

Do Female Leaders Reduce Corruption? New Evidence from Brazil*

Julieta Peveri^a

Clemence Tricaud^b

February 17, 2026

Abstract

Does female leadership reduce corruption? We study this question using close mixed-gender elections in Brazilian municipalities over five electoral terms (2000–2020). Combining multiple objective measures of corruption—including federal audit irregularities, budget-based predicted corruption scores, and legal sanctions—we find no evidence that electing a woman mayor decreases corruption. We show that previously documented effects reporting lower corruption under female leaders arise in a narrow subsample and coincide with a sharp imbalance in incumbency. Because incumbency directly increases corruption, these findings likely reflect the effect of incumbency rather than gender *per se*.

JEL Codes: D72, D73, J16, H11

*We thank Geer Ang and Louis Marie for great research assistance. The project leading to this publication has received funding from the French National Research Agency (grant ANR-25-CE26-4450).

^aUniversité Paris I Panthéon-Sorbonne - Centre d'Economie de la Sorbonne (CES). Email: julieta.peveri@univ-paris1.fr

^bUCLA Anderson, CEPR and NBER. Email: clemence.tricaud@anderson.ucla.edu

1 Introduction

Corruption poses a fundamental challenge to effective governance, undermining public trust, distorting resource allocation, and weakening state capacity (e.g., Fisman and Svensson 2007; Rothstein 2011; Rose-Ackerman and Palifka 2016). The substantial increase in women’s political representation in recent decades raises the question of whether this shift affects corruption. In other words, are female politicians less likely to engage in corrupt behavior?

A large empirical literature documents that greater representation of women in politics is associated with lower levels of corruption, both across and within countries (Dollar et al. 2001; Swamy et al. 2001; Jha and Sarangi 2018; Bauhr et al. 2019; Decarolis et al. 2023).¹ However, this relationship has been shown to depend on institutional context, including the degree of accountability (Esarey and Schwindt-Bayer 2018), and be sensitive to the inclusion of cultural factors (Debski et al. 2018).

To address these concerns and establish causality, recent studies have focused on sub-national elections and exploited close-election regression discontinuity designs. Using this approach, Brollo and Troiano (2016), Bauhr and Charron (2021), and Baskaran et al. (2024) document that female leadership reduces corruption in Brazilian municipalities, French municipalities, and Indian states, respectively.² Despite their careful empirical design, these results rest on small analysis samples and limited direct measures of corruption, raising concerns about robustness and increasing the likelihood that treatment and control groups differ along dimensions other than gender.³

This paper revisits the relationship between the gender of elected executives and corruption using thousands of close elections in Brazilian municipalities. We address the limitations of prior work by assembling a broad set of objective and direct corruption measures—most of which are available for the universe of municipalities—and by covering five electoral terms over the period 2000–2020.

Our empirical design exploits close mixed-gender mayoral races and compares municipalities in which a woman barely wins against a man to those in which a man barely wins against a woman. We provide extensive evidence supporting the validity of this design: baseline municipal characteristics are smooth at the threshold, and closely elected male and

¹See Hessami and da Fonseca (2020) for a review of the effects of female leadership on policies, including corruption, and Alexander (2021) for a review of the theoretical and empirical literature on gender and corruption specifically.

²Instead of relying on close elections, Afridi et al. (2017) exploit the random assignment of village council headship. In contrast to Baskaran et al. (2024), they find that female leadership initially *increases* corruption, with the effect vanishing over time.

³The effective sample sizes (i.e., the number of observations within the estimation bandwidths) are 103, 283, and 59 for the three studies cited above, respectively.

female mayors are similar in terms of political experience and party affiliation. Female mayors are slightly younger and significantly more educated at the threshold, but we show that these differences are unlikely to drive our results. Controlling for these characteristics leaves our estimates unchanged, and we find no independent effect of education on corruption outcomes.

We combine multiple corruption measures: (i) corruption-related irregularities recorded in the federal anti-corruption audit program, (ii) predicted corruption scores based on budget accounts for the universe of municipalities (Ash et al. 2025), and (iii) newly collected data on legal sanctions for administrative misconduct or corruption involving public officials.

Our main result is that, over the full 2000–2020 period and across six corruption measures, electing a woman mayor has no detectable effect on corruption. Having a female mayor has no effect on the number of irregularities revealed by audits, the predicted level of corruption based on budgetary accounts, the probability that the mayor is legally sanctioned, suspended from political rights, the amount of financial damage to be reimbursed, or the amount of fees imposed.

The second part of the paper investigates why this null result contrasts with the negative effect documented by Brollo and Troiano (2016), who focus on audited municipalities during the first two electoral terms (2000 and 2004). We begin by limiting our analysis to the same subset of municipalities and electoral terms used, which yields a negative and statistically significant effect across multiple audit-based corruption measures. However, the effect disappears once later elections are included or when the analysis is extended to a larger set of municipalities. We next show that the early negative effect coincides with a sharp discontinuity in incumbency: in audited municipalities during the early electoral terms—and only in this subsample—women who narrowly win are substantially less likely to be incumbents than men who narrowly win. This matters because incumbency is likely to affect corruption directly. Incumbents may have greater opportunities for corruption due to experience and networks, and they also face weaker electoral accountability—particularly in Brazil, where a two-term limit prevents second-term mayors from running again (Ferraz and Finan 2011). Consistent with this interpretation, the early gender effect largely disappears once we control for incumbency or restrict the sample to first-term mayors. We further corroborate the role of incumbency by conducting a separate regression discontinuity design comparing narrowly elected male incumbents and non-incumbents, and we find that incumbency increases corruption across all measures, both in early elections and in the full sample.

Overall, using a large number of municipalities, electoral terms, and corruption measures, our results show that female mayors in Brazil are no less likely to be corrupt than male mayors. More broadly, our findings highlight the importance of systematically examining

discontinuities in characteristics other than gender in regression discontinuity designs, to avoid conflating gender with other key drivers of political behavior (Marshall 2024).

The remainder of the paper proceeds as follows. Section 2 describes the institutional setting and data. Section 3 outlines our empirical strategy. Section 4 presents the main results. Section 5 examines why our findings differ from earlier studies, highlighting the role of incumbency. The final section concludes.

2 Context and Data

2.1 Brazilian Municipalities

Brazil is divided into 5,570 municipalities. The Constitution recognizes municipalities as “federal entities”, granting them the authority to independently determine local policies. Municipalities are responsible for providing a wide range of public services, including water and sanitation, security, transportation, basic education, and public health. In 2024, municipal expenditures accounted for 24.2% of total public spending, and 67.2% of municipal revenues came from constitutionally mandated intergovernmental transfers (Instituto Brasileiro de Geografia e Estatística 2024).

Municipal governments are made of an executive branch (*prefeitura*), led by the mayor, and a legislative branch, the municipal council (*câmara municipal*). The mayor submits a proposed budget to the council, which may amend it, but the executive ultimately retains discretion over spending allocations. Although councilors can initiate legislation, the mayor has the authority to veto proposed bills and, in practice, exercises the dominant role in the adoption of policies. This makes the mayor a key political actor, with substantial discretion over public spending.

Mayors are elected every four years under a majority-rule system. Voting is mandatory for adults aged 18 to 70. In municipalities with more than 200,000 registered voters, a runoff is held if no candidate obtains more than 50% of the valid votes. Since the 1997 constitutional amendment, mayors may serve at most two consecutive terms, implying that second-term mayors are not eligible for reelection.

Women remain substantially underrepresented. In 2000, the first election in our sample, only 7.5% of all candidates were women, and female mayors represented 5.6% of all mayors. While these shares increased in the early 2000s, they have plateaued at around 12% after the 2012 election.

2.2 Municipal Corruption

Municipal corruption in Brazil commonly involves procurement fraud (e.g., over-invoicing), diversion of funds, payment for unexecuted works or services, the use of shell companies, and falsified receipts. Based on estimates by Ferraz and Finan (2011), corruption in local governments results in losses of approximately US\$550 million per year.

To address this problem, the federal government created the *Controladoria-Geral da União* (CGU) in 2003 to audit municipalities' use of federal transfers. Between 2003 and 2015, municipalities were selected for auditing through a public, state-level annual lottery; since then, selection has been based on a vulnerability score. Once selected, teams of auditors inspect financial accounts, procurement procedures, and the delivery of federally funded public services.

Audits are not the only channel through which corruption is detected. Under Brazil's Improbity Law (*Lei de Improbidade Administrativa*), public officials may be held civilly liable for acts that result in illicit enrichment, cause damage to the public treasury, or violate core principles of public administration.

Investigations into acts of administrative improbity can be initiated following complaints from multiple sources, including public servants, internal oversight mechanisms within public agencies (such as disciplinary commissions, administrative proceedings, and internal control units), audit courts, and open sources such as newspapers and other media outlets.

When audits or investigations uncover irregularities, mayors and municipal officials may face administrative sanctions. These sanctions typically include the suspension of political rights—including temporary bans from holding public office and the loss of voting rights—the reimbursement of the estimated financial damage caused, and additional fines. When misconduct constitutes a criminal offense—such as embezzlement, procurement fraud, or participation in criminal organizations—the Public Prosecutor's Office may pursue criminal charges, which can result in imprisonment.

2.3 Data

This section describes the main datasets used in this paper. Appendix Table A1 provides the definition and source of each variable.

Corruption. To measure corruption, we first draw on Brazil's randomized anti-corruption audit program conducted by the CGU. We focus on the period from 2003 to 2015, during which municipalities were selected at random. Beginning in 2006, the CGU classifies irregularities into three categories: notices, intermediate irregularities, and severe irregularities. The first category includes minor acts of mismanagement, such as improperly completed

documentation (Avis et al. 2018). Intermediate irregularities typically reflect more significant administrative shortcomings, such as missing maintenance schedules for school buses or inadequate health infrastructure. In contrast, severe irregularities capture clear instances of corruption, including over-invoicing, bid-rigging, and the use of “ghost” employees for embezzlement (Ferrali et al. 2024). Accordingly, our first measure of corruption is the number of severe irregularities revealed by the audits.⁴ This measure is available for the municipalities that were randomly audited at some point between 2006 and 2015. The data also report the fiscal year of the audited budget to which each infraction pertains, which may precede the year of the audit. This allows us to measure corruption across four municipal terms: 2000–2003, 2004–2007, 2008–2011, and 2012–2016. Overall, 83.7% of audits reveal at least one severe irregularity, with a median of 5 severe irregularities.

Second, we use predicted corruption scores constructed by Ash et al. (2025). Using machine-learning models trained on municipalities that were audited, they identify patterns in budget composition that are predictive of corruption detected by auditors. The trained model is then applied to budget accounts for all municipalities to generate a predicted probability of corruption for each municipality-year from 2001 to 2012.⁵ Unlike the audit-based CGU measure, this predicted corruption score is available for the universe of Brazilian municipalities, substantially expanding the sample size. As the measure is available through 2012, we use it for the 2000, 2004, and 2008 electoral terms. For each term, we compute the average predicted corruption score over the four years in office. The predicted score ranges from 0 to 1, with an average of 0.51.

Finally, we assemble novel data on legal sanctions for administrative misconduct or corruption involving public officials by web-scraping the *Cadastro Nacional de Condenações Cíveis por Atos de Improbidade Administrativa e Inelegibilidade*. Using this database, we construct four outcomes: (i) an indicator for whether the mayor is ever sanctioned after entering office; (ii) an indicator for whether the sanction involves the suspension of political rights; (iii) the amount of money that has to be reimbursed to compensate the public treasury for the financial loss caused; and (iv) the amount of fines imposed. These measures are available for all Brazilian municipalities across the five electoral terms spanning the period 2000–2020. Over this period, 19.2% of mayors were legally sanctioned. Among those sanctioned, 80.4% had their political rights suspended, 53.4% were required to compensate the State for damages, and 60.2% were ordered to pay fines.

⁴As shown in Section 4, we consider several alternative definitions for this outcome, including the sum of intermediate and severe irregularities, or the probability that the audit reveals at least one severe irregularity.

⁵Ash et al. (2025) primarily train the model using the corruption indicator developed by Brollo et al. (2013), which is based on text analysis of audit reports and is available for a limited number of electoral terms. They show that using the CGU’s count of irregularities yields very similar prediction scores.

Electoral data. Electoral results are obtained from *Base dos Dados*, which aggregates and harmonizes data from the *Tribunal Superior Eleitoral* (TSE). We use data from five municipal elections: 2000, 2004, 2008, 2012, and 2016. For each candidate in each municipality, we observe gender, incumbency status, age, education level, party affiliation, number of votes received. In addition, we use data from municipal council elections to determine whether a given mayor had previously served as councilor.

Municipalities' characteristics. We use a broad set of municipal socio-demographic variables to assess the validity of our identification strategy. These include, among others, municipal GDP, the share of the population living in urban areas, the share of women, and the share of adults with a high-school degree. All demographic variables are drawn from the most recent census conducted prior to each election (i.e., the 2000 Census for the 2000, 2004, and 2008 elections, and the 2010 Census for the 2012, and 2016 elections). Municipal GDP at the time of the election is obtained from the Brazilian Institute of Geography and Statistics (IBGE).

3 Empirical Strategy

3.1 Sample and Specification

To assess the causal effect of having a female mayor, we implement a regression discontinuity design (RDD), comparing municipalities in which a woman narrowly won against a man with those in which a man narrowly won against a woman. Our sample consists of all races in the 2000, 2004, 2008, 2012, and 2016 municipal elections in which the top two candidates were of opposite genders, representing 18.7% of all races.⁶

Our final sample includes 4,769 observations spanning 2,701 distinct municipalities, as a municipality can experience multiple mixed-gender races across the five elections we consider. As shown in Appendix Table A2, the average municipality in our sample counts 37,086 inhabitants and a local GDP of R\$ 682 million (130.4 million US\$). The average election features 2.8 candidates and a turnout rate of 86.6%. Compared to the average Brazilian municipality, municipalities in our sample are somewhat larger and have slightly lower GDP. Other demographic characteristics—such as urbanization, education, and employment—are

⁶When the election took place in two rounds, we consider the top two candidates in the second round. Our main sample only contains 32 mixed-gender runoff elections (0.67%). Some elections were subsequently invalidated and followed by a supplementary election. In these cases, we retain the results of the supplementary election when it takes place before the start of the term. We exclude elections for which the supplementary elections occurred later during the term, corresponding to 476 observations (1.74% of all races). Finally, we also remove 162 races in which the winning candidate's candidacy was withdrawn, invalidated, or judicially contested after election day.

very similar across the two groups.

We estimate the following specification:

$$Y_{i,t} = \alpha + \tau T_{i,t} + \beta_1 X_{i,t} + \beta_2 X_{i,t} T_{i,t} + \mu_{i,t} , \quad (1)$$

where i indexes municipalities and t a given election. The running variable $X_{i,t}$ is defined as the vote share of the female candidate minus that of the male candidate. The treatment variable $T_{i,t}$ equals 1 if the female candidate wins ($X_{i,t} > 0$) and 0 otherwise. The corruption outcomes $Y_{i,t}$ are measured over the term following the election. τ is the coefficient of interest and captures the local average treatment effect (LATE) of electing a female mayor on corruption outcomes in close elections.

Following Calonico et al. (2014), we use a local linear specification, report robust confidence intervals, and rely on data-driven MSERD bandwidths. We further allow bandwidths to differ on each side of the threshold, which yields a lower asymptotic mean squared error (Arai and Ichimura 2018). In Section 4, we show that our results are robust to several specifications, including the inclusion of controls and fixed effects, the use of a second-order polynomial, and alternative bandwidth selection procedures. Our effective sample—the one restricted to observations within the estimation bandwidths—includes approximately 250 observations for audit measures, 1,500 for the predicted corruption score, and 3,000 for legal sanctions.⁷

3.2 Validity of the design

The identification assumption is that the only discrete change at the threshold is the gender of the mayor. We provide several pieces of evidence supporting this assumption. First, Appendix Figure A1 shows no evidence of manipulation, as the running variable is smooth at the cutoff. Second, Appendix Table A3 reports balance tests for each municipal characteristic listed in Appendix Table A2. The point estimates are small in magnitude, and only one out of eleven is significant. Appendix Table A4 and Figure A2 confirm the absence of imbalances: we do not detect any jump at the threshold when using as outcome the treatment predicted by baseline municipal characteristics.

We next examine whether winner characteristics other than gender change discontinuously at the threshold. As shown in Table 1, closely elected female mayors are 18.7 percentage

⁷Bandwidths are selected using a data-driven approach and therefore vary across outcomes, as does the effective sample size. Additionally, as described in Section 2.3, some outcomes are available only for specific subsets: the predicted corruption score is available for the first three terms, while audit-based measures are available only for audited municipalities in the first four terms.

points more likely to have completed higher education than closely elected male mayors (Part I, column 3).⁸ Female mayors also tend to be younger, although the difference is small (49.5 vs. 47.6 years old on average, column 1). In contrast, female and male mayors are balanced in their political experience—measured by incumbency status and prior service as a municipal councilor—and political orientation, as captured by affiliation with each of the four main Brazilian parties.⁹

A potential concern for interpretation is that education may have a direct effect on corruption, which could offset that of gender. For example, if education increases corruption while female leadership reduces it, the higher education level of female mayors could generate a null effect. We believe this to be unlikely for two main reasons. First, our estimates are similar when controlling for winner characteristics, including education (see Section 4). Second, a separate RD analysis comparing closely elected male mayors with and without higher education yields mostly null effects (Appendix Table A5).¹⁰

4 Main results

We assess the effect of having a female mayor on corruption using six indicators: the number of severe irregularities available for audited municipalities over the 2000, 2004, 2008, and 2012 terms; the predicted corruption score from Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms; and four measures derived from legal actions, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms.

As shown in Table 2, we find no effect of the mayor’s gender on any of the six corruption measures. Electing a female mayor has no impact on the number of severe irregularities revealed by an audit, the predicted level of corruption based on budgetary accounts, the probability that the mayor faces legal action, the probability that the mayor is suspended from political rights, the (log) amount of compensation paid for the damage caused, or the (log) amount of fines imposed. Figure 1 further confirms the absence of a discontinuity at the threshold for each of the six outcomes.

Appendix Table A6 shows that the results are robust to alternative audit-based measures, including an indicator for at least one severe irregularity, the sum of intermediate and severe irregularities, logged and de-measured counts, and irregularities per audited program. The

⁸Part II of Table 1 presents the same analysis for different subsamples, which we discuss in Section 5.

⁹We define the four main parties as those most frequently represented among the top two candidates in mayoral elections over the five elections we consider.

¹⁰We only detect a small and weakly significant effect for the probability of facing a legal action. Importantly, the point estimate is *negative*, which would, if anything, bias the estimates toward finding lower corruption among female mayors.

findings are also unchanged when using the change in the predicted score between the first and last year of the term rather than its four-year average. Finally, we find similar null effects when we include region fixed effects, election-year fixed effects, municipal controls, and winner characteristics (Appendix Table A7), as well as across alternative polynomial orders and bandwidth choices (Appendix Table A8).

5 Understanding the Gap with Previous Findings

5.1 Audited Municipalities in Earlier Terms

The results presented above show no effect of gender on corruption across multiple corruption measures and election years. This finding contrasts with prior evidence. In particular, Brollo and Troiano (2016) document a strong negative effect of female leadership on corruption at the municipal level in Brazil. They measure corruption using a binary indicator developed by Brollo et al. (2013), based on text analysis of the random audits conducted between 2003 and 2009. Given the timing of these audits, their analysis is restricted to municipalities randomly audited during the first two electoral terms (2000-2004 and 2004-2008). Several differences could potentially account for the gap with our results: differences in the corruption measures used, the study period, or in the sample of municipalities.

To investigate this discrepancy, we focus on the audit-based corruption measures and estimate the effect separately for different time periods and municipality samples. In Panel A of Table 3, we restrict the analysis to the first two terms. Column 1 replicates the analysis of Brollo and Troiano (2016) using the same text-based corruption indicator. Consistent with their findings, the point estimate suggests that having a female mayor reduces the probability of corruption by 19.9 percentage points.¹¹ While the effect is not significant with the "broad" measure of corruption ($p = 0.147$), it becomes significant at the 5 percent level when using the "narrow" corruption indicator, which exhibits greater variability.¹² We obtain similar results when using alternative audit-based corruption measures, while still focusing on audited municipalities in the 2000 and 2004 terms. Female leadership is associated with a reduction of 4.5 severe irregularities and a 0.12 lower predicted corruption score (Panel A, columns 3 and 4). Both coefficients are statistically significant at the 5 percent level and

¹¹Our estimate differs slightly from the one of Brollo and Troiano (2016) for two main reasons. First, Brollo and Troiano (2016) restricts their sample to elections with only two candidates, whereas we consider all mixed-gender elections regardless of the number of candidates, increasing the effective sample size from 103 to 186 observations. Second, following Calonico et al. (2014), we use a triangular kernel rather than a uniform one, assigning greater weight to observations closer to the threshold.

¹²Under the broad definition, 83% of mayors are classified as corrupt, compared to 47% under the narrow definition. See Appendix Table A1 for the detailed definition of each variable.

correspond to nearly a two-fold reduction and a 23.3 percent decrease, respectively, relative to male-led municipalities at the threshold.

By contrast, these effects disappear once we consider a larger sample of municipalities *or* include later elections. First, the point estimate on predicted corruption becomes negligible and insignificant when extending the sample to all municipalities in the same period rather than restricting it to audited ones (Panel A, column 5). Second, as shown in Panel B, the estimates are no longer significant—and even turn positive—when focusing on the post-2004 elections, whether restricting the sample to audited municipalities (columns 3 and 4) or including all municipalities (column 5).

Taken together, these results suggest that there is something specific in *randomly audited* municipalities during the *2000 and 2004 terms*. We confirm it to be the case by examining balance in winner’s characteristics. Part II of Table 1 reports estimates for different subsamples. Across all subsamples, female mayors are positively selected on education (column 3): although the estimates are sometimes imprecise, they are consistently positive and large in magnitude. Closely elected female mayors also tend to be younger than their male counterparts (column 1), a pattern that is more pronounced in earlier elections (Panels A and B). However, this age difference is similar in audited and non-audited municipalities. The key distinctive feature of closely elected female mayors in audited municipalities before 2004 is that they are significantly less likely to be incumbent (column 2, Panel B). The point estimate indicates that they are 24.5 percentage points (or 58.9 percent) less likely to be serving a second term compared to closely elected male mayors. In all the other subsamples, the incumbency effect is not significant and either close to zero or positive.¹³

5.2 The Role of Incumbency

The fact that the incumbency imbalance appears only in municipalities audited during the first two terms suggests that incumbency—rather than gender—may be driving the negative effect observed in this subsample. Incumbency can directly influence corruption through several channels. Incumbents may have greater opportunities for corruption due to experience and networks. Moreover, they also face weaker electoral accountability—particularly in Brazil, where the two-term limit prevents second-term mayors from running again (Ferraz and Finan 2011). If female mayors are less likely to be serving a second term, failing to account for incumbency could incorrectly attribute lower corruption levels to female leadership.

¹³In contrast, we find no evidence of imbalances in municipal characteristics that are specific to audited municipalities during the 2000 and 2004 terms (Appendix Table A9).

Consistent with this interpretation, we first show that the early negative effect in audited municipalities is largely attenuated and no longer statistically significant once we control for winners’ characteristics, including incumbency, or when we restrict the analysis to first-term mayors (Appendix Table A10). Second, we provide direct evidence of an incumbency effect on corruption. Following Ferraz and Finan (2011), we conduct a separate RD analysis comparing municipalities in which a second-term mayor narrowly won the election to those in which a first-term mayor narrowly won. We further restrict the sample to elections where the top two candidates are both male candidates, to abstract from a potential gender effect, and we control for other winner characteristics.¹⁴ We find that, in audited municipalities during the 2000 and 2004 terms, the probability of corruption is 14.6 percentage points higher when the mayor is serving a second term. This effect is significant at the 10 percent level and corresponds to a 37.0 percent increase (Table 4, column 1).

Finally, we show that the incumbency effect extends beyond early-audited municipalities. In audited municipalities over the 2000-2012 terms, the number of severe irregularities is 19.3 percent higher when the mayor is serving a second term (column 2). In the full sample of municipalities over the 2000-2008 terms, the predicted corruption score is 6.0 percent higher for incumbents (column 3). Looking at all municipalities over the 2000-2016 terms, we find that second-term mayors are 11.3 percent more likely to face legal actions (column 4), 13.2 percent more likely to face a political suspension (column 5), reimburse 37.9 percent higher financial damages (though this estimate is not statistically significant; p -value = 0.106), and incur 72.8 percent higher fees (column 6).¹⁵

These results are consistent with recent work by Dahis et al. (2025), which shows that the incumbency effect is consistently positive across various audit-based measures of corruption. Both Dahis et al. (2025) and Ferraz and Finan (2011) interpret this effect as stemming from the term-limit rule and the resulting absence of electoral incentives for second-term mayors. In line with this interpretation, we find limited evidence that experience per se affects corruption. We assess the role of experience through an additional RD analysis of male first-term mayors, comparing those who previously served as municipal councilors with those who did not. Although the effect on severe irregularities is large and significant, this estimate relies on only 83 observations. By contrast, effects on predicted corruption scores and legal action outcomes—available for substantially larger samples—are small and

¹⁴Appendix Tables A11 and A12 report the balance tests on municipality and winner characteristics for the incumbency RD analysis. While we find no discontinuities in baseline municipal characteristics, we do detect significant discontinuities in mayors’ political affiliation. We therefore control for winner characteristics in our incumbency analysis.

¹⁵For the outcomes expressed in logs (damage and fines), we compute the percentage effect as: $(\exp(\tau)-1)*100$, where τ is the point estimate.

not significant (Appendix Table A13). These findings suggest that the incumbency effect operates primarily through reduced accountability rather than accumulated experience.

6 Conclusion

This paper reexamines the relationship between female political leadership and corruption using a large sample of close mayoral elections in Brazil and multiple objective measures of corruption. Across five electoral terms and six corruption outcomes, we find no evidence that electing a woman mayor reduces corruption.

We show that the previously documented negative effect of female leadership is confined to a subsample of randomly audited municipalities in early terms. Moreover, this effect coincides with a sharp discontinuity in incumbency rates between closely elected female and male mayors. Because incumbency—through term limits and weakened electoral accountability—directly increases corruption, failing to account for this dimension leads to misleading inferences about gender effects.

Our findings shed new light on the effects of female political representation and underscore the importance of examining discontinuities in characteristics other than gender in regression discontinuity designs. Importantly, these results should not be interpreted as suggesting that greater female political representation is undesirable or unwarranted. Equity in representation remains a fundamental democratic objective, and substantial evidence indicates that women continue to face significant barriers and discrimination in politics (see e.g. Bertrand and Duflo 2017; Le Barbanchon and Sauvagnat 2022; Fujiwara et al. 2025).

Figures and Tables

Table 1: Balance tests - Winners' covariates

Part I: Full sample								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Age	Incumbent	Graduate	Former councillor	PT	PMDB	PSDB	PFL/DEM
Female	-1.929** (0.921)	-0.050 (0.038)	0.187*** (0.040)	-0.012 (0.021)	-0.013 (0.025)	-0.031 (0.034)	0.028 (0.028)	-0.017 (0.024)
Observations	2,949	2,865	3,478	3,436	3,106	2,983	3,478	3,136
Robust p-value	0.029	0.173	0.000	0.545	0.447	0.265	0.308	0.393
Bandwidth left	0.151	0.148	0.221	0.216	0.163	0.206	0.206	0.186
Bandwidth right	0.150	0.139	0.166	0.161	0.163	0.097	0.185	0.137
Mean outcome	49.543	0.248	0.410	0.092	0.082	0.182	0.117	0.101
Part II: By sub-samples								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Age	Incumbent	Graduate	Former councillor	PT	PMDB	PSDB	PFL/DEM
<i>Panel A: 2000 and 2004 terms - All Municipalities</i>								
Female	-3.841*** (1.582)	-0.059 (0.070)	0.130 (0.079)	-0.002 (0.039)	0.006 (0.035)	-0.029 (0.056)	0.039 (0.057)	-0.032 (0.062)
Observations	863	878	920	884	1,027	1,076	939	919
Robust p-value	0.008	0.287	0.130	0.979	0.926	0.684	0.592	0.666
Bandwidth left	0.130	0.135	0.172	0.168	0.224	0.235	0.176	0.173
Bandwidth right	0.179	0.175	0.151	0.137	0.164	0.185	0.162	0.147
Mean outcome	51.413	0.270	0.342	0.063	0.053	0.201	0.137	0.194
<i>Panel B: 2000 and 2004 terms - Audited Municipalities</i>								
Female	-3.154 (3.459)	-0.245* (0.159)	0.203 (0.161)	-0.015 (0.020)	0.016 (0.015)	-0.111 (0.104)	0.102 (0.135)	-0.137 (0.125)
Observations	187	178	230	156	107	204	229	219
Robust p-value	0.310	0.095	0.214	0.422	0.221	0.203	0.425	0.197
Bandwidth left	0.123	0.121	0.179	0.113	0.062	0.165	0.177	0.166
Bandwidth right	0.128	0.118	0.171	0.078	0.074	0.107	0.170	0.163
Mean outcome	52.134	0.416	0.421	0.006	-0.016	0.180	0.152	0.244
<i>Panel C: Post 2004 terms - All municipalities</i>								
Female	-1.167 (1.006)	-0.043 (0.044)	0.200*** (0.049)	-0.015 (0.026)	-0.020 (0.031)	-0.025 (0.041)	0.025 (0.032)	-0.007 (0.022)
Observations	2,265	2,130	2,292	2,407	2,062	1,942	2,361	2,197
Robust p-value	0.279	0.315	0.000	0.480	0.440	0.405	0.408	0.578
Bandwidth left	0.186	0.172	0.191	0.214	0.154	0.178	0.193	0.201
Bandwidth right	0.151	0.136	0.153	0.160	0.141	0.090	0.171	0.119
Mean outcome	48.783	0.241	0.446	0.102	0.093	0.174	0.109	0.061
<i>Panel D: Post 2004 terms - Audited municipalities</i>								
Female	-1.195 (4.906)	0.238 (0.241)	0.188 (0.244)	-0.057 (0.088)	0.029 (0.112)	0.018 (0.190)	-0.072 (0.146)	0.003 (0.129)
Observations	111	94	98	110	100	108	98	105
Robust p-value	0.824	0.225	0.425	0.363	0.907	0.853	0.641	0.884
Bandwidth left	0.238	0.144	0.168	0.245	0.157	0.232	0.171	0.175
Bandwidth right	0.172	0.131	0.151	0.137	0.173	0.131	0.119	0.174
Mean outcome	50.859	0.293	0.599	0.082	0.078	0.112	0.112	0.127

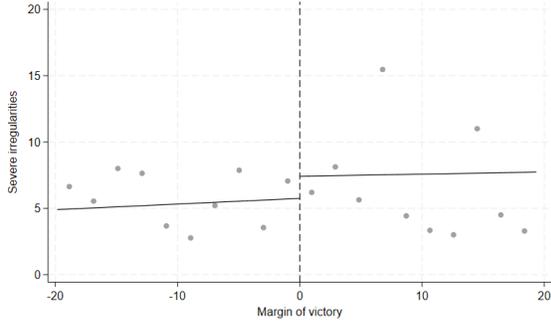
Notes: In Column 1, the outcome is the winner's age at the time of the election. In column 2 (resp. 3, 4, 6, 7, 8) the outcome is an indicator variable equal to one if the winner is the incumbent (resp. has completed higher education, served as a city councillor in the previous term, runs under the PT, PMDB, PSDB, or PFL/DEM party label). Part I reports results for the full sample of gender-mixed elections. Part II presents results for selected subsamples: Panel A restricts the sample to the 2000 and 2004 terms; Panel B further restricts this subsample to audited municipalities in the same terms; Panel C restricts the sample to the post-2004 terms; and Panel D restricts the post-2004 sample to audited municipalities only. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit, data-driven MSERD bandwidths, and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

Table 2: Gender and corruption

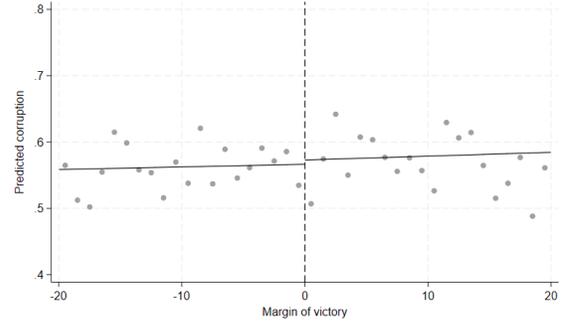
	(1)	(2)	(3)	(4)	(5)	(6)
	Severe irregularities	Predicted corruption	Legal action	Political suspension	Log of damage	Log of fines
Female	-0.970 (2.711)	-0.013 (0.028)	-0.024 (0.036)	-0.022 (0.030)	0.161 (0.289)	-0.063 (0.296)
Observations	240	1,517	3,081	3,476	3,226	3,245
Robust p-value	0.430	0.463	0.558	0.425	0.399	0.996
Bandwidth left	0.246	0.207	0.175	0.200	0.181	0.211
Bandwidth right	0.098	0.106	0.143	0.192	0.161	0.130
Mean outcome	5.335	0.569	0.210	0.171	1.128	1.322

Notes: The outcomes are: the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor's term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (column 1); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (column 2); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbability and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (column 3); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (column 4); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (column 5); the $\log(1 + x)$ amount of fines imposed (column 6). If legal action equals 0, then political suspension, damage and fines also equal 0. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

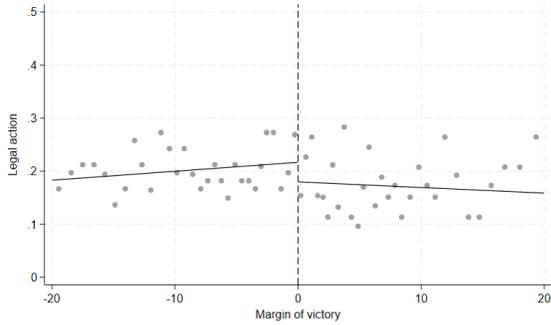
Figure 1: Gender and corruption



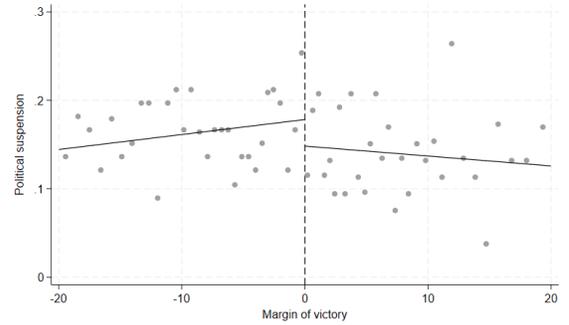
(a) Severe irregularities



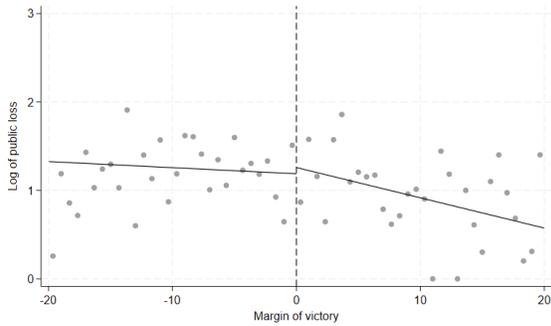
(b) Predicted corruption



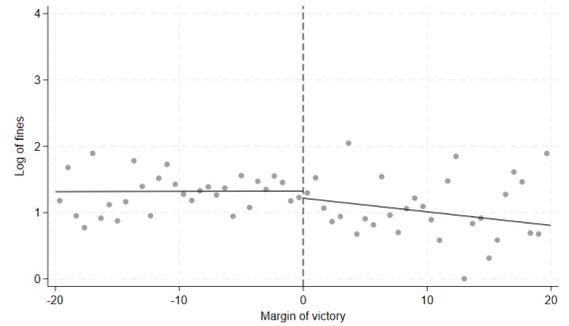
(c) Legal action



(d) Political suspension



(e) Log of damage



(f) Log of fines

Notes: The outcomes are: the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor's term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (sub-figure a); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (sub-figure b); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbity and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (sub-figure c); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (sub-figure d); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (sub-figure e); the $\log(1 + x)$ amount of fines imposed (sub-figure f). If legal action equals 0, then political suspension, damage and fines also equal 0. The running variable is defined as the difference, in percentage points, between the vote shares of the female and male candidates, with positive (negative) values indicating a female (male) victory. The figures restrict attention to observations lying within a 20 percentage-point window around the cutoff. We use a linear fit and a triangular kernel. The dots correspond to binned averages of the outcome variable, computed using evenly spaced bins of the running variable for continuous outcomes and quantile spaced bins for binary outcomes.

Table 3: Gender and corruption by time period

	(1)	(2)	(3)	(4)	(5)
	Audited municipalities			All municipalities	
	Broad corruption	Narrow corruption	Severe irregularities	Predicted corruption	Predicted corruption
Panel A: 2000 and 2004 terms					
Female	-0.199 (0.147)	-0.255** (0.162)	-4.575** (2.735)	-0.121** (0.072)	-0.042 (0.039)
Observations	186	178	80	200	890
Robust p-value	0.147	0.050	0.035	0.044	0.165
Bandwidth left	0.145	0.155	0.112	0.170	0.207
Bandwidth right	0.159	0.108	0.067	0.088	0.098
Mean outcome	0.884	0.479	4.991	0.503	0.523
Panel B: Post 2004 terms					
Female			5.166 (5.052)	0.098 (0.080)	0.022 (0.031)
Observations			106	93	724
Robust p-value			0.312	0.206	0.445
Bandwidth left			0.194	0.262	0.220
Bandwidth right			0.152	0.114	0.182
Mean outcome			6.475	0.645	0.636

Notes: Columns 1 to 4 restrict the sample to audited municipalities, while column 5 uses the full sample of mixed-gender races. In Column 1 (resp. 2), the outcome is an indicator equal to one for broad (resp. narrow) corruption based on the text analysis of the CGU audit reports Brollo et al. (2013), only available for audited municipalities over the 2000 and 2004 terms. In Column 3, the outcome is the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor's term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms. In Columns 4 and 5, the outcome is the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

Table 4: Term limit and corruption

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Narrow corruption	Severe irregularities	Predicted corruption	Legal action	Political suspension	Log of damage	Log of fines
Incumbent	0.146* (0.095)	2.089* (1.485)	0.029* (0.019)	0.043* (0.024)	0.042* (0.022)	0.321 (0.229)	0.547*** (0.216)
Observations	598	409	3,900	6,952	6,817	6,523	6,726
Robust p-value	0.087	0.069	0.084	0.059	0.055	0.106	0.008
Bandwidth left	0.116	0.080	0.096	0.144	0.167	0.125	0.151
Bandwidth right	0.246	0.192	0.191	0.242	0.203	0.223	0.211
Mean outcome	0.395	10.824	0.483	0.381	0.318	2.986	2.775

Notes: The sample is restricted to elections in which the top two candidates are men, and one is the incumbent. The outcomes are: an indicator equal to one for narrow corruption based on the text analysis of the CGU audit reports Brollo et al. (2013), only available for audited municipalities over the 2000 and 2004 terms (column 1), the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor's term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (column 2); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (column 3); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbity and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (column 4); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (column 5); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (column 6); the $\log(1 + x)$ amount of fines imposed (column 7). If legal action equals 0, then political suspension, damage and fines also equal 0. The independent variable is an indicator equal to one if the incumbent won the election. We control for the winner's age, college completion, and party affiliation (with separate indicators for PT, PMDB, PSDB, and PFL/DEM). We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for municipalities led by first-term mayors at the threshold.

References

- Afridi, F., Iversen, V., and Sharan, M. R. (2017). Women Political Leaders, Corruption, and Learning: Evidence from a Large Public Program in India. *Economic Development and Cultural Change*, 66(1):1–30. Publisher: The University of Chicago Press.
- Alexander, A. C. (2021). Gender, Gender Equality, and Corruption: A Review of Theory and Evidence. In Bågenholm, A., Bauhr, M., Grimes, M., and Rothstein, B., editors, *The Oxford Handbook of the Quality of Government*, page 0. Oxford University Press.
- Arai, Y. and Ichimura, H. (2018). Simultaneous selection of optimal bandwidths for the sharp regression discontinuity estimator. *Quantitative Economics*, 9(1):441–482.
- Ash, E., Galletta, S., and Giommoni, T. (2025). A machine learning approach to analyze and support anticorruption policy. *American Economic Journal: Economic Policy*, 17(2):162–93.
- Avis, E., Ferraz, C., and Finan, F. (2018). Do government audits reduce corruption? estimating the impacts of exposing corrupt politicians. *Journal of Political Economy*, 126(5):1912–1964.
- Baskaran, T., Bhalotra, S., Min, B., and Uppal, Y. (2024). Women legislators and economic performance. *Journal of Economic Growth*, 29(2):151–214.
- Bauhr, M. and Charron, N. (2021). Will Women Executives Reduce Corruption? Marginalization and Network Inclusion. *Comparative Political Studies*, 54(7):1292–1322.
- Bauhr, M., Charron, N., and Wängnerud, L. (2019). Exclusion or interests? Why females in elected office reduce petty and grand corruption. *European Journal of Political Research*, 58(4):1043–1065. _eprint: <https://ejpr.onlinelibrary.wiley.com/doi/pdf/10.1111/1475-6765.12300>.
- Bertrand, M. and Duflo, E. (2017). *Chapter 8 - Field Experiments on Discrimination*, volume 1 of *Handbook of Economic Field Experiments*, pages 309–393. North-Holland.
- Brollo, F., Nannicini, T., Perotti, R., and Tabellini, G. (2013). The political resource curse. *American Economic Review*, 103(5):1759–1796.
- Brollo, F. and Troiano, U. (2016). What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics*, 122:28–45.
- Calonico, S., Cattaneo, M. D., and Titiunik, R. (2014). Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs. *Econometrica*, 82(6):2295–2326. Publisher: [Wiley, The Econometric Society].
- Cattaneo, M. D., Jansson, M., and Ma, X. (2018). Manipulation testing based on density discontinuity. *The Stata Journal*, 18(1):234–261.

- Dahis, R., Mattsson, M., and Sales, N. (2025). Reelection incentives and corruption: Revisiting the evidence with llm-classified audit reports. *Mimeo*.
- Debski, J., Jetter, M., Möhle, S., and Stadelmann, D. (2018). Gender and corruption: The neglected role of culture. *European Journal of Political Economy*, 55:526–537.
- Decarolis, F., Fisman, R., Pinotti, P., Vannutelli, S., and Wang, Y. (2023). Gender and Bureaucratic Corruption: Evidence from Two Countries. *The Journal of Law, Economics, and Organization*, 39(2):557–585.
- Dollar, D., Fisman, R., and Gatti, R. (2001). Are women really the “fairer” sex? Corruption and women in government. *Journal of Economic Behavior & Organization*, 46(4):423–429.
- Esarey, J. and Schwindt-Bayer, L. A. (2018). Women’s Representation, Accountability and Corruption in Democracies. *British Journal of Political Science*, 48(3):659–690.
- Ferrali, R., Kim, G., and Peveri, J. (2024). Audits and bureaucratic corruption: Evidence from brazilian municipalities. *Mimeo*.
- Ferraz, C. and Finan, F. (2011). Electoral accountability and corruption: Evidence from the audits of local governments. *American Economic Review*, 101(4):1274–1311.
- Fisman, R. and Svensson, J. (2007). Are corruption and taxation really harmful to growth? Firm level evidence. *Journal of development economics*, 83(1):63–75.
- Fujiwara, T., Hilbig, H., and Raffler, P. (2025). Biased party nominations as a source of women’s electoral underperformance. *NBER Working Paper (No. w34396)*.
- Hessami, Z. and da Fonseca, M. L. (2020). Female political representation and substantive effects on policies: A literature review. *European Journal of Political Economy*, 63:101896.
- Instituto Brasileiro de Geografia e Estatística (2024). Estatísticas de finanças públicas e conta intermediária de governo. <https://www.ibge.gov.br>.
- Jha, C. K. and Sarangi, S. (2018). Women and corruption: What positions must they hold to make a difference? *Journal of Economic Behavior & Organization*, 151:219–233.
- Le Barbanchon, T. and Sauvagnat, J. (2022). Electoral competition, voter bias, and women in politics. *Journal of the European Economic Association*, 20(1):352–394.
- Marshall, J. (2024). Can Close Election Regression Discontinuity Designs Identify Effects of Winning Politician Characteristics? *American Journal of Political Science*, 68(2):494–510.
_eprint: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/ajps.12741>.
- McCrary, J. (2008). Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of econometrics*, 142(2):698–714.
- Rose-Ackerman, S. and Palifka, B. J. (2016). *Corruption and Government: Causes, Consequences, and Reform*. Cambridge University Press, New York, NY.
- Rothstein, B. (2011). *The quality of government: corruption, social trust, and inequality in international perspective*. University Of Chicago Press, Chicago, IL.

Swamy, A., Knack, S., Lee, Y., and Azfar, O. (2001). Gender and corruption. *Journal of Development Economics*, 64(1):25–55.

Supplemental Appendix

A Additional Tables

Table A1: Variable definitions and sources

Variable	Definition	Source
<i>Panel A: Municipality characteristics</i>		
Population	Population of the municipality.	IBGE.
GDP	Gross domestic product of the municipality expressed in 1,000 of R\$.	IBGE.
Urban pop.	Share of the municipality’s population living in an urban area.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
Female pop.	Share of the municipality’s population that is female.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
High-educated pop.	Share of the municipality’s adult population that completed college or higher education.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
Under 14 pop.	Share of the municipality’s population under 14 years old.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
Working age pop.	Share of the municipality’s population between 15 and 64 years old.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
Employed pop.	Share of the municipality’s working-age population that declared having a job.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
Informality	Share of the municipality’s working-age population (18–65 years old) employed without a labour card.	2000 and 2010 Census, downloaded from <i>Base dos Dados</i> .
Numb. of candidates	Number of mayoral candidates in the election.	TSE, downloaded from <i>Base dos Dados</i> .
Turnout	Turnout in the first round of municipal elections.	TSE, downloaded from <i>Base dos Dados</i> .
<i>Panel B: Winners’ characteristics</i>		
Female	Indicator equal to one if the candidate is a female, as registered by the electoral justice, and 0 if male.	TSE, downloaded from <i>Base dos Dados</i> .
Age	Age of the candidate at the time of the election, computed using the election date and the candidate’s date of birth.	TSE, downloaded from <i>Base dos Dados</i> .
Incumbent	Indicator equal to one if the candidate is the incumbent at the time of the election, and zero otherwise. Constructed by matching candidate identifiers and names with winners of the previous election.	TSE, downloaded from <i>Base dos Dados</i> .
Graduate	Indicator equal to one if the candidate has completed tertiary-level education.	TSE, downloaded from <i>Base dos Dados</i> .
Former councillor	Indicator equal to one if the candidate served as a city councillor in the previous term. Constructed by matching candidate identifiers with councillor winners of the previous election.	TSE, downloaded from <i>Base dos Dados</i> .
PT, PMDB, PSDB, PFL/DEM	Party dummies equal to one if the mayoral candidate ran under the respective party in the election.	TSE, downloaded from <i>Base dos Dados</i> .
<i>Panel C: Outcomes</i>		
Severe irregularities	Sum of severe irregularities reported in CGU municipal audit reports for budget years audited during the mayor’s term. We exclude audits in which the audited entity corresponds to the state governor.	CGU audit data (Controladoria-Geral da União), downloaded from <i>Base dos Dados</i> .
Predicted corruption	Continuous corruption score predicted by machine-learning models that link Brollo et al. (2013) corruption indicator (see Narrow corruption variable definition) to municipal budget accounts; available annually for all municipalities.	Ash et al. (2025).
Legal action	Indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbability and Ineligibility after entering office.	Cadastro Nacional de Condenações Cíveis por Atos de Improbidade Administrativa e Inelegibilidade (web-scraped).
Political suspension	Indicator equal to one if the mayor receives a legal sanction that results in the suspension of her political rights. This includes ineligibility to run for public office for a specified period.	Cadastro Nacional de Condenações Cíveis por Atos de Improbidade Administrativa e Inelegibilidade (web-scraped).
Log of damage	Amount that the politician has to reimburse to compensate for the financial damage caused, as consequence of convictions for administrative misconduct or corruption ($\log + 1$).	Cadastro Nacional de Condenações Cíveis por Atos de Improbidade Administrativa e Inelegibilidade (web-scraped).
Log of fines	Total monetary penalties imposed on the politician as a consequence of convictions for administrative misconduct or corruption ($\log + 1$).	Cadastro Nacional de Condenações Cíveis por Atos de Improbidade Administrativa e Inelegibilidade (web-scraped).
Broad corruption	Indicator equal to one if the CGU audit report identifies broad corruption violations—such as illegal procurement, fraud, favoritism, over-invoicing, diversion of funds, or paid but not proven expenses—based on text analysis of audit reports.	Brollo et al. (2013), obtained from Ash et al. (2025) replication package.
Narrow corruption	Indicator equal to one if the CGU audit report identifies severe corruption violations—such as illegal procurement, fraud, favoritism, or over-invoicing—based on text analysis of audit reports.	Brollo et al. (2013), obtained from Ash et al. (2025) replication package.

Notes: Definition and sources of the variables used in the main analysis. Census variables are drawn from the most recent census before each election (2000 Census for 2000-2008 elections; 2010 Census for 2010-2016 elections).

Table A2: Descriptive statistics

	Mixed races (N = 4,769)		All races (N =25,801)	
	Mean	SD	Mean	SD
Population	37,086	287,926	34,424	205,347
GDP (in 1,000 R\$)	682,060	7,003,309	721,219	7,965,981
% of urban population	61.0	22.3	60.9	23.0
% of female population	49.4	1.5	49.4	1.5
% of high-educated population	18.4	9.5	18.1	9.4
% of population under 14	29.4	6.1	29.1	6.1
% of working age population	63.3	4.7	63.6	4.7
% of employed population	53.5	12.2	55.1	12.1
% of informality	18.6	6.5	18.4	6.7
Number of candidates	2.8	1.1	2.8	1.1
Turnout	86.6	5.9	87.0	5.9

Notes: The statistics are at the municipality \times election level. The first two columns focuses on our analysis sample of mixed-gender races (see Section 3.1), while the last two include all Brazilian municipal elections. We exclude invalidated elections, supplementary elections held outside the regular election year, and elections in which the winning candidate's candidacy was withdrawn, invalidated, or judicially contested after election day. See Table A1 for the definition and source of each variable.

Table A3: Balance tests - Municipality covariates

VARIABLES	(1) Population	(2) GDP	(3) % Urban	(4) % Female	(5) % High-educated	(6) % Under 14	(7) % Working age	(8) % Employed	(9) % Informality	(10) # candidates	(11) Turnout
Female	-0.133 (0.093)	-0.079 (0.125)	0.005 (0.019)	0.001 (0.001)	0.018** (0.008)	-0.007 (0.006)	0.004 (0.004)	0.011 (0.011)	0.004 (0.006)	0.005 (0.084)	-0.669 (0.510)
Observations	2,735	2,519	3,224	2,447	3,104	3,157	3,391	3,023	3,159	3,362	2,851
Robust p-value	0.122	0.373	0.786	0.649	0.018	0.178	0.273	0.393	0.512	0.961	0.101
Bandwidth left	0.166	0.161	0.190	0.121	0.182	0.183	0.223	0.152	0.187	0.208	0.125
Bandwidth right	0.098	0.122	0.150	0.112	0.138	0.146	0.148	0.166	0.142	0.156	0.179
Mean outcome	9.350	18.400	0.586	0.492	0.171	0.298	0.629	0.528	0.184	2.784	87.582

Notes: Each column considers a specific municipality characteristic, as defined in Panel A of Table A1. Population and GDP are transformed using $\log(1 + x)$. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit, data-driven MSERD bandwidths, and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

Table A4: General balance test

	(1) Predicted treatment
Female	0.003 (0.002)
Observations	2,747
Robust p-value	0.128
Bandwidth left	0.208
Bandwidth right	0.117
Mean outcome	0.420

Notes: The outcome is the predicted treatment, computed as follows: we regress the treatment indicator on all 11 baseline characteristics listed in Appendix Table A2, and we use the regression coefficients to predict the treatment value. In the prediction regression, population and GDP are transformed using $\log(1 + x)$. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

Table A5: Level of education and corruption

	(1)	(2)	(3)	(4)	(5)	(6)
	Severe irregularities	Predicted corruption	Legal action	Political suspension	Log of damage	Log of fines
Graduate	-0.037 (1.799)	-0.000 (0.018)	-0.039* (0.026)	-0.026 (0.024)	-0.315 (0.218)	-0.334 (0.234)
Observations	413	3,517	5,938	5,743	6,144	5,724
Robust p-value	0.922	0.849	0.098	0.308	0.113	0.163
Bandwidth left	0.158	0.153	0.163	0.146	0.159	0.148
Bandwidth right	0.173	0.168	0.175	0.175	0.202	0.172
Mean outcome	4.905	0.512	0.217	0.166	1.356	1.424

Notes: The sample is restricted to elections in which the top two candidates are male, non-incumbents, and one has completed higher education while the other has not. The outcomes are: the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor’s term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (column 1); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (column 2); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbability and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (column 3); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (column 4); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (column 5); the $\log(1 + x)$ amount of fines imposed (column 6). If legal action equals 0, then political suspension, damage and fines also equal 0. The independent variable is an indicator equal to one if the candidate who completed higher education won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. “Mean outcome” reports the average outcome value for non-graduate-led municipalities at the threshold.

Table A6: Gender and corruption - Alternative corruption measures

	(1)	(2)	(3)	(4)	(5)	(6)
	At least one severe irregularity	Total irregularities	Log. of severe irregularities	Severe irregularities de-meanded	Severe irregularities per audited program	Δ Predicted corruption
Female	-0.056 (0.142)	-0.468 (9.809)	-0.065 (0.376)	0.027 (2.734)	-0.195 (0.380)	0.003 (0.030)
Observations	231	220	226	238	214	1,215
Robust p-value	0.597	0.964	0.610	0.700	0.367	0.956
Bandwidth left	0.178	0.164	0.181	0.242	0.169	0.183
Bandwidth right	0.148	0.149	0.125	0.100	0.119	0.168
Mean outcome	0.746	37.558	1.332	-0.318	0.880	0.141

Notes: The outcomes are: an indicator equal to one if at least one severe irregularity is uncovered by CGU audits (column 1); the total number of intermediate and severe irregularities (column 2); the $\log(1 + x)$ of severe irregularities (column 3); the number of severe irregularities de-meanded relative to the lottery mean (column 4); the number of severe irregularities divided by the total number of federal programs audited (column 5); and the change in the predicted corruption score computed by Ash et al. (2025) between the final year of the term and the election year, i.e. the year preceding the first year in office (column 6). The outcomes in columns 1–4 correspond to budget years within the mayor’s term and are available for audited municipalities and for the 2000, 2004, 2008, and 2012 terms. The outcome in column 5 is available for all municipalities for the 2004 and 2008 terms. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. “Mean outcome” reports the average outcome value for male-led municipalities at the threshold.

Table A7: Robustness: fixed-effects and controls

	(1)	(2)	(3)	(4)	(5)	(6)
	Severe irregularities	Predicted corruption	Legal action	Political suspension	Log of damage	Log of fines
Panel A: No Controls (Baseline)						
Female	-0.970 (2.711)	-0.013 (0.028)	-0.024 (0.036)	-0.022 (0.030)	0.161 (0.289)	-0.063 (0.296)
Observations	240	1,517	3,081	3,476	3,226	3,245
Robust p-value	0.430	0.463	0.558	0.425	0.399	0.996
Bandwidth left	0.246	0.207	0.175	0.200	0.181	0.211
Bandwidth right	0.098	0.106	0.143	0.192	0.161	0.130
Mean outcome	5.335	0.569	0.210	0.171	1.128	1.322
Panel B: Region and year FE						
Female	-2.071 (2.734)	0.008 (0.016)	-0.009 (0.035)	-0.013 (0.028)	0.239 (0.275)	0.058 (0.284)
Observations	231	1,655	2,852	3,431	3,369	3,316
Robust p-value	0.237	0.587	0.842	0.631	0.246	0.660
Bandwidth left	0.227	0.191	0.154	0.185	0.200	0.231
Bandwidth right	0.095	0.170	0.128	0.208	0.165	0.126
Mean outcome	5.362	0.568	0.211	0.171	1.152	1.329
Panel C: Municipality Controls						
Female	-3.611 (3.191)	-0.004 (0.017)	-0.012 (0.037)	-0.023 (0.030)	-0.024 (0.277)	-0.034 (0.302)
Observations	173	1,251	2,420	2,894	2,944	2,677
Robust p-value	0.114	0.763	0.850	0.424	0.964	0.948
Bandwidth left	0.170	0.197	0.150	0.180	0.220	0.193
Bandwidth right	0.087	0.178	0.121	0.186	0.146	0.117
Mean outcome	5.696	0.569	0.212	0.172	1.179	1.313
Panel D: Winners Controls						
Female	-1.608 (2.693)	-0.022 (0.028)	-0.012 (0.035)	-0.010 (0.030)	0.311 (0.289)	0.047 (0.294)
Observations	224	1,529	3,072	3,441	3,142	3,232
Robust p-value	0.275	0.285	0.800	0.697	0.174	0.713
Bandwidth left	0.208	0.225	0.173	0.198	0.172	0.209
Bandwidth right	0.090	0.096	0.143	0.187	0.156	0.132
Mean outcome	5.447	0.570	0.210	0.171	1.119	1.319
Panel E: Municipality and Winners Controls						
Female	-2.886 (3.162)	-0.006 (0.017)	-0.006 (0.037)	-0.015 (0.030)	0.050 (0.277)	0.009 (0.300)
Observations	172	1,260	2,415	2,899	2,934	2,722
Robust p-value	0.170	0.668	0.972	0.591	0.757	0.840
Bandwidth left	0.165	0.199	0.152	0.185	0.237	0.205
Bandwidth right	0.096	0.178	0.116	0.179	0.133	0.115
Mean outcome	5.764	0.569	0.211	0.171	1.190	1.318

Notes: Panel A includes no controls, reproducing Table 2. Panel B includes region and year fixed-effects. Panel C controls for all municipal characteristics presented in Table A2. Panel D controls for all winners' characteristics presented in Table 1. Panel E controls for both municipal and winners' characteristics. The outcomes are: the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor's term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (column 1); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (column 2); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbability and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (column 3); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (column 4); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (column 5); the $\log(1 + x)$ amount of fines imposed (column 6). If legal action equals 0, then political suspension, damage and fines also equal 0. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

Table A8: Robustness: bandwidths and polynomial order

	(1)	(2)	(3)	(4)	(5)	(6)
	Severe irregularities	Predicted corruption	Legal action	Political suspension	Log of damage	Log of fines
Panel A: Distinct MSE-optimal bandwidths (Baseline)						
Female	-0.970 (2.711)	-0.013 (0.028)	-0.024 (0.036)	-0.022 (0.030)	0.161 (0.289)	-0.063 (0.296)
Observations	240	1,517	3,081	3,476	3,226	3,245
Robust p-value	0.430	0.463	0.558	0.425	0.399	0.996
Bandwidth left	0.246	0.207	0.175	0.200	0.181	0.211
Bandwidth right	0.098	0.106	0.143	0.192	0.161	0.130
Mean outcome	5.335	0.569	0.210	0.171	1.128	1.322
Local polynomial order	1	1	1	1	1	1
Panel B: Distinct CER-optimal bandwidths						
Female	-2.333 (2.688)	-0.032 (0.031)	-0.027 (0.039)	-0.028 (0.033)	0.172 (0.316)	-0.019 (0.324)
Observations	202	1,155	2,297	2,684	2,412	2,460
Robust p-value	0.267	0.253	0.511	0.378	0.505	0.976
Bandwidth left	0.184	0.141	0.116	0.133	0.120	0.141
Bandwidth right	0.074	0.072	0.095	0.127	0.107	0.086
Mean outcome	5.557	0.567	0.221	0.178	1.074	1.310
Local polynomial order	1	1	1	1	1	1
Panel C: Common MSE-optimal bandwidth						
Female	-1.555 (3.346)	-0.004 (0.029)	-0.026 (0.036)	-0.023 (0.029)	0.126 (0.273)	-0.058 (0.306)
Observations	176	1,324	3,071	3,563	3,474	2,929
Robust p-value	0.404	0.747	0.535	0.378	0.494	0.982
Bandwidth	0.112	0.128	0.160	0.208	0.197	0.149
Mean outcome	6.464	0.565	0.211	0.171	1.146	1.304
Local polynomial order	1	1	1	1	1	1
Panel D: Common CER-optimal bandwidth						
Female	-3.170 (3.725)	-0.015 (0.032)	-0.034 (0.040)	-0.028 (0.032)	0.188 (0.296)	-0.052 (0.340)
Observations	141	993	2,296	2,789	2,678	2,165
Robust p-value	0.288	0.572	0.415	0.356	0.464	0.950
Bandwidth	0.084	0.088	0.106	0.138	0.131	0.099
Mean outcome	6.723	0.563	0.227	0.177	1.087	1.341
Local polynomial order	1	1	1	1	1	1
Panel E: 10 p.p bandwidth						
Female	-2.039 (4.662)	-0.009 (0.040)	-0.035 (0.055)	-0.040 (0.051)	0.179 (0.473)	-0.053 (0.467)
Observations	162	1,095	2,178	2,178	2,178	2,178
Robust p-value	0.139	0.282	0.418	0.168	0.703	0.927
Bandwidth	0.100	0.100	0.100	0.100	0.100	0.100
Mean outcome	6.472	0.562	0.229	0.192	1.054	1.341
Local polynomial order	1	1	1	1	1	1
Panel F: 2nd order local polynomial						
Female	-3.588 (2.968)	-0.018 (0.032)	-0.023 (0.044)	-0.029 (0.039)	0.289 (0.346)	0.001 (0.353)
Observations	280	1,893	3,533	3,711	3,764	3,782
Robust p-value	0.124	0.464	0.621	0.404	0.333	0.908
Bandwidth left	0.343	0.298	0.217	0.225	0.229	0.264
Bandwidth right	0.144	0.177	0.182	0.228	0.243	0.197
Mean outcome	5.708	0.566	0.219	0.181	1.025	1.306
Local polynomial order	2	2	2	2	2	2

Notes: Panel A uses two different MSE-optimal bandwidths (below and above the cutoff), reproducing Table 2. Panel B applies distinct CER-optimal bandwidths. Panels C and D use a common data-driven bandwidth on both sides of the cutoff—MSERD-optimal in Panel C and CER-optimal in Panel D. Panel E uses the same 10 p.p bandwidth on both sides of the cutoff and for all outcomes. Panel F uses a 2nd order polynomial fit with data-driven MSERD bandwidths allowed to differ on each side of the threshold. The outcomes are: the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor’s term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (column 1); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (column 2); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbability and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (column 3); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (column 4); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (column 5); the $\log(1 + x)$ amount of fines imposed (column 6). If legal action equals 0, then political suspension, damage and fines also equal 0. The independent variable is an indicator equal to one if the female candidate won the election. We assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. “Mean outcome” reports the average outcome value for male-led municipalities at the threshold.

Table A9: Balance on municipality covariates - Audited municipalities, 2000 and 2004 terms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Population	GDP	% Urban	% Female	% High-educated	% Under 14	% Working age	% Employed	% Informality	# candidates	Turnout
Female	0.113 (0.299)	-0.641 (0.446)	-0.015 (0.062)	-0.003 (0.005)	-0.017 (0.021)	-0.010 (0.016)	0.002 (0.014)	-0.013 (0.034)	-0.011 (0.021)	-0.074 (0.283)	-0.027 (1.810)
Observations	169	78	230	236	218	257	223	198	211	198	245
Robust p-value	0.554	0.107	0.700	0.387	0.283	0.502	0.781	0.563	0.481	0.827	0.858
Bandwidth left	0.096	0.110	0.187	0.206	0.187	0.229	0.177	0.145	0.174	0.148	0.211
Bandwidth right	0.129	0.080	0.140	0.152	0.105	0.169	0.162	0.114	0.116	0.116	0.164
Mean outcome	9.169	17.653	0.634	0.495	0.136	0.332	0.609	0.496	0.213	2.773	86.685

Notes: Each column considers a specific municipality characteristic, as defined in Panel A of Table A1. Population and GDP are transformed using $\log(1 + x)$. Panel A restricts the sample to the 2000 and 2004 terms. Panel B further restricts this sample to audited municipalities in the same terms. Panel C focuses on all municipalities in the post-2004 terms, while Panel D restricts the post-2004 sample to audited municipalities only. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit, data-driven MSERD bandwidths, and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold. See Table A1 for variable definitions and sources.

Table A10: Gender and narrow corruption: sensitivity to incumbency status

	(1)	(2)	(3)
	Baseline	Winners' controls	First-term
Female	-0.255** (0.162)	-0.176 (0.148)	-0.126 (0.202)
Observations	178	183	112
Robust p-value	0.050	0.124	0.460
Bandwidth left	0.155	0.154	0.109
Bandwidth right	0.108	0.124	0.087
Mean outcome	0.479	0.479	0.288

Notes: The outcome is an indicator equal to one for narrow corruption based on the text analysis of the CGU audit reports Broilo et al. (2013). This variable is only available for audited municipalities over the 2000 and 2004 terms. Column 1 includes no controls, replicating column 2 of Table 3. Column 2 controls for all winners' characteristics listed in Table 1. Column 3 restricts the sample to first-term mayors. The independent variable is an indicator equal to one if the female candidate won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for male-led municipalities at the threshold.

Table A11: Balance test - Incumbency RDD - Municipal covariates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Population	GDP	% Urban	% Incumbent	% High-educated	% Working age	% Under 14	% Employed	% Informality	# candidates	Turnout
Incumbent	-0.056 (0.067)	-0.162 (0.103)	0.004 (0.014)	0.001 (0.001)	-0.007 (0.005)	-0.005* (0.003)	0.005 (0.004)	-0.008 (0.008)	0.002 (0.004)	-0.046 (0.066)	0.061 (0.384)
Observations	6,377	4,163	6,272	5,661	6,229	5,795	6,071	5,830	5,716	5,592	6,199
Robust p-value	0.470	0.130	0.627	0.242	0.200	0.089	0.183	0.289	0.614	0.580	0.967
Bandwidth left	0.139	0.118	0.155	0.109	0.149	0.118	0.149	0.110	0.118	0.117	0.139
Bandwidth right	0.192	0.159	0.173	0.171	0.174	0.171	0.164	0.182	0.166	0.157	0.179
Mean outcome	9.380	18.544	0.587	0.493	0.173	0.639	0.288	0.555	0.182	2.694	87.870

Notes: The sample is restricted to elections in which the top two candidates are male, and one is the incumbent. Each column considers a specific municipality characteristic, as defined in Panel A of Table A1. Population and GDP are transformed using $\log(1 + x)$. The independent variable is an indicator equal to one if the incumbent won the election. We use a linear fit, data-driven MSERD bandwidths, and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for municipalities led by first-term mayors at the threshold.

Table A12: Balance test - Incumbency RDD - Winners' covariates

	(1)	(2)	(3)	(4)	(5)	(6)
	Age	Graduate	PT	PMDB	PSDB	PFL/DEM
Incumbent	0.864 (0.601)	-0.009 (0.030)	-0.002 (0.016)	-0.108*** (0.031)	0.046** (0.023)	0.026 (0.020)
Observations	6,442	6,726	6,873	4,215	5,795	6,091
Robust p-value	0.122	0.698	0.829	0.000	0.044	0.143
Bandwidth left	0.155	0.135	0.166	0.105	0.118	0.141
Bandwidth right	0.183	0.230	0.210	0.092	0.169	0.170
Mean outcome	49.922	0.433	0.077	0.269	0.119	0.099

Notes: The sample is restricted to elections in which the top two candidates are male, and one is the incumbent. In Column 1, the outcome is the winner's age at the time of the election. In column 2 (resp. 3, 4, 5) the outcome is an indicator variable equal to one if the winner has completed higher education (runs under the PT, PMDB, PSDB, or PFL/DEM party label). The independent variable is an indicator equal to one if the incumbent won the election. We use a linear fit, data-driven MSERD bandwidths, and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for municipalities led by first-term mayors at the threshold.

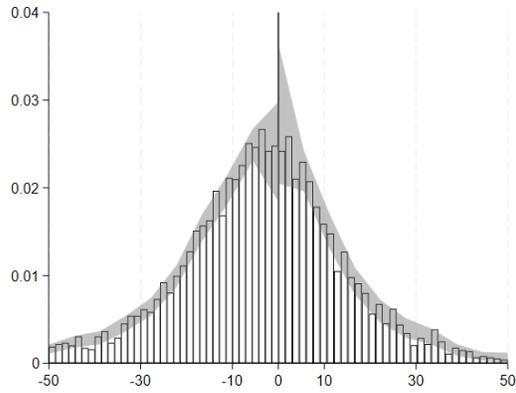
Table A13: Experience and corruption

	(1)	(2)	(3)	(4)	(5)	(6)
	Severe irregularities	Predicted corruption	Legal action	Political suspension	Log of damage	Log of fines
Former councillor	7.187* (5.425)	-0.014 (0.030)	-0.019 (0.042)	0.030 (0.043)	0.346 (0.426)	0.383 (0.420)
Observations	83	735	1,614	1,373	1,386	1,394
Robust p-value	0.085	0.586	0.623	0.334	0.307	0.261
Bandwidth left	0.079	0.198	0.210	0.162	0.169	0.161
Bandwidth right	0.235	0.144	0.174	0.121	0.120	0.130
Mean outcome	3.491	0.604	0.171	0.117	0.930	0.954

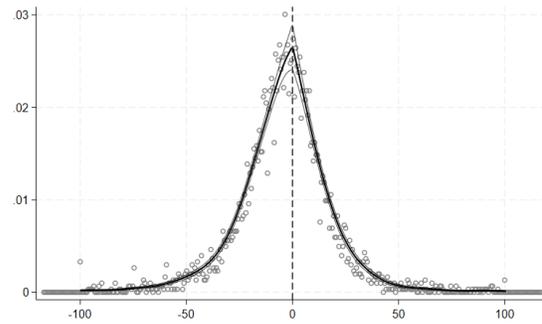
Notes: The sample is restricted to elections in which the top two candidates are male, non-incumbents, and one has prior experience as a city councillor whereas the other has not. The outcomes are: the number of severe irregularities uncovered by CGU audits for budget years corresponding to the mayor's term, available for audited municipalities over the 2000, 2004, 2008, and 2012 terms (column 1); the predicted corruption score computed by Ash et al. (2025), available for all municipalities over the 2000, 2004, and 2008 terms (column 2); an indicator equal to one if the mayor appears in the National Registry of Civil Convictions for Acts of Administrative Improbability and Ineligibility after entering office, available for all municipalities over the 2000, 2004, 2008, 2012, and 2016 terms (column 3); an indicator equal to one if the mayor receives a legal sanction that involves the suspension of political rights (column 4); the $\log(1 + x)$ amount of financial damage the mayor has to reimburse (column 5); the $\log(1 + x)$ amount of fines imposed (column 6). If legal action equals 0, then political suspension, damage and fines also equal 0. The independent variable is an indicator equal to one if a former councillor won the election. We use a linear fit with data-driven MSERD bandwidths and assess statistical significance using robust p-values. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. "Mean outcome" reports the average outcome value for municipalities led by non-former-councillor mayors at the threshold.

B Additional Figures

Figure A1: Density tests



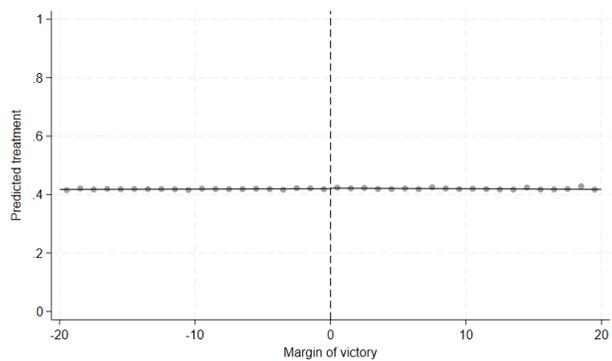
(a) Cattaneo et al. (2018)'s density test



(b) McCrary density test

Notes: Panel A tests for a discontinuity in the density of the female candidate's margin of victory at the threshold using the method developed by Cattaneo et al. (2018). The H statistic associated with the density test is 0.860, with a p-value of 0.390. The grey shaded area represents the confidence intervals. Panel B tests for a discontinuity in the density of the female candidate's victory margin at the threshold using the method developed by McCrary (2008). The black line represents the estimated density of the running variable, while the grey lines denote the confidence intervals.

Figure A2: Balance test - predicted treatment



Notes: The outcome is the treatment variable predicted by the municipal baseline characteristics presented in Table A2. The figure restricts attention to observations lying within a 20 percentage-point window around the cutoff. We use a linear fit and a triangular kernel. The dots correspond to binned averages of the outcome variable, computed using evenly spaced bins of the running variable.