IMPACT OF INTERNAL MIGRATION ON POLITICAL PARTICIPATION IN TURKEY

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ABSTRACT

During last sixty years, Turkish population moved from one province to another at the rate of about 7-8 percent per five-year interval. As a consequence of this massive internal migration, population residing in a province other than the one they were born in increased from 12 percent in 1950 to 39 percent in 2011. Impact of this population instability on provincial turnout rates in 2011 parliamentary election is studied, controlling for the effects of other socio-economic, demographic, political and institutional factors. Consequences of migration both at destinations and origins are considered. According to robust regressions estimated, the relationship between turnout and education is inverse U-shaped, and between turnout and age, U-shaped. The latter reflects generational differences as well. Large population, large number parliament members to be elected from a constituency, participation by large number of parties, and existence of a dominant party depress the turnout rate. A percentage increase in the proportion of emigrants among the people born in a province reduces turnout rate in that province by 0.13 percentage points, while a percentage increase in the ratio of immigrants in the population of a province reduces it by 0.06 percentage points. However, at destinations where large numbers of immigrants from different regions are concentrated, the opportunity afforded to immigrants to elect one of their own, reduces the latter adverse impact significantly and in some cases turns it to positive.

Keywords: election turnout, internal migration, political participation, Turkey, voter behavior.

1.   INTRODUCTION

During the last sixty years, about 7 to 8 percent of the Turkish population has moved from one province to another in every five-year interval. As can be observed from Figures 1 and 2, this movement was essentially from the east and north towards the west and south, that is from the less developed and poorer parts of the country to the more industrialized and richer regions. As a consequence of this massive internal migration, the urbanization rate has increased from about 25 percent in 1950 to 42 percent in 1975, 65 percent in 2000 and 77 percent in 2011. Now 39 percent of Turkish population resides in a province other than the one in which they were born. This figure was 28 percent in 2000, 17 percent in 1975, and only 12 percent in 1950.[3] Six provinces which collectively make up a third of the country's resident population have more immigrants than people born there. Only 16 percent of residents in Istanbul province which includes Turkey's largest metropolis, and only 32 percent of those in Ankara province, which includes country's capital and its second largest city, were born there. On the other hand, more than half of the people born in thirty-four of the eighty-one provinces were living elsewhere. Less than a fifth of those born in

[3]Although place of birth data is available for the years divisible by five during 1950-2000, it is not for later years. Instead, place of birth registry is being reported since 2008 which is rarely different than the place of birth. Thus, for the year 2011, we use the former as a near perfect substitute of the latter.

Ardahan, and only about a quarter of those born in Çankırı, Tunceli and Bayburt reside in their birth provinces.

The main purpose of this study is to investigate the impact of such a large population instability on political participation in Turkey. We examine the impact on the voter turnout not only at the destinations of migrants but also at locations they have left behind. The former is studied extensively but political consequences of migration for sending communities is highly neglected. Small number of studies that exist limited their analysis to a few specific cases and to the effects of remittances and brain drain in the context of international migration, not internal. This is one of the gaps in the migration and turnout literatures we hope to fill.

To measure the effects of immigration and emigration on turnout properly, naturally we will have to control for and estimate the impacts of other socio-economic, demographic, political and institutional factors as well. Producing this information is another purpose of this study. There are only three studies on voter turnout in Turkey that go beyond an analysis of descriptive statistics or pairwise simple correlations: a micro study by Cesur and Mocan (2013) and two macro studies by Başlevent (2013) and Çulhaoğlu (2007). These consider socio-economic factors but none of them take into account emigration. While the first two include immigration in their regressions, they ignore political and institutional factors. The last one, on the other hand, includes political and institutional variables, but none on immigration. By including all types of variables mentioned in our turnout equation, we hope to measure their individual effects more accurately.

The paper is organized as follows. In the next section, we discuss determinants of turnout and the model we specified for the Turkish 2011 parliamentary election. In section 3 we present our empirical results and interpret them. Finally in section 4 we summarize our conclusions.

2.   TURNOUT AND ITS DETERMINANTS

Studies on turnout define their dependent variable as the ratio of the number of voters to one of the following: the entire population, the voting-age population, the eligible population, or the number of registered voters. Although the first two are considered due to the ease with which they can be obtained, obviously the latter two are more proper and will be our choice. These are the same in our case due to the switch in Turkey in 2008 to a system of automatic registration of all citizens eligible to vote without any effort on their part.[4]

According to Geys (2006) who surveyed 83 aggregate-level studies, in explaining turnout, researchers typically consider socio-economic and demographic variables such as population's size, density, stability, homogeneity, and the turnout rate in the previous election, political variables such as effective number of parties and the level of electoral competition, and institutional variables such as the election system, registration and voting requirements, and the presence of other elections on the ballot. He notes that, among these variables, those on population

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[4] Since 2008, the electoral registers in Turkey are prepared and updated regularly by the state which does not require voluntary registration. This is accomplished by matching of two databases through the identification numbers each citizen is assigned. One of the databases, known, as "Merkezi Nüfus İdare Sistemi" (the Central Population Registration System) or with its Turkish acronym MERNİS, contains information such as births, deaths, marriages, divorces, adoptions. The other one, known as "Adrese Dayalı Nüfus Kayıt Sistemi" (the Address Based Population Registration System) or with its Turkish acronym, ADNKS, covers addresses of all citizens. For more details about the databases mentioned and how they are matched, the reader is referred to Taştı (2009).

size, population stability and political competition appear to be most important, and those on population concentration and homogeneity, not important at all. The findings on variables relating to political fragmentation on the other hand are ambiguous. Although some studies consider also the age and education structures of the population Geys disregards them, on grounds that interpretations of their parameters carry a potential danger for ecological fallacy. However, Smets and Van Ham (2013) who surveyed 90 individual-level studies, note that education and age are the two most common independent variables in such studies, and the two that are found most successful. We believe that, as long as one is cautious about deducing individual level relationships from patterns observed in aggregate-level data, controlling for age and education would be beneficial rather than harmful.

For brevity, we will not review studies published since the Geys (2006) survey but will mention that they considered similar variables, as we will do here.[5] However, we will ignore institutional variables relating to election system and type, day of the week and month of the year the election is held, time passed since the last election, voting age, whether voting is compulsory or optional, and the ease of registration, as these do not vary in our data. The 2011 election is held on the same day and under the same rules in every province.

The variables we consider are the following:

PRIMARY: Percentage of provincial population with at least primary school (5 years of) education.

HIGHER: Percentage of provincial population with at least college education.

UNDER30: Percentage of provincial population under age 30

OVER60: Percentage of provincial population over age 60

URBAN: Percentage of provincial population living in provincial and district capitals.

MP: Number of parliament members elected by the constituency.[6]

PARTIES: 10,000 divided by the sum of squared vote shares of the AKP, CHP, MHP and BDP.[7]

NOCOMPETITION: A dummy variable which takes the value of 1 if all parliamentary seats of a province are won by one party, and zero otherwise [8]

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[5] Perhaps we should draw attention to an aggregate-level study by Goodman and Hiskey (2008) though, as it is one of the very few studies on the effects of migration on those who are left behind in the sending city, and it lists in its endnote 9, other such relevant work.

[6] In Turkey each province, with the exception of three most populous ones, is considered a constituency. All, except one, elect multiple members to the parliament based on its share in the country's population. 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 constituencies 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. We approximated MP to be 28.3 for Istanbul, 15.5 for Ankara and 13 for Izmir.

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

[8] 14 of the 81 provinces fall under this category. These include 6 of the 18 provinces with three members of parliament,

TURNOUT2007:   Provincial turnout rate in the 2007 parliamentary election.

EMIGRANT: Percentage of those born in the province living in another province.

IMMIGRANT: Percentage of provincial population born in another province.

MP*IMMIGRANT: Product of MP and IMMIGRANT.

The first nine of the above variables are included in our model to control for socio-economic, demographic, political and institutional characteristics of provinces, so that we can estimate the parameters of the last three variables more accurately. Although the results pertaining to the first group of variables are important in their own right, here our main focus will be on the impact of the last three, dealing with migration.

The motivation for considering PRIMARY is that without some minimum level of 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. We presume that for most people, primary school education can be taken as that critical level. Although one's facility with gathering information and voting rises with increased education, it is likely to be subject to diminishing returns. Indeed, analyzing micro data from a natural experiment, Cesur and Mocan (2013) find that increasing basic schooling from 5 to 8 years did not raise the turnout rate in 2011 Turkish parliamentary election.[9] Furthermore, the opportunity cost of one's time rises as his/her education rises, especially after graduation from a university. The HIGHER variable is added to see if the effect of education on turnout dampens when the province has more people with higher education.

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, it can also be argued that accumulation of resources and political experiences, having more time, and acquisition of a habit to vote, may lead older individuals to vote in higher numbers than the middle aged.

Individuals born and raised in the same time period are exposed to the same socio-historical events which shape their political socialization. Consequently political participation may vary between generations too. Bhatti and Hansen (2012) argue that this may explain the apparent curvilinear relationship between age and turnout. For instance, the middle-aged may not turnout in larger numbers than young individuals due to age per se, but simply because they belong to a generation with higher turnout levels. It is not possible to separate the age and generation effects from each other in aggregate-level studies examining a single election, such as ours. We have included in our equation UNDER30 and OVER60 variables to measure the combined effects of age and generation.

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7 of the 15 provinces with two members of parliament, and the only province with one parliament member.

[9] They show also that the effect of education on voting preference is not working through migration.

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. However, in the Turkey, urbanization rate is not defined as the proportion of provincial population living in cities over certain size but as the proportion residing in provincial and district capitals. As many district capitals are really small towns, only slightly larger than large villages, this definition does not fully reflect the urbanization level of a province. As highly urbanized provinces have large number of parliament members, the MP variable probably captures urbanization level better. With the MP variable in the equation, the coefficient of URBAN can be interpreted as how the turnout differs between truly urban areas and typical district and provincial capitals. There are other reasons for utilizing MP. It reflects also the population size of the constituency, the complexity of the ballot, and the cost involved in gathering information about the candidates.

A larger number of parties (PARTIES) raises the probability that voters can find a party with which they identify, encouraging participation. However, by making it harder for the voters to make up their minds, it may discourage them to turn out. Also, in a proportional election system, dispersion of votes may reduce competition by letting the top party to capture more of the seats. This would discourage participation by small party supporters.

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, he/she will have an incentive to cast a ballot. When a dominant party sweeps all of the seats in a constituency, that chance is extinguished. NOCOMPETITION variable is considered to measure the effect of such an occurrence.

TURNOUT07 is considered because many studies indicate that voting may be habit-forming. People who voted in the past are more likely to turnout in future elections. However there is a drawback to including lagged dependent variable in the model. The previous turnout is likely to be effected by the very same variables current turnout is, as socio-economic, demographic, political and institutional variables change very gradually over time. Thus, at least to some extent, this variable captures the effects of other independent variables besides habit formation. Consequently it is wise to estimate the model with and without this variable.

We now turn to our variables of main interest, EMIGRANT and IMMIGRANT. The coefficient of the former measures the impact of migration at the origin and the latter at the destination. We expect both variables in question to be inversely related to the turnout. There are at least three reasons for this in the case of EMIGRANT. 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. In the case of IMMIGRANT, if voting is habit-forming as some studies on other countries show, and if the political behavior of the migrants is similar to the behavior of the people at their origins, as Akarca and Başlevent (2010) and Akarca and Tansel (2007) show, then we would expect a smaller portion of immigrants to cast a ballot compared to the native born population. As explained above, migrant producing provinces have low turnout rates. Also provinces with immigrants from all over the country have less sense of

community. Furthermore, 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. However, an exception has to be made in case of large urban constituencies where high numbers of immigrants from particular regions of the country 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 will have higher incentives to participate. The interaction term of MP and IMMIGRANT is introduced to capture this.

3. EMPIRICAL RESULTS

Equations obtained regressing 2011 turnout rate on the variables listed in the previous section, with and without the previous turnout rate are given in Table 1. Because initial estimation performed using Ordinary Least Squares method produced a number of outliers and near outliers, robust regression method is utilized instead, which is a weighted least squares procedure. All data, except those on TURNOUT2011, TURNOUT2007, MP, PARTIES and NOCOMPETITION are obtained from the Turkish Statistical Institute (Turkstat). The data on latter variables are from Tuncer (2007 and 2011). For all variables, except TURNOUT2007, their 2011 values are used.

According to the estimates presented in the first column of Table 1, each percentage increase in the portion of population with at least five years of formal education increases turnout rate by 0.32 percentage points. This becomes -0.09 for university graduates. The latter can explain the Brody's (1978) puzzle, namely why, despite rising education levels, political participation fails to increase.

The age-related parameters in Table 1 should be viewed as the net result of age and generation effects. These indicate that a province's turnout rate rises as the proportion of those over 60 and under 30 in that province rise relative to those in their middle ages. A percentage point rises in the latter increases the turnout rate 0.54 and 0.24 points, respectively. This is consistent with the generational patterns observed in many European countries by Bhati and Hansen (2012) and in Canada by Blais, et al. (2004). They find that, after controlling for age, political participation among baby boomers and the generation preceding it is substantially higher than the generations which followed them. If we accept that age-turnout relationship is inverse-U shaped, as individual level studies find consistently, it appears that in the Turkish case, generational effects work in the opposite direction of and dominate the age effects. Our results also suggest that the turnout rate which declined in the post baby-boomer generations, has begun to recover in the generation born after 1980.

We obtained a positive coefficient for URBAN and a negative one for MP which can be interpreted as turnout being less in urban areas compared to rural ones but the difference being smaller in the case of typical district or provincial centers as opposed to metropolitan centers. Negative effects of population size and ballot complexity on the turnout is also captured in this result. Increase in the number of members of parliament from a constituency lowers it by 0.43 points and each percentage increase in proportion of population residing in provincial and district capitals raises it by 0.05 points.

Our results also show that as the effective number of parties increase by one unit, the turnout drops by 1.1 points. Provinces in which a dominant party captures all seats, the turnout is lower by 1.3 points.

Migration affects turnout adversely both in sending and receiving provinces. A percentage increase in the ratio of emigrants in the population born in a province reduces turnout by 0.13 points, while a percentage increase in the proportion of immigrants in a province reduces it by 0.06. However as the number of parliament members being elected from a constituency increases, the latter figure is reduced at the rate of 0.005 per parliament member. This turns the negative impact of migration to positive in provinces such as Istanbul, Ankara, Izmir, and Bursa for example, where the number of parliament members are large.

The equation given in the second column of Table 1 includes the turnout rate in 2007. Inclusion of this variable reduces coefficients of all other variables in the equation as it takes on part of their explanatory power. However about half of them retain their statistical significance which implies that they contain additional information that cannot be represented by the lagged turnout rate alone. From the increase in the R^2 and high level of significance of its parameter however we can see that the lagged turnout variable represents other factors as well, such as habit-forming.

4.   SUMMARY AND CONCLUSIONS

It appears that the determinants of the voter turnout in Turkey are similar to the ones in other countries. Population instability created by internal migration has adverse effect on political participation both at the origins and destinations of migrants. However, at destinations with large populations (and thus large parliamentary delegations) and concentrations of immigrants, the opportunity afforded to immigrants from various regions to elect to parliament one of their own, reduces this negative impact considerably, and even turns it to positive in some of them.

A few provinces differ from the general pattern observed in the rest of the country. We were able to discern them with the aid of the robust regression algorithm. Reasons behind such deviations need to be studied but is beyond the scope of the present study.

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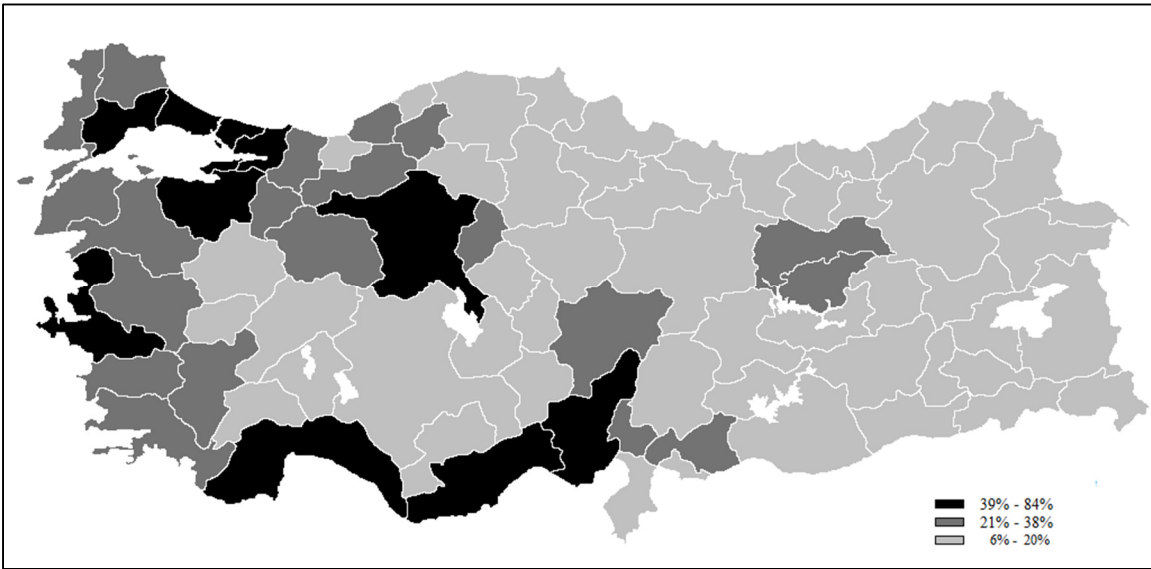
Figure 1. Immigrant: proportion of provincial population born in another province (2011)
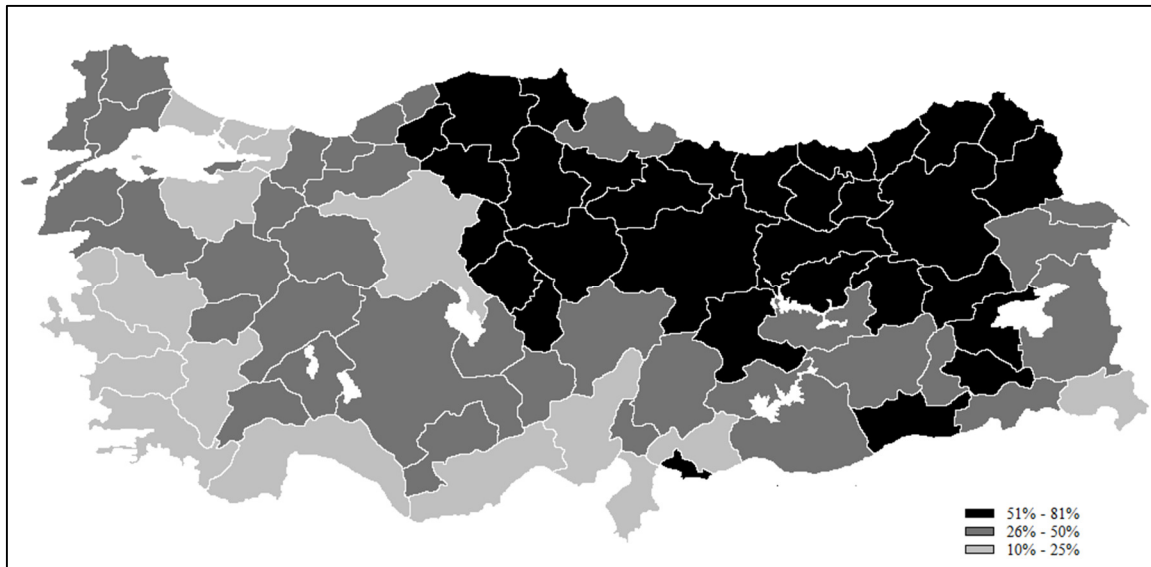
Source: Turkstat

Figure 2. Emigrant: proportion of population born in the province, which is residing in another province (2011)

Source: Turkstat

Table 1. Estimated robust regressions

Independent Variables	Regression 1	Regression 2
CONSTANT	56.097 (0.00)	46.170 (0.00)
PRIMARY	0.325 (0.00)	0.137 (0.02)
HIGHER	-0.415 (0.01)	-0.193 (0.11)
UNDER30	0.242 (0.06)	0.061 (0.52)
OVER60	0.537 (0.01)	0.155 (0.35)
URBAN	0.046 (0.04)	0.042 (0.01)
MP	-0.427 (0.00)	-0.203 (0.04)
PARTIES	-1.083 (0.05)	-0.486 (0.25)
NOCOMPETITION	-1.267 (0.05)	-0.453 (0.36)
EMIGRANT	-0.127 (0.00)	-0.061 (0.00)
IMMIGRANT	-0.058 (0.09)	-0.034 (0.18)
MP*IMMIGRANT	0.005 (0.02)	0.002 (0.13)
TURNOUT2007		0.356 (0.00)
R-SQUARE	0.78	0.90

Notes: The dependent variable is the turnout rate in the 2011 parliamentary election. Definitions of independent variables are given in section 2. Estimates are obtained using ROBUSTREG procedure of SAS statistical package. More specifically, the least trimmed squares (LTS) method is selected. The following observations are picked by the algorithm as outliers: Ağrı, Gümüşhane, Yozgat, Aksaray, and Iğdır, in the first regression, and Ağrı, Amasya, Gümüşhane, Yozgat, Aksaray, and Bayburt in the second regression, The parameter values reported are the final weighted least squares (FWLS) estimates. The numbers in parantheses next to parameter estimates are the probabilities relevant to the chi-square test of whether the associated coefficient is equal to zero.

Source: Authors' computations