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SOCIAL, POLITICAL AND ECONOMIC
DETERMINANTS OF TURKISH VOTER CHOICE
IN THE 2002 PARLIAMENTARY ELECTION

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Abstract

In 2002 elections more than half of the voters cast their ballots for a different party than the one they chose in 1999. Two new parties received more than two-fifths of the votes. The combined vote share of the three incumbent parties dropped to 14.7 percent from 53.4 in 1999. The 1999 and 2002 election outcomes are analyzed at the provincial level, through a system of regression equations. The results obtained indicate that votes moved from the Virtue, Nationalist Action, Motherland and True Path parties (FP, MHP, ANAP and DYP) to the Justice and Development Party (AKP), from the Democratic Left Party (DSP) to the Republican People's and Young parties (CHP and GP), and from the Democratic Left, Nationalist Action and Motherland parties (DSP, MHP and ANAP) to the True Path Party (DYP). The newly formed Justice and Development Party (AKP), the winner of the 2002 election and the ruling party since then, is found to have captured all of the far-right Islamist, about half of the far-right nationalist, and more than half of the center-right votes. This will give clues as to the stability of the party and the policies it is likely to pursue. The voters appear to have been influenced by the rampant government corruption involving construction and zoning code violations, exposed by the two major earthquakes which struck northwestern Turkey in 1999, the incompetence shown by the government in providing relief, the continued corruption in regards to those efforts, and government's failure to prosecute corrupt officials and businessmen. They are found to have held accountable all of the political parties which participated in governments during the last decade or so, and not just the incumbents in 2002. The party in charge of the ministry responsible for earthquake relief, and parties which served longest and controlled more of the city administrations in the quake zone were blamed more. The Justice and Development Party (AKP) was the beneficiary of the votes lost by these parties. The sensitivity shown by the electorate to real and perceived corruption implies that corruption problem will be tractable in Turkey, and can be reduced through increased transparency and democratization. The voters may have been affected by the 2001 economic crisis as well. However this does not appear to be due to its impact on their incomes in that year but perhaps due to government's incompetence in the creation and management of the crisis. The party preferences of Turkish voters are found to depend on their socioeconomic characteristics as well.

ملخص

صوت أكثر من نصف المقترعين في انتخابات العام 2002 لصالح حزبٍ مختلفٍ عن الحزب الذي صوتوا لصالحه عام 1999 وحصل حزبان جديدان على أكثر من خمسي الأصوات في حين هبط إجمالي نصيب الأحزاب الثلاثة المتواجدة في سدة الحكم من 53.4% في انتخابات عام 1999 إلى 14.7% في انتخابات عام 2002. وقد تم تحليل نتائج انتخابات عامي 1999 و2002 على مستوى محلي من خلال نظام معادلات الإنحدار، وأشارت النتائج المستقاة إلى أن الأصوات انتقلت من حزب الفضيلة وحزب العمل الوطني وحزب الوطن وحزب الطريق القويم إلى حزب العدالة والتنمية، كما انتقلت الأصوات من الحزب اليساري الديمقراطي لصالح حزب الشعب الجمهوري وكذا لصالح حزب الشباب، ومن الحزب اليساري الديمقراطي وحزب العمل الوطني وحزب الوطن لصالح حزب الطريق القويم.

أما حزب العدالة والتنمية الجديد على الساحة التركية والذي فاز بانتخابات العام 2002 وهو الحزب الحاكم منذ ذلك التاريخ فقد حظي بجميع أصوات الإسلاميين المتطرفين وحوالي نصف أصوات الوطنيين المتطرفين وأكثر من نصف أصوات يمين الوسط مما يعطي مؤشراتٍ بخصوص استقرار الحزب والسياسات التي قد ينتهجها.

وقد تأثر المقترعون على ما يبدو بالفساد المستفحل في الحكومة والذي يتضمن انتهاكات في عمليات المعمار وفي قانون تقسيم الأراضي ؛ تلك الانتهاكات التي فضحها زلزالان كبيران كانا قد ضربا شمالي غرب تركيا عام 1999 كاشفة النقاب عن مدى عجز الحكومة عن توفير المساعدات والمعونات للمتضررين وكذا استمرار الفساد فيما يتعلق بتلك الجهود إضافة إلى عدم قيام الحكومة بعقاب المسؤولين ورجال الأعمال المتورطين في أعمال الفساد، فوجهوا اللوم إلى كافة الأحزاب السياسية المشاركة في الحكومة خلال العقد الماضي أو نحو ذلك وليس فقط الأحزاب الحالية في حكومة عام 2002.

أما القسط الأكبر من اللوم فقد طال الحزب الذي كان مسؤولاً عن الوزارة المختصة بتقديم الإغاثة لضحايا الزلزال وكذلك الأحزاب التي ظلت في الحكومة لفترةٍ أطول والتي كانت تتحكم في الجزء الأكبر من إدارات المدينة في منطقة الزلزال. وعليه فقد غنم حزب العدالة والتنمية الجديد الأصوات التي خسرتها تلك الأحزاب.

وما أبداه المقترعون من حساسيةٍ حيال عمليات الفساد الحقيقية والمتصورة يعطي انطباعاً بأن مشكلة الفساد يمكن معالجتها في تركيا ويمكن تخفيض معدلها من خلال مزيدٍ من الشفافية والديمقراطية.

وربما كان للأزمة الإقتصادية عام 2001 ثمة تأثيرٍ على أصوات المقترعين على الرغم من أن هذه الأزمة لم تؤثر على دخولهم في هذا العام ولكن ربما كان السبب الأقوى يرجع إلى عجز الحكومة عن التصدي للأزمة أو إدارتها.

وقد لوحظ أن السمات الإجتماعية والإقتصادية تؤثر كثيراً على اختيارات المقترعين الأتراك.

1. Introduction

The outcome of November 3, 2002 parliamentary election in Turkey was such a shock that journalists and academicians who analyze it often refer to it using terms such as landslide, meltdown, earthquake and tsunami. As it can be observed from Table 1, in that election the aggregate vote share of the three incumbent parties, the Democratic Left Party (DSP), the Nationalist Action Party (MHP) and the Motherland Party (ANAP), dropped to 14.7 percent from 53.4 percent in the previous election held in April 18, 1999. Akarca and Tansel (2006) estimated that 24.6 of the 38.7 percentage point drop in the vote share of the incumbent parties can not be explained by the incumbency and economic conditions prevailing at that time. In addition to the voters which deserted the incumbent parties, 2.5 percent of the voters left the opposition True Path Party (DYP). Furthermore, the closing of the main opposition Virtue Party (FP) by the constitutional Court in 2001, forced 15.4 percent of the electorate which had voted for this party in 1999, to make another choice in 2002. In short, in the 2002 election, more than half of the Turkish voters cast their ballots for a different party than the one they did in 1999.

The voters who migrated from the five political parties mentioned above moved essentially to one of the following three parties: the Justice and Development Party (AKP), the Republican People's Party (CHP) and the Young Party (GP). The Justice and Development Party (AKP), one of the two parties which emerged from the banned Virtue Party (FP), received the lion's share. Its proportion of the vote was more than twice that of the Virtue party (FP) in 1999, indicating that it has attracted votes also from other parties, and giving some credence to the assertion of its leaders that they are not a continuation of the Virtue Party (FP). The Felicity Party (SP), the other party with roots in the Virtue Party (FP) however, received only 2.5 percent of the vote, perhaps due to towing the Islamist line of the old Virtue Party (FP), unlike its rival Justice and Development Party (AKP), which disavowed it. The Republican People's Party (CHP) was able to more than double its vote share. However, the party's vote gain was about half the size of the votes lost by the other center-left party, the Democratic Left Party (DSP). This hints that some of the vote traffic was from the parties on the left to the parties on the right. The Young Party (GP), formed a few months before the 2002 election, by a young business tycoon with no previous political experience, was the third magnet for the voters dissatisfied with the existing parties. It is remarkable that such a party, running on a populist and nationalistic platform, was able to get more votes than two of the incumbent parties and almost the same as the third one. The party came fifth in the 2002 election but only slightly behind the third and fourth place finishers.

At the end, none of the parties which entered the parliament in 1999 were able to do so in 2002, failing to exceed the ten percent national threshold required to be represented in the Turkish Grand National Assembly. Only two parties, the newly formed Justice and Development Party (AKP), and the Republican People's Party (CHP) which was left out of the parliament in 1999 due to falling below the ten percent mark then, were able to get in the parliament.

One of the purposes of our paper is to model the inter-party vote movements in Turkey between the 1999 and 2002 elections. Determining the origins and destinations of the migrated voters will help us bring out the bases on which the political parties depend now. This in turn will enable political analysts to better assess the stability of the parties and explain the reasons behind the positions they take. In particular, determining what type of a coalition the Justice and Development Party (AKP), the ruling party since 2002, is based upon will be helpful in gauging the stability of the government and understanding the rationale of the policies it pursues. The results obtained will also aid us in determining which

parties are seen by the electorate as substitutes for each other, and how mobile are the votes between the left and right wing parties.

Many of the researchers who investigated the reasons behind the unprecedented vote losses experienced by the incumbent parties in 2002, for example Çarkoğlu (2002), Çağaptay (2002), Özel (2003), Önis and Keyman (2003), Bacik (2004), Öniş (2006) and Sayari (2007), reached the conclusion that the government's toleration of and even involvement in rampant corruption, its incompetence, especially in creating and handling the 2001 economic crisis and the loss of income it caused, were the main culprits. However none of these studies actually backed their assertions empirically. Findings of Başlevent, Kirmanoğlu and Şenatalar (2005), who used rigorous statistical analysis, provides some statistical evidence in support of the last culprit mentioned, but their study is based on a survey and not actual vote data. Furthermore, this survey was conducted before the election and before the Young Party (GP) was established and its entry into the election was announced. Another purpose of our study is to measure to what extent and in what way, if any, the corruption issue and the 2001 economic crisis influenced the 2002 election outcome. Determining these will not only help us understand the results of the 2002 election better but will also contribute to the literatures on two distinct fields: economic corruption and economic voting.

General corruption is hard to quantify accurately. Even the data on various indexes developed to measure perception of it are not of sufficient length for Turkey, both in cross-section and time-series formats, to do any reliable statistical estimation. However, in our opinion, the government incompetence and corruption surrounding the two major earthquakes which occurred on 17 August 1999 and 12 November 1999 can be quantified. The impact of these on the vote shares of various parties, especially in the quake-effected provinces, in the first election that followed, can give us an idea about the importance of corruption. The two earthquakes mentioned, measured 7.4 and 7.2 on the Richter scale, and struck densely populated and heavily industrialized northwestern section of Turkey. These not only caused tens of thousands of deaths and billions of dollars of destruction, but also exposed rampant government corruption involving violation of construction and zoning codes. While a lot of the old buildings remained standing after the quakes, many of the recently constructed ones folded in on themselves due to their unsafe locations and inappropriate design, substandard practices employed in their construction, such as use of concrete prepared with sea sand, insufficient amount of cement and steel bars. What angered the public even more were the government's poor performance in coming to the help of the earthquake survivors, and its failure to prosecute, except for a few scapegoats, the corrupt contractors and government inspectors. News reports on corruption involved in granting contracts for construction of new housing for the quake survivors and other relief related activities further intensified the public outrage. Green (2005) explains, in detail, how corruption magnified the above disasters in Turkey. Escalares, Anbarci and Register (2007), studying 344 major quakes in 42 countries during the 1975-2003 period, shows that public sector corruption was positively related to earthquake fatalities in other countries as well. Although quite a number of studies cited government's inability and reluctance to move against corruption in general, as a major contributing factor in the outcome of the 2002 election in Turkey, the role played by the 1999 quakes in galvanizing the public anger is mostly overlooked. To our knowledge, only one study, Özel (2003), mentions the earthquake factor, but does not measure it. We hope to show statistically the relevance of this factor. We will assess whether the Turkish voters, particularly those living in the quake-effected areas, have exhibited any sensitivity to the events mentioned above, and if they have, whether they have allocated the responsibility for these, among various political parties, appropriately. In particular, we would like to determine whether the voters held previous governments which were in power when the shoddy buildings were constructed, responsible as well, and

whether they distinguished between the parties which controlled municipal administrations in the earthquake zone and those that did not. In Turkey, municipalities issue the permits for constructions and inspect them but they are overseen by the central government. The latter by granting frequent amnesties for improperly and illegally constructed buildings, and providing utilities and other services to them, encourage their spread.

Answers to the above questions will yield useful insights as to how tractable the issue of corruption is in Turkey, and what approaches are likely to be effective in fighting it. Mishra (2005) shows that when corruption is pervasive, it is also likely to be persistent. He points out that when public condones corruption, expected cost of being corrupt (including probability of apprehension and social sanction associated) would be less, leading to more people being corrupt. Then corrupt behavior becomes the equilibrium or the norm. This in turn, would hamper economic progress of the country. Meon and Sekkat (2005), Pellegrini and Gerlagh (2004), Mo (2001), and Mauro (1995) find corruption to lower investment. Countries with high levels of public sector corruption are found to receive less foreign aid, by Alesina and Weder (2002), and less foreign direct investment, by Habib and Zurawicki (2002). Tanzi and Davoodi (1997) and Mauro (1997) find that corruption shifts public expenditures from growth-promoting to low-productivity projects. Murphy, Shleifer and Vishny (1991, 1993) show that public corruption would drive potential entrepreneurs to rent-seeking activities, or even to becoming corrupt officials themselves, instead of organizing and improving worthwhile production activities. Therefore, we can say that corruption leads to diminished and misallocated resources and thus to low growth.

In 2001 the Turkish economy experienced its severest contraction until that date since 1945, with a 7.5 percent drop in real GDP (or a 5.7 percent drop, according to the new series produced recently) . This may have caused the voters to cast their ballots against the parties in power, in several ways. The government's responsibility in the creation of this crisis and/or its management may have given the voters some information about the competency of the incumbent parties. Also, the voters may have voted to punish the parties in power for hitting them in the pocketbook. The latter may be motivated by revenge or by a desire to create deterrence against similar performances by future governments. Lastly, the sharp reduction in the 2001 real GDP may have altered adversely the expectations of voters concerning future performance under the same incumbents. However, when one considers the fact that in 2002, the election year, real GDP has risen by a respectable 7.9 percent (or by 6.2 percent, using the new series), the latter two of the three reasons given makes less sense. Indeed it flies in the face of large body of literature on economic voting, which finds that economic conditions more than one year before an election does not affect its outcome. Fair (1978, 1982, 1988, 1996, 1999 and 2004) who studied this issue extensively in U.S. presidential elections, concluded that the growth rate only during 2-3 quarters preceding the election matters for the incumbent party's vote share. Studies that use the growth rate in output or in per capita output during the election year as the main economic determinant of the incumbent government's electoral success, either finding or assuming growth in earlier years to be irrelevant, abound. Beside Fair (1978, 1982, 1988, 1996, 1999 and 2004), these include time-series studies by Lewis-Beck and Rice (1984a), Burdekin (1988), Gleisner (1992), Chappell and Suzuki (1993), Alesina, Londregan and Rosenthal (1993, 1996), Alesina and Rosenthal (1995) and Lewis-Beck and Tien (1996) on U.S. presidential elections, by Kramer (1971), Lewis-Beck and Rice (1984b), Kiewiet and Udell (1998), and Grier and McGarrity (2002) on U.S. congressional elections, by Lewis-Beck (1997) on French presidential elections, cross-state time-series study by Peltzman (1987) on U.S. gubernatorial elections, cross-state study by Blackley and Shepard (1994) on a U.S. presidential election, pooled cross-national time-series studies by Powell and Whitten (1993) on 102 parliamentary elections in 19 industrialized countries, Pacek and Radcliff (1995) on

52 presidential elections in 8 developing countries, Wilkin, Haller and Norpoth (1997) on 38 parliamentary and presidential elections in 38 developed and developing countries, and Chappell and Veiga (2000) on 136 parliamentary elections in 13 Western European countries. There are very few studies which do not share in the idea of voter myopia. Peltzman (1990) analyzing U.S. presidential, senatorial and gubernatorial election outcomes, using pooled cross-state time-series data, and Abrams and Butkiewicz (1995) analyzing the outcome of a U.S. presidential election, using cross-state data, concluded that voters consider information from the incumbent's whole term, not just its final year. Their results nevertheless indicate that voters give relatively more weight to recent past of an administration than its distant past. Strumpf and Phillippe (1999) analyzing U.S. presidential election results, utilizing pooled cross-state time-series data, found growth in per capita real personal income two years prior to an election to be most relevant to its outcome. Genç, Şahin and Bekmez (2005) who studied 10 National Assembly elections in Turkey between 1950 and 1991 have argued against voter myopia in the case of Turkish voters. However, their assertion is not based on any statistical testing but solely on the fact that in two elections (out of 10) the major incumbent party won despite negative growth rates during the election year. Furthermore, their approach fails to control for other factors. In our two previous studies on Turkey, Akarca and Tansel (2006 and 2007), we reached the conclusion that economic conditions more than one year before an election does not seem to influence its outcome in Turkey as well. The first of these analyzed the outcomes of twenty-five local and parliamentary elections held in Turkey between 1950 and 2004, using time-series data. The second one analyzed the outcome of the 1995 Turkish parliamentary election, using cross-provincial data. The latter study is very pertinent to the 2002 case because both 1995 and 2002 elections took place towards the end of the years in question and the economic conditions prior to the elections mimicked each other. The Turkish real GDP declined 5.5 percent in 2001 but rose 7.2 percent in 1995. In 2001 and 2002, the corresponding figures were -7.5 percent and +7.9 percent respectively (or using the new series, available only since 1998, -5.7 percent and +6.2 percent). One other aim we have in this study is to estimate the impact of 2001 growth rate on the vote shares of the parties in the 2002 election. This will allow us to test one more time the assertion of voter myopia in the economic voting literature. Voter myopia provides the politicians with incentives to stimulate the economy prior to an election, and deal with its adverse inflationary effects after the election, giving rise to political business cycles. Our findings therefore will shed more light on the question of why governments in Turkey often resort to populist policies before elections.

2. Method and Data

To answer the questions posed in the previous section, we have built three systems of regressions, each one forming the foundation for the next one. Each system consisted of a set of party vote equations. The parties considered are the following: the Justice and Development Party (AKP), the Republican People's Party (CHP), the Young Party (GP), the Democratic Left Party (DSP), the Nationalist Action Party (MHP), the Motherland Party (ANAP) and the True Path Party (DYP). As can be seen from table 1, the 2002 vote shares of these parties summed to 85.2 percent of the valid votes cast in Turkey. The vote equations included, as independent variables, vote shares of the parties which participated in the previous election held in 1999, and some socio-economic and dummy variables to control for local conditions.

The parties whose 1999 vote shares entered the equations as independent variables are the following: the Virtue Party (FP), the Republican People's Party (CHP), the Democratic Left Party (DSP), the Nationalist Action Party (MHP), the Motherland Party (ANAP) and the True Path Party (DYP). These parties received collectively 89.5 percent of the valid votes cast in 1999, as can be seen in table 1. Entering 1999 vote shares of all of the parties on the right

hand side of the equations would lead to multi-collinearity. Consequently some of them need to be excluded to make estimation feasible. Fortunately, it is quite reasonable to assume that the Republican People's Party (CHP) did not lose any votes to other parties between 1999 and 2002 and that almost all of the Virtue Party's 1999 voters have switched to the Justice and Development Party (AKP) in 2002. The Republican People's Party (CHP) not only increased its vote share between 1999 and 2002 in total but it did so in every single province as well. Its 1999 vote share was unusually low by historical standards anyway, which resulted in the party being left out of the parliament. Similarly, the Justice and Development Party (AKP), not only received more votes than the Virtue Party (FP) in total, but its vote share was substantially higher than that of the party from which it emerged, in every province as well. The Felicity Party (SP), the other party to emerge out of the Virtue Party (FP), received only a negligible amount of the votes, as mentioned in the previous section. Thus the 1999 vote share of the Republican People's Party (CHP) is eliminated from all equations except its own, and the 1999 Virtue Party (FP) vote share is eliminated from all equations except that of the Justice and Development Party (AKP). Furthermore, it is very unlikely that any vote traffic has occurred between the extreme-right Nationalistic Action Party (MHP) and the left wing Republican People's Party (CHP). For that reason, the 1999 vote share of the former is dropped from the vote equation of the latter too. These exclusions resulted in the elimination of two major parties from the right hand side of each equation, except for the one representing the Justice and Development Party (AKP), which had one party dropped.

Three socio-economic variables utilized were mean years of schooling for people over age 6, urbanization rate, and proportion of women in non-agricultural employment. The dummy variables are considered for the following eight provinces: Bayburt, Kilis, Malatya, Osmaniye, Rize, Sakarya, Bartın, and Yalova. In the first two of these, independent candidates received considerable amount of votes. In the first one, in addition, the Felicity Party (SP) made an unusually strong showing, receiving a vote share which was almost five times its nationwide share of 2.5 percent. In the third one, the votes which went to an independent candidate in 1999 returned to the political parties. Osmaniye, Rize and Sakarya are the home provinces of the leaders of the Nationalist Action Party (MHP), the Motherland Party (ANAP) and the Young Party (GP), respectively. Their favorite son candidacies in these provinces brought to their parties extra votes. Other party leaders did not have such a strong identification with any particular province. The dummy variables for Bartin and Yalova are included because these observations constitute outliers. Even though the Nationalist Action Party (MHP) experienced a vote loss between 1999 and 2002 elections, in every other province, its vote share in Bartın and Yalova increased. Substantial amount votes went to an independent candidate in Elazığ and to a minor regional party in Sivas as well, but dummy variables were not considered for these provinces because that was the case in 1999 as well.

The first system of equations is intended to model the inter-party vote shifts which have occurred between the 1999 and 2002 elections, and includes the independent variables mentioned above. The second system of regressions are constructed to determine whether and in what way corruption and government incompetence associated with the 1999 earthquakes altered the inter-party vote shifts. The third system is constructed, to ask the same type of questions in regards to the 2001 economic crisis. The construction of the last two systems involved adding to the equations of the first system, variables pertaining to the 1999 earthquake damage and economic conditions prevailing in 2001, successively, after eliminating from them 1999 vote shares with insignificant coefficients. The equations of the second and third systems are first estimated including all of the dummy variables. Then they are re-estimated after dropping from each equation the dummy variables with parameters exhibiting less than 5 percent significance (in a one-tail test), unless they were larger than 5

in absolute value. For brevity, in the next section, only the final equations which resulted are presented.

Each set of equations are estimated as a system, utilizing cross-provincial data and the "seemingly unrelated regressions (SUR)" method of Zellner (1962). The method selected, by taking into account the correlations between the shocks affecting different parties, yields more efficient estimates. We believe that the approach we used is superior to other studies which typically rely only on descriptive statistics, since in our approach the effects are measured jointly. In other words, in the measurement of each, the other ones are held constant. Another advantage of our approach is its reliance on actual vote data rather than survey data taken at a different time than the election, and in which no-response and undecided categories often are quite large.

The provinces in which the Kurdish-nationalist Democratic People's Party (DEHAP) has received more than 10 percent of the vote in 2002, are excluded from the sample. This eliminated 17 provinces (out of 81), all from the eastern and south eastern sections of the country. The behavior of voters in these provinces is considerably different than in the rest of the country. It is largely ethnic based and is affected a lot by the terrorist events in this region and the governments response to them. The eliminated provinces are listed in the notes of Table 2. As can be observed from that table, the proportion of votes received by the Kurdish-nationalist parties, the People's Democracy Party (HADEP) in 1999 and the Democratic People's Party (DEHAP) in 2002, in this region was about ten times their vote share in the rest of the country. While the Motherland Party (ANAP) and the True Path Party (DYP) managed to get about the same proportion of votes in this region as the rest of the country, the vote shares of the Nationalist Action Party (MHP), the Justice and Development Party (AKP), the Republican People's Party and the Young Party (GP) were 35-80 percent lower in the excluded region. Also, the proportion of votes cast for independent candidates in the latter region was 7-10 times higher than the corresponding figure in the remaining provinces. Most of these independent candidates were either tribal leaders or actually members of parties which were not expected to make the ten percent nationwide threshold. In short, different dynamics were at play in the 17 provinces which were excluded. Due to small number of observations, a separate analysis is not carried out for these provinces. It should be noted that only 9.1 percent of the registered voters in 2002 resided in the eliminated provinces. The 2002 vote shares of the political parties considered sum to 88.2 percent of the votes cast in the provinces included in our sample. Thus there was no need to restrict the sum of dependent variables to 100 percent.

No data exists on government's response time to the earthquake disasters, on the number of buildings damaged due to substandard construction, and on when these were constructed. Neither is there any information on how many corrupt officials and contractors are let go because only a few of them were even charged. Consequently, it is not possible to measure the impact of government corruption and ineptitude in regards to the 1999 earthquakes, directly. However, in our opinion, whether voters showed any sensitivity to these can be determined indirectly, through the impact of a variable representing the number of residences and businesses which suffered heavy damage in a province per 100 people (henceforth referred to as Q), if one is willing to make some reasonable assumptions. It can be presumed that, the whole country followed the news on government corruption and incompetence, including those related to the earthquakes, and factored these in casting their ballots. The coefficient of a party's previous vote share in its own equation would capture the blame placed on the party nationwide, for its performance on the earthquake and other fronts. The people living in the provinces affected by the earthquakes in question however would be more sensitive to and better informed about the degree of government corruption and incompetence involved and the parties responsible for these. Furthermore, it will be logical

to assume that greater is the number of residences and businesses which suffered heavy damage in a province, in other words, the higher is the Q, the greater is the information each voter in that province is exposed to on the level of corruption involved and on the quality of the relief provided by the government. Under these assumptions, and controlling for other factors, the effect of Q on each party's vote share in 2002 election can be viewed as the incremental response of the voters who are better informed and more affected by the government corruption and incompetence. Thus the estimated effect of this variable on a party's vote share can give us some clues as to which parties, if any, were held responsible by the voters and to what extent. The nine provinces which suffered heavy property damage in the 1999 earthquakes are listed in table 3. As can be observed from that table, the intensity of the damage varied considerably between the affected provinces. This and the fact that there are many provinces at hand with zero quake damage, provides us with a good data to measure the effect of Q on the vote shares of major political parties which participated in the 2002 election. As can be observed in tables 4, 5, and 6, the date political parties came to power, the time they spent in government (at the helm or as a minor partner), and the proportion of municipal administrations they controlled in the earthquake region, exhibit great variation among parties during the decade preceding the 1999 quakes. This will enable us not only to measure but also to interpret the coefficients of Q in equations relating this variable to the vote shares.

The Democratic Left Party (DSP), the major incumbent party in 2002, came to power for the first time in June 1997 but got the premiership only seven months before the August 1999 earthquake. The party had only a negligible number of mayors in the quake affected areas, none in the cities which suffered major damage, and none in the provincial centers where the population is concentrated. Thus, any adverse impact of Q on this party's vote share should be considered as a reaction of the voters in the affected areas to the government's inefficiency in providing relief and its inability or unwillingness to prosecute corrupt officials and their private sector benefactors, but not to the corruption at the local level, and not to the construction of shoddy buildings.

The second largest incumbent party in 2002, the Nationalist Action Party (MHP), came to power less than three months before the first earthquake in 1999 and after being out of power for two decades. This party controlled almost none of the municipalities in the areas affected by the earthquakes. However, the minister of Public Works and Settlement, which supervises the General Directorate of Disaster Affairs, was from the the party. He was accused after the 2002 election by the new government, of cronyism and receiving kickbacks from contracts his ministry granted, in regards to construction of new housing for the earthquake survivors and other relief efforts. Although he was finally found not guilty in 2007 by the Supreme Court, it is not clear if he is vindicated in the public opinion, and of course the verdict was not known at the time of the 2002 election. In fact he was seen as a liability for his party and was forced to resign his post in 2001 by the leader of his party. Eight of his top bureaucrats and forty contractors they have collaborated with have been found guilty in 2008. Therefore any significant negative impact of Q on the Nationalist Action Party's (MHP's) 2002 vote share should be interpreted as a punishment by the quake victims for government incompetence in coming to their aid and for corruption related to the relief efforts, but not for the pre-quake corruption.

The third incumbent party, the Motherland Party (ANAP), held the premiership of the country in single-party governments between December 1983 and November 1991, and in coalition governments, during the March 1996 – June 1996, and June 1997 –January 1999 periods. The party was a minor partner in the coalition ruling at the time of the 1999 earthquakes. It controlled substantial number of local administrations in the quake region

since 1984. Thus an adverse earthquake effect on this party's vote could be due to the performance of its mayors and/or its cabinet members.

The opposition True Path and Republican People's parties (DYP and CHP), were in power as partners during the 1991-1996 period and both had large number of mayors in the provinces affected by the two earthquakes during the decade preceding the quakes. In saying this, we are treating the Republican People's Party (CHP) and the Social Democratic Populist Party (SHP) as one party. Initially the latter was in the coalition with the True Path Party (DYP) but after its merger with the former, the coalition continued as DYP-CHP government. If the vote shares of these parties are found to be inversely related to Q, it must be taken as an indication of voters holding parties which controlled central and local administrations during the time the shoddy buildings were built.

If the voters are rational, the Young Party (GP) should either not be affected by the earthquake related events, or benefit from them. This party was formed a few months before the 2002 election by a business tycoon who had no political experience until that time.

The Justice and Development Party (AKP) is one of the two parties formed in the second half of 2001 by the members of the Virtue Party (FP) after the dissolution of the latter by the Constitutional Court on grounds that it advocated religion based regime in violation of the constitution. The Virtue Party (FP) itself was formed by the leaders and rank and file of the Welfare Party (RP) which was closed by the Constitutional Court on the same grounds used against the Virtue Party. While Welfare Party (RP) held power only for a year from mid 1996 to mid 1997, many of the mayors in the provinces affected by the 1999 quakes were members of this party since 1994. The Justice and Development Party (AKP) disavowed the anti-Western and pro-Islamist positions of the Virtue Party and rejected being a continuation of the Virtue or Welfare parties (FP or RP). The Felicity Party (SP), the other party that emerged from the ashes of the Virtue Party, towed the old party line and received very few votes in 2002. Whether the Justice and Development Party (AKP) is a continuation of the Virtue and Welfare parties (FP and RP), is a contentious issue in Turkey. If this party turns out to have benefited from the government's handling of the earthquake related issues, that would imply that either it was not perceived as a continuation of the Welfare and Virtue parties (RP and FP) or that the mayors of the latter which joined the Justice and Development Party (AKP) are viewed by the public as not being corrupt. On the other hand, a negative coefficient for Q, for this party, would mean that it is being punished for the sins of the Welfare and Virtue parties at the local level.

The Motherland party (ANAP) served in the central government longer than the True Path Party (DYP), and the True Path Party (DYP) served longer than the Republican People's Party / Social Democratic Populist Party (CHP/SHP). On the other hand, as can be seen from Table 4, the Republican People's Party / Social Democratic Populist Party (CHP/SHP) had more mayors, during 1989-1994, in the population centers which suffered major earthquake damage, than the other two parties mentioned, and about the same number as them in the 1994-1999 period. The True Path Party (DYP) appears to have controlled slightly more mayors in these cities, in both periods in question, than the Motherland Party. Thus the size of the coefficient of the Q variable can yield valuable information on whether the electorate blamed the parties controlling the local governments. For example if the Republican People's Party is found to be affected more than the other two parties, despite serving a shorter time in central government, it can be attributed to its performance at the local level.

The deviation from unity of the coefficient of a party's previous vote share in its own equation would partially reflect how the party was rated by the voters for its management of the 2001 economic crisis and the role it had in the events which led to the crisis. If the voters

punished the incumbents also for the reduction in their incomes in 2001 as many claim, then we should observe greater vote losses for the incumbent parties, in provinces which experienced larger reductions in their per capita real GDP in 2001. Addition of the latter variable in the vote equations would permit us to test this. As we stated above, if our previous two studies, Akarca and Tansel (2006 and 2007), and the great majority of the studies on other countries are any guide, the coefficients of this variable should not be significantly different than zero. It would be beneficial if we could include the 2002 provincial per capita real GDP growth rate in our equations as well, but unfortunately the State Institute of Statistics of Turkey has stopped producing GDP figures at the provincial level after 2001.

3. Empirical Results

The estimates of the regression systems mentioned in the previous section are presented in tables 7, 8 and 9. In these tables, the 2002 vote shares of the Justice and Development Party (AKP), the Republican People's Party (CHP), the Young Party (GP), the Democratic Left Party (DSP), the Nationalist Action Party (MHP), the Motherland Party (ANAP), and the True Path Party (DYP) are represented by the symbols: AKP02, CHP02, GP02, DSP02, MHP02, ANAP02 and DYP02, respectively. The 1999 vote shares of the Virtue Party (FP), the Republican People's Party (CHP), the Democratic Left Party (DSP), the Nationalist Action Party (MHP), the Motherland Party (ANAP) and the True Path Party (DYP) are represented by the symbols: FP99, CHP99, DSP99, MHP99, ANAP99 and DYP99, respectively. The symbols S, U, and W are used to represent the mean years of schooling, the urbanization rate, and the proportion of women in non-agricultural employment, respectively. The latter two variables are measured in percentage units. Province names are used to represent the dummy variables, which take the value of one for the named province and zero for all others. As we have noted in the previous section, Q represents the number of residences and businesses which suffered heavy damage per 100 people. G01 stands for the growth rate in per capita real GDP in 2001.

The regressions in table 7 show that vote shifts which occurred during the 1999-2002 period were essentially from the Virtue, Nationalist Action, Motherland and True Path parties (FP, MHP, ANAP and DYP) to the Justice and Development Party (AKP), from the Democratic Left Party (DSP) to the Republican People's and Young parties (CHP and GP), and from the Democratic Left, Nationalist Action and Motherland parties (DSP, MHP and ANAP) to the True Path Party (DYP). Other potential vote shifts between parties are found to be insignificant and are excluded from regressions given in tables 8 and 9. In table 8, the Q variable and in table 9, both Q and G01 variables are added to the equations in the model. The regressions in both of these tables were first estimated with all of the dummy variables present and then re-estimated after those dummy variables with parameters not significant at 5 percent level (in a one-tail test) and not exceeding 5, in absolute value, are dropped.

The comparable parameters in tables 8 and 9 are almost identical because introduction of G01 makes no noticeable contribution to the model. The estimated coefficients of this variable are all almost zero and highly insignificant, except in the case of the Young Party (GP). This party appears to have attracted some people who are adversely affected by the 2001 economic crisis. However, while the impact measured is statistically significant, size wise it is very inconsequential. Our findings in regards to the 2001 economic crisis does not mean that it did not have any effect on the 2002 election outcome but simply that the impact did not vary from province to province depending on the level of income change in that province. The way the crisis occurred and the way it was handled may have provided the voters with some information on the competency of the incumbent parties and influenced their votes that way. In other words, our result implies that, if there was a voter reaction, it was not based on how

much his or her pocketbook was affected in 2001, the year preceding the election year. Some of the parameter estimates in tables 8 and 9 differ from those given in table 7, but only slightly. This is the result of Q making significant contributions to almost all of the equations in the model. We will base our analysis below directly on the estimates given in table 8.

Our empirical results reveal that the Justice and Development Party (AKP) received all of the votes that went to the far-right Islamist Virtue Party (FP) in 1999 and almost half of the votes that went to far-right Turkish-nationalist National Action Party (MHP), half of the votes that went to the center-right True Path Party (DYP) and almost two-thirds of the votes that went to the center-right Motherland Party (ANAP). The Justice and Development Party's (AKP's) gain from these parties was even more pronounced in provinces which suffered heavy earthquake damage, except in Yalova. In the earthquake zone, there was a shift in votes towards the Justice and Development Party (AKP) also from the center left Republican People's and Democratic Left parties (CHP and DSP). The Party's gains were more in provinces with high urbanization and low education levels than indicated above. It should be noted that while the estimated coefficient of the FP99 variable exceeds unity, it is not significantly different than one.

The Republican People's Party (CHP) appears to have kept all of its 1999 voters and captured close to a third of the voters who had preferred the other center-left party, the Democratic Left Party (DSP), in the previous election. The party's vote gain was more than that in provinces which are less conservative, more educated less urbanized. The Republican People's Party (CHP) lost substantial amount of its votes to the Justice and Development Party (AKP) in earthquake effected provinces, except in Yalova. It is worth noting that the estimated coefficient of the party's lagged vote share is significantly higher than unity, but this is offset by the significantly high and negative constant term in the party's equation.

The source of the votes cast in favor of the new center-right Young Party (GP) was the center-left Democratic Left Party (DSP). The former party appears to have captured about a third of the latter's 1999 votes, which corresponds almost exactly to the vote share of the former party in 2002. The Young Party (GP) seems to have not benefited from the corruption and incompetence exhibited by the incumbent parties in relation to the 1999 earthquakes. The Democratic Left Party (DSP) was able to keep only about 7 percent of its supporters in the previous election, even less in more urbanized and less conservative provinces. It pulled no votes from the other parties.

The far-right Turkish-nationalist Nationalist Action Party (MHP) retained a third of the voters who supported it in 1999, and was not able to capture any voters from the other parties. The party's losses were even bigger in provinces devastated by the 1999 quakes, except in Yalova.

The center-right Motherland Party (ANAP) kept about one-fifth of its vote share in the previous election plus 7 percent. However, the party's vote share was significantly less than that in urbanized areas and more than that in less conservative parts of the country. The party also lost votes in the provinces impacted by the earthquakes in 1999. Like the other incumbent parties, the Democratic Left Party (DSP) and the Nationalist Action Party (MHP), it was unable to attract any voters from other parties.

The True Path Party lost about half of its supporters in 1999 but was able to capture a quarter of the supporters of Motherland Party (ANAP), one of the other center-right parties. It also captured a quarter of the center-left Democratic Left Party (DSP) voters and one-seventh of the far-right Nationalist Action Party (MHP) voters. The party's gains were significantly less and losses significantly more in urbanized areas and in the areas affected by the earthquakes of 1999. The coefficient of the party's previous vote share, considered by itself, appears to

imply that the party has lost only a fifth of its 1999 supporters, but when taken into account together with the significantly negative constant term in the party's equation and the estimated coefficient of the DYP99 variable in the Justice and Development Party (AKP) equation, one reaches the conclusion that the True Path Party was able to retain only about a half of its 1999 voters.

The origins and destinations of migrated voters can be observed more clearly, reading table 8 row-wise. The votes cast for the Virtue Party in 1999 ended up almost all in the Justice and Development Party (AKP) in 2002. The voters who cast their ballots for the Republican People's Party (CHP) in 1999 did so in 2002 as well. Only 7 percent of those who supported the Democratic Left Party in 1999 continued to do so in 2002, 29 percent of them went to the Republican People's Party (CHP), 33 percent to the Young Party (GP) and 25 percent to the True Path Party (DYP). Of the voters who cast their ballots for the Nationalist Action Party (MHP) in 1999, 31 percent remained with the party, 51 percent moved to the Justice and Development Party (AKP), and 14 percent to the True Path Party (DYP). While about a fifth of the supporters of the Motherland Party in 1999 voted again for the party in 2002, close to two thirds of them deserted it for the Justice and Development Party (AKP), and a quarter of them for the True Path Party (DYP). The True Path Party appears to have lost about half of its supporters to the Justice and Development Party (AKP), retaining the remainder.

The Justice and Development Party (AKP) was the sole beneficiary of the protest votes in regards to corruption and poor relief efforts related to the earthquakes which occurred in 1999. The party was either not seen by voters as the continuation of the Welfare and Virtue parties (RP and FP), or the mayors of the latter were not regarded by the voters as corrupt. All three of the incumbent parties suffered vote losses in the quake zone that varied with the level of per capita damage encountered. The Nationalist Action Party (MHP) paid the highest price. The Democratic Left Party (DSP), the party of the prime minister, was affected also but only slightly. It appears that voters held the party in charge of the ministry responsible for earthquake relief especially accountable for the aftermath of the earthquakes, including the corruption involving relief efforts. The fact that the Motherland Party (ANAP) was affected more than the Democratic Left Party (DSP), despite being a minor partner in the ruling coalition, indicates that voters blamed the parties which participated in the central and local administrations in the past as well. This conclusion is reinforced by the fact that the adverse impacts of the variable Q on the opposition Republican People's and the True Path parties (CHP and DYP) were much larger than those on the incumbent Democratic Left and Motherland parties (DSP and ANAP). The fact that the adverse impact on the Republican People's Party (CHP) was 63 percent higher than that on the True Path Party (DYP) which served in the previous central governments longer, shows that control of city administrations mattered as well. As can be observed from tables 5 and 6, the former party had substantially more mayors in the quake region than the latter party, especially in the heavily populated provincial centers. Because there are no parties which controlled local governments but not served in central government, we are unable to assess relative blame placed by voters on the central and local governments. A survey conducted by Adaman and Çarkoğlu (2001) however show that, in general, urban dwellers in Turkey, perceive central and local governments to be both corrupt but the central government to be more corrupt. Our results here do not contradict their finding.

For the three incumbent parties, the Democratic Left Party (DSP), the Nationalist Action Party (MHP) and the Motherland Party (ANAP), the estimated coefficients of their own lagged vote variables imply that in a typical province they have lost almost all, two-thirds, and four-fifths, of their 1999 votes, respectively, controlling for other factors. These are far more than the usual amounts of erosion that can be expected in the vote shares of incumbent parties due controversial decisions they make while in office and due to voter efforts to create

checks and balances against their power. These losses no doubt reflect partially the disappointment of their supporters all over the country with the way they have responded to the earthquakes and with their failure to end or prosecute the people involved in earthquake related corruption. These parties were tainted by some non-earthquake related corruption as well. In fact, some of their leaders and cabinet members were prosecuted later for personal involvement in a variety of corruption cases. The prime minister's old age, his refusal to relinquish his power even temporarily despite his severe illness, and his self-publicized rift with the president, which triggered the 2001 economic crisis, shattered public confidence in his government, has contributed to the vote loss of incumbent parties as well. The coefficients of the Q variable should be interpreted as an addition to these in the provinces affected by the earthquakes directly.

The education level appears to affect the votes received by the Justice and Development Party (AKP) negatively and the Republican People's Party (CHP) positively. An increase in the urbanization rate on the other hand, appears to help the Justice and Development Party (AKP) and hurt the Republican People's, Democratic Left, Motherland and the True Path parties (CHP, DSP, ANAP and DYP). The vote shares of the Republican People's and the Motherland parties (CHP and ANAP) are disproportionately higher in less conservative provinces, holding other things constant.

Finally, an analysis of the coefficients of the dummy variables reveal that in Bayburt, an independent candidate and the Felicity Party which had an unusually strong showing, got their votes at the expense mainly of the Justice and Development Party (AKP) and to some extent, at the expense of the Motherland Party (ANAP). The large number votes that went to an independent candidate in Kilis would have gone mainly to the Justice and Development Party (AKP) and to a lesser extent, to the Republican People's, Young and Democratic Left parties (CHP, GP, and DSP) had the independent candidate did not run. The votes which went to an independent candidate in Malatya in 1999, in 2002 ended up with the True Path Party (DYP) and perhaps also with the Justice and Development Party (AKP). Because of its leader's favorite son candidacy in Osmaniye, the Nationalist Action Party (MHP) received an extra 14 percent of the vote there. Had he not been a candidate in that province, those votes would have gone to the Justice and Development Party (AKP). The 17 percentage points of extra votes brought to the Motherland Party by its leader in his home province Rize, would have gone mainly to the Justice and Development Party (AKP), if he was not running. The Young Party (GP) leader who ran in Sakarya brought to his party an additional 18 percent of the vote in that province which would have gone to the Justice and Development Party (AKP) in the absence of his candidacy in that province. The latter party's gain in the province due to the effects of events related to the 1999 quakes are largely offset by this and explains why the coefficient of the dummy variable for Sakarya in the Justice and Development Party equation in table 7 is much smaller and insignificant. In Bartın, the Nationalist Action and the Democratic Left parties (MHP and DSP) received more votes than expected, due to local factors. These votes appear to have come at the expense of the Republican People's, the Young and the True Path parties (CHP, GP and DYP). Similarly, due to special local circumstances in Yalova, the Nationalist Action and the Republican People's parties (MHP and CHP) received unusually high amount of votes there which seem to have reduced the share of the Justice and Development Party (AKP). The size of these special effects almost exactly cancelled the impact of quake related events which worked in the opposite direction. That is why in table 7 the coefficients of Yalova in the equations for the three parties mentioned are much smaller, in absolute value, than in table 8.

4. Conclusions

In 2002 elections more than half of the voters cast their ballots for a different party than the one they chose in 1999. Two new parties, formed shortly before the election received more than two fifths of the votes. Another party, which was left outside the parliament during 1999-2002, received about a fifth of the votes, more than doubling its previous share. Votes moved essentially from the Virtue, Nationalist Action, Motherland and True Path parties (FP, MHP, ANAP and DYP) to the Justice and Development Party (AKP), from the Democratic Left Party (DSP) to the Republican People's and Young parties (CHP and GP), and from the Democratic Left, Nationalist Action and Motherland parties (DSP, MHP and ANAP) to the True Path Party (DYP).

Some votes moved from the left to the right parties but no significant flow occurred in reverse. In addition to the left votes moving from the Democratic Left Party (DSP) to center-right Motherland and Young parties (ANAP and GP), left to right vote movements occurred in the quake zone also from the Republican People's and the Democratic Left parties (CHP and DSP) to the Justice and Development Party (AKP). The votes were more mobile among the right-wing parties than among the left-wing parties and between the left and right parties.

The Justice and Development Party (AKP) captured all of the far-right Islamist, about half of the far-right nationalist, and more than half of the center-right voters, which allowed it to form a single-party government. In other words, roughly two-fifths of the party's supporters in 2002 were people who voted in 1999 for the center-right parties. About two-fifths of its supporters were people who had voted, in the previous election, for the far-right Islamist party and one-fifth of them for the far-right nationalist party. Considering also the votes the party captured from the left in the region where 1999 quakes took place, the coalition assembled by the Justice and Development party (AKP) under the leadership of Recep Tayyip Erdoğan, resembles the one built by the Motherland Party (ANAP) in 1983, under the leadership of Turgut Özal. The Motherland Party held power in single party governments until 1991, in coalition governments it led in 1996 and during 1997-1999, and in a coalition government as a minor partner during 1999-2002. It lost its representation in the parliament in 2002 and practically disappeared after the 2007 election in which it did not even participate. This shows how difficult it is to maintain a coalition involving groups from different parts of the political spectrum. To avoid the same faith or prolong it, the Justice and Development Party (AKP) will need to emphasize goals common to all of the groups it represents and accomplish compromises when the goals and priorities clash. There is no doubt that the party's distancing of itself from political Islam, and its disavowal of the anti-Western stance taken by the Virtue Party (FP) from which it emerged, has played an important role in its capturing of the center-right votes which gives it a political legitimacy. The stability of the coalition the party has built depends on the continuation of this as well.

The only other party to pull together voters from different parts of the political spectrum in the 2002 election was the True Path Party (DYP). This center-right party attracted parts of the voters who cast their ballots in 1999 for a center-left party, for the other center-right party and for the far-right nationalist party. However, the center-right and far-right votes the party was able to attract were considerably less than the Justice and Development Party was able to do. Also, the True Path Party (DYP) lost a substantial part of its own supporters and captured none of the Islamist vote. Consequently, its vote share in 2002 was not even sufficient to be represented in the parliament, despite the votes it transferred from other parties.

Our results show further that, contrary to the general belief among the pundits, the votes received by the Young Party (GP) did not come from the Nationalist Action Party (MHP). The Democratic Left Party (DSP) was the sole source of these votes. The Democratic Left, the Nationalist Action Party, and the Motherland parties (DSP, MHP and ANAP) were able

to keep only a fraction of their 1999 supporters while not capturing any votes from other parties. Akarca and Tansel (2006) put the vote loss by these parties in perspective. That study estimates that the aggregate vote received by these parties was about 25 percentage points less than would be expected given economic and incumbency conditions and past patterns.

It appears that the performance of the Justice and Development Party (AKP) was worse in provinces with high education levels, but that of the Republican People's Party (CHP) better. A rise in the urbanization rate of a province on the other hand, seems to have raised the vote share of the Justice and Development Party (AKP) but lower those of the Republican People's, the Democratic Left, the Motherland, and the True Path parties (CHP, DSP, ANAP and DYP). Also, the vote shares of the Republican People's and the Motherland parties (CHP and ANAP) was higher in less conservative areas. For the Democratic Left Party (DSP) this was the opposite but in a smaller scale.

In casting their ballots in 2002, the Turkish voters appear to have taken into account the performance of all governments that contributed to the magnification of the earthquake disasters. Not just the incumbent parties at the time of the earthquakes but others which were in power when the substandard buildings were built were also held accountable. Each and every party which ruled during the 1983 -1999 period was adversely affected by the earthquake damage. The votes lost by these parties went to the Justice and Development Party (AKP). The Turkish voters appear to have allocated the blame rationally, taking into consideration the division of labor in the central government, and the relative control the parties exercised on local administrations. When they are made aware of public corruption, Turkish voters seem to be willing to use their electoral powers to vote out the politicians who participated in it or allowed it to happen. New earthquake related laws and regulations enacted, reorganization of agencies providing disaster relief begun, and the cabinet members and high level bureaucrats tried for corruption, after the 2002 election, show that now the Turkish politicians realize this and respond to it. This implies that corruption does not have to be a persistent problem in Turkey and can be reduced through increased transparency and democracy.

The Turkish voters were not influenced by changes in their well-being more than one year before an election. Their behavior in this regard is not different than their counterparts in other countries, developed or developing. Their behavior in this regard provides the governments with an incentive to employ populist policies before elections and fight their inflationary effects after the election, giving rise to political business cycles.

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Table 1: Political Parties and Their Vote Shares in 1999 and 2002 Elections in Turkey

POLITICAL PARTIES [a]	INCUMBENCY IN 2002	POLITICAL ORIENTATION	1999 (%)	2002 (%)
Democratic Left Party (DSP)	Incumbent	Left	22.19	1.22
Nationalist Action Party (MHP)	Incumbent	Right	17.98	8.36
Motherland Party (ANAP)	Incumbent	Right	13.22	5.13
True Path Party (DYP)	Opposition	Right	12.01	9.54
Virtue Party (FP)	[b]	Right	15.41	[b]
Justice & Development Party (AKP)	Opposition	Right	[c]	34.28
Republican People's Party (CHP)	Opposition	Left	8.71	19.39
Young Party (GP)	Opposition	Right	[c]	7.25
People's Democracy Party (HADEP)	[b]	Left	4.75	[b]
Democratic People's Party (DEHAP)	Opposition	Left	[c]	6.22
Other Parties			4.86	7.61
Independents			0.87	1.00

Notes:
a/ In paranthesis are the Turkish acronyms of political parties.
b/ The party was closed by the Constitutional Court prior to the 2002 election.
c/ The party was founded after the 1999 election.

Source:
The vote shares are computed using the data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey). The Left-Right classification employed matches those used by Özbudun (2006) and Açıkel (2003).

Table 2: Vote shares of political parties in 1999 and 2002 elections in Turkey

POLITICAL PARTIES [a]	WEST-NORTH-SOUTH- CENTRAL (64 provinces) [b]		EAST-SOUTH EAST (17 provinces) [b]	
	1999 (%)	2002 (%)	1999 (%)	2002 (%)
Democratic Left Party (DSP)	23.66	1.24	6.06	1.00
Nationalist Action Party (MHP)	19.00	8.67	6.96	5.10
Motherland Party (ANAP)	13.28	5.00	12.55	6.56
True Path Party (DYP)	11.68	9.54	15.59	9.57
Virtue Party (FP)	15.32	[d]	16.35	[d]
Justice & Development Party (AKP)	[c]	35.60	[c]	20.29
Republican People's Party (CHP)	8.97	20.35	5.83	9.51
Young Party (GP)	[c]	7.78	[c]	1.59
People's Democracy Party (HADEP)	2.72	[d]	26.92	[d]
Democratic People's Party (DEHAP)	[c]	3.55	[c]	34.51
Other Parties	4.81	8.26	5.53	6.15
Independents	0.56	0.55	4.21	5.72

Notes:

a/ In paranthesis are the Turkish acronyms of political parties.

b/ The East-South East region includes seventeen provinces in which Democratic People's Party received more than 10 percent of the vote in 2002. These are the following provinces: Adıyaman, Ağrı, Bingöl, Bitlis, Diyarbakır, Hakkari, Kars, Mardin, Muş, Siirt, Tunceli, Şanlıurfa, Van, Batman, Şırnak, Ardahan and Iğdır. Only 9.1 percent of the registered voters resided in these provinces in 2002. The West-North-South-Central region includes the remaining 64 provinces.

c/ The party was founded after the 1999 election.

d/ The party was closed by the Constitutional Court prior to the 2002 election.

Source:

The vote shares are computed using the data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey).

Table 3: Number of Residences and Businesses which Suffered Heavy Damage in the 1999 Earthquakes [a]

PROVINCES	QUANTITY	QUANTITY PER 100 PEOPLE
Bolu	2750	1.0161
Bursa	128	0.0060
Düzce	15134	4.8157
Eskişehir	111	0.0157
İstanbul	3306	0.0330
Kocaeli	41041	3.4028
Sakarya	29701	3.9278
Yalova	14473	8.5846
Zonguldak	114	0.0185

Notes:

a/ In 1999 the administrative division of the country was slightly different. The table is based on the structure prevailing in 2002.

Source:

Figures on the first column are provided by the General Directorate of Disaster Affairs (Ministry of Public Works and Settlement, the Republic of Turkey) and reflects the most recent revision dated 22 April 2003. The second column is obtained by dividing the figures in the first column by the province's 2000 population given by the State Institute of Statistics (Prime Ministry, the Republic of Turkey).

Table 4: Political Parties Ruling between 1983 and 2002

POLITICAL PARTIES [a]	PERIODS	PRIME MINISTER	COALITION GOV.
Motherland Party (ANAP)	Dec. 1983 – Nov. 1991	YES	NO
	Mar. 1996 – June 1996	YES	YES
	June 1997 – Jan. 1999	YES	YES
	May 1999 – Nov. 2002	NO	YES
True Path Party (DYP)	Nov. 1991 – Mar. 1996	YES	YES
	Mar. 1996 – June 1997	NO	YES
Republican People's Party (CHP) / Social Democratic Populist Party (SHP) [b]	Nov. 1991 – Mar. 1996	NO	YES
Welfare Party (RP)	June 1996 – June 1997	YES	YES
Democratic Left Party (DSP)	June 1997 – Jan. 1999	NO	YES
	Jan. 1999 – Nov. 2002	YES	YES
Nationalist Action Party (MHP)	May 1999 – Nov. 2002	NO	YES

Notes:
a/ In paranthesis are the Turkish acronyms of political parties.
b/ Between November 1991 and February 1995 the Social Democratic Populist Party (SHP) was in power.
This party joined the Republican People's Party (CHP) in February 1995.
The coalition government continued until March 1996 with the latter party as the official partner.

Source:
Turkish Grand National Assembly web site,(www.tbmm.gov.tr/kutuphane/hukumetler.html).

Table 5: Party Affiliations of Mayors of Provincial and District Centers Where Some Residences Suffered Heavy Damage in the 1999 Earthquakes [a]

POLITICAL PARTIES [b]	1989-1994		1994-1999	
	Provincial Centers	District Centers	Provincial Centers	District Centers
Motherland Party (ANAP)	0	21	2	41
True Path Party (DYP)	2	24	2	18
Republican People's Party (CHP) / Social Democratic Populist Party (SHP) [c]	7	50	1	18
Welfare Party (RP)	0	1	4	27
Democratic Left Party (DSP)	0	0	0	2
Nationalist Action Party (MHP)	0	0	0	3
TOTAL	9	96	9	109

Notes:

[a] The provinces in question are the following: Bolu, Bursa, Düzce, Eskişehir, İstanbul, Kocaeli, Sakarya, Zonguldak and Yalova. Between 1989 and 2002 the administrative division of the country has changed. The table is based on the structure prevailing in 2002. Party affiliations of some mayors changed between two elections. The table reflects the distributions immediately after the elections in 1984 and 1989.

[b] In paranthesis are the Turkish acronyms of political parties.

[c] The Republican People's Party was closed between 1983 and 1993. This party and the Social Democratic Party entered the 1994 local elections seperately but merged in 1995.

Source:

Compiled by authors, using the data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey) on the results of the 1984 and 1989 elections, and by the General Directorate of Disaster Affairs (Ministry of Public Works and Settlement, the Republic of Turkey) on the property damage caused by the 1999 earthquakes.

Table 6: Party Affiliations of Mayors of Provincial and District Centers Where More Than 10% of Residences Suffered Heavy Damage in the 1999 Earthquakes [a]

POLITICAL PARTIES [b]	1989-1994		1994-1999	
	Provincial Centers	District Centers	Provincial Centers	District Centers
Motherland Party (ANAP)	0	2	0	2
True Path Party (DYP)	1	4	1	3
Republican People's Party (CHP) / Social Democratic Populist Party (SHP) [c]	4	6	1	1
Welfare Party (RP)	0	1	3	7
Democratic Left Party (DSP)	0	0	0	0
Nationalist Action Party (MHP)	0	0	0	0
TOTAL	5	13	5	13

Notes:

a/ The provinces in question are the following: Bolu, Düzce, Kocaeli, Sakarya, and Yalova. Centers with more than 10 percent heavy damage are the following: Bolu, Düzce, Gölyaka, Kaynaşlı, İzmit, Gölcük, Karamürsel, Körfez, Adapazarı, Akyazı, Yalova, Altınova, and Çiftlikköy. Between 1999 and 2002 the administrative division of the country has changed.

The table is based on the structure prevailing in 2002. Party affiliations of some mayors changed between two elections. The table reflects the distributions immediately after the elections in 1984 and 1989.

b/ In paranthesis are the Turkish acronyms of political parties.

c/ The Republican People's Party was closed between 1983 and 1993. This party and the Social Democratic Party entered the 1994 local elections seperately but merged in 1995.

Source:

Compiled by authors, using the data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey) on the results of the 1984 and 1989 elections, and by the General Directorate of Disaster Affairs (Ministry of Public Works and Settlement, the Republic of Turkey) on the property damage caused by the 1999 earthquakes.

Table 7: Estimated Regressions I

Independent Variables	Equations [a]						
	AKP02	CHP02	GP02	DSP02	MHP02	ANAP02	DYP02
Constant	11.94 (1.17)	-14.54 [b] (4.25)	-2.65 (0.79)	2.11 [b] (2.89)	-4.10 (0.85)	5.68 [c] (1.81)	-11.01 [c] (2.26)
FP99	1.20 [b] (10.18)						
CHP99		1.28 [b] (18.00)					
DSP99	-0.06 (0.42)	0.28 [b] (6.71)	0.37 [b] (8.66)	0.07 [b] (7.22)	0.10 (1.55)	0.03 (0.82)	0.26 [b] (4.16)
MHP99	0.44 [b] (3.35)		0.05 (0.97)	-0.01 (0.66)	0.42 [b] (6.11)	0.03 (0.74)	0.14 [c] (1.88)
ANAP99	0.52 [b] (2.48)	0.09 (1.01)	-0.08 (1.02)	0.00 (0.22)	0.13 (1.12)	0.21 [b] (2.93)	0.27 [c] (2.38)
DYP99	0.47 [b] (2.60)	0.02 (0.22)	0.02 (0.38)	-0.00 (0.23)	-0.04 (0.38)	0.04 (0.70)	0.79 [b] (8.48)
S	- 4.15 [b] (2.44)	2.87 [b] (3.88)	-0.13 (0.21	-0.14 (1.04)	0.63 (0.69)	-0.36 (0.15)	1.09 (1.18)
U	0.17 [b] (2.59)	-0.05 [c] (1.64)	0.03 (1.17)	-0.01 [c] (2.30)	-0.02 (0.49)	-0.07 [b] (4.17)	-0.08 [c] (2.25)
W	- 0.16 (0.63)	0.15 (1.39)	-0.01 (0.07)	-0.04 [c] (1.93)	-0.05 (0.34)	0.08 (0.92)	-0.07 (0.51)
BAYBURT	-35.07 [b] (6.30)	0.16 (0.07)	2.30 (1.12)	-0.27 (0.60)	1.69 (0.57)	-6.85 [b] (3.57)	-0.01 (0.00)
KILIS	-10.15 [c] (1.82)	-4.24 [c] (1.76)	-4.97 [b] (2.41)	-1.10 [c] (2.44)	1.71 (0.57)	-1.94 (1.00)	-1.71 (0.57)
MALATYA	7.45 (1.43)	-2.58 (1.18)	1.22 (0.63)	0.21 (0.49)	-1.15 (0.41)	-0.57 (0.31)	7.21 [b] (2.56)
OSMANIYE	-13.39 [b] (2.63)	0.52 (0.25)	-1.26 0.67)	0.19 (0.45)	13.06 [b] (4.75)	2.23 (1.25)	0.31 (0.11)
RIZE	-9.74 (1.16)	-3.25 (0.90)	1.50 (0.48)	-0.06 (0.09)	-4.33 (0.95)	17.65 [b] (6.03)	-5.01 (1.11)
SAKARYA	-4.84 (1.00)	-5.50 [b] (2.69)	19.45 [b] (11.04)	-0.56 (1.45)	-3.14 (1.22)	-1.60 (0.97)	-6.00 [c] (2.34)
BARTIN	4.37 (0.82)	-3.38 (1.49)	-4.17 [c] (2.12)	2.48 [b] (5.80)	7.04 [b] (2.46)	-1.20 (0.65)	-5.02 [c] (1.76)
YALOVA	0.44 (0.08)	-1.16 (0.52)	0.70 (0.36)	-0.17 (0.41)	7.83 [b] (2.77)	-1.49 (0.82)	-6.56 [c] (2.33)

Notes:

a/ For the definitions of variables, see Section 3. The sample includes 64 provinces, excluding the following 17 provinces: Adıyaman, Ağrı, Bingöl, Bitlis, Diyarbakır, Hakkari, Kars, Mardin, Muş, Siirt, Tunceli, Şanlıurfa, Van, Batman, Şırnak, Ardahan and Iğdır. Only 9.1 percent of the registered voters resided in the latter provinces in 2002. In 1999 the administrative division of the country was slightly different. The structure prevailing in 2002 is used. The equations are estimated as a system of Seemingly Unrelated Regressions, using the procedure of Zellner (1962). The system weighted R-square is 0.90. The numbers in parantheses are the t-values in absolute value.

b/ Significant at 1 percent level (one-tail test) .
c/ Significant at 5 percent level (one-tail test).

Source:

Regressions are computed by the authors. The vote shares of political parties are computed using the data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey) on the results of the 1999 and 2002 elections. S, U, and W variables are computed utilizing the 2000 Census data provided by the State Institute of Statistics Prime Ministry, the Republic of Turkey). In computing mean years of schooling (S) for each province, 15, 11, 8, and 5 years of schooling are attributed respectively, to university, high school, middle school, and primary school graduates in the province. Two years worth of schooling is assumed for those who are literate but not a graduate of any school.

Table 8: Estimated Regressions II

Independent Variables	Equations [a]						
	AKP02	CHP02	GP02	DSP02	MHP02	ANAP02	DYP02
Constant	11.25 (1.27)	-13.24 [b] (4.79)	-0.66 (0.26)	1.67 [b] (3.18)	-0.07 (0.02)	6.81 [b] (2.97)	-10.44 [c] (2.29)
FP99	1.11 [b] (11.10)						
CHP99		1.22 [b] (21.19)					
DSP99		0.29 [b] (8.47)	0.33 [b] (11.10)	0.07 [b] (10.27)			0.25 [b] (4.79)
MHP99	0.51 [b] (5.20)				0.31 [b] (6.61)		0.14 [c] (2.16)
ANAP99	0.65 [b] (3.81)					0.17 [b] (3.05)	0.25 [b] (2.65)
DYP99	0.47 [b] (3.27)						0.76 [b] (9.16)
S	- 4.73 [b] (2.84)	3.13 [b] (4.72)	-0.26 (0.42)	-0.11 (0.84)	0.74 (0.88)	-0.08 (0.14)	1.24 (1.42)
U	0.23 [b] (3.56)	-0.07 [b] (3.18)	0.03 (1.51)	-0.01 [b] (2.98)	-0.04 (1.32)	-0.08 [b] (4.28)	-0.10 [b] (2.99)
W	- 0.36 (1.60)	0.20 [c] (2.13)	-0.02 (0.19)	-0.03 [c] (1.74)	0.09 (0.92)	0.12 [c] (1.80)	-0.03 (0.28)
Q	2.31 [b] (3.12)	-1.11 [b] (4.13)	0.03 (0.20)	-0.06 [c] (1.75)	-1.12 [b] (3.29)	-0.26 [c] (1.72)	-0.62 [b] (2.39)
BAYBURT	-33.46 [b] (8.05)					-6.25 [b] (3.79)	
KILIS	-11.59 [b] (2.81)	-4.18 [c] (2.13)	-5.49 [b] (3.20)	-1.03 [b] (2.65)			
MALATYA	5.88 (1.45)						6.68 [b] (2.54)
OSMANIYE	-11.99 [b] (3.03)				13.57 [b] (5.71)		
RIZE	-14.23 [c] (2.16)					17.26 [b] (7.32)	-3.88 (1.00)
SAKARYA	-13.60 [b] (3.01)		18.46 [b] (11.23)				-3.82 (1.49)
BARTIN	4.25 (0.83)	-3.66 [c] (1.79)	-5.16 [b] (2.94)	2.60 [b] (6.67)	7.17 [b] (2.70)		-5.45 [c] (2.02)
YALOVA	-19.08 [b] (2.73)	8.76 [b] (3.04)			17.68 [b] (4.84)		

Notes:

a/ For the definitions of variables, see Section 3. The sample includes 64 provinces, excluding the following 17 provinces: Adıyaman, Ağrı, Bingöl, Bitlis, Diyarbakır, Hakkari, Kars, Mardin, Muş, Siirt, Tunceli, Şanlıurfa, Van, Batman, Şırnak, Ardahan and Iğdır. Only 9.1 percent of the registered voters resided in the latter provinces in 2002. In 1999 the administrative division of the country was slightly different. The structure prevailing in 2002 is used. The equations are estimated as a system of Seemingly Unrelated Regressions, using the procedure of Zellner (1962). The system weighted R- square is 0.89. The numbers in parantheses are the t-values in absolute value.

Table 9 : Estimated Regressions III

Independent Variables	Equations [a]						
	AKP02	CHP02	GP02	DSP02	MHP02	ANAP02	DYP02
Constant	11.53 (1.29)	-13.18 [b] (4.77)	-0.77 (0.31)	1.68 [b] (3.16)	0.03 (0.01)	6.76 [b] (2.92)	-10.38 [c] (2.30)
FP99	1.10 [b] (10.75)						
CHP99		1.22 [b] (21.05					
DSP99		0.29 [b] (8.52)	0.32 [b] (11.07)	0.07 [b] (10.13)			0.23 [b] (4.47)
MHP99	0.51 [b] (5.11)				0.32 [b] (6.48)		0.12 [c] (1.97)
ANAP99	0.64 [b] (3.67)					0.18 [b] (3.07)	0.26 [b] (2.79)
DYP99	0.47 [b] (3.19)						0.77 [b] (9.33)
S	- 4.67 [b] (2.77)	3.15 [b] (4.74)	-0.30 (0.50)	-0.11 (0.83)	0.74 (0.87)	-0.08 (0.14)	1.16 (1.34)
U	0.23 [b] (3.50)	-0.07 [b] (3.13)	0.03 (1.46)	-0.01 (2.94)	-0.04 (1.30)	-0.08 [b] (4.21)	-0.10 [b] (2.98)
W	- 0.36 (1.56)	0.20 [c] (2.09)	-0.01 (0.13)	-0.03 [c] (1.74)	0.09 (0.91)	0.12 [c] (1.77)	-0.04 (0.28)
G01	0.04 (0.39)	0.04 (0.90)	-0.07 [c] (2.00)	0.00 (0.27)	-0.01 (0.11)	0.00 (0.13)	-0.08 (1.45)
Q	2.35 [b] (3.13)	-1.09 [b] (3.99)	-0.00 (0.02)	-0.06 [c] (1.69)	-1.13 [b] (3.25)	-0.26 [c] (1.68)	-0.67 [b] (2.59)
BAYBURT	-33.44 [b] (7.86)					-6.12 [b] (3.69)	
KILIS	-11.50 [b] (2.76)	-4.33 [c] (2.20)	-5.25 [b] (3.14)	-1.04 [b] (2.64)			
MALATYA	5.77 (1.41)						6.85 [b] (2.62)
OSMANIYE	-11.78 [b] (2.92)				13.48 [b] (5.59)		
RIZE	-14.02 [c] (2.10)					17.20 [b] (7.24)	
SAKARYA	-13.39 [b] (2.92)		18.25 [b] (11.39)				-4.13 (1.62)
BARTIN	4.13 (0.80)	-3.84 [c] (1.87)	-4.79 [b] (2.80)	2.58 [b] (6.56)	7.21 [b] (2.69)		-5.18 [c] (1.93)
YALOVA	-19.31 [b] (2.74)	8.71 [b] (3.01)			17.77 [b] (4.83)		

Notes:

a/ For the definitions of variables, see Section 3. The sample includes 64 provinces, excluding the following 17 provinces: Adıyaman, Ağrı, Bingöl, Bitlis, Diyarbakır, Hakkari, Kars, Mardin, Muş, Siirt, Tunceli, Şanlıurfa, Van, Batman, Şırnak, Ardahan and Iğdır. Only 9.1 percent of the registered voters resided in the latter provinces in 2002. In 1999 the administrative division of the country was slightly different. The structure revailing in 2002 is used. The equations are estimated as a system of Seemingly Unrelated Regressions, using the procedure of Zellner (1962). The system weighted R-square is 0.89.

The numbers in parantheses are the t-values in absolute value.
b/ Significant at 1 percent level (one-tail test) .
c/ Significant at 5 percent level (one-tail test).

Source:
Regressions are computed by the authors. The vote shares of political parties are computed using the data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey) on the results of the 1999 and 2002 elections S, U, and W variables are computed utilizing the 2000 Census data provided by the State Institute of Statistics (Prime Ministry, the Republic of Turkey). In computing mean years of schooling (S) for each province, 15, 11, 8, and 5 years of schooling are attributed respectively, to university, high school, middle school, and primary school graduates in the province. Two years worth of schooling is assumed for those who are literate but not a graduate of any school. The Q variable is constructed, using the earthquake damage data provided by the General Directorate of Disaster Affairs (Ministry of Public Works and Settlement, the Republic of Turkey) and the 2000 census population figures reported by the State Institute of Statistics (Prime Ministry, the Republic of Turkey). The G2001 variable is computed using the provincial per capita real GDP figures reported also by the latter institution.