

# Women's Electoral Participation in Turkey: Micro and Macro Factors

Ali T. Akarca,  
Aysıt Tansel  
and Şenay Üçdoğruk Birecikli

# WOMEN'S ELECTORAL PARTICIPATION IN TURKEY: MICRO AND MACRO FACTORS

Ali T. AKARCA<sup>1</sup>, Aysıt TANSEL<sup>2</sup> and Şenay ÜÇDOĞRUK BİRECİKLİ<sup>3,4</sup>

## ABSTRACT

*Women's electoral participation in Turkey is studied, using the probit procedure. A novelty of the study is the use of both micro-level and macro-level variables simultaneously. Furthermore, a wider range of variables are used in each of these categories than other studies on turnout in Turkey. Results show that women's propensity to vote is related to age (at least until 49) and being married, positively, and to being an ethnic minority, having children under 6, living in an urban area, living in an electoral district with a large number of parliament members or with a dominant party, negatively. Education and household wealth have inverted-U shaped relationships with women's probability to vote. The relationship between the effective number of parties in a woman's province and her probability to vote, on the other hand, is U-shaped. Women living in the Black Sea, Central-East and South-East regions and those who migrated to the West from these regions are less likely to vote. Being a migrant reduces likelihood of voting unless it occurs in a province with heavy migrant concentration and large number of parliament members.*

*Keywords: Turkey, election turnout, voter behavior, political participation by women, electoral competition, internal migration.*

*JEL codes: D72, J16, R23*

## 1. INTRODUCTION

For a well-functioning democracy and economy it is essential to have voters that evaluate the performance of governments from time to time and reward or punish them accordingly. For that reason, low and declining electoral turnout rates across the globe, especially in established democracies of North America and Europe, is viewed with alarm<sup>5</sup>. Consequently, the amount of research devoted to understanding the determinants of electoral participation has exploded in the last two decades. Frank and Coma (2023), Stockemer (2017), Concela and Geys (2016), Smets and Van Ham (2013) Geys (2006) and Blais (2006) provide reviews of this literature. According to these reviews, in explaining turnout, researchers typically consider demographic factors such as population size, population concentration, population stability, age, ethnicity, marital status, children at home, birth place, migration status; socioeconomic factors such as urbanization, education, economic well-being; political factors such as effective number of parties and the level of electoral competition; and institutional factors such as the number of officials being elected, the election system, registration and voting requirements, and the presence of other elections on the ballot. Relative importance of these variables vary depending on the context.

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<sup>1</sup> Department of Economics (mc 144), University of Illinois at Chicago, 601 S. Morgan Street, Chicago, Illinois 60607, USA. E-mail: akarca@uic.edu. Telephone: +1 773 208-1199 (Author of contact)

<sup>2</sup> Department of Economics, Middle East Technical University, 06531 Ankara, Turkey; Institute for Study of Labor (IZA), P.O. Box 7240, D-53072 Bonn, Germany; and Economic Research Forum (ERF) Cairo, Egypt. E-mail: atansel@metu.edu.tr. Telephone: +90 533 474-8158

<sup>3</sup> Department of Econometrics, Dokuz Eylül University.35160 Buca, İzmir, Turkey E-mail: s.ucdogruk@deu.edu.tr. Telephone: +90 532 462-6426

<sup>4</sup> Authors' names are listed in alphabetical order.

<sup>5</sup> For global trends on electoral turnout, see Solijonov (2016).

Turnout studies fall under two main categories: Micro studies which consider demographic and socioeconomic traits of individual voters, ignoring political and institutional factors, and Macro studies which consider aggregate demographic and socioeconomic characteristics of the electorate at national, subnational or supranational level, together with political and institutional factors.

To gain more insight, some studies investigate various subgroups of the electorate separately. In that regard, female voters are of particular interest because women constitute about half of the society and the electorate and vote differently than men. In the U.S, and Canada, women voters outnumber men and vote at a higher rate than them. However, the reverse is true for majority of the countries in Western Europe and in other continents.

Turkey is an interesting case for studying electoral participation. Its turnout rate is high and shows no tendency to fall. In fact, in the last five parliamentary elections, it increased steadily from 83.2 in 2011 to 87.0 in 2023. These rates are substantially higher than great majority of countries in the world, including Canada, U.S.A. and almost all of the Western European countries. Also, according to official statistics, women voters in Turkey exceeded men by 1.4 percentage points in every election since 2011 and had a higher turnout rate than them in every age group except those over 65<sup>6</sup>. This is remarkable, considering the fact that lowest female turnout rates in the world are found in the MENA (Middle East and North Africa) region. Solijonov (2016) show that the difference between turnout rates of women and men for Tunisia, Iraq, Morocco, Palestine, Libya, Qatar, Kuwait and Egypt rank 48<sup>th</sup> through 57<sup>th</sup> among 58 countries.

Despite its uniqueness, there are very few quantitative studies on electoral participation in Turkey that go beyond an analysis of descriptive statistics or pairwise simple correlations. Micro studies by Cesur and Mocan (2018) and Russell (2016) and macro studies by Kama, Aksoy and Taştan (2022), Güvercin (2017), Akarca and Tansel (2015), Başlevent (2013), Taşkın (2007) and Çulhaoğlu (2007) investigated the determinants of the turnout rate in general. Micro studies by Güvercin (2019), Cesur and Mocan (2018) and Russell (2016) investigated the determinants of women's turnout rate. Of course, the micro studies ignored macro variables and the macro studies the micro variables. However, each of the micro studies above, omitted some of the key micro variables mentioned in the literature too, and each of the macro studies, some of the key macro variables. For example, Güvercin (2019), lacks variables related to migration and ethnicity; Cesur and Mocan (2018) variables on migration, marital status and children at home; Russell (2016), variables on urbanization, migration, ethnicity, children at home, and economic well-being; Kama, Aksoy and Taştan (2022), variables on age, education, migration and the number of officials being elected; Güvercin (2017), variables on urbanization, migration, ethnicity and the numbers of parties and the number of officials being elected; Akarca and Tansel (2015), variables on ethnicity; Başlevent (2013), variables on migration, ethnicity, the numbers of parties and officials being elected and electoral competition; Taşkın (2007), variables on age, education, migration, ethnicity, the number of officials being elected; Çulhaoğlu (2007), variables on age, education, urbanization, migration, ethnicity and the number of officials being elected.

In this study, we analyze women's electoral participation in Turkey, using both micro and macro variables simultaneously. Furthermore, we use wider variety of variables in each category than other studies on turnout in Turkey. The data on micro variables is gathered from the 2013

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<sup>6</sup> See Şık (2023).

Turkey Demographic and Health Survey conducted by the Hacettepe University Institute of Population Studies (2014). The data on macro variables are obtained from Tuncer (2011) and TurkStat.

The paper is organized as follows. In the next section, determinants of voter turnout which enter into our model are discussed. In section 3, empirical results obtained by probit procedure are presented and interpreted. Finally in section 4, the conclusions reached are summarized.

## 2. THE MODEL

The variables we consider in our model are as follows:

### DEPENDENT VARIABLE

**PARTICIPATE:** Equals 1 if the survey participant indicated that she votes regularly, and zero if she indicated that she does not vote or vote only occasionally<sup>7</sup>.

### INDEPENDENT VARIABLES

**AGE:** Survey participant's age in years<sup>8</sup>.

**EDUCATION:** Years of formal education completed by the survey participant (ranges between zero and 22)

**EDUCATION\_SQUARE:** Square of EDUCATION.

**MARRIED:** Equals 1 if the survey participant is married, and zero if she is never-married, widowed, divorced or separated.

**CHILDREN\_0-5:** Equals 1 if the survey participant has children aged 5 or younger, and zero otherwise.

**URBAN:** Equals 1 if the survey participant resides in an urban area (settlement with a population of at least 10,000), and zero otherwise.

**NON\_TURKISH:** Equals 1 if the survey participant's mother tongue is not Turkish, regardless of whether she can also speak Turkish, and zero otherwise.

**WEALTH\_LOWEST:** Equals 1 if the survey participant's household wealth is in the first (lowest) quintile, and zero otherwise.

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<sup>7</sup>Cases for which the interview is interrupted or the "not applicable" option is selected, are eliminated from the sample.

<sup>8</sup>Although the age range in the survey is 15-49, to include in the sample only those with at least two election encounters, women between ages 15 and 21 are excluded. This reduced the number of observations to 7,613.

WEALTH_SECOND:	Equals 1 if the survey participant's household wealth is in the second quintile, and zero otherwise.
WEALTH_MIDDLE:	Equals 1 if the survey participant's household wealth is in the third (middle) quintile, and zero otherwise.
WEALTH_FOURTH:	Equals 1 if the survey participant's household wealth is in the fourth quintile, and zero otherwise.
WEALTH_HIGHEST:	Equals 1 if the survey participant's household wealth level is in the fifth (highest) quintile, and zero otherwise.
RESIDE_WEST:	Equals 1 if the survey participant resides in the West (see Figure 1), and zero otherwise.
RESIDE_BLACK SEA:	Equals 1 if the survey participant resides in the Black Sea region (see Figure 1), and zero otherwise.
RESIDE_CENTRAL-EAST:	Equals 1 if the survey participant resides in the Central-East region (see Figure 1), and zero otherwise.
RESIDE_SOUTH-EAST:	Equals 1 if the survey participant resides in the South-East region (see Figure 1), and zero otherwise.
BORN_WEST:	Equals 1 if the survey participant was born in the West region (see Figure 1), and zero otherwise.
BORN_BLACK SEA:	Equals 1 if the survey participant was born in the Black Sea region (see Figure 1), and zero otherwise.
BORN_CENTRAL-EAST:	Equals 1 if the survey participant was born in the Central-East region (see Figure 1), and zero otherwise.
BORN_SOUTH-EAST:	Equals 1 if the survey participant was born in the South-East region (see Figure 1), and zero otherwise.
RESIDE_WEST*BORN_BLACK SEA:	Product of RESIDE_WEST and BORN_BLACK SEA
RESIDE_WEST*BORN_CENTRAL-EAST:	Product of RESIDE_WEST and BORN_CENTRAL-EAST
RESIDE_WEST*BORN_SOUTH-EAST:	Product of RESIDE_WEST and BORN_SOUTH-EAST
PARTIES:	Effective number of parties (10,000 divided by the sum of squared vote shares of the AKP, CHP, MHP)

	and BDP in 2011 parliamentary election) in survey participant's province. <sup>9</sup>
PARTIES_SQUARE	Square of PARTIES
NOCOMPETITION:	A dummy variable which takes the value of 1 if all parliamentary seats in the survey participant's province are won by a single party in 2011 parliamentary election, and zero otherwise <sup>10</sup>
MP:	Number of parliament members elected in 2011 parliamentary election from the survey participant's electoral district. <sup>11</sup>
MIGRANT_RATIO:	Proportion of population in the survey participant's province in 2011 who were born in another province.
MP*MIGRANT_RATIO:	Product of MP and MIGRANT_RATIO.

The last six of these are the macro variables, measured at the provincial level, and the rest are micro variables measured at the individual level. The former uses figures related to the 2011 election because that is the closest election to 2013 when the survey from which the figures for micro variables are taken was conducted.

Age is one of the most important determinants of turnout. Most individual-level studies find an inverse-U shaped relationship between age and turnout. Young people, who are in a transitional phase in life, busy moving away from home, getting an education, establishing families and careers, and gradually moving into adult roles, vote less. Turnout is found to be highest among the middle-aged. For older citizens, who withdraw from social life as their social network deteriorates, turnout is expected to be low. That is why modelers often include in their turnout equations, in addition to age, age-squared. Coefficient of the former is expected to be positive and the latter negative. However, in our data, the age range is 22-49, but in Turkey, female turnout begins to decline after age 65. According to official statistics, this has been the case in every election since 2011 (Şık (2023)). Consequently, we included in our model AGE but excluded its square. When the latter was tried, not surprisingly it turned out to be insignificant.

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<sup>9</sup> This is the index suggested by Laakso and Taagepera (1979) for measuring effective number of parties. However in computing the index for Turkey, we included only vote shares of the parties which in 2011 either exceeded the 10 percent nationwide threshold or was able to bypass it by fielding independent candidates. In computing the party vote shares, we ignored the shares of parties not included in the index, as is done by the election system.

<sup>10</sup> In 2011, 14 of the 81 provinces fell under this category. Most of them are small provinces with few members of parliament. These include six of the 18 provinces with three members of parliament, seven of the 15 provinces with two members of parliament, and the only province with one parliament member.

<sup>11</sup> In Turkey each province, with the exception of three most populous ones, is considered a constituency. Members of parliament are awarded to political parties according to the D'Hondt proportional election system. However, votes of parties which receive less than 10 percent of the vote nationwide, are ignored. Istanbul is divided to three electoral districts with 30, 27 and 28 members of parliament, Ankara into two with 16 and 15 members of parliament, and Izmir into two with 13 members of parliament each (in 2011). We approximated MP to be 28.3 for Istanbul, 15.5 for Ankara and 13 for Izmir.

The motivation for considering EDUCATION is that without some education, just the act of voting will be a difficult task, let alone gathering and evaluating information on candidates, parties and issues facing the country and the province. However, although one's facility with gathering information and voting rises with increased education, it is likely to be subject to diminishing returns. Furthermore, the opportunity cost of one's time rises as her education rises, especially after graduation from a university. The EDUCATION\_SQUARE variable is added to see if the effect of education on turnout dampens after some critical point. We anticipate the sign of EDUCATION to be positive and EDUCATION\_SQUARE to be negative.

Research shows that people with stable family structures have a higher propensity to participate in civic activities such as elections, MARRIED variable is included in the model to capture that. We expect this variable to have a positive coefficient.

Children require constant care and attention of their mother, especially those under six. Thus having children at home would make voting more difficult for a woman. CHILDREN\_0-5 is in the model to take that into consideration. We expect it to have a negative sign. Like Güvercin (2019), who used the same data but a different method of estimation and fewer controls, we tried similar variables also for children between the ages 6-9 and 10-13 but their contributions to the explanation turned out to be insignificant in our case.

Individual-level studies find that participation in elections is much higher in rural areas than in urban areas. Voting in urban areas is more cumbersome and the stigma associated with not voting is less as it will be hardly noticed in the anonymity of the city. Villages on the other hand are closely knit societies where each person has intimate knowledge about the activities of others. To capture this, URBAN variable is considered. Its coefficient is expected to be negative.

The variable NON\_TURKISH aims to identify survey participants that are ethnic minorities such as Zaza, Kurd and Arab. In other countries, minorities tend to vote less. Perhaps this is because they don't feel as part of the general society or feel that the outcome of the election is not going to change their circumstances. With this variable, we aim to check whether that is the case in Turkey as well. If other countries are any guide, the coefficient of NON-TURKISH should be negative.

There are several reasons why turnout is related wealth. For one thing, as one's wealth increases, her means to gather information about candidates, parties and issues increases as well and getting to the polling place is facilitated. Second, more wealth means that the individual who owns it has more at stake. She will be affected by bad governance and by government's tax and transfer policies more. Thus we included in our model the wealth quintiles WEALTH\_SECOND, WEALTH\_MIDDLE, WEALTH\_FOURTH and WEALTH\_HIGHEST and expect them to have positive coefficients. However, wealthiest people have better ways to influence election outcomes than mere voting. They can donate money to the campaigns, place advertisements in newspapers and social media, and lend cars, office space, workers, etc. not only where they live but at other locations as well. They can also protect their interests by lobbying politicians. Availability of such options will reduce their incentive to vote. Thus we would expect the coefficients of the wealth variables mentioned to decrease after some level of wealth.

Due to its size, geography, and history, Turkey exhibits a great deal of regional diversity in many respects, including party choice and electoral participation This may be partly due to

differences in demographic and socioeconomic characteristics of various regions. We control these but there may be cultural factors at play as well. That is why most studies on turnout in Turkey include regional dummy variables in their models. For this, often the 12-way partition of the country by Turkish Statistical Institute (TurkStat) is used. However, this partition is based mostly on geography and economic activity. So, we used instead a six-way partition by Akarca (2017) which takes into account ethnic and sectarian differences besides geographic and economic ones. However, since differences between the Marmara, Aegean-Mediterranean and Central West regions of Akarca (2017) are not that drastic, we combined them in one and named it West. The Black Sea, Central East and South East regions are left as is. The four regions are shown in Figure 1. Of these regions, the West is most urbanized, most densely populated, richest, most educated, and most modernized. Provinces in this region typically have higher median age and higher mean years of schooling for women relative to men than the rest of the country. The Central-East and South-East regions on the other hand lie at the other extreme in all regards mentioned. The Black Sea region lies somewhere in between. South-East region is where ethnic Kurds are primarily concentrated. In the Central-East region, ethnic Kurds have a significant but much smaller presence. This region is where members of the Alevi sect are primarily concentrated. The West receives migrants from the other three regions.

We would expect women's electoral participation to be lower in the Black Sea, Central-East and South-East regions than in the West because they are less modernized but also because they are migrant exporters. There are at least three reasons why emigration affects turnout adversely. First, people who emigrate are likely to be the ones who are most active politically. Second, remittances sent by these people to their relatives back home reduce the latter's dependence on the state and thus decrease their incentives to get involved with politics. Third, the ones left behind may be just waiting for their turn to migrate and thus lose interest in local affairs. Akarca and Tansel (2015) show that turnout is significantly lower in Turkish provinces with high emigration rates. For all of the above reasons, we introduced in our model RESIDE\_BLACK SEA, RESIDE\_CENTRAL-EAST and RESIDE\_SOUTH-EAST variables which we expect to have negative coefficients that are likely to differ from each other. Akarca and Başlevent (2011), Güvenç and Kirmanoğlu (2009), and West (2005), using nationwide province-level data, show that voters in different regions of Turkey, consistently vote differently and change in tandem in each region when they do.

Immigrants from the other three regions living in the West should have lower turnout rates than natives living there for two reasons. First, habits change very slowly. Akarca and Başlevent (2010) show that migrants' political behavior are associated more with the voting patterns prevailing in their origin provinces than their destination provinces. Second, immigrants are too busy trying to make it in the big city to spare time for political activity. They have less knowledge of candidates and issues at their new locations, and those issues may not be their own. Consequently, fewer of them vote. RESIDE\_WEST\*BORN\_BLACK-SEA, RESIDE\_WEST\*BORN\_CENTRAL-EAST and RESIDE\_WEST\*BORN\_SOUTH-EAST are in our model to compare the turnout rates of immigrants and natives and turnout rates of immigrants from different regions. All of these variables are expected to have negative coefficients that differ from each other. Akarca and Tansel (2015), analyzing provincial data for the country, and Başlevent (2013), examining both province-level data for the country and district-level data for the Istanbul province find that migrants' election turnout is different than the natives. Akarca (2017) examining district level data for greater Istanbul (Istanbul, Kocaeli and Yalova) and Akarca



and Başlevent (2010), using individual-level data, conclude that party preferences of migrants differ not only from those of natives, but also among themselves.

As the number of parliament members (MP) elected from a province rises, the incentive to vote declines for two reasons. First, this increases the complexity of the ballot, and the cost involved in gathering information about the candidates. Second, due to the election system which assigns one MP to each of the 81 provinces and then distribute the remainder of the seats among provinces according to their population, it takes more votes to elect an MP in provinces with larger populations than smaller ones. This lowers the reward from voting in provinces with larger number of parliament members. Thus the MP variable in the model should have a negative coefficient.

Even though the turnout rate tends to decrease as number of parliament members being elected and the proportion of migrants in the constituency increase, an exception has to be made in the case of large urban constituencies where high numbers of immigrants from particular provinces are concentrated and where the number of deputies being elected is large. In such provinces, seeing an opportunity to elect one of their own, immigrants, whether interregional or interprovincial, will have higher incentives to participate in elections. MP\*MIGRANT\_RATIO is introduced to capture this. It should have a positive coefficient.

As the effective number of parties increase, by making it harder for voters to make up their minds, it discourages them to turn out. On the other hand, as the effective number of parties increase, it increases electoral competition and makes it easier for voters to find a party close to their ideology. This encourages them to vote. Thus turnout-parties relationship is likely to be non-linear. So, besides PARTIES, PARTIES\_SQUARE is included in the model. The expected signs of these variables are negative and positive, respectively.

In parliamentary elections, competition is nationwide. Even when an election in a province is very lop-sided, as long as a voter has a chance of affect the allocation of a seat, she will have an incentive to cast a ballot. In the extreme case, when a dominant party sweeps all of the seats in a constituency, that chance is extinguished. Then supporters of the dominant party has less incentive to vote because their party is going to win all of the seats anyway. Other party supporters have little incentive to vote also because they view it as futile. The NOCOMPETITION variable is included to measure the effect of such occurrences<sup>12</sup>.

### **3. EMPIRICAL RESULTS**

The descriptive statistics related to the variables in our model are given in Table 1. In Table 2, the coefficients, obtained through maximum likelihood estimation using probit procedure, are given. The table also presents the corresponding average marginal effects of the explanatory variables, computed at their mean values, where all other variables are held fixed. We will base our analysis on these. The marginal effects compute the effect of a unit change in the explanatory variable on the probability of women voting, while holding all other variables constant. To assess the significance of the coefficients and the marginal effects, the table also provides the probability values. These are for one-tailed tests. We should note that all variables in the table, except one, are significant, individually as well as collectively, and have the expected signs. As the marginal

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<sup>12</sup> In 2011, 14 of the 81 provinces fell under this category. These include six of the 18 provinces with three members of parliament, seven of the 15 provinces with two members of parliament, and the only province with one parliament member.

effects can easily be read from Table 2, in this section we will not give specific figures, except in cases of non-linear relationships which cannot be readily deciphered from the table.

We can see from the table that getting older (at least up to age 49) and getting married raises the propensity to vote. Having children ages 0 to 5, being an ethnic minority, and living in an urban area lowers it.

Education and wealth have inverted-U shaped relationships with the propensity to vote. Analyzing the results in the table further, we can see that a woman with no formal education has a 95 percent probability of voting, a surprisingly high value. As education increases, this probability rises, reaching a peak value of 96.5 percent between 8 and 9 years of education. Then it gradually declines to 93.5 percent at 22 years of education. Thus it appears that middle school graduation is optimal from the point of view of participating in elections. Further education depresses turnout. This can explain the Brody's (1978) puzzle, namely why, despite rising education levels, political participation fails to increase in America. Wealth increases the propensity to vote. This effect rises until the middle quintile but declines for the rich, as anticipated.

Region in which one is raised also matters. Propensity to vote is less for women residing in the Black Sea, Central-East or South East regions than in the West. This continues even after a woman migrates from these regions to the West. The region-of-origin effect seems to be smaller and statistically insignificant for migrants from the South-East. However, this may be due to the effect being partially captured through the ethnic minority variable (Non\_Turkish). As we mentioned above, majority of the people living in this region and thus the migrants from it are ethnic Kurds.

The relationship between the effective number of parties in a woman's electoral district and her propensity to vote is U-shaped. When the effective number of parties equals 1.45, the lowest in our sample, the probability of women voting is about 99 percent. This probability declines until effective number of parties become 2.45, reaching a minimum of 95 percent. When the effective number of parties reaches 3.50, the highest in our sample, the probability of women voting increases to about 98 percent. It appears that a little competition among the parties is not worth the complication it creates. However, when the competition is high, it stimulates turnout more than it hinders it by complicating the ballot and raising information cost of the voters. When a dominant party in a woman's province sweeps all seats, in other words, when there is no political competition, her propensity to vote declines.

As the number of parliament members being elected from a woman's district rises, her propensity to vote declines. However, this is not the case if it is accompanied by an increase in the proportion of migrants in the district's population. In short, being a migrant reduces the propensity to vote but being surrounded by migrants raises it due to the reasons listed in the previous section.

To check whether additional explanatory power was gained by including both micro and macro variables in the model, we conducted log likelihood ratio tests. They showed that exclusion of either group of variables from the model results in highly significant drop in the likelihood function.

#### 4. SUMMARY AND CONCLUSIONS

It appears that wide variety of factors affect women's turnout in Turkey. Some of these have to do with personal characteristics of the voters. Some have to do with characteristics of the electorate and the political and institutional environment in the voters' provinces. By combining both micro and macro factors, we were able to provide more comprehensive explanation and measure the influence of each determinant more accurately.

Being older, being married, being native of the West, not being an ethnic minority, not being a migrant, having close to 8-9 years of education, not having children under 6, not having too much or too little wealth, living in a rural area, living in an electoral district with few members of parliament and high-degree of inter-party competition raises the propensity to vote. On the other hand, being younger, being not-married, being an ethnic minority, having less or more than 8-9 years of education, having children under 6, having too little or too much wealth, living in an urban area, living in the Black Sea or Central-East or South-East regions or being a migrant from those regions, living in an electoral district with many members of parliament or little inter-party competition lowers the propensity to vote.

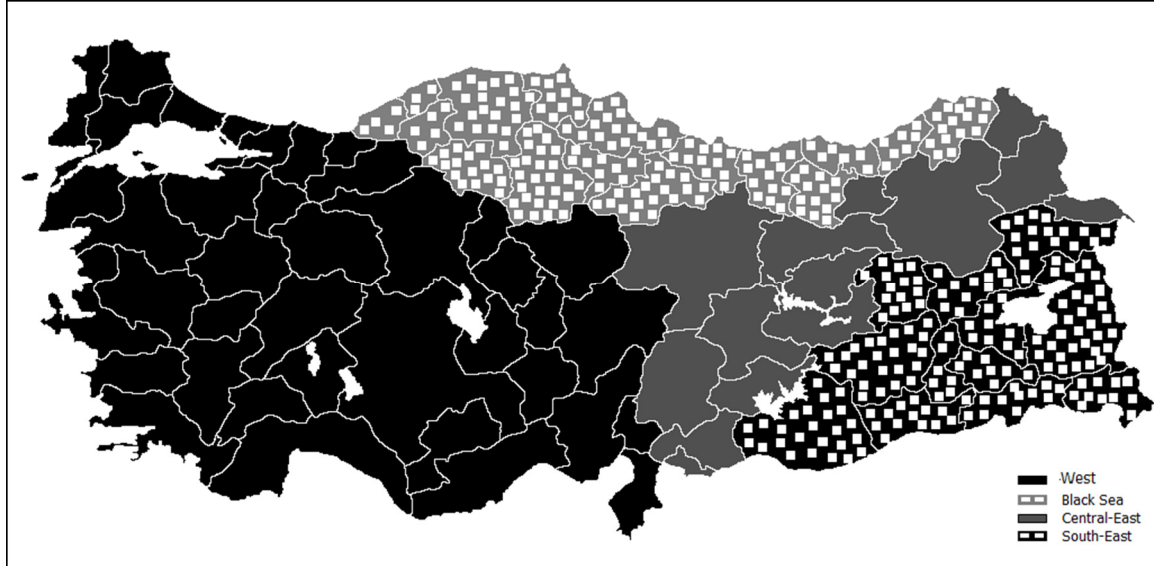
Most of the above variables are not under the control of the government but policymakers can increase the already high turnout rate of women in Turkey by reducing the sizes of very large electoral districts, by providing child care on the election days for mothers with small children, by taking measures to increase political competition such as by reducing the national vote threshold for parties to gain representation in the parliament, by increasing the sizes of very small electoral districts and by introducing preferential voting system.

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**FIGURE 1  
FOUR REGIONS**



Note:

The Marmara, Aegean-Mediterranean and Central-West regions given in Akarca (2017) are combined to form the WEST region. The Black Sea, Central-East and South-East regions are the same as in Akarca (2017).

**TABLE 1**  
**DESCRIPTIVE STATISTICS**

Variable	Mean	Std. Dev.	Min	Max
PARTICIPATE	0.9610	0.1936	0	1
AGE	34.8034	7.7437	22	49
EDUCATION	6.8983	4.4757	0	22
EDUCATION_SQUARE	67.6163	73.1331	0	484
MARRIED	0.8459	0.3610	0	1
UNMARRIED	0.1541	0.3610	0	1
CHILDREN_0-5 (No)	0.5763	0.4942	0	1
CHILDREN_0-5 (Yes)	0.4237	0.4942	0	1
RURAL	0.2598	0.4386	0	1
URBAN	0.7402	0.4386	0	1
NON_TURKISH	0.2141	0.4102	0	1
TURKISH	0.7859	0.4102	0	1
WEALTH_LOWEST	0.2003	0.4003	0	1
WEALTH_SECOND	0.2211	0.4150	0	1
WEALTH_MIDDLE	0.2044	0.4033	0	1
WEALTH_FOURTH	0.1894	0.3919	0	1
WEALTH_HIGHEST	0.1848	0.3882	0	1
RESIDE_BLACK SEA	0.1723	0.3777	0	1
RESIDE_CENTRAL-EAST	0.1605	0.3671	0	1
RESIDE_SOUTH-EAST	0.1223	0.3276	0	1
RESIDE_WEST*BORN_BLACK SEA	0.0468	0.2111	0	1
RESIDE_WEST*BORN_CENTRAL-EAST	0.0416	0.1998	0	1
RESIDE_WEST*BORN_SOUTH-EAST	0.0394	0.1946	0	1
PARTIES	2.3776	0.4397	1.4521	3.5043
PARTIES_SQUARE	5.8465	2.2046	2.1087	12.280
NO COMPETITION	0.0582	0.2341	0	1
MP	10.0251	7.0935	1	28.3
MP*MIGRANT_RATIO	4.3160	6.6034	0.1568	23.7507

Note:

Definitions of variables are given in section 2, and sources of data in Section 3. Data contains 7613 observations.

**TABLE 2**  
**PROBIT ESTIMATES OF THE MODEL**

	Coef.	Std. Error	Prob.	Marg. Effic.	Std. Error	Prob.
AGE	0.0183	0.0043	0,00	0.0014	0.0003	0.00
EDUCATION	0.0361	0.0206	0.04	0.0028	0.0016	0.04
EDUCATION_SQUARE	-0.0022	0.0012	0.04	-0.0002	0.0001	0.04
MARRIED	0.2303	0.0812	0.00	0.0180	0.0064	0.00
CHILDREN AGED 0-5	-0.1065	0.0656	0.05	-0.0083	0.0051	0.05
URBAN	-0.1231	0.0774	0.06	-0.0096	0.0061	0.06
NON_TURKISH	-0.1763	0.0902	0.02	-0.0138	0.0071	0.03
WEALTH_SECOND	0.3933	0.0888	0.00	0.0307	0.0070	0.00
WEALTH_MIDDLE	0.5320	0.1060	0.00	0.0415	0.0084	0.00
WEALTH_FOURTH	0.4649	0.1123	0.00	0.0363	0.0089	0.00
WEALTH_HIGHEST	0.3073	0.1213	0.01	0.0240	0.0095	0.01
RESIDE_BLACK SEA	-0.1776	0.1021	0.04	-0.0139	0.0080	0.04
RESIDE_CENTRAL-EAST	-0.3528	0.0986	0.00	-0.0275	0.0078	0.00
RESIDE_SOUTH-EAST	-0.2560	0.1160	0.01	-0.0200	0.0091	0.01
RESIDE_WEST*BORN_BLACK SEA	-0.2895	0.1341	0.01	-0.0226	0.0105	0.02
RESIDE_WEST*BORN_CENTRAL-EAST	-0.2258	0.1420	0.06	-0.0176	0.0111	0.06
RESIDE_WEST*BORN_SOUTH-EAST	-0.1270	0.1502	0.20	-0.0099	0.0117	0.20
PARTIES	-2.9197	0.7661	0.00	-0.2279	0.0604	0.00
PARTIES_SQUARE	0.5782	0.1516	0.00	0.0451	0.0119	0.00
NO COMPETITION	-0.2785	0.1512	0.03	-0.0217	0.0118	0.03
MP	-0.0591	0.0115	0.00	-0.0046	0.0009	0.00
MP*MIGRANT_RATIO	0.0503	0.0125	0,00	0.0039	0.0010	0.00
CONSTANT	4.8923	0.9837	0.00			
Log-likelihood	-1146.27					
LR Chi2(22)	216.59					
Prob > Chi2	0.00					

**Note:**

The dependent variable is PARTICIPATE. Definitions of both dependent and independent variables are given in section 2, and sources of data in Section 3. Data contains 7613 observations. Probability values given are for a one-tailed test. The reference category for married is unmarried; for wealth\_second, wealth\_middle, wealth\_fourth and wealth\_highest is wealth\_lowest; for non-Turkish is Turkish; for urban is rural; for reside\_Black-Sea, reside\_central-east and reside\_south-east is reside\_west; for nocompetition is lack of a dominant party.