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RACE AND THE POLITICS OF CLOSE ELECTIONS

Tom Vogl

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1050 Massachusetts Avenue

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Race and the Politics of Close Elections  
Tom Vogl  
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**ABSTRACT**

Elections between black and white candidates tend to involve close margins and high turnout. Using a novel dataset of municipal vote returns during the rise of black mayors in U.S. cities, this paper establishes new facts about turnout and competition in close interracial elections. In the South, but not the North, close black victories were more likely than close black losses, involved higher turnout than close black losses, and were more likely than close black losses to be followed by subsequent black victories. These results are consistent with a model in which the historical exclusion of Southern blacks from politics made them disproportionately sensitive to mobilization efforts by political elites, leading to a black candidate advantage in close elections. The results contribute to a growing body of evidence that the outcomes of reasonably close elections are not always random, which suggests that detailed knowledge of the electoral context is a precondition to regression discontinuity analyses based on vote shares.

Tom Vogl  
Department of Economics  
Princeton University  
363 Wallace Hall  
Princeton, NJ 08544  
and NBER  
tvogl@princeton.edu

# 1 Introduction

Economists and political scientists increasingly look to narrowly-decided elections for insights into electoral competition and the causal effects of election outcomes. Some see close elections and the incentives they create for elected officials as vital to representative democracy (McDonald and Samples 2006). Others see them as valuable regression discontinuity designs that offer plausibly exogenous variation in election outcomes (Lee, Moretti and Butler 2004; Lee 2008; Ferreira and Gyourko 2009; Gerber and Hopkins 2011). Either point of view rests on the assumption that no candidate can systematically swing close elections.

However, a growing body of evidence on U.S. congressional elections suggests that candidates in positions of power can, in fact, manipulate the outcomes of relatively close elections. Compared to losers of close congressional elections, winners tend to be affiliated with the incumbent's party, to be affiliated with the party in control of several state offices (governor, secretary of state, and state legislature), and to be better financed (Snyder 2005; Caughey and Sekhon 2010; Grimmer et al. 2011). These findings are consistent with theories in which politically or economically advantaged candidates have disproportionate control over the outcomes of close elections, through either legal or illegal means. One set of theories emphasizes the ability of advantaged candidates to out-campaign their opponents or to intimidate their opponents' supporters in the lead-up to the election. Other theories involve *ex post* manipulation of election outcomes by advantaged candidates, either through litigation and demands for recounts or through outright fraud. Only in the second set of theories do advantaged candidates have precise control over elections decided by a handful of votes. But both *ex ante* and *ex post* actions can lead to non-randomness in the outcomes of elections with victory margins of only a few percent. This non-randomness may be of direct interest as a political phenomenon, but it also challenges regression discontinuity designs based on vote shares, at least those using feasible bandwidths. Such analyses identify the effects of election outcomes (e.g., the election of a Democrat) by assuming that victory is randomly assigned in close elections (Lee 2008).

This paper studies non-randomness and its implications in close elections between black and white mayoral candidates in the United States. The election of African-Americans to top

municipal posts in the final three decades of the twentieth century represented a transformation of urban race relations in the U.S. Figure 1 exhibits the rise of black mayoral leadership over time in cities with 1960 populations greater than 50,000. As of 1960, no U.S. city had ever experienced a black mayor, but of the 100 most populous cities in that year, 38 would elect African-Americans by the year 2000. Interracial elections during this transition were heated, typically involving high turnout and close margins. As such, the properties of close interracial contests can shed light on the electoral politics facilitating the rise of black mayors. Unlike typical congressional elections, however, candidates with connections to conventional sources of power were not necessarily advantaged in close elections. Although white mayoral candidates enjoyed greater financial resources and power, black candidates had their own asset: a large unregistered, unincorporated electorate.

Nowhere was this truer than in the South, where African-Americans had been excluded from political life for much of the previous century.<sup>1</sup> Until the mid-twentieth century, poll taxes, literacy tests, and white supremacist organizations kept African-Americans from the ballot box. Following the extension of the franchise during the Civil Rights Era, efforts to increase black voter registration and turnout were crucial to black electoral success in the South (Campbell and Feagin 1984, Rosenstone and Hansen 1993). Many whites were already accustomed to voting, whereas the South had a large, untapped pool of potential black voters. Voter mobilization also took place in the North, but black turnout did not depend as heavily on it. The low cost of raising black turnout in the South had much potential to systematically swing the outcomes of close elections. Because white voters voted for white candidates and black voters voted for black candidates, a citizen's (observable) turnout decision strongly predicted her (unobservable) ballot choice inside the voting booth. This observability made voting verifiable and thus made "manipulation" of the black vote share through strategic mobilization efforts more feasible.

Thus, the close-election advantage was ambiguous during the rise of the nation's black mayors. On the one hand, white candidates had more financial resources and more ties to traditional sources of power, especially in the South. On the other, black candidates may have

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<sup>1</sup> Throughout the paper, I use the terms "Non-South" and "North" interchangeably. I use the U.S. Census Bureau's definition of the South. The main results of the paper also hold for alternative regional definitions.

faced lower mobilization costs, again especially in the South. In this paper, I study non-randomness in the outcomes of competitive interracial elections using a new dataset consisting of the name, race, party affiliation, and vote return of each of the top-two candidates in over 1,000 U.S. mayoral elections. No existing data source contains this information for the sample frame of interest, which includes all elections during 1965-2000 in cities with a 1960 population of at least 50,000 and a 1960 black population share of at least 4 percent. I draw on a variety of historical sources to compile the dataset.

I use these data to document several facts about interracial elections. As motivation, it begins by showing that high turnout and closeness are important features of racial politics; in a specification with city and year fixed effects, a black candidate raises the number of votes cast and reduces the vote margin of victory.<sup>2</sup> After establishing these facts, the paper continues with the main empirical exercise, which estimates discontinuities in the density of the black vote margin of victory as well as several other outcomes. The results indicate that in the South, black candidates were disproportionately likely to win close elections. These close black victories involved higher voter turnout than the closest observed black losses, and they were over 70 percentage points more likely to be followed by black victory in subsequent elections. Non-Southern cities exhibited none of these patterns.<sup>3</sup> The North-South differences do not appear to be driven by regional differences in party politics. Data from neither region show evidence of sorting in close mayoral elections between a white Democrat and a white Republican. Furthermore, a large political party incumbency advantage existed in white-vs.-white contests in the North but *not* in the South.

The results on interracial elections in the South present a challenge to RD designs based on vote shares, but they by no means invalidate them as a rule. Rather, they send a basic message that detailed knowledge of the electoral context is an essential ingredient to careful analyses of election RD designs. Tests for discontinuities in the density of the running variable and other baseline covariates shed some light on the validity of the RD design, but the details of electoral

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<sup>2</sup> As discussed below, the turnout response to black candidates has been documented by Washington (2006) for U.S. congressional elections and by Lublin and Tate (1995) for a smaller sample of mayoral elections.

<sup>3</sup> The estimates are large and statistically significant for the South; they are small and statistically insignificant for the North. However, the North-South differences in the estimates are not always statistically significant.

competition provide a basis for theory, which motivates these tests and allows the researcher to judge whether their results make sense.

At face value, the results present a puzzle because the historical record reveals little evidence of fraud or post-election lawsuits that systematically favored black candidates. But in the discussion of the results, I outline a simple game of electoral competition that is consistent with the results. In the game, citizens always prefer their own-race candidate but vary in their propensities to vote. Both white and black political campaigns can mobilize voters to increase turnout, but they have access to different voter mobilization technologies. If black campaigns have a larger capacity to mobilize voters, then black candidates will win a disproportionate share of close elections, and—under the most likely class of distributional assumptions—close black victories will involve higher turnout than the closest black losses. This game also suggests several mechanisms through which mobilization asymmetries may increase the persistence of black victories, whereby a single victory precedes an era of black representation. Not all of these mechanisms involve the *effects* of incumbency; some persistence arises simply because candidates who push past a voter mobilization threshold to win have superior time-invariant characteristics. Thus, the mechanisms can explain why regression discontinuity estimates of the racial incumbency advantage are largest in elections that exhibit the strongest evidence of sorting around the victory threshold. Importantly, the game depends not on the *level* of electoral participation by a racial group but rather on its *sensitivity* to the actions of elites.

The paper adds to the literature on how threshold rules can induce endogenous sorting among agents.<sup>4</sup> As a consequence, the results serve as a caveat to the many RD analyses of elections that use reasonably large bandwidths or rough global polynomial approximations of the conditional expectation function (e.g., Lee 2008; Ferreira and Gyourko 2009; Gerber and Hopkins 2010). Most relevant in this respect is Hopkins and McCabe's (2011) recent analysis of the effects of black mayors on city outcomes. Applying RD methods to a smaller, more recent dataset than my own, Hopkins and McCabe find modest evidence that black mayors increase the black share of the police force and no evidence of other effects. But in the presence of

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<sup>4</sup> For non-political applications, see Bayer, Ferreira, and McMillan (2007), Bubb and Kaufman (2009), and Urquiola and Verhoogen (2009).

endogenous campaign intensity near the victory threshold, one should be cautious in interpreting their estimates. In fact, consistent the results of this paper, Hopkins and McCabe estimate in an appendix that close black victories are more likely to take place in the South than are close black losses ( $p = 0.06$ ).

Relative to the existing literature on non-randomness in close congressional elections (Snyder 2005; Caughey and Sekhon 2010; Grimmer et al. 2011), this paper has both weaknesses and contributions. The paper is limited by the relative scarcity of interracial elections, which necessitates the use of bandwidths larger than those used in the literature on congressional elections. But many existing election RD analyses use large bandwidths (or all of the data), making themselves susceptible to sorting of the type uncovered here. On a more constructive note, the paper differs from the literature on congressional elections in demonstrating that a close election advantage does not always befall the candidate with greater political clout or economic resources. Black candidates in the South were *disadvantaged* in many respects, yet they won a disproportionate share of close elections, perhaps because the legacy of black political exclusion gave rise to an electorate highly responsive to mobilization efforts. In electoral contexts with well-defined groups of citizens who share preferences over candidates, voter mobilization may be a key margin for political competition. In this sense, this analysis of close elections contributes to a growing literature that draws attention to the electoral strategy of increasing turnout among supporters, rather than converting members of the opposition.<sup>5</sup> Non-randomness in competitive elections may threaten the validity of RD designs based on vote shares, but it is of considerable social scientific interest in its own right.

## 2 Interracial Elections Dataset

To study elections between black and white mayoral candidates, I collected data on the name, race, party affiliation, and vote return of each of the top-two candidates in urban mayoral elections between 1965 and 2000.<sup>6</sup> The sample universe includes all elections during this period in

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<sup>5</sup> On electoral competition among groups with common preferences, see Uhlaner (1989); Morton (1991); Shachar and Nalebuff (1999); Cox (2009); and Gans-Morse, Mazzuca, and Nichter (2009).

<sup>6</sup> The top-two candidates need not be a Democrat and a Republican. Many municipal elections are non-partisan.

cities with 1960 populations that were at least 50,000 and 4 percent black. A considerable portion of the data on candidate names, party affiliations, and votes (but not race) comes from Ferreira and Gyourko (2009), who mailed a survey to the election office of every U.S. city with a population greater than 25,000 that directly elects its mayor. However, their survey had some notable non-respondents, including Chicago, Cleveland, New Orleans, and Washington, DC, all of which have had prominent interracial mayoral elections. Apart from the non-respondents, many other cities returned incomplete election histories in their survey responses. In consequence, I supplement Ferreira and Gyourko's survey data with additional election returns from a wide array of sources, including newspaper archives, elections bureaus, and websites.<sup>7</sup> The Data Appendix lists the sources.

After collecting the basic election returns, I sought to identify each candidate's race. Because this research concerns itself with voting patterns, I focus on the reporting of candidates' races by the newsmedia and advocacy organizations. The candidate race data come from a variety of sources, primarily the *National Roster of Black Elected Officials*, newspaper archives, and government and political websites. In many cases, photographs of the candidates were available, but photographs were rarely the sole information source on race.

This data collection effort resulted in a dataset of 1030 elections with racial identification of both candidates.<sup>8</sup> The elections include 318 black candidates and 1742 non-black candidates. Because some of the 318 black candidates were either unopposed or some faced other black candidates, just 221 of the elections were interracial. Of these 221, 100 election returns derive from the Ferreira and Gyourko dataset, with the remaining 121 from my own data collection. The coding of candidate race is in all cases original.

Table 1 presents summary statistics for the 77 cities with elections in the interracial elections sample (column [4]) and compares them with summary statistics for several larger samples. Column (1) includes all cities with 1960 population greater than 50,000; column (2)

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<sup>7</sup> The main online source was OurCampaigns.com, which allows users to post election results for a many jurisdictions. Most posts provide detailed newspaper or election bureau citations. I verified a random subset of the citations by checking the sources cited and never encountered an error. I only use election returns that are properly cited.

<sup>8</sup> In 33 elections, one candidate's race could not be determined.



restricts to cities above the minimum black population share for inclusion in the elections sample; column (3) considers all cities with vote count and candidate race data (including cities without interracial elections). Cities in the elections samples tend to have larger populations than those in the sample frame, a result that is likely linked to the greater online availability of elections information for larger cities. Additionally, compared to the sample frame, both the overall elections sample and the interracial elections sample have greater mean black population shares and larger fractions with mayor-council government.<sup>9</sup> Cities in the interracial elections sample averaged three interracial elections and four black candidates during 1965-2000. 70 percent experienced a black mayor by the year 2000. Appendix Figure 1 exhibits the geographic distribution of cities with interracial elections. The cities are concentrated in the mid-Atlantic, the South, and the Rust Belt.

### 3 Turnout and Closeness in Interracial Elections

To motivate the main empirical exercise, which focuses on close interracial elections, this section aims to set out basic facts about how the presence of opposite race candidates affects turnout and closeness in mayoral elections. An existing literature in economics and political science suggests that turnout soars during interracial elections. Washington (2006) estimates that both white and black turnout increase by 2-3 percentage points in Congressional elections with black candidates; Lublin and Tate (1995) find similar evidence in a small sample of mayoral elections. The rise in turnout may result from an increase in voter interest when candidates differ in race, and this increased interest may in turn make elections more competitive.

Table 2 uses a difference-in-difference specification to examine how voter turnout and the margin of victory change during black-vs.-white matchups:

$$outcome_{ct} = \alpha_1 \cdot interracial_{ct} + \alpha_2 \cdot allblack_{ct} + \tau_t + \mu_c + u_{ct} \quad (1)$$

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<sup>9</sup> Data on city demographic and economic characteristics are from the *City Data Books* (U.S. Census Bureau). Data on municipal institutions and county voting in the 1960 presidential election (not reported in Table 1 but used as a covariate in later tables) are from the *Governmental Units Analysis Dataset* (Aiken and Alford 1998).

where  $outcome_{ct}$  is either the turnout rate or the margin of victory,  $interracial_{ct}$  is an indicator for an interracial election, and  $allblack_{ct}$  is an indicator for a black-vs.-black election. In the specification,  $c$  indexes city, and  $t$  indexes year, so that  $\tau_t$  and  $\mu_c$  are year and city fixed effects, respectively. The turnout rate is defined as the sum of the top-two candidates' vote receipts divided by the city's population (linearly interpolated between census years). The margin of victory is defined as the absolute value of the difference of the top-two candidates vote receipts, divided by their sum. The table only reports the coefficients on  $interracial_{ct}$ ; the coefficients on  $allblack_{ct}$  are too imprecisely estimated to be informative.

Turnout and closeness increase in interracial elections. As column (1) reveals, in both the North and the South, black-vs.-white matchups raise turnout by roughly 3.5 percentage points. Because turnout rates are on average lower in the South than elsewhere in the country, this effect is proportionally larger in the South, where it is 16 percent of mean turnout. An examination of voter turnout by race would be interesting, but data by race are not available.<sup>10</sup> Column (2) shows that the margin of victory tends to decrease during black-vs.-white matchups. The coefficients for both the North and the South are negative, but only for the North and the pooled sample are they statistically significant. This difference may reflect the endogenous response of potential black candidates to (non-black) political machines in Northern cities. The supply of black candidates may have risen only when political machines were weak and expected vote margins were small. Regardless of this (imprecisely estimated) regional difference, at a broad level, the results suggest that interracial elections draw more voters and lead to closer margins than one would predict without information on the racial identities of the candidates.

## 4 Discontinuities in Interracial Elections

Interracial elections tend to be close, high-turnout affairs, but the relative performance of black and white candidates in these contests remains unstudied. This section assesses the extent of non-randomness in the outcomes of close interracial elections by analyzing how several variables change discontinuously at the vote threshold for black victory. I first focus on

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<sup>10</sup> In congressional elections, Washington (2006) finds that black candidates raise black and white turnout by similar proportions, which advantages the white candidate because of whites have a larger population share.

discontinuities in contemporaneous election outcomes, which violate standard assumptions for RD designs based on vote shares. I then estimate discontinuities in future outcomes, as is commonplace in RD analyses, and consider the relation of these *ex post* discontinuities to the *ex ante* discontinuities in the first part of the section.

#### 4.1 Methods

I use two regression discontinuity techniques, both based on local linear estimation. Throughout, the running variable is the relative margin of victory between the top-two candidates when one candidate is black and the other non-black. I define the black vote margin as the black candidate’s votes minus the white candidate’s votes, divided by their sum. For analyses of contemporaneous turnout and future election outcomes, I use a standard local linear regression discontinuity estimator. To estimate discontinuities in the density of the running variable, I use the method developed by McCrary (2008), which involves estimating a finely-gridded histogram and then using local linear regression to smooth the histogram, allowing for a discontinuity at the victory threshold.<sup>11</sup> McCrary’s original estimand is the discontinuity in the logarithm of the density function, but to allow for consistent estimation when the density approaches zero near the victory threshold, I estimate the discontinuity in the level of the density.

Both estimation techniques can be summarized using the following specification, for city  $c$  in election year  $t$ :

$$y_{ct} = \beta \cdot 1[m_{ct} > 1] + f(m_{ct}) + v_{ct} \quad (2)$$

where  $m_{ct}$  is the black vote margin and  $f(\cdot)$  is a flexible function of the black vote margin (approximated using local linear regression). The variable  $y_{ct}$  is either an outcome (current turnout, future turnout, the probability of future black victory) or the density of the running variable. The coefficient  $\beta$  represents the discontinuous change in the conditional expectation of  $y_{ct}$  when the black vote margin crosses zero.

A primary issue in implementing local linear methods is the appropriate choice of bandwidth. For my main results, I use a bandwidth of 0.2, which is slightly smaller than the

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<sup>11</sup> McCrary’s (2008) local linear density estimator for RD settings is an application of methods developed by Cheng, Fan, and Marron (1997).

bandwidths chosen by McCrary’s (2008) bandwidth selection procedure for density discontinuity estimation and Imbens and Kalyanaraman’s (2009) bandwidth selection procedure for regression discontinuity estimation.<sup>12</sup> Section 4.5 assesses the robustness of the results to alternative bandwidths.

For the local linear regression analyses, standard errors are clustered at the city-decade level.<sup>13</sup> The density discontinuity standard errors are not clustered because analytic formulas for clustered standard errors do not exist; unreported bootstrap results suggest that the standard errors are not biased downward.<sup>14</sup> To mitigate small-sample bias in inference, I test hypotheses using critical values from a  $t$ -distribution with degrees of freedom set to the number of clusters minus two (Cameron, Gelbach, and Miller 2008).<sup>15</sup> I present specifications with and without pre-election covariates, including the lagged dependent variable. In graphical analyses, I use the Epanechnikov kernel and a bandwidth of 0.1 to enhance visual smoothness while allowing for flexibility in the regression function estimator.

## 4.2 Discontinuities in the Vote Margin Density

Figure 2 displays nonparametric density estimates of the black vote margin, allowing for a discontinuity at zero. The Southern data exhibit a stark drop in the density just below zero, suggesting precise manipulation of the running variable. The Northern data, while still showing a moderate increase in the density at zero, are nowhere near as stark.

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<sup>12</sup> I use the triangle and uniform kernels, respectively, for the local linear density smoother and the local linear regression smoother. McCrary (2009) derives asymptotics for the density estimator with the triangle kernel, which is optimal for boundary estimation. However, Lee and Lemieux (2010) recommend the uniform kernel for the local linear estimator due to its transparency. The optimal bandwidth calculations are for the correct kernels.

<sup>13</sup> In similar settings, Lee (2008) and Ferreira and Gyourko (2009) also cluster standard errors at the jurisdiction-decade level. One could argue that jurisdiction-level clustering is more attractive, but the standard errors for the models in this paper are extremely similar under the two clustering schemes. The jurisdiction-decade clustered standard errors have the advantage of using fewer degrees of freedom.

<sup>14</sup> To get a sense of whether serial correlation within cities biases the unclustered analytic standard errors, I block-bootstrapped the density discontinuity estimator and found that the resulting standard errors were smaller than the analytic standard errors. However, I have not verified the small-sample properties of the bootstrapped density discontinuity estimator, so I do not report the results here.

<sup>15</sup> The standard errors in the local linear regression results are similar when adjusted by bias-reduced linearization (BRL) to improve small sample performance (Bell and McCaffrey 2002). But in some specifications, the BRL procedure is not possible because a key matrix is not full rank, a well-known problem with this method.

Formal tests in Table 3 confirm this difference. At 1.83 (SE = 0.87), the discontinuity in the level of the density function of the South is larger and far more statistically significant than that of the Non-South, where the discontinuity is 0.85 and is smaller than its standard error. Narrow black losses were extremely rare in the South. Only one Southern election resulted in a black loss by a margin of less than 5 percent; each neighboring 5 percent bin has seven elections. While this dip may be due to sampling error, the probability it occurred randomly is roughly 3.5 percent (the  $p$ -value from a two-tailed test).<sup>16</sup>

A discontinuity in the black vote margin of victory is surprising in a democratic setting with a secret ballot. The fact that it favors African-Americans in the South makes the discontinuity even more unexpected, given the historical disenfranchisement of Southern blacks. In light of the moderately large bandwidth, the observed sorting around the black victory threshold in the South could be the result of either *ex ante* or *ex post* manipulation of the black vote share.

### 4.3 Discontinuities in Turnout

Patterns in voter turnout can shed some light on whether *ex ante* or *ex post* actions lead to the sorting of black and white candidates in close elections. If the density discontinuity is due to recounts or lawsuits, then the voter turnout rate should not differ substantially between close black victories and close black losses; these *ex post* actions primarily manipulate the distribution of a given number of votes. On the other hand, if *ex ante* black voter mobilization efforts play a role in the density discontinuity, then voter turnout will likely be higher in close black victories than in close black losses. Specific forms of electoral fraud—for example, ballot stuffing and caging (voter suppression)—may also lead to a discontinuity in turnout. But given the South’s history of institutionalized discrimination against African-Americans, one would expect these tactics to favor white candidates rather than black. In that case, white candidates would win a disproportionate share of close elections, and close black losses would involve higher turnout than close black victories.

Table 4 reports discontinuities in voter turnout. In light of the regional differences in the vote margin density, the table reports results separately for the South and Non-South. Addi-

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<sup>16</sup> Note, however, that while the Southern discontinuity is statistically significant, its difference from the Northern discontinuity is not.

tionally, to give a sense of the dynamics of voter turnout before, during and after a close election, the table reports discontinuities in past, current, and future turnout. Under standard RD assumptions, past and current voter turnout should be continuous at the black victory threshold. For comparability, the table focuses on a balanced panel (i.e., observations with turnout data for the previous, current, and next elections), but the results are similar for alternative samples. For each region, the top line reports discontinuities estimated exactly as in equation (1). For current and future turnout, the second line controls for the lagged turnout rate, and the third line adds a vector of pre-election control variables (listed in the notes to the table).

The results from the South show strong evidence of a discontinuity in contemporaneous turnout (column [2]), such that turnout is higher in close black victories than in close black losses. Without controlling for any covariates, the discontinuity is 18 percentage points, but because of a smaller, statistically insignificant discontinuity in lagged turnout (column [1]), the point estimate shrinks to 10-12 percentage points in the specifications with covariates. The covariate-adjusted estimates remain significant at the 5 percent level, however, suggesting that the discontinuity in contemporaneous turnout is not attributable to fixed differences in turnout across cities. Furthermore, turnout remains discontinuously higher in next election; following a close black victory, turnout is 17-24 percentage points higher than following a close black loss ( $p < 0.01$ ). In the South, close black victories are associated with persistent surges in turnout. In the Northern data, no discontinuities are evident for past, current, or future voter turnout.

Figure 3 shows the discontinuity in contemporaneous turnout graphically. The figure shows locally smoothed regressions as well as local means for vote margin bins of width 0.1. The local means are plotted as circles, with the size of the circle proportional to the number of observations in the bin. Because the voter turnout data are noisy, and because turnout rates are persistent (with a serial correlation of 0.7), the figure uses residuals from a regression of current turnout on lagged turnout. Consistent with the results in Table 4, the figure shows a positive discontinuity in the South but not the North. These patterns are also apparent in analogous graphs of the unadjusted turnout data, shown in Appendix Figure 2, Panel A. Meanwhile, Appendix Figure 2, Panel B, demonstrates that lagged turnout is continuous at the victory threshold in both regions. One other noteworthy pattern in Figure 3 is the correlation between

(*ex post*) closeness and turnout, both inside and outside the South. A body of research in economics and political science (e.g., Cox and Munger 1989; Shachar and Nalebuff 1999) has documented this relationship in a wide range of electoral settings.

#### 4.4 Discontinuities in the Probability of Black Victory

The persistence of the turnout discontinuity in the South suggests that black prospects in future elections may rise following a pivotal victory. This result would have key implications for estimation of the incumbency advantage using RD methods. Lee (2008) and Ferreira and Gyourko (2009), among others, use an RD design based on vote shares to estimate the political party incumbency advantage in the U.S. house and in U.S. cities, respectively. In principle, one could use a similar approach to estimate the racial incumbency advantage in the current dataset, but the sorting of black and white candidates around the victory threshold threatens a causal interpretation. A discontinuity in the probability of a future black victory would indicate that close black victories are persistent, but not necessarily that they *cause* a black advantage in future elections.

Figure 4 graphs the probability of a black victory in the next election against the black vote margin in the current election. Panel A indicates that black electoral success is strongly persistent in Southern cities. After a black loss by a margin of 10 percent or less, a city has zero probability of electing a black mayor in the next election; after a black victory by a margin of 10 percent or less, the probability of electing a black mayor in the next election rises to well over 60 percent. This is not true outside the South (Panel B), where the data show only a minor discontinuity in the future prospects of black candidates.

Table 5 estimates the magnitudes of these patterns. The setup follows that of Table 4, with estimates for lagged black victory in column (1) and for future black victory in column (2). (The discontinuity in the probability of current black victory is 1 by construction.) Whether or not the regression controls for lagged black victory and other pre-election covariates, the Southern discontinuity in the probability of future black victory is statistically significant and large, over three-quarters. At the same time, the discontinuity in the probability of lagged black victory in the South is insignificantly *negative*. This result suggests a substantial change in a city's politics

around the time of a close black victory. The extent to which this represents the causal effect of an African-American ascending to the mayor's office is unclear.

Interestingly, data from outside the South reveal no large discontinuities in the probability of past or future black victory. As in previous tables, Column (1) shows zero sorting on pre-election outcomes. In column (2), the estimated discontinuities in the likelihood of future black victory are positive but small: less than 0.2 and smaller than their standard errors.

#### **4.5 Bandwidth Sensitivity**

Due to the small number of mayoral elections between black and white candidates, the preceding results are all based on fairly large bandwidths of 0.2. Figure 5 assesses the sensitivity of the results for the vote margin density, current turnout, future turnout, and future black victory to changes in bandwidth. For the South and Non-South separately, the figure presents graphs of the discontinuities and associated t-statistics for bandwidths from 0.10 to 0.25. The plots for turnout and future black victory show estimates that do and do not control for the lagged dependent variable.

In both regions, the results are remarkably robust to bandwidth perturbations. The estimated discontinuities and associated t-statistics in the Non-South are consistently small, while those in the South are much larger. In the South, the t-statistics rarely fall below 2, and the point estimates are fairly constant across bandwidths, at least for the specifications that control for the lagged dependent variable. Figure 5 does have one unappealing feature: estimated discontinuities in the probability of future black victory that (counterfactually) exceed 1, often substantially. These estimates are due to the use of local linear regression, which admits predicted probabilities outside  $[0,1]$ , on sparse data. However, these magnitudes are largely a feature of the unadjusted estimates, and the estimates are quite consistent for all bandwidths greater than 0.15. Certainly, all bandwidths lead to strongly significant discontinuities.

#### **4.6 Are the Discontinuities Driven by Race or Party?**

The preceding results suggest regional differences in racial politics, but they also allow another explanation. More than three-quarters of black candidates were Democrats, so perhaps the results reflect regional differences in party politics. To assess this alternative explanation, Table



6 examines elections between white Democrats and white Republicans, now using the Democratic vote margin of victory as the running variable. The analysis sample includes all such elections in the overall elections dataset (column [3] in Table 1).

If party politics account for the main results, then one would expect to find large discontinuities in the vote margin density, turnout, and the probability of future democratic victory in the South but not the North. In Table 6, the data reveal no such pattern. Neither region exhibits a discontinuity in the two contemporaneous election outcomes the table considers: the vote margin density and the turnout rate. Moreover, the data indicate a large, statistically significant political party incumbency advantage in the North but not the South. The North-South difference in the political party incumbency advantage is *exactly opposite* the regional difference in black electoral persistence.

Apart from the possibility of confounding party and race, another ambiguity arises in the results over whether region is a proxy for demographic composition. Southern cities in the sample have larger black population shares than Non-Southern cities. As a result, the North-South differences may be driven by political differences between cities with large and small black populations, rather than by a regional effect *per se*. Due to sample size constraints, subsample analyses of cities with large black population shares yield extremely imprecise results, so I do not report them here. However, results for cities with black population shares of at least 40 percent in the last population census are qualitatively similar to the main paper's findings, with large, positive discontinuities in the vote margin density, turnout, and black election prospects in the South but not the North.<sup>17</sup>

## 5 Discussion

The analyses in Section 4 lay out several stark facts. In the South, close black victories were more likely than close black losses, involved higher turnout than close black losses, and were

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<sup>17</sup> An examination of majority black cities was not possible because sample sizes became too small. In the subsamples with greater than 40 percent black population shares, Northern and Southern cities had similar average black population shares: 52 and 54 percent, respectively.

more likely than close black losses to be followed by high-turnout elections and black victories. Data from cities outside the South display none of these patterns.

Because black candidates won a disproportionate number of close elections in the South, black political mobilization is likely to feature prominently in any relevant model. If coordinated political action by whites were important, then white candidates would win most close elections. In this regard, two features of the electoral environment are key: the fixed nature of voters' preferences over candidates and the observability of the turnout decision. These features made voter organization by political elites more feasible. Elites could verify citizens' turnout decisions and could predict their voting decisions once inside the voting booth. In conceptualizing the strategies of electoral competition, Cox (2009) calls attention to persuasion, which seeks to influence voters' preferences over candidates; mobilization, which seeks to affect whether citizens vote; and coordination, which sets the number and identities of candidates. Persuasion has received the most attention in models of electoral competition, but it was not the most important strategy in black mayoral campaigns.

Rather, historians and political scientists contend that voter mobilization by black political elites played an important role in black mayoral victories, as in other realms of racial politics. Voter registration and canvassing efforts were an integral part of successful black campaigns. So too were calls to a collective black consciousness. In a well-known book, Verba, Nie, and Kim (1978) argue: "It does not require any explicit group-based process of mobilization for upper-status citizens to take a disproportionate role in political life.... Lower-status groups, in contrast, need a group-based process of political mobilization if they are to catch up to upper-status groups in terms of political activity" (p. 14). Supporting this point of view, Verba and Nie (1972) Murray and Vedlitz (1977), Rosenstone and Hansen (1993), and Leighly (2001) describe the remarkable black political mobilization that took place in the United States during and after the Civil Rights Movement.<sup>18</sup> In a potential challenge to the role of black mobilization in explaining my results, Rosenstone and Hansen note that black mobilization and turnout began to dissipate in presidential elections starting in the 1970s, after the Civil Rights Movement. However, they

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<sup>18</sup> Also see Nelson and Meranto's (1977) case studies of political mobilization by black mayoral candidates in three Midwestern cities.

argue that this decline was in part due to the shifting focus of black political elites to local elections and primaries with black candidates. Their historical analysis is entirely consistent with black voter mobilization in mayoral elections.<sup>19</sup>

Although these efforts took place to some degree in Northern cities, they were especially important and intense in the South. The two decades following 1950 saw a revolution in voting rights. Figure 6, highlights the magnitude of this extension of the franchise. In the top panel, which presents data on Southern black registration from the Voter Education Project, the number of registered African-Americans in the former Confederate states rose from roughly 150,000 (3 percent of the voting-age population) in 1940 to nearly six million (64 percent) by 1990. Abetted by voter registration drives and a series of progressive Supreme Court decisions, the black voter registration rate rose gradually to one quarter by 1960. It then more than doubled over the next decade, as the Voting Rights Act of 1965 took hold, and registrars redoubled their efforts (Timpone 1995). These efforts have continued, punctuated by registration drives accompanying major political campaigns. For instance, the surge in registration associated with African-American Jesse Jackson's 1984 run for president is readily apparent in Figure 6, Panel A. As in Jackson's case, the prospects of black mayoral candidates in the South hinged upon mobilizing this large group of new eligible voters. Official registration data by race are not available for comparison in the North, but the bottom panel of Figure 6 uses data from the American National Elections Study to plot the ratio of the black voter registration rate to the white voter registration rate, inside and outside the South.<sup>20</sup> In the twenty years starting in 1952, the black reported registration rate in the South rose from one quarter of the white registration rate to parity. Blacks in the Non-South also saw a slight relative increase in reported voter registration, but this was nowhere near the magnitude of the racial convergence in the South.

Based on this regional difference in the importance of voter mobilization, Section 5.1 demonstrates how a simple game of electoral competition with voter mobilization can explain

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<sup>19</sup> In fact, although whites are substantially more likely than blacks to participate in presidential elections, the same proportions of whites and blacks reported "always" participating in local elections (Leighley 2001, using data from the 1996 Current Population Survey).

<sup>20</sup> Panels A and B of Figure 6 are not directly comparable because the ANES definition of the U.S. South includes more than the former Confederate states.

the paper’s main findings. Section 5.2 then summarizes alternative explanations for the sorting of Southern candidates in close interracial elections, arguing that none of these alternatives fit the data as successfully as the mobilization game.

### 5.1 A Voter Mobilization Game

In the game, the environment consists of two competing groups,  $i \in \{b,w\}$ , each of which fields one candidate. Citizens always prefer their own-group candidate but vary in their propensities to vote. Each candidate is endowed with a quality  $\theta_i$ , drawn from a continuous (group-specific) distribution.  $\theta_i$  is the fraction of group  $i$  citizens that turn out to vote for the candidate *in the absence of mobilization efforts*. The baseline margin of support for black candidates is therefore  $\lambda_b\theta_b - \lambda_w\theta_w$ , where  $\lambda_i$  is the population share of group  $i$ . Candidates have access to a group-specific mobilization technology  $\Delta_i$ , which increases the group  $i$  turnout rate by  $\Delta_i(c_i)$  at cost  $c_i \geq 0$ . In the lead-up to the election, candidates alternate in (irreversibly) increasing  $c_i$  in multiples of  $\varepsilon$ , the smallest unit of money, until neither wishes to make further changes.<sup>21</sup> At that point, the election takes place, and the winner receives benefit  $\alpha$  from a term in office. Note that no candidate will invest more than  $\alpha$  in voter mobilization; higher investment always results in negative payoffs. Group  $i$ ’s *mobilization capacity* is therefore  $M_i = \Delta_i(\varepsilon \lfloor \frac{\alpha}{\varepsilon} \rfloor)$ , where  $\lfloor x \rfloor$  is the largest integer that is weakly smaller than  $x$ .

The subgame perfect equilibrium to this game depends on the difference between  $M_w$  and  $M_b$ . If  $M_b > \frac{\lambda_w}{\lambda_b}M_w$ , then black candidates hold an absolute mobilization advantage. This condition is consistent with the idea that the historical exclusion of African-Americans from the political process makes them considerably more sensitive to mobilization efforts than whites (Verba and Nie 1972; Nelson and Meranto 1977; Verba, Nie, and Kim 1978). The equilibrium under this condition is determined by the baseline black margin of support,  $\lambda_b\theta_b - \lambda_w\theta_w$ . If this margin is less than  $\lambda_wM_w - \lambda_bM_b$ , neither candidate invests in mobilization, and the white candidate wins. The white candidate holds the baseline advantage and can always outmobilize the black candidate while still receiving positive payoffs. At every stage of bidding, the white

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<sup>21</sup> This sequential bidding process is similar to the vote buying model of Dekel, Jackson, and Wolinsky (2008). The sequential formulation serves mainly to guarantee that players use pure strategies. With simultaneous play, equilibrium outcomes in the unique pure-strategy Nash equilibrium would be identical.

candidate's strategy is to mobilize just enough voters than is necessary to win, and so the black candidate finds it optimal not to invest in mobilization at all. The equilibrium strategies are analogous when the baseline margin of support for the black candidate is greater than zero; the black candidate holds the baseline advantage and can always outmobilize the white candidate while still receiving positive payoffs. When the baseline margin is between  $\lambda_w M_w - \lambda_b M_b$  and zero, the white candidate holds the baseline turnout advantage but cannot outmobilize her opponent. The black candidate invests to raise her group's turnout by just enough to win, and no further bidding occurs.

The subgame perfect equilibria for  $M_b \leq \frac{\lambda_w}{\lambda_b} M_w$  are straightforward extensions of this baseline case. A white absolute mobilization advantage ( $M_b < \frac{\lambda_w}{\lambda_b} M_w$ ) has the exact opposite predictions of a black advantage. If the baseline margin of black support is greater than  $\lambda_w M_w - \lambda_b M_b$ , the black candidate wins; otherwise, the white candidate wins.

When the two competing groups can mobilize equal numbers of voters to the polls ( $\lambda_w M_w = \lambda_b M_b$ ), the game simplifies. Whenever a candidate holds the baseline turnout advantage, she can always outmobilize her opponent while still expecting positive net payoffs. By backwards induction, neither side will mount a costly mobilization campaign. Note that this framework focuses on specific costly mobilization activities such as registration campaigns, so the equilibrium behavior does not rule out campaigning altogether.

This simple static game has two main predictions if black candidates hold an absolute mobilization advantage. First, as  $\varepsilon$ —the smallest amount of money—goes to zero, the density of the *ex post* black vote margin exhibits a positive discontinuity at zero. Second, the closest black victories involve mobilized electorates, whereas the closest black losses do not. If baseline turnout is positively correlated with the baseline closeness of an election, as is widely thought to be true (Cox and Munger 1989; Shachar and Nalebuff 1999), mobilization leads to a discrete increase in voter turnout when the black vote margin crosses zero.<sup>22</sup> The game's lack of uncertainty is vital to these predictions. In the presence of bounded uncertainty over the baseline margin of black support, the discontinuity predictions would no longer be as sharp, but the

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<sup>22</sup> Turnout increases discretely between the closest observed loss and victory if  $E[2\lambda_w\theta_w|\lambda_b\theta_b - \lambda_w\theta_w \in (\lambda_w M_w - \lambda_b M_b, 0]] > E[\lambda_b\theta_b + \lambda_w\theta_w|\lambda_b\theta_b - \lambda_w\theta_w = \lambda_w M_w - \lambda_b M_b]$ . This condition holds if baseline turnout is positively correlated with baseline closeness or if black turnout varies against fixed white turnout.

partitioning of the state space would be similar, as would the overall implications for relatively close black victories and losses. Given the necessarily large bandwidths in the empirical work, the assumption of certainty provides a useful, parsimonious approximation with testable implications. In simulations of a similar game of party competition, Grimmer et al. (2010) demonstrate that RD analyses with vote margin bandwidths of less than 5 percent show sorting.

The one-period setup precludes analysis of dynamic phenomena, but the data suggest that sorting may contribute to the persistence of close black victories. To gain insights into dynamics, one could easily include multiple elections, with candidates maximizing the discounted sum of expected benefits. In such a model, each election pits the incumbent mayor against a new opponent from the other group. The winner then goes on to experience a random popularity shock while in office, and the sequence repeats. This alternative setup leads to similar equilibrium behavior but also sheds light on the dynamic effects of mobilization asymmetries.

Three potential mechanisms are especially natural for describing black mayoral persistence in this setting. The first arises mechanically because candidate types sort around the victory threshold. Because black candidates with baseline margins of support over a range of negative values still win, black incumbents who barely won in the last election will be shielded from small to moderate negative popularity shocks.<sup>23</sup> A second reason is the persistence of increases in voter registration (a stock). A third, due to Bobo and Gilliam (1990), is that a black leader's victory raises African-Americans' sense of political efficacy, leading to greater black political participation. Thus emerges a self-reinforcing, virtuous cycle, with victory leading to greater participation, which in turn enhances the chance of future victory. Given the unfamiliarity of Southern blacks to the process of voting, this hypothesis is especially well suited for describing racial politics in the South. The historical exclusion of African-Americans from the voting process in the South lies at the heart of all three theories. The persistence of close black victories may also result from white learning about the quality of black executives (Hajnal 2001, 2006) or white flight (Glaeser and Shleifer 2002), although these explanations are less related to the mobilization of black voters.

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<sup>23</sup> This is akin to a theory of machine politics, in which black victory establishes a black political machine.

## 5.2 Alterative Explanations

Compared to other potential mechanisms, the mobilization game provides a compelling explanation for the results. The fact that candidates from a *disadvantaged* group held an advantage in close elections is evidence against alternative explanations.

This fact implies, for example, that electoral fraud is unlikely to account for the results; most theories of electoral fraud predict cheating by those who hold power. The history of the pre-Civil Rights South is rife with examples of electoral fraud at the expense of African-Americans, rather than in their favor (Kousser 1974). A careful inspection of the data, news archives, and historical literature reveals no evidence of ballot manipulation in the post-1960 South, but even if such fraud did occur, it would have likely continued to benefit whites.<sup>24</sup> Most close elections in the South preceded local black political ascendance, so white political elites still controlled electoral institutions; of Southern elections decided by margins of less than 5 percent, three-quarters occurred before the city had experienced a black mayor. But in spite of this barrier, black candidates still won a disproportionate share of close elections, and their close victories involved high turnout. If ballot stuffing took place, then white candidates would have probably won most close elections, and their victories would have been associated with an increase in votes. These patterns would have also arisen if *ex ante* strategic actions by white candidates were behind the sorting of candidates in close elections.

The main remaining alternative explanation is that the results reflect *ex post* legal actions, rather than *ex ante* mobilization. But the historical record does not suggest that black candidates were more likely than white candidates to request recounts (or mount lawsuits). Nor does it suggest that recounts (or lawsuits) systematically reversed election outcomes in favor of black candidates. *Ex ante* strategic behavior is therefore much more likely to be responsible for the observed non-randomness in close election outcomes.

## 6 Conclusions

Close interracial elections played a key role in the emergence of a black elite in municipal poli-

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<sup>24</sup> See, e.g., Biles (1992), Browning, Marshall, and Tabb (1990), Colburn and Adler (2001), and Hajnal (2006).

tics. This paper documents several unexpected properties of these contests, which have implications both for our understanding of racial politics and for the reliability of regression discontinuity designs based on vote shares. In the South, where African-Americans were new to political participation, close black victories were substantially more likely than close black losses, they involved higher turnout than close black losses, and they were more likely to be followed by subsequent black victories. None of these patterns were evident outside the South, where African-Americans, though historically persecuted, had access to the ballot and participated in political life at moderate levels. The Southern results are broadly consistent with a model of mobilization politics in which white candidates and black candidates have differing capacities to mobilize voters.

These findings provide insights into electoral politics and RD designs. On the one hand, they suggest an important role for turnout manipulation—here called “mobilization”—when the observable characteristics of voters strongly predict their choices once inside the voting booth. They also point to a distinct politics that arises when a group previously excluded from public life gains new rights; this distinct politics reverses the close election advantage that usually befalls candidates with greater economic resources and strong connections with political institutions (Snyder 2005; Caughey and Sekhon 2010; Grimmer et al. 2011). On the other hand, the findings call attention to the possibility of endogenous sorting around the victory threshold in elections, especially if sample size limitations necessitate the use of large bandwidths for nonparametric RD estimation or the use of global polynomial approximations of the conditional expectation function. The results of standard validity tests here indicate threats to the assumptions of the RD design, but interpretation of these results requires an understanding of electoral competition. As a consequence, in assessing the validity of an RD design based on vote shares, a researcher would benefit from in-depth knowledge of the politics specific to the electoral context under study. This implication is not novel, but the results here serve as a useful reminder on the combined value of validity tests and institutional knowledge in the analysis of natural experiments.



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## Data Appendix

The elections data come from a variety of sources: (1) Ferreira and Gyourko's (2009) survey of cities; (2) newspapers, official election returns, and other primary sources; and (3) the website OurCampaigns.com, which itself cites primary sources. To be included in the dataset, the election results from OurCampaigns.com had to be properly cited. I verified a random subset of the citations and found no misreporting. The lists below first report the primary sources for the elections dataset and then report any additional sources referenced on OurCampaigns.com.

### *Primary Sources*

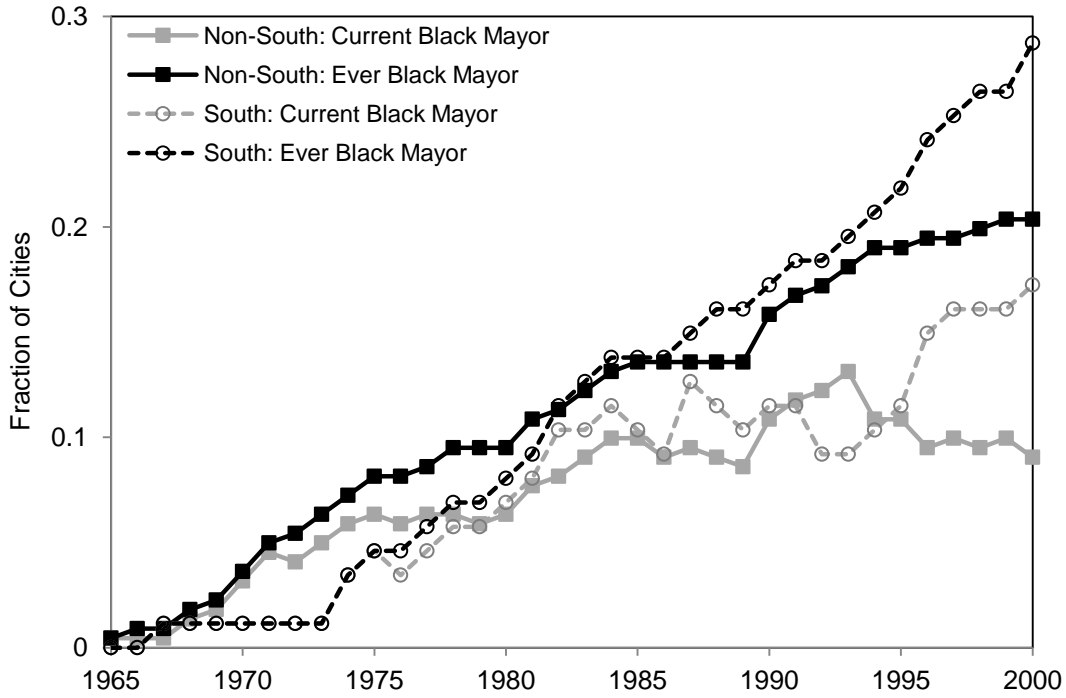
Alleghany County, PA, Division of Elections (printed in the Tribune-Review)  
Allentown Morning Call  
Associated Press  
Atlanta Daily World  
Atlanta Journal Constitution  
Augusta Chronicle  
Baltimore Afro-American  
Baltimore Sun  
Bryan Times  
Call and Post  
Charlotte Observer  
Chicago Defender  
Chicago Tribune  
City of Berkeley Website: <http://www.ci.berkeley.ca.us/>  
City of Hartford Website: <http://www.hartford.gov/voters/ElectionResults/>  
Cuyahoga County, OH, Board of Elections Website: <http://boe.cuyahogacounty.us/>  
Durham County, NC, Website: <http://www.co.durham.nc.us/>  
Encyclopedia of Chicago History: <http://encyclopedia.chicagohistory.org/>  
Flint Journal  
FOCUS  
Free-Lance Star  
Guilford County, NC, Board of Elections Website: <http://www.co.guilford.nc.us/>  
Hartford Courant  
Houston Chronicle  
JET  
Los Angeles Sentinel  
Los Angeles Times  
Louisiana Secretary of State Website: <http://www.sos.louisiana.gov/>  
Monroe County, NY, Board of Elections: <http://www.monroecounty.gov/>  
Montgomery County, OH, Board of Elections Website: <http://www.mcboe.org/>  
Mundstock (1985)  
Nelson and Meranto (1977)  
New York Times

Ocala Star Banner  
Philladelphia Daily News  
Philladelphia Inquirer  
Post and Courier  
Rome News-Tribune  
San Antonio City Clerk Website: <http://www.sanantonio.gov/clerk/>  
Savannah Morning News  
Sheboygan Journal  
South Florida Sun Sentinel  
The Deseret News  
Toledo Blade  
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Urban News, American Political Science Association  
USA Today  
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Wall Street Journal  
Washington Post  
Wilmington Morning Star  
Wright (2000)

*Additional Sources Cited on OurCampaigns.com*

Biographical Dictionary of American Mayors	Montgomery Advertiser
Boston Globe	Mount Vernon Daily Argus
Bridgeport Post	Multnomah County Website
City of Camden Board of Elections	Onondaga County website
City of Las Vegas Website	Palm Beach Post
City of San Francisco Website	Press of Atlantic City
City of St. Louis Website	Puerto Rico Herald
City of Tuscaloosa Elections Board	Rock Island Argus
CNN.com	Sacramento Bee
Columbus Dispatch	San Francisco Chronicle
Delaware Board of Elections	San Jose Mercury News
Detroit Free Press	Sheboygan Journal
Erie Times-News	St. Louis Post-Dispatch
Franklin County, OH, Board of Elections	St. Louis Public Library Website
Hudson County, NJ, Clerk	Sun-Sentinel
Jefferson City Daily Capital News	The Record
Jersery City Online	The State
Kansas City Star	Times Union
Kansas City Votes	UPI
Miami Herald	Westchester County, NY, Board of Elections
Milwaukee Journal Sentinel	

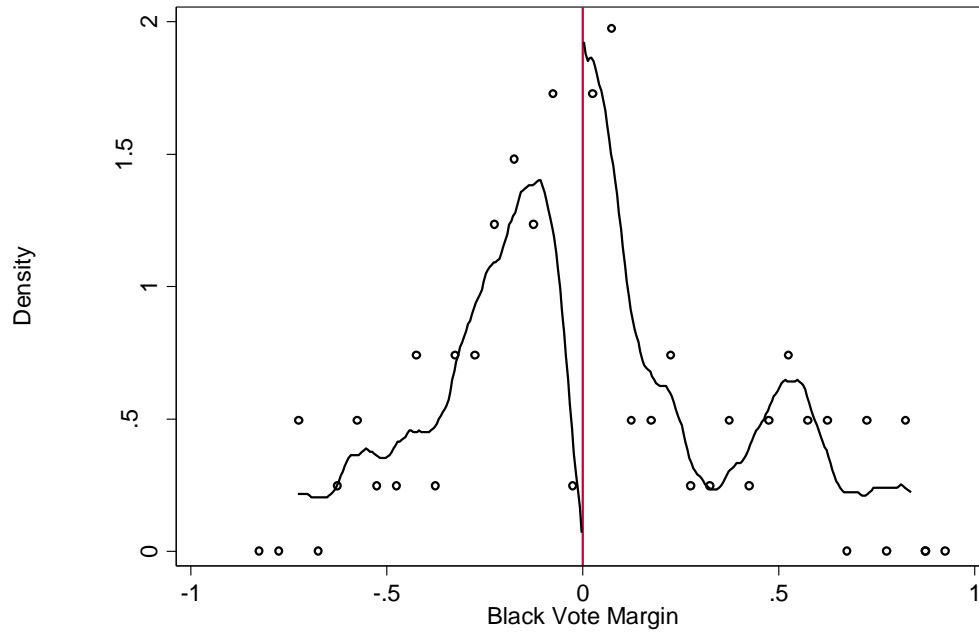
Figure 1: The Rise of Black Mayors, 1965-2000



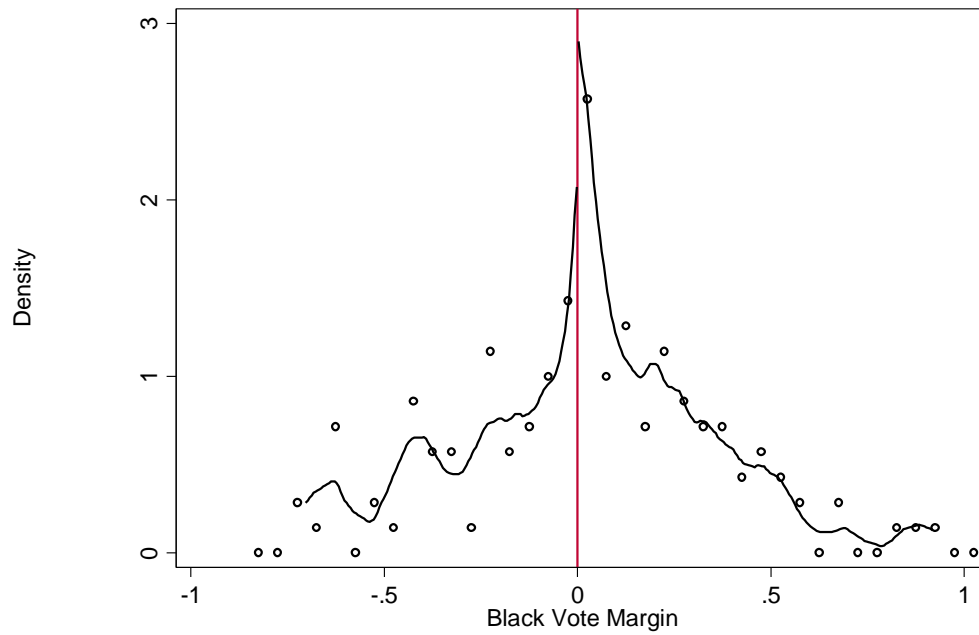
Notes: Data on black mayors were compiled from the *National Roster of Black Elected Officials* (JCPES various years). The sample includes all cities in the continental United States with 1960 population greater than 50,000.

**Figure 2: Discontinuities in the Black Vote Margin Density**

Panel A: South



Panel B: Non-South

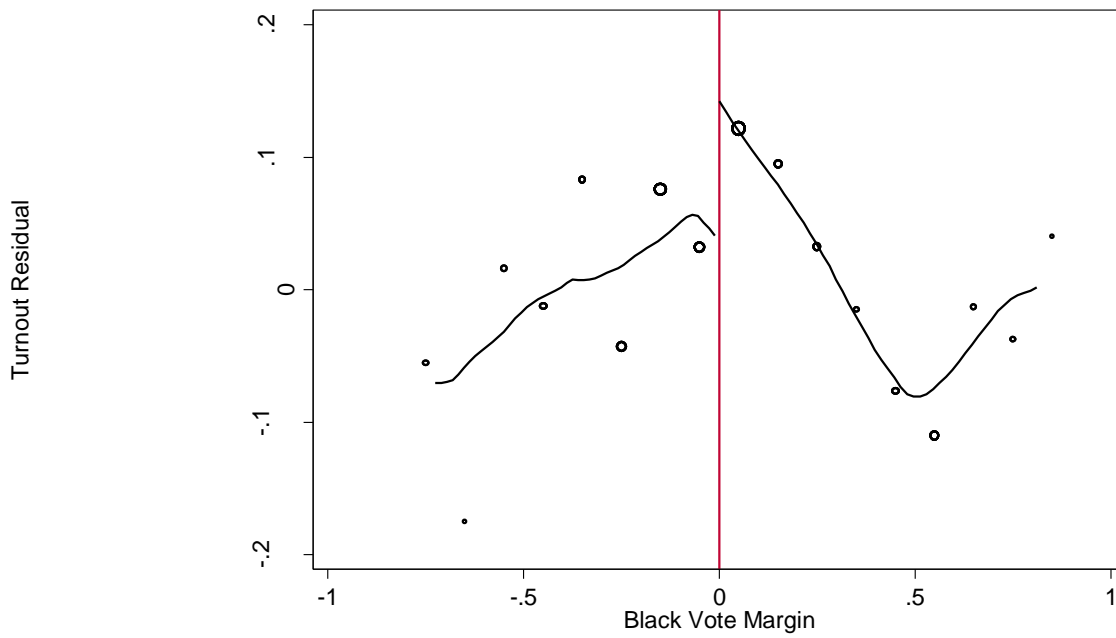


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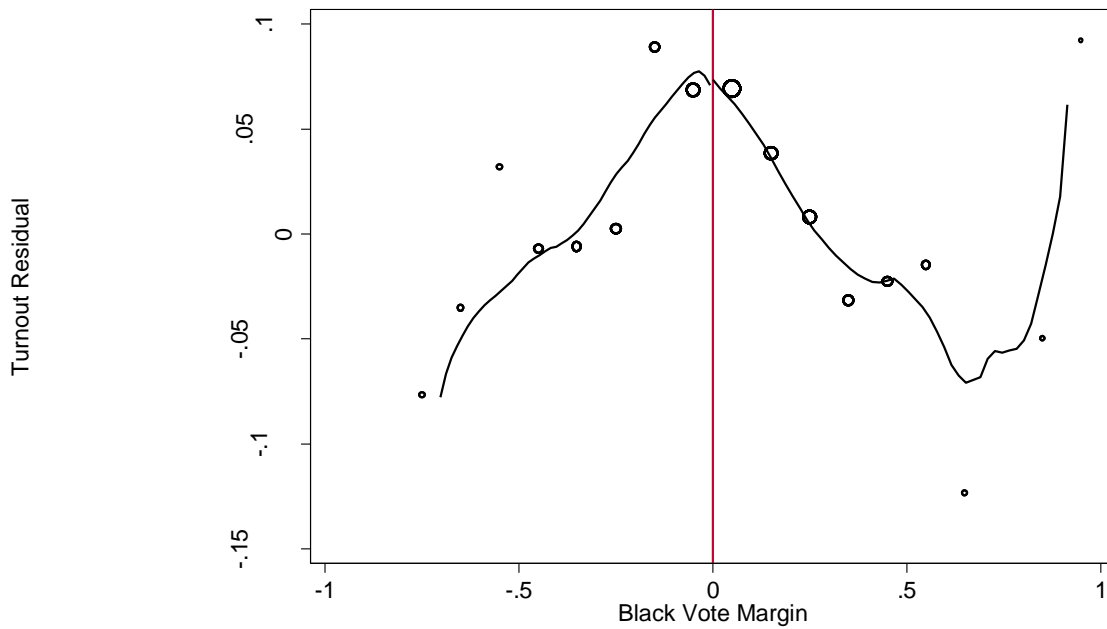
Notes: The sample includes all interracial elections during 1965-2000 in cities with 1960 populations that were at least 50,000 and 4% black. The smooth curves are local linear density estimators based on McCrary (2008), with a bandwidth of 0.1; open circles represent a histogram with a bin width of 0.05. The black vote margin is difference between the black candidate's and the white candidate's votes, divided by their sum.

Figure 3: Discontinuities in Current Turnout

Panel A: South



Panel B: Non-South

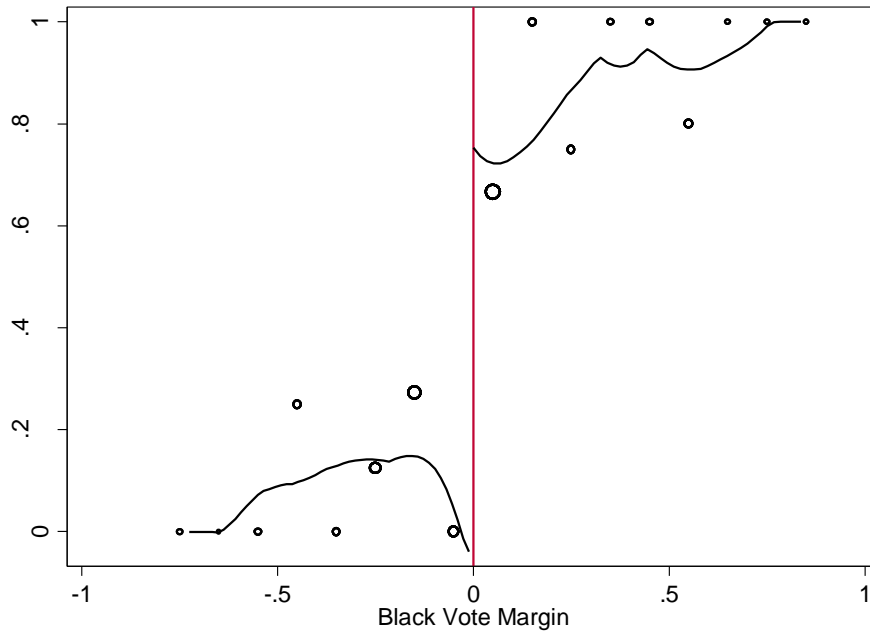


Notes: The sample includes all interracial elections with turnout data for the last, current, and next elections; it omits Augusta's 1998 election, which came after new borders dramatically increased the size of the city's population. The dependent variable is the residual from a regression of current turnout on lagged turnout. The smooth curves are local linear regressions with a bandwidth of 0.1. Open circles are local averages over 0.1-wide bins, with the size of the circle scaled to reflect the number of observations.

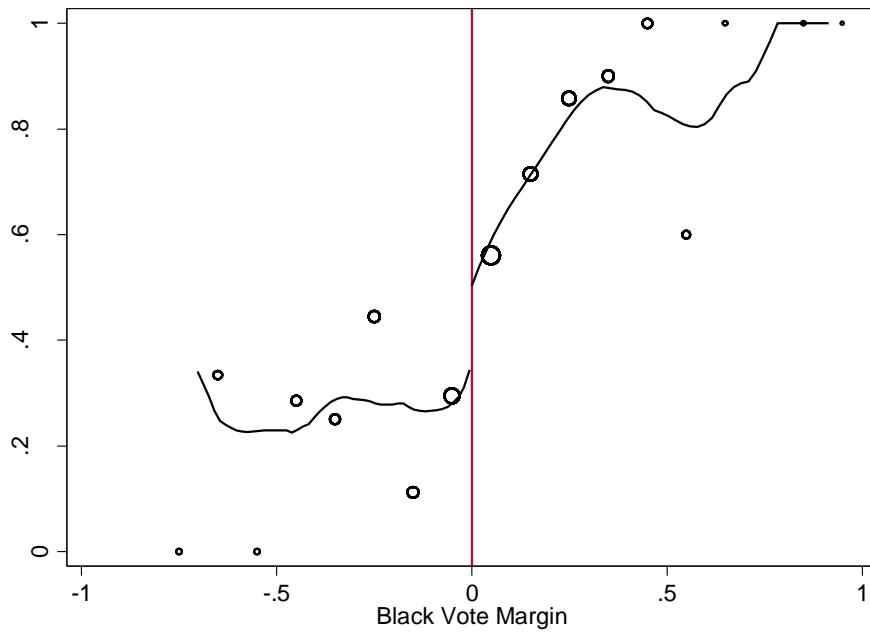


Figure 4: Discontinuities in Black Mayoral Prospects

Panel A: South



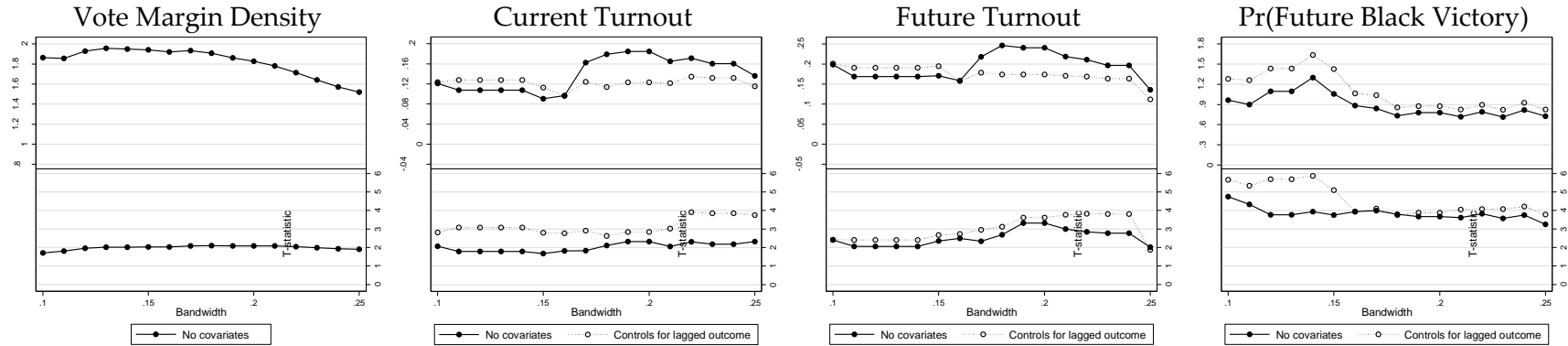
Panel B: Non-South



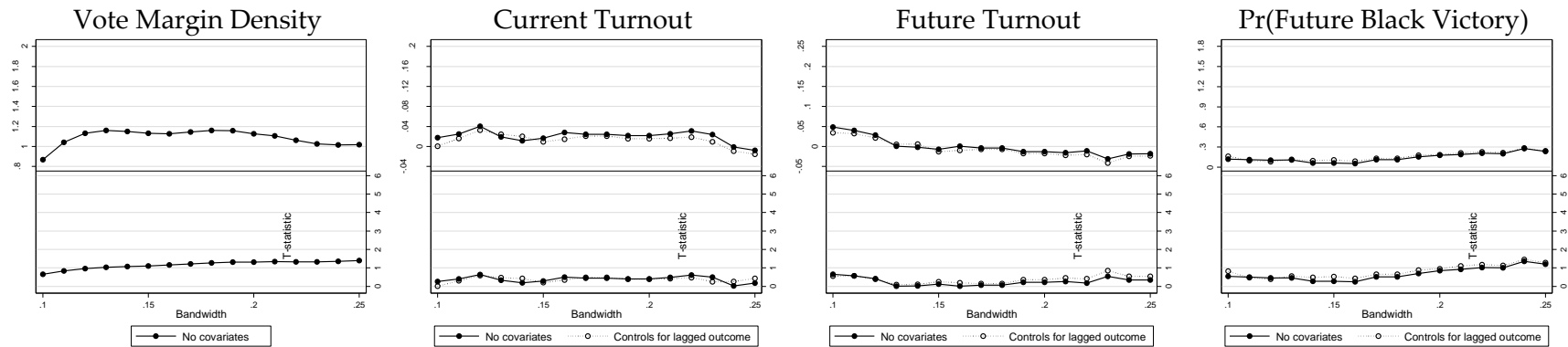
Notes: The sample includes all interracial elections during 1965-2000 in cities with 1960 populations that were at least 50,000 and 4% black. In each panel, the smooth curve is a local linear regression with a bandwidth of 0.1. The open circles are local averages over 0.1-wide bins, with the size of the circle scaled to reflect the number of observations.

**Figure 5: Bandwidth Sensitivity Checks**

Panel A: South



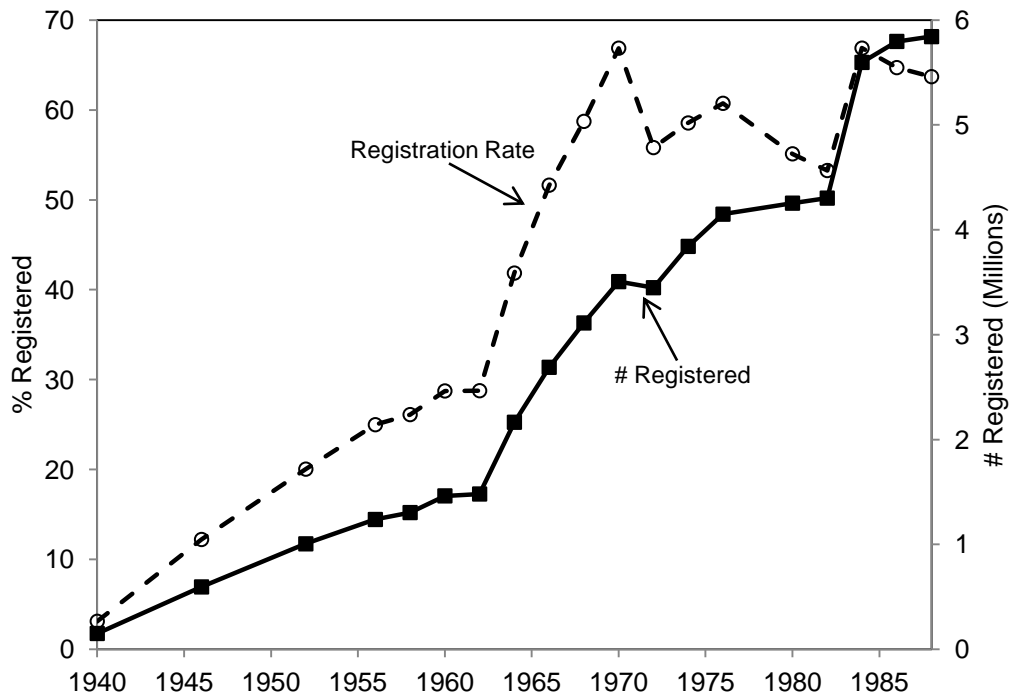
Panel B: Non-South



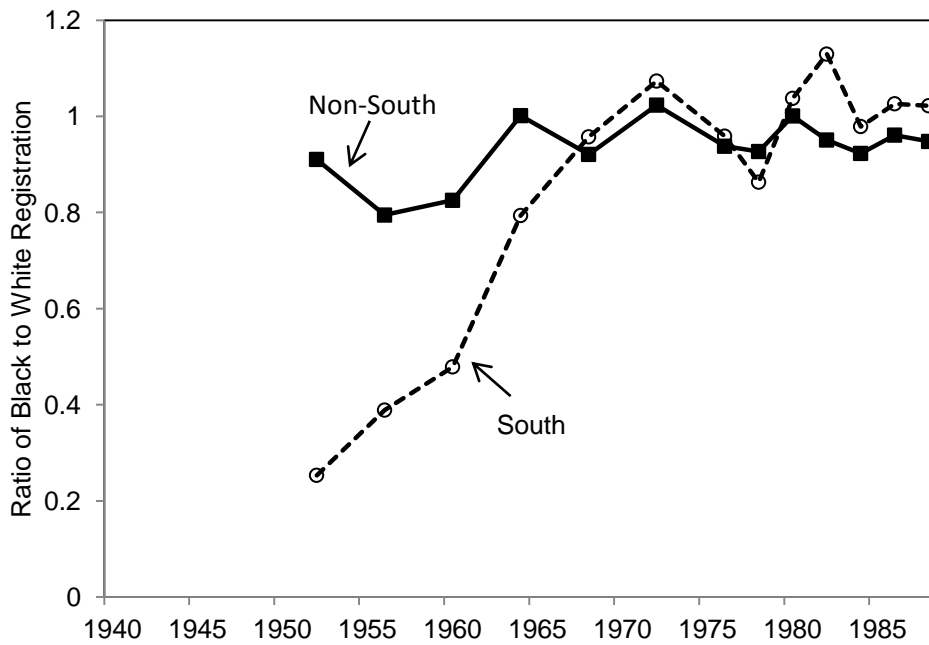
Notes: Each graph plots the discontinuity estimates and associated t-statistics from a series of local linear regressions with bandwidths varying from 0.10 to 0.25. All regressions use the uniform kernel. The samples for the analyses of the vote margin density and the probability of future black victory include all interracial elections. For comparability, the samples for the turnout analyses only include elections with turnout data for the last, current, and future elections. Results are similar without this sample restriction.

**Figure 6: The Rise of Black Voter Registration, 1940-1988**

Panel A: Black Voter Registration Rates in the South, Voter Education Project Data



Panel B: Black-White Voter Registration Ratios by Region, American National Elections Study



Notes: Panel A plots black registration rates in the former Confederate states, from Jaynes and Williams (1989) based on actual registration data from the Voter Education Project. Panel B plots the ratio of black registration to white registration, based on self-reported registration in the American National Elections Study.

**Table 1: Summary Statistics, Various Samples**

	All Cities	1960 % Black $\geq$ 4	Elections Sample	Interracial Elections Sample
	(1)	(2)	(3)	(4)
<b><i>City Characteristics in 1960</i></b>				
% Black	11.5	17.7	19.2	22.7
Population ('000)	203.4	271.7	379.9	467.8
Median Family Income ('000)	6.1	5.8	5.8	5.8
Mayor-Council Gov't	0.42	0.40	0.47	0.51
Council-Manager Gov't	0.47	0.47	0.41	0.35
South	0.28	0.42	0.41	0.40
<b><i>Election Variables, 1965-2000</i></b>				
# Interracial Elections			2.00	3.01
# Black Candidates			2.74	4.13
Ever Had Black Winner			0.46	0.69
Ever Had Black Runner-Up			0.56	0.84
Number of Cities	310	194	116	77

Notes: Each entry is the mean of the specified variable. The baseline sample includes all cities in the continental U.S. with populations greater than 50,000 in 1960. The elections sample includes cities with populations greater than 50,000 and black population shares of at least 4 percent in 1960, for which elections data were available. The interracial elections sample restricts further to cities with data available on at least one interracial election. Median family income refers to income in 1959.

**Table 2: The Effect of Black-vs.-White Matchups on Turnout and Closeness**

	Turnout	Vote Margin of Victory
	(1)	(2)
<i>Full Sample</i>	0.034	-0.057
	[0.009]**	[0.026]*
# of Elections	902	902
# of Cities	116	116
Mean of Dependent Variable	0.281	0.293
<i>South</i>	0.036	-0.042
	[0.014]*	[0.041]*
# of Elections	373	373
# of Cities	48	48
Mean of Dependent Variable	0.224	0.322
<i>Non-South</i>	0.035	-0.077
	[0.011]**	[0.034]*
# of Elections	529	529
# of Cities	68	68
Mean of Dependent Variable	0.322	0.272

Notes: OLS estimates. Parentheses contain standard errors clustered at the city level. Each cell reports the coefficient on the interracial election indicator from a separate regression. The dependent variable in column (1) is the total votes received by the top-two candidates divided by the voting-age city population (interpolated between census years). The dependent variable in column (2) is the difference in votes between the top-two candidates divided by their sum. The sample omits Augusta's 1998 election, which came just after the city's consolidation with surrounding suburbs dramatically altered the size of the city's population. All specifications also include an indicator for black-vs.-black elections. †  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table 3: Discontinuities in the Density of the Black Vote Margin of Victory**

<i>South</i>	1.83
	[0.87]*
# of Elections within Bandwidth	38
# of Cities within Bandwidth	18
<i>Non-South</i>	0.85
	[1.13]
# of Elections within Bandwidth	65
# of Cities within Bandwidth	37

Notes: Estimates of the discontinuity in the level of the density function, based on McCrary's (2008) local linear density estimation procedure, which uses a triangular kernel. The bandwidth is 0.2. See Figure 5 for bandwidth sensitivity checks. Parentheses contain robust standard errors. <sup>†</sup>  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ .

**Table 4: Discontinuities in Past, Current, and Future Turnout**

	Turnout, $t - 1$	Turnout, $t$	Turnout, $t + 1$
	(1)	(2)	(3)
<i>South</i>			
No covariates	0.083 [0.065]	0.184 [0.079]*	0.240 [0.072]**
Controls for turnout, $t - 1$	—	0.123 [0.043]*	0.174 [0.048]**
Controls for all covariates	—	0.105 [0.044]*	0.178 [0.046]**
# of Elections within Bandwidth	24	24	24
# of Cities within Bandwidth	13	13	13
<i>Non-South</i>			
No covariates	0.011 [0.053]	0.022 [0.053]	-0.013 [0.059]
Controls for turnout, $t - 1$	—	0.016 [0.041]	-0.018 [0.048]
Controls for all covariates	—	0.026 [0.043]	0.001 [0.047]
# of Elections within Bandwidth	45	45	45
# of Cities within Bandwidth	27	27	27

Notes: Results represent the discontinuous change in the dependent variable when the black vote margin of victory crosses zero. Each entry corresponds to a separate local linear regression with a uniform kernel and a bandwidth of 0.2. See Figure 5 for bandwidth sensitivity checks. Parentheses contain standard errors clustered at the city-decade level. The dependent variable is the turnout rate, or the total votes received by the top-two candidates divided by the voting-age city population (interpolated between census years). Time  $t - 1$  refers to the last election, time  $t$  to the current election, and time  $t + 1$  to the next election. The sample includes all interracial elections with turnout data for the last, current, and next elections; it omits Augusta's 1998 election, which came new borders dramatically increased the size of the city's population. The covariates include log population, percent black, percent under age 18, percent age 65 or older, and log median family income in the last census; the share of the county vote going to Kennedy in 1960; and indicators for the decade of the election. Significance tests are based on a  $t$ -distribution with degrees of freedom set to the number of clusters minus two:  $^+ p < 0.1$ ,  $^{**} p < 0.05$ ,  $^{***} p < 0.01$ .

**Table 5: Discontinuities in the Probability of Past and Future Black Victory**

	Black Victory, $t - 1$	Black Victory, $t + 1$
	(1)	(2)
<i>South</i>		
No covariates	-0.326 [0.301]	0.780 [0.213]*
Controls for black victory, $t - 1$	—	0.874 [0.225]**
Controls for all covariates	—	0.947 [0.272]**
# of Elections within Bandwidth	38	38
# of Cities within Bandwidth	18	18
<i>Non-South</i>		
No covariates	0.021 [0.200]	0.178 [0.208]
Controls for black victory, $t - 1$	—	0.186 [0.194]
Controls for all covariates	—	0.123 [0.177]
# of Elections within Bandwidth	65	65
# of Cities within Bandwidth	37	37

Notes: Results represent the discontinuous change in the dependent variable when the black vote margin of victory crosses zero. Each entry corresponds to a separate local linear regression with a uniform kernel and a bandwidth of 0.2. See Figure 5 for bandwidth sensitivity checks. Parentheses contain standard errors clustered at the city-decade level. Time  $t - 1$  refers to the last election, and time  $t + 1$  to the next election. The covariates include log population, percent black, percent under age 18, percent age 65 or older, and log median family income in the last census; the share of the county vote going to Kennedy in 1960; and indicators for the decade of the election. Significance tests are based on a  $t$ -distribution with degrees of freedom set to the number of clusters minus two: †  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

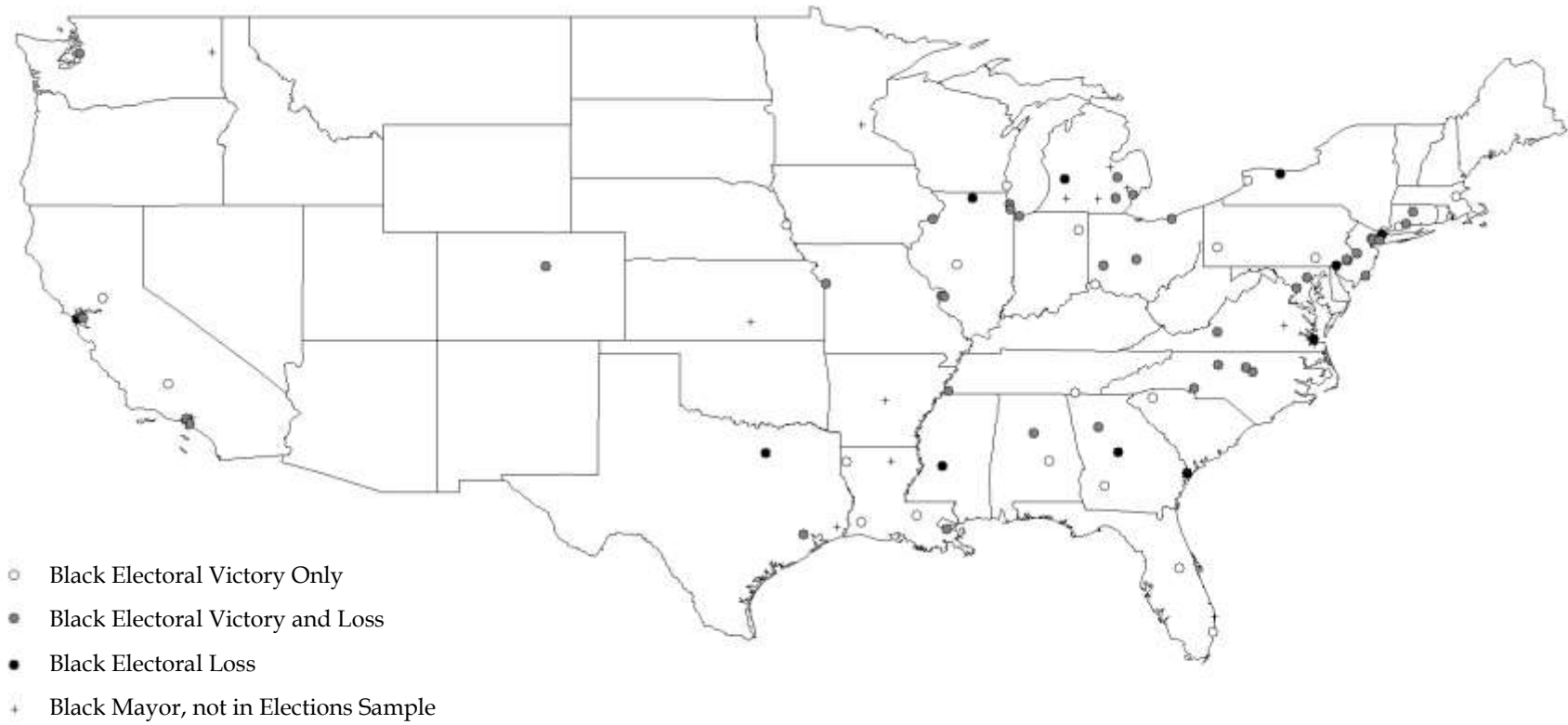


**Table 6: Political Party Discontinuities in White-vs.-White Elections**

	Density, $t$	Turnout, $t$	Democratic Victory, $t + 1$
	(1)	(2)	(3)
<b><i>South</i></b>	0.247	0.080	-0.103
	[0.579]	[0.051]	[0.264]
# of Elections within Bandwidth	49	49	49
# of Cities within Bandwidth	23	23	23
<b><i>Non-South</i></b>	0.094	0.026	0.308
	[0.646]	[0.029]	[0.151]*
# of Elections within Bandwidth	115	115	115
# of Cities within Bandwidth	41	41	41

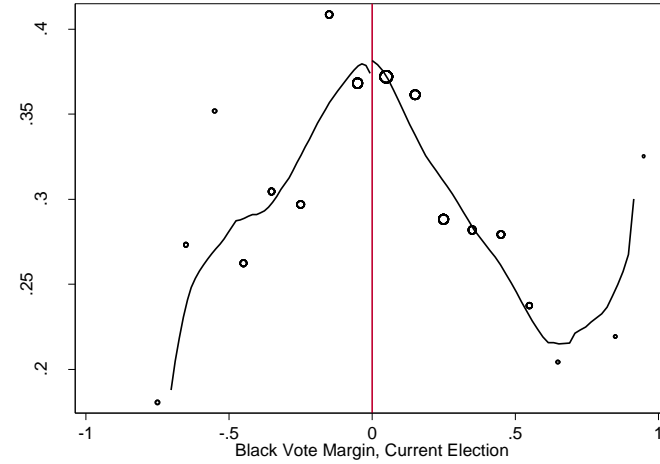
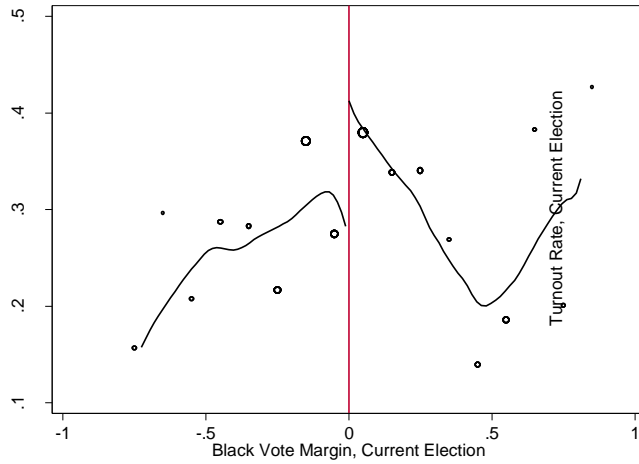
Notes: Results represent the discontinuous change in the dependent variable when the Democratic vote margin of victory crosses zero. Each entry corresponds to a separate local linear regression with a uniform kernel and a bandwidth of 0.2. See Figure 5 for bandwidth sensitivity checks. Parentheses contain standard errors clustered at the city-decade level. Time  $t$  refers to the current election, and time  $t + 1$  to the next election. The sample includes all elections between a white Democrat and a white Republican in the overall elections dataset. Significance tests are based on a  $t$ -distribution with degrees of freedom set to the number of clusters minus two:  $^+ p < 0.1$ ,  $^{**} p < 0.05$ ,  $^{***} p < 0.01$ .

Appendix Figure 1: Black Electoral Victories and Losses, 1965-2000

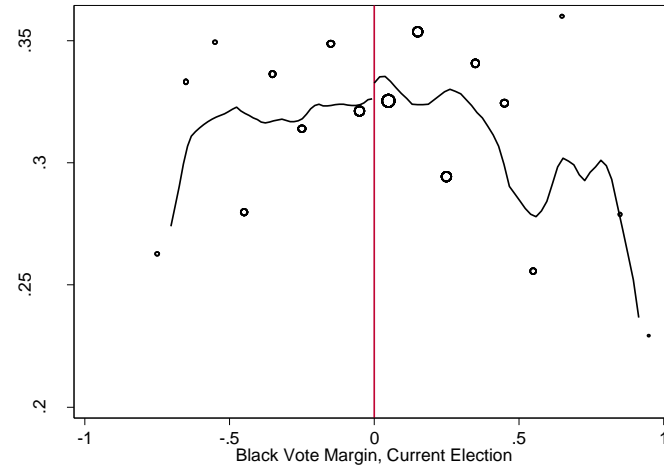
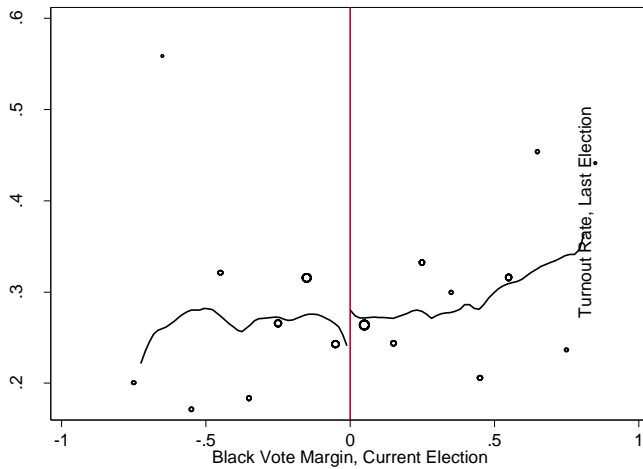


## Appendix Figure 2: Discontinuities in Unadjusted Turnout Rates

Panel A: Current Turnout



Panel B: Lagged Turnout



Notes: The turnout rate is the total votes received by the top-two candidates divided by the voting-age city population. The sample includes all interracial elections with turnout data for the last and current elections; it omits Augusta's 1998 election, which came just after a dramatic increase in the size of the city's population. The smooth curves are local linear regressions with a bandwidth of 0.1; open circles are local averages over 0.1-wide bins, with the size of the circle scaled to reflect the number of observations in the bin.