

**ECONOMIC VOTING UNDER SINGLE-PARTY AND COALITION GOVERNMENTS:  
EVIDENCE FROM THE TURKISH CASE**

By

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## **Abstract**

Strength of economic voting under single-party and coalition governments is investigated in the case of Turkey. The vote equation developed for this purpose is fitted to data covering 30 parliamentary and local administrations elections held between 1950 and 2015, and considers incumbency advantage, political inertia, strategic voting by the electorate, and political realignments as well. It is found that voters hold coalition governments less responsible for economic performance than single-party governments and minor members of a coalition government less responsible than its major member. The latter gap widens as fragmentation in the government increases numerically and/or ideologically. In governments involving many parties and parties with significantly different ideologies, some junior members of the coalition benefit rather than suffer from a bad economy. These findings may explain why economic performance is poor under coalition governments, particularly under those combining both left and right wing parties.

Keywords: Elections; Voter behavior; Economic voting; Coalition governments; Turkey

JEL Classification: D72, H11, O53

## 1. Introduction

Well-informed voters that assess economic performance of governments and reward or punish them through their ballots are essential for a well-functioning democracy and economic system. Economic voting literature surveyed by Lewis-Beck and Paldam (2000), Lewis-Beck and Stegmaier (2000, 2008, and 2015), and Stegmaier and Lewis-Beck (2013) shows that the voters indeed behave that way, even though they base their evaluations only on the recent past, providing the politicians with an incentive to create political business cycles. Akarca and Tansel (2006 and 2007) and Akarca (2011 and 2015) find that Turkish electorate's behavior is very similar to that of their counterparts in other countries. Some studies such as Powell and Whitten (1993), Whitten and Palmer (1999), Anderson (2000), Nadeau, Niemi, and Yoshinaka (2002), Hellwig, and Samuels (2008) and Hobolt, Tilley and Banducci, (2013) however argue that the strength of economic voting depends on the 'clarity of responsibility' for economic outcomes. Under coalition governments for example, it becomes more difficult for voters to assign responsibility and sanction incumbent parties for their performance. Then the impact of the economy on election outcomes tends to be smaller. Recent studies by Fisher and Hobolt (2010), Debus, Stegmaier and Tosun (2014), Williams, Stegmaier and Debus (2016) and Angelova, Konig, and Proksch (2016) find further that economic voting is not only weaker in multi-party governments, but it is also not the same for all of the ruling parties. It appears that voters hold the junior members of a coalition less responsible for economic conditions than the primary incumbent party and sometimes not responsible at all.

When governments are rewarded less for a good economy and punished less for a bad one, they will have less incentive to perform well. In addition, they will be more likely to sacrifice economic goals for other considerations. When voters do not hold the parties in coalition governments equally accountable, this will create conflict of interest and friction between the partners, delaying critical decisions and reducing the expected lives of the governments, which in turn generates uncertainty and instability. Parties with less or nothing to lose can even drag their feet on reforms they approve of just to deny vote gains to their main coalition partner, especially if they can manage to do it without getting blamed. Thus, the strength of economic voting, and how it is exercised is of utmost importance for good governance.

While this issue is largely neglected in industrialized countries, it is almost completely ignored in developing countries. In Turkey, two studies considered it but only as a side issue. Akarca and Tansel (2007) found that the economy impacts minor members of a ruling coalition less than its major partner, but that study was based on cross-section data of one election only. Although Akarca and Tansel (2006) found the impact of economic growth on the vote shares of minor and major incumbent parties to differ, they also found its effect on the latter not to vary depending on whether the party rules in a coalition or a single-party government. However, that study used a shorter time-series, and economic performance and government fragmentation variables less precisely measured than will be the case here. The aim of the current paper is to build a vote equation to investigate more thoroughly, whether, and how, economic voting differs between single-party and coalition governments in Turkey.

The paper is organized as follows. In the next section, the literature on economic voting is reviewed. Since studies, which investigate the effect of the economy on political outcomes, take into account the impacts of other factors such as strategic voting, depreciation of political capital,

and incumbency advantage, these and some relevant events in Turkish political history are discussed in Section 2 as well. Section 3 explains the methodology and the data utilized, and section 4, the empirical results. Then in Section 5, implications of the findings are discussed.

## **2. Determinants of vote share**

Understanding the behavior of voters is the key to predicting and interpreting such things as election outcomes, longevity of governments, election timing, political fragmentation, and political business cycles. Consequently, a field has developed over the last four decades or so, analyzing how voters vote, referred to as economic voting. Lewis-Beck and Paldam (2000) define it as “a field that mixes economics and political science and does so by means of econometrics.” Since detailed reviews of this literature is provided by that study, and the survey studies given in the previous section, only a summary will be given here. According to the literature mentioned, election outcomes are the result of the five competing forces described below.

### **2.1 Political alignment and realignment**

Most voters align themselves with a party that they identify as representing their interests and ideology. The demographic, cultural, and socio-economic characteristics of voters, and their habits and geographical location determine their interests and worldview. Since these usually change very gradually, most voters stick with the same party they voted for in the previous election. Consequently, there is a great amount of inertia in the political system.

Although the economic voting literature largely ignores it, occasionally, voters can change their political allegiances. Things such as migration, urbanization, changes in income, education and age, and access to better information can alter worldview and economic interests of the voters. When that happens and the parties fail to adapt, political realignments occur. Voters may move to other parties, also when they get frustrated with chronic corruption and/or incompetence exhibited by their old parties or when these parties change in a manner that deviates from their interests and beliefs. All of these have occurred in Turkey and led to a major political realignment between 2002 and 2011, which we need to take into account in building our vote equation. Consequently, a brief discussion of recent Turkish political history would be in order. However, readers not interested in these details can jump to the next subsection, without any loss of continuity.

After experiencing rampant corruption, constant infighting, and four economic crises under various coalition governments during the preceding decade and a half, in the November 2002 election, voters ousted all of the parties, which had entered the parliament in 1999. These were who's who of Turkish politics. Among them were the Motherland Party (ANAP), which held the premiership during 1983-1991 and 1997-1999, the True Path Party (DYP) and the Democratic Left Party (DSP), which led governments during 1991-1996 and 1999-2002, respectively, and the Nationalist Action Party (MHP), which was part of the ruling coalition between 1999 and 2002 together with the DSP and the ANAP. None of them was able to surpass the ten percent nationwide vote share threshold necessary for representation in the Turkish Grand National Assembly. The Constitutional Court had already banned the Virtue Party (FP) in 2001 for violating secularism clause of the constitution. The predecessor of this party, the Welfare Party (RP), held the premiership during 1996-1997. The combined vote share of the parties mentioned was 81 percent

in 1999 but only 24 percent in 2002. Only 11 percent of the legislators elected in 1999 made it to the 2002 parliament. The AKP, which emerged from the ashes of the banned FP, captured the lion's share of the voters who deserted their former parties. The party's disavowal of political Islam, embrace of free markets, globalization, EU membership, combined with the non-corrupt and effective administrator images of its mayors at the local level, its message of hope, and the likelihood of it forming a single-party government, all appealed to the electorate which deserted the right-wing ANAP, DYP and MHP.<sup>1</sup> The Felicity Party (SP), the other party rooted in the FP, towed the old party line called National Outlook or "Milli Görüş" in Turkish. This outlook advocates political Islam over secularism, traditional values over Western values, close economic, political and cultural ties with Middle Eastern and other Islamic countries at the expense of those with the West and other countries, community over individual, closed economy over globalization, the state-led economic development and redistribution over the free market, and "moral principles" over principles of capitalism. This approach yielded the SP only a couple of percent of the votes.

Akarca and Tansel (2016) argue that incompetence and rampant corruption exposed by the two big earthquakes in 1999, implicating both ruling and opposition parties, the transformation of the AKP, and the image of the party's mayors as non-corrupt and effective administrators, played crucial roles in triggering the realignment. According to corruption literature, voters react to corruption drastically only when, it is massive, information on it is highly credible and well publicized, implicates more than one political party, and not accompanied by otherwise competent and beneficial governance. Most importantly, a viable non-corrupt alternative must exist to get a big reaction from the electorate.<sup>2</sup> As mentioned above, prior to 1999, Turkey experienced corruption under each of the ruling parties. These cost the parties involved some votes. However, only after credible quake-related corruption and incompetence tainted also the DSP and MHP, the last two parties tried, coincided with poor economic conditions and the AKP emerged as an unblemished alternative, the voters reacted drastically.

Of the parties left out of the parliament in 2002, only the MHP was able to engineer a comeback. The rest continued to lose votes. By 2011, these and the Young Party (GP), which emerged in 2002 like a flash in the pan, disappeared either literally or for all practical purposes. Their combined vote share declined from 63% in 1999 to 23% in 2002 and to 2% in 2011. The shift of votes from the ANAP and DYP (later named Democrat Party) towards the AKP continued after the 2002 election.<sup>3</sup> In the ongoing power struggle between elected officials, and bureaucratic and military establishment, since the beginning of the republic, these two parties come from the tradition of siding with the former. When their new leadership relinquished this position, and not only failed to oppose several controversial interventions by the military and the judiciary but also gave support to them, they continued to lose their remaining supporters to the AKP and other parties. The way the AKP conducted itself in power facilitated this vote transfer as well. The party retained social justice aspects of Islam but did not revert to political Islam, as some have feared, it pushed for political and economic reforms necessary for Turkey's accession to the EU,

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<sup>1</sup> For more details on the sources of the AKP votes the reader is referred to Başlevent and Akarca (2009) and Akarca and Başlevent (2009).

<sup>2</sup> Chang et al. (2010) and Ferraz and Finan (2008) provide evidence for this from Italian and Brazilian cases, respectively.

<sup>3</sup> Since 1946, three parties had the acronym DP. To avoid confusion, the first of these, the Democrat Party, which existed in the fifties, will be referred to as DP, and the second one named the Democratic Party, which existed in the seventies as DP2, and the last Democrat Party as the DYP, the party's original acronym.

embraced globalization, free markets, and people power over guardianship of state bureaucracy. This dispelled some of the lingering skepticism concerning the genuineness of the party leaders' transformation. Interestingly, the party was able to do all that without alienating much of its traditional base. Over the last two decades, that base, while holding on to its basic conservative values, got increasingly richer, better informed, more entrepreneurial, more modernized, more urbanized, and more integrated with other parts of Turkey and the rest of the world. These occurred largely as the result of the introduction of internet, ending of the state monopoly on television and radio, major improvements in the transportation and telecommunication systems, and the market-oriented reforms instituted in the eighties by Turgut Özal, the prime minister then. The leadership of the AKP recognized this evolution in the society well and changed, while other parties did not or did in the opposite direction. We can say that the AKP captured the supporters of the ANAP and DYP because these parties changed but in the wrong direction, and the supporters of the FP because this party's successor, the SP, failed to change.

## **2.2 Strategic voting**

In every election, a portion of the electorate votes for a party other than their first choice. In other words, they vote strategically. They behave this way mainly for two reasons: to check the power of the incumbent party and to avoid wasting their vote by voting for a party which is not likely to gain representation in the elected body. In elections, such as midterm congressional elections in the U.S., European Parliamentary elections in European Union countries, and local administrations or parliamentary by elections in Turkey, supporters of the incumbent party get a chance to check the power of the central government, without toppling it. Then, even more of them vote with the intention of diluting the power of the government. Consequently, incumbent parties tend to do poorly in these types of elections. Existence of threshold regulations in parliamentary general elections, such as the minimum 10 percent nationwide vote share requirement to gain representation in the Turkish Grand National Assembly, contributes to this effect as well. Some of the small party supporters, who had voted strategically for one of the major parties in the previous domestic parliamentary election, not to waste their vote, return to their first choices in elections where no such handicaps apply, such as local administrations elections in Turkey. This explains for example why the SP vote share in parliamentary elections was 1-2 percent and in local elections 4-5 percent until 2014. In a parliamentary election, with the control of government at stake, the incumbent party experiences fewer deserters. Furthermore, the party attracts some supporters from its smaller ideological cousins, who fear wasting their vote if they vote for their first choice. Therefore, holding other factors constant, we should expect the vote losses of the incumbent party, due to strategic voting, to be higher in a local administration election following a parliamentary one, and lower in a parliamentary election following a local administration election, and to be in between these when the two elections involved are of the same type. Incumbent party vote losses due to strategic voting in parliamentary by elections should be even greater than in local elections, as not even the control of local administrations are at stake then.

In some elections, factors specific to those contests can make strategic voting larger or smaller than typical, which requires special attention. For example, the decision by the Kurdish-nationalist People's Democracy Party (HDP) to participate in the June 2015 election officially, rather than through independent candidates as it and its predecessors have done previously, to circumvent the ten percent threshold, was such a case. Many supporters of other parties, especially

the ethnic Kurdish ones, who felt that the presence of a party voicing Kurdish grievances in the parliament would be good for democracy, and for the solution of the Kurdish problem, voted strategically for the HDP. However, observing after the election, the HDP easily surpassing the threshold and their action creating a need for a coalition government, these voters returned to their first choices in the November 2015 snap election.

### **2.3 Cost of ruling**

Ruling involves making some compromises and unpopular or bad decisions, and shelving some promises. These erode political capital of the incumbent parties. The “cost of ruling”, as some refers to it in the literature, rises with the time spent in power, as disappointments with the government accumulate.

Sometimes a particular government action can incense the voters. Then to exhibit their outrage, they may react in a much larger way than usual. Such an incident occurred in 1973. When faced by a coup threat, the ruling Justice Party (AP) leadership decided not to pursue in earnest a proposal granting amnesty to the leaders of its predecessor, the Democrat Party (DP), who were banned from politics by the 1960 junta. This infuriated many of its supporters and their representatives, causing a faction of the party to split and form the Democratic Party (DP2). The new party siphoned off considerable amount of votes from the AP in the 1973 election. However after the amnesty law passed and the fences were mended, these votes largely returned to the Justice Party in the following election in 1975. The DP2 virtually disappeared from the political scene after that

### **2.4 Incumbency advantage**

Incumbency has its advantages too, and it can offset part of the losses due to strategic-voting and cost of ruling. Besides things like access to the media and name recognition, the incumbency advantage involves ability of the ruling party to indulge in transfer activities such as providing services, subsidies and patronage, and picking locations of government investment and public work projects to attract supporters of other parties and mobilize its own base. A change in the leadership of an incumbent party may bring an additional advantage to the party, and offset some of the cost of ruling by wiping the slate clean. On the other hand, the loss of experience and talents of the departing leader may prove to be disadvantageous. Leadership changes occurred before the 1965, 1991 and 1995 elections in the primary incumbent parties and before the 1994 and 1995 elections in the junior incumbent parties.<sup>4</sup>

### **2.5 Economic conditions**

The voters reward incumbents for a good economic performance, and punish them for a bad one. However, in making their economic evaluations, they tend to be retrospective and myopic. They look back no more than a year or so. They also tend to place far more weight on growth than inflation. Such voter behavior gives incentives to governments to conduct expansionary economic policies before an election and then switch to restrictive policies after the

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<sup>4</sup> The head of the ruling party changed before the June 2015 elections as well but because the previous leader who became the president continues to lead his party de facto, that incident should not be treated as a change in leadership.

election to counter their inflationary effects. Furthermore, it induces governments to postpone painful adjustments needed for the economy at least until after election. In short, the behavior of the voters is at the root of political business cycles observed in so many countries.

Voters judge governments ego-tropically as well as socio-tropically. That is, they consider not only changes in their own economic well-being but others' as well. In fact, many studies find that the latter gets much larger weight. This may be out of concern voters have for their fellow citizens but also because they may consider government's nationwide performance a better indicator of its competence. In addition, as being investigated in this paper, the voters may reward or punish incumbents differently in case of coalition governments .

### 3. Methodology and Data

A model, which takes into account all of the effects mentioned in the previous section, is the following:

$$V_t = a + b_1 V_{t-k} + b_2 \Delta L_t * V_{t-k} + b_3 \Delta B_t * V_{t-k} + b_4 r_t * V_{t-k} + b_5 Z73_t + b_6 Z15_t + b_7 D02_t + b_8 D04-11_t * Q_{t-k} + b_9 NEW_t + b_{10} g_t + b_{11} p_t + b_{12} C_t * g_t + b_{13} C_t * p_t + e_t \quad (1)$$

where  $\Delta$  is the differencing operator ( $\Delta X_t = X_t - X_{t-k}$ ), and the variables are defined as follows:

- $V_t$ : vote share of the major incumbent party (or the aggregate vote share of all parties in the government) in election held at time t,
- $V_{t-k}$ : vote share of the major incumbent party (or the aggregate vote share of all parties in the government) in the previous election held k years earlier,
- $L_t$ : a dummy variable, which takes on the value of one if the election involved is for local administrations, and zero otherwise,
- $B_t$ : a dummy variable, which takes on the value of one if the election involved is a National Assembly by-election only (that is, not held simultaneously with a Senate election), and zero otherwise,
- $r_t$ : number of years the major incumbent party or government was in power since the previous election,
- $Z73_t$ : a dummy variable, which takes on the value of one in 1973 election, and minus one in 1975 election, and zero in all other elections,
- $Z15_t$ : a dummy variable, which takes on the value of one in June 2015 election, minus one in November 2015 election, and zero in all other elections,
- $D02_t$ : a dummy variable, which takes on the value of one in 2002 election, and zero in all other elections,
- $D04-11_t$ : a dummy variable, which takes on the value of one in elections held between 2004 and 2011, and zero in all other elections,
- $Q_{t-k}$ : the aggregate vote share of the independent candidates and right-wing parties other than the AKP, in the previous election (or 100 minus aggregate vote share of CHP, DSP and the ethnic Kurdish party, in the previous election),

- $NEW_t$  : a dummy variable which takes on the value of one in the 1965 and 1991 elections, and zero in all other elections,
- $g_t$  : growth rate of the per capita real GDP during the four quarters preceding the election held at time  $t$  (henceforth referred to as the growth rate),
- $p_t$  : inflation rate in GDP implicit price deflator during the four quarters preceding the election held at time  $t$  (henceforth referred to as the inflation rate),
- $C_t$  : a dummy variable, which takes on the value of one if the incumbent government is a coalition government, and zero otherwise
- $e_t$  : error term.

In the above model, the parameter  $a$  represents the incumbency advantage and is expected to be positive.  $(b_1-1)$  represents the change in the vote share of the major ruling party (or all government parties) between two parliamentary elections, due to strategic voting. The corresponding change between a parliamentary and a local administrations election is given by  $(b_1-1+b_2)$ , between a local administration election and a parliamentary election by  $(b_1-1-b_2)$ , between parliamentary general and by elections by  $(b_1-1+b_3)$ , and between a parliamentary by and general elections by  $(b_1-1-b_3)$ . The signs of  $b_1$ ,  $b_2$  and  $b_3$  are expected to be positive, negative and negative respectively. The proportion of supporters lost by the major incumbent party (or all incumbent parties) for each year it spends in power (cost of ruling) is given by  $b_4$ , which should be negative. The coefficients  $b_5$  and  $b_6$  aim to capture the extraordinary strategic vote movements between the 1973 and 1975 elections and between the June and November 2015 elections, respectively. Based on our discussion in Section 2.2, we would expect both of these parameters to be negative. The political realignment between 2002 and 2011 is captured through  $b_7$  and  $b_8$ . We would expect the first of these to be negative and the second one positive. What impact the changes in the leaderships of major incumbent parties had in the 1965 and 1991 elections is measured by  $b_9$ , sign of which cannot be determined a priori.<sup>5</sup> The effects of economic growth and inflation on election outcomes is measured by  $b_{10}$  and  $b_{11}$ , respectively. To check whether the economy matters the same under single-party and coalition governments is determined by  $b_{12}$  and  $b_{13}$ . If the theoretical arguments and empirical results of few studies on other countries are any guide, these two parameters should be negative and positive respectively.

The above model treats all coalition governments the same. To check whether the strength of economic voting depends on the number of parties in a coalition and/or their ideological compatibility, we will consider another version of equation (1) in which  $g_t * C_t$  and  $p_t * C_t$  are replaced with  $g_t * (ENOP-1)_t$ ,  $p_t * (ENOP-1)_t$ ,  $g_t * MIXED_t$ ,  $p_t * MIXED_t$ , where ENOP and MIXED are defined as follows:

ENOP : effective number of parties in government as defined by Laakso and Taagepera, 1979).

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<sup>5</sup> As mentioned in Section 2.4, the leaders of the major incumbent party changed in 1994 as well. However, in preliminary investigation of major party leadership changes individually, it was found that while the 1965 and 1991 changes made large and statistically significant effects on the vote shares of the government and the major incumbent party, the one in 1994 did not, perhaps because it coincided with the change in the leadership of its junior coalition partner. Similar examination of the 1995 election showed the change in the leadership of the minor incumbent party created no noticeable impacts.

MIXED: a dummy variable, which takes on the value of one if the incumbent government is a coalition largely made up of ideologically incompatible parties (if at least one half of the junior parties in the government are from different side of the political spectrum than the primary incumbent party), and zero otherwise.

#### **4. Empirical Results**

Parameter estimates of equation (1) are presented in Table 1 both for the major incumbent party and for the government. These are obtained using the Ordinary Least Squares method. Included in the table are also the t-statistics, R-square, adjusted R-square, and F values for judging the fits of the equations, and Durbin's (1970) h and White's (1980) chi-square statistics and their probability values for checking autocorrelation and heteroskedasticity in the residuals and any misspecification in the model. The table in the Appendix presents the data used. The notes to that table provide sources of the data, and explain in detail how the variables are defined and measured. Both regressions in the table fit the data well but the first one fits better than the second one, perhaps indicating that effects differ somewhat from one coalition government to another.

The first column of the Table 1 shows that the major incumbent party enjoys an 8-point incumbency advantage. However, its votes depreciate at the rate of 5 percent per year while in office. In addition, the major incumbent party loses 16 percent of its support in the previous election due to strategic voting, if the two elections in question are of the same type. This figure rises to 20 percent in local and to 29 percent in by elections that follow a regular parliamentary election and go down to 12 percent in regular parliamentary elections that follow a local election and go down to 3 percent in regular parliamentary elections that follow a by election.

Furthermore, it is estimated that, due to extraordinary events discussed in the previous section, cost major incumbent parties 8 and 5 percent of the votes in 1973 and June 2015 respectively, which they gained back in the next election. In 2002, the primary incumbent party lost 16 percent more votes than would be expected, given the incumbency and economic circumstances prevailing at the time. In each election between 2004 and 2011, the old right-wing parties collectively lost about 17 percent of their remaining supporters to the new incumbent party.

The results show that a percentage point increase in the growth rate during the four quarters preceding the election, raises the vote share of the major incumbent party by one-percentage point if it is in power by itself. However, in the case of a coalition government, this reward is half as much. Each percentage point increase in the inflation rate during the same period on the other hand lowers the vote share of the sole party in the government by 0.13 percentage points. This may be slightly but not significantly lower in the case of coalition governments.

The first seven parameter estimates given in the first and second columns of Table 1, are almost identical. This implies that strategic voting and cost of ruling are quite similar for major and minor ruling parties, but incumbency advantage is either non-existent or very small for minor incumbent parties. Comparison of the two columns also indicate that vote shifts during 1973-1975 and 2004-2011 affected only the major incumbent parties as one would expect, and that in 2002 junior members of the coalition government lost extraordinary amount of votes as well.

The second regression in Table 1 finds the return to a single-party government of a percentage increase in the growth rate to be about a point increase in its vote share, or the same as

what was found in the first regression. However, the same return to a multi-party government is negative half a percent. As the vote share of the leading member of a coalition goes up by half a point when the growth rate rises by one point, this implies that the aggregate vote share of the other members goes down by about one percent. The regression in question also finds that a multi-party government benefits from a drop in the inflation rate half as much as a single party government. Then junior members of the coalition must suffer from an improvement in the inflationary front. In other words, voters appear to treat at least some of the minor parties as if they are opposition parties. In the regressions presented in Table 2, whether this is related to the fragmentation and ideological composition of coalitions is explored.

In Table 2 regressions, the Coalition dummy (C) in our original model is replaced by Effective Number of Parties in the government minus one (ENOP-1). In addition, two other regressions are considered. These add two interaction terms to our model, one between growth and MIXED and another between inflation and MIXED, where MIXED is a dummy variable intended to distinguish coalitions, which are ideologically more harmonious than others are. As mentioned above, this variable takes on the value of one if least one-half of the junior parties in the government are from different side of the political spectrum than the primary incumbent party.

The parameter estimates given in the first column of Table 2 are almost the same as the ones given in the first column of Table 1. To see that that is the case with those related to economic performance as well, we should note that ENOP-1 and C both equal zero in the case of single-party governments. Then each percentage rise in the growth rate and the inflation rate affect the vote share of the incumbent party by one and -0.14 points, respectively. Average number of effective parties for the coalition governments in our sample is 2.06. Multiplying that minus one with the coefficients of  $g*(ENOP - 1)$  and  $p*(ENOP - 1)$  in the first column of Table 2 yields -0.50 and 0.03 respectively just as the coefficients of  $g*C$  and  $p*C$  in the first column of Table 1. Thus, the model in Table 1 can be thought of as a special case of the one in Table 2 when effectively there are roughly two parties in the government. The model in Table 2 allows the strength of economic voting to vary with the number of parties in the government. Vote share gain from each additional unit of growth drops by 0.47 units for each unit increase in the effective number of parties in the government. The highest value for ENOP in our sample is 2.88. When the government fragmentation is that much, a percentage increase in the growth rate brings only 0.12 points of extra vote share to the lead party. The effect of inflation on vote share of the major incumbent party is quite small to begin with, and it may be even smaller when the party leads a coalition with many parties. However we cannot assert this with confidence as the coefficient of  $p*ENOP$  is not statistically significant.

Insignificance of the last two coefficients in the second column of Table 2 implies that the figures quoted for the major incumbent party in the previous paragraph applies regardless of its partners being of similar or different ideology. Significance of the corresponding parameters in the last column of Table 2 on the other hand indicate that not only the fragmentation in the government, but also its ideological composition matters when all incumbent parties are considered collectively.

Last column of Table 2 shows that in case of single-party governments, each additional unit of growth brings to the government 1.1 points of extra vote share. However, each additional

party in the government takes away 0.7 points from that, as long as it is of similar ideology with the lead party. When the effective number of parties in the government exceed 1.6, the effect of growth on the government's vote share turns negative, even when the ruling parties are of the same political wing. When the incumbent parties differ ideologically by a significant amount, the growth rate and the government's vote share become inversely related, regardless of the number of parties in the government. It looks like when they are at the opposite end of the political spectrum than the major incumbent party, the minor incumbent parties begin being seen by the public as impeding government's performance rather contributing to it. Perhaps this varies with the degree of political incompatibility, but given the size of our data, it is not feasible to pursue that avenue. Inflation affects the vote share of the government by a small amount but negatively, as long as the number of effective parties in it are less than 1.7. The ideological harmony of the government appears to have no significant impact on the response of vote share to inflation.

Contrary to what was found in Table 1, there is a hint in Table 2 that strategic voting may be slightly weaker for junior members of a coalition government than for its leading member. However as in Table 1 regressions, in those in Table 2, incumbency advantage is found to be much less for minor partners of a coalition than its primary partner, but cost of ruling the same for all incumbents.

## **5. Discussion**

Akarca (2016), examining the 1950-2015 period, reports that the average growth rate of real GDP in Turkey under coalition governments was 1.5 percentage points lower and the average inflation rate 26.7 points higher than under single-party governments. Economic performance of coalitions involving ideologically incompatible parties are even worse. In their case, the gaps mentioned rise to 2.1 and 29.1 respectively. Had the average growth rate of per capita real GDP during 1950-2015 was the same as the rate achieved under single party governments, Turkey's per capita real income today would be 1.6 times higher.

Many reasons are given in the literature for economic performance being poorer under coalition governments. The current study suggests that incentives provided by the electorate being weaker in the case of coalition governments may be a key reason as well. Reward or punishment coalition governments get for their economic performance is much smaller than what single-party governments get. Conflicts created by uneven distribution of the rewards or punishments among partners in coalitions may be another reason for their poor performance. Voters hold the lead party in such governments far more responsible for economic outcomes than other incumbent parties. The findings of the current paper also explains why economic performance gets worse as the fragmentation of the government rises, quantitatively and ideologically. Returns to economic performance gets even smaller, and the gap between returns to major and minor ruling parties even wider, as the number of parties in the government increase. When coalition governments include too many parties and/or parties of different ideologies, incentives turn into disincentives for some of its junior members. Then the latter could resist or delay even policies they agree with just to deny the lead party a success or to have it blamed.

Thus, economic performance of the country can be improved if incidence of coalition governments are reduced, or in case of such governments, clarity of responsibility is enhanced. If coalition governments reflected genuine diversity in the public opinion and were negotiated

accordingly, the first of these remedies could be considered undemocratic. However, as Akarca (2016) argues, most coalitions in Turkey, in particular those involving both right and left wing parties, were created artificially by military interventions to prevent conservative parties from gaining full power. All of the successful coups were conducted against such parties, as they were viewed by the military and the bureaucracy as a threat to the secular and western orientation of the country and the guardianship role of the armed forces. The religious-right and economic-right voters in Turkey show a tendency to unite under one roof and most of the time have more than sufficient public support to form a single-party government. Whenever that happened however, their government was toppled. Political fragmentations created by coups were the main cause of coalition governments, and single party governments formed by united conservatives were the main reason behind the coups. The toppled parties were fragmented into pieces after the coups, some of which were then forced to share power with left-statist parties.<sup>6</sup> A chain of incompatible coalition governments followed each coup until another single-party government emerged again, which was brought down by another coup. Thus, coups not only brought coalitions but coalitions laden with conflicts. In this paper, we found that such governments were less incentivized, less responsible and more conflicted, and thus produced poorer economic results.

Combining findings in this study with those of Akarca (2016), we can also state that coups have long lasting consequences not only politically but economically as well. Curtailing coups through institutional measures and by raising the democratic consciousness of the public, the bureaucracy, military and the political parties will also curtail coalitions and produce better economic outcomes. Another way to reduce the frequency of coalitions may be through the election system. Election systems try to strike a good balance between fairness in representation and stability in governance. Findings of this paper suggest that in the case of Turkey perhaps a slight tilt in favor of the latter may be proper. In democracies, coalition governments cannot be eliminated altogether. Therefore, it is also necessary to come up with creative changes in the institutional setup that will increase the clarity of responsibility in case of multi-party governments.

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<sup>6</sup> Even though in 1961 the right-wing Justice Party (AP), the New Turkey Party (YTP) and the Republican People's Party (CKMP) which captured the votes of the Democrat Party ousted by the 1960 coup, were willing and able to form a government, the military junta forced AP to form a coalition government with left-statist CHP. Nevertheless, the planned coalition was formed later, shortly before the next general election in 1965, which brought the AP to power alone. When the 12 March 1971 coup toppled the AP government, leaders of the junta demanded a cabinet composed of AP, CHP and National Reliance Party (MGP) deputies, and a number of unelected technocrats, headed by a prime minister from the CHP.

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**Table 1: Vote equations**

Variables	Major incumbent party	All incumbent parties
Constant	8.00 (2.57)	9.05 (1.24)
$V_{t-k}$	0.84 (12.67)	0.85 (5.80)
$\Delta L_t * V_{t-k}$	-0.04 (2.65)	-0.04 (1.56)
$\Delta B_t * V_{t-k}$	-0.13 (5.96)	-0.13 (2.95)
$r_t * V_{t-k}$	-0.05 (5.56)	-0.06 (3.34)
Z73 <sub>t</sub>	-8.22 (5.60)	-7.86 (2.79)
Z15 <sub>t</sub>	-4.79 (3.52)	-4.74 (1.74)
D02 <sub>t</sub>	-15.93 (6.97)	-26.99 (6.23)
D04-11 <sub>t</sub> * S <sub>t-k</sub>	0.17 (4.87)	-0.17 (2.22)
NEW <sub>t</sub>	5.30 (3.51)	8.36 (2.79)
g <sub>t</sub>	1.02 (8.12)	0.95 (3.78)
p <sub>t</sub>	-0.15 (5.62)	-0.18 (2.93)
g <sub>t</sub> * C <sub>t</sub>	-0.50 (2.26)	-1.47 (3.41)
p <sub>t</sub> * C <sub>t</sub>	0.03 (1.43)	0.11 (2.19)
$V_{t-k} * C_t$		
$\Delta L_t * V_{t-k} * C_t$		
$r_t * V_{t-k} * C_t$		
F Prob > F	113.35 (0.00)	19.35 (0.00)
Durbin-h Prob > h	-1.57 (0.06)	-1.11 (0.13)
White Chi-square Prob > Chi-sq.	28.49 (0.81)	20.32 (0.98)
R-square Adj. R-square	0.99 0.98	0.94 0.89

Notes:

The dependent variable in each regression is  $V_t$ , the vote share of the sole incumbent party in case of single-party governments and of the major incumbent party in case of coalition governments. For the definitions of independent variables, see Section 3, and for their measurement, the notes to the Appendix Table. The data covers 30 local and parliamentary elections between 1951 and 2015. Estimates are obtained using the Ordinary Least Squares method. The numbers in parentheses, next to the parameter estimates, are the t-values. The dark-gray shaded cells indicate significance of the parameter estimates at one percent level, and the light-gray shaded cells, at five percent level, in one-tailed tests.

Source:

Author's computations using the data given in the Appendix.

**Table 2: Vote equations**

Variables	Major incumbent party		All incumbent parties	
	1	2	1	2
Constant	7.65 (2.47)	8.15 (2.37)	6.78 (1.13)	4.70 (1.13)
$V_{t-k}$	0.85 (12.92)	0.84 (11.66)	0.91 (7.58)	0.91 (10.99)
$\Delta L_t * V_{t-k}$	-0.04 (2.82)	-0.04 (2.48)	-0.04 (1.85)	-0.03 (1.97)
$\Delta B_t * V_{t-k}$	-0.13 (6.14)	-0.13 (5.74)	-0.13 (3.54)	-0.13 (5.31)
$r_t * V_{t-k}$	-0.05 (5.75)	-0.05 (5.43)	-0.06 (4.14)	-0.05 (5.43)
$Z73_t$	-8.60 (5.85)	-8.94 (4.83)	-8.70 (3.49)	-3.54 (1.79)
$Z15_t$	-4.82 (3.63)	-4.78 (3.39)	-4.76 (2.06)	-4.63 (2.99)
$D02_t$	17.65 (6.54)	-17.15 (5.60)	-36.53 (7.74)	-39.98 (11.34)
$D04-11_t * S_{t-k}$	0.17 (4.88)	0.17 (4.49)	0.17 (2.74)	0.19 (4.52)
$NEW_t$	5.04 (3.46)	5.10 (3.25)	8.06 (3.19)	8.88 (5.16)
$g_t$	1.00 (8.46)	1.00 (7.56)	0.87 (4.21)	1.07 (7.30)
$p_t$	-0.14 (6.02)	-0.15 (5.09)	-0.17 (3.83)	-0.15 (4.32)
$g_t * (ENOP-1)_t$	-0.47 (2.54)	-0.49 (1.74)	-1.59 (4.71)	-0.68 (2.09)
$p_t * (ENOP-1)_t$	0.03 (1.27)	0.02 (0.43)	0.15 (3.37)	0.21 (4.99)
$g_t * MIXED_t$		0.04 (0.12)		-1.78 (4.44)
$p_t * MIXED_t$		0.02 (0.43)		-0.05 (1.16)
F Prob > F	118.46 (0.00)	91.91 (0.00)	27.06 (0.00)	54.35 (0.00)
Durbin-h Prob > h	-0.73 (0.23)	-0.87 (0.19)	0.53 (0.30)	0.95 (0.17)
White Chi-square Prob > Chi-sq.	27.61 (0.84)	30.43 (0.64)	28.23 (0.75)	29.34 (0.81)
R-square Adj. R-square	0.99 0.98	0.99 0.98	0.95 0.92	0.98 0.96

Notes:

In the first two regressions, the dependent variable ( $V_t$ ) is the vote share of the sole incumbent party in case of single-party governments and of the major incumbent party in case of multi-party governments. In the last two regressions, the dependent variable ( $V_t$ ) is the vote share of the sole incumbent party in case of single-party governments and the aggregate vote share of all incumbent parties in case of multi-party governments. For the definitions of other independent variables, see Section 3, and for their measurement, the notes to the Appendix Table. The data covers 30 local and parliamentary elections between 1951 and 2015. Estimates are obtained using the Ordinary Least Squares method. The numbers in parentheses, next to the parameter estimates, are the t-values. The dark-gray shaded cells indicate significance of the parameter estimates at one percent level, and the light-gray shaded cells, at five percent level, in one-tailed tests.

Source:

Author's computations using the data given in the Appendix.

**Table A: Political and economic conditions: 1950-2015**

Election Date	Elec. Type <sup>a</sup>	Provinces covered by the election	Incumbent Parties <sup>b</sup>	Vote Share (%)		Previous Vote Share (%)		Time in Power since last election (years)		Effective number of parties in gov. <sup>g</sup>	Growth Rate <sup>h</sup> (%)	Inf. Rate <sup>i</sup> (%)
				Major Incumbent Party	All Incumbent Parties <sup>c</sup>	Major Incumbent Party	All Incumbent Parties <sup>d</sup>	Major Incumbent <sup>e</sup>	All Incumbents <sup>f</sup>			
May.14, 1950	A	63 of 63	CHP	39.59	39.59			3.75	3.75	1.00	-3.5	-0.2
Sep. 16, 1951	B	17 of 63	DP	52.73	52.73	55.22	55.22	1.25	1.25	1.00	9.2	4.3
May 2, 1954	A	64 of 64	DP	58.42	58.42	52.73	52.73	2.50	2.50	1.00	4.8	4.9
Oct. 27, 1957	A	67 of 67	DP	48.62	48.62	58.42	58.42	3.50	3.50	1.00	3.6	20.3
Oct. 15, 1961	A	67 of 67	Military rule									
Nov. 17, 1963	L	67 of 67	CHP/YTP/CKMP	36.20	45.80	36.74	64.43	2.25	1.50	2.40	6.8	5.7
June 7, 1964	S	26 of 67	CHP	40.85	40.85	36.20	36.20	0.50	0.50	1.00	4.2	4.1
Oct. 10, 1965	A	67 of 67	AP/CKMP/YTP/MP	52.87	65.10	50.28	56.81	0.50	0.50	2.45	0.1	4.2
June 7, 1966	S + B	24 of 67	AP	56.49	56.49	52.87	52.87	0.75	0.75	1.00	4.6	5.2
June 2, 1968	L	67 of 67	AP	49.06	49.06	56.49	56.49	2.00	2.00	1.00	3.7	5.3
Oct. 12, 1969	A	67 of 67	AP	46.53	46.53	49.06	49.06	1.25	1.25	1.00	2.5	6.5
Oct. 14, 1973	A	67 of 67	AP/CGP	29.82	35.08	46.53	53.11	4.00	2.50	1.28	1.7	19.2
Oct. 12, 1975	S + B	27 of 67	AP/MSP/CGP/MHP	41.34	52.98	29.82	50.26	0.75	0.50	2.37	4.4	21.0
June 5, 1977	A	67 of 67	AP/MSP/CGP/MHP	36.88	53.73	41.34	52.98	1.75	1.75	2.37	4.7	19.4
Dec. 11, 1977	L	67 of 67	AP/MSP/MHP	37.08	50.59	36.88	51.86	0.50	0.50	1.83	1.3	23.7
Oct. 14, 1979	S + B	29 of 67	CHP/CGP/DP2	29.22	31.59	41.81	43.42	1.75	1.75	1.18	-2.2	68.4
Nov. 6, 1983	A	67 of 67	Military rule									
Mar. 25, 1984	L	67 of 67	ANAP	41.48	41.48	45.14	45.14	0.25	0.25	1.00	4.1	48.2
Sep. 28, 1986	B	10 of 67	ANAP	32.12	32.12	41.48	41.48	2.50	2.50	1.00	3.9	40.3
Nov. 29, 1987	A	67 of 67	ANAP	36.31	36.31	32.12	32.12	1.25	1.25	1.00	7.1	33.6
Mar. 26, 1989	L	71 of 71	ANAP	21.80	21.80	36.31	36.31	1.25	1.25	1.00	-2.5	69.2
Oct. 20, 1991	A	74 of 74	ANAP	24.01	24.01	21.80	21.80	2.50	2.50	1.00	1.5	55.2
Mar. 27, 1994	L	76 of 76	DYP/SHP	21.44	35.01	27.03	47.78	2.25	2.25	1.97	6.4	66.1
Dec. 24, 1995	A	79 of 79	DYP/CHP	19.18	29.89	21.44	39.64	1.75	1.75	1.97	5.6	87.2
Apr. 18, 1999	A	80 of 80	ANAP/DSP/DTP	13.22	35.99	19.65	34.29	2.00	1.75	1.96	-1.8	68.4
Nov. 3, 2002	A	81 of 81	DSP/MHP/ANAP	1.22	14.71	22.19	53.39	3.50	3.25	2.88	-0.6	46.4
Mar. 28, 2004	L	81 of 81	AKP	41.67	41.67	34.28	34.28	1.25	1.25	1.00	4.5	18.8
July 22, 2007	A	81 of 81	AKP	46.58	46.58	41.67	41.67	3.25	3.25	1.00	4.6	9.0
Mar. 29, 2009	L	81 of 81	AKP	38.39	38.39	46.58	46.58	1.75	1.75	1.00	-5.6	13.3
June 12, 2011	A	81 of 81	AKP	49.83	49.83	38.39	38.39	2.25	2.25	1.00	7.3	7.6
Mar. 30, 2014	L	81 of 81	AKP	43.40	43.40	49.83	49.83	2.75	2.75	1.00	3.4	7.2
June 7, 2015	A	81 of 81	AKP	40.87	40.87	43.40	43.40	1.25	1.25	1.00	1.6	7.4
Nov. 1, 2015	A	81 of 81	AKP	49.50	49.50	40.87	40.87	0.25	0.25	1.00	2.2	7.3

Notes:

- a/ A: National Assembly general election.  
B: National Assembly by election.  
S: Senate election  
L: Local administrations election (election for Provincial Councils until 2014, and for metropolitan mayors in provinces, which have metropolitan status, and for Provincial councils in other provinces, since 2014).  
S+B: Senate election plus National Assembly by election (only in provinces where no Senate election was held simultaneously).

In instances when different types of elections are held simultaneously or almost simultaneously, the priority for inclusion in the sample was given first to the National Assembly general elections, next to local elections, then to the Senate elections, and last to the by elections. The Senate and by elections were given lower priorities because, unlike the National Assembly general elections and local elections, they did not cover the whole country. The Senate elections involved only a third of the provinces and only a third of the seats in the Senate that were subject to election. The coverage of by elections were even less, about 15-27 percent of the provinces when they did not coincide with a Senate election. When the Senate and by elections were held simultaneously, their results were aggregated to increase the coverage of the country. In such aggregation, for provinces where the two elections overlapped, the outcome of the Senate election is considered.

- b/ The party listed first in the Table is the major incumbent party. The Turkish acronyms used in the table and the parties they represent are as follows:

CHP: Republican People's Party  
DP: Democrat Party  
YTP: New Turkey Party  
CKMP: Republican Peasant's Nation Party  
AP: Justice Party  
MP: Nation Party  
CGP: Republican Reliance Party  
MSP: National Salvation Party  
MHP: Nationalist Action Party  
DP2: Democratic Party  
ANAP: Motherland Party  
DYP: True Path Party  
SHP: Social Democratic People's Party  
DSP: Democratic Left Party  
DTP: Democrat Turkey Party  
AKP: Justice and Development Party

A minority government formed by DSP was in power during the four months preceding the 1999 election but it was just a caretaker government. For that reason the coalition government in power prior to that for over eighteen months is taken as the incumbent for that election.

Of the parties listed, CHP, CGP, SHP and DSP are considered to fall in the left side, and the rest in the right side of the political spectrum. Thus governments at the time of the 1963, 1973, 1979, 1994, 1995, 1999, and 2002 elections are treated as ideologically mixed.

c/ The vote share given for the 1975 election is for the AP, MSP and MHP only. The CGP did not enter the 1975 election.

The vote share given for the 1979 election is for the CHP and CGP only. DP2 did not enter the 1979 election.

d/ The lagged vote share given for 1965 is the aggregate vote share of AP, CKMP and YTP in 1964. The MP did not enter the 1964 election.

The lagged vote share given for the June 1977 election is the aggregate vote share of the AP, MSP and MHP in 1975. The CGP did not enter the 1975 election.

The lagged vote share given for 1995 is the aggregate vote share of DYP, CHP and SHP in 1994. As the SHP and CHP merged before the 1995 election, the SHP and CHP are treated as if they were one party in 1994.

The lagged vote share given for 1999 is the aggregate vote share of the ANAP and DSP. DTP was formed in 1997 and thus did not enter the 1995 election.

e/ 0.25 times the number of quarters since last election during which the major incumbent party was in power majority of time, either alone or with other parties.

f/ 0.25 times the number of quarters since last election during which all incumbent parties were in power simultaneously majority of time, with or without other parties.

As the CGP was formed by the merger of National Reliance Party (MGP) with the Republican Party (CP). In computing CGP's time in power, CGP and MGP are treated as if they were the same party.

g/ Effective number of parties in government (ENOP) is computed according to the definition suggested by Laakso and Taagepera ( 1979):

$$ENOP_t = 1 / \sum_{k=1}^l s_{kt}^2$$

where  $s_k$  stands for the proportion of votes the  $k$ th party in government received in the previous national assembly general election, relative to the aggregate vote share of the incumbent parties, and  $l$  is the total number of parties in the government.

During the 1964 election, a CHP minority government, was in power. Since this government got the extra support it needed from the independent deputies rather than an opposition parties, it is treated as a single-party government.

For the 1965 election, CKMP and MP were treated as if they are one party because MP split from the CKMP after the previous general assembly election in 1961.

For the 1995 election, ENOP is computed treating the SHP vote share in 1991 as if it was the CHP's. CHP and SHP merged before the 1995 election.

For the 1999 election, DTP is assumed to be not in the government as that party did not exist in 1995 and was very small anyway.

h/ The growth rate,  $g_t$ , is taken as the growth rate of per capita real GDP during the four-quarter period preceding the election. The latter is obtained by adjusting the growth rate of real GDP during the four-quarter period before the election with the annual growth rate of the population during the year of the election if the election was held in the second half of the year and during the year before if the election was held in the first half of the year. The quarter of the election is included in the four-quarter period if the election was held in the second half of the quarter and not, if otherwise.

For elections prior to 1989 when quarterly data was not available,  $g_t$  is computed as follows:

$$g_t = m G_t + (1-m) G_{t-1}$$

where  $G_t$  and  $G_{t-1}$  are the annual growth rates for the year in which the election was held, and the one prior to that.

$m = 0.00$  if the election is held between January 1 and February 14,

$m = 0.25$  if the election is held between February 15 and May 15,

$m = 0.50$  if the election is held between May 16 and August 15,

$m = 0.75$  if the election is held between August 16 and November 15,

$m = 1.00$  if the election is held between November 16 and December 31,

except for elections in 1965, 1975 and 1984, when  $m$  is taken as unity because the governments then were either not in power during the year preceding the election or were in power for less than half a quarter.

For the year 1968, growth rate of per capita real GNP is substituted for the missing growth rate for per capita real GDP.

i/ The inflation rate,  $p_t$ , is taken as the growth rate of the GDP implicit price deflator during the four-quarter period preceding the election. The quarter of the election is included in the four-quarter period if the election was held in the second half of the quarter and not if otherwise. For the elections prior to 1989, when quarterly data was not available,  $p_t$  is computed as weighted average of the annual inflation rates during the election year and the one before it, in a similar way the  $g_t$  was computed as explained above.

For the year 1968, rate of change in GNP deflator is substituted for the missing rate of change in GDP deflator.

Sources of data:

The dates and the coverage of elections, make-up of governments and their time in power, are determined using the information given in Tuncer (2002, 2007, 2009, 2010, 2011a, 2011b, 2012a and 2012b), Tuncer and Kasapbaş (2004), Tuncer, Kasapbaş and Tuncer (2003), Tuncer and Tuncer (2016) and Tuncer, Yurtseven and Tuncer (2014 and 2015).

Vote shares in parliamentary elections are computed by the author, using the data provided by Tuncer (2010) for the 1950 election, by Tuncer (2011a) for the 1954 election, by Tuncer (2012a) for the 1957 election, by Tuncer (2012b) for the 1961 election, by Tuncer (2002) for elections between 1965 and 1999 (including by elections), by Tuncer, Kasapbaş and Tuncer (2003) for the 2002 election, by Tuncer (2007) for the 2007 election, by Tuncer (2011b) for the 2011 election, by Tuncer, Yurtseven and Tuncer (2015) for the June 2015 election, and by Tuncer and Tuncer (2016) for the November 2015 election. In aggregating the Grand National Assembly By and Senate elections held in 1975 and 1979, the province level vote data provided by Turkish Institute of Statistics (TurkStat) was also utilized. It should be noted that for 1950, 1954, 1957 and 1961 elections data in Tuncer (2002) differ slightly from those given in Tuncer (2010, 2011a, 2012a and 2012b). Here the latter are used as they are based on more detailed and more recent research. When Tuncer publishes his planned individual volumes on elections between 1965 and 1987, vote share figures on some of those may be revised as well.

Vote shares in local administrations elections are obtained from Tuncer and Kasapbaş (2004) for the 2004 election, from Tuncer (2009) for the 2009 election, and Tuncer, Yurtsever and Tuncer (2014) for the 2014 election. Source of data for all other local administrations elections is TurkStat. The figures given for all elections, except the one for 2014, are for Provincial General Councils. For the 2014 election, the sum of the votes cast for District Municipal Councils in 30 provinces which are officially classified as Metropolises and for Provincial General Councils in the remaining 51 provinces is used.

The growth rates are computed by the author, as explained in note (e), using the data provided by the TurkStat for all years except 1948 and 1968. For latter two years, per capita real GNP growth rate is substituted for the missing growth rate in per capita real GDP. In computing the former, the population growth rate, provided by the TurkStat, and the real GNP growth rate, provided by the State Planning Organization (SPO) of the Republic of Turkey are utilized.

The inflation rates are computed by the author, as explained in note (f) above, using the data provided by the TurkStat for all years except 1948 and 1968, for which the rate of change in GNP price deflator was used instead. The rate of change in GNP deflator is provided by the SPO.

The GDP series, from which growth and inflation rates are obtained, is 1987 based for the years prior to 1998, and 1998 based for years after 1999.