Forecasting the Second Party Vote Share: A Model for Turkish Elections

1. Introduction

As an interesting area of academic research, election forecasting has developed significantly during the last three decades. Although this interest created a highly illuminating literature, it is heavily concentrated on the elections in established democratic countries like USA, UK and France. For certain other democracies, little or no election forecasting has been carried out. Trying to fulfil this gap present work focuses on forecasting elections in Turkey. Accordingly the aim of this article is to develop and test a new forecasting model for general elections in Turkey. While doing so, this study will base on three theoretical premises: first, the voters reward or punish parties according to their performances related to the macroeconomic conditions; second, the popularity of the political parties in Turkey are highly connected by their performance in local elections, and third, the centre-periphery distinction affects the fortune of the political parties in Turkey. The contribution of this analysis is the introduction of an explicit model, which can forecast the impact of economic and political variables across the elections in Turkey by using reliable, public and macro level data.

The organization of the paper is as follows. Initially, it rehearses the literature on the three theoretical premises mentioned above. Then it offers a new forecasting model, based on the 10 general elections in Turkey, for forecasting the difference between the lead and second party vote share. Following that, article continues with the diagnostics of the model proposed and finishes with conclusions.
2. Theoretical Background

The tripartite theoretical premise, described in the introduction, stems from the lines of the research on forecasting literature, Turkish electoral and political structure. To start with, there is a considerable amount of literature on the first premise, which examines the impact of macroeconomic conditions on elections. The influence of the economy on voting has been demonstrated frequently in the forecasting literature (among others see Aidt, 2000; Anderson, 2000; Chappell and Gonçalves Veiga, 2000; Fauvelle-Aymar et al., 2000; Lewis-Beck and Stegmaier, 2007). Usually called as the “Responsibility Hypothesis”, this literature argues that macro economy has a considerable influence on electoral outcomes (Lewis-Beck and Paldam, 2000; Lewis-Beck and Stegmaier, 2000; Nannestad and Paldam, 1994). Recent research has also displayed that the economy is increasingly evaluated by the voter via the Responsibility Hypothesis (Bellucci, 2010; Campbell and Lewis-Beck, 2008; Lewis-Beck and Stegmaier, 2000). According to this argument, a voter monitors the economy, judges the functioning and decides on the vote. One dominant line within the Responsibility Hypothesis highlights the perceptions of macroeconomic conditions of the past, and tries to prove that voter behaviour is highly connected with the retrospective evaluation of macroeconomic conditions (Alvarez et al., 2000; Kiewiet, 1983; Kiewiet, 2000; Lewis-Beck, 1988). Following this stance, this study will also argue that the voting behaviour in Turkey is highly bounded with the retrospective evaluation of macroeconomic conditions (Başlevent et al., 2005; Hazama, 2006). Although there are a number of studies that analysed the elections and the voting behaviour in Turkey1, most of these researches utilized the micro level data, based on private

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1 The examples that used micro-level data have tended to focus on voter profiles and field work is carried by private research companies. Among others see Yılmaz Esmer, “Parties and the Electorate: A Comparative Analysis of Voter Profiles of Turkish Political Parties,” in Çiğdem Balm et al., Turkey: Political, Social, and Economic Challenges in the 1990s (Leiden: E. J. Brill, 1995); Yılmaz Esmer, Devrim, Evrim, Statüko: Türkiye’de Sosyal, Sıyasal, Ekonomik Değerler (İstanbul: Türkiye Ekonomik ve Sosyal Etüdler Vakfı-TESEV, 1999); Yılmaz Esmer, “At the Ballot Box: Determinants of Voting Behavior,” in Politics, Parties, and Elections in Turkey, eds. Sabri Sayari and Yılmaz Esmer (Boulder, CO: Lynne Rienner, 2002); Necat Erder, Türkiye’de Siyasi Parti Seçmenlerinin Nitelikleri, Kimlikleri ve Eğilimleri (İstanbul: Türkiye Sosyal Ekonomik Sıyasal Araştırmalar Vakfı-TÜSES, 1996); Necat Erder, Türkiye’de Siyasi Parti Seçmenleri ve Toplum Düzeni (İstanbul: Türkiye Sosyal Ekonomik Sıyasal Araştırmalar Vakfı-TÜSES, 1998); Necat Erder, Türkiye’de Siyasi Partilerin Yandaş/Seçmen Profili (1994-2002) (İstanbul: Türkiye Sosyal Ekonomik Sıyasal Araştırmalar Vakfı-TÜSES, 2002); Cem Başlevent, Hasan
research. The research, carried by using aggregate data, is rare (Bulutay, 1970; Bulutay and Yıldırım, 1969; Çarkoğlu, 1997), and these studies prioritize other research questions rather than forecasting.

Second theoretical premise, which links the popularity of the political parties in Turkey with their success in local elections, is actually a replacement for the popularity function, which is commonly used in forecasting studies. Although the public opinion polls increased in number in Turkey during the last two decades, there are series of problems, using these opinion polls. First of all, they fall short in covering the time span of this study. Secondly, data is not open to public. Last but not least, the public opinion polls in Turkey have serious problems in reliability and validity. Hence, for the Turkish context this study will utilize the local election performance of the political parties as the indicators of their popularity. This choice also has a number of other reasons. To start with the rapid growth of urbanization changed the social, economic, and political landscape of major cities in Turkey: according to the 2010 census 75 percent of the Turkish population lives in urban areas (TurkStat2010). This fact increased the attention on local elections since given this large concentration of the voters in urban areas, the political parties have increasingly viewed the local elections as crucial in expanding their electoral popularity in the national political arena (İncioğlu, 2002). The local governors of big metropolitans of cities like Istanbul and Ankara have a considerable visibility in national politics and usually continue their careers as the members of parliaments. Moreover, the recent research showed that the local elections can act as the most significant indicator of the voting patterns (İncioğlu, 2002).
The third and the last premise of the centre-periphery distinction is also borrowed from the literature on Turkish political structure. Introduced by Shils (1961) and first used by Mardin (1973) for the Turkish context, the centre-periphery distinction played a crucial role for the understanding of Turkish political structure. According to this theory, every society is organized around a sacred “centre” which is a constituent of the values, the beliefs and the actions (Shils, 1975, 3). Applying this theory to the era of early Turkish Republic, Mardin locates Cumhuriyet Halk Partisi (Republican People’s Party, CHP) to the centre and Demokrat Parti (Democrat Party, DP) to the periphery (Mardin, 1973, 185). Following Mardin, a considerable amount of the authors refer to the centre-periphery scheme in understanding Turkish elections. For example, Tachau (2002) argues that the tension between the centre and the periphery has characterized the Turkish society. He interprets the success of DP in the 1950 elections as a victory of “periphery”, and similarly the 1960 military coup as the return of the “centre” by means of the military intervention. Although some prominent researchers of Turkish politics recommend a redefinition of the centre and the periphery (Çarkoğlu and Avcı, 2002; Güneş-Ayata and Ayata, 2002; Kalaycıoğlu, 2002), they still agree on the fact that the centre-periphery distinction is still a useful tool for the understanding of electoral behaviour in Turkey.

A Synopsis on the Political Parties and the Elections in Turkey

The political parties and the elections have always been the central components of Turkish political structure. With the transition to the democratic politics during mid 1940s of Turkish Republic, their parcel on political structure expanded, and especially, the political parties consolidated their position in the Turkish politics. During the early years of the republic, two parties, namely CHP and DP, dominated the electoral and the parliamentary
politics. In the three elections held in 1950, 1954 and 1957, CHP and DP collectively received more than 90 percent of the total votes, and controlled 98 percent of the parliamentary seats (Sayarı, 2002). This dual structure is actually an early representation of the centre-periphery distinction, mentioned in the previous paragraphs. On one side, DP displayed the image of the party that represent the interests of rural and conservative periphery and on the other side, CHP was identified with centre with its elitist and secularist voter base. Within that framework, the elections, which took place in 1950, 1954 and 1957, were resulted in favour of DP. Although these early years displayed similarities with basic characteristics of two-party systems of Western European countries, it lacked in alteration in power and displayed high level of polarization (Sayarı, 2002). Through these years, DP became more and more arrogant with its electoral victories and CHP chose confrontation as the basic strategy of the opposition. These choices of DP and CHP created unrest among the society, and the initial attempts of democratic politics came to an end with the military intervention of 1960.

The military administration of 1960 outlawed DP and banned its leading figures from politics. However, it did not take too long for the “periphery” to reunite under the newly formed Adalet Partisi (Justice Party, AP). Even stronger than DP, AP won the 1965 and the 1969 elections in landslide with 52.87 percent and 46.55 percent vote shares respectively. However, similar to DP, AP’s tenure in office was cut by the military (read as centre) in 1971. Different from the 1960 coup, this time AP was not outlawed and its executives were not banned from politics. Up to the third military intervention of 1980, AP and CHP dominated the party scene; but a series of new developments were also visible within the system. Among those, the most important one was the rising role of the minor parties. With the introduction of the new constitution and the changes in legal framework, a number of new parties managed to found place in the political spectrum. The Marxist Türkiye İşçi Partisi (Turkish Workers
Party, TIP), the extreme right-wing Milliyetçi Hareket Partisi (Nationalist Action Party, MHP), the explicitly Islamist Milli Nizam Partisi (National Order Party, MNP) and its successor, Milli Selamet Partisi (National Salvation Party, MSP), and the Alevi-based Birlik Partisi (Unity Party, BP) were representative of the expanding ideological and political spectrum of the party politics in 1960s and 1970s (Sayar, 2002). This fragmentation was coupled with the ideological polarization, which was basically fuelled by the cold war tensions. When this highly polarized and fragmented political system accompanied with economic crisis, military once again stepped in and suspended the parliamentary politics in 1980.

Different than the previous coups, the 1980 military intervention had a strong impact on the Turkish political system. As the executive body of the military, the National Security Council (NSC) banned all political parties, arbitrarily vetoed the political rights of the individuals, who were involved with politics before the coup, permitted only three new political parties for electoral competition in 1983. Among these the centre-right Anavatan Partisi (The Motherland Party, ANAP) managed to get 45.1 percent of the votes and formed a single party government. ANAP’s single party government continued after the 1987 elections although ANAP’s votes declined to 36.3 percent. The single party governments of ANAP during 1980s were replaced by a number of coalition governments during 1990s. The three parliamentary elections in 1991, 1995 and 1999 underscored the volatility of the electorate as parties experienced significant shifts in their popular appeal (Sayar, 2002). One of the significant developments of the 1990s is the victory of the Islamist Refah Partisi (Prosperity Party, RP) in 1995 elections. Also 1999 election was marked by the rise of the far-right nationalist MHP. So, by the 1990s Turkish political system was fragmented again as it was before the 1980 coup: none of the three elections of 1990s formed single party governments.
This fragmentation also caused a decline in the support for the centrist parties. The total vote share of four centre right and centre left parties collectively was 82.7 percent in 1991; however this was reduced down to 56.1 percent in 1999 elections. The failure in dealing with the pressing economic and social problems effectively was the main reason for this decrease. Parties that were not located at the centre of the political spectrum successfully took the advantage of this situation. The success of RP is a clear example of this: the party effectively capitalized on the shortcomings and ineffective governance of the centrist parties, and reaped the electoral benefits from having a well functioning and effective party organization (Sayarı, 1996).

During 1990s the Turkish political system experienced some other important developments as well. Fazilet Partisi (Virtue Party, FP), which is the successor to the RP that was banned by the constitutional court in 1998, managed to have 15.4 percent of the votes in 1999 elections, and also maintained the control at the local/municipal level including the metropolitans like İstanbul and Ankara. When FP was also closed by another ruling of the Constitutional Court in 2001, the Islamist movement faced a major split for the first time in their history. While the conservatis formed the Saadet Partisi (Felicity Party, SP), a faction which was labelled as reformists formed the new Adalet ve Kalkınma Partisi (Justice and Development Party, AKP) under Recep Tayyip Erdoğan's leadership. Additionally, for the first time the pro-Kurdish parties entered electoral competition in 1990s. As the first example of these parties, Halkın Demokrasi Partisi (People's Democracy Party, HADEP) managed to receive around 5 percent of the votes in 1995 and 1999 elections, and became the lead party in number of eastern and south eastern provinces of Turkey.

The successive victories of AKP reshaped the Turkish political arena starting with the 2002 elections. Since from the very beginning, AKP differentiated itself from its Islamist
political predecessors and focused instead on economy. In November 2002 general elections, AKP managed to get 34 percent of the national vote, and established a single party government. In 2002 elections the only other party that was able to pass the national 10 percent threshold was CHP. During the first term in office, AKP gave special importance to economy. As a result, the Gross National Product (GNP) increased fourfold, the Gross Domestic Product (GDP) per capita doubled, reaching $5500. The inflation went below for 10 percent. Working with the IMF, AKP government managed to reverse the biggest financial crisis in the history of the Republic in 2001. In that sense, the 2004 local elections can be evaluated as the ratification of the AKP’s performance by the voters: AKP raised its national vote share to 41 percent in the 2004 local elections. Lastly the 2007 parliamentary elections in Turkey also ended with an enhanced landslide victory of AKP. With this victory AKP became the only incumbent party since 1983 to have increased its votes in a subsequent election with the exception of the Democratic Left Party (Demokratik Sol Parti, DSP), which ran on the coattails of the nationalist sentiment created by the capture of Abdullah Öcalan shortly before the 1999 elections (Şekercioğlu and Arikan, 2008).

At this point it would also be useful to provide some basic information about electoral system in Turkey. The Grand National Assembly of Turkey has 550 members and deputies are elected through a closed-list proportional representation system to serve 4-year terms. There are 81 electoral areas corresponding to the provinces. Each party must clear a national threshold of 10 percent and at least one D'Hondt quotient in the district from which it is elected. Additionally, a candidate may be seated only if his party is organized in one-third of districts within each of half of the provinces, and has nominated two candidates for each seat in at least half of provinces. Independent candidacy is possible, and the 10 percent national threshold rule does not apply to the independent candidates.
Currently the most controversial issue of the Turkish electoral system is the 10 percent threshold. The effects of this were particularly visible in the 2002 and 2007 elections. In 2002 only two and in 2007 only three parties managed to pass the threshold. In 2007 it also appears that it heavily influenced the voters’ choices, with a significant flow of votes away from the small parties towards those which were expected to exceed 10 percent (Hale, 2008). Relatively small parties formulated strategies to overcome the threshold, either by trying to form alliances or by running their candidates as independent candidates.

The model

The purpose of this model is to forecast, six to twelve months in advance, the difference between the lead and second party vote share in the forthcoming general elections. Given the small number of cases under the investigation\(^2\) (N=10), this model follows the principle of the parsimony and the “minimalism” (Lebo and Norpoth, 2007). Hence, based on the literature described above, the basic model equation is as follows:

\[
\text{Difference between lead and second party vote share} = \text{Economic conditions} + \text{Local election success} + \text{political structure}
\]

\[
\text{DifLpSp} = \text{INF} + \text{LE} + \text{PES} + e \\
\text{Eq. 1}
\]

where DifLpSp is the difference between the lead and second party vote share; INF is the annual average inflation rate between the election years; LE is the second party vote share in local elections and PES is the dummy variable, which indicates the problems with establishment. The dummy variable of PES is coded as “1” if the party has problems with the establishment and “0” on other cases. For the model the results of 1961, 1965, 1969, 1973, 1977, 1987, 1991, 1995, 1999, 2002, 2007 general elections and 1963, 1968, 1973, 1977, 1983 general elections are omitted from the cases.

\(^2\) As mentioned in the theoretical discussion, the military administration 1980 coup banned existing political parties and party executives. Parties that compete in the elections of 1983 were totally different organizations than the political parties of 1970s. Since there is no continuity between 1977 and 1983 elections, 1983 general elections are omitted from the cases.
1984, 1989, 1994, 1999, 2004, 2009 were used. Out of 10 cases 7 of the local elections happened before the general elections and on three occasions local and general elections were carried together.

**IV1- The Inflation**

Inflation is a structural characteristic of the Turkish economy since from the 1960s. During the 1970s annual rates climbed up to 59 percent, during 1980s it broke the 100 percent level and in 1990s the annual average rate was 75.2 percent with a peak of 106.3 per cent in 1994. These numbers were caused by economic policies which were subject to short-termism, the misuse of public funds and periodic crisis. In addition stabilization programs of 1990s which attempted to set and economic order were not successful. The movement towards a free market economy has been linked to the massive increase in exports that occurred and the inference drawn was that further liberalization would cure inflation and other problems (Rivlin, 2003).

As displayed below, inflation has a considerable amount of the explanation power in the model. This is in line with the previous research on Turkey, which argued that the retrospective socio-tropic evaluations have the largest and the most persistent impact on voting (Çarkoğlu, 2008). The impact of economy became more visible and consistent after 1980s, where the political system is more stable compared to pre-1980 period. This is clearly a sign of “learning the economic vote” (Stegmaier and Lewis-Beck, 2009). It seems that the voters punished ANAP in 1991, Doğru Yol Partisi (True Path Party, DYP) in 1995, RP in 1999 for their poor performances in economy. Although on average they have recorded around three percent raise in GNP during their reign, they lost around 30 percent of their vote share in the following election. However, the power of economic voting became most visible in 2002 elections. In 2001 Turkey experienced a very deep and destructive economic crisis. In
2001 the value of the Turkish lira has decreased nearly 50 percent and prices have soared dramatically. Public protests became common because of the declining living standards and the rising unemployment. Unions also protest government plan to freeze salaries for over 400,000 state workers for six months as part of the austerity plan, mandated by the IMF. Additionally, the prices on imports like gasoline, cars, electronics, computers, etc, have risen as much as 50 percent. That has repercussions on domestic prices as well. Meanwhile, hundreds of thousands have lost their jobs. The voters severely punished the lead party, which was the DSP for all of these developments and DSP lost 95 percent of its vote share. Coalition partners of DSP, namely MHP and ANAP, were also punished by the voters: both parties lost around 60 percent of their vote share in the 2002 elections. In line with the responsibility hypothesis Turkish voters also reward successful economic performances as well. ANAP in 1987 and AKP in 2007 both recorded an average GNP increase around 7 percent, which was rewarded by the voters in the consecutive elections.

IV2- Local elections

Although local elections in Turkey date back to 1940s, their importance increased especially after 1990s. The local government reforms of the early 1980s strengthened the municipalities financially and the creation of a Greater Municipal City system through these reforms for the country's largest cities facilitated the emergence of the metropolitan municipality mayors as influential figures in local and, in some cases, even in national politics (İncioğlu, 2002, p 88). As large cities like İstanbul, Ankara and İzmir, continue to accommodate the large number of populations. The administration of these cities became very important for the lead parties to consolidate their vote base. This situation is likely to continue in the following local elections. Moreover, the attempts for the decentralization of the
administrative system, which will increase the importance of the local elections, is on top of the list of the political agenda in Turkey. So, the greater transfer of power from the central to the local administrative bodies, coupled with the expanding size of the country's urban voters, will significantly enhance the importance of the local electoral processes in coming years (İncioğlu, 2002, p.89).

Based on the facts, described above, one important way of assessing the popularity of the political parties in Turkey is to check their performances at the local elections. It is striking to see that in a number of cases the local election results are nearly identical with the general election results. In 1969 AP, in 1991 ANAP, in 1995 DYP and in 2002 DSP had the same vote share (excluding the decimal points) in both general and local elections.

IV3-Problems with the establishment

When Mardin proposed the centre-periphery framework for explaining the Turkish politics, he argued that the Turkish society had a centre and a periphery, and that “the confrontation between the centre and the periphery was the most important social cleavage underlying Turkish politics and one that seemed to have survived more than a century of modernization” (Mardin, 1973, p. 170). It is agreed that the cleavage between the centre and periphery, which was inherited from the Ottoman political structure, continued to exist in Turkish republic. While defining centre Mardin argues that the Republican elite, “was unable to establish contact with the rural masses...[and] the members of the bureaucratic class under the Republic had little notion of identifying themselves with the peasantry” (Mardin, 1973, p.183). Additionally, when the centre decided to eliminate the functions of religion from social and political life the connection with the periphery was further weakened, the tension between them was exacerbated and the distance between the central elite and the ascriptive,
religious groups of the periphery greatly increased (Sunar and Toprak, 2004, p.160). When the new Republic executed its secularization project with the purpose of establishing a homogeneous, Western-type, secular nation state, it tried to cut down the links with the “traditional” including religion. This strategy widened the gap between the centre and the periphery. Besides, it created the ground for a salient political struggle, which is organized around the secularist/powerful centre and the traditional/religious periphery. In this confrontation the periphery was seen as the complement of the centre and it reflects the parochial orientations built around resentful cynicism towards the modernization project, introduced by the centre (Çarkoglu and Hinich, 2006, p.374).

Although the parties that represent the interests of the periphery managed to receive more votes than the parties of the centre, the periphery did not represent a mono-bloc totality in terms of parties and ideology. During the early years DP and AP managed to receive the votes of the periphery. However, the peripheral coalition was broken into three groups, one representing moderate right-wing (i.e. AP, ANAP, DYP), the others ultra-nationalist (i.e. MHP, BBP) and the pro-Islamist constituencies (i.e. MNP, MSP, RP, FP, SP) (Çarkoglu and Hinich, 2006, p. 375). Traditionally the centre has always been represented by CHP. However, after the 1980 coup, a number of other parties like DSP, SODEP and SHP became visible in the political arena for representing the centre.

Basing itself on the above literature, this paper argues that when the establishment (read as “centre”), tried to exclude the parties that represent the interests of periphery from the political arena, these parties returned back stronger and increased their vote share. For example, when DP was closed after the 1960 military intervention, its successor AP won the 1965 elections with 52.87 percent vote share. After the 1980 coup, in 1983 general elections, although the ruling military junta openly supported Milliyetçi Demokrasi Partisi (Nationalist Democracy Party, MDP), voters preferred ANAP, which was the sole representative of the
periphery in 1983 elections. As mentioned before, during 1990s the Constitutional Court closed RP and FP because of their practices against secularism. More recently AKP faced difficulties with the establishment. In 2008, the chief prosecutor of Supreme Court of Appeals, which is among the strongest representatives of the centre, opened up a case against the AKP just after the 2007 general elections, in which AKP received 46.58 percent of the votes. However, this time the Constitutional Court did not closed down the AKP; but submitted a warning to the party.

A dummy variable is created for the inclusion of the centre-periphery cleavage to this analysis. Accordingly, if a political party is closed down or sanctioned by the apparatuses of the centre, such as the military intervention or the constitutional court, it is judged as that the particular party had problems with the establishment and coded as “1”. Hence DP, RP and AKP were coded as 1 and the others (CHP, ANAP, DYP and DSP) were coded as “0”.

To estimate the model, the multiple regression (ordinary least squares) was used to the 1965-2011 data set. Results are displayed in Table 1.
Table 1. **MODEL - INFLATION, LOCAL ELECTIONS AND PROBLEMS WITH ESTABLISHMENT**

\[ \text{DifLpSp} = 40.479 - 0.394 \times \text{INF} - 0.498 \times \text{LE} - 12.164 \times \text{PES} \]

(5.28) \hspace{2cm} (-2.12) \hspace{2cm} (-3.64) \hspace{2cm} (-6.18)

<table>
<thead>
<tr>
<th>Party</th>
<th>Prediction</th>
<th>DifLpSp</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHP</td>
<td>21.79</td>
<td>24.20</td>
<td>-2.41</td>
</tr>
<tr>
<td>CHP</td>
<td>22.58</td>
<td>19.20</td>
<td>3.38</td>
</tr>
<tr>
<td>AP</td>
<td>6.05</td>
<td>3.50</td>
<td>2.55</td>
</tr>
<tr>
<td>AP</td>
<td>1.91</td>
<td>4.50</td>
<td>-2.59</td>
</tr>
<tr>
<td>SODEP</td>
<td>11.62</td>
<td>11.50</td>
<td>0.12</td>
</tr>
<tr>
<td>ANAP</td>
<td>7.64</td>
<td>3.00</td>
<td>4.64</td>
</tr>
<tr>
<td>ANAP</td>
<td>-1.19</td>
<td>1.80</td>
<td>-2.99</td>
</tr>
<tr>
<td>MHP</td>
<td>5.34</td>
<td>4.20</td>
<td>1.14</td>
</tr>
<tr>
<td>CHP</td>
<td>13.91</td>
<td>14.90</td>
<td>-0.99</td>
</tr>
<tr>
<td>CHP</td>
<td>22.66</td>
<td>25.70</td>
<td>-3.04</td>
</tr>
<tr>
<td>?</td>
<td>21.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( R^2 = 0.90 \) \hspace{2cm} \text{Adj. } R^2 = 0.86 \hspace{2cm} \text{SEE} = 3.47 \hspace{2cm} \text{D-W} = 2.38 \hspace{2cm} N = 10 \hspace{2cm} \text{MAE} = 2.38

where DifLpSp = The difference between lead and second party’s vote shares; INF = annual average inflation rate between election years; LE = second party’s vote share in local elections; PES = problems with establishment (0=No, 1=Yes); *, ** = statistically significant at .01 and .07 respectively; numbers in parenthesis are t ratios. Sources TurkStat

The model forecasts the vote share different between the first and second party as 21.12 percent. It is not easy to translate this outcome to parliamentary seats because of the current electoral mechanism which is based on D'Hondt system and the 10 percent threshold. To illustrate this situation one may compare the 2002 and 2007 elections. In 2002 AKP received 34.43 percent of the votes and had 365 seats. In 2007 although AKP increased its vote share to 46.58 percent, they had only 341 seats in the parliament. This is because in 2007, different then 2002, MHP managed to enter to the parliament by receiving the 14.27 percent of the votes. However, according to the findings of this forecast, it is still plausible to argue that the party that will lead the elections of 2011 will have the majority of the seats at the grand national assembly.
Diagnostics

Although there are a number of different diagnostic tools for the assessment of forecasting models, the most systematic one has been Lewis-Beck’s. Lewis-Beck (Lewis-Beck, 1985; Lewis-Beck and Tien, 2008) proposes four distinct dimensions of the forecast model quality: (A), parsimony (P), reproducibility (R), and lead time (L). In this method each dimension is marked with a score of between 0 and 2, and combined with the below formula to construct a quality index.

\[
\text{Quality Score} = \frac{(3A+P+R)L}{M}
\]

In this formula, M is the maximum value of the numerator; so that the value of the quality index ranges from 0-1. Although this index was criticised in a number of ways (Campbell, 2008), it is still the most commonly used and powerful tool within the literature. It provides the most important space for the “ultimate standard” in forecasting, which is the accuracy. Additionally it includes, lead time, parsimony, and reproducibility.

The accuracy (A) of the model proposed here deserves a maximum score of 2 since the MAE is equal to 2.26, which is also accepted as quite accurate by Campell’s (2008) benchmarking system. When the dimension of parsimony (P) is concerned, the model proposed in this article display a similar structure with other models within the literature, which has a score of 1.5. The score for the reproducibility (R) of this model should also be around 1.5 to 2.0 since all the data is public and easily accessible. Most importantly this model’s strongest part is its lead time (L). With an accurate inflation estimation, which is quite successfully carried out by international organizations like World Bank, IMF, OECD etc., the election results can be estimated even 12 months before. So, when we plug in the scores, the quality score for the Turkish model is as follows:
0.9 is a very high score for quality, which is a proof for the strength of this model.

Besides the Lewis-Beck’s quality score index, there are some other useful tools for checking the strength of forecasting models. A common approach, which called as the “out-of-sample” method, assesses the predictive quality of the regression model. In this method each known election score is excluded from the data set and the same regression model re-estimates the scores with the remaining observations. While doing so, the absolute errors of the model can be averaged; and this is called as the Mean Absolute Error (MAE). MAE is useful for providing a rough idea about the general error of the model. One specific trend in using the “out-of-sample” method is to check the “largest error” where the maximum error of the model is regarded as a benchmark for the strength of the model. In the Turkish model the “largest error” happened in 1995 elections with the 4.57 percent. The basic problem with this strategy is that we do not know if the largest error is an outlier or not. If this is the case, this test becomes quite though to fulfil. So, to overcome this difficulty there is another strategy which is called as the “step-ahead” method. In this method forecasters estimate the result at time “t”, although the result of “t+1” is known. For example, for the Turkish case with the data at hand we may forecast the 2007 elections results by using the data for 1965-2002. This can be replicated by going backwards and estimate the result of the 2002 elections by using the date for 1965-1999. By doing so, it is possible to evaluate the model stability and eliminate the problems caused by the outliers. One final method is to select random cases from the data and run the same regression formula to test the strength of the model.
For the Turkish model the results of these diagnostic tools are as follows:

<table>
<thead>
<tr>
<th>Sample of Elections</th>
<th>Sample Size(N)</th>
<th>R²</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-2002</td>
<td>9</td>
<td>.89</td>
<td>3.3</td>
</tr>
<tr>
<td>1965-1999</td>
<td>8</td>
<td>.93</td>
<td>2.9</td>
</tr>
<tr>
<td>1965-1995</td>
<td>7</td>
<td>.98</td>
<td>1.3</td>
</tr>
<tr>
<td>1965-1991</td>
<td>6</td>
<td>.98</td>
<td>0.3</td>
</tr>
<tr>
<td>Random</td>
<td>6</td>
<td>.97</td>
<td>2.5</td>
</tr>
</tbody>
</table>

As it is evident from the Table 2, the Turkish model performed well with the diagnostic tests. Even working with a small N like 6, the model can still explain more than 95 percent of the variance. The step ahead error scores are within the acceptable limits with an average of 2.06. All of these results and the Lewis-Beck’s quality index score prove that the Turkish model is a strong model.

Before closing this part, one important aspect of the diagnostics should be underlined. The election forecasting studies try to estimate the *popular vote share* of the candidates and/or the parties. However, due to the complexity of the electoral systems the candidate or the party who got most of the popular vote share, may not win the elections. A clear example of this is the 2000 presidential elections of USA. The forecasting models were severely criticised for having wrongly predicted that Democrat Al Gore would defeat Republican George W. Bush. In that particular example although Gore received a majority of the popular vote, it was Bush that won the majority of the electoral vote. The forecast models of the time predicted the popular vote and in this dichotomous sense, each of the major forecasting models could be said to have been “right” in predicting a popular vote plurality for Gore in 2000 (Campbell, 2008, p.262). So, the main point here is that; the electoral forecast cannot be judged as simply
right or wrong. What is done here is to forecast a certain vote share in an interval measure rather than in a right-wrong dichotomy. Like many other forecasting studies this model also concentrates on the popular vote share of the lead party in the following election. So, the numbers produced here do not indicate the winners or losers of elections. However, it is still very valuable to see the lead party’s vote share in the forthcoming elections since it will provide a very firm ground for deciding on the winner.

**Summary and conclusions**

Turkish Republic is a multi-party democracy since from the mid 1940s. Although it was interrupted by three military coups, the party and election system in Turkey has brought real alternations in the government starting from very early years. So, it is plausible to argue that Turkish voters have the tradition of evaluating the performances of political parties, as in any other Western-type democracy. That is to say; the dynamics of evaluations of political parties in Turkey follow a similar pattern with contemporary democracies, being driven by economic and political factors. Basing itself on above assumption, this study sets up a model that forecasts lead party’s vote share between two elections by utilizing inflation, the local elections and the centre-periphery distinction, which are salient structural factors in Turkish politics. The model proposed here has a number of strengths. First of all, the statistical indicators like $R^2$ values, Durbin-Watson statistics are satisfactory. Although the SEE value is a bit higher than the similar studies, if a one-tailed confidence interval is applied, it is within acceptable margins. Secondly, the proposed model performs well with Lewis-Beck’s quality score index. Not only it has a very good lead time like 12 months, it is also parsimonious and reproducible. Last but not least, it performs well with the other diagnostic tools like MAE and step-ahead error scores. With all its power in theory, the real strength the model proposed in
this study will be tested in June 2011 general elections. To recall again this model forecasts 21.12 percent vote share difference between the first and second party.

This study may also be considered as an attempt for widening the scope of forecasting literature. By offering a forecasting model for Turkey, it contributes to the strong body of empirical and theoretical research on forecasting election outcomes that has been heavily investigated in established democracies like France, the United Kingdom, and the United States. As it is proven here it is quite possible to forecast elections in different democratic systems. However, this study can only reveal limited information. It is hoped that this study will create interest in election forecasting both in Turkey and under-studied democracies of the world.
References

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