic of the electorate, otherwise the electorate is considered to show the behavior compatible with a longer memory.

The impact of the party being in power to the elections is tried to be observed by looking at the average real income levels in years preceding and following the elections.

As alluded to above in the Introduction section, several studies attempt to do certain econometric analyses such as ordinary least squares. We, however, prefer not to resort to this practice since the short sample size would undoubtedly affect our findings.

Data and Data Source

The data set for the study is constructed by variables that are collected from different sources. Real gross domestic product values are taken from the Penn World Table (Summers et. al.). We use three different real income concepts, namely, the Real GDP per capita in constant dollars (Chain Index), (RGDPCH), which is expressed in international prices for the base year of 1985; the Real GDP per capita (Laspeyres index), (RGDPL), which is also in 1985 international prices; and the Real GDP per capita in constant dollars adjusted for changes in terms of trade, (RGDPTT). The last income concept is expressed in 1985 international prices for domestic absorption and current prices for exports and imports. All three real income variables can be employed in constructing the criteria mentioned above since all are very closely related to each other. This fact is established in Figure 1. Figure 2 shows the growth rates of all the income concepts, which also supports the idea of substitutability among the variables in question for our analytical purposes.

[Insert Figures 1 & 2 approx. here]

Election dates and winners of the election data are obtained from Statistical Indicator of Turkey 1923-1995 of State Institute of Statistics, SIS. The information on government in power is gathered from the web page of Turkish Grand National Assembly at www.tbmm.gov.tr. The sample range starts with the data in 1950, which is the year in which the multiparty political party system is introduced into the Turkish politics. The ending date of the sample is mostly imposed by the availability (or better to say, the unavailability) of some data.

The coalition governments are identified by the major coalition partner in the government. In one case, the military government led by Ulusu in the period of 1981-1983 is assumed to be the predecessor of the Ozal government since Ozal himself was the main person in control of the economic policy of the military government. Military governments which are mentioned as *Others* in Table 1 are not elected by the people, but rather appointed by the military coup leaders until democracy is restored in the country. For rather political reasons, though, we assume that the military governments led by Erim and Talu between 1971 and 1973 were left-wing leaning administrations given the political tendencies of the military leaders and the compositions of the bureaucrats in these interim governments.

[Insert Tables 1 & 2 approx. here]

Table 1 summarizes the reign period of all governments/ parties in Turkey. All of the data set is presented in Table A1 in the Appendix regarding elections and the real income levels. Average real income data as calculated from the values in Table A1 are presented in Table 2. These numbers alongside with the numbers from Table A1 can be used to gauge the validity of the second and third criteria mentioned above.

Findings

The most striking observation, perhaps on a side note, is the fact that the Turkish electorate are overwhelmingly right wing leaning. As Table 1 shows, about three fourths of the time span of our coverage period is ruled by the right wing political parties. Nevertheless, the governmental office seems to have alternated between the right and the left wing parties quite often, though not with equal time in office. This is clearly a sign of the existence of a large number of voters who can switch sides depending on certain criteria. However, we do not have an evidence to suggest that the switches are mostly based on economic reasons rather than the political ones.

Criterion 1 results presented in Table 3 show that the voters acted as expected by our economic reasoning laid out above, where voters seemed to look at where they started and where they ended during the rule of a specific government. Other criteria are satisfied, as well[8].

Voter myopia is another concern of the political economy literature. According to our criteria, the voters should not look at the year immediately before the election year in casting their votes, but rather at a larger picture. We think that at least the voters casting their votes in favor of the opposition simply because of a less than satisfactory performance of the incumbent government in the year before elections would have a myopic view of the political system. Within the Turkish context, in election years of 1954, 1965 and 1991, the current welfare falls short of the welfare level attained in the previous year. If the voters had short memory, they would have voted against the sitting governments in those election years. However, the results (in Table A1) show that voters favored the party in power in spite of this factor, suggesting a longer memory phenomenon for the Turkish electorate.

In Table 4, we calculate the average growth rates of real income in years around the election times. We find that the average growth rates in the election year and second year after the election are around 2 percent. On the other hand, the average growth rates in the first year (right after the election) and third year (before the election) after the election are 6 and 3.6 percent respectively. We believe that these results may suggest that parties in power try to influence the voters to win the election.

[Insert Tables 3 & 4 approx. here]

Conclusions

In this paper, we outline a general theoretical framework, based mostly on Fair (1978), but may find its counterparts in quite a few other studies. The theory suggested certain empirically observable (and very simple) criteria to test several hypotheses, which appeared in the political economy literature, specifically the responsibility hypothesis, voter's myopia and the possibility of the incumbent government's influence in the current elections.

We show that within the Turkish context for the period of 1950 to 1991, the comparisons of the levels of real income can predict all election results, suggesting the effect of the economic variables on the outcome of the Turkish politics.

Our experiments do not provide an evidence to conclude that the Turkish electorate is myopic. On another issue, we found some evidence to suggest the possibility of the incumbent governments' effort in influencing the election results to their favor.

The study can be extended in many directions. For example, the obvious direction should be conducting the research with a more frequent data set such as quarterly rather than annually to better measure the voter myopia as well as other claims made in this paper. If the sample range of the data is extended, it may be possible to carry out some econometric exercises, too. Furthermore, it is quite straightforward to extend this study to other countries.

Tables

Table 1: Parties and the Periods in Office

Ruling Party	Position in the Political Spectrum	Periods in Power
Democrat Party (DP)	Right	1950-1960
CHP	Left	1961-1965 1973-1974 1978-1979
AP	Right	1966-1970 1975-1977 1980
ANAP	Right	1983-1991
Others	Left-Right	1971-1972 1981-1982

Table provides a short summary of parties in power associated with their periods in power in Turkey for the period of 1950-1991. We choose the 1950 as the beginning of the period since before that year Turkey was under one party regime. No election was hold before 1950.

Table 2: Average Real GDP Numbers in Election Years

Year	avRGDPCH	avRGDPL	avRGDPTT
1954	1303.6	1296.6	1335.2
1957	1513	1510	1542
1961	1676.75	1669	1699.25
1965	1777.75	1771.25	1821.75
1969	2069.75	2066.75	2120.5
1973	2376	2376.25	2438.25
1977	2985.667	2906	2951.5
1983	2878.333	2919	2920.167
1987	3209.75	3209.75	3222.75
1991	3559.25	3563	3577.25

The average income values are calculated from Table A1 GDP numbers, which are simple averages for the duration of the government from the time it ascended to power till the next election time.

Table 3: Predicting Election Results According to Criterion 1

Election Year	Welfare Comparison	Government Wins/Loses
1954	W54>W50	Wins
1957	W57>W54	Wins
1961	W61<W57	Loses
1965	W65>W61	Wins
1969	W69>W66	Wins
1973	W73>W71	Wins
1977	W77>W75	Wins
1983	W83>W81	Wins
1987	W87>W83	Wins
1991	W91>W87	Wins

Criterion 1: If $W_t > W_0$, government wins, otherwise the opposition wins. Wk where k is a year represents the welfare as measured by the real GDP in year k.

Table 4: Growth Rate of Real GDP

Party	period	election	election +1	election +2	election +3
DP	1950-1953	0	0.18153878	0.0592879	0.093631
	1954-1956	-0.1100009	0.078599	-0.0132637	
	1957-1960	0.16244865	0.05745706	-0.0532842	-0.03573
CHP	1961-1964	0.00553337	0.0236303	0.0821593	0.001653
	1965-	-0.0022051			
	1973-1974	0.00324281	0.07295103		
	1978-1979			-0.0194685	-0.0323
AP	1966-1968		0.09320079	0.0144749	0.044107
	1969-1970	0.02528225	0.01786989		
	1975-1976			0.0655256	0.057843
	1977	0.0343227			
ANAP	1983-1986	0.01419446	0.03810948	0.0180362	0.069664
	1987-1990	0.04214273	-0.006414	-0.0023426	0.092347
Average		0.0174961	0.06188248	0.0167917	0.036402

Growth rates are calculated as the first differences of the natural log of the real income levels.

Figures

Figure 1: Real Income Concepts in Levels

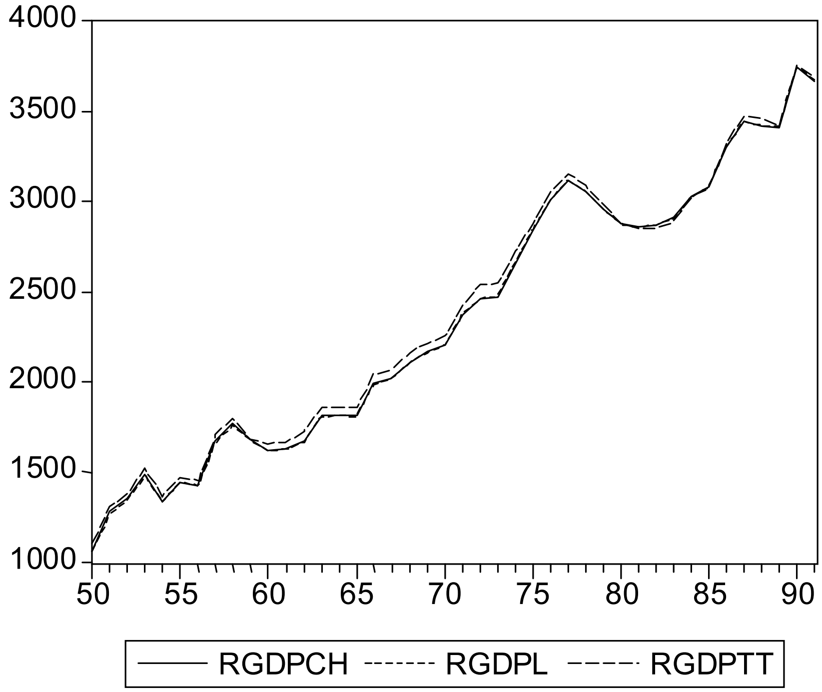
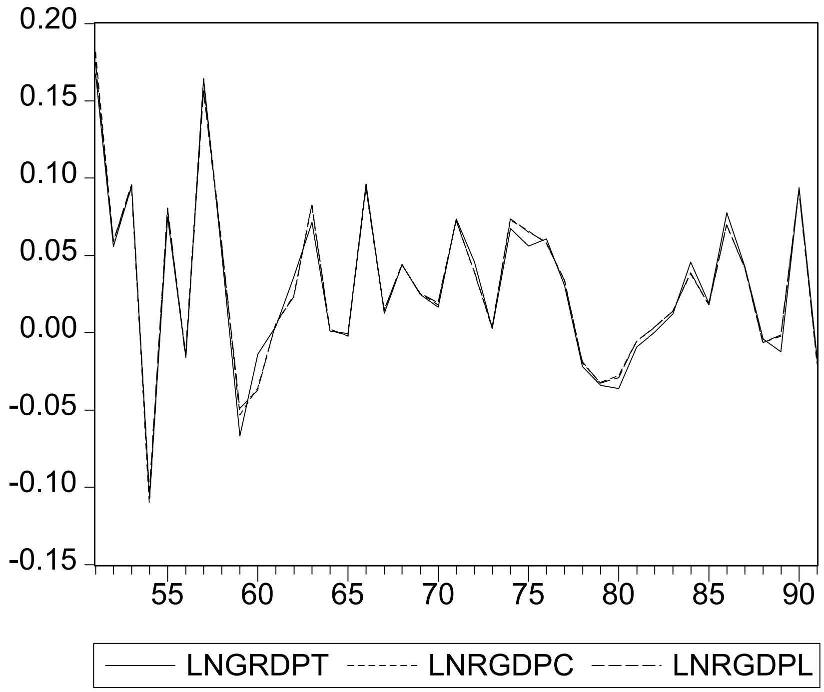


Figure 2: The Growth Rates of the Real Income Concepts



Appendix

Table A1: The Whole Data Set

year	election	government	election winner	RGDPCH	RGDPL	RGDPTT
1950	election	menderes	dp	1065	1063	1105
1951		menderes		1277	1266	1306
1952		menderes		1355	1343	1381
1953		menderes		1488	1478	1519
1954	election	menderes	dp	1333	1333	1365
1955		menderes		1442	1445	1471
1956		menderes		1423	1422	1448
1957	election	menderes	dp	1674	1663	1707
1958		menderes		1773	1760	1796
1959		menderes		1681	1676	1680
1960	coup	menderes		1622	1615	1657
1961	election	inönü	chp	1631	1625	1664
1962		inönü		1670	1663	1725
1963		inönü		1813	1806	1853
1964		inönü		1816	1810	1855
1965	election	inönü	chp	1812	1806	1854
1966		demirel		1989	1986	2041
1967		demirel		2018	2015	2067
1968		demirel		2109	2106	2160
1969	election	demirel	ap	2163	2160	2214
1970		demirel		2202	2202	2251
1971	coup	erim		2368	2368	2423
1972		erim		2463	2463	2536
1973	election	talu	chp	2471	2472	2543
1974		ecevit		2658	2661	2720
1975		demirel		2838	2840	2877
1976		demirel		3007	3010	3057
1977	election	demirel	ap	3112	3113	3152
1978		ecevit		3052	3055	3084
1979		ecevit		2955	2957	2981
1980	coup	demirel		2874	2872	2875
1981		ulusu		2858	2856	2848
1982		ulusu		2868	2867	2849
1983	election	ulusu	anap	2909	2907	2884
1984		ozal		3022	3022	3019

1985		ozal		3077	3077	3077
1986		ozal		3299	3299	3325
1987	election	ozal	anap	3441	3441	3470
1988		ozal		3419	3419	3456
1989		ozal		3411	3414	3414
1990		akbulut		3741	3743	3750
1991	election	yılmaz	anap	3666	3676	3689

coup refers to actual military overtake of the governmental duties or any military intervention.

References

Austin, D. A. (1996) “ The Price of Nationalism: Evidence from Soviet Union” Public Choice 87:1-18.

Arcelus, F. and A. H. Metzler, “The Effect of Aggregate Economic Variables on Congressional Elections,” *American Political Science Review* 69 (Dec. 1975a), 1232-1239.

Arcelus, F. and A. H. Metzler, “Aggregate Economic Variables and Votes for Congress: A Rejoinder, “ *The American Political Science Review* 69 (Dec. 75b), 1266-1269.

Alesina, A. (1987) "Macroeconomic Policy in a Two-Party System as a Repeated Game" *Quarterly Journal of Economics*, 102, 651-678.

Alesina A. and N. Roubini (1992) “Political Cycles in OECD Economies,” *The Review of Economic Studies*, V. 59, Issue 4 (October), 663-688.

Alesina, A., Roubini, N., and Cohen, G. D. (1997), *Political Cycles and the Macroeconomy*, MIT Press.

Bloom, H. S. and H. D. Price, “Voter Response to Sort-Run Economic Conditions: The Asymmetric Effect of Prosperity and Recession,” *The American Political Science Review* 69 (Dec. 1975), 1240-1254.

Burns, A. F. and Mitchell, W. C. (1946) “Measuring Business Cycles, New York: NBER

Campbell, C.M. (1999) “Large Electorates and Decisive Minorities” Journal of Political Economy 107 (6): 1-1199-1211

Coughlin, P. (1990) “Candidate Uncertainty and Electoral Equilibria” in Advances in the Spatial Theory of Voting, Enelow, J and Hinich, M. (Eds.), 145-166 New York: Cambridge University Press

Downs, A., *An Economic Theory of Democracy* (New York: Harper and Row, 1957).

Enelow, J. M. (1992) “An Expanded Approach to Analyzing Policy-minded Candidates” Public Choice 74:425-445

Fair, R. C. (1978) "The Effect of Economic Events on Votes for President" *The Review of Economics and Statistics*, 60, 2, 159-175.

Frey B. S. and Schneider, F. (1978) “An Empirical Study of Politico-Economic Interaction in the United States” *The Review of Economics and Statistics,* 60(2):174-183

Goodhart, C. A. and Bhansali, R. J. (1970) “Political Economy” Political Studies 18(1):86-99

Hibbs, D. (1977) "Political Parties and Macroeconomic Policy" *The American Political Science Review*, 7, 1467-1487.

Hibbs, D. (1987) *The American Political Economy* Cambridge, MA: Harvard University Press.

Khemani, S. (2001) “Political Cycles in a Developing Economy : Effect of Elections in the Indian States,” *World Bank Development Research Group*, Rural Development, Working Paper

Kramer, G. H., “Short-term Fluctuations in US Voting Behavior, 1896-1964,” *The American Political Science Review* 69 (Mar. 1971), 131-143.

Leper, S. J., (1974) “Voting Behavior and Aggregate Policy Targets,” *Public Choice* 18 (Summer), 67-81.

Lindbeck, A. (1976) "Stabilization Policies in Open Economies with Endogenous Politicians," *American Economic Review (Papers and Proceedings)*, 66, 1-19.

McCallum, B. T. (1978) “The Political Business Cycle: An Empirical Test” *Southern Economic Journal* 44: 504-515

Meltzer, A. H. and Vellrath, M. (1975) “The Effects of Economic Policies on votes for the Presidency: Some Evidence from Recent Elections” *The Journal of Law and Economics* 18 (December):781-800

Miller, W. L. and Mackie, M (1973) “The Electoral Cycle and the Asymmetry of Government and Opposition Popularity: An Alternative Model of the Relationship between Economic Conditions and Political Popularity” *Political Studies* 21 (3):263-279.

Nordhaus, W. (1975) "The Political Business Cycle", *Review of Economics Studies*, 42, 162.190.

Okun, A.M., “Comments on Stigler’s Paper,” *The American Economic Review* 63 (May 1973), 160-167.

Paldam, M., (1981) “A Preliminary Survey of the Theories and Findings on Vote and Popularity Functions,” *European Journal of Political Research* V.9, 2, 181-199.

Paldam, M. (1981) “An Essay on Rationality of Economic Policy: The Test-Case of the Electional Cycle” Public Choice 37:287-305

Summers, R., A. Hestan, B. Aten, and D. N., *Penn World Table 5.6*, Center for International Comparison at the University of Pennsylvania.

Panzer, J. and Paredes, R. D. (1991) "The Role of Economic Issues in Election: The Case of the 1988 Chilean Presidential Referendum" Public Choice 71:51-59.

Persson, T. and Tabellini, G. (1990) *Macroeconomic Policy, Credibility and Politics* London: Harwood Academic Publishers.

Rogoff, K. (1990) "Equilibrium Political budget Cycles" *American economic Review*, 80, 21-36.

Rogoff, K. and Sibert, A. (1988) "Evaluating Rational Partisan Business Cycle Theory," *Review of Economic Studies*, 55, 1-16.

Rosenberg, J. (1992) "Rationality and the Political Business Cycle: The Case of Local Government Public Choice 73:71-81

Stigler, G. J., "General Economic Conditions and National Elections," *The American Economic Review* 63 (May 1973), 172-177.

State Institute of Statistics Prime Ministry of Republic of Turkey, *Statistical Indicators* 1923-1998.

Tufte, E. D., "Determinants of the Outcomes of Midterm Congressional Elections, "*The American Political Science Review* 69 (Sept. 1975), 812-826.

ENDNOTES

[1] See, among many others, also those mentioned in the rest of this paper, Austin (1996) for a study on Russia, Meltzer and Vellrath (1975) on USA, McCallum (1978), Khemani (?) on India, and Panzer and Paredes (1991) on Chile.
[2] As in Fair (1978), we assume that the equality is a trivial case, which causes no fundamental changes in the results obtained here. Fair assumes that these voters may simply abstain from voting.
[3] We can also use equality in the first expression, which states that in case of no change in the well-being of the voter, he or she votes for the incumbent party. Alternatively, the voter may simply tosses a coin, and casts his or her vote according to its outcome.
[4] See Frey and Schneider (1978) for a critique of the econometric techniques used in the political economy literature.
[5] An alternative theory on modeling the political parties is called the *(Rationalistic) Partisan Policy Maker Behavior*, in which parties follow policies to the benefit of their own supporters as in Hibbs (1977, 1987) and Alesina (1987). Such models assume that leftist parties (governments) follow the anti-unemployment policies while rightists consider anti-inflation as the main enemy to combat.
[6] Also see Enelow (1992) and Coughlin (1990) for modeling the behavior of the candidates who care about "what wins" rather than "who wins."
[7] The positive monotonic transformations of this function would produce the same qualitative results.
[8] The results are available upon request.