

Political Exit: The Unintended Effects of Electoral Rules in India

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Abstract

What are the unintended consequences of electoral rules on candidate re-entry into politics? We examine the downstream effects of electoral rules designed to prevent “non-serious” candidates from contesting in elections. Candidates contesting for elected office in India must submit a monetary deposit to the electoral authority which they forfeit if they fail to secure less than one-sixth of the total votes cast in the race. We use the discontinuity created by this *deposit rule* to study the causal effect of costly procedural rules on the decision to re-contest in subsequent elections. We find that such institutions disproportionately deter women from re-running for election compared to men. Additionally, we observe that these effects are particularly pronounced for women contesting on smaller regional party tickets, indicating potential party-level discrimination against women candidates.

Keywords: electoral rules, political parties, gender, India

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1 Introduction

Electoral candidates are the bedrock of competitive democracies. Yet, only a small percentage of the eligible population runs for office. Given the importance of a strong and diverse supply of electoral candidates, their relative sparsity poses an important challenge to representation in democratic politics. This challenge is compounded by two other factors in many contexts: One, electoral authorities often impose rules that might affect individual politicians' decision to run for office (Beath et al., 2016; Bueno and Dunning, 2017). Two, in the absence of democratic means of candidate selection, such as party primaries, political parties in developing democracies act as the ultimate gatekeepers of political entry. Party leaders often exercise near total control over nomination decisions – even conditional on an individual politician's willingness to run for office (Kerevel, 2015). These constraints to running for office that affect all candidates, can potentially have a differential impact on traditionally marginalized groups in a society, such as women and other underrepresented communities. Moreover, marginalized groups may be less likely to reap the benefits of incumbency due to consolidation against them and divisions within their ranks (Allie, 2023a).

Therefore, this paper studies the following research question: *What is the impact of institutional rules — that restrict electoral entry — on politicians' electoral re-entry?* An extensive theoretical and empirical literature has highlighted various determinants affecting the decision to selecting candidates and pursuing political office (Hazan and Rahat, 2010; Dal Bó et al., 2017; Gulzar, 2021). Broadly, costs to run for office, political ambition, institutional constraints, and socioeconomic aspect are theorized to operate individually or in conjunction with one another. In terms of the lack of representation based on gender and minority status, scholars have broadly argued that financial and household responsibilities (Bernhard, Shames and Teele, 2021), societal norms, democratic and electoral institutions, and party organization (Carroll and Sanbonmatsu, 2013; Piscopo, 2018) play significant roles. From the perspective of individual politicians, perceptions about party recruitment and subsequent support for candidature (Butler and Preece, 2016) and incumbency advantage are considered important inhibiting factors (Fox, 2000).

That said, most if not all of the studies on electoral analysis have focused on the winning and runner-up candidates. Results in the developed world indicate an incumbency advantage (Gelman and King, 1990; Trounstine, 2011; Warshaw, 2019), whereas in developing

democracies the evidence is mixed (Uppal, 2009; De Magalhaes, 2015; Lee, 2020). Studies concerning runners-up have documented evidence in favor of their chances of re-running and winning in the subsequent elections (Anagol and Fujiwara, 2016; Dano et al., 2022). The scholarly literature has largely ignored the *entire* slate of candidates for office, especially individuals who end up in the bottom half of secured vote shares. While this is understandable, political candidacy itself is a “rare event” (Gulzar, 2021) and understanding the determinants of (re)entry decisions for *any* candidate can potentially shed more light on this rare phenomenon.

A central challenge in studies of candidate entry into politics is that it is often impossible to observe the universe of individuals who aspire for office. Furthermore, studying the causal role of electoral institutions poses considerable challenges since institutions seldom vary exogenously. Therefore, selection problems often do not allow researchers to make causal claims.

We employ three strategies to address these challenges:

First, we focus on the world’s largest democracy, India, where an institutional feature provides us causal leverage. Per electoral rules, candidates contesting for state-level elections must submit a fee (deposit) to the electoral authority that they then forfeit should they fail to secure less than one-sixth of the total votes cast in the race – we term this as the “deposit rule”. The purported goal of the deposit rule is to “curb non-serious candidates from contesting elections”. This strict cut-off on the votes secured as a metric to decide deposit forfeiture allows us isolate the causal effect of procedural rules on the decision to re-contest in subsequent elections. Specifically, we use a regression discontinuity design where the discontinuity brought about by the *deposit rule* allows us to study the effects of falling *just* above or below the threshold and the impact forfeiting one’s deposit has on running in the subsequent elections. Second, we analyze data from all 329 sub-national (state-level) elections held between 1961 and 2018, encompassing over 49,500 political candidates. Finally, by focusing on the re-entry of all politicians who had previously contested in elections, rather than on the initial entry decision, we alleviate some concerns regarding the lack of data on the universe of potential aspirants.

Imposing a financial penalty (even a modest one) for those who secure less than one-sixth of the vote typically means a guaranteed penalty for those – oftentimes women – who will

not be among the top vote-getters in single-member districts with plurality rule. Preliminary analysis of our data spanning nearly 60 years reveals a striking descriptive statistic: women comprise less than 4 per cent of the overall candidate pool (1,907 women out of 49,684 candidates). This motivates our rigorous study of the role of institutional constraints on political candidacy, especially that of traditionally under-represented groups who might be adversely impacted by said rules.

In our regression discontinuity analysis, we compare the candidates who *just* fall above or below the deposit rule (deposit *retainers* versus deposit *losers*) threshold and whether they contest in the subsequent elections. Our analysis reveals that women in Indian state elections are 10.5 percentage points *less likely* to contest for reelection if they forfeited their deposits in the previous election (or failed to secure more than one-sixth of the total votes). Women who lose their deposit are on average not renominated, nor do they contest as independent candidates. We do not observe these trends among men in the data. This disparity in the re-contest rates even at the lower end of the distribution underscores the yawning gap between men and women and the differential effect that barriers to running for political office can have.

Next, we explore four potential mechanisms underlying this effect. One, we study the role of parties by determining whether effects vary by candidates' party-type. Two, we examine variations across regions. Three, we assess the impact on caste groups. Finally, we explore the effects on religious minorities. We find evidence regarding the role of political parties and candidate forfeiture. There is little evidence for the other three mechanisms.

Our findings suggest that in developing democracies, gatekeepers of political entry – political parties and party leaders – drive this effect through their role in making nomination decisions. For the purposes of our analysis, we adopt the party categorization outlined by [Agarwal et al. \(2021\)](#), which classifies political parties into: 'National Parties,' 'State-based Parties,' 'Local Parties,' and 'Independent candidates.' We treat parties classified as 'state-parties' or 'local parties' – those that are “principally associated with one state” – as non-national or regional parties.¹ While national parties dominate politics in India, the regional

¹It must be noted classification of political parties by [Agarwal et al. \(2021\)](#) differs from that of the Election Commission of India. However, upon inspecting the two types of categorizations we choose to present the former in our analysis. The main difference in the coding arises in the categorization of regional parties, and [Agarwal et al. \(2021\)](#) categorize “parties contesting in several states but being principally associated with one state” as “state-based parties, even though they may meet the ECI definition of national party”. That said, our results are robust to the alternative definitions.

parties for a long time have acted as important players in the state and national politics, and been important members of governing coalitions both at the state and federal levels (Ziegfeld, 2012).

This leads us into our investigation of forfeiture rates and subsequent running for elections by party types. We find that 66 percent of regional party candidates forfeit deposits, and only 14 per cent re-contesting after deposit forfeiture. In contrast, 34 percent of national party candidates forfeit deposits, with 32 percent getting to re-run. Upon further investigation, we find that men from national parties demonstrate a significant 5-percentage-point higher re-run rate after deposit forfeiture. By contrast, men and women from regional parties both are less likely to seek re-election after deposit forfeiture. However, the decline is more prominent for women, with men exhibiting a 4-percentage-point decrease, while women show a significant 30-percentage-point decrease in seeking re-election after forfeiting their deposit. Thus, our results indicate that the deposit rule has a differential effect on women's renomination chances, and that this effect is pronounced for women in regional parties.

In sum, our findings highlight that the deposit rule disproportionately impacts the re-running chances of women, and that regional party nomination strategies likely drive this gender gap. However, it is plausible that candidates securing a small vote share potentially have a different re-running decision calculus. Our estimated effect could partially be driven by the income shock resulting from forfeiting the deposit. It must be noted that the quantum of money deposited (Rupees 10,000 \approx \$125) is a tiny fraction of the total costs to running for office.² Hence, to ascertain whether financial constraints – i.e., for candidates and/or parties – alone impact women's re-run rates, we examine a rule change implemented in 1996 that increased the deposit amount for political candidates. An 'income effect' would suggest that the effect of 'forfeiture' should be substantially larger just after the post-1996 period following the increased deposit requirement as individual candidates lack the financial wherewithal to cover these additional costs. A 'party finances' effect³ would indicate that

²The federal independent Election Commission of India caps the legal election spending by candidates at Rupees 4,000,000 \approx \$50,000 for state-level elections, and Rupees 9,500,000 \approx \$118,750 for national elections. Notably, there are no limits on expenditure by political parties, and media reports routinely suggest that candidates overspend on elections

³While the election rules state that deposit costs are to be borne by individual candidates, anecdotal evidence from individuals and practitioners suggests the possibility of parties financing candidate deposit. The available data does not allow us to distinguish between deposit made by individual candidates and those made by respec-

parties renominate deposit-forfeiting candidates at a lower rate as they aim to avoid facing the penalty of a deposit loss again by renominating a candidate perceived as “non-viable”.

We find that, if anything, the magnitude of the coefficient is smaller for women following the increase. This suggests that women are more likely to rerun after losing the deposit following the 1996 policy change relative to women losing the deposit prior to the fee increase.⁴ This trend holds across all parties. Moreover, following the 1996 fee increase, men surprisingly exhibit an even higher probability of rerunning in the subsequent election. That said, we wish to exercise caution in interpreting these results due to two reasons. One, this analysis uses relatively smaller sample sizes. Two, beyond the fees that candidates deposit to electoral authorities, the costs to running in an election are multi-fold. While survey evidence indicates that most politicians “report spending less on campaigns than the official limits” (Bussell, 2018) it must be noted that these legal limits are imposed on individuals rather than political parties. In practice, political parties routinely provide support to candidates in their bid to win office (Bussell, 2018; Hindustan Times, 2019). The parties themselves are heterogeneous in this aspect, with resource-rich national parties allocating higher funds to their electoral campaigns compared to their regional counterparts Gowda (2012). Hence, our analysis of the income and party spending effects offers suggestive evidence. However, our understanding of actual electoral spending and precise candidate selection procedures by the political parties remains limited, making it challenging to entirely disentangle the individual income effect from the party spending effect.

Our paper is one of the first to study political candidates at the lower end of the vote-share distribution, while the existing scholarly literature has focused on the top end of the distribution (Anagol and Fujiwara, 2016; Dano et al., 2022). In doing so, we complement Faravelli, Khalil and Ponnusamy (2022) who study the same setting but find evidence for “gender norms” — proxied by sex ratio — driving a gendered effect. Further, our research also contributes to two streams of the literature. One, the growing literature on the role that institutions play in candidate selection and emergence (Niven, 1998; Krook, 2010; Cheng

tive parties. Administratively, the deposit is reported as being filed by the candidate before contesting, and we only know that the deposit was paid without precise indication of the source.

⁴It must be noted that per the electoral rules an individual candidate is expected to submit the *deposit* before contesting. However, it is also possible that political parties might fund this expense. Since we do not directly observe who *actually* pays in our data, we go with the official rules and assume that the individual bears this particular expense. Mechanism analyses presented in subsequent sections help to disentangle the extent to which concerns over personal finance v. party finances are driving the main effect we estimate – the effect of falling just above or below the deposit rule.

and Tavits, 2011; Beath et al., 2016; Grossman, 2014; Arora, 2022). Two, we specifically contribute to the literature on pivotal role of political party nomination behavior in determining electoral fortunes and its potential to amplify gender gaps (Gallagher and Marsh, 1988; Katz and Mair, 1992; Norris, 1993; Katz, 2001; Hazan and Rahat, 2006; Fujiwara, Hilbig and Raffler, 2021; Gulzar, Hai and Paudel, 2021).

While India serves as the focus of our study, it's worth noting the potential applicability of our results to other settings. Similar deposit rules exist in numerous developed and developing democracies, including the United Kingdom, Australia, Malaysia, and others.⁵ Additionally, many political parties impose their own costly procedural rules and/or monetary deposits in addition to state-mandated regulations. As Hazan and Rahat (2010, pp.25-26) note "The Canadian Conservatives required a \$1,000 deposit (Canadian Conservative Party, 2024). The Christian Democratic Union – Czechoslovak People's Party required payment of a nomination fee of CZK 10,000 (about \$500) from their candidate to the European Parliament (Linek and Outly, 2006). These sums are not returned to the candidate unless they obtain a certain percentage of the vote. In Kenya, the National Rainbow Coalition required parliamentary aspirants to pay a nomination fee of approximately \$380 (Ohman, 2004)". Hence, we expect that our results will travel to settings with similar procedural rules and a heterogeneous party landscape.

Finally, our findings hold two important policy implications for the study of democratic politics. First, procedural rules designed to deter candidate entry may disproportionately impact underrepresented groups – especially those from smaller regional parties contesting elections in federal systems. This can potentially exacerbate the sparsity of the candidate pool. From a state-building point of view this is a challenge. As Myerson (2011) argues, the "essential problem in building a democratic state is to develop the nation's supply of democratic leaders", and the ability to run for office is a crucial aspect of cultivating such a supply. Second, political parties and party leaders control nomination decisions in many developing contexts. Even when an individual is willing to run for office, the eventual nomination

⁵In the UK, candidates are required to submit a deposit for elections to the House of Commons, mayoral races, and other elected public offices. The Electoral Commission's Factsheet for candidates states, "To become validly nominated you must submit a completed set of nomination forms together with a deposit of £500 to the (Acting), Returning Officer before the close of nominations"(UK Electoral Commission, 2009). Similarly, in Australia, candidates aspiring to the House of Representatives must pay a deposit of AU\$2000 with their nomination (Australian Electoral Commission, 2024). In Malaysia, media commentary suggests that candidates face some of the highest deposit rates for contesting elections, with a deposit of 10,000 Malaysian Ringgits for Parliamentary races and 5,000 Ringgits for state assembly races (Hibrahim, Muhammad Amnan, 2022).

decision is an "intra-party" call with minimal outside regulation. In the absence of transparent democratic procedures of candidate selection, candidate nomination is black box from an analyst's point of view. While this obfuscation of nomination decisions poses econometric challenges to uncover deeper mechanisms, our results augment evidence in favor of the literature that has highlighted the overwhelming role that political parties play in an individual's political career (Hazan and Rahat, 2010; Luna et al., 2021; van Dijk, 2023; Weeks et al., 2023).

The rest of the paper is organized as follows. Section 2 provides details on the institutional background, and broad details about Indian state elections. Section 3 describes empirical strategy and data. Section 4 presents results from the estimation. Section 5 delves into the potential mechanisms. Section 6 conducts a battery of robustness checks and segues into section 7 that concludes.

2 Background and Institutional Setting

2.1 State Elections in India

Since Independence in 1947, the political map of India has undergone many changes. A comprehensive history detailing state reorganizations and the creation of new states is beyond the scope of this paper. For a detailed perspective until 2010, refer to Tillin (2013). At the time of writing this article, the Indian union comprises 28 states and 9 federally administered Union Territories (figure 5).

Since the adoption of the Constitution of India January 1950, the state legislative assemblies of the constituent states are elected based on universal adult franchise. The elections follow plurality rule in single member districts and the parliamentary style state governments are headed by a chief minister (equivalent to Governors in the US). The governments are typically elected for 5 year terms, unless early elections are called for. These free and fair elections are fiercely contested along partisan lines and monitored by independent electoral authorities – election commissions – that are Constitutionally vested with the responsibility of managing electoral rolls and administration.

The political party landscape in India is large and vivid. However, compared to their global counterparts the parties are typically centralized in their operational structure but

poorly “organized” (Chhibber, Jensenius and Suryanarayan, 2014). The major “national parties” – those with a presence across multiple Indian states – are the Bharatiya Janata Party, The Indian National Congress, and the Communist Party of India. The timeline we analyze (1962-2018) reveal several interesting patterns. First, we see the domination of the preeminent party of the independence movement, the Indian National Congress and its gradual decline. Second, the rise of the conservative right-wing Bharatiya Janata Party, and the rise and decline of the Communist Parties. Finally, we notice the fragmentation of the party system coinciding with the decline of the Congress (Chhibber and Nooruddin, 2000). Consequently, several smaller regional parties – those with an effective presence in one or a handful of states – emerged after Congress’ decline. The raw count of total number of political parties is 473. However, the effective number of political parties as envisaged by Laakso and Taagepera (1979) at the state level ranges from between 2.26-4.45. Appendix table A2 provides this range for each state. We provide a detailed summary of our data in section 3. Briefly, we study all state elections for every state and union territory from 1962 to 2018. This encompasses 329 elections. Appendix table A1 provides a summary table of the total elections by state.

2.2 Institutional setting: The *Deposit Rule*

The Representation of People Act of 1951 (section 34) mandates every candidate contesting state and national level elections to deposit money to signal “seriousness”. This money (\approx \$300 and \$125 for national and state elections respectively) is deposited with the Election Commission. The amount varies by the caste grouping of the individuals, but is the same for men and women within a caste group. Candidates running from an open seat deposit a minimum of Rs 25000 (\approx \$300) in the national assembly election and 10,000 (\approx \$125) in the state assembly elections (the focus of this study). Candidates belonging to Schedule Caste (SC) and Schedule Tribe (ST) only need to deposit half of these amounts. Importantly, according to section 158 of the Act, if any candidate fails to secure one-sixth of the total votes, his/her security deposit is forfeited – we term this as the “deposit rule”.⁶ The loss of the deposit signals a very poor performance in the elections, and is usually a frequent topic discussed in popular media.

⁶if a candidate has deposited more than the minimum required amount for security deposits then all amount is forfeited if does not receive at least $1/6^{th}$ of total votes

The amount of security deposit was last revised in 1996, raising the earlier amount of Rs. 500/- for Lok Sabha elections and Rs.250/- for Assembly elections to the current levels. The revision was made primarily to “discourage non-serious candidates from jumping to the electoral arena.” (*Uma Charan Mishra vs Union Of India And Another, N.d.*) In fact, the “National Commission to Review the Working of the Constitution” setup in 2000 at the behest of the federal government took up this issue. In the report submitted in 2002, the commission stated that “in order to check the proliferation of the number of independent candidates and the malpractices that enter into the election process because of the influx of the independent candidates, the existing security deposits in respect of independent candidates may be doubled.” (*Venkatachaliah, 2002*). The commission went on to recommend even more drastic measures for independent candidates: It states “If any independent candidate has failed to get at least five percent of the total number of votes cast in his constituency, he/she should not be allowed to W.P.(C) No.10633 of 2018 contest as independent candidate for the same office again at least for 6 years” “An independent candidate who loses election three times consecutively for the same office as such candidate should be permanently debarred from contesting election to that office.”(*Uma Charan Mishra vs Union Of India And Another, N.d.*) These particular recommendations of this commission have not been accepted.

3 Data and Research Design

3.1 Data

Our primary data source is the “LokDhabha: Indian Election Dataset” by *Agarwal et al. (2021)* (LokDhabha, henceforth) that in turn has digitized and cleaned the electoral results collected by the non-partisan and Constitutionally-established Election Commission of India. Further, LokDabha also collects the “socio-demographic profile of main parties’ candidates and “the sociological profile of constituencies”. In sum, across 28 states, and 6 federally administered union territories, we study a total of 329 elections from 1962 to 2018. Table [A1](#) provides a summary table of the total elections by state. Figure [1](#) shows the distribution of women over the election year by party type and overall. The raw data suggests a gradual increase in the overall percentage of women candidates over time. However, the total number still remains below 10% of the total candidates in 2018.

Figure 1: Share of women candidates by party types over the election years

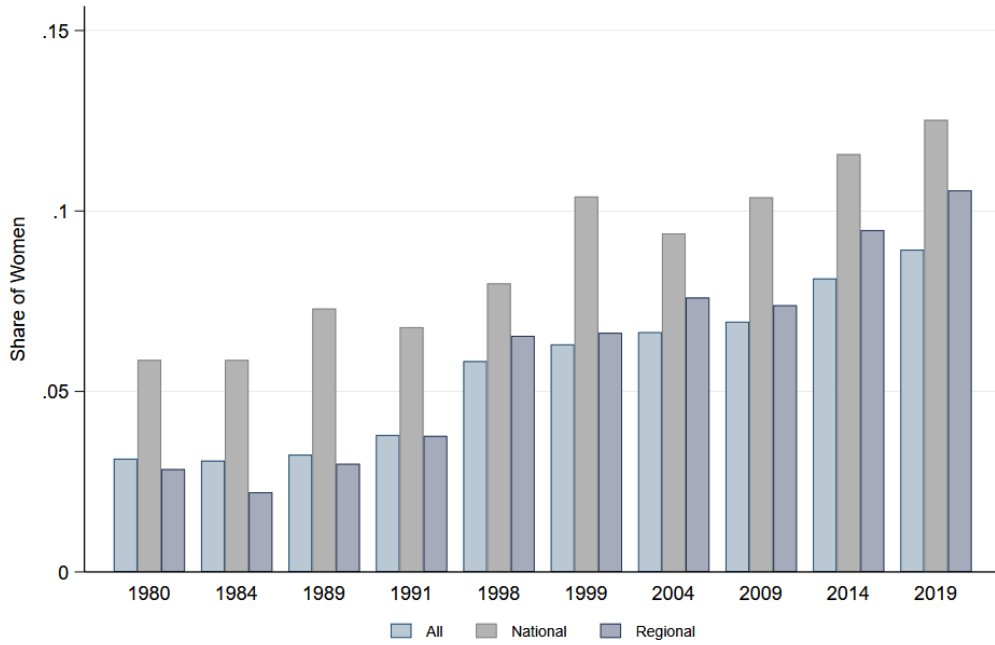
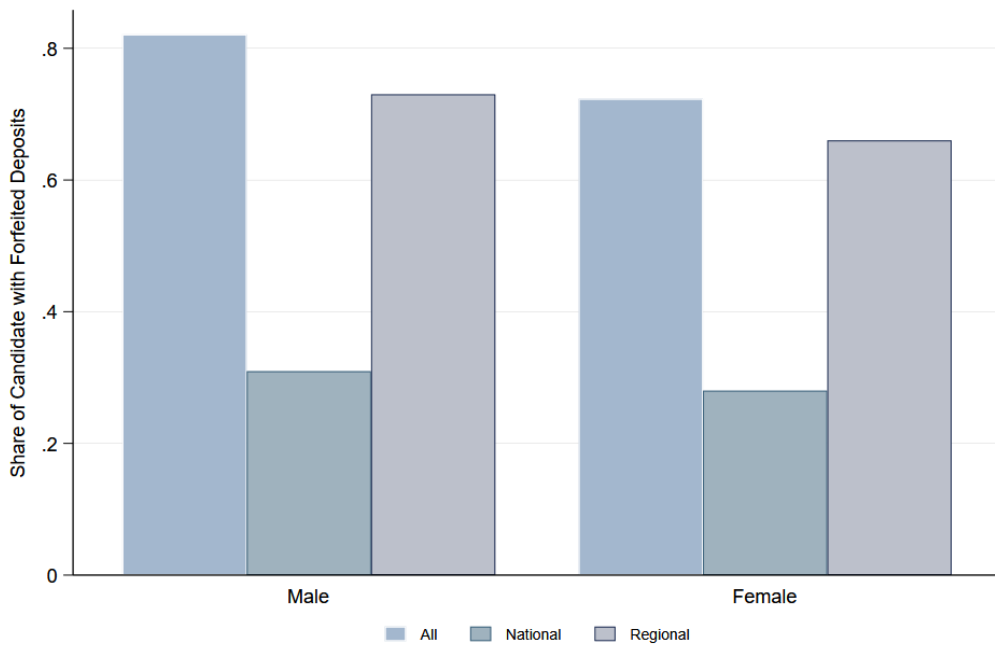


Figure 2: Share of candidates forfeited deposits by party types over the election years



To be precise, the share of women running for election in 1980 was 3.1% of the total candidates; this increased to 9% in 2019, which is about a 6 percentage point increase. However, when we decompose this by party types, regional parties experienced the largest growth in the share of women running for election. The growth rate in the share of women running on national party tickets between 1980 and 2019 was 113 percent, while for regional parties, this growth was 270 percent over the same period of time. This also coincides with regional political parties significantly increasing their vote shares since the 1990s (Ziegfeld, 2012).

In Figure 2, we present the distribution of candidates in the election who forfeited their deposits, categorized by gender and party. The data reveals that approximately 86% of the total candidates who ran for election were unable to secure 1/6th of the total votes cast, resulting in forfeited deposits. More interestingly, the percentage of female candidates losing their deposits was 10 points lower than that of their male counterparts, with 74% of female candidates compared to 84% of male candidates.

This gendered trend has persisted for both national and regional parties. Notably, only 32% of candidates lost their deposits when contesting on national party tickets, contrasting with the higher rate of 72% for candidates on regional party tickets.

Table 1 presents the recontest rate by party and gender. The overall recontest rate for candidates was about 16%. The recontest rate is considerably higher for candidates affiliated with national parties compared to those associated with regional parties or running independently. Specifically, only 19% of candidates on regional party tickets opted to recontest, while a higher proportion, 31%, of candidates on national party tickets chose to re-enter the next election. Independent candidates exhibited a significantly lower recontest rate. When examining gender differences in recontest rates, we observe no disparity between male and female candidates contesting on national party tickets. However, on regional party tickets, males were 5 percentage points more likely to recontest compared to their female counterparts. Interestingly, this gender gap was substantially smaller among independent candidates.

Table 1: Summary Statistics for the Mean Number of Candidates Who Re-run in the subsequent election

Candidate Group	All Parties	All Parties Total	National Parties	National Parties Total
All	0.160	416,030	0.307	110,053
Men	0.161	397,471	0.307	105,045
Women	0.150	18,512	0.302	5,004
Candidate Group	Regional Parties	Regional Parties Total	Independents	Independents Total
All	0.192	81,193	0.073	192,742
Men	0.195	76,361	0.074	185,912
Women	0.147	4,821	0.057	6,812

Note. Table displays summary statistics for the mean number of candidates who re-ran in the subsequent election across all parties, national parties, regional parties, independents. The totals refer to the absolute numbers

3.2 Research design

The deposit rule enables us to employ a regression discontinuity design (RDD) to estimate the effect of deposit losses on recontest rates. A simple comparison of candidates with and without forfeited deposits suffers from selection bias, therefore we make the key identifying assumption of continuity of potential outcomes in the running variable at the assignment threshold.⁷ In our setting, candidates who fall just above the *deposit rule* cut-off are comparable to the candidates who fall just below the cut-off—i.e., those who lose their deposit. We use the comparability of these candidates around the threshold to estimate the effect of deposit losses on recontest rates in the subsequent election. Formally, we implement the RDD by estimating the following equation:

$$recontest_{ic} = \beta_0 + \beta_1 D_{ic} + \beta_2 R_{ic} + \beta_3 R_{ic} D_{ic} + \epsilon_{ic} \quad (1)$$

Where *recontest* is a dummy variable that takes the value 1 if candidate *i* re-ran in the next election and 0 otherwise. β_0 represents a constant term, and R_{ic} represents the number of votes above/below the deposit threshold for candidate *i*. D_{ic} is a dummy variable that takes on the value 1 if the candidate did not secure 1/6th of the total votes and forfeited the deposits—i.e., $R_{ic} < 0$ —and 0 otherwise—i.e., $R_{ic} > 0$. β_1 , the main coefficient of interest, indicates the effect of a deposit loss on candidate *i*'s rate of recontesting in the next election.

We implement a triangular kernel-weighted, local linear regression with a 1-degree polynomial (in order to avoid overfitting) within a mean square error-optimal bandwidth around

⁷For a more formal and extensive discussion of these identification assumptions, see Cattaneo, Idrobo and Titiunik (2019).

the deposit threshold. We demonstrate the robustness of our results to alternative bandwidths and kernels (Imbens and Lemieux, 2008; Imbens and Kalyanaraman, 2012; Gelman and Imbens, 2019; Cattaneo and Titiunik, 2022). We also present results that include state-fixed effects and a vector of controls, such as population, to ensure the robustness of our findings.

3.3 Identification and validity assumptions

The RDD approach assumes that the running variable is continuous at the cutoff, and that there is no manipulation or bunching around the cutoff point (Lee and Lemieux, 2010). To assess the validity of this assumption – specifically the absence of manipulation in the running variable – we implement a density test proposed in Cattaneo, Jansson and Ma (2020).⁸ We present the results confirming the validity of this assumption in Table 2. We also visualize the density of the running variable in Figure 3. We do not observe any evidence of manipulation in the running variable around the cutoff. This finding lends credibility to our estimates and reinforces the robustness of our research design. Additionally, from a substantive perspective, our focus at the lower end of the distribution of candidates – i.e., those candidates with the least influence over election authorities – increases our confidence regarding the lack of manipulation around the deposit rule cut-off. Taken together, the observed differences in candidate behavior around the deposit threshold are likely a result of the deposit requirement itself, rather than manipulation.

Table 2: Density discontinuity test results

	x
Density (left)	0.000129
Density (right)	0.000127
Difference in Density	-2e-06
Robust t-statistic (density difference)	-0.312
Robust p-value (density difference)	0.755

Note. Table displays the results of the density test (Cattaneo, Jansson and Ma, 2020) that looks for evidence of manipulation around the regression discontinuity cut-off – the deposit rule threshold in our case. The results do not show any evidence of manipulation in the running variable around the cutoff.

We also provide the balance test results for all outcome variables and covariates in Figure 6, 7, and 8 in the appendix. The graphical representations of the tests suggest that there are

⁸This test is a refinement of the McCrary test developed by McCrary (2008), which in turn is similar to the balance test introduced by Lee (2008).

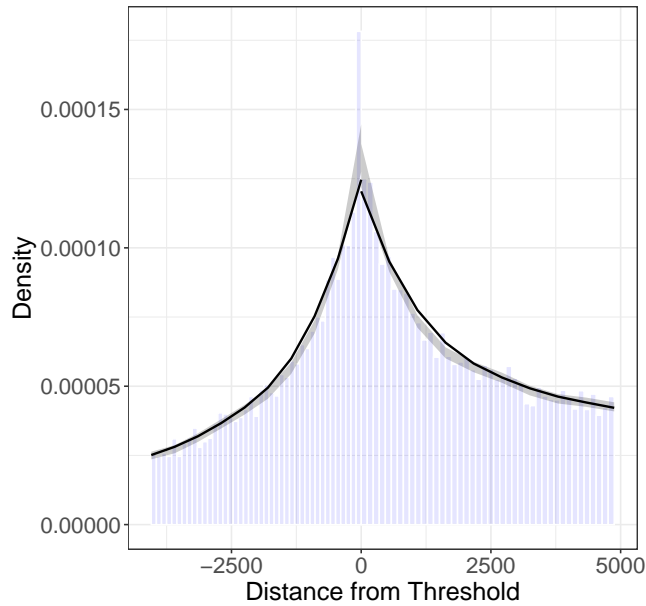


Figure 3: Test of discontinuity in the running variable

no significant effects on any of the outcome variables or covariates in the election period $t - 1$. The absence of any noticeable impacts on the past election outcomes and covariates serves as compelling evidence that the discontinuity in our study is not driven by external factors or systematic selection.

Although this diagnostic evidence supports the RDD identification assumptions, recent scholarship has found that many studies in political science implementing the RD design lack adequate statistical power (Stommes, Aronow and Sävje, 2023). We estimate the statistical power for the primary treatment effect estimations of interest and find that our study achieves over 80% power (Table A5).

4 Results

4.1 Baseline Results

We estimate a regression of the form 1 and compare the candidates who *just* fall above or below the deposit rule (deposit *retainers* versus deposit *losers*) threshold and whether they contest in the subsequent election. Our estimation procedure was conducted using an optimal bandwidth determined through a data-driven approach as outlined by Calonico et al. (2017). Our analysis reveals that women in Indian state elections are 10.5 percentage points

less likely to re-contest if they forfeited their deposits (i.e., failed to secure more than one-sixth of the total votes). Women who lose their deposit are, on average, not renominated, nor do they re-contest as independent candidates. We do not observe these effects among men nor when analyzing the full sample of candidates. This disparity in the re-contest rates even at the lower end of the distribution underscores the yawning gap between men and women in their re-contest rates and the differential effect that barriers to running for political office can have. Tables [A10](#) and [A11](#) present robustness checks with alternative bandwidths and kernels.

Table 3: RD Estimates: Effect of Deposit Forfeit on Recontesting (all constituencies)

	1	2	3
	Full Sample	Men	Women
Effect estimate	-0.002	-0.001	-0.105
95% CI	[-0.023, 0.018]	[-0.022, 0.02]	[-0.198, -0.012]
Robust p-value	0.813	0.943	0.026
Bandwidth (votes)	3543.419	3543.106	8609.156
N (inside BW)	22415	21719	1155
N (total)	49684	47775	1907

Note: The dependent variable is whether candidate recontest in subsequent election. The table displays the effect of narrowly forfeiting the deposit on the recontest rate for the full sample (column 1), male sample (column 2) and female sample (column 3). We employ a regression discontinuity design, where we leverage the discontinuity created by the *deposit rule*. We estimate the effect with no controls. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by [Calonico et al. \(2017\)](#). In square bracket we report the respective confidence intervals associated with effect estimates. Standard errors are clustered at constituency level.

Research on electoral rules shows that they can have an impact on candidate selection ([Grossman, 2014](#); [Bueno and Dunning, 2017](#)), and our results augment evidence in favor of this literature. Since the decision to run for office is largely an individual decision, understanding the strategic calculus of all individuals' decision to run at scale poses challenges due to data constraints. Addressing this presents a promising avenue for future research.

5 Mechanisms Analysis

5.1 The Role of Political Parties

Extensive research has highlighted the significant role played by political parties and party elites in candidate selection and candidates' electoral prospects ([Sanbonmatsu, 2006](#); [Esteve-](#)

Volart and Bagues, 2012; Pansardi and Vercesi, 2017; Crowder-Meyer and Cooperman, 2018; Cirone, Cox and Fiva, 2021). Therefore, in the first part of our heterogeneity analysis we seek to decompose the effect of deposit rule on women’s subsequent running prospects by political parties. Before delving into the regression discontinuity analysis by party, we initially present the descriptive statistics regarding re-contest rates for candidates who forfeited their deposits across various political parties, including independents.

We find that 66% of regional party candidates forfeited their deposit, 14% of these candidates re-ran in the subsequent elections. On the other hand, the national party number look drastically different. 34% of national party candidates forfeited their deposits, but 32% of these candidates re-contested after deposit forfeiture. These numbers suggest that a substantially greater proportion of candidates from national parties who faced deposit forfeiture secured renomination, relative to those candidates from regional parties.

Table 4: Regional vs. National Parties Desposit Losses and Re-running Rates

	Recontest Rate After Deposit Forfeit	Deposit Forfeit Rate
Regional	0.14	0.66
National	0.32	0.34

Note: The table displays the deposit forfeit rate, and re-contest rate after deposit forfeiture in our full sample for regional and national parties.

Given the dramatic differences in re-running rates across parties, we estimated equation 1 and compared candidates who *just* fall above or below the deposit rule threshold for the subsample consisting of candidates who ran for elections on a national party ticket. To tie our hands when categorizing a political party as a “national party” during our analysis, we adopt the party categorization outlined by Agarwal et al. (2021), which classifies political parties into: ‘National Parties,’ ‘State-based Parties,’ ‘Local Parties,’ and ‘Independent candidates.’ National parties are those parties that contest and have active presence in multiple states like the Bharatiya Janata Party, Indian National Congress, the Communist parties etc.⁹

Table 5 presents these results and shows that candidates affiliated with national parties are 5 percentage points more likely to recontest, even after deposit forfeiture in the previous election. This pattern holds true for men. However, women running on national party tickets are 5 percentage points less likely to rerun for election in the subsequent period after

⁹The complete list of national parties are: CPI, SWA, INC, JS, PSP, SOC, CONG, CON, CPM, SSP, BJS, BKD, JAP, NCO, SOP, BLD, SP, JNP, INC(I), INC(U), BJP, JNP(JP), JNP(S), LKD, ICS, JD, SAP

deposit forfeiture. That said, the evidence for women’s re-run rates is weak and we cannot conclusively reject the null hypothesis.

Table 5: RD Estimates: Effect of Deposit Forfeit on Recontesting (constituencies with narrow deposit forfeits by national parties)

	1	2	3
	National parties	Men (national)	Women (national)
Effect estimate	0.051	0.054	-0.046
95% CI	[0.019, 0.083]	[0.021, 0.087]	[-0.172, 0.08]
Robust p-value	0.002	0.002	0.473
Bandwidth (votes)	2720.854	2625.897	7641.783
N (inside BW)	9473	8922	625
N (total)	22735	21746	989

Note: The table displays the effect of narrowly forfeiting the deposit on the recontest rate for national party candidate sample (column 1), national party male sample (column 2) and national party female sample (column 3). We employ a regression discontinuity design, where we leverage the discontinuity created by the *deposit rule*. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by [Calonico et al. \(2017\)](#).

Next, we conducted the same analysis for regional parties. Once again, we adhere to [Agarwal et al. \(2021\)](#) and consider parties classified as ‘state-parties’ or ‘local parties’ for our this analysis.¹⁰ This analysis uncovers entirely different trends compared to the national party analysis. Panel A in Table 6 presents the results for regional parties, and it shows that men are 4 percentage points less likely to re-contest after deposit forfeiture in the previous election. However, the impact of forfeiture is much more substantial for women running on regional party tickets. We notice that women are 30 percentage points less likely to run for re-election in the subsequent election. In sum, both men and women from regional parties have a lower probability of re-running in the subsequent election after losing their deposit. But, the effects are more pronounced for women.

Finally, Indian electoral rules allow candidates to run for office as independents without any party affiliation. Although independents have a very small chance of securing a victory, it is a valid vehicle to run for electoral office, and evidence suggests that independent

¹⁰It must be noted classification of political parties by [Agarwal et al. \(2021\)](#) differs from that of the Election Commission of India. However, upon inspecting the two types of categorizations we choose to present the former in our analysis. The main difference in the coding arises in the categorization of regional parties, and [Agarwal et al. \(2021\)](#) categorize “parties contesting in several states but being principally associated with one state” as “state-based parties, even though they may meet the ECI definition of national party”. That said, our results are robust to the alternative definitions. There are 464 regional parties as per this classification. Appendix section A.8 provides the complete details

Table 6: RD Estimates: Effect of Deposit Forfeit on Recontesting (constituencies with narrow deposit forfeits by regional parties)

	1	2	3
	Panel A		
	Regional parties	Men (regional)	Women (regional)
Effect estimate	-0.045	-0.038	-0.292
95% CI	[-0.086, -0.005]	[-0.08, 0.003]	[-0.485, -0.099]
Robust p-value	0.029	0.072	0.003
Bandwidth (votes)	5964.155	5813.083	7752.754
N (inside BW)	5633	5339	243
N (total)	9890	9451	439
	Panel B		
	All independents	Men (independents)	Women (independents)
Effect estimate	-0.059	-0.059	-0.108
95% CI	[-0.101, -0.018]	[-0.101, -0.017]	[-0.507, 0.29]
Robust p-value	0.005	0.006	0.594
Bandwidth (votes)	4128.070	4075.555	5698.111
N (inside BW)	6293	6154	123
N (total)	13076	12785	290

Note: **Panel A** displays the effect of narrowly forfeiting the deposit on the recontest rate for regional party sample (column 1), regional party male sample (column 2) and regional party female sample (column 3).

Panel B displays the effect of narrowly forfeiting the deposit on the recontest rate for independents (column 1), independent male sample (column 2) and independent female sample (column 3).

In both cases, we employ a regression discontinuity design, where we leverage the discontinuity created by the *deposit rule*. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by [Calonico et al. \(2017\)](#).

candidates provide voters “better opportunities to express their preferences” (Kapoor and Magesan, 2018). Furthermore, it is reasonable to think that a candidate willing to run for office but denied a party ticket might opt to run as an independent. Hence, we also examine the effects of the falling above/below the deposit rule threshold for independent candidates. Panel B in table 6 reports the results for independent candidate. We observe a similar pattern compared to candidates running on regional party tickets. Overall, independent candidates are 6 percentage points less likely to rerun in the subsequent election if they lose the deposit in the previous election. The rates are similar for men and much higher for women, although the effect size is imprecisely estimated for women due to the lower number of observations

Taken together, these findings highlight the disadvantages faced by both men and women running on regional party tickets, with women being more adversely impacted by deposit forfeiture – with respect to their renomination chances in the subsequent elections – compared to men. With national parties, on the other hand, parties seem to be broadly re-nominating candidates even after a narrow loss of their election deposit. In fact, there is suggestive evidence indicating that men in the national parties are “failing up” and are re-nominated even after losing their deposit. This suggests two potential scenarios. One, National parties offer their members more opportunities to succeed (even after failure). Two, regional parties witness more turnover in their candidate pool. While our data and empirical strategy does not allow us to clearly point to the either of the mechanisms, our results emphasize how the penalty for failure appears more stringent for women, particularly within regional parties.

5.2 Muslim Candidates

There are over 200 million Muslims in India, constituting approximately 14% of the population. Yet Muslim representation in state and national level politics remains significantly low (Allie, 2023b). Despite being the the largest minority group, Muslims face substantial social discrimination. Further, there is an extensive discussion on the correlation between Islam and restrictive women’s rights (Inglehart and Norris, 2003). Consequently, Muslim women often find themselves at the intersection of multiple disadvantaged identities (Crenshaw, 2013). Hence, we aim to understand the impact of falling below the deposit rule threshold on the broader Muslim community, and Muslim women specifically.

Analyzing Muslim candidates is a challenging task because self-declaration of candidate religion is optional in Indian elections, and these data are not systematically collected. Therefore, we employ state-of-the-art machine learning and prediction algorithms to identify Muslim candidates within our dataset for the sub-sample analysis. To accomplish this, we utilize the ‘pranaam’ Python package (Chintalapati and Sood, 2022), which predicts religion based on Indian names. The underlying models in this package utilize land holdings data from Bihar, encompassing “41.87 million plots (or 12.13 million individuals) across 35,626 villages, resulting in 4 million unique records”.

Table 7: RD Estimates: Effect of Deposit Forfeit on Recontesting (Muslim Candidates Nearest Deposit Threshold)

	1	2	3
	Muslim sample	Muslim Men	Muslim Women
Effect estimate	-0.027	-0.029	-0.092
95% CI	[-0.093, 0.038]	[-0.095, 0.037]	[-1.105, 0.921]
Robust p-value	0.413	0.391	0.859
Bandwidth (votes)	5583.165	5588.818	3546.084
N (inside BW)	2294	2268	20
N (total)	3859	3802	57

Note: The table displays the effect of narrowly forfeiting the deposit on the recontest rate for the entire Muslim candidate sample (column 1), Muslim male sample (column 2) and Muslim female sample (column 3). We employ a regression discontinuity design, where we leverage the discontinuity created by the *deposit rule*. We study the effects of falling just above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by Calonico et al. (2017).

Procedurally, we created a list of all political candidates in our dataset and employed ‘pranaam’ to generate predicted probabilities of a candidate being Muslim. Subsequently, we selected candidates labeled as Muslims (‘pranaam’ assigns this label if the predicted probability is >50%) by the algorithm. Next, we use this Muslim sub-sample to estimate a regression equation similar to equation 1, comparing Muslim candidates just above or below the deposit rule threshold. We do not find any evidence (Table 7) for the deposit rule affecting Muslim candidates. Notably, the sub-sample of Muslim women lacks power ($N = 20$ within the bandwidth) to draw any conclusive claims.

5.3 SC/ST

Caste is a salient sociopolitical cleavage in Indian society. There is considerable variation across India with respect to the social status, economic, and educational position of various caste groups. That said, scheduled caste groups are defined by their traditional exclusion from the Hindu community, and scheduled tribes are defined by their geographic isolation. Members of these caste groups remain among the poorest in India despite affirmative action programs designed to help them. In fact, the quantum of deposit submitted by candidates belonging to these groups is lower than the rest of the population. Hence, it is reasonable to think that the effects of deposit forfeiture could be higher among these groups. Therefore,

Table 8: RD Estimates: Effect of Deposit Forfeit on Recontesting

	1	2	3
	All SC & STs	Men (SC & STs)	Women (SC & STs)
Effect estimate	0.030	0.036	-0.189
95% CI	[-0.019, 0.079]	[-0.014, 0.086]	[-0.442, 0.063]
Robust p-value	0.231	0.161	0.142
Bandwidth (votes)	1792.806	1745.725	3111.047
N (inside BW)	4251	4086	157
N (total)	7007	6762	244

Note: Table displays the effect of narrowly forfeiting the deposit on the recontest rate for scheduled caste and scheduled tribe (SC & ST) sample (column 1), SC & ST male sample (column 2) and SC & ST female sample (column 3). We employ a regression discontinuity design, where we leverage the discontinuity created by the *deposit rule*. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by [Calonico et al. \(2017\)](#). Candidates belonging to Scheduled Caste and Scheduled Tribes categories receive constitutional protection, and guaranteed representation at all levels of governance in India. Reserved-seat quotas for SC/STs ensure that a proportion of seats are exclusively set aside for a candidates belonging to these groups.

we estimate regression models similar to the one described in equation 1 for a sub-sample of scheduled caste and scheduled tribe groups. The results from this estimation exercise are shown in Table 8. We do not find substantial evidence of heterogeneity in the effect of deposit forfeiture by these caste groups. While the coefficient sign is negative for women belonging to these caste groups and the magnitude is close to 19 percentage points, it is imprecisely estimated. The imprecise estimate is due to low statistical power and a low number of observations within the bandwidth.

5.4 Sub-Regional Differences

Table 9: RD Estimates: Effect of Deposit Forfeit on Recontesting (constituencies in South Indian states and Hindi speaking states)

	1	2	3
	Panel A		
	South Indian States	Men (South India)	Women (South India)
Effect estimate	0.026	-0.001	-0.105
95% CI	[-0.019, 0.071]	[-0.022, 0.02]	[-0.198, -0.012]
Robust p-value	0.251	0.943	0.026
Bandwidth (votes)	5300.448	3543.106	8609.156
N (inside BW)	4052	21719	1155
N (total)	11126	47775	1907
	Panel B		
	Hindi-Speaking States	Men (Hindi States)	Women (Hindi States)
Effect estimate	-0.014	-0.010	-0.150
95% CI	[-0.044, 0.016]	[-0.041, 0.021]	[-0.326, 0.025]
Robust p-value	0.358	0.535	0.094
Bandwidth (votes)	4678.584	4346.238	7096.452
N (inside BW)	11240	10373	464
N (total)	18923	18203	720

Note: **Panel A** displays the effect of narrowly forfeiting the deposit on the recontest rate for all candidates contesting in South India (column 1), men contesting in South India (column 2) and women contesting in South India (column 3). The South Indian states are Andhra Pradesh, Madras, Kerala, Karnataka, Mysore, Telangana, Tamil Nadu, and Puducherry.

Panel B displays the effect of narrowly forfeiting the deposit on the recontest rate for all candidates contesting in Hindi-speaking states (column 1), men contesting in Hindi belt states (column 2) and women contesting in Hindi belt states (column 3). The Hindi belt states are: Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Uttarakhand.

In both cases, we employ a regression discontinuity design, where we leverage the discontinuity created by the *deposit rule*. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by [Calonico et al. \(2017\)](#).

There are large regional disparities in socioeconomics within India. Most importantly, these differences are significant across Hindi-speaking states and non-Hindi-speaking states. Hindi is one of the 22 languages recognized in the Indian constitution and is a topic of frequent debate in non-Hindi-speaking states regarding its status as the “national language”.¹¹ Hence, it is worth investigating if there are regional differences in the re-election rate after deposit forfeiture. We present the results for non-Hindi speaking southern states and Hindi-speaking state sub-samples in Table 9. These results indicate that women in both southern and Hindi-speaking north Indian states are less likely to run for re-election after forfeiting

¹¹The non-Hindi-speaking states in Southern India include Andhra Pradesh, Kerala, Karnataka, Telangana, Tamil Nadu, and Puducherry. The Hindi belt states, on the other hand, include Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Uttarakhand.

their deposits in the previous election. More specifically, women in Southern states are 10 percentage points less likely to seek re-election compared to women in Hindi-speaking states.

6 Robustness Checks

As is standard in applied regression discontinuity research designs, we confirm the robustness of our key results using alternative bandwidths, and kernel.

Alternative Bandwidth All our main analysis tables are estimated using Equation 1 and an optimal data-driven bandwidth that is selected following Calonico et al. (2017). We test the sensitivity of our main results using alternative bandwidths. We re-estimate Equation 1 with alternative bandwidths for all candidates, as well as the samples of candidates running on national tickets and regional party tickets. The results are reported in Table A10 and presented separately for overall party types and for women and men. Overall, we find that our results are stable and less sensitive to alternative bandwidths. In Panel A2, we report the results for women candidates on all party tickets, and we find that effect sizes remain stable even after increasing the bandwidth size to 1.5 times the optimal bandwidth. A similar pattern was found for women on regional and national party tickets, for which the results are reported in Panel B2 and Panel C2.

Alternative kernels We also check the robustness of results with respect to alternative kernels. We report results in Table A11 for three different kernels commonly used in the literature. Different kernels assign different weights to observations close to the cutoff point and those further away from the cutoff points. Our main results are reported in the paper using a triangular kernel, which gives higher weights to observations closer to the cutoff, with weights decreasing linearly as we move away from the cutoff. We also report the results using a uniform kernel (assigning the same weight to all observations) and an Epanechnikov kernel (which has some optimality property). We find that the results are robust to alternative weighting schemes.

6.1 Income Effect

Throughout the paper, we have argued that the loss of deposits (cash) may not be the dominant channel influencing the decision to rerun in a subsequent election after not securing 1/6 of the total votes. We examine this mechanism to determine whether the financial costs induced by deposit loss hinder candidates from rerunning in subsequent elections by utilizing a unique policy shock and its timing. As described earlier, India's federal election commission increased the amount of deposit required for each candidate running for candidacy in the election in 1996 (*Uma Charan Mishra vs Union Of India And Another*, N.d.; Venkatachaliah, 2002).

We expect that if income effects are determining women's decision not to rerun in the election after losing the deposit in the previous election, then the effect size of "forfeiture" should be much stronger and larger in the immediate aftermath of the 1996 policy change that increased the required deposit.

In panel A of Table 10, we report the results for candidates running from all party types, and subsequently, in panels B and C, we separate the results for national party candidates and regional party candidates. Overall, we find that if anything, the coefficient size is much smaller for women in the post-1996 time period, suggesting that women are more likely to run after losing the deposit in the post-1996 policy despite the increase in the fee. This holds true across all samples. In fact, after the 1996 fee increase, men are even more likely to rerun in the election. Comparing the coefficients for women across samples and men across samples, it is clear that the loss of cash is less likely to drive the decision over whether to rerun in the subsequent election.

6.2 Jackknife RD Analyses: Regional Parties and Women's Re-Contest Rates

We further probe causal mechanisms with multiple jackknife RD analyses on the sample of regional parties. Each iteration of the jackknife RD removes one prominent regional party from the sample.¹² If a regional party's exclusion from the sample generates an RD estimate for women's re-contest rates closer to zero, then we can attribute the negative effect of

¹²We define "prominent" as the ten regional parties contributing the most candidates to the overall regional party sample.

Table 10: RD Estimates: Pre- vs. Post-1996 Deposit Fee Increase

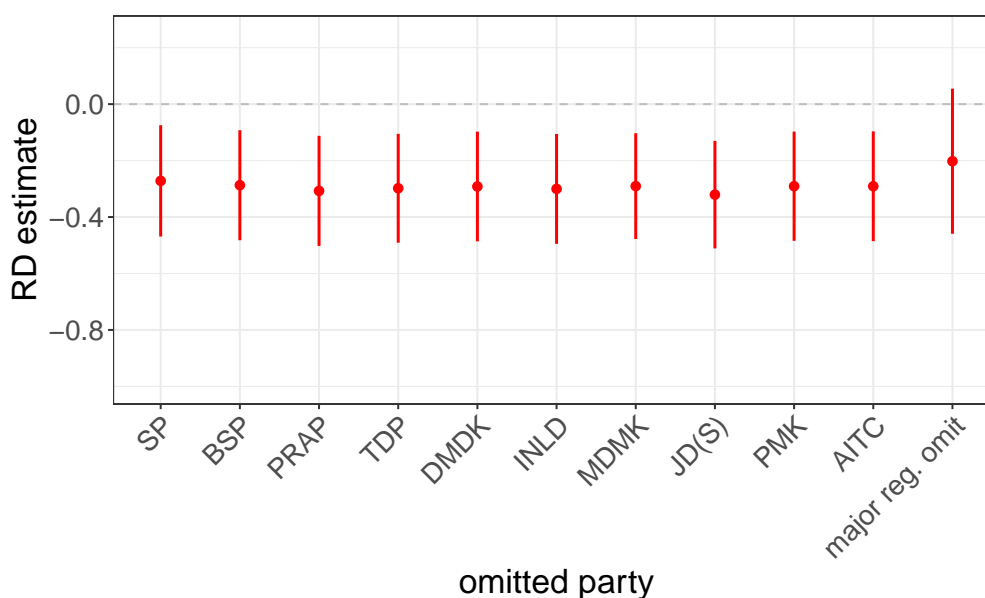
1996 Fee increase policy	Estimates	95% CI	Robust p-value	N (inside BW)
Panel A: All party types				
Panel A1: All				
Before	0.012	[-0.041, 0.066]	0.652	4297
After	0.004	[-0.051, 0.06]	0.878	3907
Panel A2: Women				
Before	-0.174	[-0.445, 0.097]	0.208	195
After	-0.191	[-0.425, 0.044]	0.112	208
Panel A3: Men				
Before	0.018	[-0.037, 0.073]	0.521	4097
After	0.013	[-0.044, 0.069]	0.664	3677
Panel B: National Parties				
Panel B1: All				
Before	0.074	[0, 0.149]	0.051	2326
After	0.227	[0.117, 0.338]	0.000	977
Panel B2: Women				
Before	-0.178	[-0.454, 0.097]	0.205	148
After	-0.002	[-0.367, 0.363]	0.991	105
Panel B3: Men				
Before	0.090	[0.013, 0.167]	0.022	2167
After	0.235	[0.121, 0.349]	0.000	909
Panel B: Regional Parties				
Panel C1: All				
Before	-0.027	[-0.122, 0.068]	0.580	1225
After	-0.006	[-0.093, 0.08]	0.886	1407
Panel C2: Women				
Before	-0.546	[-1.128, 0.036]	0.066	27
After	-0.310	[-0.475, -0.145]	0.000	52
Panel C3: Men				
Before	-0.018	[-0.115, 0.079]	0.718	1166
After	0.005	[-0.084, 0.093]	0.920	1354

Note: The table displays the effect of a deposit loss on re-contest rates by whether the election occurred just before or after the deposit fee increase implemented in 1996. **Panels A, B, and C** present these supplementary RD estimates for samples including all party types, national parties only, and regional parties only, respectively.

deposit loss reported in Table 6 on characteristics specific to the omitted regional party (e.g., biased internal nomination processes).

The results indicate that relatively prominent regional parties in India — such as the Samajwadi Party and Bahujan Samaj Party — are not responsible for the negative effect of deposit losses on women’s re-contest rates. Figure 4 presents the jackknife RD results. Labels on the x -axis indicate the regional party omitted for that iteration of the jackknife RD. The estimate on the right hand side of Figure 4 draws on a sample of regional parties which omits the ten most prominent regional parties. Even when omitting these parties simultaneously, the effect of deposit losses on women’s re-contest rates remains negative.¹³

Figure 4: Jackknife RD estimates: Effect of Deposit Loss on Women Re-Running



Note: This plot shows the RD estimates of deposit loss on the re-contest rate for regional parties’ female candidates—omitting the ten most prominent regional parties. The acronyms on the x -axis indicate the party omitted from the respective RD estimate. The plot includes robust, bias-corrected 95% confidence intervals. The tabular results are presented in Tables A14, A15, and A16.

Our results indicate that the primary regression discontinuity estimates are driven by small regional and local parties, which constitute the bulk of India’s highly-fragmented party landscape. (Chhibber and Nooruddin, 2000; Chhibber, Jensenius and Suryanarayan, 2014). Parties with relatively small electoral footprints and weak organizational structures—weaker even than the relatively large, well-established regional parties—are likely more susceptible to the male-dominated gatekeeping that has been repeatedly identified as inhibiting women’s advancement in political parties and democratic politics (Cheema et al., 2023; Goyal, 2023;

¹³Figures 9 and 10 indicate that the results are consistent when running the jackknife RD analyses on the five and fifteen (rather than ten) most “prominent” regional parties as well.

Karekurve-Ramachandra, 2023). Our findings highlight the need to delve deeper into the dynamics of local and regional parties that are operating on the margins of India’s political landscape. Understanding their electoral fate can potentially hold important consequences for equitable representation for women in democratic competition, and presents promising avenues for future research.

6.3 Deposit Loss & Voter Discrimination

The political views of voters on gender issues can influence their evaluation and voting behavior towards candidates based on their gender. Despite improvements in voters’ perception of the quality of women’s leadership with exposure (Beaman et al., 2009; Pas, Aaldering and Steenvoorden, 2022), women candidates often face discrimination from voters during elections. Traditional societal norms relegate women to domestic roles, impacting their acceptance in political spheres. Despite legal measures such as reserved seats, gender-based discrimination persists, discouraging many potential women leaders (Bhalotra, Clots-Figueras and Iyer, 2018). Moreover, deep-rooted gender biases shape voters’ perceptions, impeding women’s political progress (Herrnson, Lay and Stokes, 2003). Some female candidates face overt harassment during political campaigns, including gender-based slurs and character attacks. This hostile environment can discourage them from re-contesting the election after a loss, further exacerbating the gender gap in political representation (Krook and Sanín, 2020). While directly estimating evidence for voter discrimination is challenging with our data, table A9 presents indirect evidence of voter discrimination in Indian state elections. We examine the regional parties whose candidates lost their deposit and the vote share secured by these parties in the subsequent elections. This analysis helps us understand whether voters are penalizing the parties for their candidates’ deposit forfeiture in the subsequent elections. While this analysis is under powered (with $N = 32$ within the bandwidth), the results presented in Table A9 provide suggestive evidence that voters are more likely to penalize women candidates in subsequent elections if they lose their deposit – fail to secure at least 1/6 of the total vote – compared to male candidates.

7 Discussion and Conclusion

Constraints to running for political office are common worldwide. Often, these constraints also act as a punishment for poor electoral performance. Such constraints can potentially have a differential impact on traditionally marginalized groups in a society, such as women and other underrepresented communities. We study the unintended consequences of one such constraint to running for office in India. An electoral rule in India demands a fee to the electoral authorities for contesting in elections that candidates forfeit if they fail to secure less than one-sixth of the total votes cast in the race (*the deposit rule*). This strict cut-off on the votes secured as a metric to decide deposit forfeiture allows us isolate the causal effect of procedural rules on the decision to re-contest in subsequent elections.

Specifically, we use a regression discontinuity design where the discontinuity brought about by the deposit rule allows us to study the effects of falling *just* above or below the threshold and the impact forfeiting one's deposit on running in the subsequent elections. We find that both men and women are less likely to run for reelection if they lose the deposit in the previous election. That said, the magnitude of the negative effect is much larger than for women than for men. This observation holds true across parties, however, the effect size for women who contest on regional party tickets – parties that are mostly associated with one state – is particularly pronounced.

Unlike most research in this area that focuses on the winner and the runner-up, our analysis focuses on the tail of the distribution of electoral candidates. However, our findings have two important policy implications for the study of democratic politics in the developing world. First, women contesting on smaller regional parties in federal systems bear the brunt of the impact of constraints to run for office. This can potentially exacerbate the sparsity of the already limited candidate pool in electoral politics, which can potentially be detrimental from a state-building perspective reliant on the supply of political leaders. Second, Even when individuals are willing to run, the eventual nomination is an "intra-party" affair with minimal external regulation. While this opacity of nomination decisions presents econometric challenges in uncovering deeper mechanisms, our results provide further evidence of the significant role that political parties play in an individual's political career.

Gender norms may permeate political spheres, dissuading parties from actively promoting or selecting women political candidates. Political parties often prioritize factors such as

incumbency, political lineage, and electoral viability over gender diversity in their candidate selection processes (Auerbach et al., 2022). This reinforces a male-dominated political landscape and sidelines qualified women leaders. Combined with stereotypical social mindsets and the failure to secure at least 1/6 of the total votes, parties might be further inclined to systematically punish women candidates more than their male counterparts by replacing the female candidates with male ones. This systematic exclusion not only impedes women's political careers but also exacerbates the existing gender gap.

While several factors might contribute to women dropping out of electoral politics, especially at the lower end of the distribution, we present evidence that the differences we see are linked to political party types and nomination decisions. These results hint towards political party discrimination against women – compared to men – for electoral failure that results in their exit from electoral politics. That said, the precise rules or norms that dictate internal party calculus still remain opaque (McCarty and Schickler, 2018), and opening the party black box presents promising avenues for future research.

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Additional Tables and Figures

Figure 5: India Political Map 2023



Note: The map shows the the 28 Indian states and 9 Federally Administered Union Territories as of December 2023. Our analysis includes all the states from 1961 - 2018, spanning 320 state assemblies that saw a total of 49,684 candidates running for office in this time period.

Figure 6: Balance test using number votes, voter turnouts, number of candidates, and whether INC won using election period $t - 1$

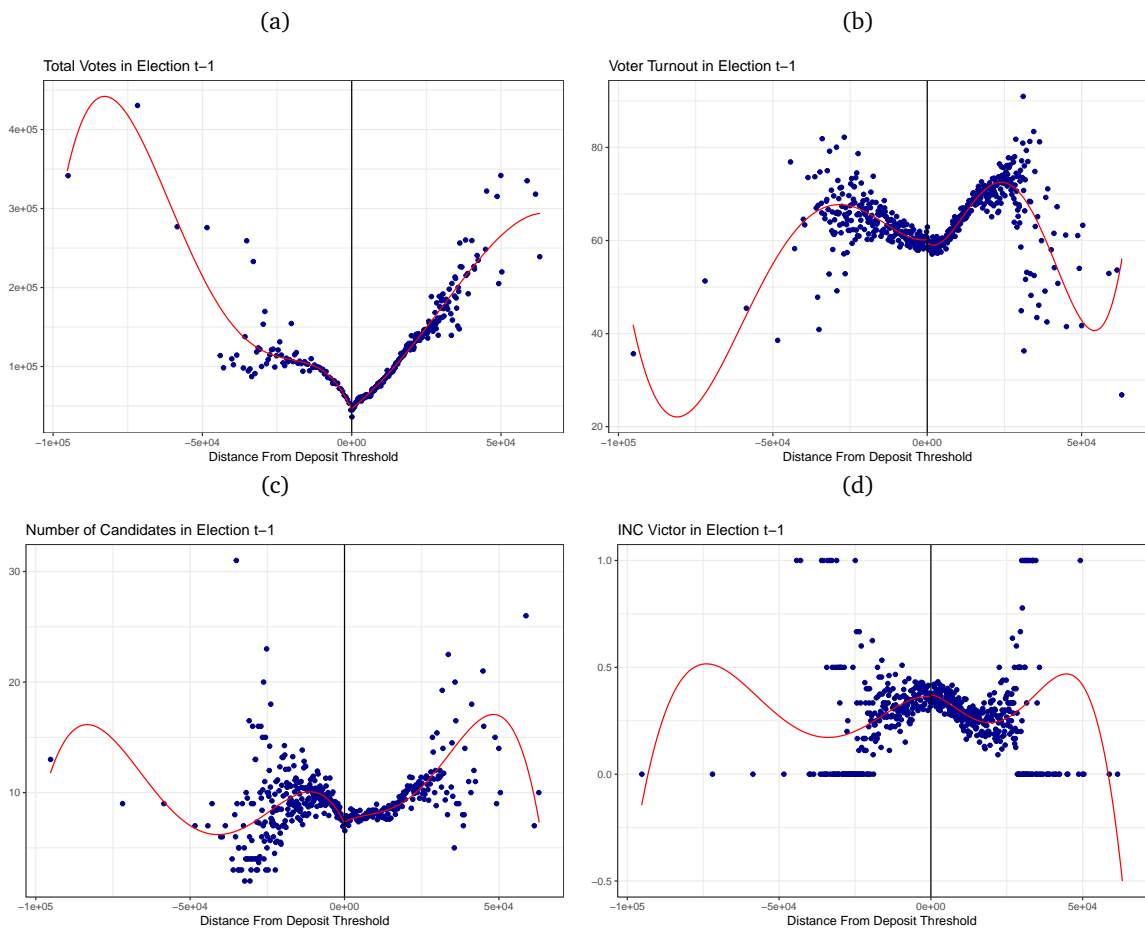


Figure 7: Balance test using gender of winner, ENOP and whether seats were reserved in election period $t - 1$

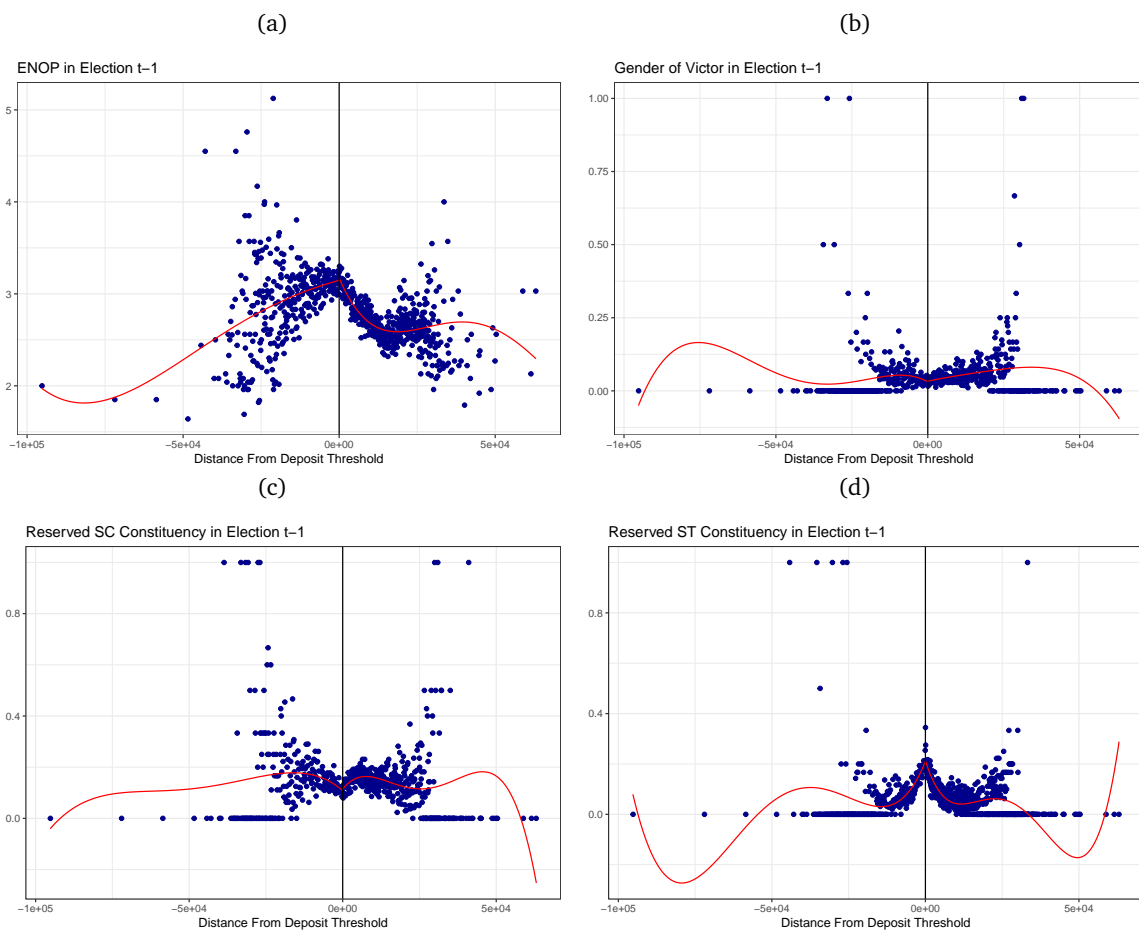


Figure 8: Balance test using number of eligible candidates, age, gender of candidates, whether candidates were affiliated with regional parties in election period $t - 1$

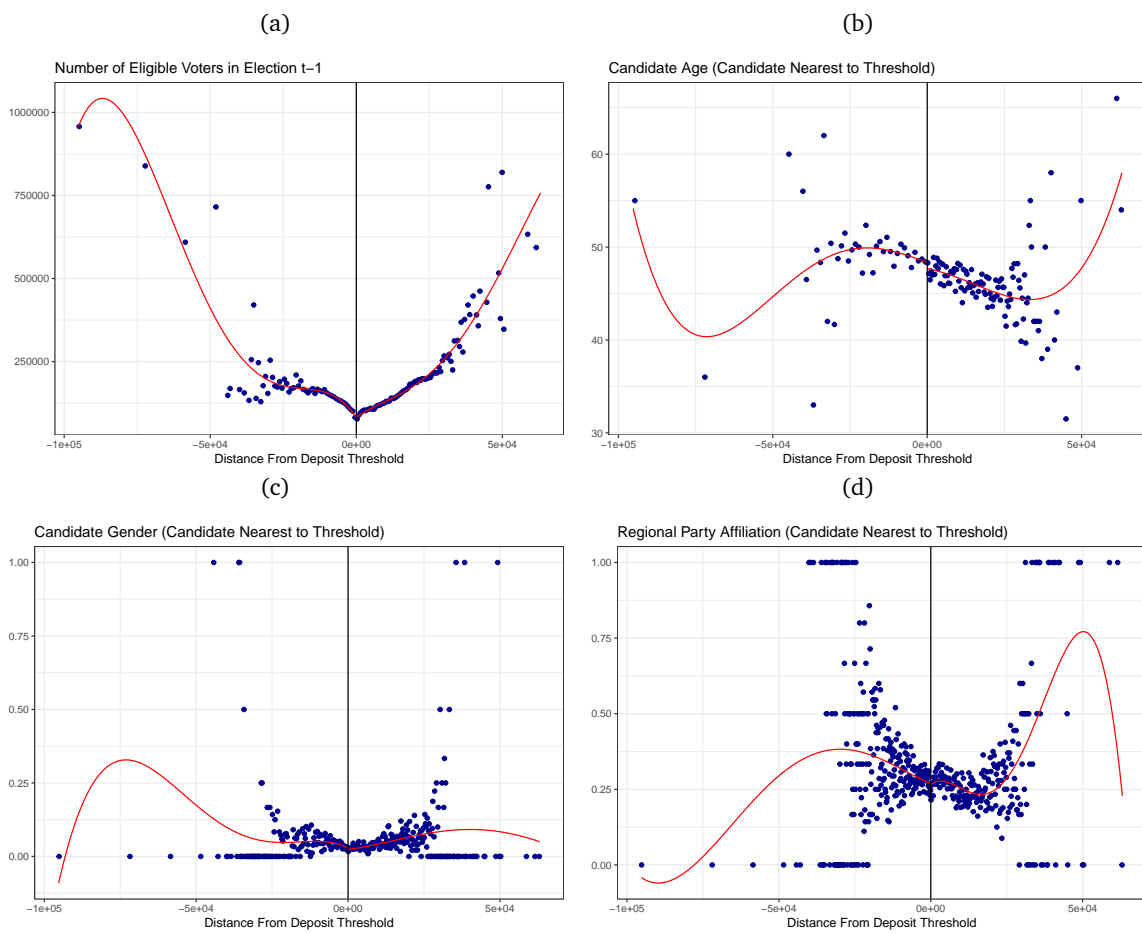
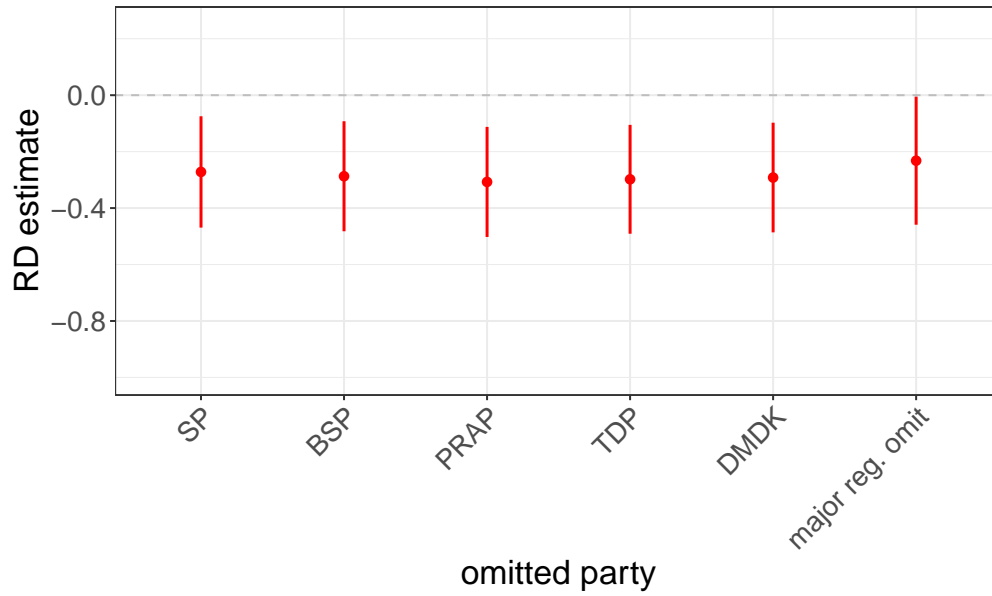
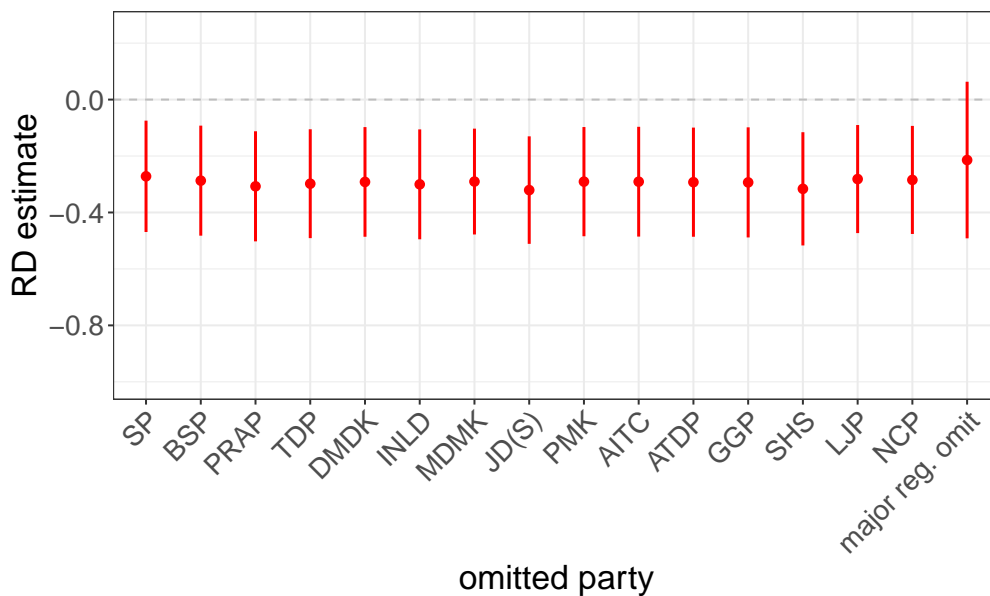


Figure 9: Jackknife RD estimates: Effect of Deposit Loss on Women Re-Running



Note: This plot shows the RD estimates of deposit loss on the re-contest rate for regional parties' female candidates—omitting the five most prominent regional parties. The acronyms on the x -axis indicate the party omitted from the respective RD estimate. The plot includes robust, bias-corrected 95% confidence intervals. The tabular results are presented in Tables [A12](#) and [A13](#).

Figure 10: Jackknife RD estimates: Effect of Deposit Loss on Women Re-Running



Note: This plot shows the RD estimates of deposit loss on the re-contest rate for regional parties' female candidates—omitting the fifteen most prominent regional parties. The acronyms on the *x*-axis indicate the party omitted from the respective RD estimate. The plot includes robust, bias-corrected 95% confidence intervals. The tabular results are presented in Tables [A17](#), [A18](#), [A19](#), and [A20](#).

Table A1: Total Elections in Indian States and Union Territories

	State Name	Total Elections	Year Range
1	Andhra Pradesh	12	1962-2014
2	Arunachal Pradesh	9	1978-2014
3	Assam	12	1962-2016
4	Bihar	13	1962-2015
5	Chhattisgarh	3	2003-2013
6	Delhi	9	1972-2015
7	Goa	7	1989-2017
8	Daman and Diu	4	1967-1980
9	Gujarat	13	1962-2017
10	Haryana	12	1967-2014
11	Himachal Pradesh	12	1967-2017
12	Jammu and Kashmir	9	1962-2008
13	Jharkhand	3	2005-2014
14	Karnataka	10	1978-2018
15	Kerala	13	1965-2016
16	Madhya Pradesh	12	1962-2013
17	Madras	1	1962-1962
18	Maharashtra	12	1962-2014
19	Manipur	12	1967-2017
20	Meghalaya	10	1972-2018
21	Mizoram	11	1972-2013
22	Mysore	2	1962-1967
23	Nagaland	13	1964-2018
24	Odisha	13	1961-2014
25	Puducherry	13	1964-2016
26	Punjab	13	1962-2017
27	Rajasthan	12	1962-2013
28	Sikkim	8	1979-2014
29	Tamil Nadu	11	1971-2016
30	Telangana	1	2014-2014
31	Tripura	11	1967-2018
32	Uttar Pradesh	15	1962-2017
33	Uttarakhand	4	2002-2017
34	West Bengal	14	1962-2016
	Total	329	

Table A2: Effective Number of Parties Across Indian States

	State_Name	Total Assemblies	Assembly No. Range	Effective Number of Parties
1	Andhra_Pradesh	12	3-14	2.46-2.46
2	Arunachal_Pradesh	9	1-9	2.38-2.38
3	Assam	12	3-14	3.14-3.14
4	Bihar	14	3-16	3.62-3.62
5	Chhattisgarh	3	1-3	3.07-3.07
6	Delhi	9	2-10	2.65-2.65
7	Goa	7	1-7	2.75-2.75
8	Goa_Daman_&_Diu	4	1-4	2.55-2.55
9	Gujarat	13	1-13	2.49-2.49
10	Haryana	12	1-12	3.26-3.26
11	Himachal_Pradesh	12	2-13	2.49-2.49
12	Jammu_&_Kashmir	9	1-9	2.93-2.93
13	Jharkhand	3	1-3	4.45-4.45
14	Karnataka	10	1-10	2.84-2.84
15	Kerala	13	3-15	2.34-2.34
16	Madhya_Pradesh	12	3-14	2.88-2.88
17	Madras	1	3-3	2.51-2.51
18	Maharashtra	12	1-12	2.93-2.93
19	Manipur	12	1-12	3.57-3.57
20	Meghalaya	10	1-10	3.32-3.32
21	Mizoram	11	1-11	3.06-3.06
22	Mysore	2	3-4	2.29-2.29
23	Nagaland	13	1-13	2.7-2.7
24	Odisha	13	3-15	2.81-2.81
25	Puducherry	13	1-13	2.52-2.52
26	Punjab	13	3-15	2.69-2.69
27	Rajasthan	12	3-14	2.79-2.79
28	Sikkim	8	1-8	2.33-2.33
29	Tamil_Nadu	11	1-11	2.61-2.61
30	Telangana	1	1-1	3.26-3.26
31	Tripura	11	1-11	2.26-2.26
32	Uttar_Pradesh	15	3-17	3.67-3.67
33	Uttarakhand	4	1-4	3.75-3.75
34	West_Bengal	14	3-16	2.45-2.45

Table A3: Covariate balance tests

	SC Reserved Const. (t-1)	ST Reserved Const. (t-1)	Woman Victor (t-1)	INC Victor (t-1)	ENOP (t-1)	Voter Turnout (t-1)
Effect estimate	-0.002	0.018	-0.005	0.019	0.021	-0.732
95% CI	[-0.019, 0.016]	[-0.005, 0.04]	[-0.015, 0.004]	[-0.007, 0.046]	[-0.037, 0.078]	[-1.678, 0.214]
Robust p-value	0.854	0.124	0.265	0.159	0.475	0.129
Bandwidth (votes)	4552.358	4589.966	4526.782	4387.507	6377.118	5514.929
N (inside BW)	20300	20402	20241	19838	24535	22749
N (total)	41191	41191	41191	41191	41025	41189

Table A4: Covariate balance tests (cont'd)

	Total Votes (t-1)	# of Cands. (t-1)	Eligible Voters (t-1)	Candidate Gender (t)	Candidate Age (t)	Candidate Regional (t)
Effect estimate	-1371.047	-0.243	-1375.158	0.005	0.728	-0.011
95% CI	[-3330.561, 588.466]	[-0.536, 0.049]	[-4783.966, 2033.651]	[-0.002, 0.012]	[-0.392, 1.848]	[-0.031, 0.01]
Robust p-value	0.170	0.103	0.429	0.173	0.203	0.300
Bandwidth (votes)	4717.136	4547.677	5242.136	5646.643	9582.373	5239.923
N (inside BW)	20750	20286	22068	29248	6380	28057
N (total)	41191	41191	41190	49684	11592	49684

Table A5: Power Analysis for Effect of Deposit Loss On Re-Running Rate (Women From Regional Parties)

	X
Statistical Power	0.843
Effect Size	-0.292

Table A6: Fixed Effects RD Estimates: Effect of Deposit Forfeit on Recontesting (all constituencies)

	1	2	3
	full sample	men	women
Effect estimate	-0.006	-0.005	-0.097
95% CI	[-0.025, 0.012]	[-0.024, 0.014]	[-0.191, -0.003]
Robust p-value	0.484	0.611	0.044
Bandwidth (votes)	4399.924	4242.845	7090.038
N (inside BW)	25431	24115	1041
N (total)	49684	47775	1907

Note: The second and third columns refer to RD estimates for constituencies where the candidate most closely retaining or forfeiting the deposit was a man or woman, respectively. RD estimator includes state and year fixed effects.

Table A7: Fixed Effects RD Estimates: Effect of Deposit Forfeit on Recontesting (constituencies with narrow deposit forfeits by national parties)

	1	2	3
	national parties	men (national)	women (national)
Effect estimate	0.040	0.040	0.002
95% CI	[0.01, 0.071]	[0.009, 0.071]	[-0.123, 0.127]
Robust p-value	0.009	0.012	0.972
Bandwidth (votes)	2893.932	2811.207	5481.564
N (inside BW)	9868	9331	527
N (total)	22735	21746	989

Note: The second and third columns refer to RD estimates for constituencies where the candidate most closely retaining or forfeiting the deposit was a man or woman, respectively. RD estimator includes state and year fixed effects.

Table A8: Fixed Effects RD Estimates: Effect of Deposit Forfeit on Recontesting (constituencies with narrow deposit forfeits by regional parties)

	1	2	3
	regional parties	men (regional)	women (regional)
Effect estimate	-0.035	-0.026	-0.224
95% CI	[-0.074, 0.005]	[-0.067, 0.015]	[-0.373, -0.074]
Robust p-value	0.088	0.223	0.003
Bandwidth (votes)	5334.649	4992.466	5030.210
N (inside BW)	5301	4918	190
N (total)	9890	9451	439

Note: The second and third columns refer to RD estimates for constituencies where the candidate most closely retaining or forfeiting the deposit was a man or woman, respectively. RD estimator includes state and year fixed effects.

Table A9: RD Estimates: Effect of Deposit Loss on Vote Shares in t+1 (regional parties)

	1	2	3
Sample Name	All (regional)	Men (regional)	Women (regional)
Effect estimate	-3.453	-2.821	-23.472
95% CI	[-6.925, 0.02]	[-6.392, 0.749]	[-49.724, 2.779]
Robust p-value	0.051	0.121	0.080
Bandwidth (votes)	5941.002	5552.113	5263.996
N (inside BW)	1116	1047	32
N (total)	1771	1701	70

Table A10: RD Estimates with Alt. Bandwidths

Parties/Candidates	Estimates	95% CI	Robust p-value	N (inside BW)	BW Types
Panel A1: All					
All	-0.002	[-0.023, 0.018]	0.813	22415	MSE-optimal
All	0.006	[-0.016, 0.029]	0.583	28300	1.5 X MSE-Optimal
Panel A2: Women					
All [Women]	-0.105	[-0.198, -0.012]	0.026	1155	MSE-optimal
All [Women]	-0.100	[-0.196, -0.003]	0.042	1459	1.5 X MSE-Optimal
Panel A3: Men					
All [Men]	-0.001	[-0.022, 0.02]	0.943	21719	MSE-optimal
All [Men]	0.008	[-0.015, 0.031]	0.496	27396	1.5 X MSE-Optimal
Panel B1: All					
National	0.051	[0.019, 0.083]	0.002	9473	MSE-optimal
National	0.062	[0.026, 0.097]	0.001	12057	1.5 X MSE-Optimal
Panel B2: Women					
National [Women]	-0.046	[-0.172, 0.08]	0.473	625	MSE-optimal
National [Women]	-0.044	[-0.171, 0.082]	0.491	756	1.5 X MSE-Optimal
Panel B3: Men					
Nationa [Men]	0.054	[0.021, 0.087]	0.002	8922	MSE-optimal
Nationa [Men]	0.065	[0.028, 0.101]	0.000	11373	1.5 X MSE-Optimal
Panel C1: All					
Regional	-0.045	[-0.086, -0.005]	0.029	5633	MSE-optimal
Regional	-0.040	[-0.082, 0.003]	0.068	6914	1.5 X MSE-Optimal
Panel C2: Women					
Regional [Women]	-0.292	[-0.485, -0.099]	0.003	243	MSE-optimal
Regional [Women]	-0.283	[-0.475, -0.092]	0.004	310	1.5 X MSE-Optimal
Panel C3: Men					
Regional [Men]	-0.038	[-0.08, 0.003]	0.072	5339	MSE-optimal
Regional [Men]	-0.032	[-0.076, 0.011]	0.148	6571	1.5 X MSE-Optimal

Note: The table displays the effect of narrowly forfeiting the deposit on the recontest rate for all parties and candidates. We employ a regression discontinuity design with alternative bandwidths as a robustness check. We leverage the discontinuity created by the *deposit rule*. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The estimation procedure was conducted using an optimal bandwidth, determined through a data-driven approach, as outlined by [Calonico et al. \(2017\)](#).

Table A11: Robustness checks using different kernel

Parties/Candidates	Estimates	95% CI	Robust p-value	N (inside BW)	BW Types
Panel A1: All					
All	-0.006	[-0.026, 0.014]	0.538	22249	Epanechnikov
All	-0.008	[-0.028, 0.012]	0.450	20318	Uniform
All	-0.002	[-0.023, 0.018]	0.813	22415	Triangular
Panel A2: Women					
All [Women]	-0.103	[-0.201, -0.006]	0.037	1074	Epanechnikov
All [Women]	-0.093	[-0.196, 0.009]	0.075	930	Uniform
All [Women]	-0.105	[-0.198, -0.012]	0.026	1155	Triangular
Panel A3: Men					
All [Men]	-0.004	[-0.024, 0.016]	0.692	21419	Epanechnikov
All [Men]	-0.004	[-0.025, 0.016]	0.689	19144	Uniform
All [Men]	-0.001	[-0.022, 0.02]	0.943	21719	Triangular
Panel B1: All					
National	0.044	[0.013, 0.075]	0.006	9500	Epanechnikov
National	0.033	[0.005, 0.062]	0.021	9755	Uniform
National	0.051	[0.019, 0.083]	0.002	9473	Triangular
Panel B2: Women					
National [Women]	-0.053	[-0.176, 0.07]	0.397	611	Epanechnikov
National [Women]	-0.069	[-0.189, 0.051]	0.260	573	Uniform
National [Women]	-0.046	[-0.172, 0.08]	0.473	625	Triangular
Panel B3: Men					
Nationa [Men]	0.044	[0.013, 0.075]	0.006	9500	Epanechnikov
Nationa [Men]	0.033	[0.005, 0.062]	0.021	9755	Uniform
Nationa [Men]	0.051	[0.019, 0.083]	0.002	9473	Triangular
Panel C1: All					
Regional	-0.047	[-0.088, -0.006]	0.024	5309	Epanechnikov
Regional	-0.047	[-0.089, -0.005]	0.028	4688	Uniform
Regional	-0.045	[-0.086, -0.005]	0.029	5633	Triangular
Panel C2: Women					
Regional [Women]	-0.301	[-0.497, -0.105]	0.003	231	Epanechnikov
Regional [Women]	-0.308	[-0.509, -0.107]	0.003	215	Uniform
Regional [Women]	-0.292	[-0.485, -0.099]	0.003	243	Triangular
Panel C3: Men					
Regional [Men]	-0.039	[-0.081, 0.003]	0.070	5006	Epanechnikov
Regional [Men]	-0.043	[-0.085, 0]	0.048	4651	Uniform
Regional [Men]	-0.038	[-0.08, 0.003]	0.072	5339	Triangular

Note: The table displays the effect of narrowly forfeiting the deposit on the recontest rate for all parties and candidates. We employ a regression discontinuity design with alternative kernels as a robustness check. We leverage the discontinuity created by the *deposit rule*. We study the effects of falling *just* above or below the threshold (those who fail to secure one-sixth of the votes cast in a race and consequently lose their deposit.) and its impact on running in the subsequent elections. Specifically, we compare the candidates who just fall above or below the deposit rule threshold and whether they contest (dummy variable) in the subsequent elections. The main estimation procedure was conducted using triangular kernels, as outlined by [Calonico et al. \(2017\)](#).

Table A12: Jackknife RD Results
(top five regional parties)

	SP	BSP	PRAP
Effect estimate	-0.272	-0.287	-0.307
95% CI	[-0.469, -0.075]	[-0.482, -0.092]	[-0.502, -0.112]
Robust p-value	0.007	0.004	0.002
Bandwidth (votes)	7450.800	7690.012	7751.911
N (inside BW)	228	231	228
N (total)	406	409	414

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top five regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A13: Jackknife RD Results
(top five regional parties)

	1	2	3
	TDP	DMDK	major reg. omit
Effect estimate	-0.298	-0.292	-0.232
95% CI	[-0.491, -0.105]	[-0.486, -0.097]	[-0.459, -0.005]
Robust p-value	0.002	0.003	0.045
Bandwidth (votes)	8327.112	7668.350	5512.345
N (inside BW)	239	240	165
N (total)	422	423	318

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top five regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A14: Jackknife RD Results
(top ten regional parties)

	SP	BSP	PRAP	TDP
Effect estimate	-0.272	-0.287	-0.307	-0.298
95% CI	[-0.469, -0.075]	[-0.482, -0.092]	[-0.502, -0.112]	[-0.491, -0.105]
Robust p-value	0.007	0.004	0.002	0.002
Bandwidth (votes)	7450.800	7690.012	7751.911	8327.112
N (inside BW)	228	231	228	239
N (total)	406	409	414	422

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top ten regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A15: Jackknife RD Results
(top ten regional parties)

	DMDK	INLD	MDMK	JD(S)
Effect estimate	-0.292	-0.300	-0.290	-0.321
95% CI	[-0.486, -0.097]	[-0.495, -0.106]	[-0.478, -0.103]	[-0.511, -0.13]
Robust p-value	0.003	0.003	0.002	0.001
Bandwidth (votes)	7668.350	8241.620	8153.006	7364.088
N (inside BW)	240	240	246	237
N (total)	423	426	427	428

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top ten regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A16: Jackknife RD Results
(top ten regional parties)

	PMK	AITC	major reg. omit
Effect estimate	-0.291	-0.291	-0.202
95% CI	[-0.484, -0.097]	[-0.485, -0.096]	[-0.459, 0.055]
Robust p-value	0.003	0.003	0.123
Bandwidth (votes)	7802.545	7586.516	4171.144
N (inside BW)	238	241	126
N (total)	429	430	263

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top ten regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A17: Jackknife RD Results
(top fifteen regional parties)

	SP	BSP	PRAP	TDP
Effect estimate	-0.272	-0.287	-0.307	-0.298
95% CI	[-0.469, -0.075]	[-0.482, -0.092]	[-0.502, -0.112]	[-0.491, -0.105]
Robust p-value	0.007	0.004	0.002	0.002
Bandwidth (votes)	7450.800	7690.012	7751.911	8327.112
N (inside BW)	228	231	228	239
N (total)	406	409	414	422

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top fifteen regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A18: Jackknife RD Results
(top fifteen regional parties)

	DMDK	INLD	MDMK	JD(S)
Effect estimate	-0.292	-0.300	-0.290	-0.321
95% CI	[-0.486, -0.097]	[-0.495, -0.106]	[-0.478, -0.103]	[-0.511, -0.13]
Robust p-value	0.003	0.003	0.002	0.001
Bandwidth (votes)	7668.350	8241.620	8153.006	7364.088
N (inside BW)	240	240	246	237
N (total)	423	426	427	428

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top fifteen regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A19: Jackknife RD Results
(top fifteen regional parties)

	PMK	AITC	ATDP	GGP
Effect estimate	-0.291	-0.291	-0.293	-0.293
95% CI	[-0.484, -0.097]	[-0.485, -0.096]	[-0.486, -0.099]	[-0.488, -0.098]
Robust p-value	0.003	0.003	0.003	0.003
Bandwidth (votes)	7802.545	7586.516	7635.596	7535.234
N (inside BW)	238	241	243	239
N (total)	429	430	430	430

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top fifteen regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

Table A20: Jackknife RD Results
(top fifteen regional parties)

	SHS	LJP	NCP	major reg. omit
Effect estimate	-0.316	-0.282	-0.285	-0.214
95% CI	[-0.517, -0.116]	[-0.473, -0.09]	[-0.476, -0.093]	[-0.492, 0.063]
Robust p-value	0.002	0.004	0.004	0.130
Bandwidth (votes)	7479.576	8117.462	8049.526	4108.912
N (inside BW)	235	241	243	111
N (total)	430	431	431	220

Note. Table displays the jackknife RD estimates of the effect of deposit loss on regional party women candidates' rerunning rates. The parties omitted in each iteration include the top fifteen regional parties in terms of the number of candidates they contribute to the sample. The omitted party is indicated at the top of each column. All results are produced using `rdrobust`.

A.8 List of National and Regional Parties

Throughout our analysis, we adopt the party categorization outlined by [Agarwal et al. \(2021\)](#), which classifies political parties into: ‘National Parties,’ ‘State-based Parties,’ ‘Local Parties,’ and ‘Independent candidates.’ National parties are those parties that contest and have an active presence in multiple states. [Agarwal et al. \(2021\)](#) categorize regional parties as those “parties contesting in several states but being principally associated with one state” as “state-based parties, even though they may meet the ECI definition of national party”. It must be noted classification of political parties by [Agarwal et al. \(2021\)](#) differs from that of the Election Commission of India. However, upon inspecting the two types of categorizations we choose to present the former in our analysis. That said, our results are robust to the alternative definitions.

A.8.1 National Parties

The complete list of national parties are: CPI, SWA, INC, JS, PSP, SOC, CONG, CON, CPM, SSP, BJS, BKD, JAP, NCO, SOP, BLD, SP, JNP, INC(I), INC(U), BJP, JNP(JP), JNP(S), LKD, ICS, JD, SAP.

A.8.2 Regional Parties

The complete list of regional parties are: REP, ACK, RCP, HLC, JP, NJP, HMS, HM, NC, PP, DNC, RRP, FB, PWP, LSS, AD, HLS, HF, SUC, SBP, WPI, RSP, GL, PF, KC, ML, RPI, AHL, JKD, UGF, MAG, UGS, JKN, KEC, JAC, PFR, ADM, ADS, JTP, BAC, FBL, VHP, LTC, SHD, PHJ, UFN, NNO, DMK, SAD, RPA, PJP, JMD, USP, KMP, MAP, PBI, LKD, PML, NDF, PBK, BJD, BBC, RCI, ISP, MUL, UTC, JKP, SSP, SML, RPK, STS, SOP, PTC, HSD, HJS, NMG, BAS, LRP, JMI, SHS, MRP, ILP, TUS, IAL, KNA, MHU, UDF, ADK, SSD, RSM, KLP, RMP, MLO, KCP, NCN, TCD, JNP, PPA, HPD, PPC, SCR, SJP, SPC, JNP(SC), JMM, JNP(SR), KEC(J), IML, MPP, MUM, RPI(K), NND, ICJ, PDC, PC, TNC, TDP, DDP, LKD(A), JPP, ICS(SCS), NPP, HPU, AHL(A), MIM, BSP, LKD(B), MCPI, CPI(ML), GLP, GBS, KRS, BRP, MNF, NPC, RIS, DPC, ADK(JR), ADK(JL), IFT, UKD, BKUS, HJD, IPF, BJS, SOP(L), IP, YVP, DMM, KSM, MMS, MHPC, UCPI, PMK, IDP, SAD(M), ICJ(TG), UMF, AGP, URC, NAGP, PTCA, ADC, GGS, YAD, HVP, PMM, TMK, TMM, AMI, TMUL, SP, HKP, CMM, GGP, KMGR, AHL(CAM), HPSD,

PDI, JD(B), AMB, TJS, MBT, ADMK, SAP, UGDP, KRRS, JD, SDF, BPP, CPI(ML)(L), SJP(R), JMM(M), JMM(S), CSP-JSD, BBMS, HJP, ICS, FPM, OCP, UMFA, AIIC(T), PDP, INL, BLP, MDMK, MGRK, HRPI, UKKD, BKKGP, NLP, KVP, NDP, ABGL, FB(S), JKP(N), PJM, INLD, LS, LD, AIRJP, HVC, AJBP, CSP, SWJP, SVSP, GNC, HPDP, UDP, PDM, HSP, RJD, MNF(N), MZPC, MDF, RJVP, ABJS, PPOI, BJRP, MCPI(S), ATDP, NTRTDP(LP), JD(S), AC, NCP, GMLP, GRCP, JD(U), BRPP, BBM, PWPI, BJC(R), MCO, BPSP, KSP, MSCP, AITC, ASDC(P), PDF, UBNLF, AKMDMP, TMC(M), PMC, PB, TDK, MNK(PLP), MADMK, PDS, LJNSP, GNLF, BNP, JKAL, JKNPP, DRPP, MNC, DBSM, LBP, BSP(A), RLD, RTKP, SD, ABLTC, UJP, AB, ABHM, LMHP, RSMD, MDP, KHNAM, ZNP, NPF, NDM, RSNM, ABCD(A), LPSP, INPT, TRS, BCUF, RPI(KH), RPC(S), ANC, KNDP, JSS, PRBP, RPI(A), SJP(M), RSPS, ABHS, STBP, OGP, BMVP, SHRP, LJP, KVSP, AP, ES, JVC, AJSU, JKPP, AUFD, ASDC, AGP(P), DIC, DMDK, LKPT, AIFB, IPFB, SGF, CPI(ML)(L), ADSP, BJSH, ABMSD, NNLP, BGTD, SBSP, BSKP, IJP, PMSP, NLHP, UPUDF, IEMC, JKDPN, JKDPD, JKANC, KCVP, SKP, PRSP, GMS, HSPDP, MPC, UNDP, LSWP, PRAP, TPPP, LSP, AIMIM, HJCBL, HASWP, AJSUP, JVM, RAKAP, LTSD, MNS, SWP, BREM, SGPP, AIUDF, BOPF, SUCI, SDPI, SJD, MMKA, IJK, AIJMK, VCK, AIPPMR, TMMK, KNMK, UMK, PDCI, KPP, RADP, JHAP, GSRP, GVP, GPP, BNJD, HLP, CPI, HiSP, PPOP, PnPP, JaKP, RSBP, MD, PECP, RUC, QED, RLM, JPS, RPD, UtRM, UKDP, RLNP, CSM, NPEP, AAAP, KJP, BSRCF, BA S D, ABGP, BSCP, JND, BYS, JGP, MEDP, IPFT, YSRCF, JASPA, STR, JBSP, PREP, MVA, BVA, SKM, JAPL, SKLP, GJDS, HAMS, RSWD, HVD, JDR, JHP, BDJS, AINRC, SUNP, KMDK, TAVK, MAMAK, CPM, GSM, BMUP, VPP, INCP, AINHCP, GJCP, MANPA, BTP, JANSF, RADM, LOGAP, SWAP, MNDF, NEINDP, PRJA, LIP, RMPOI, NINSHAD, IBUSF, AIMEP, BJSC, NmC, NDPP, TLSP.