Politicians' Careers

Alexandre Rabelo *

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Abstract

The present work aims to understand politicians' careers, looking at monetary and non-monetary outcomes of winning a mayoral election in Brazil. Specifically, we ask how becoming a mayor affects wage growth in office and after the mayor mandate and other monetary dimensions such as wealth and firm ownership. Further, we investigate the impact of becoming a mayor on political career outcomes and occupational transitions in the formal labor market. To this end, we merged electoral data from 2004 to 2016 with a large administrative source of information and novel data on mayors' wages to reconstruct politicians' paths in political careers and the formal labor market. We estimate the effect of winning a municipal mayor election using a regression discontinuity design in a close election context. Our main finding is that the wage while in office represents a large wage growth for winners of mayoral elections when compared to the runners-up that were in the formal labor market after their loss in the elections. Since we find no effect on declared wealth growth, firm ownership, and occupational mobility in the public formal labor market, we interpret our results as evidence that the wage while in the office is the main monetary benefit of becoming a mayor. We also present evidence that winning a close election for mayor election is not a gateway to other elective offices.

Keywords: returns to office, political careers, close elections

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*PhD candidate at Sao Paulo School of Economics (FGV/EESP)

1 Introduction

How a career in politics affects the wage return for politicians in the traditional formal labor market is not obvious. On the one hand, political engagement could lead to lower wages in the private sector due to both time and effort constraints.[1] On the other hand, politicians can benefit from the prominence and extensive network and contact with people from different sectors that the elective office generates. These characteristics of the political environment can generate opportunities for the elected politician in the traditional job market after serving the term. Although the many shreds of evidence that politicians exploit their privileged political positions to increase their returns (Jayachandran, 2006; Fisman et al., 2014; DellaVigna et al., 2016) empirical evidence on sources of rents outside politics, associated with winning an election, and on the elected politician's occupational choice are scarce, especially for developing countries.

The current work aims to contribute to this discussion by investigating the monetary returns of winning an election. Thus, we ask how becoming a mayor affects wage growth in office and after the term mandate and other monetary dimensions such as wealth and firm ownership. Further, we investigate the impact of winning a mayoral election on Brazilian politicians' political career outcomes and occupational transitions in the labor market. Specifically, we investigate the impact of being elected mayor on the probability of participating in and winning future elections and on the occupational status of the former mayor in the traditional labor market.

The political career models of Mattozzi and Merlo (2008) and Diermeier et al. (2005) formalize what we propose to test. In both models, the agents take career decisions based on non-pecuniary rewards of politics, wages and rents in electoral office, chances of reelection, future career prospects, and other monetary rewards outside politics. In both models, congressional experience is valuable in the private sector. It can be optimal for politicians to opt out of politics at a particular point in their careers to maximize post-congressional payoffs.

Most empirical studies about the private gains of politicians focus on wealth growth, but this variable is typically available only for candidates that participate in at least two elections. Thus, they can only estimate the private gains of winning an election, condi-

[1] As anecdotal evidence, take the example of a former mayor of the city of Juiz de Fora, who was defending the right to receive a lifetime pension said that "the municipality must help those who have served it for a long period." because he was "(..) a politician for 40 years, and I have always fulfilled my obligation. While exercising my mandate, they prohibited me from practicing my legal profession" https://www.otempo.com.br/politica/em-juiz-de-fora-ex-prefeitos-tem-aposentadoria-vitalicia-1.358704

tional on the candidate's persistence in a political career (**?**, for example). The present study aims to overcome this problem since we have information on wages and firm ownership, even for candidates that have participated in only one election since 2004. Thus we can estimate the effect of being elected over non-political gains. As we look at municipal elections, our paper provides evidence on non-political outcomes at the early stage/lower level politician's career.

The benefits and privileges received by the Brazilian political class when in office are widely reported in the press.[2] Given this context, our research is an attempt to verify whether these benefits expand into the labor market generating monetary and non-monetary gains during and after mayors mandate.

Given that winning an election may reflect non-observable characteristics that affect the private market's outcomes, we perform the estimation in a close election context, similar to other works like Anagol and Fujiwara (2016); Bruce et al. (2022); Kresch and Schneider (2020). Using a regression discontinuity design in a close election, we have that, under certain conditions, a candidate's electoral performance is almost as good as random. So, we can compare the change in wealth, wages, firm ownership of winners, and other occupational outcomes with a valid counterfactual for them: the close runners-up. To this end, we merge the electoral data from the Superior Electoral Court (TSE) that contains candidate's wealth information with two large datasets: the Annual Social Information Report (RAIS) and Brazil's Internal Revenue Service of Brazil (IRS). These two sources give us the formal sector wages and provide information about firm ownership and size.

A limitation of RAIS is that it does not provide information on the remuneration of municipal mayors. So, to better understand the monetary benefits of being in the position of mayor, we built a new dataset with information on mayor salaries for eight Brazilian states using the information on municipal expenditures. With this new dataset, we can assess the salary growth resulting from the remuneration of the mayor's office.

So, the TSE data allow us to have information on all Brazilian elections from 1998 to 2018. Merging TSE data with RAIS and IRS gives us information on politician trajectory in the traditional labor market and on firm ownership from 2003 and 2018. Our sample consists of candidates who have not won for mayor since 2000, considering municipal

[2]These privileges usually include office public funds for the purchase of clothes, airfare, remuneration for various advisers, special retirement rules, and others, as can be seen in this journalist report from 2013: "Government representatives enjoy unimaginable privileges" -https://www.em.com.br/app/noticia/politica/2013/07/07/interna_politica,418169/representantes-do-poder-publico-desfrutam-de-privilegios-inimaginaveis.shtml

elections of 2004, 2008, and 2012.

Our main result shows that close winners experience a greater salary gain upon taking office as mayor than runners-up who remain in the formal labor market due to the loss in the mayoral election. The wage growth of receiving the mayor's wage is between 75% and 91% higher than the wage growth experienced by the close runners-up in the traditional labor market. The magnitude of the effect we find is similar to the one estimated by Dahlgaard et al. (2022) for Denmark. Moreover, our result holds for all four years of mayor mandates.

Given the wage gain while in office, we investigate whether this effect persists for elected mayors who return to the formal market after their term in office. We find that growth between the year prior to the mayoral election and the first year after the mandate, we find that the wage growth for winners is 14% less than the wage growth of the runners-up. Since we find no effect on declared wealth growth, firm ownership, and small impact on occupational mobility from low-skilled to high-skilled jobs within the public formal labor market, we interpret our results as evidence that the wage while in the office is the main monetary benefit of becoming a mayor.

Since there are no monetary gains from being elected mayor in the formal labor market, we look at the effect on future political outcomes, like the probability of participating and winning future elections for different offices. In line with previous literature on this subject for Brazil (Gemignani, 2015; Meireles, 2019), we find that winning a close mayoral election diminishes the likelihood of participating and winning future elections. When we look at the election outcome of specific offices, we do not find any effect on winning or participating in elections for state or federal elective positions. But our estimates show that winning a close mayoral election actually diminishes the probability of winning another mayor election in the future by 11.8% when compared to close runners-up. Winning a mayoral election also harm participating in and winning elections for city councilor.

When we look at heterogeneous effects, based on previous political experience, we find that candidates that won any election before becoming a mayor have a wage growth 39% higher than the wage growth of the runners-up that won recent elections before running for mayor. These candidates also experience smaller negative effects on political outcomes. All our results are robust to different specifications of the RDD estimation method and bandwidth choice.

This work aims to contribute primarily to the literature investigating the returns from winning an election, examining the net financial returns for public office. Fisman et al. (2014), studying wealth accumulation of politicians in India, find a larger annual asset growth for winners in more corrupt states, concluding that the monetary benefits may

be different given distinct contexts. Politicians' wealth accumulation also depends on the party campaign financing sources and its connections, as highlighted by Eggers and Hainmueller (2009), and from the benefits arising due to party alignment and better state job position, as in Olejnik (2020). Querubin and Snyder Jr. (2013), looking at political rents for members of the U.S house of representatives from 1850-1880, concludes that politicians may take advantage during crises such as natural disasters or other episodes of political and economic turmoil, such as the Civil War. These authors show that this event allows politicians to engage in rent-seeking activities and increase their wealth.

However, the existence or not of the returns from winning an election is still an open question. Lenz and Lim (2009), for example, finds out that U.S Representatives accumulate wealth at about the same rate as similar normal households. Recent studies such as Berg (2018) and Jung (2020) also find a null effect of winning an election on wealth growth and disposable income. One possible explanation for the lack of significant differences is that representatives under-report their wealth to hide widespread graft. This problem is a limitation in almost all the works cited above.

The most similar paper to ours is Dahlgaard et al. (2022). In their work, using data from parliament candidates in Denmark and a quantile difference-in-difference estimation, they find that the short-term returns to office correspond to a 112% income increase. They also highlight the fact that the life-cycle returns for candidates from the top quarter of the pre-office income distribution have no long-term economic gain from winning. Our article differs from theirs in that we analyze the effect of being elected to a position in the executive branch with greater local prominence. In addition, we are investigating the existence of this effect in a developing country, providing a new type of evidence. Finally, the Brazilian electoral context that we analyzed allows the estimation by discontinuous regression, different from the method used by

Our paper contributes to this literature in several ways. First, we examine the monetary returns of winning an election in a developing country context, where politicians' privileges are typically much more pervasive. Two previous study looks at the wealth growth of Brazilian politicians: Izumi (2019) finds that winning a mayor election has no effect on wealth accumulation, and Cunha (2019) estimates positive wealth return for municipal councilors, but as the author highlight, the effect is because several candidates declare initial wealth equal to zero. The main difference between these two articles and our work is that we link the electoral data to administrative data to obtain further information on formal labor market status and firm ownership of the politicians at different moments of time. Also, neither Cunha (2019) nor Izumi (2019) look at the occupational choice of elected politicians. Further, we also build new data with information on the wage of the

municipalities' mayors that allow us to estimate the short-term gain of winning a close mayoral election.

The second contribution of our work is that we are among the first studies to use administrative data to access candidates' wages in the formal sector before and after the election. We are the first to our knowledge to access data and investigate the effect of winning an election over politicians' firms' ownership. Moreover, we contribute to the above literature by looking simultaneously at a political career and the politician career in the formal labor market.

The remainder of the paper unfolds as follows: section 2 briefly describes the institutional context of Brazilian municipal elections, while section 3 presents data used in the analysis. Section 4 describes the data and our empirical strategy. We show the results and robustness checks in section 5 presents our estimation results. We conclude the work in the last section with our final remarks.

2 Institutional Context

One of the main characteristics of the Brazilian political structure is its very decentralized nature. The municipal mayor has the power to decide (along with local councilors) over several important subjects, such as public spending, education (including most of the public daycare), transportation, housing, and decisions about city zoning, sanitation, and garbage collection, and some local-level taxes. Most of the local government budget depends on state and federal transfers.[3]

Brazil holds elections every two years, interleaving federal and state elections with municipal elections. Local elections occur every four years, and citizens vote for the mayor and local councilors. In municipalities with less than 200,000 voters, we define the elected mayor using a simple majority rule. In turn, municipalities with more than 200,00 voters use a two-round system. Most Brazilian municipalities are small, having 22,630 registered voters on average. Thus, slightly more than 1% of the cities use a two-round system (Izumi, 2019). First-term incumbents may run for another 4-year term. In the second year of the mayor's mandate, there are Federal and State elections and the mayor can opt for a leave of absence to run for one of the available positions (State Deputy, State Governor, Federal Deputy, Senator, and Presidency). In case of winning, he leaves the

[3]According with Municipal Information Observatory, using data from National Treasury Secretariat for 2018, transfers constitute, on average, 64% of the municipality's total budget. http://www.oim.tmunicipal.org.br/abre_documento.cfm?arquivo=_repositorio/_oim/_documentos/D1B44D1A-F25F-3BDB-A44A8C5553BA4F1031012020083133.pdf&i=3156

mayor's office to assume the new position. If he loses, he returns to the mayor's office till the end of his term.

When applying for public office, all candidates (including those running for mayor) must disclose their assets. This information has been made public since the 2006 elections. Because there is no enforcement for candidates to declare the true value of their assets, there is no guarantee that politicians do not strategically under/over report its value. Underreport the wealth would be plausible action if candidates believe that this makes them seem more honest through the eyes of the voters.

Each municipal legislative chamber determines the mayor's wage. Although heterogeneous, the Brazilian Federal Constitution establishes a maximum wage cap for municipal public servants. So, the mayor's salary cannot be higher than the salary of a Supreme Federal Minister (in 2019, this wage was R$ 39.293,32). Although Federal Constitution states (in its article 38) that it is forbidden to accumulate mayor remuneration with remuneration from another occupation in the public sector, there is no clear regulation about the accumulation of the mayor's position with another occupation in the private sector. If the elected mayor has an occupation in the public sector, he has to choose between keeping the salary he receives in this occupation or the mayor's salary. If the mayor has a position in the private sector, the State Court of Accounts decides, taking into account the compatibility of schedules and possible conflicts of interest, for the accumulation or not of the two wages.

3 Data and empirical strategy

3.1 Data

As already mentioned, we will use primary sources of information: The Superior Electoral Court (TSE), the Annual Social Information Report (RAIS), and the Brazilian Internal Revenue Service (Receita Federal do Brasil).

TSE makes the electoral records from 1998 to 2018 public.[4] The first mayoral election on our database is for the year 2000. To match our information on wages, we will look at the three municipal elections that occurred from 2004 to 2012. We use the information on all the periods (since 1998) to generate indicators of experience (participation and winnings in past elections) and career path (participation and winning in a future election).[5]

[4]The information available at http://www.tse.jus.br/eleicoes/estatisticas/repositorio-de-dados-eleitorais-1/ dates from 1945 information on older elections are unreliable.

[5]We consider that a candidate participated/won an election if he ran for at least one of the following

In the cases where a candidate ran for mayor more than once, we kept the first election he appears. Furthermore, we excluded from our sample incumbents that were running for reelection. Our final sample has 16,320 politicians.

The TSE data provides information on the candidate's election results, such as affiliations to parties and coalitions, funds raised during the campaign, candidates' tax identifier (CPF), and demographic characteristics. We use this information to perform balance checks to show that our RD design is valid. From the 2006 elections, the TSE data also bring information about the self-reported asset value.

The labor market information from RAIS that we use consists of an administrative matched employer-employee dataset managed by the Ministry of Labor (MTE). This data provides information on the universe of workers in both public and formal private sectors. We use data from 2003 to 2017. We can match this data to the TSE using the CPF number. RAIS also has employers tax identifiers (CNPJ) that allow tracking individuals over time and across employers, providing a complete picture of an individual's labor market career. This database provides two wage variables: i) wage value received in December, which we use in the results presented in the next section; ii) average of wages received that year[6]. For observations with more than one job, we add the wages of all her occupations. To deal with outliers, we winsorize the top and bottom 1% of wage and wealth distribution. A drawback of RAIS is that it only reports information for workers in the formal sector. Thus our results should be interpreted as job market outcomes in the formal sector. Another essential feature is that we have information on the specific occupation of each worker, classified into 2,511 categories (Classificação Brasileira de ocupações - CBO 2002), that allow us to analyze two dimensions of occupational transition of former mayors candidates. The first dimension concerns the occupational transition between the public and private sectors. We also look at transitions within the public sector, creating four groups of public sector occupations, as in Colonnelli et al. (2020): Bureaucrat-Manager (managers of the public sector); Bureaucrat Lower-level (workers of administrative services, such as administrative assistant and receptionist); Frontline provider-High Skills (primary and secondary school teachers, physician); Frontline provider-Low Skills (low skilled workers from public services such as night guard, street cleaner and driver).

In Brazil, it is common among some occupations, like lawyers and physicians, to offer their work through their own firm, and do not appear on RAIS data. To obtain

positions: senator, federal deputy, state deputy, state governor, state vice-governor, mayor, vice-mayor, and city councilor.

[6]We also ran the estimation with this variable, and the outcomes were almost the same as the ones presented here.

information on individuals in these occupations, we use company membership data from Receita Federal do Brasil (Internal Revenue Service) to capture individuals who do not appear in RAIS because they own a company or appear in RAIS but have another source of income. This source provides information for all Brazilian firms, with information on the firm as CNPJ, activity code, and whether it is still operating. The data also has information about its partners in the company, their date of entry on the partnership, their full names, and partial CPF (6 out of the eleven numbers that CPF has). Next, we merged the IRS data with RAIS using the CNPJ number to obtain each company's employees over time as a measure of firm size. Then we linked this information with data on elections using both partial CPF numbers and full politicians' names.

Another drawback of RAIS is that it does not report information for elective positions. So, we do not have information on the mayor's wage during his mandate. To overcome this fact we built a novel dataset, gathering information on wage of the municipal mayor from eight States, from all 5 great regions of Brazil (Amazonas, Goiás, Minas Gerais, Paraíba, Paraná, Rio Grande do Norte, Rio Grande do Sul, São Paulo). Brazilian municipalities must report their expenses, including wages, to their respective State Audit Office (or "Tribunal de Contas Estadual - TCE"). The eight States mentioned above were the ones that met the following requirements: i) made public the expenses reported by the municipalities; ii) the breakdown of expenses allowed the identification of the mayor's salary; iii) had information for the years before 2018 so that we could complement the RAIS data in the analyzed period. Table 1 shows the number of municipalities and the period we have data for each state. Of the 5,568 Brazilian municipalities, our dataset on the mayor's wage has information for 3,092.

With these four datasets combined, we can access the following information of candidates over the years: wealth at the date of the election (after 2006), wages in the formal job market, the number of firms that she owns, and their respective size, mayor's wage, occupational transitions in the formal sector and political career. All monetary variables are in 2019 values. The exception is the declared wealth for the underreport discussed above.

3.2 Empirical Strategy

Estimating the returns to public office is not a straightforward task. Unobserved characteristics, such as intrinsic ability and taste for public office, make a comparison between election winners and runner-ups too naive. In this case, differences in financial gains between the groups may result from selection bias. The ideal set-up to perform this

TABLE 1: INFORMATION ON MAYOR'S WAGE

State	Number of municipalities	Years available
Amazonas	62	2016-2017
Goiás	246	2013-2017
Minas Gerais	853	2014-2017
Paraíba	223	2013-2017
Paraná	399	2013-2017
Rio Grande do Norte	167	2014-2017
Rio Grande do Sul	497	2011-2017
São Paulo	645	2009-2017
Total	**3,092**	

estimation would be a random assignment of mayors. Since this is not plausible, we will use close elections to induce a kind of random variation. We will employ a Regression Discontinuity Design to estimate the causal impact of rank in election and labor market outcomes, following the steps suggested by Lee and Lemieux (2010). Within a municipal election, we approximate the ideal experiment by comparing the careers of candidates whose vote margin difference is small. The main identification assumption is that, for the specific subset of competitive electoral races that we consider, whether the candidate gets the higher or lower rank is as good as random.

To clarify this argument, we can model the growth of wealth and wage as Fisman et al. (2014). Define W_{ci}^t as the variable of interest (wealth or wage) of the candidate i in constituency c at time t and the returns of holding an office are given by R_O. When the candidate loses an election, his returns are given by R_L. Besides these rents, it is reasonable to assume that individual characteristics, $\mathbf{x}$, and the opportunities in her constituency, a_c, also affect the monetary gains.

Then, we can write the wealth dynamic as:

$$\frac{dW_{ic}^t}{W_{ic}^t} = [R_L + (R_O - R_L)D_i + b'\mathbf{x} + a_c]dt + d\epsilon_i^t \tag{1}$$

Where ϵ_i^t captures idiosyncratic shocks to wealth[7], and D_i it is equal to 1 if the candidate were elected and 0 if she lost the election. The expected log of wealth in period 1 is

[7] $d\epsilon_i^t \sim \mathcal{N}(0, dt)$

given by[8]:

$$logW_{ci}^{1} - logW_{ci}^{0} = (R_O - R_L)D_i + b'\mathbf{x} + \underbrace{R_L + a_c - \frac{1}{2}}_{\equiv\alpha} + \epsilon_i^1 \tag{2}$$

We may define the mean yearly rate of monetary growth between year t and year T as $R_{ci} \equiv \frac{log(W_{ci}^T) - log(W_{ci}^t)}{T-t}$. And we want to estimate:

$$\mathbb{E}[logW_{ci}^1 | Winner] - \mathbb{E}[logW_{ci}^1 | RunnerUp] = R_O - R_L. \tag{3}$$

The above equation is the difference in financial growth rates due to being in office, that is, the monetary gains associated with being elected mayor. Figure 1 presents the timing of electoral cycle. We consider that at $t = -1$, the candidate decides to run or not for the mayor's office. The election runs at $t = 0$ and the winner takes the office at $t = 1$ until $t = 4$. At the beginning of $t = 5$, the winner leaves the office and finds a new job, considering whether she wants to pursue a political career or not. Given this dynamic, to investigate if there are non-political gains in winning a close mayor's election, we compare the wage and firm ownership growth between $t = -1$ - the time that the candidate decides to run for office - and $t = 5$, the first year after the winner leaves the office. We use the same time interval to examine the effect of winning a mayor's election over occupational transitions in the formal sector. Also, we compare the wage growth between $t - 1$ and $t = 1$ to test if the wage gain for being in an office appeals to those running for the position.

Since we only observe the wealth of a politician in election years, for these outcomes, the comparison is made between the declared wealth at $t = 0$, and the declared wealth at $t = 4$, only for candidates that decided to continue in politics. It is worth mentioning that, as highlighted in red, when $t = 2$, the federal and state elections take place.

For firm ownership, we consider three different outcomes. The first is a dichotomous variable that equals one if the candidate has at least one firm at a time $t = 5$, and zero otherwise. This information is the dependent variable with the sub-sample of politicians with no firms at $t = -1$ or $t = 5$. We refer to this as the extensive margin of firm ownership. Next, for the intensive margin of firm ownership, we look at the subsample of candidates with at least one firm at $t = -1$ and use the change in their total number of

[8]Since $\int_0^1 \frac{dW_{ic}^t}{W_{ic}^t} = logW_{ci}^1 - logW_{ci}^0$ and $\int_0^1 d\epsilon_i^t = \epsilon_i^1 - 1/2$, where the half is coming from PDF of a normal centered around 0, evaluated at 0.

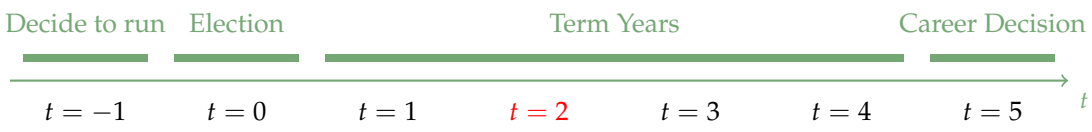


FIGURE 1: ELECTORAL CYCLE TIMING

partnerships $t = -1$ as a dependent variable $t = 5$. Last, we look at the changes in firm size, defined by the number of employees in firms owned by the candidate. At the same time, the wage and wealth are normalized to capture the yearly change, as shown above, with the denominator of R_{ci}.

Therefore, under conditional mean independence of the error term, the effect of winning an election over monetary outcomes can be estimated by:

$$R_{cit} = \beta Mayor_{cit} + b'x_i + \alpha_c + \epsilon_{cit} \tag{4}$$

But, as already mentioned, there is a high probability that elected and unelected candidates have different unobservable attributes that probably influence the election result and their monetary gains. The solution to this problem is the use of a RD design as proposed by Lee and Lemieux (2010) and performed by Eggers and Hainmueller (2009), Berg (2018) and Anagol and Fujiwara (2016) in elections context. The idea is that, in close elections, the odds of being on one side or the other of the voting threshold are as good as random. In this case, the close runners-up give the counterfactual of how the gains of politician i would evolve had he not been elected.

The equation that we estimate is given by:

$$R_{cit} = \beta Mayor_{cit} + \gamma f(VoteShare_{cit}) + \tau[Mayor_{cit} * f(VoteShare_{cit}] + \alpha_c + \delta_t + \epsilon_{ij} \tag{5}$$

Where the variable of interest is $mayor_{cit}$, which indicates if the candidate i won the mayor election at municipality c, in year t, our coefficient of interest is β, that measure the effect of winning an election over non-political gains. We also include a measure of the candidate's victory margin $f(VoteShare_{cit})$, election fixed effect δ_t to capture time trends that are common to all municipalities at each election, and meso region to capture different return opportunities.[9] We cluster the standard errors at the candidate level.

[9]Meso region is an administrative-territorial division that consists of a unit bigger than cities but smaller than the States. The use o mesoregion happens for two main reasons. First, given the number of observations in our sample, we would not have enough degrees of freedom necessary to estimate the 5.569 cities' fixed effects. Second, most o Brazilian cities are very small, and it is reasonable to assume that the influence and return opportunities have a spillover effect over municipalities nearby.

Following the most recent developments in RD design, our main estimation will use a local linear specification with a triangular kernel, as suggested by Cattaneo et al. (2017). We will also use the optimal bandwidth selector to minimize an approximation to the coverage error (CER) of the confidence interval and robust bias correction for constructing confidence interval as proposed by Calonico et al. (2020) and Cattaneo et al. (2019a). In the robustness, we test for different bandwidths, kernel, and polynomial degrees specifications.

3.2.1 Descriptive statistics and RD validity

As the information on wealth, wage, and firm ownership is not uniformly available among candidates, we have different samples for each outcome described in the previous section. Before we present a more careful investigation about the validity the assumptions that our RD design rely on, we present in tables 2, 3 4, the descriptive statistics of outcomes and baseline covariates for each sample. In each table, Panel A presents the mean, standard deviation for winners and losers, and the t-statistic of mean comparison for all the candidates. Panel B presents the same information, but for candidates that won/lost the election for a small margin.

We can see that mayor candidates are rich, more educated, mostly men, and middle age. These characteristics do not change across the three tables or within the full and restricted sample. In Table 2, we see that the median wealth of a mayor's candidate at $t = 0$ is more than a million and half a reais, with a high variance. This value is extremely high when we consider the Brazilian context. It is interesting to observe that the mean total wealth at $t = 4$ is approximately 20% less than the mean at $t = 0$. Looking at the data, one possible explanation for this fact is that many politicians report the same value at $t = 0$ and $t = 4$ for certain assets as real state properties, ignoring probable valuations that may occur between these two periods. Thus, since we deflated the assets to 2019 values, this could explain the values' differences across time. The full sample shows that winners and runners-up differ across several baseline attributes. This fact reinforces our argument in the last subsection that a simple comparison of winners and runners-up would result in biased estimation. But, when we restrict the sample to close elections, a significant part of these differences disappear. The difference persists in the higher proportion of candidates who completed high school among winners.

In the wage sample, presented in table 3, we see that the average wage of mayor winners in the formal sector is more than eight thousand reais per month before the election. This value is more than a thousand reais higher than the mean wage of runners-up. The

wage in both groups increases at $t = 5$, and although they are statistically different when we look at the full sample, their difference is not statistically significant in the RD sample. Also, the RD sample's baseline characteristics seem similar among the two groups. However, once again, we see differences in the proportion of candidates that completed high school. Also, runners-up have a higher probability of belonging to the PMDB party.

Table 4, presents the descriptive statistics for the firm outcomes. We can see by the number of observations on the outcomes variables (firm owner, number of firms, and number of employees) that we have three different samples for the firm. For the sake of brevity, we present the baseline covariates only to the sample of the number of firms since, for the other two, the statistics are very similar to this one. We observe that more than a third of politicians in each group is a partner in at least one firm, and this proportion grows to almost half of both samples in the first year after the end of the major term. Among those with at least one firm, the mean number of partnerships is between five and six, with a similar mean for the number of employees. Both numbers increase over time. As expected, the covariates are similar to the RD sample, except for the percentage of candidates that self-declared mayor as their main occupation, which is higher in the winners' group.

Overall, we observe that politicians present wage growth and firm ownership outcomes except for total wealth. However, this happens in both groups, and the mean differences are not statistically significant when we look at our RD sample. Further, when we restrict our sample to candidates in close elections, the group of winners and runners-up becomes similar in observable pre-treatment characteristics.

It is important to know more about the characteristics of the job positions occupied by the candidates in the time interval studied here. Figure 2 shows the occupational sector of the politician before running for the election, in the first year of the mandate, and the two years after the end of the mayor's term. We group the sectors as public or private (according to the main occupation of the politician in RAIS), firm owner, and elective office (if the politician is a city councilor, federal/state deputy, governor, or senator). In this case, a politician could be both in the public sector, a firm owner, and/or at an elective office. When we compare the data before the election (graph "a") with the first year of mandate (graph "b"), we notice a reduction in the proportion of winners in both the private and public sectors since they all are now in mayor's office. For the runners-up, we do not see significant changes in the composition of the private and public sectors. However, we noticed a reduction in the elective office, indicating that most were in municipal elective positions. In the two years following the mayor's mandate, we see a decrease in the proportion of politicians in both public and private sectors and an increase in the

TABLE 2: DESCRIPTIVE STATISTICS - WEALTH SAMPLE

Panel A: Full Sample

	Winners		*Runners-up*				
	Mean	Std. Dev	Mean	Std. Dev	Mean diff.	t-stat	p-value
Total wealth at t=0	1,511,526	3,132,834	1,152,352	2,328,417	359,174	4.15	0.000
Total wealth at t=4	1,254,412	2,446,275	958,510	1,754,082	295,902	4.44	0.000
Age at t=0	43.523	9.24	44.697	9.27	-1.174	-3.97	0.000
Female	0.121	0.33	0.155	0.36	-0.034	-3.05	0.000
Married	0.755	0.43	0.754	0.43	0.001	0.03	0.972
Party: PMDB	0.208	0.41	0.167	0.37	0.041	3.34	0.000
Party: PT	0.097	0.30	0.108	0.31	-0.011	-1.22	0.223
Party: PSDB	0.117	0.32	0.102	0.3	0.015	1.56	0.119
College	0.500	0.50	0.469	0.50	0.031	1.95	0.051
High School	0.287	0.45	0.272	0.45	0.015	1.03	0.304
Medium School	0.121	0.33	0.154	0.36	-0.033	-2.95	0.003
Occupation: Public Server	0.077	0.27	0.082	0.275	-0.005	-0.54	0.589
Occupation: Physician	0.052	0.22	0.038	0.192	0.014	2.1	0.035
Occupation: Lawyer	0.043	0.20	0.052	0.22	-0.009	-1.28	0.202
Occupation: Mayor	0.190	0.39	0.177	0.38	0.013	1.03	0.300
Occupation: Councillor	0.029	0.17	0.63	0.24	-0.601	-4.91	0.000

Panel B: RDD Sample

	Winners		*Runners-up*				
	Mean	Std. Dev	Mean	Std. Dev	Mean diff.	t-stat	p-value
Total wealth (t=0)	1,517,514	3,142,739	1,309,805	2,625,673	207,709	1.44	0.154
Total wealth (t=4)	1,220,160	2,385,296	1,023,969	1,766,109	196,191	1.87	0.061
Age	44.349	9.47	44.218	9.4	0.131	0.275	0.784
Female	0.126	0.33	0.152	0.36	-0.026	-1.514	0.130
Married	0.783	0.41	0.744	0.44	0.039	1.83	0.067
Party: PMDB	0.208	0.41	0.174	0.38	0.034	1.7	0.089
Party: PT	0.097	0.3	0.115	0.32	-0.018	-1.17	0.239
Party: PSDB	0.099	0.3	0.111	0.31	-0.012	-0.76	0.446
College	0.488	0.5	0.500	0.5	-0.012	-0.48	0.634
High School	0.296	0.46	0.245	0.43	0.051	2.29	0.022
Medium School	0.133	0.34	0.152	0.36	-0.019	1.11	0.267
Occupation: Public Server	0.073	0.26	0.091	0.29	-0.018	-1.32	0.186
Occupation: Physician	0.061	0.24	0.047	0.21	0.014	1.24	0.216
Occupation: Lawyer	0.055	0.23	0.047	0.212	0.008	0.75	0.454
Occupation: Mayor	0.015	0.36	0.182	0.39	-0.167	-1.71	0.087
Occupation: Councilor	0.032	0.18	0.050	0.22	-0.018	-1.72	0.085

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses.

TABLE 3: DESCRIPTIVE STATISTICS - WAGE SAMPLE

Panel A: Full Sample

	Winners		*Runners-up*				
	Mean	Std. Dev	Mean	Std. Dev	Mean diff.	t-stat	p-value
Wage (t=-1)	8,224	7,960	7,107	6,939	1,117	3.7	0.000
Wage (t=5)	10,472	8,734	9,300	8,537	1,172	3.41	0.000
Worked hours (t=-1, weekly)	49.479	24.96	47.859	24.09	1.620	1.66	0.097
Worked hours (t=5, weekly)	44.752	21.78	44.916	21.47	-0.164	-0.19	0.848
Age	44.843	8.33	45.097	8.4	-0.254	-0.75	0.452
Female	0.151	0.36	0.195	0.4	-0.044	-3.06	0.002
Married	0.768	0.42	0.785	0.41	-0.017	-1.01	0.310
Party: PMDB	0.171	0.38	0.189	0.39	-0.018	-1.18	0.237
Party: PT	0.106	0.31	0.125	0.33	-0.019	-1.54	0.123
Party: PSDB	0.154	0.36	0.132	0.34	0.022	1.55	0.120
College	0.694	0.46	0.691	0.46	0.003	0.16	0.872
High School	0.199	0.40	0.183	0.39	0.016	1.05	0.295
Medium School	0.045	0.21	0.058	0.233	-0.013	-1.43	0.152
Occupation: Public Server	0.210	0.41	0.219	0.414	-0.009	-0.53	0.596
Occupation: Physician	0.147	0.36	0.130	0.34	0.017	1.28	0.199
Occupation: Lawyer	0.032	0.18	0.048	0.21	-0.016	-2.07	0.038
Occupation: Mayor	0.082	0.28	0.068	0.252	0.014	1.33	0.182
Occupation: Councillor	0.010	0.10	0.019	0.14	-0.009	-1.86	0.063

Panel B: RDD Sample

	Winners		*Runners-up*				
	Mean	Std. Dev	Mean	Std. Dev	Mean diff.	t-stat	p-value
Wage (t=-1)	7,991	7,536	7,179	6,766	812	1.84	0.066
Wage (t=5)	10,267	8,829	9,458	8,542	809	1.53	0.128
Worked hours (t=-1, weekly)	48.50	24.80	48.91	24.79	-0.410	-0.27	0.786
Worked hours (t=5, weekly)	44.658	20.99	44.936	21.53	-0.278	-0.22	0.829
Age	45.730	8.51	44.996	8.73	0.734	1.37	0.170
Female	0.180	0.39	0.178	0.38	0.002	0.11	0.910
Married	0.781	0.41	0.786	0.41	-0.005	-0.23	0.817
Party: PMDB	0.169	0.38	0.216	0.41	-0.047	-2.02	0.043
Party: PT	0.115	0.32	0.118	0.32	-0.003	-0.12	0.901
Party: PSDB	0.143	0.35	0.137	0.34	0.006	0.28	0.781
College	0.688	0.46	0.692	0.46	-0.004	-0.14	0.891
High School	0.210	0.41	0.160	0.37	0.050	2.12	0.034
Medium School	0.048	0.22	0.069	0.25	-0.021	-1.49	0.136
Occupation: Public Server	0.206	0.41	0.209	0.41	-0.003	-0.16	0.875
Occupation: Physician	0.148	0.36	0.126	0.33	0.022	1.02	0.306
Occupation: Lawyer	0.025	0.16	0.042	0.2	-0.017	-1.53	0.127
Occupation: Mayor	0.079	0.27	0.092	0.29	-0.013	0.77	0.439
Occupation: Councillor	0.014	0.12	0.014	0.117	0.000	0.00	0.999

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses.

TABLE 4: DESCRIPTIVE STATISTICS - FIRM OWNERSHIP

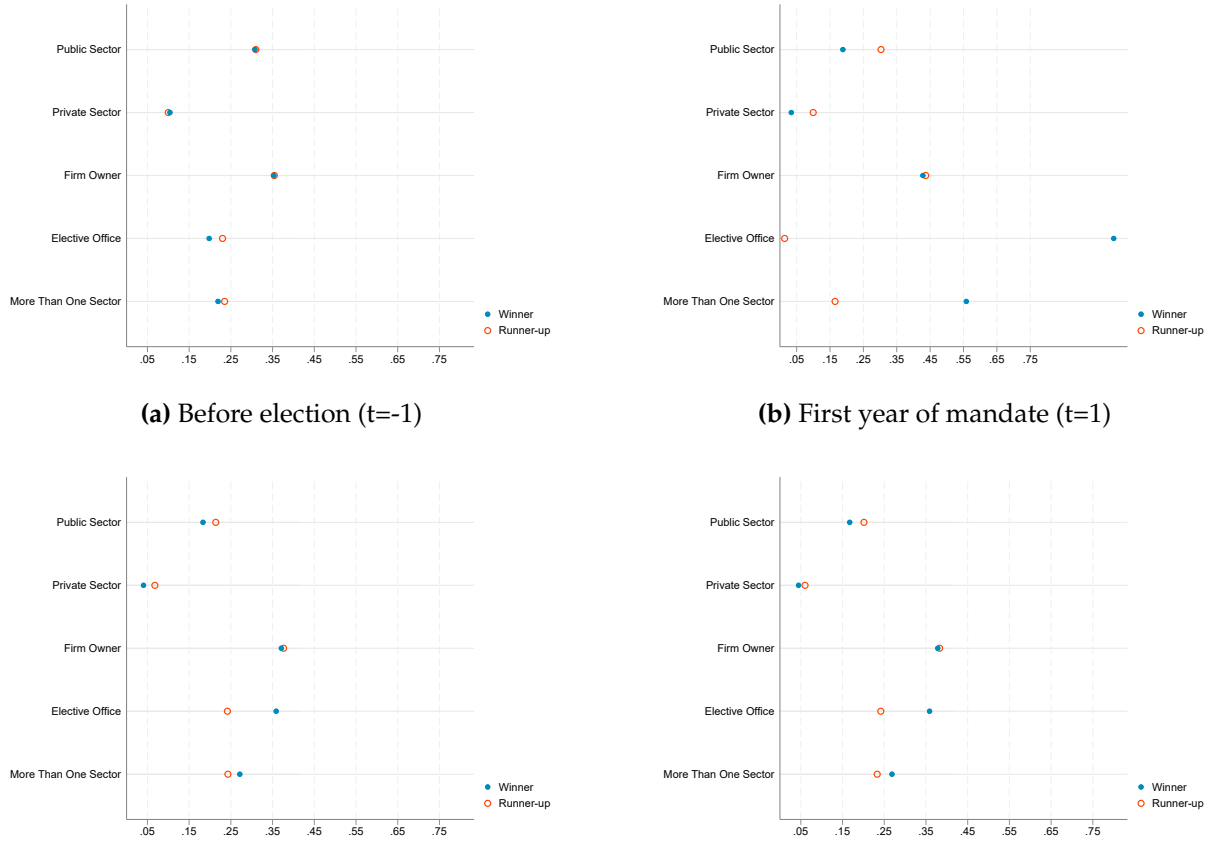
Panel A: Full Sample

	Winners			*Runners-up*					
	n	Mean	Std. Dev	n	Mean	Std. Dev	Mean diff.	t-stat	p-value
Firm owner (t=-1)	7,562	0.351	0.48	9,281	0.346	0.48	0.005	0.75	0.455
Firm owner (t=5)	7,562	0.463	0.50	9,281	0.471	0.5	-0.008	-1.09	0.276
Number of firms (t=-1)	2,601	5.309	20.95	3,139	5.142	30.1	0.167	0.25	0.806
Number of firms (t=5)	2,601	5.912	22.26	3,139	5.909	30.75	0.003	0.00	0.996
Number of employees (t=-1)	2,601	4.489	30.15	3,139	4.611	34.48	-0.122	-0.14	0.885
Number of employees (t=5)	2,601	7.244	61.18	3,139	5.038	31.92	2.206	1.68	0.093
Age at t=0	2,533	46.413	9.65	3,058	47.211	9.58	-0.798	-3.09	0.002
Female	2,601	0.087	0.28	3,139	0.113	0.32	-0.026	-3.3	0.000
Married	2,600	0.783	0.41	3,138	0.776	0.42	0.007	0.65	0.514
Party: PMDB	2,601	0.199	0.4	3,139	0.178	0.38	0.021	1.96	0.499
Party: PT	2,601	0.076	0.27	3,139	0.092	0.29	-0.016	-2.22	0.027
Party: PSDB	2,601	0.130	0.34	3,139	0.123	0.33	0.007	0.83	0.404
College	2,601	0.496	0.50	3,139	0.495	0.50	0.001	0.06	0.949
High School	2,601	0.268	0.44	3,139	0.263	0.44	0.005	0.39	0.700
Medium School	2,601	0.141	0.35	3,139	0.140	0.35	0.001	0.142	0.887
Occupation: Public Server	2,601	0.056	0.23	3,139	0.059	0.24	-0.003	-0.52	0.604
Occupation: Physician	2,601	0.078	0.27	3,139	0.083	0.28	-0.005	-0.67	0.500
Occupation: Lawyer	2,601	0.041	0.20	3,139	0.061	0.24	-0.020	-3.51	0.000
Occupation: Mayor	2,601	0.160	0.37	3,139	0.074	0.26	0.086	10.04	0.000
Occupation: Councillor	2,601	0.015	0.12	3,139	0.03	0.17	-0.015	-3.79	0.000

Panel B: RDD Sample

	Winners			*Runners-up*					
	n	Mean	Std. Dev	n	Mean	Std. Dev	Mean diff.	t-stat	p-value
Firm owner (t=0)	3,686	0.362	0.48	4,105	0.348	0.48	0.014	1.29	0.197
Firm owner (t=1)	3,686	0.463	0.50	4,105	0.475	0.5	-0.012	-1.12	0.262
Number of firms (t=0)	1,302	4.871	12.46	1,392	6.21	44.32	-1.339	-1.08	0.279
Number of firms (t=1)	1,302	5.379	12.86	1,392	7.099	45.15	-1.720	-1.363	0.173
Number of employees (t=0)	1,302	4.995	35.38	1,392	5.649	42.69	-0.654	-0.438	0.661
Number of employees (t=1)	1,302	7.044	70.269	1,392	7.380	43.85	-0.336	-0.149	0.881
Age	1,268	47.002	9.62	1,348	46.991	9.52	0.011	0.03	0.975
Female	1,302	0.094	0.29	1,392	0.111	0.31	-0.017	-1.45	0.147
Married	1,302	0.792	0.41	1,391	0.790	0.41	0.002	0.11	0.909
Party: PMDB	1,302	0.210	0.41	1.392	0.190	0.39	0.020	1.29	0.194
Party: PT	1,302	0.072	0.26	1,392	0.081	0.27	-0.009	-0.88	0.381
Party: PSDB	1,302	0.117	0.32	1,392	0.135	0.34	-0.018	-1.43	0.152
College	1,302	0.501	0.5	1,392	0.487	0.5	0.014	0.71	0.477
High School	1,302	0.261	0.44	1,392	0.271	0.45	-0.010	-0.57	0.570
Medium School	1,302	0.141	0.35	1,392	0.139	0.35	0.002	0.08	0.929
Occupation: Public Server	1,302	0.046	0.21	1,392	0.063	0.24	-0.017	-1.88	0.060
Occupation: Physician	1,302	0.087	0.28	1,392	0.075	0.26	0.012	1.08	0.281
Occupation: Lawyer	1,302	0.048	0.22	1,392	0.062	0.24	-0.014	-1.53	0.127
Occupation: Mayor	1,302	0.120	0.33	1,392	0.091	0.29	0.029	2.47	0.013
Occupation: Councillor	1,302	0.020	0.14	1,392	0.024	0.024	-0.004	-0.79	0.432

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses.



(a) Before election (t=-1)

(b) First year of mandate (t=1)

(c) First year after mandate (t=5)

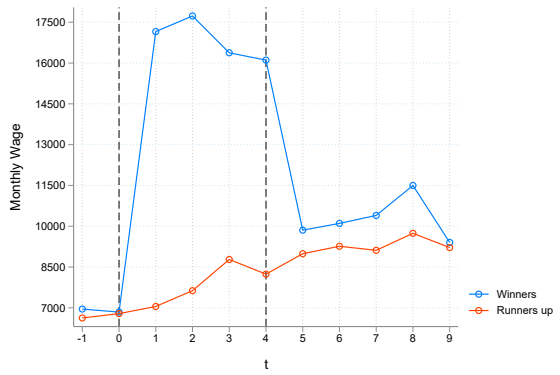
(d) Second year after mandate (t=6)

FIGURE 2: OCCUPATIONAL SECTOR OF THE POLITICIAN.

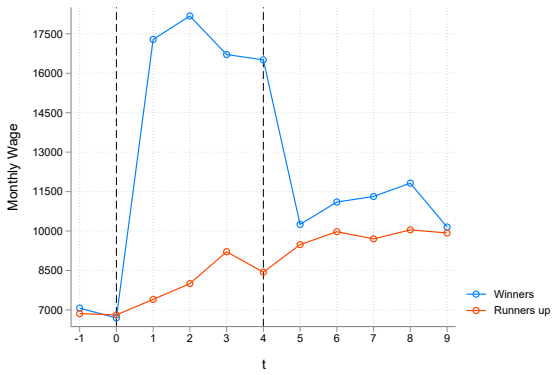
Note: For individuals with more than one formal occupation in RAIS, we define the public/private sector according to the occupation with the highest income. The category "More than One Sector" includes individuals in the public or private sector, the firm owner, and/or hold an elective office.

proportion in elective offices, especially for the winners. That is, there is a transition from the formal sector to the political sector for some of the candidates, and this transition is strong among winners of the mayoral election. On the other hand, the proportion of firm owners does not seem to change much between the four time periods, ranging between 35% and 45%.

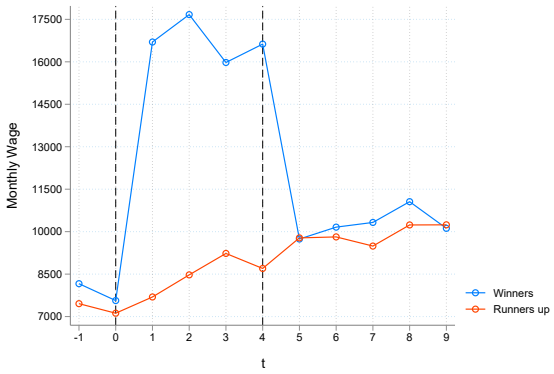
In addition to looking at the sectoral transition, it is also important to understand and compare the salary evolution of the candidates. When we look at Figure 3, we see no major difference in the wage dynamic between winners and runners-up, except for the period of the mayor's term. In the two periods before the term began, the mean wages in the formal sector were very similar for both winners and runners-up. However, while in office, winners mean wages more than double. That is, on average, the mayor's wage is



(a) All candidates



(b) Candidates that were in the public sector at t=-1



(c) Candidates that were in the private sector at t=-1

FIGURE 3: MEAN WAGES OVER TIME.

more than two times greater than the politician's wage before the election. On the other hand, for the runners-up, the wage growth is smoother. After the mandate, the wage of the winner in the formal sector is almost twice smaller than the wage that he received while in office, falling to a level similar to the one received by the runners-up. The wages of winners and runners-up are greater than the ones they received before the election. This wage dynamic is very similar for public and private sector individuals in the year prior to the election. It is important to point out that, for the periods $t = -1, t = 0$ and $t \geq 5$, we only have information on the formal sector, i.e., we do not include the wage received by the politicians in elective offices.

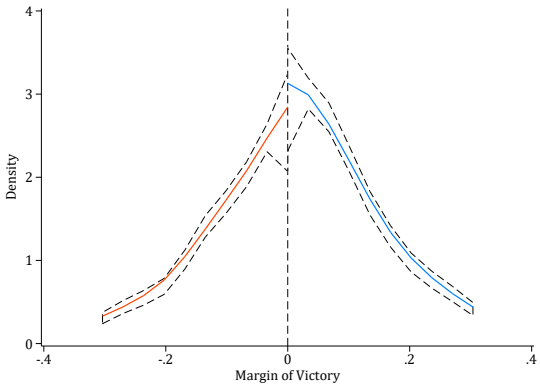
The figures 2 and 3 indicate that, after running for mayor, some candidates leave formal public and private sectors and occupy more elective positions. This transition seems

stronger for winners of major elections. Further, the wage received while in the office is greater than the wage in the formal sector both before and after occupying the mayor's office, suggesting that political careers have a monetary advantage compared to those in the formal sector. In addition, winning a mayoral election does not appear to generate an advantage for those who return to formal public and private sectors compared to the runners-up in these sectors. To study these aspects to aspects more precisely and rigorously, we perform RDD estimations.

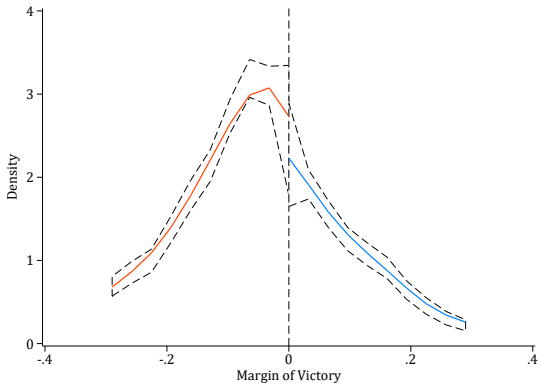
The context of a close election is one of the most common applications of regression discontinuity designs. The validity of RD assumptions has been tested and confirmed in different contexts, as described by Eggers et al. (2015) and Caughey and Sekhon (2017). Despite this evidence, we show that our regression discontinuity approach to measuring the non-political returns of winning a Mayoral election is adequate. To this end, we provide strong evidence that regression functions are smooth functions of the score at the cutoff. Since the continuity of the conditional distribution of potential outcome assumption relies on unobservable features, we can not directly test it. But, as suggested by Cattaneo et al. (2019a), we can test the empirical implications of the unobservable RD assumptions, providing evidence of its validity.

First, we perform a manipulation test based on the idea proposed by McCrary (2008). This test aims to check if the candidates' votes are manipulated around the cutoff by examining if candidates' density is continuous near the cutoff value. Figure 4 presented the plot of the distributional density of a candidate's margin of victory and performed the test proposed by Cattaneo et al. (2019b) to each sample that we analyzed. So, we cannot reject the null hypothesis of no manipulation in all five samples, indicating no discontinuity around the zero vote margin of victory.

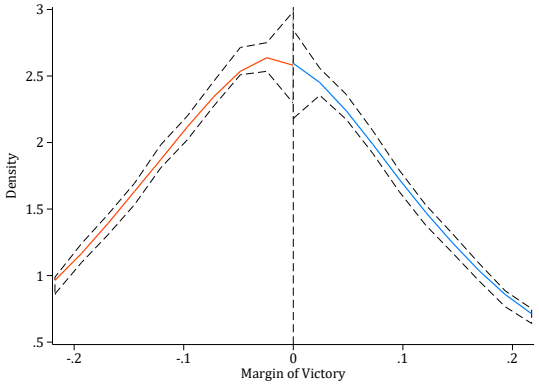
The second test consists of a falsification test that examines whether treated units are similar to control units in observable pre-treatment characteristics near the cutoff. The key idea is very straightforward: if we find systematic differences between candidates with similar vote margins, we have evidence that candidates can manipulate the number of votes they receive. We perform the same regression as our main specification but use the predetermined covariates as the dependent variable. Therefore, for each regression, we use its respective CER-Optimal bandwidth and both election and mesoregion fixed effects. Figure 5 presents the point estimation with the 95% confidence interval for each regression sample we study. We can see that in each sample, at most, one out of thirteen covariates presented is statistically significant. Thus, we can argue that there is no manipulation of the running variable near the cutoff. Given these results, we can state that what we are estimating is indeed the causal effect of winning an election over monetary



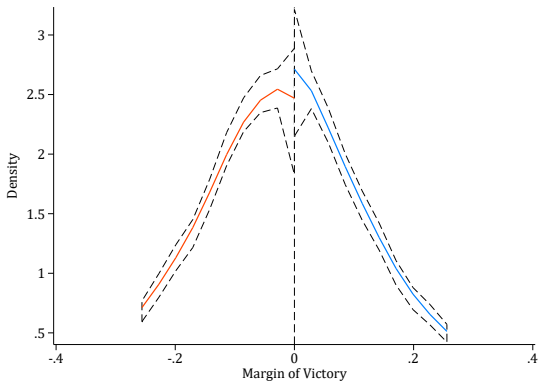
(a) Wealth sample



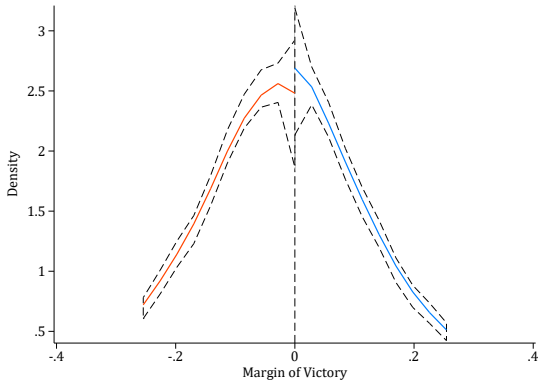
(b) Wage sample



(c) Firm Ownership (extensive margin) sample



(d) Firm Ownership (intensive margin) sample



(e) Firm size sample

FIGURE 4: DENSITY TESTS

Note: Manipulation test proposed by Cattaneo et al. (2019b). The null hypothesis is that there is no manipulation with the chosen bandwidth (here, bandwidth selection was based on the MSE of the sum of densities). The robust bias-corrected p-value for each figure, and its respective bandwidth are as follow: (a) 0.532; bw=0.101 (b) 0.570, bw=0.097; (c)0.609, bw=0.073 (d)0.404, bw=0.085; (e) 0.489, bw=0.085.

outcomes.

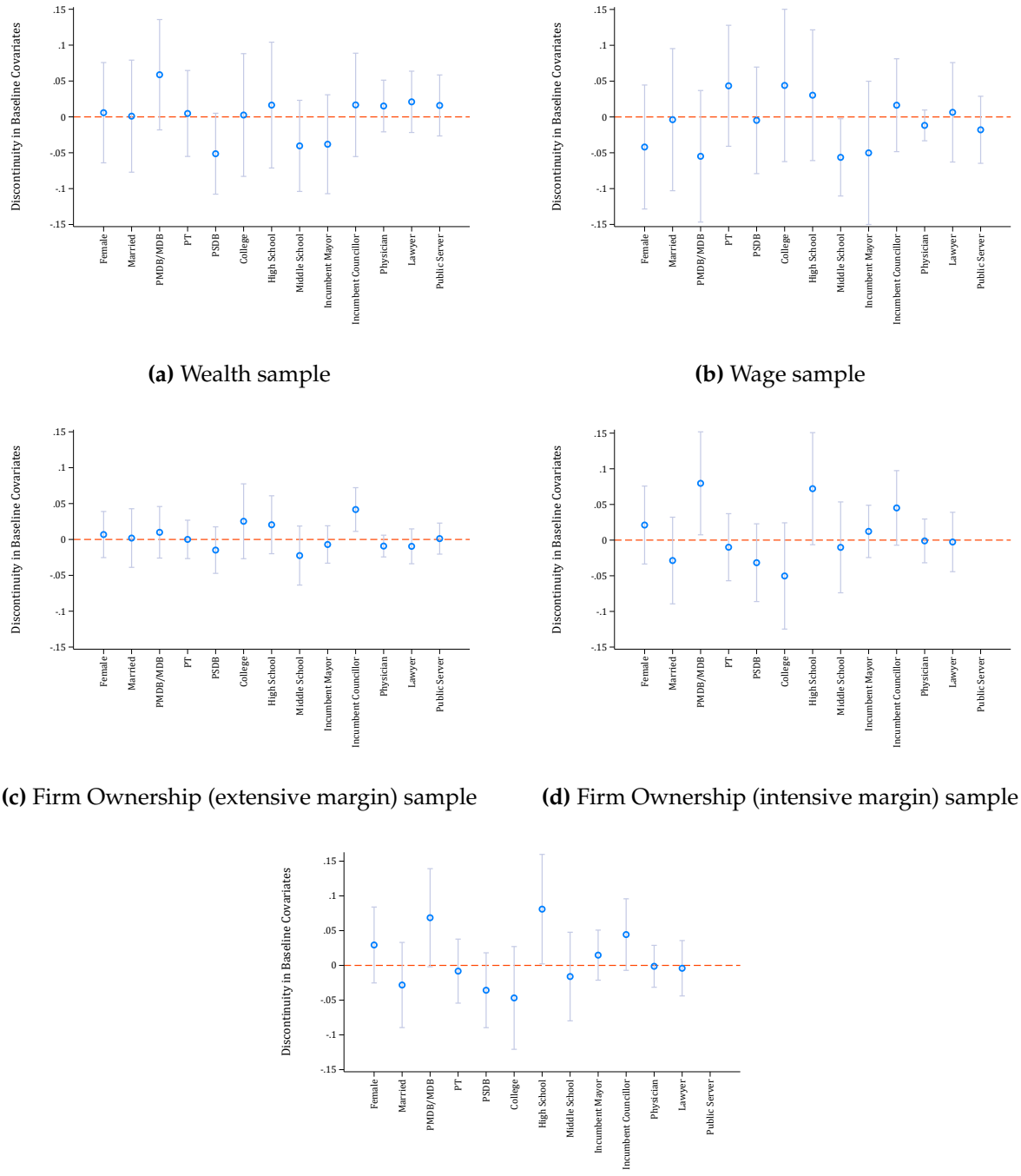
4 Results

4.1 Monetary outcomes

Once we provide evidence that the continuity hypotheses of our regression discontinuity estimation are valid, we can now present and discuss our estimation results. We begin by estimating the overall effect of winning an election and then looking at how this effect varies conditional on previous political experience. Columns 1 to 3 in Table 5 present the result, including all candidates, with a different election and meso region fixed effects combinations. Columns 4 to 6 restrain our sample on different levels of experiences: i) not elected before: candidates that were not elected since 1998 elections; ii) First runners: candidates that are on their first political contest since 1998; iii) Won an election before: Candidates that, from 1998 to the year $t = 0$ won an election for at least one of the elective positions (senator, federal deputy, state governor or vice governor, vice-mayor, municipal councilor).; iv) Ran in an election before: candidates that participated in previous elections since 1998. The appendix A presents the RD plot for the main results.

Panel A of table 5 presents the effect of winning a Mayoral election on yearly wealth growth. We can see that the coefficient is close to zero for the full sample. The same happens when we look at columns 4 and 5, relatives to candidates with no previous experience. The coefficient is larger but statistically equal to zero for the sub-sample of candidates who already won an election or participated in elections (columns 6 and 7).

Panel B presents the effect of being a mayor on wages in the formal job market. The estimation results for the full sample show evidence that winning a mayor election harms yearly wage growth. The estimation is more precise when we add the mesoregion fixed effect. According to this estimation, winners have a yearly wage growth between 14.6% and 16% less than close runner-up candidates. When we look at heterogeneous effects based on previous political experience, we notice that the reduction is even larger for those who did not win an election before (17.6%) and for the first runners (-28.1%). On the other hand, for the candidates that experienced a victory in recent elections, the effect is positive, large, and statistically significant at a 5% confidence interval. Politicians that already won an election, and a close mayor election, have a wage growth of 39.2% higher than politicians that won an election before but lost a close mayor election. In its turn, the effect is not statistically different from zero for candidates that ran in an election before. Overall, the results indicate that new politicians that go to the formal job market



(a) Wealth sample

(b) Wage sample

(c) Firm Ownership (extensive margin) sample

(d) Firm Ownership (intensive margin) sample

(e) Firm size sample

FIGURE 5: TEST FOR DISCONTINUITIES IN COVARIATES

Note: Point estimate and 95% confidence intervals of RDD estimates using baseline covariates as the dependent variable and the margin of victory as the running variable.

after winning a mayor election experience a smaller wage growth than those who lost the mayor election. But for the politicians that have already succeeded in a political contest, winning a mayor election generates wage gains when occupying a position in the formal labor market after the mayor term.

The last three panels describe the results for the firm ownership outcomes. We find evidence of the negative effect of winning a close mayor election on the firm ownership dimension, with heterogeneous effects based on political experience. Looking at the extensive margin, i.e., if the candidate is a partner in at least one firm, we do not find any effect of winning a close mayor election on the probability of being a partner in at least one firm, both for the full sample and the sub-samples of political experience. But, the first column of panel D shows us that, besides a negative effect on wage growth, winners also experience between 7.5% to 8.5% fewer new partnerships than close runners-up. For candidates with less political experience, this effect is even larger. In its turn, for politicians that won other elections before running for mayor, the estimated coefficient shows no difference in this dimension between the winner and the close runner-up. The behavior of the estimated coefficients indicates that freshmen mayors have difficulty keeping the same pace of personal business as their counterfactual close second-place candidates. This phenom does not seem to happen when we compare more experienced candidates. On the other hand, panel D results show no effect of being elected mayor over firm size. Therefore, although freshman mayors seem to be entering fewer partnerships, this does not lead to differences in the pace of growth of the firms.

Although the estimations presented in table **??** show that the effect of winning a close mayor election over wage growth is negative, especially for inexperienced politicians, as figure 3 suggested the existence of a wage premium for being in office. To investigate the existence of this wage premium, we use the novel data with mayors' wages that we build. With this data, we have information on the wage for the years of the mayor's term, both for the runners-up (that are in the formal labor market) and for the winners while they are at office.[10] Table 6 presents the estimation results for wage growth between the year before the election ($t = -1$) and the first (panel A) and second year of mandate (panel B). We notice that winning a mayor election greatly impacts wage growth. The wage of the winners increases between 75% and 91% more than the wages of the runners-up in the

[10] According to RAIS data, approximately 14% of elected mayors have a position on the formal labor market. As mentioned in the institution context section, mayors, under certain circumstances, can accumulate mayor and private sector wages. Since we do not have information about who is receiving both from the mayor and the private sector, we opt to use only the latter's wages. For the elected mayors that kept their wages in the public formal labor market, we also use only the wage reported on RAIS.

TABLE 5: ESTIMATES OF THE EFFECT OF BEING ELECT OVER WEALTH, WAGES AND FIRM OWNERSHIP

Panel A: Effect on growth of declared wealth (between t=0 and t=4)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RD Estimate	0.141	0.097	0.092	0.060	0.218	0.113	-0.027
(s.e)	(0.125)	(0,114)	(0.031)	(0.133)	(0.133)	(0.175)	(0.187)
Dependent Variable Mean	221,328.67	221,328.67	221,328.67	236,436.00	186,667.97	193,782.25	263,909.44
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.084	0.084	0.084	0.081	0.095	0.089	0.080
Eff. Number of Obs	1620	1620	1620	1031	934	586	743
Number of Obs	3448	3448	3448	2222	1768	1226	1680

Panel B: Effect on wage growth (between t=-1 and t=5)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.092	-0.159*	-0.142*	-0.176*	-0.281**	0.392**	0.055
(s.e)	(0.089)	(0.0871)	(0.084)	(0.099)	(0.114)	(0.153)	(0.418)
Dependent Variable Mean	2,871.57	2,871.57	2,871.57	2,933.15	3,222.15	2,678.47	2,466.34
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.102	0.102	0.102	0.074	0.075	0.070	0.073
Eff. Number of Obs	1535	1535	1535	889	618	278	567
Number of Obs	3103	3103	3103	2330	1588	773	1515

Panel C: Effect on firm ownership - extensive margin (between t=-1 and t=5)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.030	-0.032	-0.029	-0.019	-0.033	-0.058	-0.024
(s.e)	(0.025)	(0.025)	(0.024)	(0.027)	(0.034)	(0.041)	(0.035)
Dependent Variable Mean	0.221	0.221	0.221	0.242	0.222	0.156	0.217
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yeas	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.093	0.093	0.093	0.119	0.099	0.08	0.085
Eff. Number of Obs	4961	4961	4961	4458	2434	1117	2449
Number of Obs	10808	10808	10808	7973	5058	2835	5750

Panel D: Effect on firm ownership - intensive margin (between t=-1 and t=5)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.075***	0.079***	-0.085***	-0.101***	-0.102***	0.002	-0.102**
(s.e)	(0.029)	(0.028)	(0.027)	(0.029)	(0.037)	(0.049)	(0.041)
Dependent Variable Mean	0.425	0.425	0.425	0.441	0.438	0.348	0.420
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.08	0.08	0.08	0.092	0.078	0.077	0.078
Eff. Number of Obs	2213	2213	2213	1925	1194	487	979
Number of Obs	5401	5401	5401	4173	2917	1228	2484

Panel E: Effect on firm ownership - growth in the number of employees (between t=-1 and t=5)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.003	-0.015	-0.001	-0.026	0.006	0.171	0.099
(s.e)	(0.078)	(0.078)	(0.078)	(0.086)	(0.110)	(0.129)	(0.094)
Dependent Variable Mean	-0.522	-0.522	-0.522	0.172	-0.418	-1.311	-0.628
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.088	0.088	0.088	0.102	0.095	0.078	0.073
Eff. Number of Obs	2401	2401	2401	2096	1390	488	934
Number of Obs	5685	5685	5685	4173	2917	1228	2484

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses. Column 4 refers to the subsample of candidates that were not elected in any office runs since 1998. Column 5 refers to the subsample of candidates that did not run in any elections since 1998. Column 6 refers to the subsample of candidates that won any office runs since 1998. Column 7 refers to the subsample of candidates that ran in at least one elections since 1998. In Panel A, we control for 2008 election fixed effect and Brazilian mesoregions fixed effects when specified. On panel B to E we control for 2008 and 2012 fixed effects, and also Brazilian mesoregions when specified. ***Significant at the 1 percent level. The dependent variable mean is the mean of the individuals in control group inside the optimal bandwidth. ** Significant at the 5 percent level. * Significant at the 10 percent level.

two-time intervals presented here.[11] The results do not change much when we look to estimate the model for each group of politicians based on their political experience.

So, on the one hand, inexperienced politicians that win a close mayoral election have lower wage growth in the formal labor market than the runners-up. On the other hand, the wage growth when they take office is substantially greater than that received by their respective counterfactual. So, the wage while in office appears to be the greatest monetary incentive to enter a race for mayor. Politicians who have won a recent election before becoming mayor benefit monetarily from the wage received during their term in office and the salary reward received in the formal labor market after leaving office. The next subsections will look at the effects of political outcomes and labor market transitions.

TABLE 6: ESTIMATES OF THE EFFECT OF BEING ELECT ON WAGE WHILE IN OFFICE

Panel A: Effect on wage growth (between t=-1 and t=1)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RD Estimate	0.806***	0.796***	0.755***	0.693***	0.632***	0.676***	0.831***
(s.e)	(0.114)	(0.106)	(0.106)	(0.121)	(0.129)	(0.177)	(0.156)
Dep. Variable Mean	472.71	472.71	472.71	215.397	404.08	848.10	576.41
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.096	0.096	0.096	0.099	0.10	0.177	0.109
Eff. Number of Obs	846	846	846	564	452	316	448
Number of Obs	1937	1937	1937	1251	997	686	940

Panel B: Effect on wage growth (between t=-1 and t=2)

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	0.887***	0.912***	0.844***	0.918***	0.932***	0.647***	0.632***
(s.e)	(0.161)	(0.145)	(0.144)	(0.157)	(0.159)	(0.226)	(0.185)
Dep. Variable Mean	1.149.26	1.149.26	1.149.26	771.54	1,153.35	1,780.41	989.72
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.083	0.083	0.083	0.087	0.091	0.106	0.119
Eff. Number of Obs	515	515	515	362	306	208	313
Number of Obs	1297	1297	1297	869	712	428	585

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses. Column 4 refers to the subsample of candidates that were not elected in any office runs since 1998. Column 5 refers to the subsample of candidates that did not run in any elections since 1998. Column 6 refers to the subsample of candidates that won any office runs since 1998. Column 7 refers to the subsample of candidates that ran in at least one elections since 1998. The dependent variable mean is the mean of the individuals in control group inside the optimal bandwidth. ***Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

[11] The estimated results for years $t = 3$ and $t = 4$ are very similar to the ones reported on table 6. It is important to reinforce that there are federal and state elections occurring in $t = 2$, and we lose from our wage sample the politicians elected to these positions.

4.2 Political outcomes

Beyond monetary benefits, winning a mayoral election may be viewed as a gateway to a successful career in politics. Several studies showed that the existence incumbency effect in Brazil depends on the official position that the incumbent holds. In general, politics at legislative functions such as federal and state deputy have a higher probability of participating and winning future elections. Conversely, for mayors, the literature finds an incumbency disadvantage (Meireles (2019); Brambor and Ceneviva (2011); Gemignani (2015)). In this section, we will investigate the political career outcomes of winning a mayoral election, looking at the effect on participation and success in future elections and if the results depend on previous political experience. To this end, we use information from close mayoral runs that occurred in the municipal elections of 2004, 2008, and 2012 and information on election participation and results for the seven elections between 2006 to 2018.

We begin by estimating the effect of winning a close mayoral election over the participation and winning any future election. From the results in Panel A and B from table 7, we notice that winning a close mayoral election is associated with around 8% less chance of participating in future elections and about 20% less chance of winning a future race for elective office. However, when we look at the pool of first runners politicians, we observe that there is no negative effect on the career outcome of participation in future elections. The same is true for politicians that already won an election before winning the mayor's office. Within these two groups of politicians, we also observe that the negative effect over winning future elections is a little smaller than for other groups: First runners that win a mayoral election have about 13.7% less chance of winning a future election when compared to their runners-up. For the group of politicians that won an election before, this effect is 14.7%. The magnitude of the estimation performed here is very similar to the one found by Gemignani (2015) when comparing the probability of participation and winning an election in four years between closer mayoral winners and runners-up.

When we analyze panel C and panel D from table 7, we notice that winning g a close mayoral election does not affect the likelihood of participating in or winning a federal or state election. All estimated coefficients are very close to zero and statistically insignificant. So, becoming a mayor could not be viewed as a gateway to a political career at the state or federal levels.

Given the previous result, we focus on the effect on local political careers. Table 8 presents the result of the estimations with participation and winning mayoral and city councilor elections outcomes. We observe that the effect of participation on future may-

TABLE 7: ESTIMATES OF THE EFFECT OF BEING ELECT OVER POLITICAL CAREER (OVERALL AND FEDERAL/STATE POSITIONS)

Panel A: Effect over participation on future elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RD Estimate	-0.083***	-0.082***	-0.079***	-0.061**	-0.019	-0.058	-0.098***
(s.e)	(0.027)	(0.027)	(0.026)	(0.029)	(0.035)	(0.041)	(0.033)
Dependent Variable Mean	0.631	0.631	0.631	0.593	0.569	0.734	0.692
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.06	0.06	0.06	0.063	0.072	0.085	0.074
Eff. Number of Obs	5110	5110	5110	4028	2971	1708	3079
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel B: Effect over winning future elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.202***	-0.196***	-0.194***	-0.188***	-0.137***	-0.147***	-0.229***
(s.e)	(0.030)	(0.030)	(0.029)	(0.033)	(0.039)	(0.049)	(0.039)
Dependent Variable Mean	0.396	0.396	0.396	0.360	0.349	0.497	0.443
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.06	0.06	0.06	0.062	0.073	0.081	0.039
Eff. Number of Obs	5104	5104	5104	3985	3009	1645	2909
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel C: Effect over participation on future federal or state elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.003	-0.005	-0.005	-0.009	-0.000	0.009	-0.006
(s.e)	(0.012)	(0.012)	(0.011)	(0.011)	(0.012)	(0.026)	(0.018)
Dependent Variable Mean	0.073	0.073	0.073	0.053	0.037	0.131	0.111
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.091	0.091	0.091	0.108	0.103	0.101	0.089
Eff. Number of Obs	7320	7320	7320	6343	4023	1970	3632
Number of Obs	16209	16209	16209	12146	8035	4063	8234

Panel D: Effect over winning future federal or state elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.003	-0.002	-0.002	-0.003	0.000	0.003	-0.007
(s.e)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.017)	(0.097)
Dependent Variable Mean	0.020	0.020	0.020	0.008	0.005	0.054	0.035
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.089	0.089	0.089	0.081	0.093	0.086	0.09
Eff. Number of Obs	7179	7179	7179	4996	3684	1715	3654
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses. Column 4 refers to the subsample of candidates that were not elected in any office runs since 1998. Column 5 refers to the subsample of candidates that did not run in any elections since 1998. Column 6 refers to the subsample of candidates that won any office runs since 1998. Column 7 refers to the subsample of candidates that ran in at least one elections since 1998. We control for 2004 and 2008 fixed effects, and also Brazilian mesoregions when specified. The dependent variable mean is the mean of the individuals in control group inside the optimal bandwidth. ***Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

oral elections is null for all groups of politicians. But, there is a negative effect on winning a mayoral election in the future. Close winners have 12% less chance of becoming mayor in the future than their close runners-up. This negative effect is a bit smaller for the pool of first runners politicians. Furthermore, the effect is smaller and statistically indistinguishable from zero for the pool of politicians that already won an election before becoming mayor. Once again, our results over the probability of winning a mayoral election are similar to the ones found by Gemignani (2015) and Brambor and Ceneviva (2011).

The estimations also show that close winners are less likely to run (4.3%) and win (2.8%) a city councilor election in the future. However, for first runners, these effects are smaller and statistically significant only at 10%. In its turn, for politicians with more political experiences (columns 6 and 7 of Panel C and D of table 8), these negative effects are larger. This result indicates that winning a mayoral election generates a greater difference in the decision to participate in elections for city councilors among more experienced politicians than in less experienced ones.

In a nutshell, we do not observe many benefits for the political career of winning a mayoral election. Contrary to the observed in other countries, we do not observe an incumbent effect in Brazil. Further, we find that there are negative effects of winning an election for mayor over the probability of winning and participating in a future election at the municipal level. On the other hand, we do not observe any effect on political career outcomes at the state and federal levels.

4.3 Occupational outcomes

After investigating the possible monetary and political benefits of winning a mayoral election, we now look at occupational outcomes and transitions in the formal labor market. Specifically, we want to know how winning a mayoral election affects the probability of the politician having a position in the formal labor market after his first mayoral term. Further, we will also look at which economic sector the politicians were in before and after running for mayor.

Table 9 shows the estimation results for the probability of being in the formal labor market (Panel A), being in the public sector (Panel B), being in the private sector (Panel C), and the transition between private and public sector (Panel C). The overall results indicate no effect of winning a close mayoral election over occupational status. However, we find a small but statically significant negative effect on the likelihood of the winner being in the private formal labor market after the end of the mayor's term. Moreover, this negative effect is present among the groups of individuals with less political experience

TABLE 8: ESTIMATES OF THE EFFECT OF BEING ELECT OVER POLITICAL CAREER (MAYOR AND CITY COUNCILLOR)

Panel A: Effect over participation on future mayoral elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RD Estimate	0.005	0.008	0.009	0.020	0.029	0.049	0.016
(s.e)	(0.032)	(0.031)	(0.031)	(0.033)	(0.039)	(0.051)	(0.038)
Dependent Variable Mean	0.415	0.415	0.415	0.414	0.404	0.417	0.043
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.052	0.052	0.052	0.058	0.066	0.075	0.064
Eff. Number of Obs	4435	4435	4435	3779	2744	1531	2760
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel B: Effect over winning future mayoral elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.121***	-0.120***	-0.118***	-0.125***	-0.099**	-0.077	-0.132***
(s.e)	(0.032)	(0.032)	(0.032)	(0.035)	(0.039)	(0.053)	(0.042)
Dependent Variable Mean	0.248	0.248	0.248	0.245	0.248	0.256	0.247
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.052	0.052	0.052	0.057	0.068	0.075	0.060
Eff. Number of Obs	4463	4463	4463	3681	2803	1531	2609
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel C: Effect over participation on future city councillor elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.046***	-0.043***	-0.043***	-0.038***	-0.024*	-0.077***	-0.612***
(s.e)	(0.011)	(0.011)	(0.011)	(0.010)	(0.013)	(0.023)	(0.018)
Dependent Variable Mean	0.126	0.126	0.126	0.070	0.079	0.167	0.173
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.084	0.084	0.084	0.111	0.098	0.123	0.078
Eff. Number of Obs	3891	3891	3891	6479	3871	2299	3222
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel D: Effect over winning future future city councillor elections

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.028***	-0.028***	-0.028***	-0.026***	-0.019*	-0.044*	-0.038**
(s.e)	(0.009)	(0.008)	(0.002)	(0.008)	(0.010)	(0.023)	(0.015)
Dependent Variable Mean	0.057	0.057	0.057	0.040	0.032	0.110	0.083
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.085	0.085	0.085	0.103	0.098	0.080	0.069
Eff. Number of Obs	6942	6942	6942	6093	3857	1606	2916
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses. Column 4 refers to the subsample of candidates that were not elected in any office runs since 1998. Column 5 refers to the subsample of candidates that did not run in any elections since 1998. Column 6 refers to the subsample of candidates that won any office runs since 1998. Column 7 refers to the subsample of candidates that ran in at least one elections since 1998. We control for 2004 and 2008 fixed effects, and also Brazilian mesoregions when specified.The dependent variable mean is the mean of the individuals in control group inside the optimal bandwidth. ***Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

(those not elected before and the first runners). We also do not find any evidence that the result of the close mayoral election affects the transitions between the public and private sectors.

One possible argument when discussing the occupational mobility of politicians is that they may benefit from changes in their position within the public sector. We use the public sector typology suggested by Colonnelli et al. (2020) to investigate if this may be true to our scenario. Table 10 presents the results for our estimation. We observe that winners have a lower probability of being employed in positions pooled as "Frontline Provider Low Skill" (i.e., community health worker). They also have a lower probability of transitioning from bureaucrat positions (manager of public sector or administrative assistant, for example) to low-skilled frontline providers. Winners also have a higher chance of changing from lower-level bureaucrat and frontline provider low-skill positions to jobs described as "Frontline Provider High Skill" (that includes primary school teacher, secondary school teacher, doctor, nurse, nursing technician and assistant, and other mid-level positions). On the other hand, politicians that won a close mayoral election face a lower probability of transition for Bureaucrat Manager jobs (school headmaster, administrative director, health services manager, for example) when they were at bureaucrat's lower level of frontline provider low skill positions before the election.

Overall, our evidence points out to nonexistence of effects of winning a mayoral election over sector transitions in the formal labor market. On the other hand, we have evidence that the result of the mayoral election impacts the occupational transitions within the public sector. Concerning this dimension, our analysis here is exploratory, and further investigations, looking at the larger window of time, may shed more light on this subject.

4.4 Robustness checks

This section discusses robustness checks for the main results presented above. First, we will look at how the bandwidth choices affect our estimations. Figures 6 and 7 show that our point estimation is very stable across different bandwidths choices, both for monetary and non-monetary outcomes.

We perform a cutoff sensibility test for our main result, the positive effect of winning a mayor election. This test estimates our model, defines different cutoff points to our running variable, and the difference in vote share between the winner and the runner-up. If the application of the identification method is correct, we expect to verify the effect only for the true cutoff (0%). This result is what we observe in Figure 8. So we have another piece of evidence that our estimation is valid.

TABLE 9: ESTIMATES OF THE EFFECT OF BEING ELECT OCCUPATIONAL STATUS

Panel A: Effect over being on formal labor market

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
RD Estimate	0.0217	0.021	0.021	0.008	0.028	0.029	0.022
(s.e)	(0.023)	(0.022)	(0.022)	(0.022)	(0.032)	(0.028)	(0.027)
Dependent Variable Mean	0.291	0.291	0.291	0.289	0.295	0.304	0.293
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.092	0.092	0.092	0.138	0.090	0.095	0.129
Eff. Number of Obs	7424	7424	7424	7529	3611	1069	4862
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel B: Effect over being on public formal labor market

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	0.017	0.016	0.013	0.004	0.057	0.038	-0.178
(s.e)	(0.026)	(0.026)	(0.025)	(0.028)	(0.035)	(0.049)	(0.033)
Dependent Variable Mean	0.274	0.274	0.274	0.265	0.261	0.298	0.286
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.065	0.065	0.065	0.073	0.067	0.080	0.081
Eff. Number of Obs	5523	5523	5523	4570	2777	1605	3368
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel C: Effect over being on private formal labor market

	Full Sample			*Not elected before*	*First runners*	*Won an election before*	*Ran in an election before*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elected	-0.029**	-0.026**	-0.027**	-0.033**	-0.044**	-0.003	-0.009
(s.e)	(0.013)	(0.013)	(0.013)	(0.015)	(0.018)	(0.021)	(0.016)
Dependent Variable Mean	0.082	0.082	0.082	0.082	0.085	0.079	0.079
Election FE	Yes	No	Yes	Yes	Yes	Yes	Yes
Meso Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Bandwidth	0.075	0.075	0.075	0.074	0.074	0.118	0.09
Eff. Number of Obs	6201	6201	6201	4640	3032	2227	3668
Number of Obs	16209	16209	16209	12146	7975	4063	8234

Panel D: Effect over economic sector transition

	Private to public			*Public to private*		
	(1)	(2)	(3)	(4)	(5)	(6)
Elected	0.073	0.043	0.0387	-0.021	-0.008	-0.007
(s.e)	(0.073)	(0.059)	(0.059)	(0.017)	(0.015)	(0.015)
Dependent Variable Mean	0.154	0.154	0.154	0.053	0.053	0.053
Election FE	Yes	No	Yes	Yes	No	Yes
Meso Region FE	No	Yes	Yes	No	Yes	Yes
Bandwidth	0.070	0.070	0.070	0.072	0.072	0.072
Eff. Number of Obs	539	539	539	1899	1899	1899
Number of Obs	1541	1541	1541	5101	5101	5101

Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses. Column 4 refers to the subsample of candidates that were not elected in any office runs since 1998. For panels A to C: Column 5 refers to the subsample of candidates that did not run in any elections since 1998; Column 6 refers to the subsample of candidates that won any office runs since 1998; Column 7 refers to the subsample of candidates that ran in at least one elections since 1998. We control for 2008 and 2012 fixed effects, and also Brazilian mesoregions when specified. ***Significant at the 1 percent level. The dependent variable mean is the mean of the individuals in control group inside the optimal bandwidth. ** Significant at the 5 percent level. * Significant at the 10 percent level.

TABLE 10: ESTIMATES OF THE EFFECT OF BEING ELECT OVER OCCUPATIONAL STATUS WITHIN THE PUBLIC SECTOR.

Panel A: Bureaucrat Lower Level

	All	*Front. Provider HS before*	*Bureauc. Man. before*	*Front. Provider LS*
	(1)	(2)	(3)	(4)
RD Estimate	-0.001	0.060	0.032	0.019
(s.e)	(0.460)	(0.046)	(0.084)	(0.092)
Dependent Variable Mean	0.063	0.050	0.093	0.039
Election FE	Yes	Yes	Yes	Yes
Meso Region FE	Yes	Yes	Yes	Yes
Bandwidth	0.089	0.086	0.092	0.116
Eff. Number of Obs	950	566	235	168
Number of Obs	2101	1314	488	299

Panel B: Bureaucrat Manager

	All	*Front. Provider HS before*	*Bureauc. LL. before*	*Front. Provider LS*
	(1)	(2)	(3)	(4)
RD Estimate	-0.023	0.004	-0.170*	-0.152**
(s.e)	(0.048)	(0.055)	(0.092)	(0.065)
Dependent Variable Mean	0.084	0.077	0.127	0.061
Election FE	Yes	Yes	Yes	Yes
Meso Region FE	Yes	Yes	Yes	Yes
Bandwidth	0.069	0.074	0.071	0.099
Eff. Number of Obs	786	389	200	149
Number of Obs	2160	994	547	299

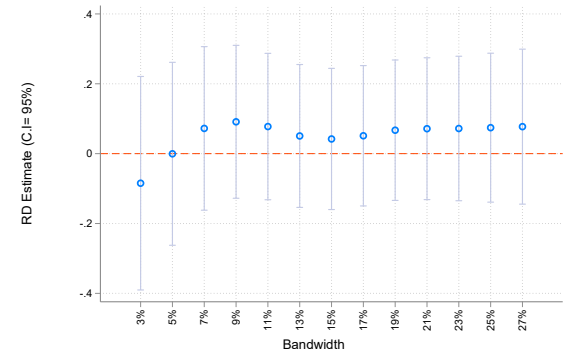
Panel C: Frontline Provider High Skill

	All	*Bureauc. Man. before*	*Bureauc. LL. before*	*Front. Provider LS*
	(1)	(2)	(3)	(4)
RD Estimate	0.055	0.139	0.270***	0.175***
(s.e)	(0.071)	(0.088)	(0.089)	(0.057)
Dependent Variable Mean	0.114	0.120	0.126	0.035
Election FE	Yes	Yes	Yes	Yes
Meso Region FE	Yes	Yes	Yes	Yes
Bandwidth	0.063	0.11	0.062	0.073
Eff. Number of Obs	455	260	182	118
Number of Obs	1334	488	547	299

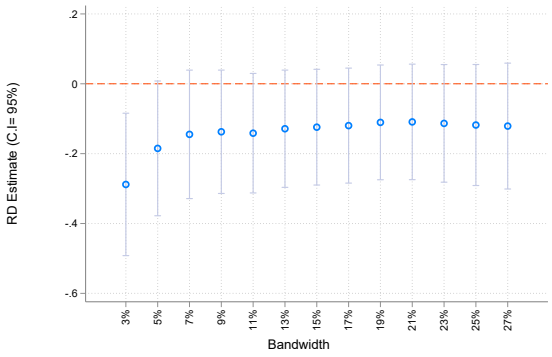
Panel D: Frontline Provider Low Skill

	All	*Bureauc. Man. before*	*Bureauc. LL. before*	*Front. Provider HS*
	(1)	(2)	(3)	(4)
RD Estimate	-0.120**	-0.213***	-0.125**	-0.012
(s.e)	(0.047)	(0.074)	(0.049)	(0.063)
Dependent Variable Mean	0.739	0.549	0.500	0.433
Election FE	Yes	Yes	Yes	Yes
Meso Region FE	Yes	Yes	Yes	Yes
Bandwidth	0.067	0.064	0.121	0.078
Eff. Number of Obs	848	187	752	205
Number of Obs	2349	547	1314	488

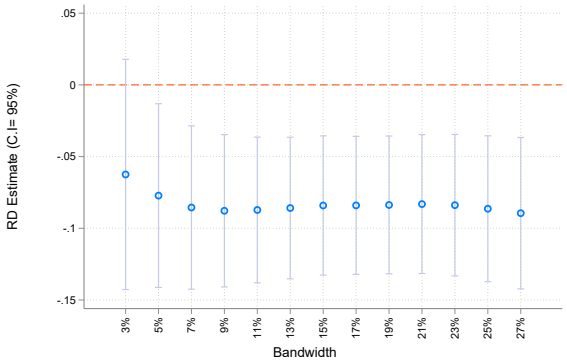
Note:. All estimates presented uses bandwidths CER-Optimal, local linear regression and triangular kernel. Robust standard errors clustered at the individual level are reported in parentheses. Column 4 refers to the subsample of candidates that were not elected in any office runs since 1998. We control for 2008 and 2012 fixed effects, and also Brazilian mesoregions when specified. ***Significant at the 1 percent level. The dependent variable mean is the mean of the individuals in control group inside the optimal bandwidth. ** Significant at the 5 percent level. * Significant at the 10 percent level.



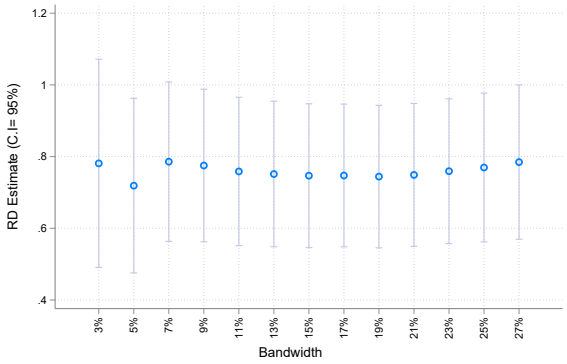
(a) Wealth sample



(b) Wage sample



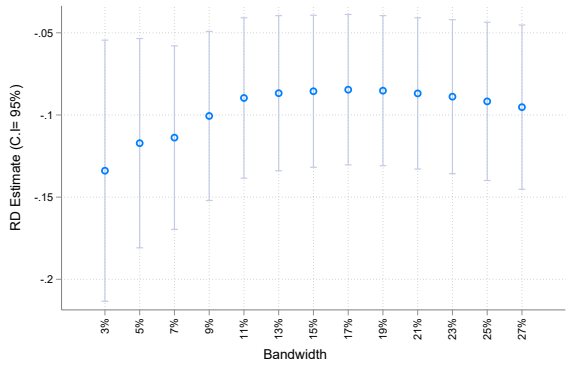
(c) Firm ownership (intensive margin) sample



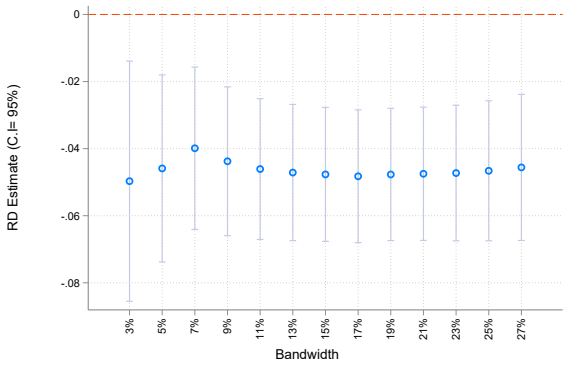
(d) Wage growth while in office

FIGURE 6: BANDWIDTH SENSIBILITY - MONETARY OUTCOMES

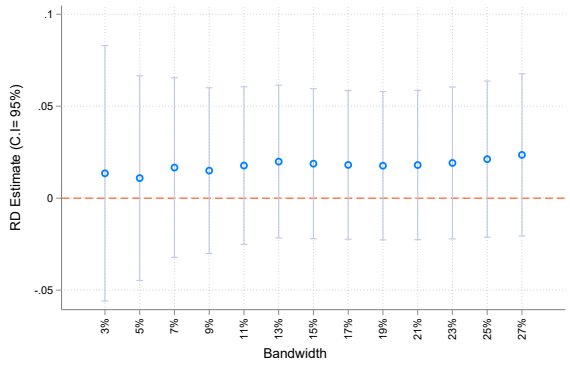
Note: Point estimate and 5% confidence interval of treatment effect with different bandwidths with the same specification as in column (3) of table 5



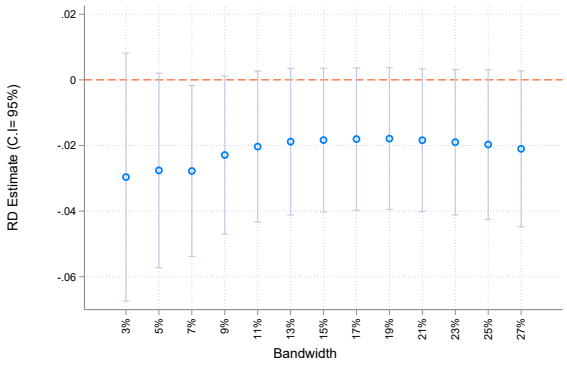
(a) Winning a mayor election in the future



(b) Run for city councilor in future elections



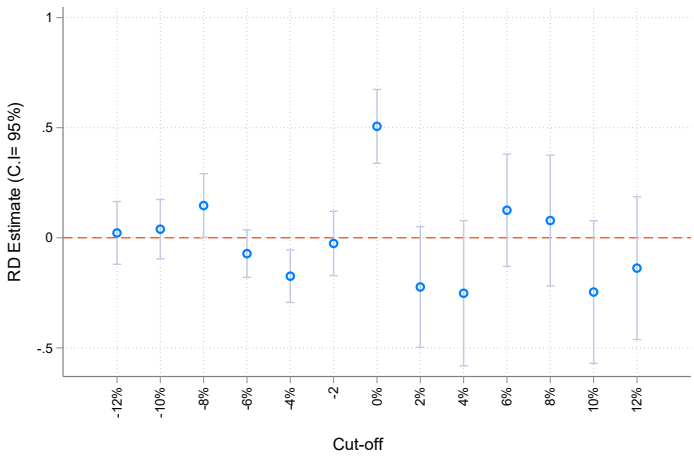
(c) Probability of being on Public formal sector



(d) Probability of being on Private formal sector

FIGURE 7: BANDWIDTH SENSIBILITY - NON-MONETARY OUTCOMES

Note: Point estimate and 5% confidence interval of treatment effect with different bandwidths with the same specification as in column (3) of table 5



(a) Wage growth while in office

FIGURE 8: CUT-OFF SENSIBILITY

Note: Point estimate and 95% confidence interval of treatment effect with the true cut-off value (zero) and false cut-off values, with the same estimation specification as in column (3) of table 5

Our estimations are also robust to different RDD specifications, such as choice of polynomial and kernel.

5 Conclusion

This work aimed to better understand politicians' careers, looking at monetary and non-monetary outcomes of winning a mayoral election. Using a large administrative source of information and building new data on mayors' wages, we were able to reconstruct the politicians' paths both in political careers and in the formal labor market. Our main finding is that the wage while in office represents a large wage growth for winners of mayoral elections when compared to the runners-up that were in the formal labor market after their loss in the elections.

In line with the literature on the incumbency effect in Brazil, winning a close mayor election harms future political outcomes. Although it does not affect state and federal elections, it reduces the likelihood of participating in and winning future municipal elections. So, winning a municipal election is not a gateway to other elective offices.

When looking at occupational status before and after winning a mayoral election, we do not find any impact on the probability of employment in the formal labor market or on the public/private sector transitions. We report evidence that winning a mayoral election impacts occupational transition within the public sector. But more studies looking at a larger window of time could contribute to a better understanding of how these transitions occur inside the public sector.

Future research on this area should look if the results are the same for other political positions, such as city councilors and state and federal deputies. Further, constructing new datasets with information for other elective positions will help to improve our understanding of the monetary incentives of pursuing a political career.

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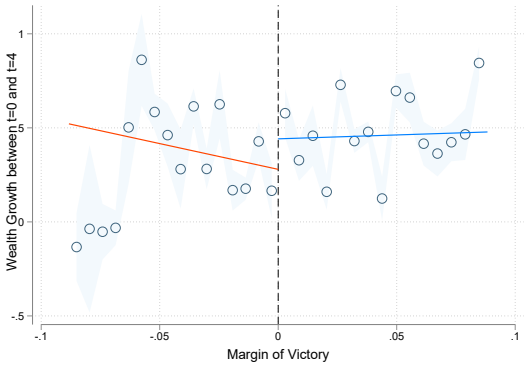
Appendix

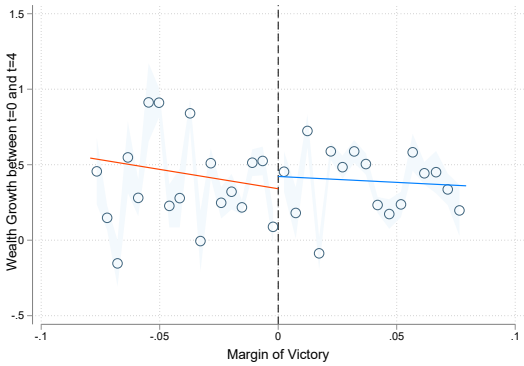
A RD Plots

(a) Not elected before

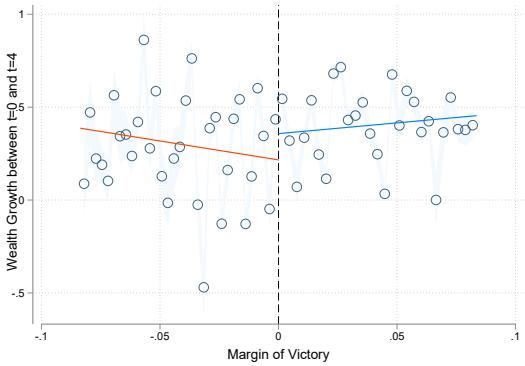


(b) Won an election before

(c) First runners

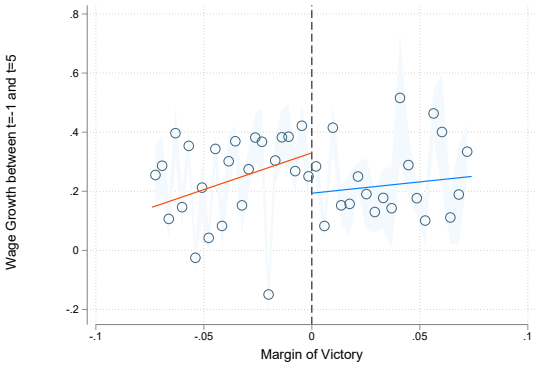


(d) Ran in an election before

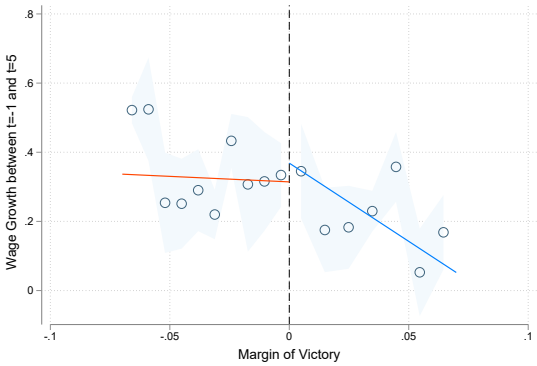


(e) Full Sample

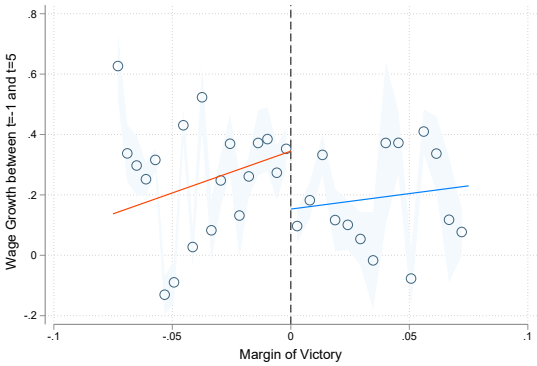
FIGURE A.1: RD PLOT- WEALTH GROWTH



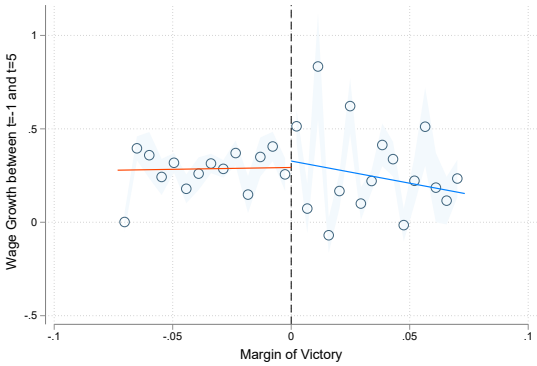
(a) Not elected before



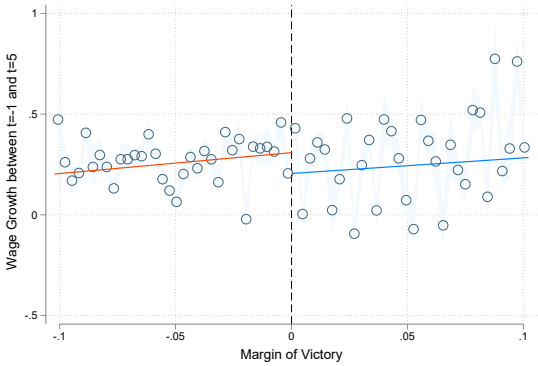
(b) Won an election before



(c) First runners

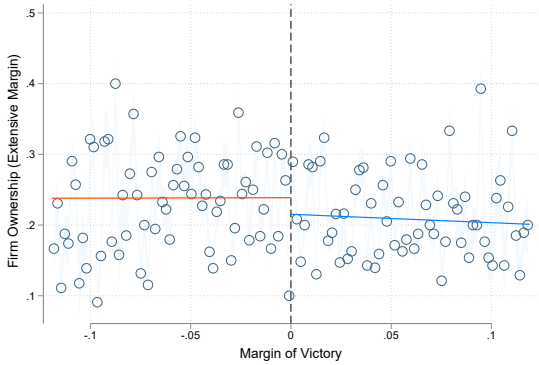


(d) Ran in an election before

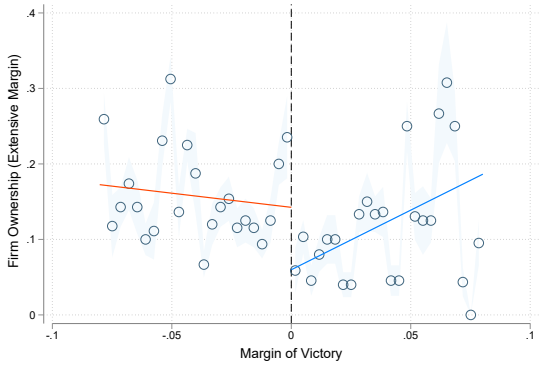


(e) Full Sample

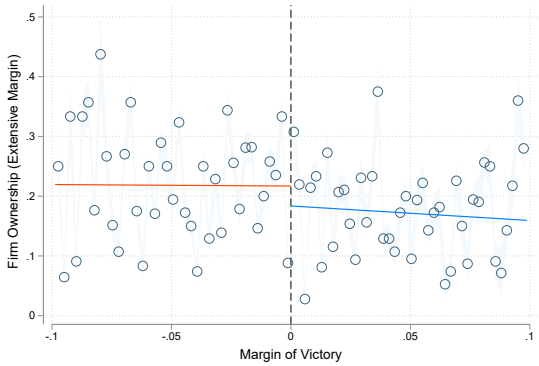
FIGURE A.2: RD PLOT- WAGE GROWTH



(a) Not elected before

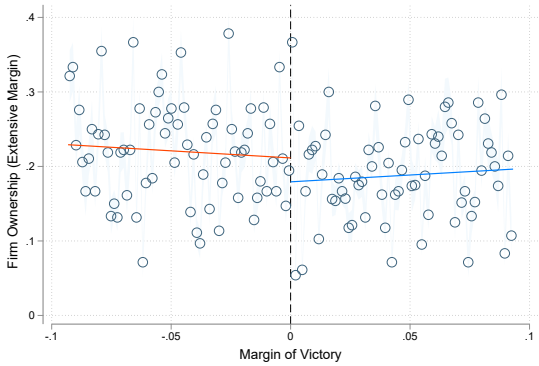


(b) Won an election before



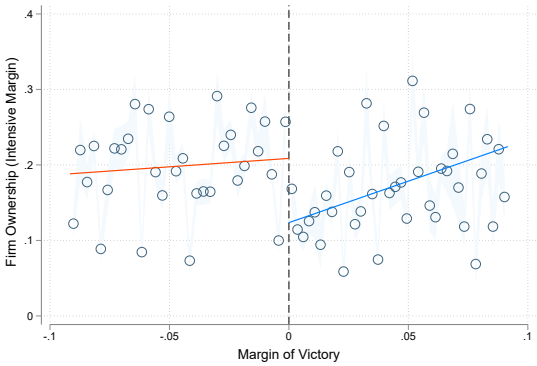
(c) First runners

(d) Ran in an election before

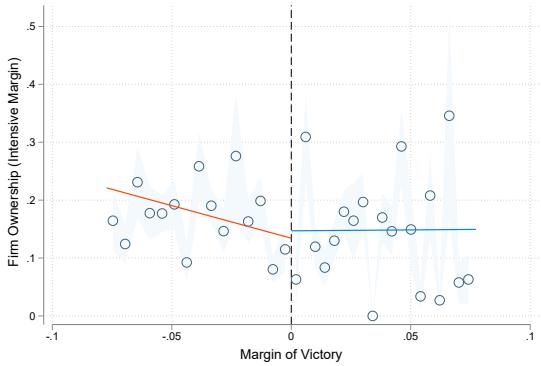


(e) Full Sample

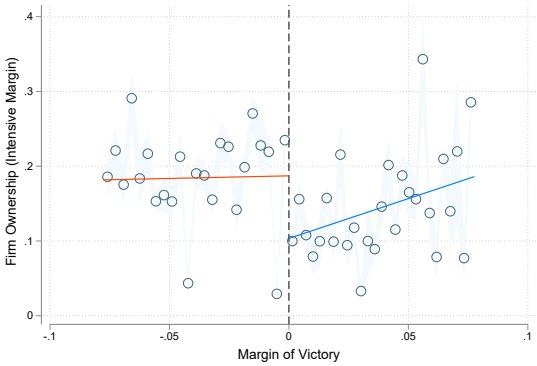
FIGURE A.3: RD PLOT- FIRM OWNERSHIP (EXTENSIVE MARGIN)



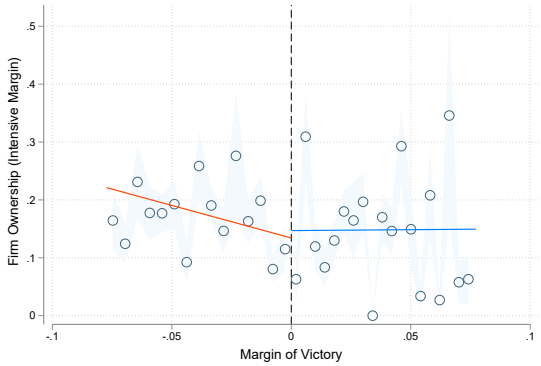
(a) Not elected before



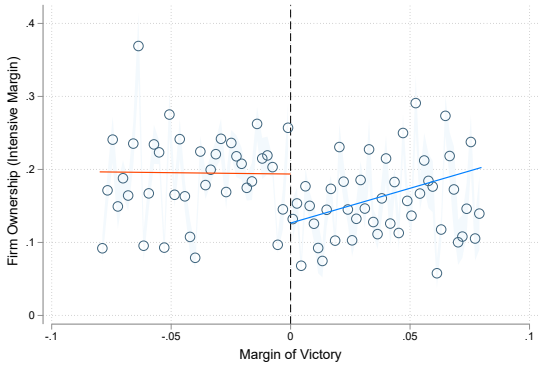
(b) Won an election before



(c) First runners

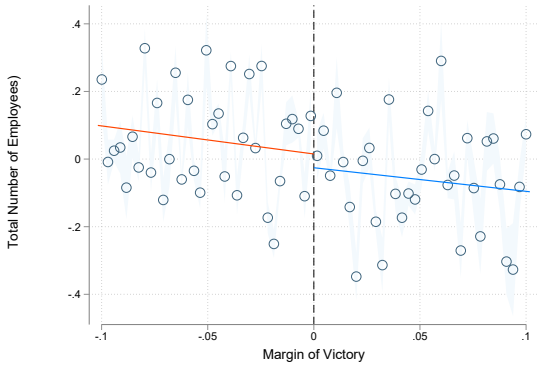


(d) Ran in an election before

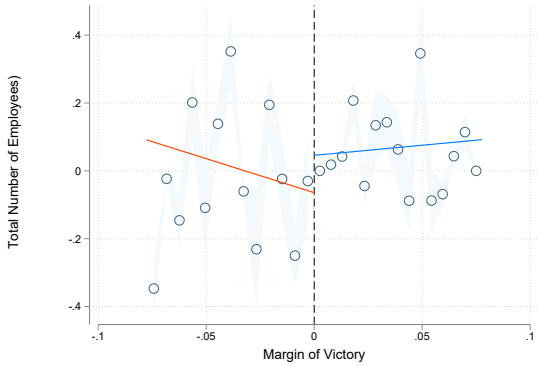


(e) Full Sample

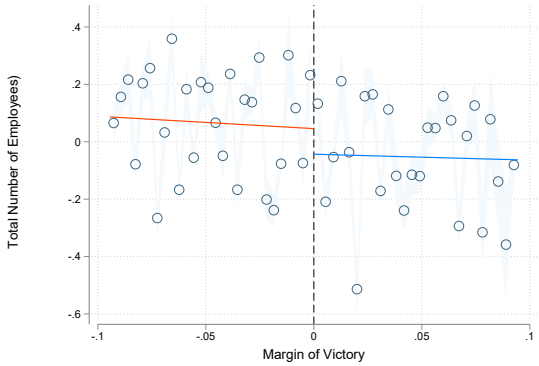
FIGURE A.4: RD PLOT- FIRM OWNERSHIP (INTENSIVE MARGIN)



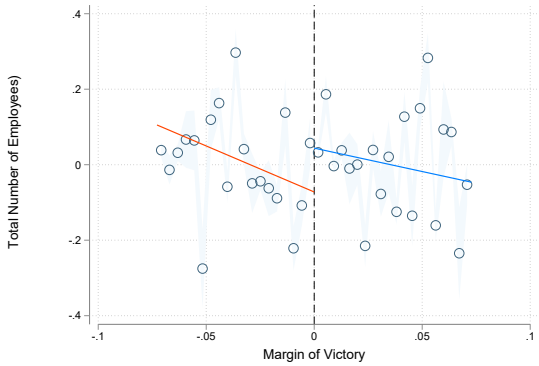
(a) Not elected before



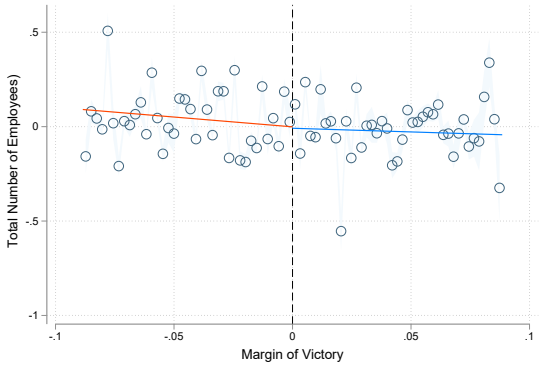
(b) Won an election before



(c) First runners

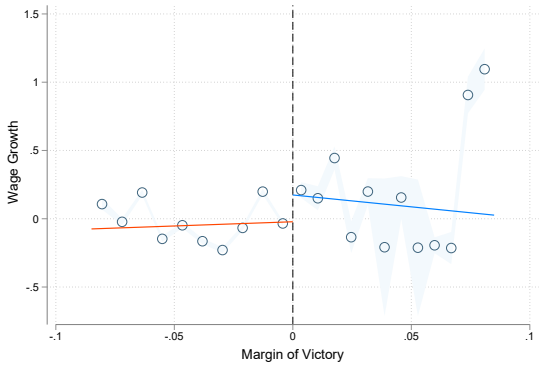


(d) Ran in an election before

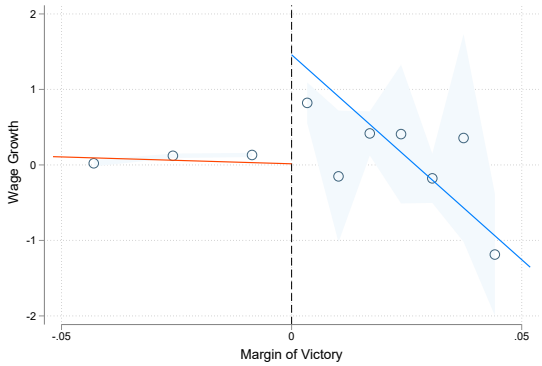


(e) Full Sample

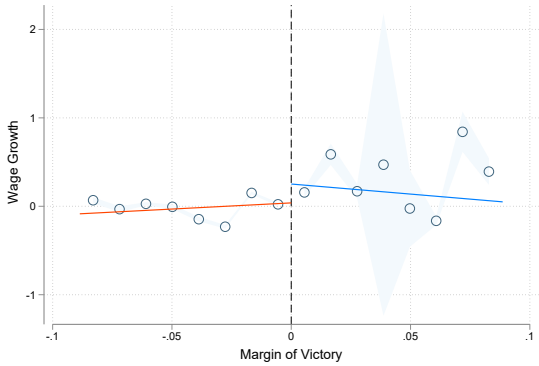
FIGURE A.5: RD PLOT- FIRM SIZE



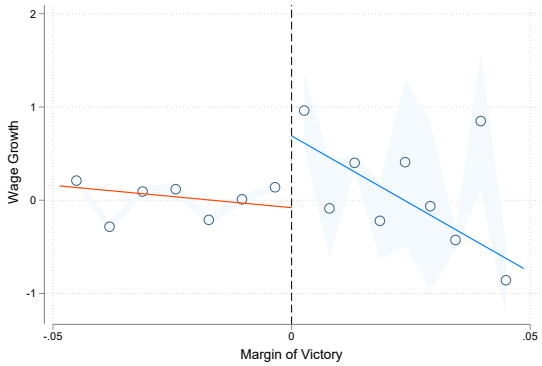
(a) Not elected before



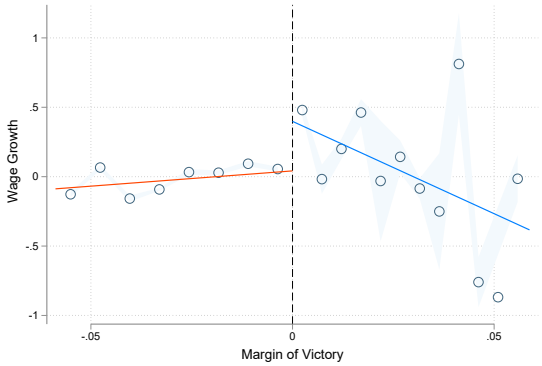
(b) Won an election before



(c) First runners

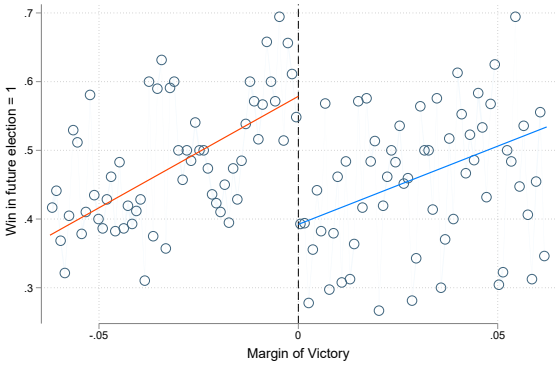


(d) Ran in an election before

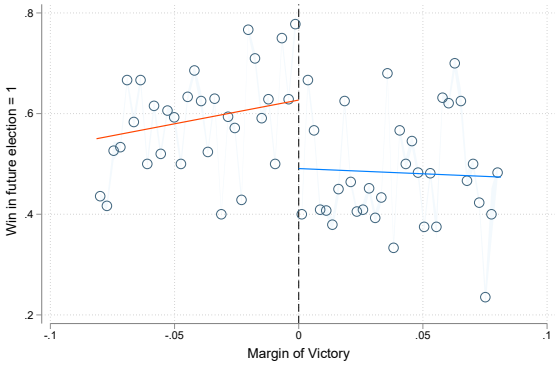


(e) Full Sample

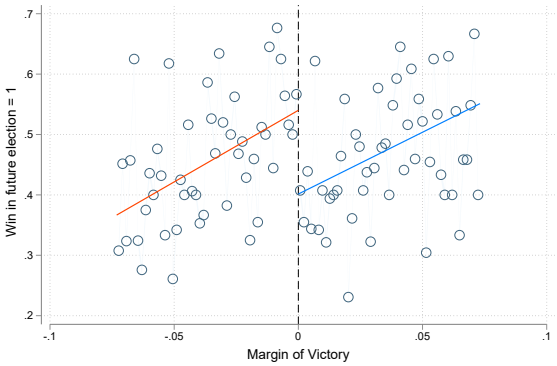
FIGURE A.6: RD PLOT- WAGE GROWTH WHILE IN OFFICE



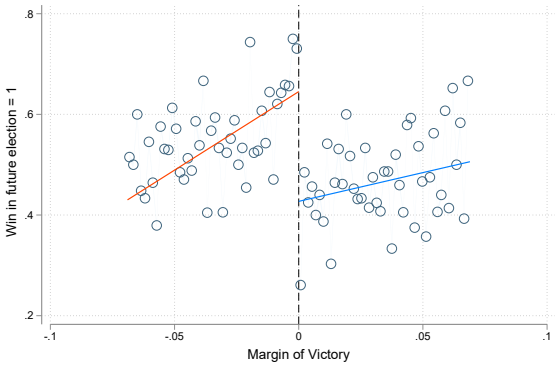
(a) Not elected before



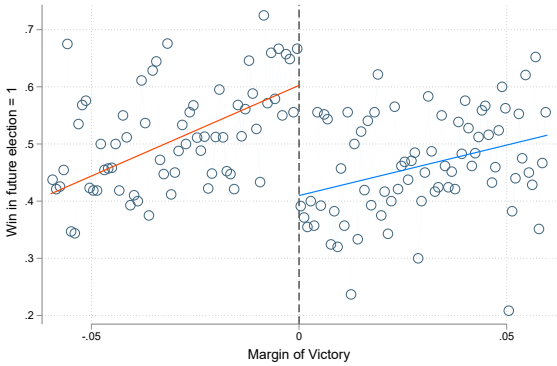
(b) Won an election before



(c) First runners

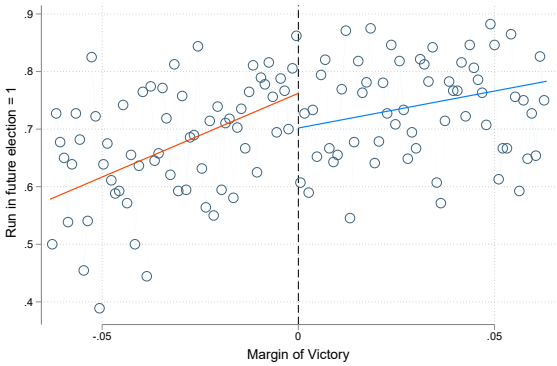


(d) Ran in an election before



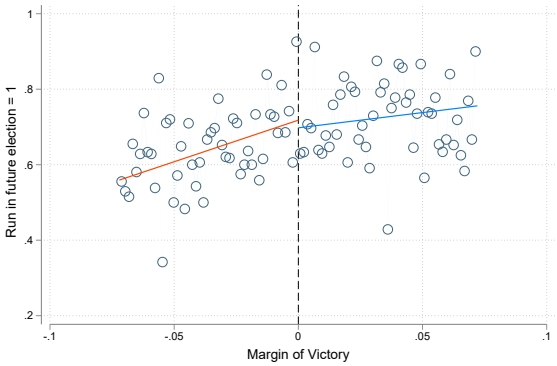
(e) Full Sample

FIGURE A.7: RD PLOT- FUTURE WIN IN SOME ELECTION



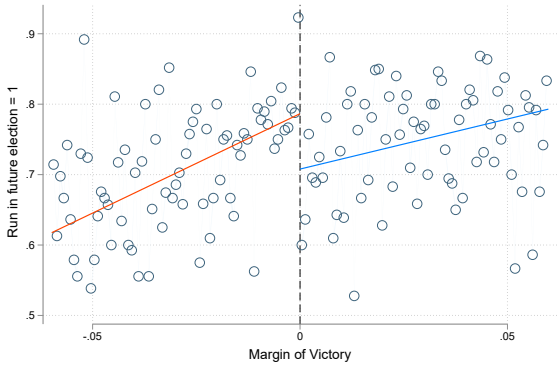
(a) Not elected before

(b) Won an election before



(c) First runners

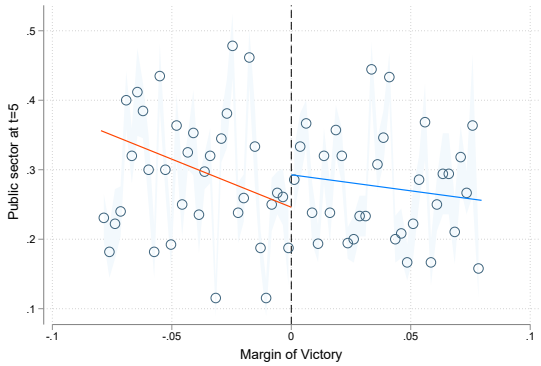
(d) Ran in an election before



(e) Full Sample

FIGURE A.8: RD PLOT- PARTICIPATION ON FUTURE ELECTIONS

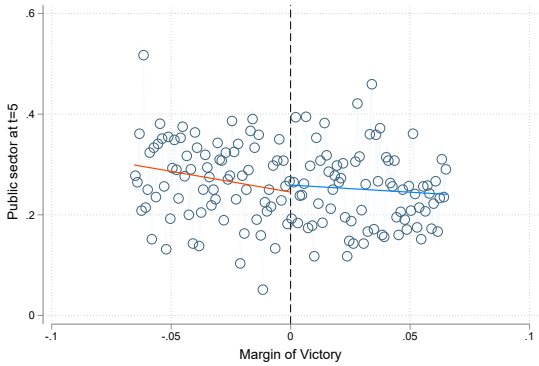
(a) Not elected before



(b) Won an election before

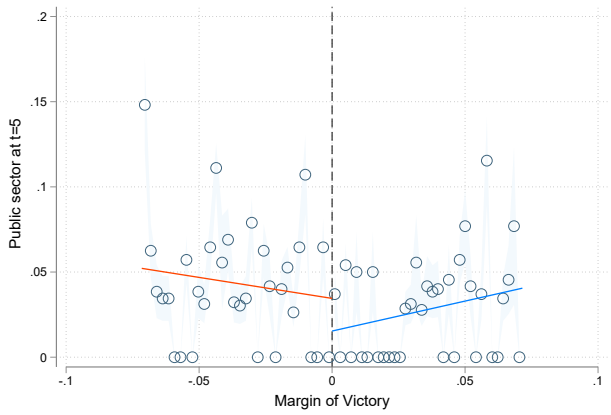
(c) First runners

(d) Ran in an election before

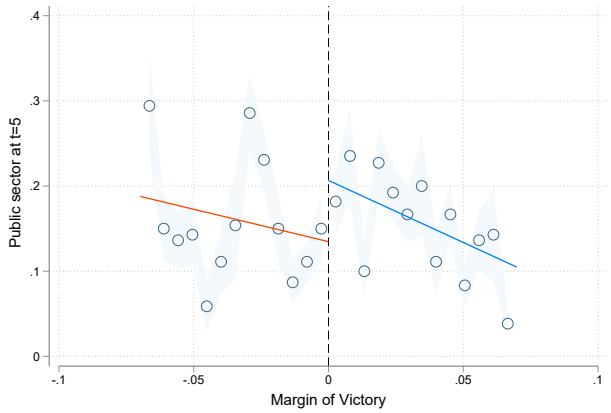


(e) Full Sample

FIGURE A.9: RD PLOT- POSITION ON PUBLIC SECTOR



(a) Private to public sector



(b) Public to private sector

FIGURE A.10: RD PLOT- TRANSITION BETWEEN PUBLIC AND PRIVATE SECTOR