Elections that Inspire: Effects of Black Mayors on Educational Attainment*

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Abstract

This paper studies the effects of the election of Black candidates as mayors in Brazil on Black students' educational choices and attainment. Using a regression discontinuity design comparing municipalities where Black candidates either won or lost the election by a small margin, we first document that Black students from municipalities where Black candidates win are more likely to enroll for the National High School Examination (ENEM), a high-stakes exam used as an admission criteria for many universities. Effects start two years after the election and persist for up to eight years. We also document positive, but much smaller effects for White students. Consistent with the effect on ENEM enrollment, Black students from municipalities where Black candidates won the election are more likely to be enrolled in universities and, in subsequent years, to graduate. Finally, exploring mechanisms, we find suggestive evidence that students' aspirations play (at least partially) an important role: (i) secondary and tertiary education are not primary responsibilities of mayors; (ii) Black mayors do not change policies that could affect our outcomes; and (iii) the effects are strong and similar for Black students from both public and private schools, while weaker for White students from public schools.

Keywords: Race; Education; Brazilian Elections; Aspirations; Discrimination.

JEL Codes: J15; D72; D91.

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1 Introduction

Racial inequality is pervasive in Brazil and many other countries. While over 55% of the Brazilian population self-declares as Black, the racial distribution of income or power in the country is far from egalitarian. When it comes to education, Black students are 15 percentage points less likely to graduate from high school than White students, and the rate of analphabetism is more than twice as large for the Black population compared to the White population (9.1 against 3.9%). The income distribution is also unequal: considering only individuals with an occupation, Black workers earn on average 57,5% of White workers' earnings (IBGE, 2019). Political racial inequality is also stark: less than 30% of elected candidates to the federal legislative branch self-declare as Black, and less than one-third of mayors in the country are Black. Reducing some of these inequalities is a constant topic of policy debate in Brazil and other countries. In particular, understanding how racial inequality in some of these domains interact may be key to reducing them.

How does political representation of the Black population impact educational choices and attainment among Black students? This paper answers this question in the context of the election of Black candidates in Brazilian municipal elections. Estimating the effect of the victory of a Black candidate is challenging due to the likely endogeneity of such victory. Indeed, municipalities where Black candidates are elected mayor are probably systematically different from municipalities where Black candidates are runner-ups—and even more different from municipalities where no Black person ran for mayor. To overcome this challenge, we use a regression discontinuity design comparing municipalities where, among the first two most-voted candidates, one identified as Black and the other as non-Black—which we call "interracial" elections throughout this paper. We then compare exclusively those municipalities that had interracial elections decided by a short margin.

Our sample includes elections from 2004 to 2016, for a total of 3,966 unique municipality-election year pairs. To identify a candidate's race, we start by using the candidate's racial self-declaration provided to the Superior Electoral Court. As this information only started being collected in 2014, we back out the racial identification of candidates from previous elections first by matching candidates that ran for office both before and after 2014 (in which case their identification is their self-declared race after 2014). For the relatively few cases of candidates who did not continue running for elected offices, we obtained candidates' races from Brazil's matched employer-employee dataset (RAIS). Throughout the study, we consider as Black all individuals identified as either *preto* ("black") or *pardo* ("mixed-race"), as is standard in Brazilian statistics and the academic literature on race in Brazil. We conceptualize race as a constructed social category (Sen and Wasow, 2016; Rose, 2023) rather than a fixed or immutable characteristic—i.e., our measure of race must be understood as a proxy for an individual's perceived social identity, and not as a biological fact.

We start by studying the effect of the election of a Black candidate in a close interracial election on the number of Black and White students who enroll in Brazil's National High School Examination (ENEM). ENEM is a high-stakes exam taken annually by millions of Brazilians, and that defines university admission for several universities in the country. Enrolling in ENEM, therefore, signals that a student aspires to increase their level of ed-

ucation, possibly by going to university. We find that the election of Black candidates as mayors increases the number of Black students who enroll for this exam by over 20% two and three years after the election. The effect is persistent and increasing even after the end of the mayor's term, suggesting that there are lasting effects from the election of Black candidates. Among White students, we also estimate positive point estimates, though mostly non-significant. This result allows us to rule out that Black mayors favor Black students by crowding out White students.

Considering that enrolling or not to take the ENEM is generally a personal decision, this result indicates that Black students in municipalities that elected a Black mayor increasingly desire to invest in their education. However, participating in the exam by itself does not guarantee an increase in education, as poor performance in it would not grant access to the university. Thus, to investigate whether electing a Black mayor causes an increase in educational attainment, we turn to higher education outcomes obtained from Brazil's yearly Higher Education Census. We document that the election of a Black candidate increases the number of Black students enrolled in the first year of a university major, starting three years after the election. It also increases graduation rates of Black students, with results concentrated seven and eight years after the election.

The progression of outcomes—positive effects for ENEM enrollment starting two years after the election, enrollment in first-year university majors three years after, and graduation four or five years after that—indicates that the increased desire to improve one's own education following the election of a Black mayor is realized through enrolling in and then graduating from university. We also document that these students are not enrolling in low-return majors, as Black students in municipalities that elected Black mayors become more likely to enroll in public universities (on average, higher quality universities) and in high-return STEM majors compared to Black students in municipalities where Black candidates lost the election by a small margin.

Regarding the research design's identifying assumptions, we document that municipalities where a Black candidate won or lost a municipal election by a small margin are extremely similar across a wide range of variables, which reassures us about the validity of the continuity assumption of the RD design. Importantly, we show that there is balance both in municipality-level and candidate-level variables. Assessing the balance of candidate-level variables is relevant given potential concerns that candidates' race could be correlated with other variables that allow a candidate to win a close election (Marshall, 2022). We show that this is not the case for a wide range of characteristics, including demographic variables, political ideology, party, and experience. Still, the effect we estimate should be understood as the effect of electing a Black candidate—this is the effect of a bundle of characteristics, most of which are elements that contribute to the identification of a candidate as Black (as discussed by Sen and Wasow, 2016).

After documenting the positive and sizeable effects of electing a Black mayor on educational choices (as measured by ENEM enrollment) and attainment (in terms of graduation from universities) of Black students from these municipalities, we turn to investigating mechanisms. On the one hand, Black mayors could be actively influencing policies, for instance, by enhancing the quality of public education in the municipality and, therefore, leading

students to obtain better educational outcomes. In Brazil, the mayor's attributes regarding education are restricted to early childhood and elementary school. This fact already suggests that a policy channel would be unlikely to explain the previous results, as they are concentrated among older students. Still, using extensive administrative data on school infrastructure, municipal expenditure on education, and students' performance in standardized exams in different stages of their education, we document that this channel is indeed unlikely. We do not find significant effects of electing Black mayors on education infrastructure or the number of teachers and other employees in municipal schools. Similarly, Black students' performance in a national standardized exam does not improve in municipalities that elected Black candidates in close interracial elections. These pieces of evidence suggest that the effects we document are not likely to be explained by policy changes.

A second possibility, more strongly supported by the data, is that the election of Black mayors shifted the aspirations of Black students through a role model effect. Following Morgenroth et al. (2015), a role model is someone who influences the objectives, motivations, and decisions of a person, by acting as a model of behavior, a representation of what is possible, or as an inspiration. More specifically, the contact with a role model with whom a person identifies (for instance, due to a shared identity such as race) may change this person's decision on important aspects of life, such as investment in education or the decision of which career to pursue, by giving to this person an example of a feasible path. Apart from ruling out a set of alternative mechanisms, we show that the effects we obtained for ENEM enrollment are equally strong among Black students from private and public high schools. Students from private schools are unlikely to be directly affected by the mayor's decision, further suggesting that the aspirational channel may play a role.

This paper is related to different strands in the literature. First, it contributes to the literature on race and elections. There is considerable literature on this topic for the United States, but not for Brazil. This paper is among the first to use data on candidates' racial identification in Brazil to study the causal effect of electing Black candidates. For the US, while there is somewhat extensive literature studying how elections involving Black candidates differ from other elections (for instance, Washington (2006) shows that voter turnout increases in elections involving Black candidates),[1] fewer papers consider the effects of electing a Black candidate—which is the main contribution of this paper.[2] This paper contributes to this literature in at least three ways. First, it provides a more credible causal identification strategy by using a regression discontinuity design in close interracial elections for a relatively large sample of elections. Second, it is among the first papers to present causal

[1] Vogl (2014) shows that this difference in turnout happens even in close elections. Although this difference could potentially be a concern in our setting, we show that the elections in which a Black candidate wins by a short margin are not significantly different from the ones in which a Black candidate loses by a short margin in the case of Brazil. And, considering specifically the matter of turnout, this is unlikely to be an issue since voting in Brazil is mandatory for citizens above 18 years old.

[2] Hopkins and McCabe (2012), which show that the election of a Black candidate as mayor in the US leads to policies that are indistinguishable from the ones in cities not governed by a Black mayor, and Nye et al. (2015), that show that the election of a Black mayor increases employment among the Black population. Broockman (2013) performs a correspondence study on US legislators and finds that Black politicians are more likely than White politicians to respond to requests from Black citizens, even if they are not from the politician's district.

estimates of the effect of the election of Black mayors in Brazil, a particularly relevant context given the intense racial inequality in the country and the large Black population (56% of the country's population according to the 2022 Census). To the best of our knowledge, the only other paper that studies the effect of electing Black candidates in Brazil is Rabelo et al. (2022). The authors study the effects of the election of Black candidates on the composition of municipal managers and on policies implemented by the mayor.[3] Third, differently from the papers studying the topic in the US, it considers the channels behind the results obtained—and, in particular, argues that they can be explained by a role model effect.[4]

There is also a large literature studying how the election of some underrepresented groups affects a variety of outcomes. For instance, when it comes to gender, several papers document how female politicians lead to different outcomes, both in Brazil (Brollo and Troiano, 2016; Arvate et al., 2021; Bruce et al., 2022), and other contexts (Beaman et al., 2009, 2012). Apart from gender, there are papers studying the religion of candidates (e.g., Bhalotra et al., 2014), as well as ethnicity (Amodio et al., 2019). Yet, as mentioned before, the racial dimension has not been studied, and this paper fills this important gap.

Second, the paper is related to the literature that evaluates policies aimed at increasing access to higher education, particularly among Black Brazilians. Several important papers have shown that policies such as affirmative action and centralized admissions affect the composition of students in universities (Mello, 2022; Otero et al., 2021; Estevan et al., 2019). While this type of direct policy is fundamental to increasing access, this paper documents that increasing political representation also indirectly increases access to universities for Black students, suggesting that political representation should be taken into consideration in debates regarding access to higher education.

Third, by documenting that shifts in aspirations are likely a relevant channel explaining the results, the paper contributes to the literature on role models and aspirations. Part of this literature shows evidence of role models in politics (Ajzenman et al., 2023; Ajzenman, 2021) and the media (Riley, 2022; Jensen and Oster, 2009; Chong and La Ferrara, 2009; La Ferrara et al., 2012), but does not consider how shared identities between role models and role aspirers impact outcomes. In our case, we show that the effects of the election of Black candidates are concentrated on Black students, who potentially identify with the mayor. We are very closely related to papers showing how female politicians increase aspirations and political engagement of women (Beaman et al., 2012; Arvate et al., 2021), as well as change voter behavior (Beaman et al., 2009). Since the seminal work of Beaman et al. (2012), a large and important literature on how female politicians impact the aspirations of female voters developed. Nevertheless, this type of phenomenon has not been studied in the context

[3] Rabelo et al. (2022)'s paper complements the analysis in this paper since it shows that the election of Black candidates as mayors in a close municipal election has no effect on policies directed towards the Black population of the municipality, nor on the racial composition of municipal managers, at least on the short run. Therefore, any result obtained in this paper cannot come from policy or administrative changes made by the mayor, but more likely from a role model effect.

[4] While Broockman (2013) discusses a potential channel that differs Black politicians from White politicians, he does not discuss how this difference may cause different outcomes when a district elects a Black candidate.

of race, which is particularly relevant given the intense inequality and lack of representation also in this dimension.

Indeed, when it comes to race, the literature on role models is less extensive. There is considerable evidence that the matching of same-race students and teachers benefits Black students (Dee, 2005; Fairlie et al., 2014; Gershenson et al., 2022; Edmonds, 2022), but most studies—with the notable exceptions of Gershenson et al. (2022) and Edmonds (2022)—do not attempt to separate the channels through which this effect may be operating. Similar results are obtained on health by Alsan et al. (2019), who show that Black patients are more likely to go to medical appointments and undergo invasive surgical procedures when treated by Black doctors. Nevertheless, to the best of our knowledge, this paper presents the first evidence of Black role models in the context of politics.

Finally, from a policy perspective, understanding how political racial representation affects educational choices and attainment is particularly valuable. The high level of racial inequality in Brazil—in education in particular—is a problem in itself and may have negative and lasting consequences for economic development.[5] The results in this paper suggest that one positive consequence of increasing the political representation of Blacks is to increase the educational attainment of this demographic group, which is a relevant effect to take into account in debates regarding racial quotas in politics. Our results also highlight the importance of shifting aspirations. Indeed, the fact that the effects we obtain are lasting and increasing even after the end of a Black mayor's mandate suggests that such a shift is persistent, reducing the inequality in aspirations that may lead to an equilibrium of low investments which reinforce racial inequalities (Genicot and Ray, 2017, 2020).

The remainder of this paper is organized as follows: in the next section, we present the data and Brazil's institutional background; section 3 discusses the empirical methodology; section 4 shows the paper's main results; section 5 discusses the channels that may explain the results; finally, section 6 concludes.

2 Background and Data

The objective of this paper is to study what happens when a Black candidate wins a municipal election in Brazil. Municipalities are the smallest political-administrative unit in Brazil for which there are autonomous elected governments. Elections take place every 4 years to elect a mayor (the chief of the municipalities' executive branch). For the purpose of this paper, we consider results of four consecutive municipal elections: 2004, 2008, 2012 and 2016. For municipalities with less than 200 thousand voters, elections happen in a single round, with simple plurality rule. For larger municipalities, mayors are elected by a majority rule with run-off. We use data from several different sources to study the effects of the election of

[5]For instance, Hsieh et al. (2019) discuss how the misallocation of talent due to racial and gender discrimination may have substantially reduced the economic output of the United States between 1960 and 2010, while Cook et al. (2021) argue that systemic racism and sexism hinder innovation at every stage of this process, which has negative consequences not only for the individuals who directly suffer from these phenomena but also to the economy as a whole.

Black mayors, and divide the data description in three blocks: electoral data (including the description of how we define a candidate's racial identity, and the explanation for choosing these four election rounds); educational data (our outcomes); and administrative data from a large set of sources, which are used to study mechanisms and in validity tests.

2.1 Electoral Data. Electoral data comes from the Tribunal Superior Eleitoral (TSE), the Brazilian Superior Electoral Court, the highest body of the country's electoral justice system. We used data from the 2004, 2008, 2012, and 2016 municipal elections. The data obtained is on the candidate's level and includes information about candidates' characteristics (gender, age, occupation, political party, etc), as well as information about the election (number of votes obtained by each candidate, who was elected, etc).[6]

A key variable in our analysis is candidates' racial identification. TSE started collecting information on self-declaration of race in the 2014 election. Thus, data on candidates' self-declared race is not available for the 2004, 2008, and 2012 elections. We circumvented this issue by imputing candidates' race based on the information reported in the 2014, 2016, and 2018 elections, in this order. If the candidate's race was not available in these elections, we also searched for it on RAIS, Brazil's matched employer-employee dataset, to impute the candidate's race.[7] In both datasets, racial identity is chosen (as is standard in Brazilian statistics) from one of the five following categories: *branco* (white), *indígena* (indigenous), *amarelo* ("yellow", term used to refer to people of Asian descent), *preto* (black) or *pardo* (mixed-race or "brown"). Throughout this study, we consider as Black those identified as either *preto* or *pardo*, in line with Brazil's official statistics and the academic literature (e.g., Gerard et al., 2021). We also aggregate information on white and Asian individuals—results are robust to excluding the Asian group, as it corresponds to a very small share of candidates.

Considering these procedures, our final dataset contains 3,966 interracial elections (on average, the dataset contains 990 municipalities per election year, or approximately 20% of Brazilians municipalities each year). The racial distribution of winners and runner-ups in these elections is displayed in Table 1. The number of interracial elections won by white candidates or black candidates is roughly the same— specifically, out of the 3966 elections, 2046 were won by a White or Asian candidate, against 1920 by Black candidates. The elections won by White or Black candidates are also distributed widely across Brazil's territory, as demonstrated by figure 1 (which only shows the subset of elections decided by a margin shorter than 15 percentage points). The figure shows that there were interracial municipal elections in all 26 Brazilian states during our sample period. States in the North

[6]We do not include the 2020 election in the sample due to the impossibility of studying long-term outcomes. Moreover, in 2020, TSE instituted a rule mandating parties to allocate their public funds as well as radio and TV advertising time proportionately to the number of Black candidates in the party, raising concerns related to possible strategic changes in racial declarations in the 2020 election.

[7]We performed a validation exercise for the 2016 election and the RAIS data to check the similarity of racial information in these two sources. We report the results of this validation exercise in Appendix Tables A.3 and A.4. In more than 75% of cases, the racial classification of the candidate matched in the two datasets, even though electoral data reports self-declared race, while RAIS reports hetero-identified race (by the employer). In Appendix Table A.5, we also present the number of candidates by the source of the race variable, showing that the vast majority of cases in our data are self-reported data to the Electoral Justice.

and Northeast have a relatively larger proportion of interracial elections, while states in the South had the smallest incidence of this type of election. Nevertheless, the figure also shows that the spatial distribution of elections won by a Black candidate is similar to the spatial distribution of elections won by a White candidate. This is important when we consider the identification assumptions of the regression discontinuity design method, which will be discussed more deeply in the next section.

Table 1: Distribution of interracial municipal elections by candidate's racial classification, Brazil (2004-2016)

Elected \ **Runner-up**	Asian	White	*Pardo*	*Preto*	Total
Asian	-	-	39	6	45
White	-	-	1881	120	2001
Pardo	27	1767	-	-	1794
Preto	0	126	-	-	126
Total	27	1893	1920	126	3966

Notes: The table displays the distribution of results, in terms of candidates' racial classification, of interracial municipal elections in Brazil from 2004 to 2016.

2.2 Educational Data. We are interested in studying the effect of the election of a black mayor on the educational path. for this purpose, we use annual data from Brazil's National High School Examination (ENEM) from 2010 to 2019. ENEM is an annual exam taken by millions of Brazilians, most of whom are high school students. All federal universities in the country use the exam – and many other public and private universities – as the main (in most cases, unique) criteria to decide college admissions. It is also an alternative way of obtaining a High School diploma for students who abandoned school. Therefore, ENEM is an important, high-stakes exam for Brazilian students, representing the chance to have a superior education (either by entering university or signaling high school completion).

The variable of interest in this study is the number of (black or white) people residing in each municipality who enroll for ENEM in each year. The choice to enroll for the exam is made strictly by each individual. Hence, we expect that the decision to take or not the test depends on the individual's belief about his chance of succeeding in a more academic path (college).

We also use microdata from the Higher Education Census from 2010-2019. The dataset contains individual-level information on all students enrolled in tertiary education. For our purposes, the data includes race and municipality of birth, student status (freshman, graduated, etc), program, and some university characteristics. Therefore, we are able to construct the total number of (black and/or white) students born in each municipality enrolled (by status) in an university. We can also look at enrollment by program type (e.g, STEM careers).

2.3 Other Data. Finally, we use administrative and socio-economic data at the municipality level. Data on municipalities' gross domestic product (GDP), alphabetization rate, and population are obtained from Brazil's Institute of Geography and Statistics; municipal annual expenditure by function is obtained from the System of Accounting and Fiscal Information of the Brazilian Public Sector. We also use data from Brazil's Survey on Basic Municipal Information (MUNIC) to construct an indicator for whether each municipality adopted policies on racial discrimination. These data are used to test the regression discontinuity's hypothesis, or to assess mechanisms in section 5. See Appendix Table A.1 for a list of variables and sources.

3 Empirical Strategy

The main challenge in estimating the causal effect of the election of Black mayors on educational outcomes resides in the probable endogeneity of the victory of a Black candidate. Indeed, municipalities in which a Black candidate is successful are probably systematically different from municipalities in which Black candidates are not successful, and even more different from municipalities in which no viable candidate is Black. In Appendix Table A.2, we shoe that this is indeed the case: among all municipalities that had an interracial election in our sample, those in which a Black candidate was elected are systematically different than those were a Black candidate lost. For instance, municipalities electing Black candidates are more likely to elect younger and more left-leaning candidates. Therefore, a simple comparison of outcomes between municipalities that elected Black candidates and the remaining municipalities would most certainly yield biased estimates for this causal effect.

To deal with this problem, we use a regression discontinuity (RD) design, comparing close interracial elections, where a Black candidate either won or lost the election by a short margin against a White candidate. Intuitively, the idea behind this method is that these two groups of municipalities (and winning candidates) should be similar across all other characteristics correlated with the outcomes of interest, i.e., there should be no other discontinuities at the winning threshold that are relevant to educational outcomes. The key identifying assumption, in this case, is that the expected value of potential outcomes of municipalities that elected or not a Black candidate as mayor are continuous at the vote margin threshold.

Formally, let $M_{it} \in [-1, 1]$ be the difference in vote share between a Black and White candidate in an election at municipality i in year $t \in \{2004, 2008, 2012, 2016\}$ in our sample. Note that, by convention, a Black candidate has won the election when $M_{it} \geq 0$. We consider a local linear regression specifications, for municipalities with $M_i \in [-h, h]$ for some bandwidth h, of the form:

$$Y_{i,t+k} = \alpha + \beta_k B_{it} + \gamma M_{it} + u_{i,t+k} \tag{1}$$

where $Y_{i,t+k}$ is an outcome of interest for municipality i, k years after the election that happened at year t; B_{it} is an indicator equal to one if the election at municipality i and year t was won by a Black candidate; and $u_{i,t+k}$ is an idiosyncratic error. We are interested in the

parameter β_k, the RD treatment effect—i.e., the average effect of electing a Black candidate k years after the election for a municipality-election year pair at the threshold $M_{it} = 0$.

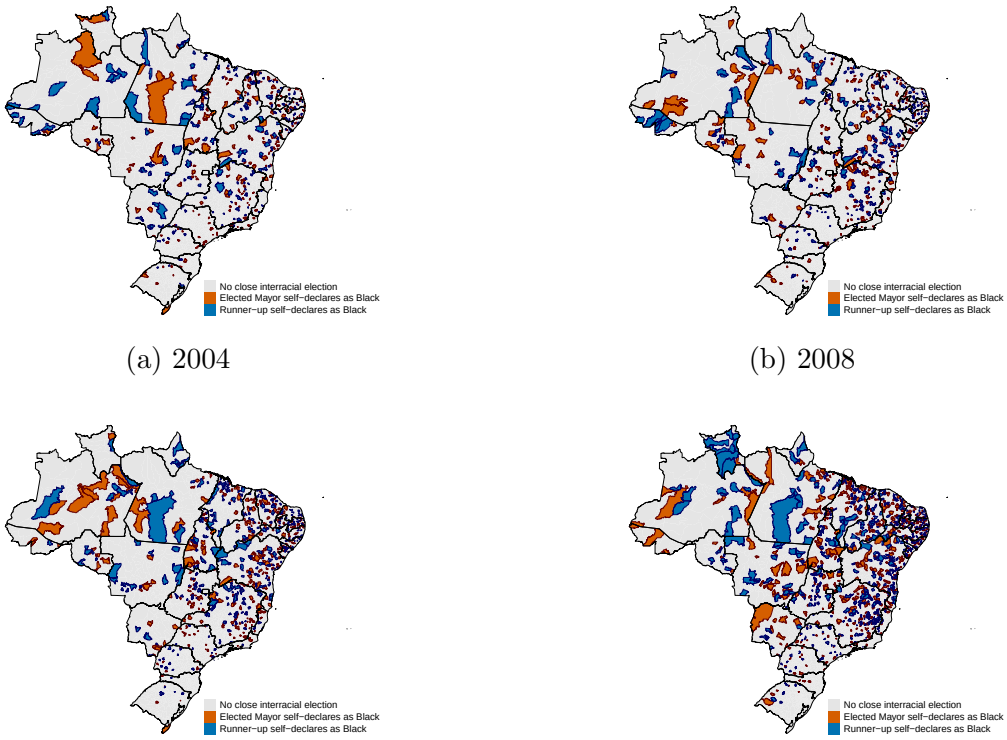
For estimating the parameter β_k, we implement the estimator of Calonico et al. (2014), and report both the standard and bias-corrected estimates and standard errors. For most of our empirical exercises, we pool the data for all for election years, and run separate regressions Bandwidths are also computed using the bandwidth selection method of Calonico et al. (2014). In our main results, we weigh observations using a Triangular Kernel and include election-year fixed effects, but also report results with other Kernel choices, different bandwidths, and no fixed effects in the Appendix (results are highly robust to all of these specification choices). Finally, standard errors are clustered at the municipality level, to account for potential auto-correlation in the errors for the same municipality in different election years.

3.1 Validity of Empirical Strategy Under the key identifying assumption of continuity of the expectation of potential outcomes at the winning vote threshold, we can identify the RD treatment effect, the effect of electing a Black mayor for municipalities that are exactly at the threshold $M_i = 0$.

This continuity assumption has two main testable implications: first, it must be that municipalities with a close interracial election won by a Black candidate (treated) and municipalities with a close interracial election won by a White candidate (control) do not exhibit any discontinuity in pre-treatment variables. To show that this is indeed the case, we conducted a series of balance tests on both municipal and candidate-level variables. These tests are shown in Figure 2, which shows that the vast majority of variables are indeed continuous at the threshold. Figure 1 also displays the geographical distribution of close interracial elections in Brazil, showing that they are both widely distributed across the country (having happened in all states in all years we consider) and that treated and control municipalities have similar spatial distributions. Moreover, in every table of results, we present a "placebo" test of the effect of electing a Black mayor on the outcome one year *before* the election. We document that electing a Black mayor has no significant effect on the vast majority of pre-treatment outcomes. This, alongside with the lack of meaningful discontinuities across the wide range of variables presented in Figure 2, reassures us of the validity of the RD design.

The second testable implication of the RD identification assumption is that there cannot be a perfect sorting around the threshold, i.e., municipalities cannot perfectly manipulate whether they will be treated or control. Theoretically, we do not expect such manipulation to occur: since municipal elections in Brazil are very competitive, it is hard to predict results in advance, especially in close elections. Therefore, no candidate can know for sure if he or she will win or lose the election. Despite this theoretical prediction, we test for manipulation in the data following Cattaneo et al. (2020). In our test, the null hypothesis is that the density of the running variable is continuous at the cutoff (specifically, that the density of candidates who self-declare as black is continuous for candidates that won and lost close elections). Performing the test with our data, we obtain a p-value of 0.7668, i.e., we do not have evidence that it is possible to manipulate the side of the cutoff. This result can be seen graphically in Appendix Figure A.1.

Figure 1: Geographic distribution of close municipal interracial elections



(a) 2004 (b) 2008

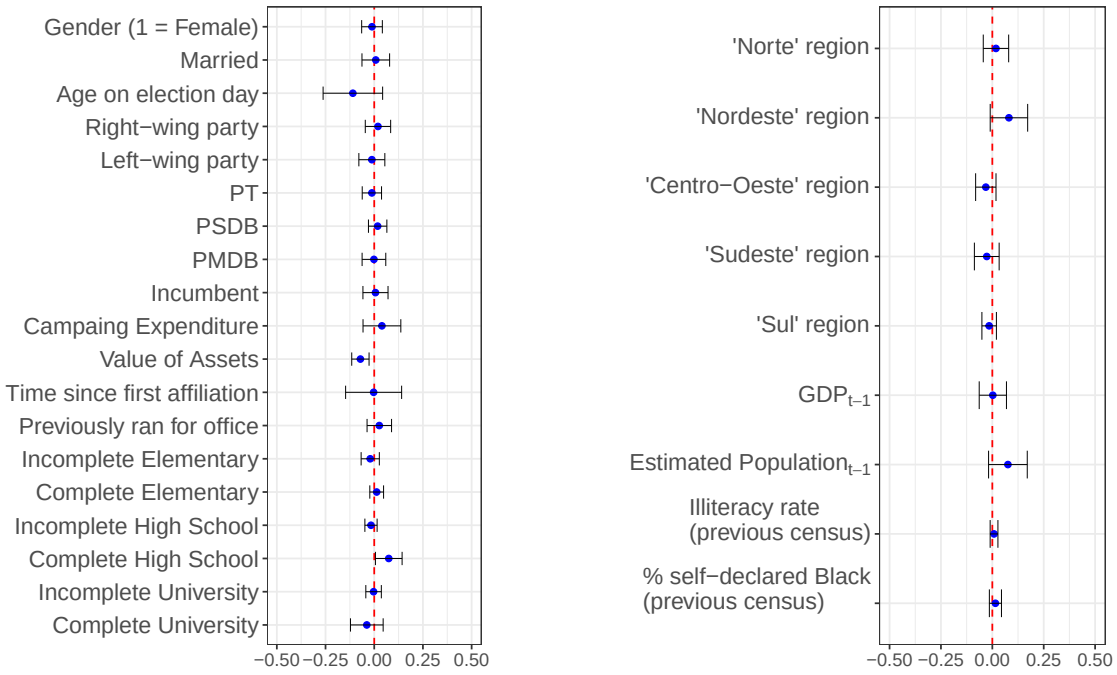
(c) 2012 (d) 2016

Notes: The figures shows the spatial distribution of interracial municipal election across Brazil's territory. We focus on close elections, defined in these figures as the ones in which the margin of victory for either candidate is less than 15 percentage points.

Finally, in close-election RD designs that condition results on a candidate's characteristics—as is the case in this paper—a relevant concern is that there could be other candidate's characteristics, correlated with the characteristic of interest (race), that work as compensating differentials to allow a candidate with the characteristic of interest to win (Marshall, 2022). For instance, if voters, on average, discriminate against Black candidates, a Black candidate who wins a close election could be systematically different from White candidates who win these elections, and our specification would identify not the effect of race but rather of these compensating differentials. For this reason, what we identify is the effect of electing a Black mayor—not the effect of race itself, as close elections do not (as-if) randomly assign race.

Yet, the evidence on the left-hand side panel of Figure 2 suggests that the race of a winning candidate is indeed uncorrelated with a vast array of other potentially relevant characteristics: Black candidates who win close elections are not differently likely than their White counterparts of being female, married, or belong to specific parties. Moreover, Black and White candidates who win close interracial elections are equally likely to be incumbents, have similar campaign expenditures, similar political experience (as measured by time since

Figure 2: Discontinuities on baseline variables



(a) Mayor's baseline characteristics

(b) Municipality's baseline characteristics

Notes: The figures show the estimated discontinuities and 95% confidence intervals on baseline variables between treated and control municipalities, using the local linear regression method from Calonico et al. (2014). Continuous variables were standardized. Variable descriptions can be found on Appendix Table A.1.

their first affiliation to a political party and by having previously run for office), and have similar levels of education. Therefore, we can rule out that the effects we estimate derive from several potential confounders, including candidates' political parties and ideologies.

Naturally, there could still be other unobservable characteristics correlated with race that take part in the effect we estimate. For this reason, we intentionally define our parameter of interest as the effect of electing a Black candidate. This is the parameter of interest for a couple of reasons. First, from a policy perspective (for instance, to inform policies incentivizing Black politicians to run for mayor), we would indeed be interested in understanding the effect of electing a Black candidate, with all characteristics that this involves. Our setting allows us to estimate precisely this effect. Second, given that a winning candidate's race is uncorrelated with several potential confounders, it becomes increasingly difficult to think of other characteristics that would act as a compensating differential and are not part of what makes a candidate be identified by citizens as Black. Indeed, following Sen and Wasow (2016), we conceptualize race as a "bundle of sticks", i.e., a socially constructed category that encompasses several elements (one of which might be skin color). Thus, under this conceptualization, we can be confident that we are identifying the policy-relevant effect of electing a Black Mayor, and—given the lack of correlation between the winning candidate's

race and several potential confounders—that this effect is approximately the effect of the bundle of characteristics that identify a candidate as Black.

4 Effects of Black Mayors on Education

This section presents the main results of the paper. We start by presenting the effect of the election of a Black mayor on the enrollment to Brazil's National High School Examination (ENEM). We then discuss higher education outcomes.

4.1 ENEM enrollment Do Black mayors affect the educational choices of students from their municipalities? We start by considering Black and White students' enrollment to Brazil's National High School Examination (*Exame Nacional do Ensino Médio*, ENEM). ENEM is an annual exam organized by Brazil's Federal Ministry of Education and taken yearly by millions of Brazilians, most of whom are high school students. The exam is used by all federal universities (and several other public and private universities) as an admission criterion. For most of our sample period, it could also be used by high school dropouts to obtain a diploma for this level of education. Therefore, ENEM is a high-stakes exam that represents the chance to have a better education (either by entering university or by completing high school).

Importantly, the decision to take this exam is generally made by each student personally. A student will choose to take the exam if the expected benefits of doing so outweigh the costs; thus, if the election of a Black candidate leads to changes in the beliefs on the returns to education of young students who identify with this candidate, then we would expect an increase in ENEM enrollment after such an election.

Table 2 shows the estimates for the effect of the election of a Black mayor in a close interracial election on ENEM enrollment of Black and White students who reside in the municipality in the following years. Outcomes are in logs. All tables of results in this paper follow a similar pattern: for each outcome, we display RD estimates (computed following Calonico et al. (2014) as discussed in the previous section) for effects from one year before ($t-1$) to eight years after ($t+8$) the election of interest. Since mayors in Brazil have mandates of four years, we are capable of studying both short-term (within the mandate) and long-term (after the mandate) effects. For each outcome and number of years after/before the election, we present both the standard RD estimate and the bias-corrected estimate with robust standard errors (in all cases, standard errors are clustered at the municipality level).

Table 2 shows that, for Black students residing in the mayor's municipality, the election of a Black mayor causes a significant and large increase in ENEM enrollment, starting two years after the election. These results can also be seen graphically in Appendix Figure A.2, which show RD plots of ENEM enrollment by Black students for the same years. The results are robust to several bandwidths and other specification choices (see Appendix B). For the first year after the election, the estimate is also positive, but smaller and non-significant. Before the election, estimates are also non-significant, reassuring us about the validity of the

Table 2: Effect on ENEM Enrollment, RD Estimates

	Panel A: Black Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.18	0.16	0.14	0.26	0.28	0.41	0.41	0.51	0.50	0.77
Std. Error	(0.14)	(0.14)	(0.14)	(0.12)	(0.12)	(0.18)	(0.17)	(0.16)	(0.16)	(0.2)
P-value	[0.184]	[0.235]	[0.330]	[0.034]	[0.022]	[0.022]	[0.018]	[0.002]	[0.001]	[0.000]
Coef. (Robust)	0.22	0.19	0.16	0.3	0.33	0.48	0.48	0.57	0.56	0.85
Std. Error	(0.16)	(0.16)	(0.16)	(0.14)	(0.14)	(0.2)	(0.19)	(0.18)	(0.17)	(0.22)
P-value	[0.175]	[0.225]	[0.314]	[0.032]	[0.021]	[0.017]	[0.013]	[0.001]	[0.001]	[0.000]
Total Obs. (Effective)	1614	1579	1586	1994	1958	970	994	1303	1377	731
Bandwidth	0.15	0.147	0.148	0.141	0.137	0.124	0.128	0.12	0.128	0.112
	Panel B: White Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.08	0.08	0.08	0.22	0.22	0.23	0.24	0.25	0.27	0.39
Std. Error	(0.14)	(0.14)	(0.14)	(0.13)	(0.13)	(0.17)	(0.17)	(0.15)	(0.15)	(0.19)
P-value	[0.547]	[0.546]	[0.563]	[0.085]	[0.088]	[0.169]	[0.144]	[0.096]	[0.075]	[0.039]
Coef. (Robust)	0.1	0.09	0.09	0.25	0.25	0.26	0.27	0.28	0.32	0.43
Std. Error	(0.17)	(0.16)	(0.16)	(0.14)	(0.15)	(0.2)	(0.19)	(0.17)	(0.18)	(0.22)
P-value	[0.556]	[0.560]	[0.565]	[0.085]	[0.083]	[0.179]	[0.156]	[0.101]	[0.072]	[0.050]
Total Obs. (Effective)	1627	1623	1629	1979	1945	1060	1055	1509	1413	941
Bandwidth	0.152	0.151	0.152	0.139	0.136	0.141	0.139	0.146	0.134	0.161

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the participation of Black (Panel A) and White (Panel B) students residing in the municipality on the National High School Examination (ENEM), for different number of years before and after the election. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained pooling municipality-year pairs for elections between 2004 and 2016. The first three rows in each panel use the conventional Calonico et al. (2014, 2015) RD estimator, while the second set of rows (rows 4 to 6) use the bias-corrected estimator suggested by the same authors. The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

RD continuity assumption. For all other years in our time frame, effects are positive and monotonically increasing, suggesting a lasting effect of electing a Black mayor on the choice of students of the same race to attempt this National exam. Indeed, two years after the election, Black students from municipalities that elected a Black mayor in a close interracial election are 26% more likely to enroll for the ENEM than similar students in municipalities where a Black candidate lost; this difference increases to 41% four years after the election and gets closer to 80% eight years after it.

Such increase in effects, robust to specification choices and also found in the remaining outcomes we analyze, might reflect a shift in how Black students value education in the treated municipalities. It also suggests that the election of Black mayors has lasting effects that go beyond the mayor's mandate.

On the other hand, when we consider students who self-declare as White, we do not find such large effects for the election of Black mayors on ENEM enrollment, as shown on Panel B of Table 2. Indeed, the point estimates are smaller than those for Black students and not significant for many of the years we analyze. Nevertheless, they are all positive, suggesting that the election of Black mayors may also have a positive (albeit smaller) effect on ENEM

enrollment for White students. This result is reassuring, as it indicates that the increase in educational investment by Black students does not crowd out White students.

Overall, we find that the election of Black candidates in close interracial elections increases enrollment in ENEM for Black students residing in the municipality, with effects increasing and persistent over time, while (at least) does not impact White students to the same degree. Given that enrolling in ENEM is an exclusively personal decision, this effect suggests that Black students attempt to increase their educational attainment following the election of a Black candidate in their city. However, attempting to increase their education does not imply that these students are successful in doing so.[8] For instance, since ENEM is an exam used for admissions into higher education institutions, a bad performance in the exam would not grant a student access to university, so their educational level would remain fixed. Therefore, it is important to also investigate the direct effects of electing a Black mayor on educational attainment. This is done in the subsection that follows, which studies the effect of electing a Black mayor on Black students' university enrollment and graduation.

4.2 Higher Education The previous section documents that, after a Black candidate is elected mayor, Black students become significantly more likely to enroll in the National High School Examination, compared to Black Students in municipalities where Black candidates were runner-ups in municipal elections. This result is interesting in itself, as ENEM enrollment can be interpreted as indicating an aspiration to improve one's own education. However, it could be that students take the exam but perform poorly. If this is the case, we would not see any improvement in educational outcomes among this group. Therefore, this section explores the effects of electing Black mayors on higher education outcomes.

We start by documenting that, following the election of a Black mayor, the number of Black students born in the municipality enrolled in the first year of a University undergraduate course increases. Table 3 shows that Black individuals born in a municipality where a Black candidate won an interracial close election are 37% more likely to be enrolled in the first year of a university course than Black individuals born in municipalities where a Black candidate lost such election, three years after the election. As with the ENEM results, effects are persistent over time and mostly increasing and statistically significant, with the election of Black mayors causing an increase of 62% in the number of Black students born in the municipality enrolled in the first year of university eight years after the election. Moreover, as in the case of ENEM enrollment, estimated pre-treatment coefficients are non-significant.

Interestingly, the first period with a positive and significant effect for this variable is two years after the election, suggesting that students are successful in their attempt to increase their educational attainment. ENEM is an exam taken in November or December of each year, allowing access to university in the next academic year. Therefore, results from Tables 2 and 3 are consistent with each other: after an increase in participation in ENEM, if students are successful, we would expect an increase in university enrollment to be lagged

[8] In Appendix Tables A.6 and A.7 we show that the election of a Black mayor has no effect on average grades obtained by Black and White students (respectively) on ENEM. This suggests that despite the change in the composition of those taking the exam (as more students choose to take the exam following the election of a Black candidate), the performance of either group does not fall on average.

Table 3: Effect on Enrollment in Higher Education, RD Estimates

	Panel A: Black Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.26	0.17	0.17	0.28	0.37	0.45	0.34	0.47	0.55	0.62
Std. Error	(0.2)	(0.2)	(0.2)	(0.16)	(0.17)	(0.25)	(0.24)	(0.22)	(0.21)	(0.22)
P-value	[0.189]	[0.374]	[0.392]	[0.076]	[0.027]	[0.067]	[0.154]	[0.031]	[0.008]	[0.006]
Coef. (Robust)	0.29	0.19	0.2	0.32	0.41	0.51	0.33	0.55	0.63	0.71
Std. Error	(0.23)	(0.23)	(0.23)	(0.19)	(0.19)	(0.28)	(0.28)	(0.24)	(0.23)	(0.25)
P-value	[0.210]	[0.414]	[0.391]	[0.085]	[0.033]	[0.068]	[0.229]	[0.024]	[0.007]	[0.004]
Total Obs. (Effective)	1084	1086	1079	1569	1529	483	538	816	858	791
Bandwidth	0.172	0.171	0.17	0.166	0.159	0.151	0.185	0.128	0.138	0.124
	Panel B: White Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.21	0.11	0.18	0.20	0.24	0.28	0.33	0.23	0.28	0.24
Std. Error	(0.19)	(0.2)	(0.19)	(0.16)	(0.16)	(0.29)	(0.28)	(0.22)	(0.23)	(0.23)
P-value	[0.280]	[0.581]	[0.341]	[0.203]	[0.135]	[0.331]	[0.246]	[0.287]	[0.213]	[0.278]
Coef. (Robust)	0.26	0.14	0.21	0.23	0.27	0.37	0.4	0.26	0.35	0.3
Std. Error	(0.23)	(0.23)	(0.23)	(0.19)	(0.18)	(0.33)	(0.32)	(0.25)	(0.26)	(0.26)
P-value	[0.254]	[0.542]	[0.359]	[0.227]	[0.136]	[0.257]	[0.221]	[0.296]	[0.171]	[0.243]
Total Obs. (Effective)	1109	1112	1105	1617	1643	450	481	940	864	888
Bandwidth	0.178	0.179	0.177	0.175	0.18	0.132	0.149	0.161	0.139	0.144

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the number of Black (Panel A) and White (Panel B) students born in the municipality enrolled in the first-year of university for different numbers of years before and after the election. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. The first three rows in each panel use the conventional Calonico et al. (2014, 2015) RD estimator, while the second set of rows (rows 4 to 6) use the bias-corrected estimator suggested by the same authors. The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

by one year. While we do observe some increase in university enrollment two years after the election, most of the effect starts to appear three years after it, consistent with an increase in ENEM enrollment starting two years after the election. Still, the fact that university enrollment increases (slightly) before this moment can be explained by students entering university through other admission processes, or by Black students who took the ENEM in earlier years exerting more effort.

We also do not obtain statistically significant effects for White students, even though point estimates are positive and, in some years, comparable to those of Black students. Again, this suggests that the election of Black mayors does not crowd out White students, even if, as expected, it does not shift the aspirations of White students to the same degree as those of Black students (who are more likely to identify with the new mayor).

Do the newly enrolled Black students manage to graduate? Table 4 shows that yes: the election of Black mayors increases the number of Black students graduating from university, with large and statistically significant effects seven and eight years after the election. This is the expected time a university major would take, suggesting that the excess number of Black students that enroll in university starting two or three years after the election manage

Table 4: Effect on Graduation from University, RD Estimates

	Panel A: Black Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.18	0.29	0.13	0.28	0.31	0.26	0.21	0.33	0.48	0.53
Std. Error	(0.17)	(0.18)	(0.17)	(0.15)	(0.16)	(0.2)	(0.21)	(0.21)	(0.22)	(0.21)
P-value	[0.284]	[0.108]	[0.457]	[0.057]	[0.052]	[0.186]	[0.305]	[0.118]	[0.027]	[0.011]
Coef. (Robust)	0.22	0.32	0.15	0.31	0.36	0.29	0.22	0.4	0.57	0.61
Std. Error	(0.2)	(0.21)	(0.2)	(0.17)	(0.18)	(0.23)	(0.24)	(0.23)	(0.24)	(0.23)
P-value	[0.268]	[0.128]	[0.458]	[0.069]	[0.054]	[0.202]	[0.354]	[0.086]	[0.015]	[0.008]
Total Obs. (Effective)	1124	1093	1175	1534	1410	580	582	777	675	757
Bandwidth	0.183	0.175	0.203	0.159	0.143	0.213	0.217	0.121	0.1	0.116
	Panel B: White Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.15	0.26	0.14	0.12	0.21	0.16	0.35	0.11	0.26	0.18
Std. Error	(0.17)	(0.19)	(0.18)	(0.14)	(0.15)	(0.25)	(0.27)	(0.21)	(0.23)	(0.22)
P-value	[0.379]	[0.156]	[0.436]	[0.396]	[0.157]	[0.527]	[0.201]	[0.584]	[0.256]	[0.409]
Coef. (Robust)	0.19	0.32	0.18	0.13	0.24	0.21	0.45	0.17	0.34	0.26
Std. Error	(0.21)	(0.21)	(0.22)	(0.16)	(0.18)	(0.29)	(0.31)	(0.24)	(0.25)	(0.25)
P-value	[0.366]	[0.138]	[0.413]	[0.411]	[0.163]	[0.457]	[0.150]	[0.478]	[0.181]	[0.312]
Total Obs. (Effective)	1111	1060	1103	1746	1605	470	441	865	765	834
Bandwidth	0.18	0.164	0.176	0.203	0.173	0.142	0.128	0.139	0.118	0.132

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the number of Black (Panel A) and White (Panel B) students born in the municipality graduating from university for different numbers of years before and after the election. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. The first three rows in each panel use the conventional Calonico et al. (2014, 2015) RD estimator, while the second set of rows (rows 4 to 6) use the bias-corrected estimator suggested by the same authors. The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

to graduate. This result is important, as it shows that the election of a Black mayor does not only shift the aspirations of Black students (which are captured by enrollment in ENEM); it also has palpable effects on the educational attainment of those students. As before, there is no statistically significant effect on the graduation of White students; still, the positive point estimates allow us to rule out significant negative effects.

Finally, one important question is whether the students going to university after the election of a Black candidate are graduating from high-quality courses, that will increase their expected lifetime income. We present (in the Appendix) two pieces of evidence that suggest that the answer is yes. First, public universities in Brazil tend to have higher quality (Mello, 2022). Appendix Table A.8 shows that the election of Black mayors increases enrollment of Black students in public universities, suggesting that these students are indeed going to universities that are, on average, good. Second, Table A.9 documents that Black students are also more likely to enroll in STEM (Science, Technology, Engineering, and Math) majors following the election of a Black candidate. Given that the wage premium of STEM majors in Brazil is estimated to be around 12% (Machado et al., 2022), this result also suggests that Black students are not disproportionately enrolling in low-return majors.

4.3 Robustness Appendix B shows that results discussed in this section are highly robust to a number of specification choices. For each outcome, we present results with different bandwidth choices (half and two-thirds of the optimal bandwidth), with a uniform rather than triangular Kernel, and without controlling for election year. Results remain extremely similar. Overall, point estimates when using a uniform Kernel are slightly lower than the ones we report in the main text, indicating that effects are larger for municipalities closer to the threshold. RD plots of the main results are also available in Appendix A.6.

5 Mechanisms

In the previous section, we saw that the election of a Black mayor in a close interracial election increases the enrollment of Black high school students on Brazil's National High School Examination (ENEM) and subsequently increases enrollment and graduation of Black students from the university. What are, however, the mechanisms behind these results? In this section, we investigate this question by considering the evidence in favor of several alternative explanations for the results described.

Specifically, one hypothesis is that the results are explained by a role model effect: the election of a Black candidate as mayor changes individuals' beliefs about their chance of succeeding on paths that they did not consider feasible, which changes the decision to invest more in education. As pointed out by the literature on role models and aspirations (e.g., Serra, 2022), we would expect such an effect to be stronger among Black students, who are more likely to identify with the mayor. Another possibility is that the mayor, once elected, changes policies that are favorable to the Black population of the municipality. In the context of the ENEM or higher education results, Black mayors could invest in education or policies focusing on racial equality. Third, when it comes to race, given the potential fluidity of this identity (Davenport, 2020), it is relevant to consider changes in self-identification. We provide some evidence for each of these alternative explanations and argue that shifts in aspirations likely played an important role in the phenomenon we documented in what follows.

Changes in Self-declaration of Race The first channel that could be (at least partially) explaining the results from section 4 is the possibility that the election of a Black candidate as mayor changes some individuals' self-declaration of race. It is possible that the success of a Black candidate causes some people to reflect on their own racial identification. In this case, students who would take the exam anyway change their racial self-declaration following the election of a Black candidate. As a result we would observe more black students taking the exam or enrolled in a university in the data.

It is unlikely that this "identity" channel explains the entirety of the results. If it did, we would expect to see a reduction in the number of White students proportional to the increase in Black students for each of the outcomes we analyze. Such a reduction in the participation of White students does not happen, as shown in the previous section. If anything, it marginally increases. Therefore, even if electing a Black mayor changes the

racial self-identification of some students, this compositional change cannot fully explain our results.

Educational Policies A second potential explanation for the results in the previous section is that a Black mayor, once elected, adopts policies that foment education, particularly for Black students. In this section, we show that this is not the case—at least, not to the extent and in the timing that would be necessary to explain the results in Section 4.

First, as pointed out in the Background Section, it is relevant to highlight that, while municipalities in Brazil are relatively autonomous government units, mayors' attributions regarding education are focused on early childhood and primary school.[9] Therefore, one would not expect mayors to affect the quality of education at the High School level, which is generally under the responsibility of states and is the focus of this paper.

Indeed, several pieces of evidence—summarized in Table 5—indicate that electing Black mayors does not significantly affect the average level of education provided at the municipality. First, using data from Brazil's yearly school census, we construct three municipality-level indices of quality of municipal education. The first index, of School Infrastructure, combines information on the proportion of municipal schools that have access to different educational resources: libraries, reading rooms, science laboratories, access to the internet, and computer labs. The second index considers the proportion of municipal schools with access to basic infrastructure related to water, sewage systems, electricity, and daily meals for students. Finally, the third index focuses on schools' personnel, combining information on the number of teachers for each educational level and the number of non-teaching employees in municipal schools. Together, the three indices map a wide range of quality indicators that could be affected by educational policies. Nevertheless, for all three indices, we find that the election of a Black mayor in a close interracial election has no effect—if anything, there are small, marginally significant negative effects for the Educational Infrastructure index. The estimates related to the remaining two indices are consistently null.

These results suggest that electing a Black mayor does not significantly change the quality of education provided in the municipality, at least not in the time horizon we analyze. Given the constitutional competencies of mayors, even if there was such improvement, it would likely happen for younger students, who would still be far from going to university.

[9]This is determined in Brazil's Constitution, on article 30, subparagraph VI, which states that it is among the municipality's competencies to *"maintain, with the technical and financial cooperation of the Union and states, pre-school and elementary school education."* (Brazil, 1988). For a detailed discussion on the federative organization of education policy in Brazil, see Abrucio (2010).

Table 5: Mechanisms, RD Estimates

	Dependent variable: Educational Infraestructure (index)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.09	-0.08	-0.08	-0.08	-0.06	-0.08	-0.09	-0.16	-0.15	-0.13
Std. Error	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.10)	(0.10)	(0.09)	(0.09)	(0.11)
P-value	[0.208]	[0.267]	[0.210]	[0.255]	[0.355]	[0.410]	[0.369]	[0.081]	[0.099]	[0.268]
Total Obs. (Effective)	1773	1643	1787	2027	2008	913	912	1195	1201	828
Bandwidth	0.174	0.154	0.175	0.144	0.142	0.115	0.115	0.108	0.109	0.13
	Basic School Infraestructure (index)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.11	0.11	0.08	0.05	0.03	-0.01	0.03	0.01	0.08	0.05
Std. Error	(0.06)	(0.06)	(0.06)	(0.04)	(0.06)	(0.09)	(0.09)	(0.06)	(0.08)	(0.07)
P-value	[0.084]	[0.065]	[0.164]	[0.253]	[0.564]	[0.955]	[0.716]	[0.796]	[0.304]	[0.491]
Total Obs. (Effective)	1301	1323	1418	1878	2027	1106	1112	1453	1375	942
Bandwidth	0.116	0.118	0.128	0.129	0.144	0.149	0.15	0.139	0.128	0.162
	School Employees and Teachers (index)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.02	0.00	0.01	-0.02	-0.01	-0.03	-0.02	-0.01	-0.01	-0.01
Std. Error	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
P-value	[0.153]	[0.723]	[0.463]	[0.104]	[0.158]	[0.050]	[0.078]	[0.229]	[0.563]	[0.330]
Total Obs. (Effective)	1510	1497	1309	1463	1548	821	892	1125	1401	994
Bandwidth	0.139	0.137	0.117	0.096	0.103	0.1	0.112	0.099	0.132	0.177
	Expenditure on Education and Culture									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.15	0.06	0.11	0.22	0.16	0.54	0.28	0.18	0.24	0.56
Std. Error	(0.13)	(0.13)	(0.12)	(0.12)	(0.13)	(0.26)	(0.14)	(0.14)	(0.11)	(0.17)
P-value	[0.261]	[0.656]	[0.359]	[0.065]	[0.213]	[0.037]	[0.048]	[0.203]	[0.032]	[0.001]
Total Obs. (Effective)	1435	1586	1496	1856	1915	890	971	1570	1591	811
Bandwidth	0.136	0.162	0.142	0.131	0.137	0.121	0.128	0.166	0.167	0.139
	Proficiency in Portuguese, Black Students, 9th grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.03		-0.04		-0.02		-0.00		-0.07	
Std. Error	(0.04)		(0.04)		(0.03)		(0.05)		(0.04)	
P-value	[0.434]		[0.381]		[0.628]		[0.978]		[0.108]	
Total Obs. (Effective)	1717		1643		2208		1004		1226	
Bandwidth	0.17		0.157		0.17		0.13		0.114	
	Proficiency in Math, Black Students, 9th grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.01		-0.03		-0.01		-0.01		-0.09	
Std. Error	(0.04)		(0.04)		(0.04)		(0.05)		(0.05)	
P-value	[0.743]		[0.527]		[0.762]		[0.902]		[0.050]	
Total Obs. (Effective)	1657		1658		2174		998		1155	
Bandwidth	0.161		0.159		0.165		0.129		0.107	

Notes: The table reports RD estimates for the effect of the election of a Black mayor on several outcomes. The first three outcomes are indices computed following Anderson (2008) using school-level data from Brazil's yearly School Census—for details, see Appendix Table A.1. The fourth outcome, expenditure on education and culture (log) comes from the System of Accounting and Fiscal Information of the Brazilian Public Sector (FINBRA). The last two variables are the average (standardized) grades of Black students born in the municipality in the SAEB exam (in Portuguese and Maths, respectively). Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. For each regression, we only report the bias-corrected estimator suggested by Calonico et al. (2014). The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

The fourth panel of Table 5, however, shows that there seems to be an increase in the expenditure on education in municipalities that elect a Black mayor. Data on the municipal's annual expenditure by function comes from the System of Accounting and Fiscal Information of the Brazilian Public Sector (FINBRA). Point estimates are positive across all years but mostly non-significant—with the notable exception of four and eight years after the election. In these two years, there seems to be a sizeable increase in educational expenditure, not coupled with improvements in school quality as shown before. Notably, the years in question (four and eight years past the election) are also election years. Thus, one potential explanation for the increase in expenditure on education and culture is a demand-side one: following the election of a Black candidate, constituents may start demanding better education quality and, given electoral incentives, the increase in expenditure happens precisely on electoral years. Even if this is not the explanation for this result, the fact that the increase in educational and cultural expenditure happens later than the effects from Section 4, and is not coupled with improvements in education, points to the conclusion that they do not explain the increased enrollment in ENEM and universities.

Nevertheless, it could still be that our measures of education quality, based on infrastructure and personnel information, do not fully capture all dimensions of quality. Therefore, the bottom two panels of Table 5 show RD estimates for the effect of electing a Black mayor on Black students' performance on a standardized test, the System of Evaluation of Basic Education (SAEB), taken at the end of the 9th grade (last year of elementary school, when students are approximately 14 years old). Exam grades are standardized. Analyzing Table 5, we see that the election of a Black mayor does not impact Black students' performance in the exam, either in Portuguese or Math (the two measured competencies). If anything, there is some decrease in performance seven years after the election.[10] Therefore, we can confidently rule out that Black mayors elected in close interracial elections have a large impact on the quality of education offered in the municipality, which makes this an unlikely explanation for the increase in enrollment in ENEM and universities previously documented.

A Black mayor could still be investing in other policies—not directly related to education—but that could potentially improve education outcomes of students from the municipality. To study this possibility, we use data from the Survey on Basic Municipal Information (MUNIC). We construct an indicator of whether municipalities adopt policies regarding racial equality and discrimination. Results, reported in Appendix Table A.12, indicate that, while there is some (noisily-measured) increase in adoption of such policies by Black mayors, such increase in adoption begins after the increase in ENEM enrollment. This also rules out the adoption of such policies as a full explanation for our results.

Black Mayors as Role Models One factor that may contribute to the persistence of sharp racial inequalities is differences in beliefs and aspirations. If someone's beliefs (for instance, on the returns to education) are shaped by the examples they have around them—

[10] Appendix Tables A.10 and A.11 also document no effects for a similar exam taken in the 5th grade and for White students (both in the 5th and 9th grades). As mentioned in Section 4, we also find null effects of the election of Black candidates on performance in ENEM—see Appendix Table A.6—, further indicating no changes in the quality of education offered in the municipality.

and especially by the examples of those whom they identify with—, it would be expected that black individuals have, on average, lower beliefs and aspirations than whites. If this is the case, those individuals might invest less in education and political participation, creating a trap of low beliefs, low aspirations, and low investments that reinforce racial inequalities (Genicot and Ray, 2017, 2020).

Under this scenario, elected and now publicly visible Black mayors may work as role models to Black students. Theoretically, a role model is someone who influences a person's objectives, motivations, and decisions, by acting as a model of behavior, a representation of what is possible, or as an inspiration (Morgenroth et al., 2015). More specifically, the contact with a role model with whom a person identifies (for instance, due to a shared identity such as race) may change this person's decision on important aspects of life, such as investment in education or the decision of which career to pursue. This could help to reduce racial gaps if a role model incentivizes Black individuals to increase their investment in education, for example.

Separating the effect of changes in aspiration from any direct policy or service the mayor provides is challenging. Nevertheless, we do the following exercise. Our ENEM dataset contains information on whether high school students are enrolled in public or private schools. Typically, students from private schools come from wealthier families, while public school students are relatively poorer and would benefit more from the mayor's work performance. If our results are driven by the mayor's policies and services targeted to more vulnerable populations, we should also observe strong results for white students coming from public schools. Meanwhile, if our results are mainly from a role model effect, we could also observe responses from Black students even if they are enrolled in private schools.

Table 6 shows the results of this empirical exercise. Perhaps surprisingly, we find a robust and sizeable effect of the election of Black mayors on the ENEM take-up of Black students from private schools. These effects are even larger than those found for Black students in public schools. Furthermore, the effects for White students from public schools are mostly non-significant. These findings suggest that the racial dimension is more determinant of our results than the school background—which is more consistent with a role model effect for the Black population than a policy action oriented towards lower-income public service users.

Table 6: ENEM Enrollment by Type of High School, RD Estimates

	Black Students, Public High School (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.2	0.16	0.11	0.27	0.29	0.49	0.43	0.43	0.52	0.57
Std. Error	(0.15)	(0.14)	(0.15)	(0.13)	(0.13)	(0.18)	(0.18)	(0.15)	(0.16)	(0.18)
P-value	[0.178]	[0.268]	[0.437]	[0.038]	[0.025]	[0.006]	[0.014]	[0.004]	[0.001]	[0.001]
Total Obs. (Effective)	1651	1633	1640	2002	1975	974	984	1476	1275	897
Bandwidth	0.154	0.152	0.153	0.142	0.139	0.125	0.126	0.143	0.117	0.148
	Black Students, Private High School (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.19	0.32	0.24	0.34	0.41	0.39	0.35	0.4	0.45	0.76
Std. Error	(0.17)	(0.17)	(0.17)	(0.14)	(0.14)	(0.2)	(0.2)	(0.18)	(0.18)	(0.24)
P-value	[0.254]	[0.063]	[0.169]	[0.017]	[0.004]	[0.054]	[0.085]	[0.025]	[0.011]	[0.001]
Total Obs. (Effective)	1480	1375	1421	1892	1721	1060	1073	1339	1369	839
Bandwidth	0.135	0.123	0.128	0.131	0.117	0.14	0.143	0.124	0.128	0.134
	White Students, Public High School (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.02	0.03	0.03	0.2	0.19	0.23	0.26	0.23	0.28	0.25
Std. Error	(0.15)	(0.14)	(0.15)	(0.13)	(0.13)	(0.18)	(0.16)	(0.15)	(0.16)	(0.2)
P-value	[0.911]	[0.832]	[0.842]	[0.133]	[0.139]	[0.185]	[0.119]	[0.142]	[0.084]	[0.217]
Total Obs. (Effective)	1676	1710	1654	1980	2106	1064	1106	1552	1409	920
Bandwidth	0.158	0.163	0.155	0.14	0.151	0.142	0.149	0.153	0.132	0.155
	White Students, Private High School (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.18	0.22	0.22	0.27	0.2	0.25	0.22	0.3	0.28	0.44
Std. Error	(0.16)	(0.16)	(0.17)	(0.14)	(0.14)	(0.2)	(0.21)	(0.18)	(0.17)	(0.23)
P-value	[0.251]	[0.188]	[0.185]	[0.060]	[0.156]	[0.224]	[0.294]	[0.090]	[0.107]	[0.058]
Total Obs. (Effective)	1526	1486	1456	2020	1911	1075	1038	1427	1454	947
Bandwidth	0.141	0.136	0.132	0.143	0.133	0.143	0.135	0.135	0.139	0.164

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the participation of Black (Panels A and B) and White (Panels C and D) students residing in the municipality on the National High School Examination (ENEM), for different number of years before and after the election. The table further shows heterogeneity by type of High School in which students were enrolled: either Public (Panels A and C) or Private (Panels B and D). The analysis is, therefore, restricted to students enrolled in High School at the moment they were taking the exam (the only group of students for whom we have type of High School information). Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. For each regression, we only report the bias-corrected estimator suggested by Calonico et al. (2014). Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

6 Conclusion

We present evidence of what happens after a Black candidate wins a close interracial municipal election in Brazil. We find that electing a Black candidate as mayor increases the number of students who enroll for Brazil's National High School Examination (ENEM). Afterward, it also increases the number of Black students enrolling and graduating from university.

Both results are quantitatively meaningful and persistent: for ENEM enrollment, we estimate an increase in enrollment of approximately 25 percent two years after the election, with effects increasing over time and lasting even after the end of the mayor's mandate. At the same time, we estimate smaller, positive, and mostly non-significant effects for White students, suggesting that, at the very least, the increase in educational attainment for Black students does not crowd out White students.

Results are at least partially explained by a role model effect: the election of a Black candidate signals to the municipality's population that successful career paths are viable to Black individuals, which incentivizes investment in education for individuals who identify with the mayor. We rule out alternative explanations related to investments in policy by showing that there is no evidence that the election of a black mayor increases the quality of education provided in the municipality.

This result is relevant for a variety of reasons. First, we show that racial representation in politics has positive effects both on educational aspirations and attainment of Black students, potentially reducing racial gaps in education. Moreover, considering mechanisms, results suggest that having positive examples—or role models—may be an important determinant of behavior and of relevant life choices. The nonexistence of such role models may reinforce inequalities that are already stark in countries such as Brazil. This evidently does not mean that role models are enough to close racial gaps—since those gaps have deeper historical and socioeconomic roots. Nevertheless, the results discussed here show that, on the margin, political representation can be a powerful tool to increase the educational investment of groups that are under-represented in this sphere.

More broadly, this paper's results may be informative to the debate about policies that incentivize Black candidates' entry into politics, such as quotas or financial incentives. This topic has been intensely debated in recent elections in Brazil. The results discussed here illustrate a way in which the election of Black candidates may be beneficial to society, which can be understood as an argument in favor of such policies. Nevertheless, the external validity of the RD estimates must be taken into consideration when reaching such a conclusion.

Finally, there is still much to explore on the topic of race and elections, as many interesting questions are still open. This is especially true in Brazil, given how recent the data of candidates' self-declaration of race is. In particular, it will be interesting to verify if the type of phenomenon discussed in this paper is also verified in other domains, such as political participation or the labor market. Moreover, a recent debate regarding politicians' identity suggests that an interesting avenue of research is understanding what are the incentives for racial identification in politics and to what degree self-identification is consistent with how a candidate is seen by voters.

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Online Appendix to: "Elections that Inspire: Effects of Black Mayors on Educational Attainment"

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A Additional Figures and Tables

A.1 Description of Variables

Table A.1: Description of Variables

Variable	Description	Source	Years
Norte, Nordeste, Centro-Oeste, Sudeste and Sul region	Brazil's geographical macro-regions	TSE	2004, 2008, 2012, 2016
GDP	Municipal Gross Domestic Product	IBGE	2003, 2007, 2011, 2015
Estimated Population	Municipality's Estimated Population	IBGE	2003, 2006, 2011, 2015
Illiteracy rate	Municipality's illiteracy rate among population above 15 years old	Brazilian Census	2000, 2010
% Self-declared Black	Percentage of municipality's population self-declared as Black	Brazilian Census	2000, 2010
Gender (1=Female)	Winning candidate's gender	TSE	2004, 2008, 2012, 2016
Married (1=Yes)	Winning candidate's marrital status	TSE	2004, 2008, 2012, 2016
Age in election day	Winning candidate's age	TSE	2004, 2008, 2012, 2016
Right-wing party	Winning candidate belongs to one of the following parties: DEM, PP, PSL, PRP, PSC, PSDC, PRTB, or PR	TSE	2004, 2008, 2012, 2016
Left-wing party	Winning candidate belongs to one of the following parties: PT, PDT, PSB, PC do B, PSOL, PSTU, PCB, PCO, REDE	TSE	2004, 2008, 2012, 2016
PT, PSDB, PMDB	Winning candidate belongs to PT (Worker's party), PSDB (Brazilian Social Democracy Party), and PMDB (Brazilian Democratic Movement Party), respectively	TSE	2004, 2008, 2012, 2016

Continued on next page

Table A.1: Description of Variables (Continued)

Variable	Description	Source	Years
Incumbent	Winning candidate was the previous mayor	TSE	2004, 2008, 2012, 2016
Campaign Expenditure	Winning candidate's campaign expenditure	TSE	2004, 2008, 2012, 2016
Value of Assets	Winning candidate's assets as declared to the Electoral Justice	TSE	2004, 2008, 2012, 2016
Time since first affiliation	Time passed (years) since the winning candidate's first affiliation to a political party	TSE	2004, 2008, 2012, 2016
Previously ran for office	Indicator equal to one if winning candidate had previously ran for office (since 1998)	TSE	2004, 2008, 2012, 2016
Education	Indicators for winning candidate's highest level of education	TSE	2004, 2008, 2012, 2016
Students enrollment in ENEM	Number of students (from a given race) residing in the municipality who enrolled for the National High School Examination (ENEM)	INEP	2010-2019
Students enrollment/graduation in university	Number of students born in the municipality who were enrolled/graduated university	Higher Education Census	2010-2019
Expenditure on Education/Culture	Municipality's expenditure commited to education at the fiscal year	FINBRA	2010-2019
School Infrastructure Index	Index computed following Anderson (2008) using the following variables (municipality level): fraction of municipal schools with a library or reading room; with a sciences laboratory; with access to the internet; and with a computer lab	School Census	2010-2019

Continued on next page

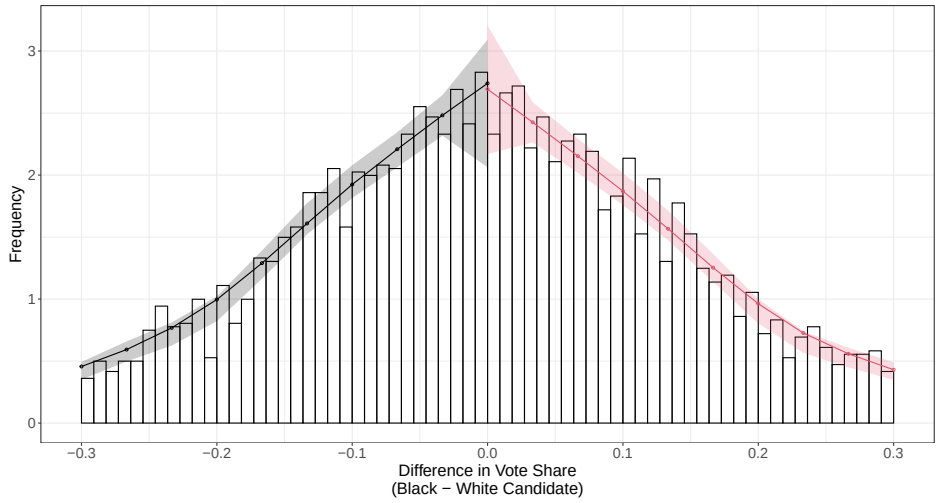
Table A.1: Description of Variables (Continued)

Variable	Description	Source	Years
Basic School Infrastructure Index	Index computed following Anderson (2008) using the following variables (municipality level): fraction of municipal schools with access to water; access to sewage systems; access to electricity; and providing meals to students	School Census	2010-2019
School Infrastructure Index	Index computed following Anderson (2008) using the following variables (municipality level): average number of Pre-School Teachers in municipal schools; average number of Elementary Teachers in municipal schools; average number of High School teachers in municipal schools; average number of Employees in municipal schools (including non-teaching staff)	School Census	2010-2019
Adoption of Policies on Racial Equality and Discrimination	Indicator constructed from MUNIC data equal to one if a municipality reported, in a given year, to adopt (at least) one of the following policies: policies, programs or actions promoting racial equality; (existence of) Municipal Council of Racial Equality; Educational Secretary adopts actions aimed at combating discrimination in schools; health of the Black population and the fight against racism are part of the education of health workers.	MUNIC	2011, 2014, 2018, 2019

Notes: Acronymins of data sources: Brazil's Superior Electoral Court (TSE); Brazilian Institute of Gepgraphy and Statistics (IBGE); National Institute of Research on Education Anísio Teixeira (INEP); Survey on Basic Municipal Information (MUNIC); System of Accounting and Fiscal Information of the Brazilian Public Sector (FINBRA).

A.2 Density test

Figure A.1: Density test and histogram of vote margin of black candidates



Notes: The figure shows the histogram for the margin of victory of Black candidates, defined as the difference in vote share between a Black candidate and a white candidate, and a local polynomial density estimate and robust bias-corrected confidence intervals computed as described in Cattaneo et al. (2020).

A.3 Descriptive Statistics

Table A.2: Descriptive Statistics: Sample of interracial municipal elections (2004-2016)

	White Mayor		Black Mayor		
	Mean	Obs	Mean	Obs	p-value
Mayor's characteristics					
Gender (1=Female)	0.14	2045	0.11	1921	0.005
Married (1=Yes)	0.24	2045	0.27	1921	0.046
Age in election day	48.09	2000	46.98	1886	0.001
Right-wing party	0.21	2045	0.19	1921	0.050
Left-wing party	0.22	2045	0.26	1921	0.001
Workers' Party (PT)	0.069	2045	0.11	1921	0.000
Brazilian Social Democracy Party (PSDB)	0.12	2045	0.13	1921	0.517
Brazilian Democratic Movement Part (PMDB)	0.19	2045	0.16	1921	0.003
Incumbent	0.27	2045	0.24	1919	0.050
Elementary School (incomplete)	0.068	2045	0.073	1921	0.546
Elementary School (complete)	0.06	2045	0.068	1921	0.302
High School (incomplete)	0.031	2045	0.03	1921	0.766
High School (complete)	0.26	2045	0.28	1921	0.215
University (incomplete)	0.073	2045	0.063	1921	0.195
University (complete)	0.50	2045	0.49	1921	0.245
Municipality's Characteristics					
Norte Region	0.13	2045	0.13	1921	0.906
Nordeste Region	0.49	2045	0.51	1921	0.193
Centro-Oeste Region	0.11	2045	0.10	1921	0.349
Sudeste Region	0.22	2045	0.21	1921	0.562
Sul Region	0.047	2045	0.044	1921	0.684
GDP (t-1), R$ 1,000	506,438	2045	578,221	1921	0.410
Estimated Population (t-1)	35,348	2045	38,054	1921	0.489
Illiteracy rate (previous census)	0.22	2045	0.23	1921	0.655
Proportion of population self-declared as Black (previous census)	0.63	2040	0.63	1918	0.195
Black Students enrolled in ENEM (t-1)	971.54	1323	844.89	1239	0.499
White Students enrolled in ENEM (t-1)	401.27	1323	364.94	1239	0.592
Black Students enrolled in University (t-1)	354.67	1319	316.14	1236	0.680
White Students enrolled in University (t-1)	251.87	1319	223.99	1236	0.584
Black Freshman Students in University (t-1)	100.87	1319	89.31	1236	0.673
White Freshman Students in University (t-1)	64.69	1319	60.13	1236	0.739
Black Graduating Students in University (t-1)	30.39	1319	27.18	1236	0.678
White Graduating Students in University (t-1)	25.38	1319	23.28	1236	0.670
Black Students enrolled in Public University (t-1)	114.02	1319	101.60	1236	0.703
White Students enrolled in Public University (t-1)	70.83	1319	57.05	1236	0.384
Black Students enrolled in STEM courses (t-1)	55.13	1319	49.48	1236	0.728
White Students enrolled in STEM courses (t-1)	41.46	1319	38.85	1236	0.772
Expenditure on Education (2016)	15,037,851	1981	15,862,608	1865	0.557
Expenditure on Culture (2016)	548,798	1893	558,897	1806	0.905
Proportion of Municipal Schools with Library or Reading Room (t-1)	0.23	2045	0.23	1920	0.939
Proportion of Municipal Schools with Internet Access (t-1)	0.29	2010	0.28	1888	0.182
Proportion of Municipal Schools with Science Laboratory (t-1)	0.015	2045	0.016	1920	0.816

Notes: The table displays descriptive statistics for several variables at the mayor and/or municipal level. The reported p-value is the p-value of a difference of means test between the municipalities where a White and a Black candidate were elected, with null hypothesis that the mean of the variable for both groups are equal.

A.4 Correlation between Self-identification and RAIS, 2016 elections

Table A.3: Candidates' racial self-identification and RAIS racial classification, White and Non-White, 2016

TSE \ **RAIS**	White	Non-White
White	3483	619
Non-White	769	845

Notes: The table displays the results of a validation exercise between the self-reported race in the 2016 election and the data collected from RAIS (White and Non-White).

Table A.4: Candidates' racial self-identification and RAIS racial classification, Black and Non-Black, 2016

TSE \ **RAIS**	Non-Black	Black
Non-Black	3502	606
Black	779	829

Notes: The table displays the results of a validation exercise between the self-reported race in the 2016 election and the data collected from RAIS (Black and Non-Black).

A.5 Origin of racial information

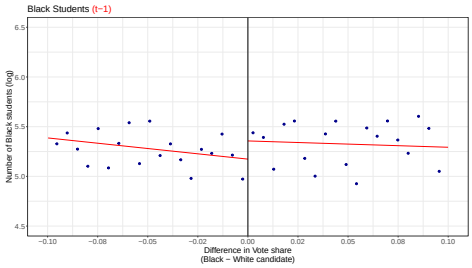
Table A.5: Origin of candidates' racial information, 2004-2016

	Original data	TSE 2014	TSE 2016	TSE 2018	RAIS
Elected	1614	168	1135	103	946
Runner-up	1614	206	1200	34	912

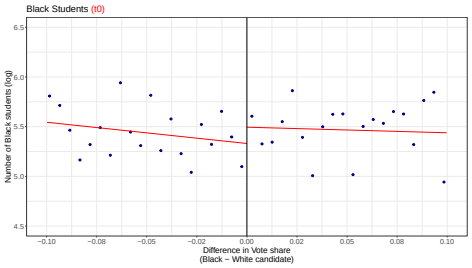
Notes: The table displays the origin of candidates' racial information since the availability of this data from the TSE started in the 2014 election.

A.6 RD Plots of Main Results

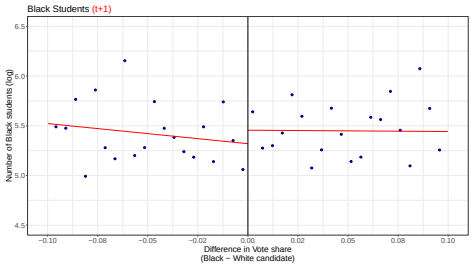
Figure A.2: Effect on ENEM Enrollment among Black Students



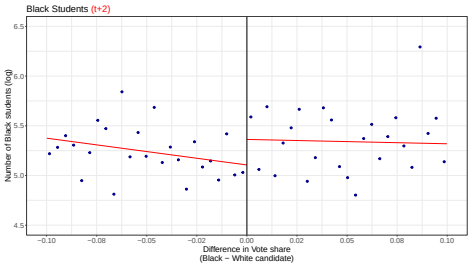
(a) $t-1$



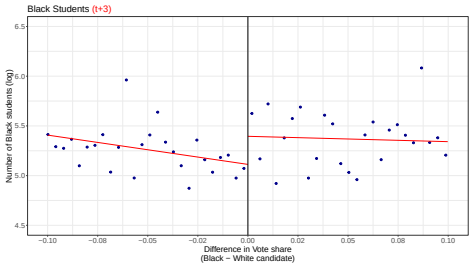
(b) t



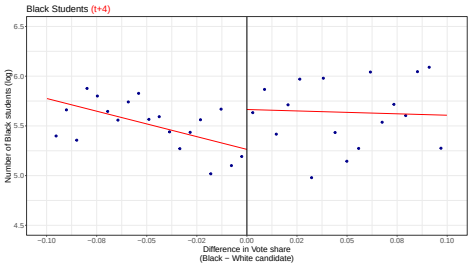
(c) $t+1$



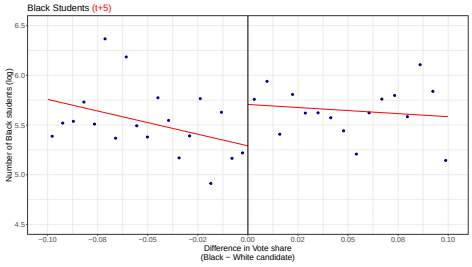
(d) $t+2$



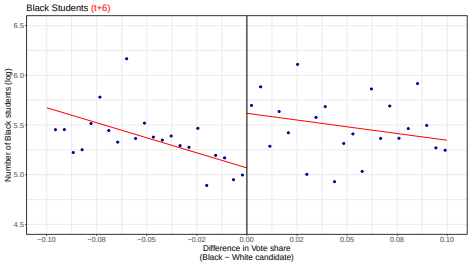
(e) $t+3$



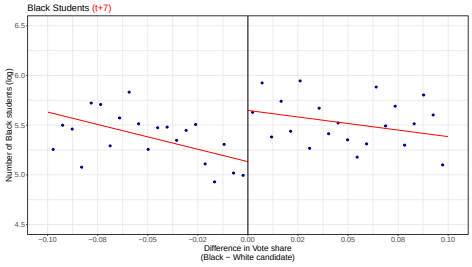
(f) $t+4$



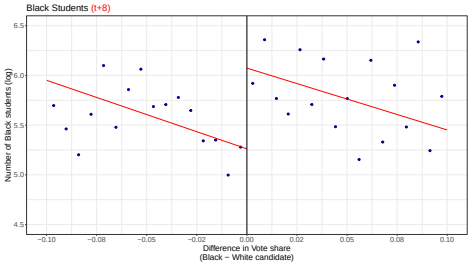
(g) $t+5$



(h) $t+6$

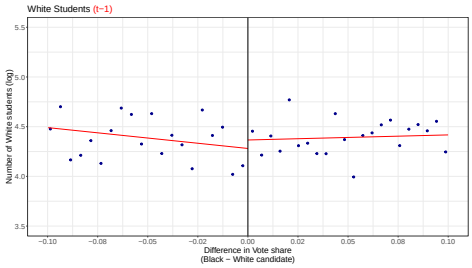


(i) $t+7$

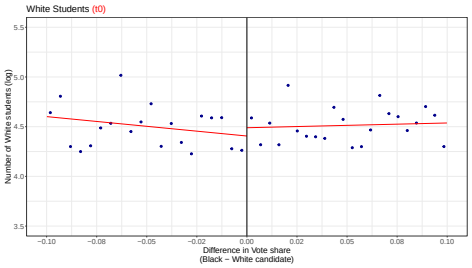


(j) $t+8$

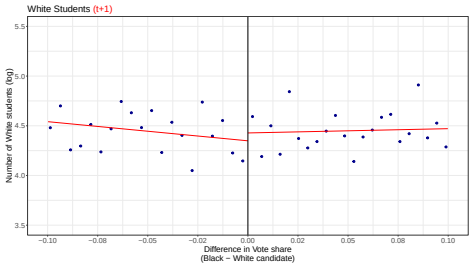
Figure A.3: Effect on ENEM Enrollment among White Students



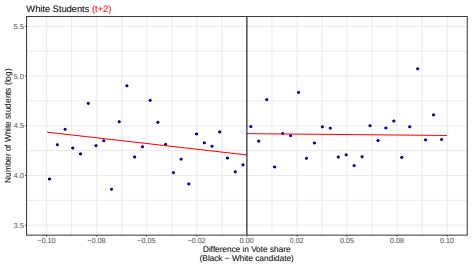
(a) $t-1$



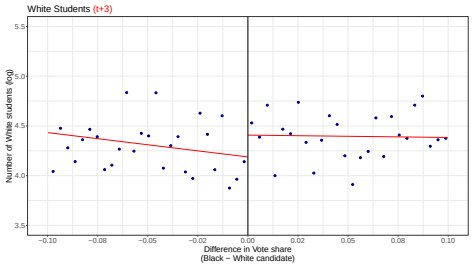
(b) t



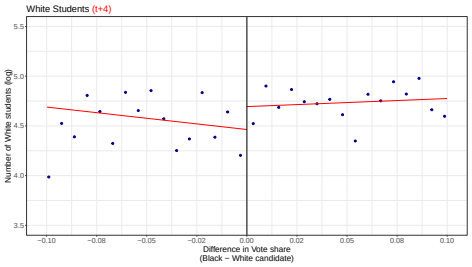
(c) $t+1$



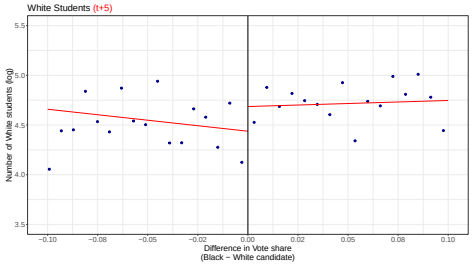
(d) $t+2$



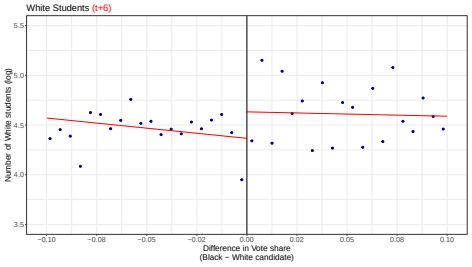
(e) $t+3$



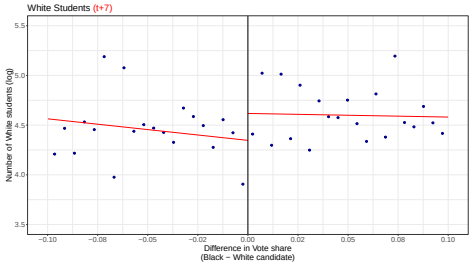
(f) $t+4$



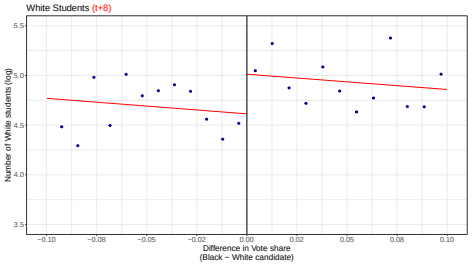
(g) $t+5$



(h) $t+6$

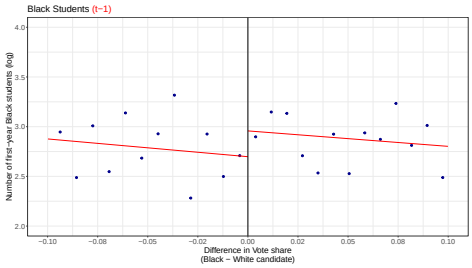


(i) $t+7$

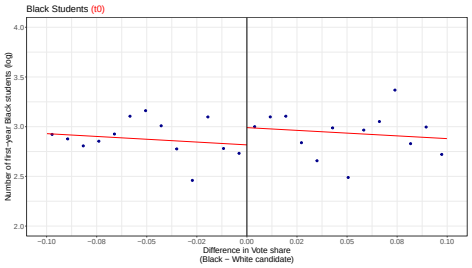


(j) $t+8$

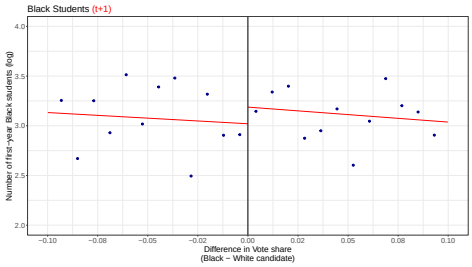
Figure A.4: Effect on the number of first-year Black students in University



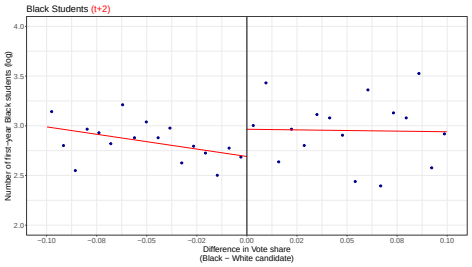
(a) $t-1$



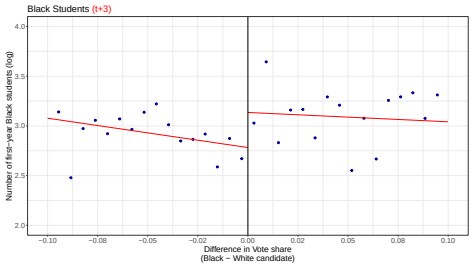
(b) t



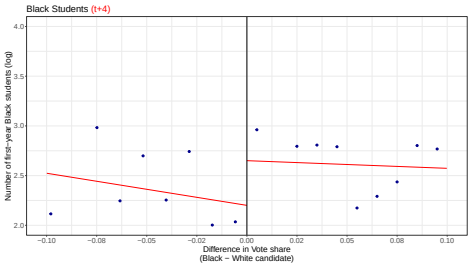
(c) $t+1$



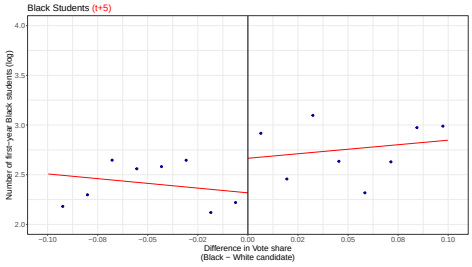
(d) $t+2$



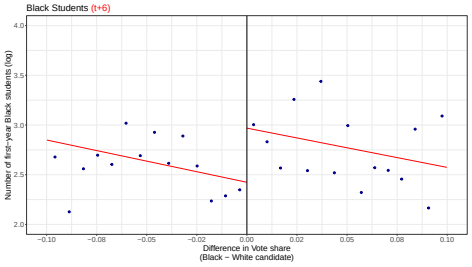
(e) $t+3$



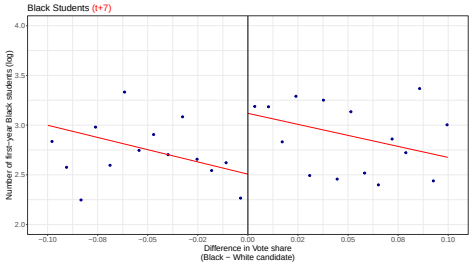
(f) $t+4$



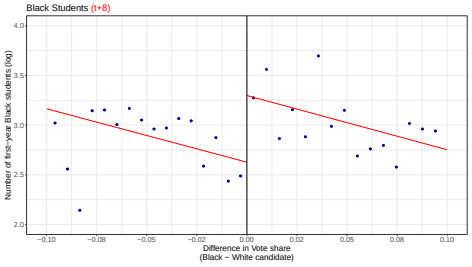
(g) $t+5$



(h) $t+6$

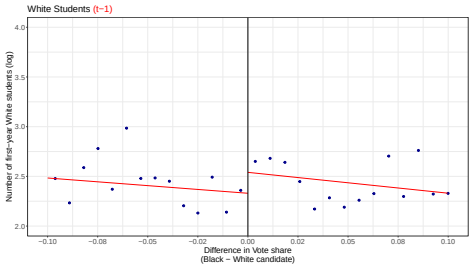


(i) $t+7$

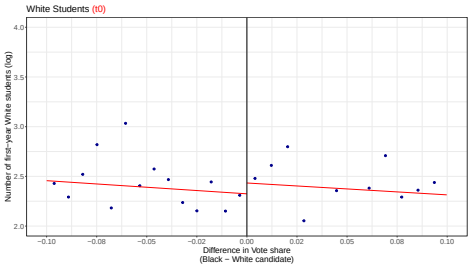


(j) $t+8$

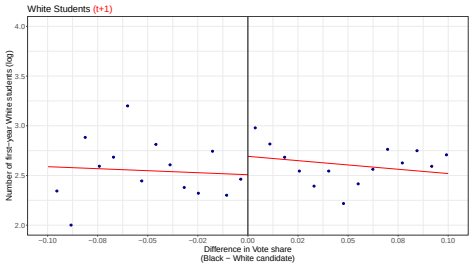
Figure A.5: Effect on the number of first-year White students in University



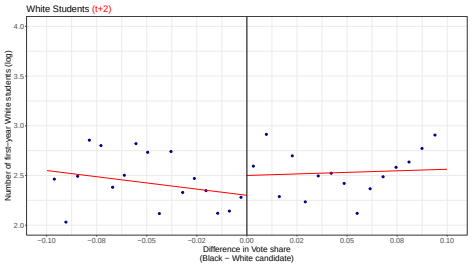
(a) $t-1$



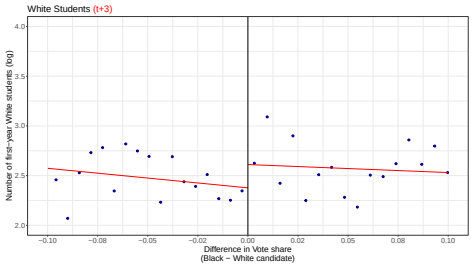
(b) t



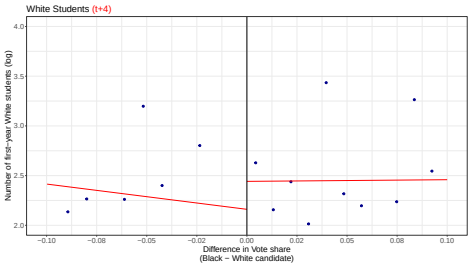
(c) $t+1$



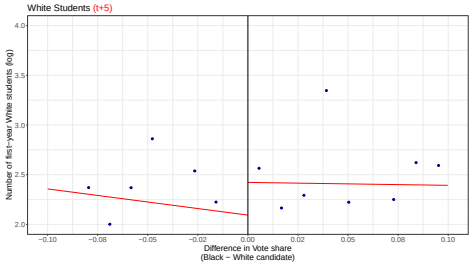
(d) $t+2$



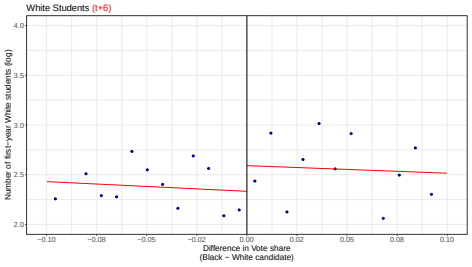
(e) $t+3$



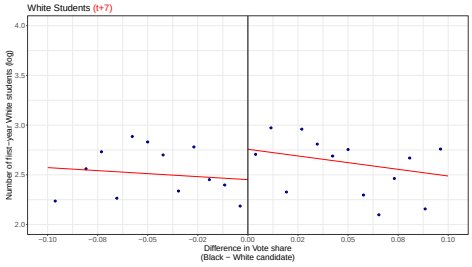
(f) $t+4$



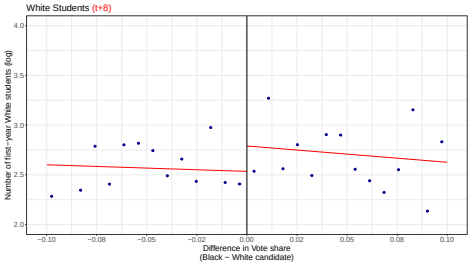
(g) $t+5$



(h) $t+6$

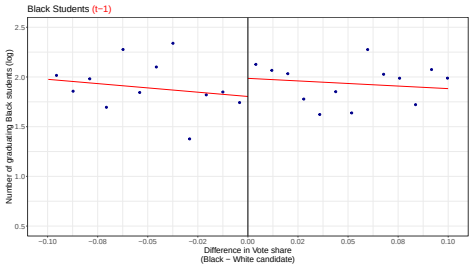


(i) $t+7$

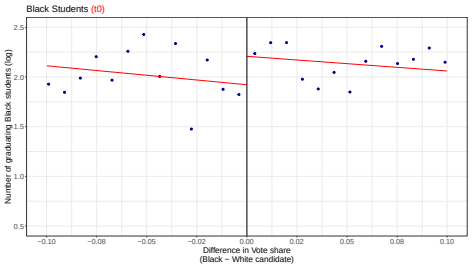


(j) $t+8$

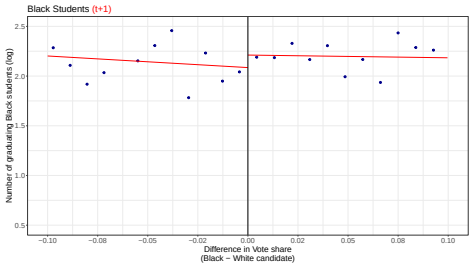
Figure A.6: Effect on the number of Black students graduating from University



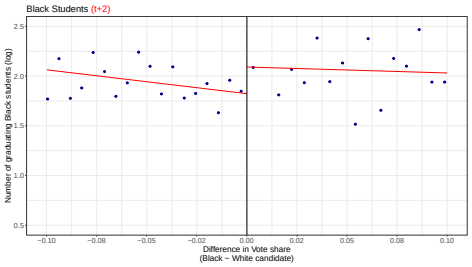
(a) $t-1$



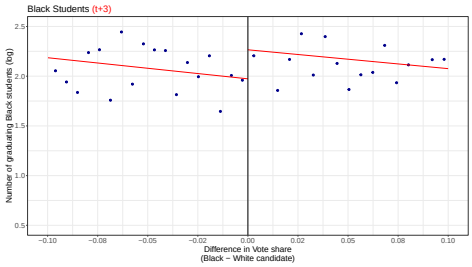
(b) t



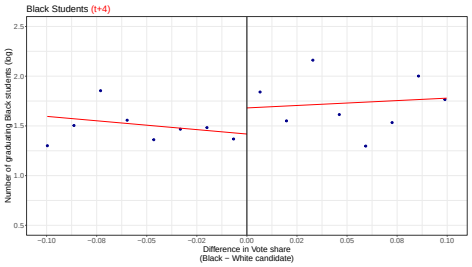
(c) $t+1$



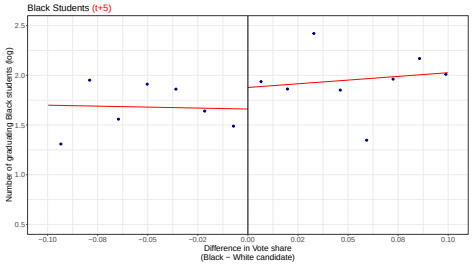
(d) $t+2$



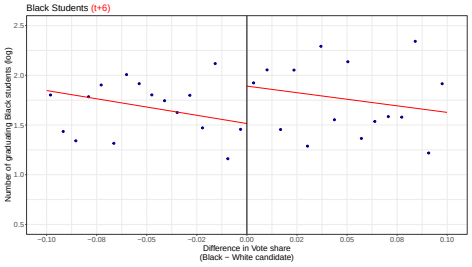
(e) $t+3$



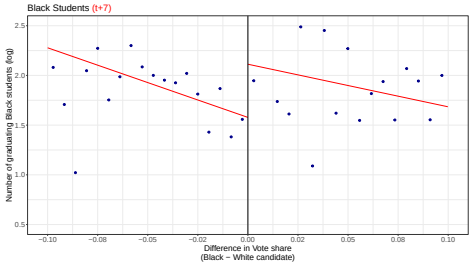
(f) $t+4$



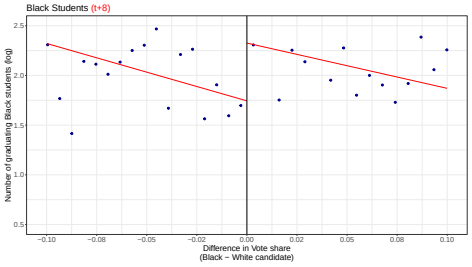
(g) $t+5$



(h) $t+6$

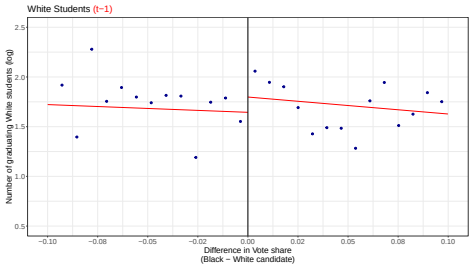


(i) $t+7$

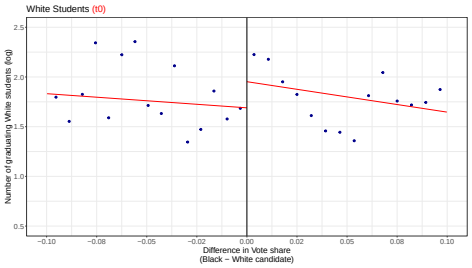


(j) $t+8$

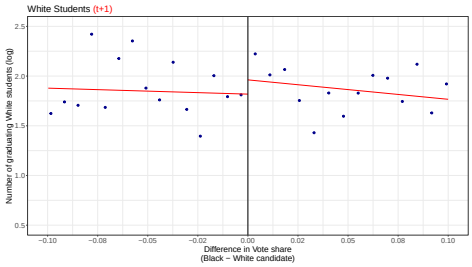
Figure A.7: Effect on the number of White students graduating from University



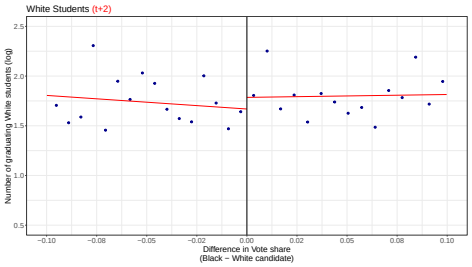
(a) $t-1$



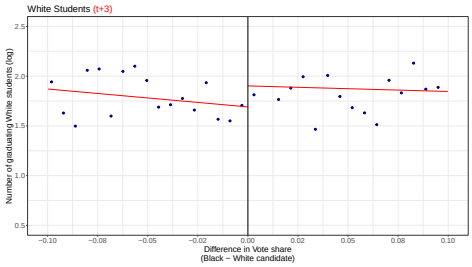
(b) t



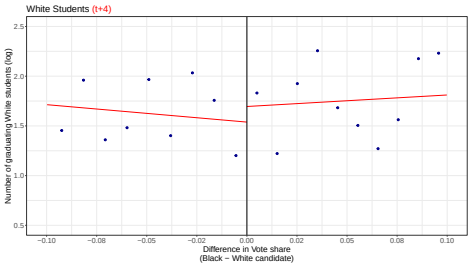
(c) $t+1$



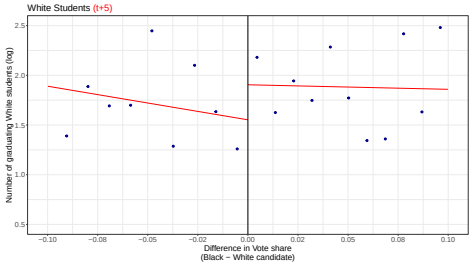
(d) $t+2$



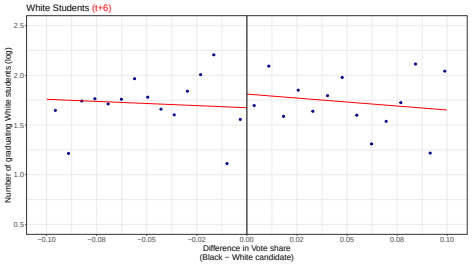
(e) $t+3$



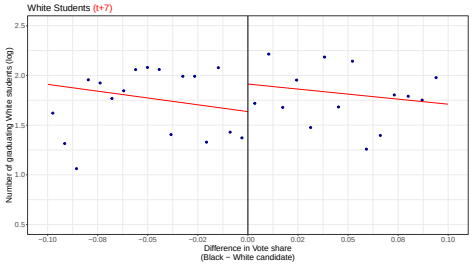
(f) $t+4$



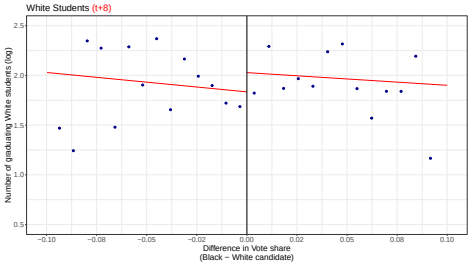
(g) $t+5$



(h) $t+6$



(i) $t+7$



(j) $t+8$

A.7 Additional Outcomes

Table A.6: Effect on ENEM grades, Black students, RD Estimates

	ENEM Grades, Natural Sciences									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.00	0.02	0.01	-0.00	0.01	-0.02	-0.02	0.01	-0.00	0.02
Std. Error	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
P-value	[0.896]	[0.488]	[0.486]	[0.884]	[0.763]	[0.514]	[0.576]	[0.680]	[0.890]	[0.509]
Total Obs. (Effective)	1765	1579	1814	2447	2528	989	1101	1302	1324	980
Bandwidth	0.171	0.147	0.18	0.195	0.211	0.127	0.148	0.12	0.122	0.174
	ENEM Grades, Humanities									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.01	-0.00	0.01	0.02	0.00	-0.03	0.01	0.02	0.01	0.02
Std. Error	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
P-value	[0.653]	[0.855]	[0.655]	[0.332]	[0.833]	[0.405]	[0.749]	[0.487]	[0.585]	[0.554]
Total Obs. (Effective)	1736	1611	1906	2281	2413	1011	1240	1364	1530	1093
Bandwidth	0.167	0.149	0.199	0.172	0.191	0.13	0.183	0.127	0.15	0.215
	ENEM Grades, Languages									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.02	0.01	0.03	0.02	-0.00	-0.02	-0.04	0.01	-0.00	0.00
Std. Error	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)	(0.04)	(0.03)	(0.04)
P-value	[0.541]	[0.852]	[0.334]	[0.477]	[0.962]	[0.619]	[0.321]	[0.821]	[0.951]	[0.963]
Total Obs. (Effective)	1653	1617	1810	2233	2266	1009	938	1275	1337	870
Bandwidth	0.155	0.15	0.18	0.165	0.169	0.13	0.119	0.117	0.124	0.141
	ENEM Grades, Math									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.00	0.00	0.02	0.01	-0.01	-0.04	-0.01	0.01	-0.01	0.00
Std. Error	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.04)	(0.03)	(0.03)	(0.02)	(0.03)
P-value	[0.908]	[0.919]	[0.351]	[0.789]	[0.687]	[0.348]	[0.655]	[0.742]	[0.559]	[0.878]
Total Obs. (Effective)	1744	1571	1755	2336	2463	1054	1171	1386	1729	980
Bandwidth	0.168	0.146	0.17	0.18	0.197	0.139	0.166	0.129	0.188	0.173
	ENEM Grades, Essay									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Std. Error	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
P-value	[0.051]	[0.826]	[0.456]	[0.865]	[0.874]	[0.871]	[0.786]	[0.425]	[0.841]	[0.795]
Total Obs. (Effective)	1702	1884	1908	2369	2284	1336	1221	1543	1752	956
Bandwidth	0.162	0.193	0.199	0.184	0.172	0.213	0.179	0.152	0.192	0.166

Notes: The table reports RD estimates for the effect of the election of a Black mayor on Black students' standardized ENEM grades in each one of the five subjects. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. We report the bias-corrected estimator and robust standard errors suggested by Calonico et al. (2014). The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

Table A.7: Effect on ENEM grades, White students, RD Estimates

	ENEM Grades, Natural Sciences									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.00	0.01	-0.01	-0.00	0.01	0.00	0.03	0.02	0.03	-0.01
Std. Error	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)
P-value	[0.956]	[0.756]	[0.747]	[0.883]	[0.750]	[0.986]	[0.354]	[0.644]	[0.381]	[0.826]
Total Obs. (Effective)	1838	1718	1746	2285	2272	1042	1114	1522	1624	1078
Bandwidth	0.185	0.164	0.168	0.174	0.171	0.136	0.151	0.149	0.166	0.21
	ENEM Grades, Humanities									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.01	0.01	0.01	0.00	0.01	0.01	0.02	-0.04	0.02	0.02
Std. Error	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.03)	(0.04)
P-value	[0.594]	[0.837]	[0.674]	[0.864]	[0.613]	[0.873]	[0.624]	[0.291]	[0.500]	[0.608]
Total Obs. (Effective)	1845	1793	1907	2144	2423	990	1048	1273	1524	1074
Bandwidth	0.187	0.176	0.199	0.155	0.192	0.127	0.137	0.117	0.149	0.209
	ENEM Grades, Languages									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.02	0.04	0.02	-0.01	0.01	-0.03	0.01	-0.03	0.02	0.02
Std. Error	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
P-value	[0.635]	[0.198]	[0.586]	[0.874]	[0.807]	[0.446]	[0.791]	[0.500]	[0.645]	[0.639]
Total Obs. (Effective)	1744	1699	1768	2206	2398	951	1059	1345	1531	902
Bandwidth	0.168	0.162	0.173	0.163	0.19	0.122	0.14	0.125	0.15	0.15
	ENEM Grades, Math									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.00	0.02	0.02	-0.02	-0.00	-0.04	0.03	0.01	-0.01	-0.01
Std. Error	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.04)	(0.04)	(0.03)	(0.05)
P-value	[0.891]	[0.515]	[0.603]	[0.495]	[0.948]	[0.353]	[0.487]	[0.695]	[0.699]	[0.879]
Total Obs. (Effective)	1646	1781	1752	2065	2190	913	1158	1618	1775	935
Bandwidth	0.154	0.175	0.169	0.148	0.161	0.115	0.163	0.165	0.196	0.159
	ENEM Grades, Essay									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.01	0.02	0.02	-0.00	-0.01	-0.02	0.02	0.04	-0.01	-0.01
Std. Error	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)
P-value	[0.548]	[0.220]	[0.211]	[0.820]	[0.544]	[0.443]	[0.447]	[0.084]	[0.677]	[0.654]
Total Obs. (Effective)	1853	1847	2010	2590	2287	1002	1236	1475	1688	942
Bandwidth	0.189	0.188	0.227	0.224	0.174	0.129	0.182	0.143	0.178	0.162

Notes: The table reports RD estimates for the effect of the election of a Black mayor on White students' standardized ENEM grades in each one of the five subjects. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. We report the bias-corrected estimator and robust standard errors suggested by Calonico et al. (2014). The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

Table A.8: Effect on number of students enrolled in public universities, RD Estimates

	Panel A: Black Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.36	0.37	0.33	0.36	0.49	0.41	0.35	0.61	0.65	0.61
Std. Error	(0.21)	(0.21)	(0.21)	(0.18)	(0.19)	(0.26)	(0.26)	(0.24)	(0.24)	(0.24)
P-value	[0.085]	[0.076]	[0.117]	[0.050]	[0.013]	[0.124]	[0.170]	[0.011]	[0.006]	[0.010]
Coef. (Robust)	0.4	0.42	0.38	0.42	0.56	0.43	0.38	0.7	0.74	0.69
Std. Error	(0.24)	(0.24)	(0.25)	(0.21)	(0.22)	(0.3)	(0.29)	(0.26)	(0.26)	(0.27)
P-value	[0.095]	[0.084]	[0.124]	[0.044]	[0.011]	[0.154]	[0.202]	[0.008]	[0.005]	[0.009]
Total Obs. (Effective)	1073	1053	1018	1339	1242	543	592	767	812	847
Bandwidth	0.169	0.163	0.157	0.134	0.122	0.188	0.229	0.119	0.128	0.135
	Panel B: White Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.29	0.34	0.30	0.20	0.28	0.20	0.35	0.39	0.39	0.41
Std. Error	(0.22)	(0.22)	(0.22)	(0.17)	(0.18)	(0.29)	(0.3)	(0.24)	(0.24)	(0.25)
P-value	[0.190]	[0.117]	[0.164]	[0.247]	[0.123]	[0.489]	[0.240]	[0.105]	[0.107]	[0.100]
Coef. (Robust)	0.35	0.4	0.36	0.23	0.32	0.21	0.4	0.47	0.47	0.49
Std. Error	(0.25)	(0.25)	(0.25)	(0.2)	(0.21)	(0.34)	(0.35)	(0.27)	(0.27)	(0.28)
P-value	[0.174]	[0.108]	[0.161]	[0.247]	[0.127]	[0.527]	[0.248]	[0.088]	[0.084]	[0.080]
Total Obs. (Effective)	1058	1062	1060	1607	1545	514	511	875	878	863
Bandwidth	0.165	0.165	0.165	0.174	0.162	0.171	0.168	0.143	0.143	0.139

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the number of Black (Panel A) and White (Panel B) students born in the municipality enrolled in public universities for different numbers of years before and after the election. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. The first three rows in each panel use the conventional Calonico et al. (2014, 2015) RD estimator, while the second set of rows (rows 4 to 6) use the bias-corrected estimator suggested by the same authors. The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

Table A.9: Effect on number of students enrolled in STEM majors, RD Estimates

	Panel A: Black Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.14	0.14	0.15	0.27	0.33	0.33	0.48	0.38	0.38	0.45
Std. Error	(0.19)	(0.19)	(0.19)	(0.16)	(0.16)	(0.26)	(0.27)	(0.22)	(0.22)	(0.22)
P-value	[0.440]	[0.463]	[0.428]	[0.079]	[0.042]	[0.202]	[0.076]	[0.084]	[0.085]	[0.039]
Coef. (Robust)	0.16	0.17	0.17	0.31	0.37	0.42	0.57	0.47	0.46	0.53
Std. Error	(0.22)	(0.22)	(0.23)	(0.18)	(0.19)	(0.29)	(0.31)	(0.25)	(0.25)	(0.25)
P-value	[0.452]	[0.448]	[0.443]	[0.088]	[0.046]	[0.153]	[0.062]	[0.061]	[0.067]	[0.033]
Total Obs. (Effective)	1109	1113	1091	1528	1486	429	454	761	816	833
Bandwidth	0.178	0.18	0.174	0.158	0.152	0.125	0.135	0.117	0.128	0.132
	Panel B: White Students (log)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.18	0.20	0.23	0.24	0.25	0.36	0.41	0.33	0.27	0.31
Std. Error	(0.2)	(0.2)	(0.2)	(0.16)	(0.15)	(0.26)	(0.27)	(0.22)	(0.23)	(0.23)
P-value	[0.362]	[0.311]	[0.240]	[0.125]	[0.096]	[0.161]	[0.122]	[0.139]	[0.223]	[0.181]
Coef. (Robust)	0.23	0.25	0.27	0.28	0.29	0.41	0.46	0.4	0.34	0.38
Std. Error	(0.23)	(0.23)	(0.23)	(0.18)	(0.17)	(0.3)	(0.31)	(0.25)	(0.26)	(0.26)
P-value	[0.330]	[0.280]	[0.241]	[0.127]	[0.093]	[0.168]	[0.138]	[0.111]	[0.183]	[0.145]
Total Obs. (Effective)	1087	1112	1105	1633	1737	497	511	843	864	833
Bandwidth	0.173	0.179	0.177	0.178	0.2	0.16	0.169	0.135	0.139	0.132

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the number of Black (Panel A) and White (Panel B) students born in the municipality enrolled in STEM (Science, Technology, Engineering and Mathematics) majors for different numbers of years before and after the election. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained by pooling municipality-year pairs for elections between 2004 and 2016. The first three rows in each panel use the conventional Calonico et al. (2014, 2015) RD estimator, while the second set of rows (rows 4 to 6) use the bias-corrected estimator suggested by the same authors. The last two rows in each Panel report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

Table A.10: Effect on Proficiency in Portuguese and Mathematics, 5th grade students, RD Estimates

	Proficiency in Portuguese, Black Students, 5th Grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.00		-0.05		-0.02		-0.02		0.00	
Std. Error	(0.05)		(0.05)		(0.04)		(0.07)		(0.06)	
P-value	[0.960]		[0.349]		[0.666]		[0.723]		[0.933]	
Total Obs. (Effective)	1749		1734		2342		937		1370	
Bandwidth	0.178		0.168		0.186		0.121		0.131	
	Proficiency in Math, Black Students, 5th Grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.01		-0.05		-0.03		-0.05		0.02	
Std. Error	(0.05)		(0.05)		(0.04)		(0.07)		(0.06)	
P-value	[0.753]		[0.353]		[0.402]		[0.491]		[0.720]	
Total Obs. (Effective)	1878		1712		2478		851		1435	
Bandwidth	0.207		0.165		0.21		0.107		0.141	
	Proficiency in Math, White Students, 5th Grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.03		-0.12		0.00		-0.06		-0.04	
Std. Error	(0.06)		(0.07)		(0.05)		(0.08)		(0.07)	
P-value	[0.631]		[0.081]		[0.991]		[0.445]		[0.619]	
Total Obs. (Effective)	1707		1562		2399		850		1238	
Bandwidth	0.17		0.146		0.194		0.107		0.115	
	Proficiency in Portuguese, White Students, 5th Grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.00		-0.09		-0.00		-0.04		-0.04	
Std. Error	(0.06)		(0.07)		(0.05)		(0.08)		(0.07)	
P-value	[0.948]		[0.155]		[0.939]		[0.630]		[0.593]	
Total Obs. (Effective)	1777		1652		2358		877		1219	
Bandwidth	0.183		0.157		0.189		0.111		0.113	

Notes: The table reports RD estimates for the effect of the election of a Black mayor on students' proficiency in Portuguese and Mathematics in the 5th grade, as measured by the standardized test from the System of Evaluation of Basic Education (SAEB). Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained pooling municipality-year pairs for elections between 2004 and 2016. The first set of results (first three rows) uses the conventional Calonico et al. (2014, 2015) RD estimator, while the second set (rows 4 to 6) uses the bias-corrected estimator suggested by the same authors. The last two rows report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

Table A.11: Effect on Proficiency in Portuguese and Mathematics, 9th grade, White students, RD Estimates

	Proficiency in Math, White Students, 9th Grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	-0.03		-0.04		-0.01		0.01		-0.10	
Std. Error	(0.05)		(0.05)		(0.05)		(0.06)		(0.06)	
P-value	[0.606]		[0.467]		[0.776]		[0.899]		[0.074]	
Total Obs. (Effective)	1655		1707		2030		1037		1165	
Bandwidth	0.161		0.165		0.149		0.137		0.109	
	Proficiency in Portuguese, White Students, 9th Grade (SAEB)									
	t-1	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef. (Robust)	0.00		-0.02		-0.02		0.01		-0.08	
Std. Error	(0.05)		(0.05)		(0.05)		(0.05)		(0.05)	
P-value	[0.991]		[0.706]		[0.697]		[0.880]		[0.141]	
Total Obs. (Effective)	1658		1778		2021		1296		1480	
Bandwidth	0.162		0.177		0.149		0.201		0.148	

Notes: The table reports RD estimates for the effect of the election of a Black mayor on White students' proficiency in Portuguese and Mathematics in the 9th grade, as measured by the standardized test from the System of Evaluation of Basic Education (SAEB). Results for Black students are on Table 5 in the main text. Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained pooling municipality-year pairs for elections between 2004 and 2016. The first set of results (first three rows) uses the conventional Calonico et al. (2014, 2015) RD estimator, while the second set (rows 4 to 6) uses the bias-corrected estimator suggested by the same authors. The last two rows report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

Table A.12: Effect on Policies on Racial Equality and Discrimination, RD Estimates

Any Racial Policy	**t-1**	**t+2**	**t+3**	**t+6**	**t+7**
Coef.	-0.05	-0.06	0.08	0.05	0.11
Std. Error	(0.07)	(0.04)	(0.05)	(0.04)	(0.06)
P-value	[0.461]	[0.131]	[0.099]	[0.270]	[0.079]
Coef. (Robust)	-0.06	-0.06	0.09	0.05	0.12
Std. Error	(0.09)	(0.04)	(0.05)	(0.05)	(0.07)
P-value	[0.507]	[0.183]	[0.086]	[0.293]	[0.104]
Total Obs. (Effective)	645	1734	1595	1163	936
Bandwidth	0.158	0.166	0.17	0.164	0.128

Notes: The table reports RD estimates for the effect of the election of a Black mayor on the municipality's adoption of policies on racial equality and discrimination. Data comes from the Survey of Basic Municipal Information (see Table A.1 for details). Each column represents estimates for a different regression with outcomes k years before or after the election (that happened at $t0$). Estimates are obtained pooling municipality-year pairs for elections between 2004 and 2016. The first set of results (first three rows) uses the conventional Calonico et al. (2014, 2015) RD estimator, while the second set (rows 4 to 6) uses the bias-corrected estimator suggested by the same authors. The last two rows report the bandwidth (computed optimally for each regression) and effective number of observations in each regression. Regressions include election-year fixed effects. Standard errors clustered at the municipality level are reported in parentheses, and corresponding p-values in brackets.

B Robustness of Main Results

Table A.1: Robustness: ENEM Enrollment by Black Students

	Half of Optimal Bandwidth									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.24	0.24	0.21	0.41	0.43	0.57	0.58	0.67	0.70	0.94
Std. Error	(0.19)	(0.19)	(0.19)	(0.17)	(0.17)	(0.24)	(0.23)	(0.21)	(0.21)	(0.27)
P-value	[0.194]	[0.197]	[0.265]	[0.014]	[0.009]	[0.015]	[0.012]	[0.002]	[0.001]	[0.001]
Coef. (Robust)	0.31	0.3	0.3	0.37	0.4	0.52	0.47	0.65	0.68	0.82
Std. Error	(0.26)	(0.25)	(0.26)	(0.23)	(0.23)	(0.31)	(0.3)	(0.28)	(0.27)	(0.38)
P-value	[0.232]	[0.242]	[0.244]	[0.102]	[0.077]	[0.086]	[0.108]	[0.020]	[0.013]	[0.033]
Total Obs. (Effective)	901	885	889	1131	1103	542	559	738	777	412
Bandwidth (h/2)	0.075	0.073	0.074	0.07	0.069	0.062	0.064	0.06	0.064	0.056
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Two-thirds of Optimal Bandwidth									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.19	0.17	0.15	0.34	0.36	0.55	0.55	0.65	0.64	0.95
Std. Error	(0.16)	(0.16)	(0.17)	(0.15)	(0.15)	(0.21)	(0.21)	(0.19)	(0.18)	(0.24)
P-value	[0.257]	[0.294]	[0.385]	[0.023]	[0.014]	[0.010]	[0.008]	[0.001]	[0.000]	[0.000]
Coef. (Robust)	0.31	0.32	0.3	0.47	0.49	0.59	0.58	0.7	0.75	0.93
Std. Error	(0.23)	(0.23)	(0.23)	(0.2)	(0.2)	(0.28)	(0.27)	(0.26)	(0.25)	(0.35)
P-value	[0.179]	[0.163]	[0.203]	[0.023]	[0.015]	[0.036]	[0.034]	[0.007]	[0.003]	[0.007]
Total Obs. (Effective)	1150	1131	1135	1434	1401	694	715	941	1003	530
Bandwidth (2h/3)	0.1	0.098	0.098	0.094	0.091	0.082	0.085	0.08	0.086	0.075
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Uniform Kernel									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.19	0.17	0.09	0.19	0.21	0.30	0.35	0.40	0.41	0.55
Std. Error	(0.13)	(0.13)	(0.12)	(0.11)	(0.11)	(0.16)	(0.16)	(0.14)	(0.14)	(0.18)
P-value	[0.164]	[0.203]	[0.454]	[0.092]	[0.060]	[0.061]	[0.028]	[0.004]	[0.003]	[0.002]
Coef. (Robust)	0.22	0.2	0.11	0.22	0.24	0.34	0.39	0.43	0.45	0.59
Std. Error	(0.15)	(0.15)	(0.14)	(0.13)	(0.12)	(0.19)	(0.18)	(0.16)	(0.15)	(0.2)
P-value	[0.160]	[0.194]	[0.454]	[0.077]	[0.056]	[0.068]	[0.034]	[0.008]	[0.003]	[0.003]
Total Obs. (Effective)	1439	1458	1658	2081	2076	987	974	1443	1465	816
Bandwidth	0.13	0.132	0.156	0.149	0.149	0.127	0.125	0.137	0.141	0.128
Kernel	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Without Election-Year Fixed Effects									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.19	0.19	0.08	0.18	0.19	0.29	0.33	0.33	0.32	0.61
Std. Error	(0.14)	(0.14)	(0.12)	(0.11)	(0.11)	(0.17)	(0.17)	(0.14)	(0.14)	(0.18)
P-value	[0.173]	[0.191]	[0.489]	[0.107]	[0.089]	[0.086]	[0.048]	[0.023]	[0.019]	[0.001]
Coef. (Robust)	0.24	0.24	0.1	0.19	0.21	0.33	0.38	0.37	0.35	0.65
Std. Error	(0.16)	(0.16)	(0.14)	(0.13)	(0.13)	(0.19)	(0.19)	(0.16)	(0.15)	(0.21)
P-value	[0.135]	[0.144]	[0.490]	[0.132]	[0.103]	[0.081]	[0.043]	[0.023]	[0.022]	[0.002]
Total Obs. (Effective)	1305	1275	1663	2128	2050	947	922	1536	1573	826
Bandwidth	0.117	0.113	0.156	0.153	0.146	0.121	0.117	0.151	0.157	0.13
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	No	No	No	No	No	No	No	No	No	No

Table A.2: Robustness: ENEM Enrollment by White Students

	Half of Optimal Bandwidth									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.18	0.15	0.17	0.36	0.38	0.32	0.33	0.36	0.41	0.67
Std. Error	(0.19)	(0.19)	(0.19)	(0.17)	(0.17)	(0.23)	(0.22)	(0.2)	(0.21)	(0.25)
P-value	[0.361]	[0.424]	[0.375]	[0.035]	[0.027]	[0.164]	[0.137]	[0.072]	[0.048]	[0.008]
Coef. (Robust)	0.25	0.16	0.23	0.33	0.37	0.24	0.27	0.41	0.47	0.82
Std. Error	(0.27)	(0.26)	(0.26)	(0.24)	(0.24)	(0.3)	(0.29)	(0.27)	(0.27)	(0.36)
P-value	[0.359]	[0.535]	[0.372]	[0.158]	[0.120]	[0.420]	[0.351]	[0.130]	[0.090]	[0.025]
Total Obs. (Effective)	911	909	912	1116	1090	610	606	865	804	579
Bandwidth (h/2)	0.076	0.076	0.076	0.07	0.068	0.07	0.07	0.073	0.067	0.081
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Two-thirds of Optimal Bandwidth									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.11	0.10	0.11	0.29	0.30	0.28	0.29	0.30	0.36	0.53
Std. Error	(0.17)	(0.16)	(0.17)	(0.15)	(0.15)	(0.2)	(0.2)	(0.18)	(0.18)	(0.22)
P-value	[0.500]	[0.538]	[0.515]	[0.052]	[0.045]	[0.170]	[0.140]	[0.091]	[0.051]	[0.017]
Coef. (Robust)	0.25	0.2	0.24	0.42	0.45	0.34	0.36	0.43	0.47	0.83
Std. Error	(0.24)	(0.23)	(0.23)	(0.21)	(0.21)	(0.28)	(0.27)	(0.24)	(0.25)	(0.32)
P-value	[0.297]	[0.395]	[0.304]	[0.049]	[0.035]	[0.225]	[0.189]	[0.080]	[0.060]	[0.010]
Total Obs. (Effective)	1164	1156	1168	1420	1392	775	773	1114	1035	710
Bandwidth (2h/3)	0.101	0.101	0.101	0.093	0.091	0.094	0.093	0.097	0.089	0.108
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Uniform Kernel									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.06	0.07	0.04	0.17	0.15	0.22	0.21	0.25	0.20	0.35
Std. Error	(0.13)	(0.12)	(0.12)	(0.12)	(0.11)	(0.17)	(0.17)	(0.14)	(0.15)	(0.19)
P-value	[0.615]	[0.587]	[0.731]	[0.139]	[0.188]	[0.206]	[0.212]	[0.089]	[0.184]	[0.066]
Coef. (Robust)	0.07	0.07	0.05	0.19	0.16	0.25	0.23	0.25	0.22	0.35
Std. Error	(0.14)	(0.14)	(0.14)	(0.14)	(0.13)	(0.2)	(0.19)	(0.17)	(0.17)	(0.22)
P-value	[0.618]	[0.604]	[0.700]	[0.162]	[0.215]	[0.206]	[0.232]	[0.127]	[0.206]	[0.117]
Total Obs. (Effective)	1689	1708	1681	1914	2055	913	924	1397	1308	793
Bandwidth	0.16	0.163	0.159	0.134	0.146	0.115	0.118	0.131	0.121	0.124
Kernel	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Without Election-Year Fixed Effects									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.06	0.05	0.04	0.18	0.20	0.18	0.25	0.26	0.22	0.36
Std. Error	(0.13)	(0.12)	(0.12)	(0.12)	(0.12)	(0.17)	(0.17)	(0.15)	(0.15)	(0.19)
P-value	[0.652]	[0.675]	[0.721]	[0.135]	[0.084]	[0.287]	[0.144]	[0.081]	[0.133]	[0.067]
Coef. (Robust)	0.07	0.06	0.05	0.18	0.21	0.19	0.28	0.27	0.21	0.36
Std. Error	(0.15)	(0.14)	(0.14)	(0.14)	(0.13)	(0.19)	(0.19)	(0.17)	(0.17)	(0.22)
P-value	[0.641]	[0.697]	[0.715]	[0.199]	[0.114]	[0.325]	[0.141]	[0.112]	[0.210]	[0.108]
Total Obs. (Effective)	1682	1663	1688	1911	1949	946	902	1401	1372	786
Bandwidth	0.159	0.157	0.16	0.133	0.136	0.121	0.113	0.131	0.128	0.122
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	No	No	No	No	No	No	No	No	No	No

Table A.3: Robustness: Enrollment in Higher Education by Black Students

	Half of Optimal Bandwidth									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.37	0.31	0.34	0.46	0.56	0.73	0.60	0.52	0.76	0.77
Std. Error	(0.27)	(0.27)	(0.27)	(0.22)	(0.23)	(0.31)	(0.3)	(0.29)	(0.28)	(0.3)
P-value	[0.178]	[0.255]	[0.203]	[0.033]	[0.014]	[0.019]	[0.048]	[0.076]	[0.006]	[0.012]
Coef. (Robust)	0.53	0.52	0.47	0.59	0.64	0.78	0.74	0.36	0.81	0.82
Std. Error	(0.39)	(0.39)	(0.4)	(0.32)	(0.33)	(0.45)	(0.43)	(0.39)	(0.39)	(0.42)
P-value	[0.173]	[0.181]	[0.245]	[0.065]	[0.052]	[0.085]	[0.087]	[0.360]	[0.035]	[0.051]
Total Obs. (Effective)	608	609	606	912	878	289	343	461	498	448
Bandwidth (h/2)	0.086	0.086	0.085	0.083	0.079	0.075	0.093	0.064	0.069	0.062
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Two-thirds of Optimal Bandwidth									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.30	0.23	0.25	0.37	0.45	0.61	0.47	0.58	0.70	0.78
Std. Error	(0.24)	(0.24)	(0.24)	(0.19)	(0.2)	(0.28)	(0.27)	(0.25)	(0.24)	(0.26)
P-value	[0.210]	[0.330]	[0.296]	[0.053]	[0.025]	[0.031]	[0.085]	[0.021]	[0.004]	[0.003]
Coef. (Robust)	0.45	0.42	0.45	0.58	0.68	0.88	0.73	0.44	0.86	0.79
Std. Error	(0.34)	(0.34)	(0.35)	(0.28)	(0.29)	(0.4)	(0.38)	(0.36)	(0.35)	(0.38)
P-value	[0.186]	[0.218]	[0.197]	[0.037]	[0.018]	[0.027]	[0.051]	[0.220]	[0.013]	[0.037]
Total Obs. (Effective)	779	777	772	1147	1112	361	425	606	634	590
Bandwidth (2h/3)	0.114	0.114	0.114	0.11	0.106	0.1	0.124	0.085	0.092	0.083
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Uniform Kernel									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.29	0.17	0.18	0.21	0.28	0.38	0.40	0.44	0.51	0.79
Std. Error	(0.22)	(0.22)	(0.22)	(0.16)	(0.16)	(0.28)	(0.26)	(0.21)	(0.24)	(0.25)
P-value	[0.190]	[0.428]	[0.414]	[0.171]	[0.077]	[0.167]	[0.128]	[0.040]	[0.032]	[0.001]
Coef. (Robust)	0.32	0.3	0.34	0.24	0.3	0.97	0.57	0.48	0.59	0.9
Std. Error	(0.33)	(0.32)	(0.32)	(0.18)	(0.18)	(0.38)	(0.37)	(0.24)	(0.26)	(0.27)
P-value	[0.333]	[0.347]	[0.293]	[0.171]	[0.097]	[0.010]	[0.117]	[0.051]	[0.022]	[0.001]
Total Obs. (Effective)	779	777	772	1472	1440	361	425	754	634	571
Bandwidth	0.114	0.114	0.114	0.15	0.147	0.1	0.124	0.115	0.092	0.08
Kernel	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Without Election-Year Fixed Effects									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.27	0.15	0.20	0.22	0.29	0.46	0.39	0.51	0.62	0.87
Std. Error	(0.21)	(0.21)	(0.21)	(0.16)	(0.16)	(0.29)	(0.26)	(0.23)	(0.25)	(0.26)
P-value	[0.200]	[0.491]	[0.344]	[0.180]	[0.066]	[0.105]	[0.134]	[0.024]	[0.012]	[0.001]
Coef. (Robust)	0.28	0.13	0.19	0.27	0.32	0.58	0.34	0.56	0.71	0.98
Std. Error	(0.25)	(0.25)	(0.25)	(0.18)	(0.18)	(0.31)	(0.3)	(0.26)	(0.27)	(0.28)
P-value	[0.256]	[0.612]	[0.450]	[0.140]	[0.083]	[0.065]	[0.252]	[0.029]	[0.008]	[0.000]
Total Obs. (Effective)	829	801	815	1519	1515	340	427	748	624	545
Bandwidth	0.123	0.118	0.121	0.158	0.157	0.091	0.124	0.114	0.09	0.077
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	No	No	No	No	No	No	No	No	No	No

Table A.4: Robustness: Enrollment in Higher Education by White Students

	Half of Optimal Bandwidth									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.44	0.35	0.45	0.49	0.47	0.53	0.47	0.33	0.51	0.42
Std. Error	(0.27)	(0.28)	(0.27)	(0.21)	(0.21)	(0.38)	(0.36)	(0.28)	(0.3)	(0.3)
P-value	[0.109]	[0.208]	[0.099]	[0.022]	[0.027]	[0.157]	[0.192]	[0.238]	[0.087]	[0.169]
Coef. (Robust)	0.51	0.51	0.65	0.67	0.68	0.63	0.5	0.26	0.57	0.43
Std. Error	(0.4)	(0.42)	(0.41)	(0.31)	(0.32)	(0.5)	(0.49)	(0.38)	(0.39)	(0.41)
P-value	[0.204]	[0.221]	[0.108]	[0.031]	[0.032]	[0.213]	[0.316]	[0.498]	[0.144]	[0.294]
Total Obs. (Effective)	629	634	621	943	971	261	287	578	500	514
Bandwidth (h/2)	0.089	0.09	0.088	0.088	0.09	0.066	0.074	0.08	0.069	0.072
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Two-thirds of Optimal Bandwidth									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.31	0.22	0.28	0.33	0.34	0.46	0.40	0.29	0.45	0.37
Std. Error	(0.24)	(0.24)	(0.23)	(0.19)	(0.19)	(0.34)	(0.33)	(0.26)	(0.27)	(0.27)
P-value	[0.187]	[0.370]	[0.229]	[0.078]	[0.071]	[0.175]	[0.217]	[0.258]	[0.092]	[0.171]
Coef. (Robust)	0.56	0.52	0.64	0.68	0.64	0.66	0.55	0.36	0.6	0.49
Std. Error	(0.35)	(0.36)	(0.35)	(0.27)	(0.27)	(0.46)	(0.44)	(0.35)	(0.36)	(0.37)
P-value	[0.104]	[0.148]	[0.066]	[0.012]	[0.019]	[0.153]	[0.218]	[0.300]	[0.096]	[0.192]
Total Obs. (Effective)	801	807	798	1196	1218	329	358	707	639	656
Bandwidth (2h/3)	0.119	0.119	0.118	0.117	0.12	0.088	0.099	0.107	0.092	0.096
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Uniform Kernel									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.14	0.07	0.09	0.16	0.15	0.26	0.23	0.23	0.22	0.21
Std. Error	(0.21)	(0.22)	(0.21)	(0.17)	(0.15)	(0.32)	(0.31)	(0.22)	(0.25)	(0.24)
P-value	[0.504]	[0.745]	[0.673]	[0.337]	[0.311]	[0.427]	[0.473]	[0.304]	[0.370]	[0.384]
Coef. (Robust)	0.57	0.43	0.57	0.14	0.17	0.77	0.69	0.19	0.3	0.25
Std. Error	(0.32)	(0.33)	(0.32)	(0.19)	(0.17)	(0.45)	(0.43)	(0.25)	(0.27)	(0.27)
P-value	[0.078]	[0.192]	[0.075]	[0.453]	[0.324]	[0.089]	[0.108]	[0.446]	[0.280]	[0.354]
Total Obs. (Effective)	801	807	798	1329	1571	329	358	780	678	725
Bandwidth	0.119	0.119	0.118	0.131	0.167	0.088	0.099	0.121	0.101	0.111
Kernel	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Without Election-Year Fixed Effects									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.25	0.07	0.19	0.18	0.20	0.24	0.30	0.32	0.26	0.21
Std. Error	(0.2)	(0.21)	(0.2)	(0.17)	(0.16)	(0.29)	(0.29)	(0.23)	(0.25)	(0.24)
P-value	[0.207]	[0.723]	[0.329]	[0.276]	[0.201]	[0.411]	[0.306]	[0.162]	[0.313]	[0.376]
Coef. (Robust)	0.3	0.09	0.19	0.18	0.23	0.29	0.32	0.31	0.34	0.26
Std. Error	(0.23)	(0.24)	(0.23)	(0.2)	(0.18)	(0.34)	(0.34)	(0.26)	(0.28)	(0.27)
P-value	[0.179]	[0.709]	[0.417]	[0.367]	[0.203]	[0.391]	[0.336]	[0.239]	[0.226]	[0.341]
Total Obs. (Effective)	922	884	914	1344	1516	402	407	797	658	722
Bandwidth	0.139	0.132	0.138	0.134	0.157	0.115	0.118	0.125	0.097	0.111
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	No	No	No	No	No	No	No	No	No	No

Table A.5: Robustness: Graduation from Higher Education by Black Students

	Half of Optimal Bandwidth									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.31	0.47	0.23	0.39	0.46	0.39	0.40	0.42	0.56	0.62
Std. Error	(0.23)	(0.24)	(0.23)	(0.2)	(0.22)	(0.26)	(0.27)	(0.28)	(0.28)	(0.27)
P-value	[0.177]	[0.051]	[0.325]	[0.045]	[0.033]	[0.131]	[0.137]	[0.144]	[0.048]	[0.022]
Coef. (Robust)	0.53	0.65	0.42	0.43	0.45	0.36	0.5	0.57	0.51	0.63
Std. Error	(0.33)	(0.35)	(0.33)	(0.28)	(0.31)	(0.35)	(0.37)	(0.39)	(0.37)	(0.36)
P-value	[0.116]	[0.064]	[0.209]	[0.128]	[0.146]	[0.311]	[0.180]	[0.146]	[0.171]	[0.085]
Total Obs. (Effective)	641	615	706	884	804	378	381	444	376	426
Bandwidth (h/2)	0.092	0.087	0.102	0.08	0.071	0.107	0.108	0.061	0.05	0.058
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Two-thirds of Optimal Bandwidth									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.23	0.36	0.16	0.33	0.39	0.37	0.35	0.43	0.57	0.66
Std. Error	(0.2)	(0.21)	(0.2)	(0.17)	(0.19)	(0.23)	(0.24)	(0.25)	(0.25)	(0.24)
P-value	[0.259]	[0.094]	[0.419]	[0.054]	[0.038]	[0.101]	[0.142]	[0.083]	[0.024]	[0.006]
Coef. (Robust)	0.44	0.62	0.33	0.46	0.52	0.39	0.47	0.48	0.55	0.62
Std. Error	(0.29)	(0.31)	(0.29)	(0.25)	(0.27)	(0.31)	(0.33)	(0.35)	(0.34)	(0.34)
P-value	[0.137]	[0.045]	[0.260]	[0.063]	[0.055]	[0.214]	[0.153]	[0.179]	[0.113]	[0.063]
Total Obs. (Effective)	824	789	901	1119	1012	470	476	581	484	549
Bandwidth (2h/3)	0.122	0.116	0.136	0.106	0.095	0.142	0.144	0.081	0.067	0.077
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Uniform Kernel									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.20	0.25	0.15	0.23	0.25	0.37	0.30	0.27	0.49	0.51
Std. Error	(0.19)	(0.2)	(0.19)	(0.15)	(0.15)	(0.22)	(0.23)	(0.21)	(0.23)	(0.22)
P-value	[0.279]	[0.200]	[0.431]	[0.109]	[0.102]	[0.087]	[0.208]	[0.203]	[0.031]	[0.024]
Coef. (Robust)	0.27	0.51	0.19	0.25	0.26	0.37	0.43	0.34	0.59	0.6
Std. Error	(0.28)	(0.29)	(0.27)	(0.17)	(0.18)	(0.31)	(0.33)	(0.24)	(0.24)	(0.24)
P-value	[0.335]	[0.076]	[0.497]	[0.125]	[0.154]	[0.241]	[0.189]	[0.153]	[0.017]	[0.014]
Total Obs. (Effective)	824	789	901	1424	1319	470	476	679	588	612
Bandwidth	0.122	0.116	0.136	0.144	0.13	0.142	0.144	0.102	0.082	0.086
Kernel	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Without Election-Year Fixed Effects									
Black Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.18	0.24	0.14	0.26	0.26	0.35	0.28	0.30	0.55	0.52
Std. Error	(0.19)	(0.19)	(0.19)	(0.15)	(0.16)	(0.24)	(0.24)	(0.22)	(0.23)	(0.23)
P-value	[0.338]	[0.201]	[0.443]	[0.073]	[0.103]	[0.157]	[0.238]	[0.173]	[0.018]	[0.024]
Coef. (Robust)	0.22	0.27	0.17	0.29	0.28	0.42	0.26	0.37	0.65	0.61
Std. Error	(0.22)	(0.22)	(0.22)	(0.16)	(0.19)	(0.27)	(0.27)	(0.24)	(0.25)	(0.25)
P-value	[0.316]	[0.215]	[0.433]	[0.072]	[0.135]	[0.129]	[0.343]	[0.124]	[0.009]	[0.015]
Total Obs. (Effective)	832	838	882	1542	1328	370	423	672	563	618
Bandwidth	0.124	0.124	0.131	0.161	0.131	0.104	0.123	0.1	0.079	0.089
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	No	No	No	No	No	No	No	No	No	No

Table A.6: Robustness: Graduation from Higher Education by White Students

	Half of Optimal Bandwidth									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.39	0.57	0.34	0.30	0.42	0.28	0.65	0.28	0.41	0.29
Std. Error	(0.25)	(0.26)	(0.26)	(0.18)	(0.21)	(0.32)	(0.36)	(0.28)	(0.3)	(0.3)
P-value	[0.115]	[0.027]	[0.191]	[0.100]	[0.039]	[0.381]	[0.068]	[0.316]	[0.166]	[0.338]
Coef. (Robust)	0.53	0.74	0.52	0.52	0.47	0.39	0.84	0.43	0.62	0.33
Std. Error	(0.37)	(0.39)	(0.39)	(0.26)	(0.3)	(0.43)	(0.47)	(0.37)	(0.38)	(0.4)
P-value	[0.150]	[0.056]	[0.182]	[0.049]	[0.120]	[0.370]	[0.073]	[0.253]	[0.104]	[0.407]
Total Obs. (Effective)	635	593	620	1068	937	278	251	500	437	474
Bandwidth (h/2)	0.09	0.082	0.088	0.101	0.086	0.071	0.064	0.07	0.059	0.066
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Two-thirds of Optimal Bandwidth									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.25	0.42	0.22	0.20	0.31	0.27	0.58	0.23	0.40	0.29
Std. Error	(0.21)	(0.22)	(0.22)	(0.16)	(0.18)	(0.29)	(0.32)	(0.25)	(0.26)	(0.26)
P-value	[0.237]	[0.062]	[0.321]	[0.223]	[0.080]	[0.345]	[0.067]	[0.344]	[0.133]	[0.268]
Coef. (Robust)	0.55	0.77	0.49	0.44	0.53	0.33	0.79	0.39	0.49	0.31
Std. Error	(0.32)	(0.33)	(0.33)	(0.23)	(0.26)	(0.4)	(0.43)	(0.34)	(0.35)	(0.36)
P-value	[0.080]	[0.021]	[0.143]	[0.053]	[0.043]	[0.404]	[0.067]	[0.261]	[0.163]	[0.393]
Total Obs. (Effective)	807	758	797	1354	1184	347	324	643	564	615
Bandwidth (2h/3)	0.12	0.11	0.118	0.135	0.115	0.095	0.086	0.093	0.079	0.088
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Uniform Kernel									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.13	0.24	0.08	0.08	0.20	0.21	0.39	0.08	0.16	0.10
Std. Error	(0.19)	(0.2)	(0.2)	(0.15)	(0.15)	(0.28)	(0.31)	(0.21)	(0.23)	(0.23)
P-value	[0.506]	[0.245]	[0.701]	[0.563]	[0.181]	[0.439]	[0.207]	[0.706]	[0.497]	[0.648]
Coef. (Robust)	0.44	0.69	0.44	0.09	0.23	0.36	0.88	0.11	0.24	0.16
Std. Error	(0.29)	(0.31)	(0.31)	(0.17)	(0.18)	(0.38)	(0.42)	(0.24)	(0.26)	(0.26)
P-value	[0.136]	[0.024]	[0.154]	[0.591]	[0.189]	[0.343]	[0.037]	[0.635]	[0.350]	[0.536]
Total Obs. (Effective)	807	758	797	1466	1404	347	324	748	665	711
Bandwidth	0.12	0.11	0.118	0.15	0.141	0.095	0.086	0.114	0.098	0.109
Kernel	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform	Uniform
Election-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Without Election-Year Fixed Effects									
White Students	**t-1**	**t0**	**t+1**	**t+2**	**t+3**	**t+4**	**t+5**	**t+6**	**t+7**	**t+8**
Coef.	0.19	0.21	0.18	0.07	0.15	0.15	0.21	0.09	0.17	0.12
Std. Error	(0.18)	(0.19)	(0.19)	(0.15)	(0.15)	(0.25)	(0.28)	(0.21)	(0.23)	(0.23)
P-value	[0.292]	[0.269]	[0.351]	[0.625]	[0.311]	[0.555]	[0.449]	[0.666]	[0.459]	[0.605]
Coef. (Robust)	0.19	0.24	0.19	0.08	0.18	0.19	0.31	0.14	0.25	0.18
Std. Error	(0.21)	(0.22)	(0.22)	(0.17)	(0.17)	(0.29)	(0.31)	(0.24)	(0.26)	(0.26)
P-value	[0.351]	[0.270]	[0.384]	[0.618]	[0.303]	[0.517]	[0.321]	[0.564]	[0.323]	[0.491]
Total Obs. (Effective)	915	886	913	1487	1437	402	371	729	665	710
Bandwidth	0.138	0.133	0.138	0.152	0.146	0.115	0.104	0.112	0.098	0.108
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Election-Year FE	No	No	No	No	No	No	No	No	No	No