Political Competition and the Spread of Banking in Turkey, 1961-2016

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Abstract

Can the selective opening of bank branches and the timing of public bank branch openings turn into a political opportunity? This issue is present in many countries where public-sector banking exists. I explore this question through the lens of Turkey by studying the effect of political competition on the allocation of public bank branches. I use a large data set of the number of bank branches for 188 banks and 14 nationwide elections for 81 cities covering the period 1961-2016. Building on a difference-in-differences strategy that exploits the greater influence of politics on state-owned banks as compared to their private counterparts, I find that greater political competition produces better state-provided financial services. Cities which were won by a lower margin of victory are more likely to enjoy an increase in the number of state-owned bank branches the year before the elections. By highlighting the role of delivering financial services with high public visibility to win votes in elections, this study adds a political angle to the literature explaining financialization through bank branching.

Keywords: political competition, elections, Turkey, state-owned banks
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1 Introduction

Unlike private banks, profit maximization and competition are not the only motives behind the determinants of public bank branching activities. Instead, public banks can be used to reduce the cost of public services and offer financial services to people living in places that are not served by private banks. Can strategic selection of locations and the timing of the public branch openings turn into a political opportunity for politicians? This is a question that we face in many countries where public-sector banking exists.[1] I explore this question through the lens of Turkey. The coexistence of the private and public banking sectors provides an ideal empirical environment to test the effect of politics on public bank branching and to compare public branching behaviors with their private counterparts.

Figure 1: Public-Bank Branch Opening News

Sources: Picture on the left https://paratic.com/ziraat-katilim-bankasindan-buyuk-basari/; picture on the right titled "A bank branch opened for the first time in the district of Yazihan, http://www.milliyet.com.tr/yerel-haberler/malatya/24-yillik-ilceye-ilk-banka-subesi-acildi-10542456 [last accessed September 2020]

In the photo on the left in Figure 1, we see politicians from the governing party attending the ribbon-cutting ceremony of a state-owned bank branch opening. The photo on the right hand is from a newspaper, reporting the opening of the first bank branch in a district called

[1] Although the ownership structures change across years and across countries, public banks owned 18% of total global financial assets in 2017 (Cole, 2009). State-owned banking assets in selected countries in 2009: Argentina 39%, Germany 36%, India 72%, Portugal 22%, Russia 41% (WorldBank, 2012).

Yazihan, and the mayor expressing thanks to the representative of the incumbent party for his efforts. These are just two examples among many similar ones that motivate this study to dig deeper into the role of politics on the spread of bank branches.

When it comes to banks, each country has a different bank ownership structure. Governing parties of countries that have state-owned banks such as Turkey have more influence on the banking sector compared to other countries that only play a regulatory role in the system such as the United States. Banks are likely to be used as a policy tool in the former group of countries. State-owned banks play an important role in the distribution of resources, especially for individuals or industries, which are not financed by the private sector. However, using banks for the politicians own purposes may create inefficiencies and misallocation of resources in the market (Bircan and Saka, 2019; Cull et al., 2017).

Can opening a state-owned bank branch be used as an electoral tool to convince voters to vote for the incumbent party? This paper answers this question by adding a political angle to the literature explaining the financialization of countries through bank branching. I study the impact of political competition among parties on the number of state-owned bank branches across Turkey starting from 1961. I use large city-year-level data for the number of bank branches for 188 banks and 14 nationwide election results for 81 cities between 1961 and 2016 to show that the closer the votes of the first and second parties are in a city (province), the more likely is state-owned bank branch to open. In addition, the density of bank coverage does not always increase. There are periods in which the number of bank branches decreased due to economic and financial crises. This allows politicians to use the opening of state-owned bank branches as an electoral tool over the period of study.

My identification is based on the difference-in-differences (DiD) strategy, which exploits the greater influence of politics on state-owned banks as compared with their private counterparts. In addition to city (province)- and year-fixed effects, controlling for the spatial dependence of electoral outcomes in a spatial autoregressive model (SAR) helps me to control for unobservable explanations of differences in the state- and private-owned bank

branching activities. Recent studies on bank lending indicate that private banks might also be subject to political interference (Antoniades and Calomiris, 2018; Blau et al., 2013; Delatte et al., 2020; Duchin and Sosyura, 2012; Chavaz and Rose, 2016). It is important to point out that those studies consider the developed economies such as the U.S. and French banking systems, which are dominated by private-owned banks.[2] In my context, however; state-owned banks represent one-third of the financial system. In addition, private banks might not only compete with other private banks but also respond to competition from state-owned banks. Even if this is the case, the estimation results in this study suggest the minimum effect of politics on the spread of banking in Turkey.

Yet why do parties need to invest in more observable goods before the elections? Visible goods and services not only convince voters that the governing party works but also signal their potential of keeping their promises (Rogoff, 1990; Mani and Mukand, 2007). For instance, the quality of banking services is much less observable than the number of bank branches. To observe the quality, people need to use the financial services provided by the bank actively. On the other hand, when a state-owned bank branch is opened, it is easily noticed by the voters. Even people who do not use that specific branch's services still see the presence of the building. Hence, it is not wrong to suggest that the incumbent might consider the additional bank branches as a way to increase their share of votes. That is why in this study I focus on the change in the number of bank branches.

The next step is to identify the role of state banks in the voters' decision process. The promise of easy access to loans is among the most common election promises, especially in developing countries. Although it is not the only way (For example, microfinance institutions are an alternative), opening a bank branch is a necessary step to increase access to formal loans and financial services. Moreover, unlike other promises, opening a state-owned bank branch does not require long procedures, time, or infrastructure for the incumbent.

[2]The Bank of North Dakota is the U.S.'s only state-owned bank (https://www.vox.com/the-highlight/2019/9/24/20872558/california-north-dakota-public-bank) and state-owned banks asset size in France is 4.9% (WorldBank, 2012).

The governing party can easily rent, buy or use a building and turn it into a bank branch.

Infrastructure projects such as building roads and highways, and opening schools, universities, and hospitals are also among the popular promises that politicians make before the elections. They, however, all require a certain process to be completed even before actual construction begins. For example, to build a road, it is necessary to check the suitability of the land and find experts to prepare the project. Building requires a certain time. After it is built, maintenance and repairs start. Hence, the government needs to allocate resources for these types of promises to provide a secure and continuous service. In addition, unlike opening a state-owned bank branch, these promises are indirectly related to the economy.

1.1 Relevant Literature

This study differs from financialization and bank branching literature in many dimensions. Most of the studies explain the presence of banks by pure profit maximization motive. Based on this, population and income are the main determinants of bank presence (Calcagnini et al., 2002; Cohen and Mazzeo, 2010; Huysentruyt et al., 2013; Sengupta and Dice, 2019).[3] However, the political determinants of bank branching is also important, especially for the countries where state-owned banks form a large share of the formal financial sector. There are very few studies in the literature discussing the impact of politics on financialization and their approach is mainly from the perspective of efficiency.

Unlike the earlier studies that focus on the efficiency of banks based on the number of loans given before and after the elections and their contribution to economic productivity (Bircan and Saka, 2019; Cole, 2009), this study asks whether bank branching itself could be an electoral tool. In addition, since the data include information for the number of branches

[3]Huysentruyt et al. (2013) and Okeahalam (2009) show that high income neighborhoods are attractive locations for banks to open new branches. Similarly, banks tend to exit the market in poor income areas. Calcagnini et al. (2002), Huysentruyt et al. (2013), Okeahalam (2009) and Sengupta and Dice (2019) find that there is a positive correlation between the densely populated areas and the de novo bank branching in Italy, Belgium South Africa, and the United States since expected revenue is high due to higher number of potential customers

of all banks operating between 1961 and 2016 and election results at the city level, there is no selection bias that may later have an impact on the findings.

Elections and the allocation of public resources is another relevant literature for this study. There are studies empirically showing the tactical allocation of public resources in swing districts before the elections (Ansolabehere and Snyder, 2006; Baum et al., 2010; Baleiras and da Silva Costa, 2004; Cole, 2009; Min and Golden, 2014). For instance, Cole (2009) analyses the theory of political cycles with Indian data and finds that government-owned banks give more agricultural loans during the election year in India. It is shown that the electoral interests of the politicians influence the loans given by government-owned banks. In more competitive districts, in which the ruling party won or lost the election with a smaller difference, more loans are given. However, despite the increase in agricultural loans, there is no significant change in agricultural output or investments. Hence, the main motive to give loans was to be re-elected.

On the other hand, Baum et al. (2010) find that state-owned banks in Turkey are not different than domestic- and foreign-owned private banks in terms of their lending behavior before, during, and after the elections. Moreover, their results indicate that loan to asset ratio of state-owned banks does not differ from their domestic- and foreign-owned counterparts. However, Baum et al. (2010) use bank-year level data. Hence, their study potentially misses any city level variation. For example, it is not clear whether there are differences in the lending behavior of state-owned banks in cities where the vote shares of the winning and the runner-up parties are close to each other. As stated earlier, my paper examines the differences in the branch opening behavior of state-owned banks in swing districts and compares this behavior in election years with non-election years. Hence, the data allow me to observe bank-city-year-level variations.

Following the literature on political favoritism, politicians of the governing party tend to reward constituencies that voted for them (Baskaran and Hessami, 2017; Beg, 2019). Alternatively, the constituencies that have more in common with the politicians may get an

unusual higher share from the public investment (Burgess et al., 2015; De Luca et al., 2018; Dickens, 2018; Hodler and Raschky, 2014). Burgess et al. (2015) find that the districts that share the ethnicity of the president receive more expenditure on roads in Kenya, which shows the impact of ethnic favoritism on the allocation of public resources. Similarly, Beg (2019) shows that the ruling party uses its power over agencies that control water flow to regions that deliver the most electoral support to the incumbent.

Analyzing whether political favoritism has any effect on the number of bank branches in Turkey is one of the objectives of this study. My findings are consistent with the existing literature that politicians use economic tools to convince voters to be (re)elected. Also, regardless of the service provided, places with close political competition (when the difference in vote shares is less than or equal to 1%) are more likely to have new bank branches opened one year before the elections.

There are also other studies in the literature concerning economic performance during the elections. Following political business cycles literature, Liu and Ngo (2014) show that bank failure is about 45% less likely in the year leading up to an election. Ferris (2008) finds that degree of political competition impacts the expansion of monetary policy in Canada. Dospinescu (2016) combines the voting behavior theory with Nordhaus (2002)'s theory of political cycles and shows a negative correlation between governing party's vote share and the unemployment rate under strong economic conditions in Romania.

The political behavior of the incumbent and the opponent parties differ in places where the vote shares are close to each other. There is an incentive to distort policy tools to impress voters when the expected win-margin is small (Aidt et al., 2011). Hence, all competitors are willing to take the advantage of any opportunity. Downs (1957) explains this as the behavior of a "vote-seeking party" where policies are designed for victory rather than a desire to win the election to design policies.[4]

The organization of the remainder of this paper is as follows: The next section describes

[4]"Parties formulate policies in order to win elections, rather than win elections in order to formulate policies" (Downs (1957), p.28)

the conceptual framework identifying the channels through which political competition impacts the allocation of public resources. Section 3 provides background information on the electoral and banking system in Turkey. Section 4 presents the data. Specification for the empirical analysis is discussed and results are shown in Sections 5 and 6, respectively. The final section concludes the paper.

2 Conceptual Framework

I present a simple framework to understand how political competition impacts the allocation of public resources. The incumbent (or the ruling party) is the one making a decision about the public good allocation. Hence, consider a decision problem for the incumbent party to allocate public resources. It has mainly two options: (1) to allocate public resources before the elections or (2) to make promises to fulfill after the elections if it is re-elected.

The governing party may prefer to allocate public resources before the elections to signal its power to convince the voters to be re-elected. Alternatively, it may prefer to make promises to uphold after the elections.

The incumbent party has limited resources to allocate. However, not all actions provide the same visibility. When the incumbent allocates these limited resources to less tangible and more complex issue areas, such as improving education or the health care system, the results might be less visible in terms of demonstrating to the public an improvement in the provision of public goods. On the other hand, politicians can get political dividends during elections by delivering public goods with high public visibility such as opening a new public bank branch.

Unlike its competitors, the incumbent has full information about the current economic condition and the feasibility of its promises. The other parties have full information about the vote share differences from the previous elections but they are not fully confident

whether they can keep their promises until they are elected due to the information asymmetry of the current economic condition. Hence, allocating the public resources in a strategic way can increase the odds of the incumbent winning, especially in swing districts, and can also increase the incumbent's chance to form the government by winning a majority of the seats in the parliament.

Then the question is how the incumbent party will allocate the public resources. What is the most strategic way? One possibility is to allocate more resources to swing districts. If the governing party can convince the swing voter to vote for it, then the return will be high compared to the return from the core districts that vote for the party under any circumstance. Another possibility is to allocate more resources to core districts where the majority of votes is guaranteed. This both rewards the districts that vote for the ruling party and signals the swing districts about the services that they can potentially receive if they vote for the governing party.

Given that the objective of the incumbent is to form a government as a single party by winning as many seats as possible in the parliament, it is sub-optimal to open more state-owned bank branches in swing districts since the marginal return in core districts is small. More intuitively, voters of core districts are biased towards one party and have a strong preference to vote for that party regardless of its promises/actions.

To sum up, the conceptual framework gives me two implications to test:

1. **Allocation of Resources:** Incumbent party allocates more public resources to swing districts by opening more state-owned bank branches (Alternative hypothesis: State-owned bank branches are opened to core supporter districts of the incumbent party).

2. **Timing of the Resource Allocation:** Incumbent party prefers to open a state-owned bank branch before the elections (Alternative hypothesis: State-bank branches are opened after the elections as a reward).

1.2.1 Why opening a State-Owned Bank Branch? Because it is...

FAST. Before the elections, each party makes promises in exchange for electoral support. The governing party tends to engage in projects with high immediate visibility during the elections to convince the citizens to vote for them (Rogoff, 1990). Similarly, all opposition parties, regardless of their ideologies, want to convince voters with their promises showing their potential to run the government in an efficient way. In a very simple form, election promises can be divided into two categories. The governing party or all parties in the competition promise (i) immediate actions and (ii) actions that can be completed during their term if they are re-elected (or elected). If they promise goods and services that can be fulfilled with immediate action, voters can observe it before they vote. Those types of actions may have a psychological influence on voters who are convinced that the governing party works well and has the potential to reach its goals. To open a state-owned bank branch, the ruling party only needs to get the permission of the relevant ministry (in the case of Turkey) where the minister is appointed by the prime minister, typically the leader of the ruling party. Hence, among other promises, it is relatively fast to open a state-owned bank branch.

EASY. Another advantage of such promises that require immediate actions is that most of the time they do not require a certain preparation time. For example, in order to open a state-owned bank branch, there is only a need for a building and technical equipment for banking activities (following permission from the relevant ministry). Hence, it is not wrong to claim that the governing party (or parties) is (are) advantageous when it comes to more visible promises since they have the sources in their hand to keep promises before the elections.

LESS RISKY FOR THE INCUMBENT. The voters need to wait to see the outcome of promises that require certain processes to be completed such as restructuring retirement salaries and changing the retirement age. Being able to achieve these kinds of actions mainly depends on the economic condition of the country. However, only the govern-

ing party has full information about the budget. Opposition parties may not fully observe whether they will be able to achieve their promises until they are elected. Opening a state-owned bank branch is a less risky investment for the incumbent since it generates relatively less burden to the budget (buying/renting a building and technical equipment and employing people to work at the bank) unless those state banks are encouraged to give risky loans. The existence of bank branches potentially creates jobs and increases engagement with financial services.

ONE OF MAJOR FINANCIAL INSTITUTIONS. Banks are the heart of the financial system. They not only strengthen economic stability but also play a central role in providing financial services to people. Based on the World Bank Global Findex Database[5] (2017), among 69% of adults with having an account worldwide, the vast majority of them prefer banks along with other regulated financial institutions (Demirguc-Kunt et al., 2018)

In addition to banks, post offices offer simple financial services like money orders and money transfers in some countries including the United States, Spain, and Germany. In some countries like the United Kingdom and Italy, post offices have a partnership with banks to offer bank accounts and more advanced services such as mortgages and personal loans.[6] Post offices started to provide very basic financial services (money orders, payments, etc.) in the early 2000s in Turkey. According to the Postal Services act (No.22)[7] in 2013, post offices which offer some degree of financial services are not subject to the Banking Law. In line with the agreements to be made with banks, they can provide support services including monetary postal services, address information registration, and payment. Therefore, post offices may not provide financial services at the desired level. Even if the incumbent prefers to open a post office or enlarge the existing post office, post offices still need to partner with a bank.

[5]https://globalfindex.worldbank.org/
[6]https://www.americanbanker.com/slideshow/post-office-banking-around-the-globe
[7]https://www.resmigazete.gov.tr/eskiler/2013/05/20130523-14.htm

2.1 What do voters get when a bank branch opens up?

When a bank branch opens, voters immediately see its physical presence. Having a closeby bank branch can also engage people more with financial services. Although technological changes reduce the cost of using bank services through automated teller machines (ATMs) and online banking in recent years, not all regions equally benefit from the digital improvements and not all citizens are digitally literate. The distance was cited as a barrier to accessing formal financial services by 22% of adults worldwide (12% in Turkey) without a financial institution account (Demirguc-Kunt et al., 2018). Therefore, distance matters for accessing financial services.

This also gives motive to the incumbent to invest more in opening new bank branches instead of enlarging existing branches. The latter might have been optimal if the concern was excess demand and lack of bank employees in certain districts.

3 Background

This section provides information on the electoral system and the banking system in relation to politics in Turkey.

1.3.1 Turkish Political System

General overview. Today Turkey's electoral system varies as general, local, and presidential elections.[8] General elections take place in every 4 years on the same day throughout the country.[9] This eliminates the possibility of any bias from the endogeneity of election timing.

[8]Presidential elections are based on a two-round system. If none of the candidates wins 50%+1 of the popular vote in the first round, then the top two candidates contest in a run-off election that takes place two weeks after the first round. Previously the Parliament members chose the president. This system changed in the 2007 constitutional referendum with a direct national vote. Thus, there is only one presidential election between 1961 and 2015, which was held in 2014.

[9]However, the government has the right to call for an early election.

For the period between 1923 and 2016, Turkey had a secular parliamentary system. Prime minister was the head of the government whereas the president was the head of the state. Turkey's political system shifted from a parliamentary system to a presidential system after the referendum in 2017.[10] The existence of the executive, legislative and judicial branches represents the separation of powers. The Council of Ministers exercises the executive power and the Grand National Assembly of Turkey has the legislative power.

Turkey has a party-list proportional representation system (also known as D'Hondt Method). Based on this system, each of the 85 electoral districts[11] elects a proportionate number of members to the Grand National Assembly based on their population. For example, Istanbul, which is the most populous city of Turkey, was represented by 88 members in the parliament in 2015. On the other hand, small cities (in terms of population) such as Sinop, Karaman, and Erzincan elected 2 members each in the same election. The 550 members[12] in total are elected for a four-year term. Since there has been a 10% election threshold, if a party does not gain at least 10% of the votes nationwide, it cannot be represented in Parliament. This implies that in order to gain a seat in the Parliament, winning most of the votes in a certain district is not sufficient; parties need to get at least 10% of the overall votes. 10% election threshold does not apply to independent candidates.

Start of competition. Up to the 1950 elections, the Republic of Turkey had a one-party political system and was governed by the Republican People's Party. The Democrat Party was the first opposition party that won the election against the Republican's People Party ending the one party era. After then political parties started to compete with each other to

[10]In the new system the president is both the chair of his party and the head of the state. (Yetkin,M., Hurriyet Daily News, Dec 30, 2017).

[11]Turkey has 81 provinces but 85 electoral districts. Istanbul, which is the first largest city in terms of population, is divided into three subdistricts. Ankara (capital), and Izmir, the second and the third populous cities, are divided into two sub-districts each. In this study, I combined the subdistricts in Ankara, Istanbul, and Izmir and did the analysis for 81 provinces. The main reason is that in the data set that I used, the number of bank branches was published at the province level. The second reason is that big cities are attractive to private banks and people have more alternatives besides state-owned bank branches. Hence, quality of service rather than quantity may be needed to convince the voters. The main concern of this study is the quantity since it is more observable.

[12]This number was increased to 600 members in the 2018 elections. This paper studies the period between 1960 and 2016.

gain seats in the Parliament. This raises the question of whether political competition has any impact on the distribution of financial resources in the context of state-owned banks. Two possibilities come to mind. First, in order to increase the probability of re-election, the governing party would have invested in regions where the population density is high. So we expect to see an increase in the per-capita bank branches, especially state-owned bank branches, in more densely populated areas. Second, if the ruling party prefers to invest more in areas where it receives the majority of votes, we should see high number of state-owned bank branches in areas that vote for the governing party.

In the general elections, there is high competition between two parties in some regions. In some districts, one party wins a seat in the parliament by a marginal majority. For example, in the 1999 general election, Democratic Left Party (DSP) and Nationalist Movement Party (MHP) were the first and the second parties in Turkey based on their number of representatives, 136 and 129 respectively, in the parliament. In one of the provinces, Samsun, DSP received 21.6% of the votes and gained 3 representatives. On the other hand, MHP gained 2 representatives with 20.9%. The difference in the vote shares was 0.7% ($\equiv$ 4328 votes). In 1999, since none of the parties won more than 50% of the seats in the parliament, the parties had to form a coalition. Considering the difference between the representatives of two parties in the parliament, even 1 more representative gives one party an advantage over the other party.[13]

The evolution of the electoral system discussed in the section is presented in the timeline in Figure 6. The next section discusses the role of banking system in the Turkish economy and its connection with the politics.

[13] Yet another example: In 1995 general elections in Bilecik, the difference between the vote share of the party who was the first party in general and vote share of the second party in general was 0.7 % ($\equiv$ 732 votes). Similarly in the same election this difference of the vote shares between the first and second party was 1.37% ($\equiv$ 8518 votes) in Antalya. Source: Turkish Statistical Institute

3.1 Turkish Banking System

General overview. The banks in Turkey are divided into two groups: commercial banks that have permission to collect deposits and non-depository banks that do not collect deposits. Based on the source of their capital, each type above is divided into three subgroups: government-owned banks (state-owned), private banks, and foreign banks (The Banks Association of Turkey, 2005).

Financing a specific industry is the main motive to establish state-owned banks. For example, Ziraat Bank (Agricultural Bank of the Republic of Turkey), is a state-owned bank that was established to support farmers. Similarly, Halkbank's (People's Bank) initial purpose is to meet the loan need of small tradesmen and artisans. On the other hand, private banks generally have connections with specific industrial groups that primarily aim to maximize profit. All banks are subject to the same laws and regulations based on Banking Law in Turkey.

As of 2016, Turkey has 34 commercial banks and 13 development and investment banks. They operate based on the missions stated in Banking Law (law no 5411). According to law, commercial banks are responsible for collecting deposits from the public and lending money to borrowers. Unlike commercial banks, development and investment banks do not collect deposits. Their main goal is to finance the investments of public and private enterprises. Table 1 provides decennial information for the number of banks in Turkey based on their type.

There are also five participation banks that conduct some of their financial business outside of the traditional banking system. Participation banks collect funds through participation accounts and provide loans. The term participation is mainly used in Turkey to emphasize the use of non-interest financial services. Operating based on Islamic Rules mainly differs participation banks from their counterparts. Cokgezen and Kuran (2015) find that market characteristics of Islamic credit cards do not differ from their conventional counterparts.

Ziraat Participation Bank, the country's first state-owned participation bank, is founded in May 2015. Therefore, the existence of state-owned participation banks is not a concern in the study period (1961 - 2016) of this paper. In addition, only 1% of people who do not have a bank account reported religious concerns as their sole reason (Demirguc-Kunt et al., 2018). Therefore, the tendency to adapt the banks to the local context (such as opening more participation banks in certain districts) is low.

Role of banks in the financial system. The banking system of Turkey has 10,781 bank branches (including those that are abroad) as of 2016. 3,702 of them belong to state-owned commercial banks. This implies that 3 commercial state-owned banks have 34% of the total number of bank branches.[14] In terms of the number of employees, 191,363 people work in the commercial banking sector. 57,586 of them work in state-owned commercial banks. Almost one-third of the banking sector employees work in state-owned banks. Thus, it is possible for the governing party to use its power in elections through state-owned banks.

Although Banking Law states all the conditions that are required to open a bank branch in a certain location, there are some unusual cases in which a bank branch was opened merely with a legislative proposal by the representatives in the Parliament without carefully considering whether the required conditions were satisfied. For example, Sarveliler (Karaman) became a county in 1990. Up until 2010, there was only one state-owned public bank branch in Sarveliler.[15] In 2010 with the support of the Justice and Development Party (AKP), the ruling party, a second public bank branch was opened. Opposition parties saw this as an election investment since it was one year before the general elections in 2011. When the election results of AKP in 2011 are compared with the election results of the same party in 2007, AKP increased its votes from 2,767 to 3,282. Considering the many other similar cases, this supports the idea that opening bank branches can be used as an electoral tool to increase the power of the incumbent party. Henry and Springborg (2010) support this idea and state that Ziraat Bank (Agricultural Bank of Turkey) is the

[14]Figure 3 shows the distribution of banks in 2016 based on their source of capital.

[15]Source:http://www.karamaninternet.com/karaman-sarivelilere-ilk-banka-subesi-acildi-579h.htm

government's main patronage vehicle for collecting votes in the countryside.

Table 1 shows the evolution of Turkish banks over the past 60 years. The total number of state-owned banks declined from 14 in 1960 to 3 in 2016. What is also striking is the sharp decline in private banks in 2010 compared to the early 2000s. With the impacts of the twin currency and banking crisis, more than 15 banks failed and 11 were taken over by the Savings Deposit Insurance Fund (SDIF) between 1999 and 2001. In addition, in order to improve financial stability and strengthen the banks, Turkey initiated a reform package during the same period. As part of the International Monetary Fund's restructuring program 800 branches of two state-owned banks, Ziraat and Halk, were closed and some 30,000 employees were laid off.[16] However, state-owned banks were never fully privatized due to the government's concerns about full privatization of state-owned banks, which would undermine their social role. Therefore, state-owned banks continued to retain their roles in the financial system by expanding their branch network, hiring new employees, and issuing large amounts of loans. Figures 4 and 5 show the share of state banks for agriculture and total loans. Between 1988 and 2016, on average 60% of the agriculture loans were provided by public banks. Although state-owned banks' share of the total loans decreased over years, it still constitutes one-third of the loans given in 2016. This indicates that the number of state-owned bank branches is not only one-third of commercial bank branches but they also control one-third of total loans. Hence, state-owned banks always play an important role in the banking sector during my sample period.

4 Data

This section presents the data in detail. I use large city (province) level panel data collected from different sources to estimate the effect of political competition on the number of bank branches in Turkey from 1961 to 2016. There are two reasons to choose this time period:

[16]Turkey: 2004 Article IV, IMF Country Report No. 05/163

(i) city-level bank branch data is not available for earlier periods, (ii) Turkey was governed by a single party until 1945. The one party era ended in the 1950 general elections. Thus, political competition between political parties is out of the question before this period.

Before starting to describe the data, I would like to point out that in Turkey the largest city in each province shares the same name with the province.[17] Hence, the city and province terms will be used interchangeably.

Banks. The data for the number of bank branches in each city (province) mainly come from the Banks Association of Turkey.[18] It provides information for the number of bank branches for banks operated between 1961 and 2016. However, there is not a single source for the data. I build my own data set combining the information in books (e.g., Akguc (1975); BankaveEkonomikYorumlar (1974)) archive of old newspapers, calendars and address books and agendas. Figure 1 and Table 2 present the number of banks by type and number of bank branches across years in Turkey. As of 2016, 34% of commercial banks are state-owned, 39% are private and the remaining is foreign invested. Banks are classified under the name of type indicator according to whether they are state-owned banks or private banks, whether they are national or foreign invested and whether they are commercial banks or not. This makes it possible to test the hypothesis of whether political competition has a significant effect on the opening of state-owned bank branches.

The data set includes the number of bank branches in 81 cities between 1961 and 2016. Data has limited information on the opening dates of still active banks. Hence, it does not allow to estimate whether there are any bank branch closings because of political reasons shortly after an opening in electorally competitive districts. It is also important to note

[17] Between 1961 and 1989 there were 67 provinces in Turkey. The number of provinces increased from 67 to 81 between 1989 and 1999. These provinces are listed in Table 2. This was done by splitting a province. The election outcome variables for each city for the years before 1999 are calculated by making adjustments based on how the cities are formed for robustness. The same approach is followed for the other city/province level control variables before 1999. For example, the voting share of a newly formed city is assigned the value of the province from which it was separated.

[18] https://www.tbb.org.tr/en/banks-and-banking-sector-information/

that this study considers the net change in the number of branches rather than the complete entry-exit effect. For example, the number of bank branches may increase by 10. This does not necessarily imply that 10 new branches opened. It is possible that 5 of the existing branches closed but 15 new branches opened so the change is 10. However, regardless of new entry and exit, the net change in the number of bank branches is 10.

Elections. In order to explain the change in the number of bank branches, general election results for each province are used. The general elections are held every 4 years. The data set is rich. It includes information for the overall vote share of the winner and the runner-up parties in the general elections and the vote share of the same parties in each province together with the number of valid votes taken by each party. It also includes information on the number of representatives each party gained in each province based on its vote share, participation rate, number of valid votes, and number of parties competing in each election. Thus, data set allows testing whether the political competition is tough (in other words, the number of votes (or the vote shares) taken by the parties is close to each other) in some districts and whether it has any impact on the number of bank branches in those places. General elections data is mainly derived from the Turkish Statistical Institute.

Controls. Finally, the data set includes five main variables that are used as a control: population, loan, Gross National Product (GNP) share of each city, GNP per capita and inflation. All of them except Inflation are at the city level. Only inflation is at the aggregate level.

(i) Population. The population data is extracted from the Turkish Statistical Agency's website that provides data for the years 1965, 1970, 1975, 1980, 1985, 1990, 2000, and 2010-2016. The data for the other years are estimated by using the annual average population growth rate.

(ii) Loans. In the literature, the amount of loans that is given before, during, and after the elections is generally used as a dependent variable or main interest variable to show political business cycles. The concern in those studies is the economic outcome (whether

the change in the amount of certain loans has any impact on the economic performance). However, as stated earlier this study inquires whether having an additional bank branch regardless of the service it provides can impress voters to vote for a political party. Hence, the yearly data for the amount of loans that were given in each city starting from 1987 is used as another control variable. Loans are separated into 6 categories based on their purpose: agricultural, real estate, occupational, marine, tourism, and the other.

(iii) GNP share of each city and (iv) GNP per capita in each city. Data for GNP share of each city is publically available for the years between 1987 and 2001 and data for GNP per capita in terms of dollars for the years 2004-2016. This data is not published for the period before 1987. GNP share of each city shows each city's contribution to the Turkish economy throughout the years. It is possible to observe differences in the number of public and private bank branches in the provinces with low GNP share if the government supports the public banks in opening branches in those locations in order to decrease inequality across regions. If this is the case, it is expected that the branches of private banks are concentrated in the regions with higher GNP while the number of public branches increases in the rural areas.

(v) Inflation. The data for inflation come from Turkish Statistical Institute. Inflation rate provides information on the performance of the economy. When the economy performs well, the ruling party has more resources to allocate. During periods of a strong economy, it is possible for the ruling party to invest more in projects with high immediate visibility to citizens.

Choice of Control Variables. Control variables include demographic and economic factors considered in the literature to explain the spread of banking activities. Since profit maximization is the main concern of private banks, the spread of private bank branching can be explained mainly by the economic (the more the income so is the profit and private bank branches) and demographic indicators (the more the population so is the customers and private bank branches). Therefore, I estimate regression 1 showing the impact of my

control variables on the change in the private bank branches. When I add all control variables, R^2 is 0.55. As shown in Table 13, the population itself explains 32% of the variation. This suggests that control variables predict the optimal private bank branching. Therefore, the coefficient of public branches (that will be discussed in the next part in detail) captures distortions. In other words, the change in the number of state-owned bank branches cannot be explained only by pure profit maximization motive.

$$\Delta NumPri_{c,t} = \alpha_0 + \alpha_1 Controls_{c,t} + \psi_t + \epsilon_{c,t} \tag{1}$$

where $\Delta NumPri_{c,t} = NumPri_{c,t} - NumPri_{c,t-1}$ is the net change in the number of bank private branches in city c from time t-1 to time t, $Controls_{c,t}$ are the control variables, ψ_t is the year fixed effect and $\epsilon_{c,t}$ is the error term.

Additional Variables for Robustness Checks:

Coup. Although the elections are usually held in every four years, because of the coups or other forms of intervention such as ultimatums or threats of coups, there are some years (1971, 1981, 1982, and 1983) where the military took the power. The military government had no incentive to influence voters with electoral tools and promises.

Recession. Turkey experienced economic recessions in 1969, 1974, 1978, 1980, 1986, 1988, 1989, 1991, 1994, 1998, 1999, 2001, and 2008 [19]. During the recession, both the governing party and its competitors have their priorities in designing policies to target economic obstacles. The promises and the election roadmaps change accordingly.

Authority for new branch permission. According to Turkish Banking Law, in order to open a bank branch, banks need to get permission from the Ministry of Finance. After 1985, this role was transferred to the Undersecretariat of Treasury, and then Banking Regulation and Supervision Agency was given the right to issue new banking permits under the

[19] Source: https://www.sabah.com.tr/galeri/ekonomi/turkiyede-ekonomik-krizler/26

guidance of the International Monetary Fund reform package to strengthen the financial stability after the currency and banking crises of 2000. When one party wins the majority of the votes, the minister and the undersecretary are chosen among the representatives or the supporters of the governing party. When general elections do not produce a majority for a single party, then parties form coalition governments. Under a coalition, each coalition party receives an allocation of ministries to manage. When dividing the ministries among coalition parties, it is particularly important for the party with the largest share of votes to have the incentive to keep key ministries such as Finance, Education, External Affairs, and Internal Affairs since the party can improve its share of votes by providing goods and services to the public through them.

Coalitions. Turkey was governed by coalition governments between 1961 and 1965, 1971 and 1975, and 1991 and 2002. During these periods which party gets the Ministry of Finance before 1985 and the Undersecretariat of Treasury after 1985 is important. Since these institutions give permission to open bank branches, their heads may prioritize their party's preference. For instance, they may give priority to the improvements in places where their party gets the majority of the votes. If this is the case, then it is possible to observe a positive relationship between the change in the number of bank branches and the vote shares of the party of the head of the Ministry of Finance and Undersecretariat. Hence, I created Coalition and Minister dummy variables showing whether there is a coalition and whether the minister/undersecretary is chosen from the party with the highest vote share in the coalition in that order. I also added a Coalition*Minister interaction variable to test the joint effect of the case in which there is a coalition and the Minister of Finance or the Undersecretary of Treasury is from the party with the highest vote share in the coalition.

Unemployment Rate. Turkish Statistical Institute published the unemployment rate at the city level for the years 1980, 1985, 1990, and 2000. I interpolate the data for the other years based on the increase in the unemployment rate.

Municipality Expenditures. Data is publicly available for the years 1985, 1990, 1995,

2000, and 2002. Istanbul (the largest city in terms of population) has the highest municipality expenditures per capita followed by Ankara (capital) in all years.

Public Investments. This data is publicly available at the city level for the years 2003-2016. The data set shows the amount of public investment in each city in various areas: Agriculture, Manufacturing, Energy, Transportation and Communication, Tourism, Housing, Education, Health, and Others. The public investment share of each city is calculated based on the total spending in each city between 2003 and 2016. Istanbul received the highest investment.

5 Specification

I am interested in whether political competition matters for the opening of state-owned bank branches. Hence, the change in the number of bank branches is chosen as the dependent variable. A model is built on the hypotheses that (1) regions enjoy more state-owned bank branches when the number of votes given to the governing party and the opposition parties is close to each other, and (2) the incumbent party supports the opening of new state-owned bank branches in districts where the vote shares are close to the opposition parties. The main estimation equation takes the form:

$$\Delta NB_{c,t} = \alpha_0 + \alpha_1 ClosenessVote_{c,e} + \alpha_2 Election_t * ClosenessVote_{c,e} + \psi_t + \gamma_c + \epsilon_{c,t} \tag{2}$$

where $\Delta NB_{c,t} = NB_{c,t} - NB_{c,t-1}$ is the net change in the number of bank branches in city c from time t-1 to time t, $Election_t$ is the election year dummy (takes value 1 for the election years). Closeness in vote is calculated based on the absolute value of differences between votes given to the incumbent and runner-up parties in each city in general elections (tested for the different levels such as 10000, 20000, 30000...). In other words, it represents

the electoral strength of the parties in each city. $ClosenessVote_{c,e}$ is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party in the election year for each city is less than or equal to a certain threshold. α_2 is the coefficient of interest that captures the impact of 'close' votes on the net change in the number of bank branches in each city in the election year. ψ_t is the year fixed effects. Variation across years is controlled by the year-fixed effect. γ_c is the city fixed effect and $\epsilon_{c,t}$ is the error term.

Table 3 shows the number of observations and their shares among total observations when 'Closeness' is defined at different levels. There is a trade-off between choosing a low threshold and having few 'treated' cities. Therefore, while I choose a 10,000 vote difference as my baseline competition level, I investigate different thresholds as well.

I measure the competition in terms of the number of votes taken by the first- and second-party in each city in each election. The main reason for defining the closeness in terms of the difference in the number of votes rather than the difference in vote shares can be explained by the following example. There are approximately 10,5 million voters in Istanbul(population is 14.8 million). In order to increase its vote share by 1% the governing party needs to convince 105,000 voters. On the other hand, the least populous city of Turkey is Bayburt with 56 thousand voters. Convincing 560 voters contributes 1% to the vote share of the governing party. Hence, the return of opening a state-owned bank branch is not the same for different cities. In addition to this, even a 1% difference in vote shares does not imply tough competition in many cities. On the other hand, when the closeness is defined in terms of the difference between the number of votes taken by the parties, it is possible to estimate the competition.

The difference in the number of votes is converted to percentages based on the number of voters in the 2015 election (the last general election in the data set) for each city in Figure 7 when the closeness threshold is 10,000 votes. This figure visually shows that defining the competition in terms of percentage shares for the entire country may result in estimation

bias. In addition, Figures 8, 9, and 10 show that how we observe the competition across cities is based on different thresholds.

I follow two approaches in analyzing how parties observe the competency to make a promise: **(i) backward looking approach:** realized difference in the number of votes (based on the previous election results), and **(ii) forward looking approach:** expected difference in the number of votes (based on the coming election results). These approaches allow me to identify the impact of political competition on the number of state-bank branches throughout the entire period.

In light of backward looking approach since the impact of results continues until the coming elections, the years between two elections are assigned the value of the previous election. Considering equation 2, assume that we make an analysis for years between 1989 and 1996 where the election years are 1991 and 1995. Closeness is equal to the difference between the number of valid votes given to the incumbent and the runner-up parties in each city in the elections for the years 1992 and 1996. Closeness for the years 1992, 1993, 1994, and 1995 takes the same value with the previous election year, 1991. Similarly, the value of Closeness for 1989, 1990, and 1991 comes from the 1987 election results. Here, it is important to note that all general elections were held in the second half of the year with an exception of the 1999 general election which was held in April (Table 4 shows the timing of the general elections). Therefore, in the election year parties observe the results of the previous election and make promises accordingly. Example (i) overviews backward looking approach data assignment process.

Example (i): Backward looking approach: previous election result impacts the following years

Election Years:	1991	1995					
Years:	... 1990	**1991**	1992	1993	1994	**1995**	1996 ...
Election year (specification):	... e-1	**e-1**	e	e	e	**e**	e+1 ...

Here, e represents the *Election* results (absolute difference in the number of votes taken) in the elections.

Alternatively, forward looking approach indicates that parties make promises (i.e. incumbent party supports state-owned bank branch opening) based on their expectation of future elections. Again assume that we make an analysis for years between 1989 and 1996 where the election years are 1991 and 1995. Closeness is defined as the difference in the number of votes taken by the incumbent and the runner-up party in each city in the elections for the years 1991 and 1995. Closeness for the years 1992, 1993, and 1994 takes the same value with the next coming election year, 1995. In this case, the value of Closeness for 1989 and 1990 comes from the 1991 election results. Another difference between the backward- and forward-looking approaches is that election results can be foreseen by the parties in the election years for the latter one. Example (ii) shows the data assignment process for forward looking approach.

Example (ii): Forward looking approach: future election result impacts the previous years

Election Years:	1991	1995					
Years:	...1990	**1991**	1992	1993	1994	**1995**	1996 ...
Election year (specification):	... e	**e**	e+1	e+1	e+1	**e+1**	e+2 ...

Here, e represents the *Election* results (absolute difference in the number of votes taken) in the elections.

6 The Impact of Political Competition on the Number of Bank Branches

I present the main results of my empirical findings in the impact of political competition on the number of bank branches based on the backward looking approach and equation (2). The results of forward looking approach are discussed under robustness checks.

6.1 Main Results

Backward Looking Approach. Following the backward looking approach Table 5 shows the relation between the net change in the number of bank branches and the closeness between the first and the second party in the elections for different closeness levels in 81 cities (c=81) and for the years 1961 - 2016 (t=55)[20]. The coefficient of ClosenessVote is statistically insignificant both for state-owned and private bank branches except for the lower bound of the threshold, which is 10,000 votes. Baseline estimation also includes the $Election_t * ClosenessV_{c,e}$ interaction variable to estimate whether the election year has an impact on the change in the number of bank branches. Estimation results for the main coefficient of interest, α_2, indicate that as expected the number of state-owned bank branches increases when the number of votes given to the first and second party is close to each other at 10000, 20000, 30000, 40000 and 50000 levels (coefficients: 0.43**, 0.52**, 0.75**, 0.55* and 0.57, respectively) in previous elections. Once the vote difference reaches the 50,000 threshold, it loses its significance. This suggests that there is a strategic allocation of state-owned bank branches in competitive cities in elections.

Close elections have a negative impact on the change in the number of private bank branches. This might be considered as an eviction effect for private banks as a response to the entry of their public counterparts into the market. However, the overall effect on the total number of banks (Panel A) is close to zero.

Table 6 reports the estimation results for the cases, in which the incumbent won based on various thresholds in vote differences. Conditional on the city- and year-fixed effects, high competition measured by the closeness in votes is associated with an additional 1 state-owned bank branch on average.

One effect ignored so far is that there might be spillovers from neighboring cities for the competition. In order to correct standard errors for this potential spillover, the baseline re-

[20] Since the dependent variable is the change in the number of bank branches, the analysis consists 55 years instead of 56.

sults are replicated by the spatial autoregressive model (SAR). I calculate the spatial weight matrix based on the inverse centroid distances between each of Turkey's 81 provinces. The estimated coefficient captures the local marginal effect of close elections on the number of bank branches, conditional on observed exogenous variation across cities. I assume that all explanatory variables are exogenous to quantify this effect. Table 14 reports the GMM estimations. The spatial auto-correlation ρ suggests positive spatial dependence for state-owned banks. However, coefficients on the main variable of interest, ElectionxClosenessV, show that the significance of previous baseline results is not driven by spatial autocorrelation. In addition, as shown in the baseline results, spatial correlation is captured by the city fixed effect.

Impact before and after the elections.

$$\begin{aligned}\Delta NB_{c,t} = \alpha_0 + \alpha_1 Election_{t-2} * Closeness_{c,e-1} + \alpha_2 Election_{t-1} * Closeness_{c,e-1} \\ + \alpha_3 Election_{c,t} * Closeness_{c,e-1} + \alpha_4 Election_{t+1} * Closeness_{c,e} \\ + \alpha_5 Election_{t+2} * Closeness_{c,e} + \psi_t + \gamma_c + \epsilon_{c,t}\end{aligned} \tag{3}$$

Parties start to make preparations before the election year. Based on the election results of the previous years, parties have the chance to design policies and make promises. The timing of fulfilling the promises is equally important as making the promises. Then, one might wonder what happens in the number of state-owned bank branches 1-2 years before and after the election. Since elections are held once in every 4 years, 2 years before an election is 2 years after the previous election.

For equation 3, I run the regressions for state-owned and private banks separately. Estimation results are presented in Table 12. Estimation results show that districts with close vote shares experience an increase in the number of state-owned bank branches one year before the elections (coefficient: 0.51**, 0.56**, 0.56**, 0.59**, 0.70* for different close

vote thresholds). This can be seen as a preparation for the coming elections. Also, there is an increase in the number of state-owned bank branches two years after the elections with a relatively small magnitude. This implies the fulfilling of promises (or the possibility of rewarding the districts that voted for the party) and investment for coming elections. This strengthens the hypothesis that when the political competition is high (vote shares are close to each other), the incumbent party tries to signal its power as much as possible before the elections to convince the voters. Unsurprisingly the coefficients are found to be negative and statistically significant for the private banks one year after close elections. This might be related to the private banks' response to competition from state-owned banks.

6.2 Robustness

To improve the reliability of my identification strategy and to evaluate the extent to which the magnitude of my estimated coefficients is affected by other factors, I carry out a number of robustness checks, that are discussed in this section.

Excluding the impact of big cities. Does opening state-owned bank branches convince the voters in all cities and reward the governing party by increasing its vote share? Citizens living in big cities have the advantage of accessing more alternatives. It is the same for the bank branches. If the district where they live does not have a state-owned bank branch, then they are most likely to have private bank options. Since the big cities are likely to be the places where trade, business, and most economic activities occur, they are potential attractions for private banks.

In order to probe the consistency of my previous results, I exclude Ankara (the capital city) and Istanbul (the most populous city) and rerun the regression. The estimation results are presented in Table 8. When the vote shares of the incumbent and its competitor are close at the 10000, 20000, 30000, 40000, and 50000 levels (coefficients: 0.28*,0.33*,0.53**, 0.53**, 0.47) there is an increase in the number of state-owned bank branches. To further check, Table 9 replicates the same exercise by excluding the ten most populous cities.

These are Ankara, Istanbul, Izmir, Bursa, Antalya, Adana, Konya, Sanliurfa, Gaziantep, and Kocaeli. Results are consistent with Table 5.

Coalition vs. Single Party. There is a checking mechanism in the coalitions. Although each party primarily tries to maximize its own benefit, it has a limited ability since its policies are checked by its coalition partners. On the other hand, a single party that wants to signal its power to be re-elected can be more influential in the allocation of public resources to swing constituencies. Table 11 presents the impact of single party governance and coalitions on the number of bank branches in swing districts. Closeness in vote differences under single party governance at 10000, 20000, 30000, 40000, and 50000 (with coefficients: 0.63**, 0.67** 0.86**, 0.79** and 0.66) levels have a positive impact on the number of state-owned bank branches. The impact is especially large when I focus on the recent single party governance period between 2002 and 2016. As presented in Table 7, high competition results in a net change of 3 state-owned bank branches on average. The positive impact of political competition on the change in the state-owned bank branches remains when I control for participation rate and the number of parties that compete in each election (Table 11). Coalitions do not have a significant impact on the number of state-owned bank branches except for the lower threshold of 10,000. Controlling for whether the party with the highest vote share is the senior coalition partner and whether it got the relevant Ministry, it is likely that the coalition partner with the highest vote share benefits more by opening a bank branch in swing districts, conditional on having the relevant ministry.

Impact of population. Population determines the number of representatives in the parliament. To test whether winning at the margin can be more important in relatively more populous cities, I added an interaction term, *Population x Election x ClosenessV*, to the main estimation equation 2. Table 10 reports the results for public banks. As expected the impact of the interaction terms is positive and significant for the public banks when the difference between votes is greater than or equal to 30,000. However, in terms of magnitude, the impact is less than the impact of *Election x ClosenessV* dummy (for example in Table

5). This is not surprising since the winning margin should be large in order to get one more representative in a populous city.

Political competition through time (Attrition effect). The study period in this work is little more than half a century. Turkish politics experienced many different levels of competitiveness (coalitions vs single party, civil vs military governance). One might wonder whether the change in the density of bank coverage over this period leads to systematic differences over time. If this is the case, then more state-owned bank branches are being opened in places that are less competitive and where the available space for using bank branches as an electoral tool supposedly decreases with time. Although in general, it follows an increasing trend over years, the number of bank branches does not necessarily increase over time (Figure 2). As discussed earlier some banks failed, some were merged or taken over by the Savings Deposit Insurance Fund, and some state-owned banks closed following the IMF's restructuring program. Hence, it is not wrong to claim that state-owned bank branches remain as an important electoral promise over time. In order to test this empirically, I rerun equation 2 for different economic and political time windows. Tables 10 and 11 report results that are consistent with previous findings.

Forward Looking Approach. What would happen if parties have perfect foresight about their competitiveness in each district? Based on this approach, I assume parties have full information about how many votes they will get in elections. Table 15 reports the results for this approach. As one might expect, state-owned banks are more likely to be opened in cities where the votes of the incumbent and opponent are close. This finding for the baseline estimation is qualitatively consistent with the backward looking approach. However, unlike the backward looking approach, the estimated coefficient for the 50,000 vote difference threshold is statistically significant at 1% whereas the coefficient for the lowest threshold of 10,000 vote difference becomes insignificant. This can be interpreted as the incumbent's tendency to signal its power by delivering physical public goods to convince voters when the vote difference starts to increase.

Announcement vs Opening of Public Bank Branch. My estimation results indicate that we are likely to see more public bank branches opening one year before the elections. Then it is optimal to expect a short period between the time that the incumbent makes a promise (announcement) and the branch starts to operate. The current data set does not allow me to empirically test for it. However, Table 16 presents some sample cases collected from newspapers and websites providing additional proof that we observe this in practice. On the other hand, this does not totally rule out the possibility of late fulfillment of past promises of opening a bank branch. There might be cases where politicians made a promise in earlier elections and were not able to fulfill it due to various reasons.

Excluding One-Election Year for Sensitivity Check. To test whether the estimation results are driven by a specific election, I re-estimate the main specification (equation 2) for the baseline vote difference, 10000, by excluding one election year from the sample of each regression. Figure 11 plots the estimated coefficients for the main variable of interest, ElectionxClosenss, for the public bank branches. The x-axis shows the excluded election year from each estimation. The statistically significant coefficients are indistinguishable from each other and from the main results reported in Table 5.

7 Discussion and Policy Implications

Politicians manipulate policy tools to one degree or another in every country to stimulate the economy before the elections in order to be re-elected. This can also be observed in the strategic allocation of public resources before the elections are held. Depending on its competency level in each district, the incumbent party decides what to promise and when to keep that promise to signal its power and convince voters. Investing in less tangible and more complex issue areas such as education and healthcare systems requires greater institutional effort and more time for their improvement. On the other hand, the incumbent can reap the political award by investing in more observable goods in electorally competitive

districts before elections. In this sense, I argue that the visibility of public banks relates them to political opportunity.

Overall, this paper contributes to the literature, which has studied the impact of political influence on banking and economic outcome by asking whether bank branching independent from the loans given could be an electoral tool. I use a new data set of the number of bank branches collected from various sources, and 14 nationwide elections. I show that greater political competition produces more state-provided financial services by focusing on the change in the number of state-owned bank branches across 81 cities in Turkey for the period 1961-2016. Cities which were won by a lower margin of victory are more likely to enjoy an increase in the number of state-owned bank branches the year before the elections. Compared with the coalitions, the impact is larger under single-party governance, especially in the recent single-party period of 2002-16 where high competition led to a net change of three state-owned bank branches on average.

These findings lead to a number of avenues for future research. First of all, I document that the public and private bank branching activities differ, and the former group is politically more influenced in the context of Turkey. However, Turkey is not the only country where public and private banking co-exist. The share of state-owned banks in the total banking sector varies across countries. For instance, the share of state-owned banks constitutes 74% in India, 72% in Belarus, 51% in Slovenia, 41% in Iceland, 38% in Indonesia, 26% in the United Kingdom, 22% in Korea, and 12% in Austria (Cull et al., 2017). Measuring the impact of politics and electoral competition on the strategic allocation of financial sources in various countries, which are in different income groups, and have different institutional structures and political systems is important for understanding the extent of the political influence in various contexts.

In addition, although the results remain qualitatively unchanged when using different approaches and are robust to a number of alternative explanations, this study does not completely rule out the possibility of potential direct or indirect influence of politics on private

banks. Finally, distance to a financial institution is a barrier for 12% of people in Turkey (Demirguc-Kunt et al., 2018). My results indicate while the state opens bank branches strategically to aid incumbent, at the same time political competition also reduces the cost of public service to people with no access to formal financial institutions. Hence, it might contribute to the financial inclusiveness of politically competitive districts. On the other hand, inequality between competitive cities and their pro-incumbent or pro-opposition counterparts might increase due to political considerations. The evolution of financial inclusiveness through bank branching activities and the contribution of strategic allocation of state-owned banks to city-level financial inclusiveness require further research.

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Tables, Figures and Graphs

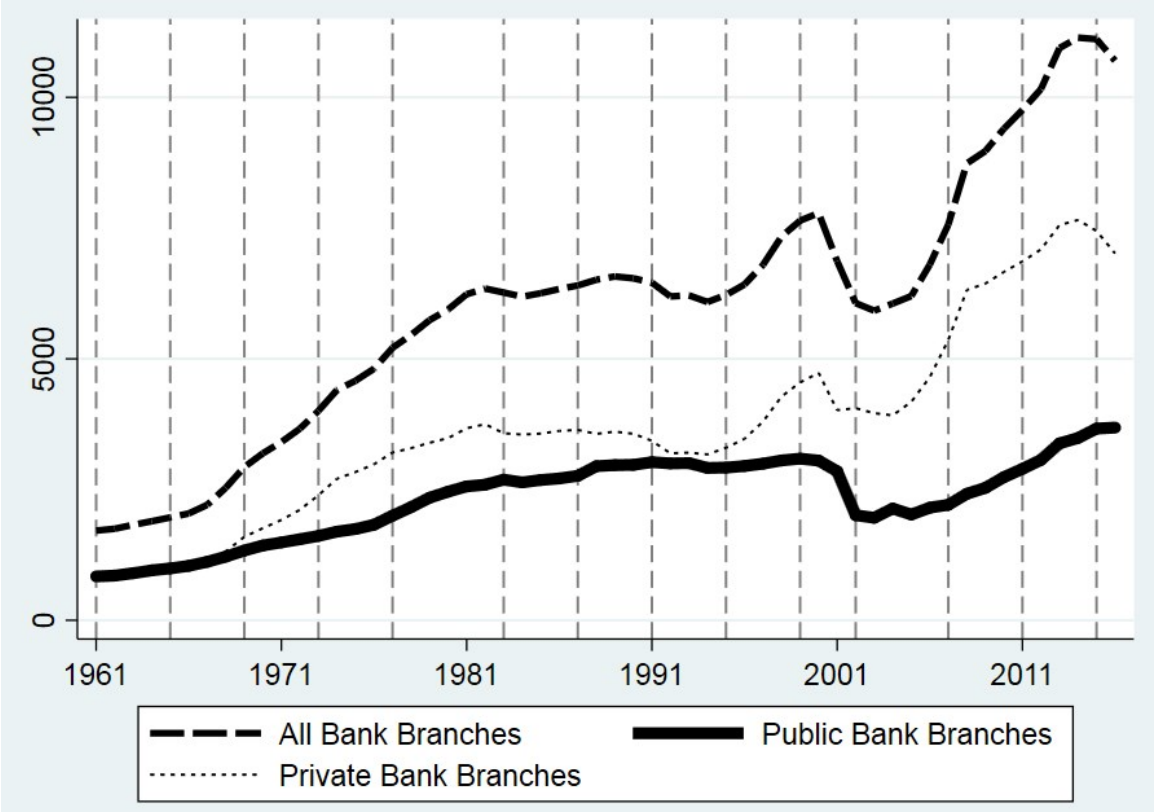
Table 1: Number of Banks in Turkey

Banks	1960	1970	1980	1990	2000	2010	2016
State-owned	14	12	12	8	4	3	3
Private	20	22	24	25	28	11	9
Foreign-invested	5	5	4	23	18	17	21
Local	12	5	-	-	-	-	-
Transferred to SDIF*	-	-	-	-	11	-	1
Total Commercial Banks	**51**	**44**	**40**	**56**	**61**	**32**	**34**
Development &Investment	0	2	3	10	18	13	13
Participation	-	-	-	-	-	4	5
Total	**51**	**46**	**43**	**66**	**79**	**49**	**52**

Source: Turkish Banks Association

This table shows the number of banks in Turkey decennially. SDIF* represents the banks that were transferred to Saving Deposit Insurance Fund. Total Commercial Banks include state-owned, private, foreign-invested, and local banks. commercial banks are the ones with permission to collect deposits and lend money to borrowers. Unlike commercial banks, development and investment banks do not collect deposits. They finance public and private enterprise investments. Participation banks collect funds through participation accounts and provide loans. The final row shows the Total number of banks including commercial, development & investment, and participation banks for different years.

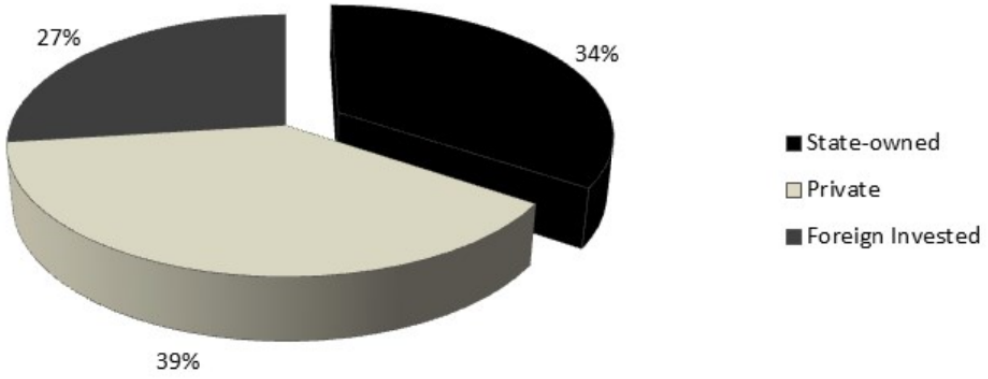
Figure 2: Number of Bank Branches, 1961-2016



Source: Author's calculation based on data set in this study

This figure shows the number of bank branches for the sample over the years, 1961-2016. Long dash lines represent the total number of bank branches. Short dash lines represent private bank branches and the thick black line shows public bank branches. Vertical lines are drawn to show the general election years: 1961, 1965, 1969, 1973, 1977, 1983, 1987, 1991, 1995, 1999, 2002, 2007, 2011, and 2015.

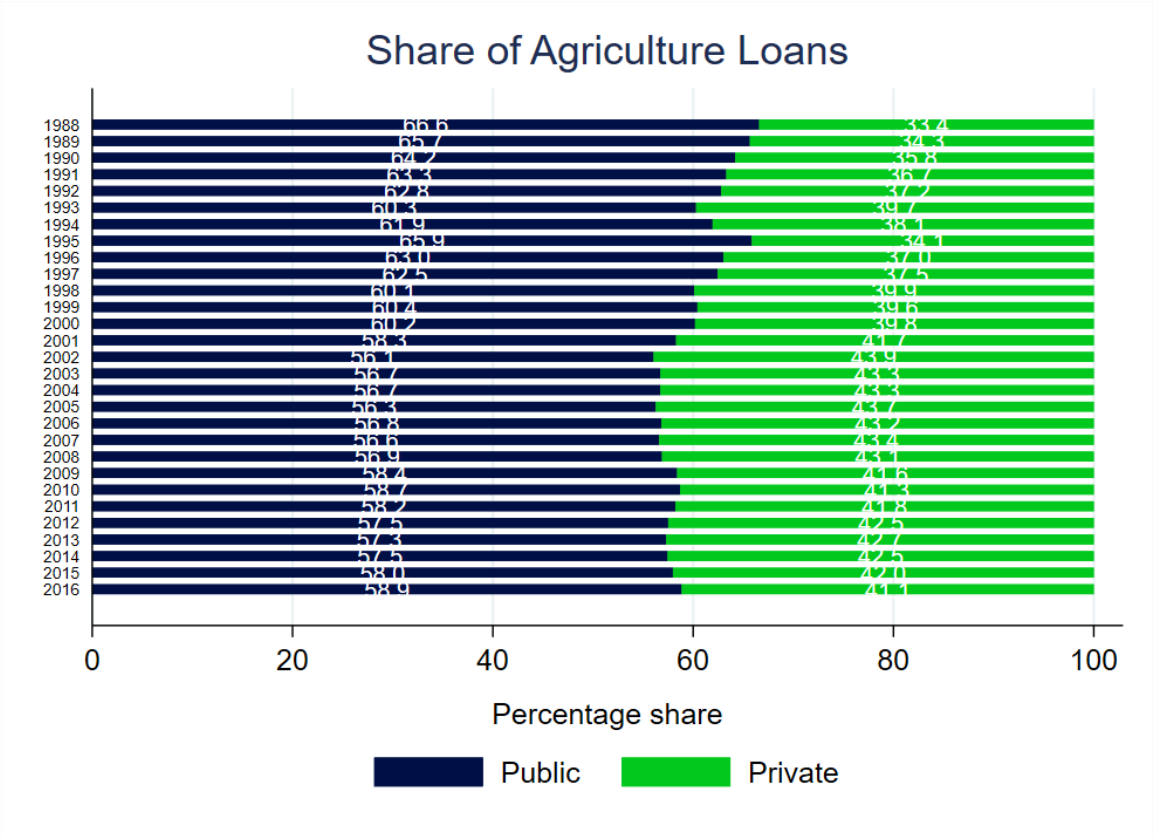
Figure 3: Share of Commercial Bank Branches by ownership in 2016



Source: Author's calculation based on Turkish Banks Association Data

This chart shows the distribution of commercial bank branches based on their source of capital as of 2016. 34% (1/3) of the banks are owned by the state, 39% of the banks are private- and 27% of the banks are foreign-owned.

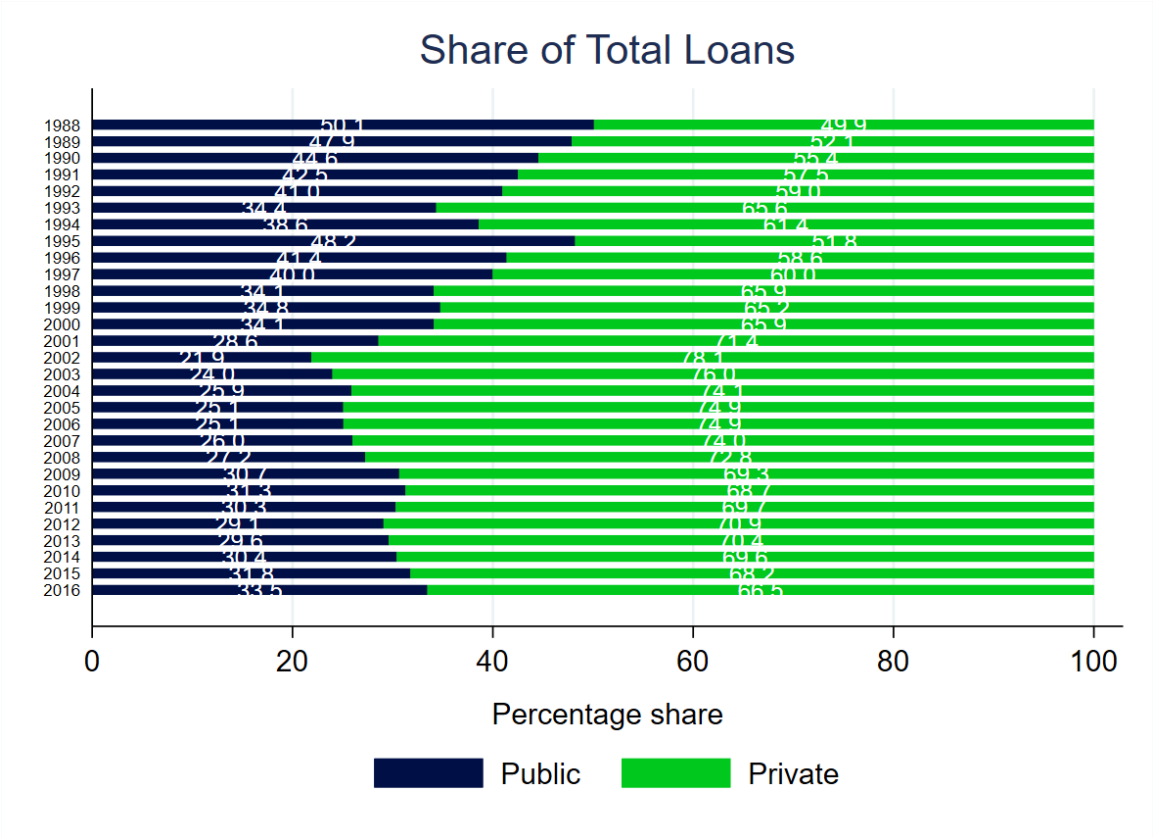
Figure 4: Distribution of Agricultural Loans, 1988-2016



Source: Author's calculation based on Turkish Banks Association Data

This graph shows the distribution of Agricultural Loans given by the public and private banks for the period 1988-2016. Detailed data are available for the years after 1987. Private banks include private domestic banks and foreign banks.

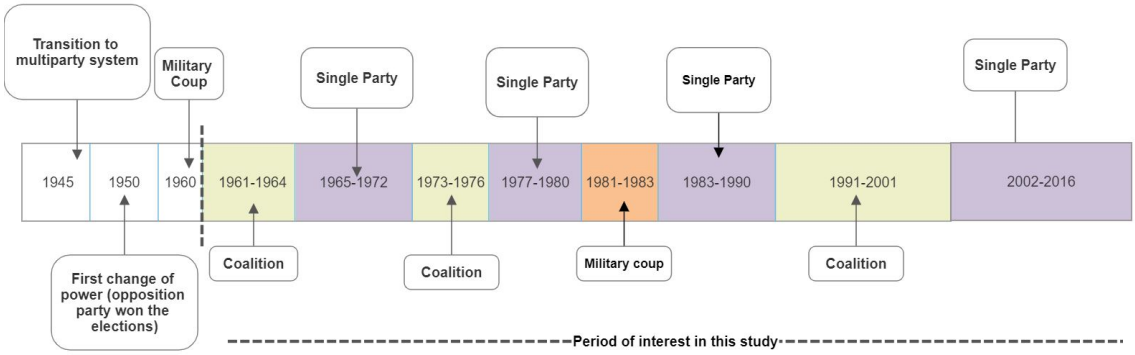
Figure 5: Distribution of Total Loans, 1988-2016



Source: Author's calculation based on Turkish Banks Association Data

This graph shows the distribution of Total Loans given by the public and private banks for the period 1988-2016. Detailed data are available for the years after 1987. Private banks include private domestic banks and foreign banks.

Figure 6: Evolution of Electoral System, 1945-2016



This figure shows the evolution of the electoral system starting from 1945 (transition to a multiparty system). The analysis in this study is based on the period 1961-2016.

Table 2: New Provinces and Years that they became Provinces in Turkey

Provinces	Separated from [City]	The year of Separation
Duzce	Bolu	1999
Osmaniye	Adana	1996
Karabuk	Zonguldak	1995
Kilis	Gaziantep	1995
Yalova	Istanbul	1995
Igdir	Kars	1992
Ardahan	Kars	1992
Bartin	Zonguldak	1991
Sirnak	Siirt	1990
Batman	Siirt	1990
Kirikkale	Ankara	1989
Karaman	Konya	1989
Bayburt	Gumushane	1989
Aksaray	Nigde	1989

This table shows the list of districts that became provinces together with the year of separation and the province from which it is separated.

Table 3: Number of observations based on *Closeness* in the number of votes taken

$t = 55$ years, $c = 81$ cities ($N = 4455$)

Difference in N. of Votes $\leq$	**N. of observations**	**Share in total observations**
5,000	735	16.2%
10,000	1290	28.4%
15,000	1680	37.0%
20,000	2068	45.5 %
25,000	2345	52.6 %
30,000	2651	59.5%
40,000	3023	67.8%
50,000	3322	74.5%
100,000	4055	91.0%

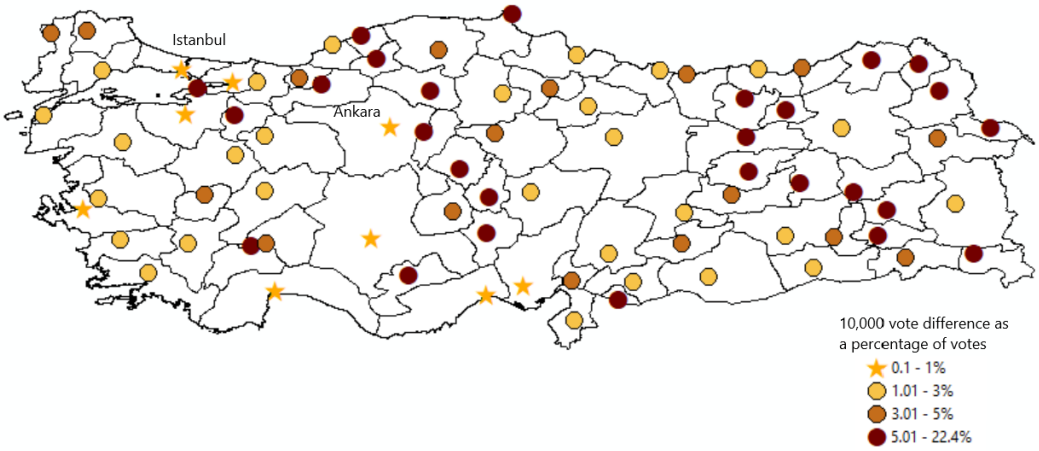
Note: This table shows the number of observations for different Closeness thresholds (difference in the number of votes taken by the first party and the runner-up party in each city) and their share in total observations.

Table 4: Timing of General Elections

Month-	**Year- of General Elections**
October	1961
October	1965
October	1969
October	1973
June	1977
November	1983
November	1987
October	1991
December	1995
April	1999
November	2002
July	2007
June	2011
June	2015

This table shows the timing of 14 general elections for the period 1961-2016. Elections are held on the same day throughout the country.

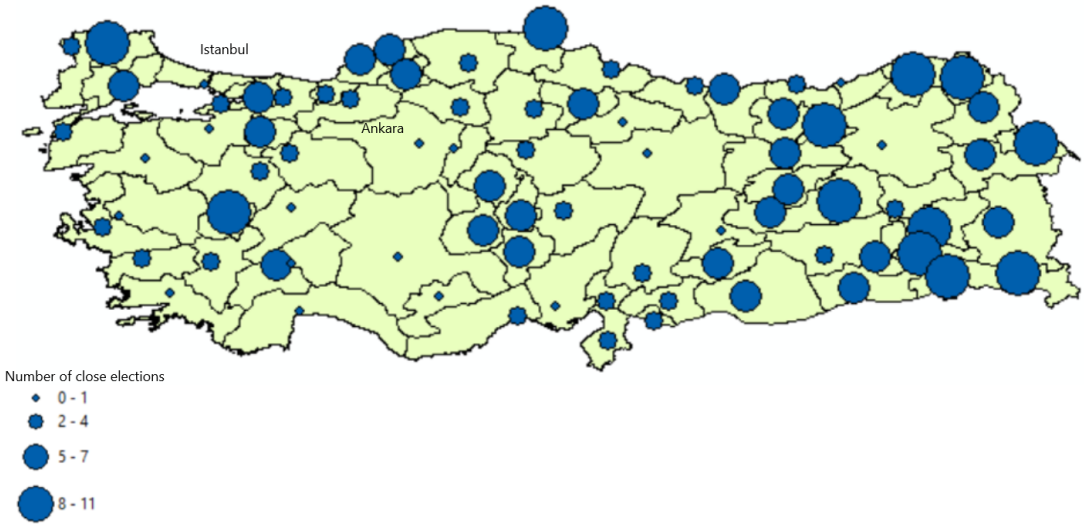
Figure 7: Percentage of votes that corresponds 10,000 vote difference



Source: Author's calculation

This map shows the percentage equivalence of a 10,000 vote difference across Turkey based on the number of voters in the 2015 elections. Stars represent the cities where a 10,000 vote difference corresponds to less than 1% vote difference.

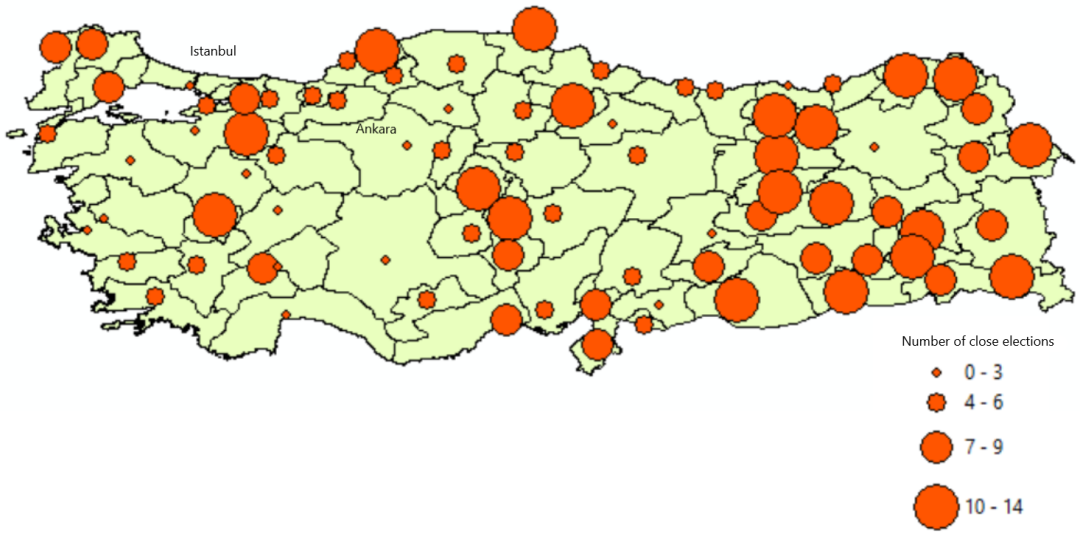
Figure 8: Number of close elections when vote difference $\leq$ 10,000



Source: Author's calculation

This map shows the number of close elections that each city experienced when the competition threshold is 10,000 votes. There are 14 general elections in the period 1960-2016. Bigger dots show the cities experienced high competition in the elections.

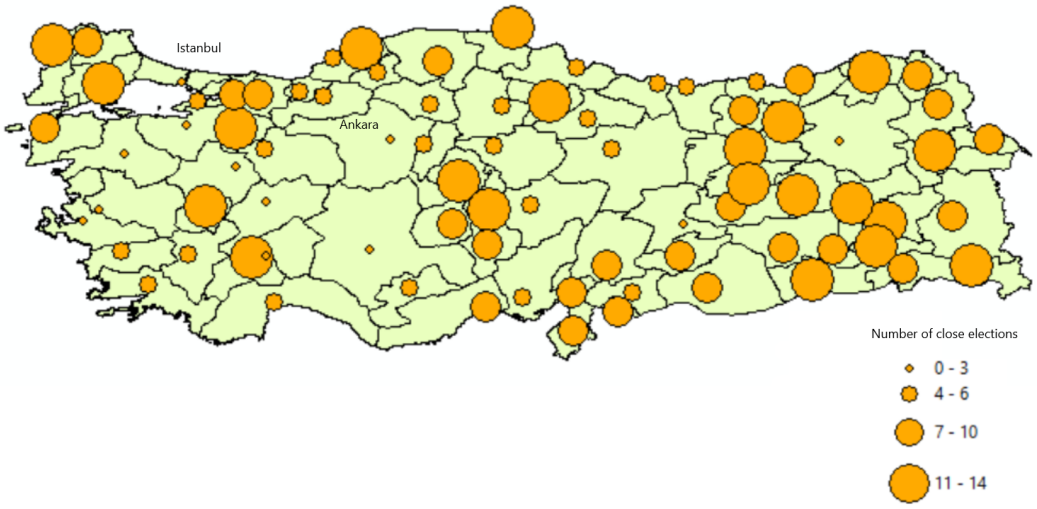
Figure 9: Number of close elections when vote difference $\leq$ 20,000



Source: Author's calculation

This map shows the number of close elections that each city experienced when the competition threshold is 20,000 votes. There are 14 general elections in the period 1960-2016. Bigger dots show the cities experienced tough competition in the elections.

Figure 10: Number of close elections when vote difference $\leq$ 25,000



Source: Author's calculation

This map shows the number of close elections that each city experienced when the competition threshold is 25,000 votes. There are 14 general elections in the period 1960-2016. Bigger dots show the cities experienced high competition in the elections.

Table 5: Effect of Political Competition on Bank Branches: Backward Looking Approach

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: All Banks (Public & Private)					
$ClosenessVote$	0.67**	0.19	-0.04	-0.37	-0.37
	(0.25)	(0.23)	(0.20)	(0.25)	(0.30)
$ElectionxClosenessV$	-0.10	0.08	0.20	0.05	-0.02
	(0.20)	(0.19)	(0.22)	(0.28)	(0.35)
R^2	0.106	0.106	0.107	0.106	0.106
PANEL B: Public Banks					
$ClosenessVote$	0.27**	0.16	0.06	-0.09	-0.09
	(0.12)	(0.14)	(0.14)	(0.19)	(0.20)
$ElectionxClosenessV$	0.43**	0.52**	0.75**	0.55*	0.57
	(0.19)	(0.21)	(0.28)	(0.32)	(0.38)
R^2	0.212	0.212	0.212	0.211	0.211
PANEL C: Private Banks					
$ClosenessVote$	0.39**	0.03	-0.10	-0.27	-0.28
	(0.16)	(0.15)	(0.22)	(0.20)	(0.28)
$ElectionxClosenessV$	-0.54**	-0.44	-0.54*	-0.50	-0.59
	(0.25)	(0.27)	(0.31)	(0.39)	(0.51)
R^2	0.079	0.078	0.079	0.079	0.079
Observations	4455	4455	4455	4455	4455
Year& City Fixed Effects	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016. Panel A, B, and C report estimation results for the change in total, public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of a number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Robust Standard errors are in parentheses.* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Effect of Political Competition on Bank Branches when the Incumbent Won: Backward Looking Approach

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: All Banks (Public & Private)					
$ClosenessVote$	0.470	-0.0305	0.108	-0.0177	0.148
	(0.382)	(0.331)	(0.355)	(0.433)	(0.529)
$ElectionxClosenessV$	1.213	1.498*	1.236**	0.703	0.422
	(0.770)	(0.817)	(0.571)	(0.587)	(0.713)
R^2	0.120	0.120	0.120	0.120	0.119
PANEL B: Public Banks					
$ClosenessVote$	0.210	0.169	0.167	0.0415	0.0623
	(0.152)	(0.167)	(0.221)	(0.260)	(0.263)
$ElectionxClosenessV$	1.022*	1.233**	1.355**	0.911*	0.818
	(0.545)	(0.595)	(0.605)	(0.524)	(0.586)
R^2	0.208	0.210	0.211	0.208	0.207
PANEL C: Private Banks					
$ClosenessVote$	0.260	-0.199	-0.0590	-0.0592	0.0857
	(0.273)	(0.225)	(0.205)	(0.242)	(0.364)
$ElectionxClosenessV$	0.191	0.265	-0.118	-0.208	-0.396
	(0.375)	(0.399)	(0.269)	(0.236)	(0.323)
R^2	0.091	0.091	0.091	0.091	0.091
Observations	2301	2301	2301	2301	2301
Year& City Fixed Effects	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016. Panel A, B, and C report estimation results for the change in total, public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Robust Standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Effect of Political Competition on Bank Branches, 2002-2016: Backward Looking Approach

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: All Banks (Public & Private)					
$ClosenessVote$	0.74	-0.47	-1.01	-1.33*	-0.73
	(0.76)	(0.71)	(0.64)	(0.68)	(0.91)
$ElectionxClosenessV$	4.05**	3.42***	3.59***	2.24*	1.78
	(1.56)	(1.27)	(1.22)	(1.16)	(1.42)
R^2	0.135	0.134	0.134	0.133	0.133
PANEL B: Public Banks					
$ClosenessVote$	0.54	0.38	0.16	-0.46	-0.32
	(0.41)	(0.42)	(0.35)	(0.46)	(0.54)
$ElectionxClosenessV$	3.59***	3.11***	3.47***	2.35**	2.25*
	(1.31)	(1.17)	(1.21)	(1.12)	(1.30)
R^2	0.260	0.260	0.263	0.254	0.253
PANEL C: Private Banks					
$ClosenessVote$	0.19	-0.86	-1.17*	-0.86*	-0.40
	(0.42)	(0.54)	(0.60)	(0.51)	(0.72)
$ElectionxClosenessV$	0.46	0.30	0.11	-0.10	-0.46
	(0.73)	(0.57)	(0.49)	(0.44)	(0.53)
R^2	0.090	0.090	0.091	0.090	0.090
Observations	1215	1215	1215	1215	1215
Year & City Fixed Effects	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 2001-2016. Panel A, B, and C report estimation results for the change in total, public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Robust Standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Effect of Political Competition on Bank Branches: Excluding Big Cities

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: All Banks (Public & Private)					
$ClosenessVote$	0.40**	0.08	0.01	-0.22	-0.17
	(0.16)	(0.17)	(0.17)	(0.18)	(0.27)
$ElectionxClosenessV$	-0.12	0.04	0.28	0.27	0.17
	(0.18)	(0.17)	(0.18)	(0.22)	(0.27)
R^2	0.298	0.297	0.297	0.298	0.297
PANEL B: Public Banks					
$ClosenessVote$	0.13***	0.07	-0.01	-0.12	-0.12
	(0.05)	(0.05)	(0.07)	(0.07)	(0.10)
$ElectionxClosenessV$	0.28*	0.33*	0.53**	0.53**	0.47
	(0.15)	(0.17)	(0.26)	(0.32)	(0.39)
R^2	0.403	0.402	0.403	0.403	0.402
PANEL C: Private Banks					
$ClosenessVote$	0.26**	0.01	0.02	-0.09	-0.04
	(0.13)	(0.14)	(0.12)	(0.13)	(0.20)
$ElectionxClosenessV$	-0.41*	-0.29	-0.25	-0.26	-0.30
	(0.21)	(0.25)	(0.23)	(0.28)	(0.38)
R^2	0.235	0.235	0.235	0.235	0.235
Observations	4345	4345	4345	4345	4345
Year & City Fixed Effects	Yes	Yes	Yes	Yes	Yes
Exclude Ankara & Istanbul	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016.The impact of Ankara (capital city) and Istanbul (most populous city) is excluded. Panel A, B, and C report estimation results for the change in total, public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Robust Standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 9: Effect of Political Competition on Bank Branches: Excluding Most Populous Ten Cities

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: All Banks (Public & Private)					
$ClosenessVote$	0.31***	0.11	0.14	0.01	-0.02
	(0.09)	(0.10)	(0.12)	(0.14)	(0.16)
$ElectionxClosenessV$	-0.18	0.02	0.14	0.26	0.01
	(0.15)	(0.15)	(0.17)	(0.20)	(0.22)
R^2	0.418	0.417	0.417	0.417	0.416
PANEL B: Public Banks					
$ClosenessVote$	0.08**	0.04	0.03	-0.01	-0.04
	(0.04)	(0.04)	(0.05)	(0.06)	(0.05)
$ElectionxClosenessV$	0.14	0.23**	0.33**	0.37**	0.14
	(0.12)	(0.11)	(0.13)	(0.16)	(0.15)
R^2	0.494	0.495	0.495	0.495	0.494
PANEL C: Private Banks					
$ClosenessVote$	0.22***	0.07	0.11	0.03	0.02
	(0.08)	(0.08)	(0.09)	(0.11)	(0.13)
$ElectionxClosenessV$	-0.32***	-0.21	-0.19	-0.11	-0.13
	(0.11)	(0.12)	(0.13)	(0.13)	(0.15)
R^2	0.329	0.328	0.328	0.328	0.328
Observations	3905	3905	3905	3905	3905
Year & City Fixed Effects	Yes	Yes	Yes	Yes	Yes
Exclude Most Populous Cities	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016.The impact of 10 most populous cities, Ankara (capital city), Istanbul, Izmir, Bursa, Antalya, Adana Konya, Sanliurfa, Gaziantep, Kocaeli, is excluded. Panel A, B, and C report estimation results for the change in total, public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Robust Standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 10: Effect of Political Competition on Public Bank Branches: Robustness Checks

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
Control for Total and Agricultural Loans					
$ClosenessVote$	0.28*	0.14	0.13	0.01	0.01
	(0.16)	(0.14)	(0.12)	(0.15)	(0.17)
$ElectionxClosenessV$	0.79***	0.84***	1.08***	0.88**	0.79
	(0.29)	(0.30)	(0.38)	(0.43)	(0.56)
R^2	0.497	0.497	0.500	0.496	0.495
Observations	2237	2237	2237	2237	2237
Excluding Recession and Coup Years					
$ClosenessVote$	0.22	0.09	0.04	-0.17	-0.13
	(0.16)	(0.18)	(0.16)	(0.20)	(0.20)
$ElectionxClosenessV$	0.73**	0.77***	1.09***	0.71	0.69
	(0.28)	(0.28)	(0.37)	(0.47)	(0.52)
Observations	2997	2997	2997	2997	2997
R^2	0.231	0.231	0.232	0.230	0.229
Control for Distance to Big Cities					
$ClosenessVote$	0.05	-0.02	-0.11	-0.23**	-0.25**
	(0.03)	(0.048)	(0.08)	(0.09)	(0.12)
$ElectionxClosenessV$	0.28*	0.33*	0.54**	0.53*	0.48
	(0.15)	(0.17)	(0.26)	(0.32)	(0.39)
Observations	4345	4345	4345	4345	4345
R^2	0.402	0.403	0.402	0.402	0.403
Effect in Populous Cities					
$ClosenessVote$	-0.14***	-0.08	-0.09	-0.10	-0.10
	(0.05)	(0.05)	(0.07)	(0.07)	(0.10)
$PopxElectionxClosenessV$	0.01	0.02	0.03*	0.03*	0.02*
	(0.01)	(0.01)	(0.02)	(0.02)	(0.03)
Observations	4345	4345	4345	4345	4345
R^2	0.401	0.402	0.387	0.402	0.401
Year & City Fixed Effect*	Yes	Yes	Yes	Yes	Yes
Exclude Ankara and Istanbul	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016. The impact of Ankara (the capital city) and Istanbul (the most populous city) is excluded. Panel A, B, and C report estimation results for the change in public bank branches under different economic and political conditions. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. * The last panel does not include the city fixed effect. Robust Standard errors are in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 11: Effect of Political Competition on Public Bank Branches: Robustness Checks (Political Indicators)

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
Control for Participation Rate and Number of Parties					
$ClosenessVote$	0.26*	0.16	0.03	-0.13	-0.14
	(0.14)	(0.15)	(0.15)	(0.20)	(0.21)
$ElectionxClosenessV$	0.60**	0.67**	0.88**	0.70**	0.73*
	(0.23)	(0.26)	(0.33)	(0.34)	(0.41)
Observations	4125	4125	4125	4125	4125
R^2	0.213	0.213	0.214	0.212	0.212
Single Party Governance					
$ClosenessVote$	0.06	-0.03	-0.10	-0.18*	-0.17
	(0.08)	(0.08)	(0.08)	(0.10)	(0.15)
$ElectionxClosenessV$	0.63**	0.67**	0.86**	0.79**	0.66
	(0.24)	(0.27)	(0.34)	(0.39)	(0.47)
Observations	2370	2370	2370	2370	2370
R^2	0.439	0.439	0.441	0.439	0.438
Coalitions					
$ClosenessVote$	0.07	0.13	0.05	-0.02	-0.09
	(0.06)	(0.09)	(0.12)	(0.12)	(0.15)
$ElectionxClosenessV$	0.19*	0.12	0.06	0.07	0.23
	(0.10)	(0.11)	(0.12)	(0.12)	(0.13)
Observations	1106	1106	1106	1106	1106
R^2	0.206	0.207	0.205	0.204	0.205
Year & City Fixed Effect	Yes	Yes	Yes	Yes	Yes
Exclude Ankara and Istanbul	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016. The impact of Ankara (the capital city) and Istanbul (the most populous city) is excluded. Panel A, B, and C report estimation results for the change in public bank branches under different economic and political conditions. Coalition years are 1961-1965, 1971-1975, and 1991-2002. In other years, Turkey was governed by a single party. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. * The last panel does not include the city fixed effect. Robust Standard errors are in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 12: Effect of Political Competition on Bank Branches Before and After the Elections

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: Public Banks					
2 Years before election x CloseV	0.09	0.07	0.07	0.07	0.15
	(0.12)	(0.11)	(0.11)	(0.11)	(0.17)
1 Year before election x CloseV	0.51**	0.56**	0.56**	0.59**	0.70*
	(0.24)	(0.26)	(0.27)	(0.26)	(0.36)
1 Year after election x CloseV	0.17	-0.07	-0.07	-0.17	-0.30
	(0.77)	(0.22)	(0.22)	(0.28)	(0.40)
2 Years after election x CloseV	0.35*	0.38*	0.38*	0.56*	0.75**
	(0.18)	(0.19)	(0.19)	(0.29)	(0.37)
PANEL B: Private Banks					
2 Years before election x CloseV	-0.28	-0.42	-0.42	-0.42	-1.10***
	(0.35)	(0.25)	(0.25)	(0.25)	(0.37)
1 Year before election x CloseV	1.15	0.81	0.81	2.30*	2.97
	(0.29)	(0.30)	(0.38)	(0.43)	(0.56)
1 Year after election x CloseV	-0.56*	-0.63**	-0.63**	-0.76**	-1.16***
	(0.29)	(0.26)	(0.26)	(0.35)	(0.42)
2 Years after election x CloseV	1.20	1.01	1.01	1.77	2.09
	(0.88)	(0.99)	(0.99)	(1.40)	(2.19)
Observations	991	991	991	991	991
Year & City Fixed Effect	Yes	Yes	Yes	Yes	Yes
Exclude Ankara and Istanbul	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 3 estimated on panel data set of 81 cities for the period 1961-2016. The impact of Ankara (the capital city) and Istanbul (the most populous city) is excluded. Panel A and B report estimation results for the change in public and private bank branches before and after close elections. Each column and row is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Control variables are log change in population, agricultural and total loans, GNP share, and GNP per capita. Control variables are not interpolated. Robust Standard errors are in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 13: Effect of Control Variables on Private Bank Branching

Dep.Var: Δ Private Branches			
	(1)	(2)	(3)
log Δ Population	1.11**	2.39*	2.04
	(0.60)	(1.31)	(1.29)
log GNP		8.15**	12.59***
		(3.66)	(3.71)
log Total Loans		2.78***	2.99***
		(0.85)	(0.63)
Observations	4450	880	880
R^2	0.320	0.453	0.555
Year Fixed Effect	Yes	Yes	Yes
Additional Controls	No	No	Yes

This table shows the impact of control variables on the change in the number of private bank branches over time. Each column is a separate regression showing the impact of the relevant economic and demographic variables on the net change in private bank branches. Additional control variables include the logarithm of Total Agricultural, Occupational, Marine, Real Estate, and Tourism loans as well as the distance to Ankara and Istanbul, and also the share of each city from total public investment in column (3). Due to data availability estimation results cover the period 1987-2016. Control variables are not interpolated. Robust Standard errors clustered at the city level are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 14: Effect of Political Competition on Bank Branches: Spatial Autoregressive Model

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
	PANEL A: Public Banks				
$ClosenessVote$	0.27*	0.16	0.06	-0.09	-0.09
	(0.08)	(0.14)	(0.14)	(0.16)	(0.18)
$ElectionxClosenessV$	0.42*	0.51*	0.74*	0.55*	0.56
	(0.29)	(0.26)	(0.28)	(0.31)	(0.36)
ρ	0.25***	0.25***	0.25***	0.27***	0.26***
	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)
	PANEL B: Private Banks				
$ClosenessVote$	0.39	0.02	-0.10	-0.27	-0.28
	(0.16)	(0.43)	(0.22)	(0.20)	(0.28)
$ElectionxClosenessV$	-0.53	-0.43	-0.53	-0.51	-0.58
	(0.85)	(0.77)	(0.84)	(0.82)	(0.85)
ρ	0.05	0.05	0.04	0.04	0.05
	(0.07)	(0.07)	(0.07)	(0.06)	(0.07)
Observations	4455	4455	4455	4455	4455
Year& Spatial Fixed Effects	Yes	Yes	Yes	Yes	Yes

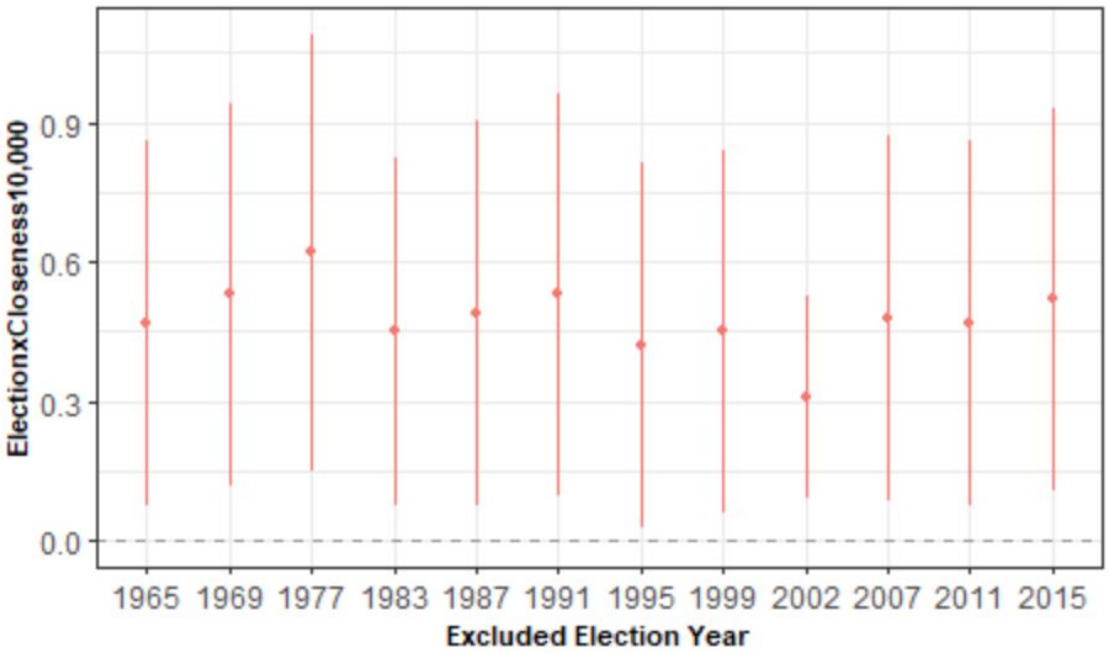
This table shows the spatial autoregressive model results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016. Panels A and B report estimation results for the change in public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. ρ is the spatial lag. Robust Standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 15: Effect of Political Competition on Bank Branches: Forward Looking Approach

Dependent variable:	Change in the Number of Bank Branches				
Difference in votes:	(10,000)	(20,000)	(30,000)	(40,000)	(50,000)
PANEL A: All Banks (Public & Private)					
$ClosenessVote$	-0.12	-0.14	-0.08	-0.13	-0.14
	(0.24)	(0.24)	(0.21)	(0.18)	(0.21)
$ElectionxClosenessV$	0.13	0.07	-0.01	0.43*	0.40
	(0.24)	(0.21)	(0.25)	(0.24)	(0.32)
R^2	0.106	0.106	0.106	0.106	0.106
PANEL B: Public Banks					
$ClosenessVote$	-0.01	0.04	0.12	0.09	0.07
	(0.11)	(0.13)	(0.17)	(0.17)	(0.19)
$ElectionxClosenessV$	0.17	0.31	0.29*	0.55**	0.74***
	(0.16)	(0.20)	(0.17)	(0.20)	(0.25)
R^2	0.210	0.211	0.211	0.211	0.212
PANEL C: Private Banks					
$ClosenessVote$	-0.11	-0.18	-0.21	-0.23	-0.21
	(0.20)	(0.22)	(0.19)	(0.19)	(0.26)
$ElectionxClosenessV$	-0.04	-0.24	-0.31	-0.12	-0.33
	(0.15)	(0.17)	(0.25)	(0.27)	(0.34)
R^2	0.079	0.079	0.079	0.079	0.079
Observations	4455	4455	4455	4455	4455
Year& City Fixed Effects	Yes	Yes	Yes	Yes	Yes

This table shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016 following forward looking approach. Panel A, B, and C report estimation results for the change in total, public and private bank branches. Each column is a separate regression showing the impact of Close elections on the net change of the number of bank branches for different Closeness levels between 10,000 and 50,000. ClosenessVote is a dummy variable that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold. ElectionxClosenessV is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to a threshold in the election year. Robust Standard errors are in parentheses.* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 11: Excluding One Year for Sensitivity Check for Public Bank Branches



This figure shows the results of equation 2 estimated on panel data set of 81 cities for the period 1961-2016 following backward looking approach for public bank branches. ElectionxClosenessV, the main coefficient of interest, is the interaction dummy that takes value 1 if the absolute difference in the number of votes given to the first- and second-party is less than or equal to 10,000 (baseline level) in the election year. Each regression leaves out one election year from the regression to evaluate whether the results are driven by a specific election. The x-axis shows the election year excluded from the regression. Standard errors are robust. Error lines show 95% confidence intervals.

Table 16: Examples of Announcement and Opening of State-Owned Bank Branches

Province-District	**Announcement**	**Opening**
1. Malatya- Doganyol	3 August 2014	December 2014
2. Malatya-Yazihan	August 2014	26 December 2014
3.Sirnak-Guclukonak	20 April 2016	10 Jan 2017
4. Istanbul - Eminonu (new public bank)	December 2014	29 May 2015

Sources:
1.https://www.mynet.com/milletvekili-calikdan-doganyol-ve-puturge-ilcelerine-ziyaret-180101485744
2.http://www.milliyet.com.tr/yerel-haberler/malatya/24-yillik-ilceye-ilk-banka-subesi-acildi-10542456
3.https://www.haberler.com/ilce-de-ilk-kez-banka-subesi-acilacak-8372838-haberi/
4.https://www.dunya.com/finans/haberler/ziraat-katilim-bankasi-acildi-haberi-281321
(last accessed: January 2020)

Figure 12: Bank Opening News Example: ”A bank branch opened for the first time in the district of Yazihan”

24 YILLIK İLÇEYE İLK BANKA ŞUBESİ AÇILDI

24 yıl ilçe olan Yazıhan ilçesine ilk defa bir banka şubesi açılarak hizmete girdi. Malatya'da banka şubesi bulunmayan ilçeler arasında yer alan Yazıhan'a Ziraat Bankası Şubesi açıldı.

Daha önce herhangi bir banka şubesi ve ATM bulunmayan Yazıhan' da açılan Ziraat Bankası ilçede mutlulukla karşılandı.

Yazıhan Belediye Başkanı Nevzat Öztürk "İlçemizde bir bankanın olmamasının büyük sıkıntısını yaşıyorduk. Gerek vatandaşlarımız gerekse de kamu kurumlarımız işlemleri için Malatya'ya gitmek durumundaydılar. Açılan Ziraat Bankası sayesinde bu sıkıntıdan kurtulmuş olacağız. Ziraat Bankası şubesinin açılması için göreve ilk geldiğimiz günden bu güne kadar kurumlarımız ve ve vatandaşlarımızın işlem hacmini ortaya koyan ve bankanın açılmasına esas teşkil edecek raporlarımızı ve dosyalarımız hazırlamış ve Ziraat Bankası Genel Müdürlüğü'ne göndermiştik. Sağ olsunlar Milletvekillerimiz bankamızın açılması için gerekli takip noktasında yardımlarını esirgemediler" dedi.

Öztürk şunları söyledi:

"Ayrıca Bankamızın açılmasında büyük emek sarf eden Ak Parti Genel Başkan Yardımcısı Malatya Milletvekilimiz Sayın Öznur Çalık'a da teşekkürlerimizi sunuyoruz.

Açılan bankamızın ilçemizin gelişimi ve kurumsallaşması açısından önemini bir kez daha vurgulamak istiyor. Yazıhanlı vatandaşlarımıza hayırlı olmasını temenni ediyorum. Son olarak şubemizin açılışında emeği geçen Ziraat Bankası Malatya Bölge Müdürüne tüm Ziraat Bankası çalışanlarına şükranlarımızı sunuyoruz."

Source: http://www.milliyet.com.tr/yerel-haberler/malatya/24-yillik-ilceye-ilk-banka-subesi-acildi-10542456

This figure is the screenshot of a news taken from a web-site related to the first bank branch opening in the district called Yazihan.

Translation of the title and the part inside the box: A bank branch opened for the first time in the district of Yazihan, which is 24 years old...The Ziraat Bank opened in Yazihan, which had no bank branches or ATMs before, was happily met by the province... Yazihan Mayor Nevzat Ozturk: **”We are also grateful to the AKP Deputy Chairman and the Malatya representative of the Parliament, Mr. Oznur Calik, who has made great efforts in opening our Bank.”**

Table 17: Elections Summary Statistics

Year	First Party share of seats	First Party	Coalition, Yes=1	N.Parties in the Parliament	N.Parties in the Election	Participation Rate, %	N.Voters
1961	34.80	CHP	1	4	4	81.4	12,925,395
1965	53.30	AP	0	6	6	71.3	13,679,953
1969	56.90	AP	0	8	8	64.3	14,788,552
1973	41.10	CHP	1	7	8	66.8	16,798,164
1977	47.30	CHP	1	6	8	72.4	21,207,303
1983	52.90	ANAP	0	3	3	92.3	19,767,366
1987	64.90	ANAP	0	3	7	93.3	23,376,923
1991	39.60	DYP	1	5	6	83.9	29,979,123
1995	28.70	RP	1	5	12	85.2	34,155,981
1999	24.70	DSP	1	5	20	87.1	37,495,217
2002	66.00	AKP	0	2	18	79.1	41,407,027
2007	62.00	AKP	0	3	14	84.2	42,799,303
2011	59.50	AKP	0	3	15	83.2	52,806,322
2015	57.60	AKP	0	4	29	87.3	56,949,009

Source: Turkish Statistical Institute

This table shows the summary statistics for the general elections for the period 1961-2016. First party names are abbreviations for Republican People's Party (CHP), Justice Party (AP), Motherland Party (ANAP), True Path Party (DYP), Welfare Party (RF), Democratic Left Party (DSP), and Justice and Development Party (AKP).