

# Financial disclosure and political selection: Evidence from India<sup>\*</sup>

Raymond Fisman<sup>†</sup>

Florian Schulz<sup>‡</sup>

Vikrant Vig<sup>§</sup>

This version: May 2019

## Abstract

We study the effects of financial disclosure on the selection of politicians, exploiting the staggering of Indian state assembly elections to identify the effect of disclosure laws, combined with India's 2016 demonetization. We document a 13 percentage point increase in exit of incumbents post-disclosure, indicating that disclosure requirements had a large effect on politician self-selection. This selection coincides with a higher win probability for remaining incumbents, suggesting that voters interpreted the selection as positive. In elections around demonetization, politician exit is highest for post-demonetization elections, indicating a complementary effect of disclosure requirements and policies that limit hidden wealth.

*JEL Classification:* D72; D73; D78

*Keywords:* Information disclosure; Political selection; Indian politics; Demonetization

---

<sup>\*</sup>Acknowledgments: We would like to thank Arkodipta Sarkar, Andrew Siegel, as well as participants at Harvard's positive political economy seminar, HEC Montreal, Massachusetts Institute of Technology, University of Chicago, and the University of Southern California for their helpful comments and suggestions.

<sup>†</sup>Boston University. Email: [rfisman@bu.edu](mailto:rfisman@bu.edu)

<sup>‡</sup>University of Washington. Email: [fschulz@uw.edu](mailto:fschulz@uw.edu)

<sup>§</sup>London Business School. Email: [vvig@london.edu](mailto:vvig@london.edu)

# 1 Introduction

The influence of information on the behavior of elected officials by voters is a central element to agency theory in political economy. In theory, a better-informed electorate can mitigate moral hazard among incumbents (e.g., Barro (1973); Ferejohn (1986)), elect more honest or competent politicians (Besley (2005)), and even encourage positive self-selection by politicians themselves (Dal Bó et al. (2016)).

With motivations of greater transparency and accountability, many countries require that politicians provide financial asset disclosures on taking office.<sup>1</sup> In some cases, including that of India which is our focus here, public asset disclosures are required even to stand for office.

There is little evidence to date on whether these disclosure laws have any effect on political selection, whether via self-selection of those who choose to run for office or the selection of politicians by voters. Interest in such questions has increased with the release of the Panama Papers in early 2016 (and the Paradise Papers in 2017), which brought unexpected transparency to the finances of politicians in a number of countries. The disclosures from the leak resulted in the resignation of Iceland’s prime minister and the shaming of many others. Great Britain’s Prime Minister David Cameron initially resisted discussing his finances and called them a private matter. His reaction suggests a negative consequence of disclosure requirements: they may discourage otherwise qualified politicians – who wish to keep their finances out of public view – from taking office.

The unanticipated revelations via the Panama Papers also highlighted another potential challenge to the efficacy of financial disclosure rules, by revealing assets that had previously been left off politicians’ official disclosures. For example, it brought to light undisclosed assets held by Pakistani Prime Minister Nawaz Sharif, leading to his resignation and subsequent prosecution. This suggests that steps to increase the cost of hiding assets may be complementary to asset disclosure rules.

---

<sup>1</sup>See Djankov et al. (2010) for a detailed list.

In this paper, we aim to provide the first (to our knowledge) empirical analysis of the effect of asset disclosure laws, as well as the complementary effect of a government reform that made it more difficult for politicians to underreport their assets. We do so by examining the introduction of financial disclosure requirements for Indian state-level Members of the Legislative Assembly (MLAs), and the subsequent “demonetization” event that raised the cost of underreporting financial assets. More specifically, we study the selection of politicians (both self-selection and selection by voters) around a Supreme Court ruling on citizens’ right to information (RTI) that, since November 2003, has required all candidates standing for state or national office to disclose the value and composition of their assets. Disclosure is mandatory, with punitive consequences for misreporting, and asset disclosures are publicized via civil society organizations such as the Association for Democratic Reforms (ADR) as well as the media. We combine this disclosure “event” with the Indian government’s unexpected demonetization, implemented in November 2016, which made it more difficult for politicians (and others) to hide “black money.”

Asset disclosure requirements went into effect on November 2003, in the midst of the 2002-2004 wave of state elections. As a result, 11 states held elections in the 18 months prior to the change, and 11 states held elections in the 18 months following. We argue that a comparison of changes in pre- and post-disclosure states allows us to credibly distinguish the effects of disclosure rules from general time trends.

In the first post-RTI period (when asset disclosures were first required), we find no effect on the fraction of MLAs standing for reelection (referred to henceforth as the “rerun rate”). Note that these were disclosures that revealed the level, but *not* the growth, in assets. In the second post-RTI period, however, we find a large (13 percentage point) decline in the rerun rate. (We emphasize that our empirical analysis exploits differences in the timing of (pre-determined) elections across states, to compare the trajectories of states that held elections just before the passage of the RTI Act versus those with elections just after.) We find no effect of disclosure laws on the willingness of runner-up candidates to stand again for election. The difference in patterns between winners and runners-up emphasizes that, among otherwise

comparable candidates, disclosure reduces the rerun probability *only* for elected candidates.

If disclosure primarily discouraged candidates from standing for election due to privacy concerns, we would expect to observe at least some immediate impact, and also an effect on non-incumbent candidates. Our results are more easily reconciled with incumbents self-selecting out of office rather than arousing suspicions of corruption by revealing asset accumulation in office.

We next take advantage of a second shock to explore whether asset disclosure rules are complementary to efforts that make it more difficult for politicians (and others) to hide their assets. On November 8, 2016, the Indian government announced that all large (500 and 1000 rupee) bank notes were to be recalled, with the stated purpose of forcing the disclosure of hidden assets. While the so-called demonetization policy had mixed results overall (for example causing cash shortages that may have negatively impacted economic activity), most of the “black money” in circulation was deposited in bank accounts or exchanged for new notes as a result of demonetization. Given the limits on allowable conversions into new notes, we argue that the paper trail created by bank deposits made it more difficult for politicians to avoid disclosing their wealth in the following election cycle. (There is some evidence that the constraint on cash conversion was binding in general, and for politicians in particular. As we note below, most old currency was converted into bank deposits rather than cash, and there are numerous instances of enforcement of those trying to launder old bank notes. Among the political class, the highest profile case involved the arrest of Manish Sharma, a candidate for the national parliament from West Bengal, who was arrested while trying to convert old notes worth nearly US\$50,000 into new currency in December 2016.<sup>2</sup>)

Consistent with demonetization serving to complement the effects of disclosure, we find that, among politicians in the 10 “post-disclosure” states in our dataset, there is a significantly lower rerun rate among those in states with elections that follow demonetization. (Our findings on the impact of demonetization – which occurred at a different point in the election cycle

---

<sup>2</sup>See for example, “BJP leader Manish Sharma arrested with new notes worth Rs 33 lakh,” Firstpost India, December 7, 2016.

from the implementation of disclosure rules – also help to mitigate concerns that our main results are simply picking up the effects of other political factors coincident with disclosure changes. We return to this issue in discussing the main threats to identification below.)

We provide additional analyses which suggest that the increased exit rate of incumbents was the result of positive self-selection of incumbent politicians. First, we show that while incumbents faced an electoral disadvantage in the earlier part of our sample (consistent with prior work by, for example, Linden (2004) and Anagol and Fujiwara (2016)), this incumbency disadvantage is greatly reduced in the *second* election that follows the passage of the RTI Act, i.e., in the same election when rerun rates decline sharply. This suggests that politicians who chose to continue standing for election post-RTI were preferred by voters, relative to incumbents in the pre-RTI era. Second, we find that the relationship between recent economic growth and incumbent reelection is attenuated with the introduction of disclosures, which we interpret as further suggestive evidence that disclosures provide information to voters that may be used to evaluate candidates.

Our work contributes most directly to research on the effects of increased transparency and accountability on the quality of government. Notable contributions include several papers that exploit experimental or quasi-experimental variation in information disclosure to study the effects on incumbent reelection. These include Ferraz and Finan (2008), who focus on the impact of corruption audits in Brazil, and Casey (2015), who studies the effect of information on ethnic allegiances in Sierra Leone.

A number of studies have used asset disclosure data to study politicians’ wealth accumulation.<sup>3</sup> These papers exploit the data generated by disclosure laws to study politicians’ wealth, rather than studying the effects of disclosure itself.

Djankov et al. (2010) document the existence of disclosure laws and the extent of compliance using cross-country data, and examine the correlates of these variables. Consistent with our findings, they find that public disclosure is associated with better government and

---

<sup>3</sup>See, for example, Fisman, Schulz, and Vig (2014) for an analysis of wealth accumulation by Indian MLAs; Folke, Persson, and Rickne (2015) for Sweden, and Eggers and Hainmueller (2009) for the United Kingdom.

less corruption. We are, to our knowledge, the first to go beyond cross-country correlations in examining the impact of disclosure laws on the selection and behavior of politicians. Relative to this earlier work, we provide a more compelling approach to identification, and can also assess the channels through which disclosure impacts government performance.<sup>4</sup>

Finally, we contribute to the discussion on the determinants of politician selection and performance. Ferraz and Finan (2009), Gagliarducci and Nannicini (2013), and Fisman et al. (2015), for example, examine on the effect of bureaucratic pay on the quality of candidates, as well as their performance once in office. Besley et al. (2013) and Banerjee and Pande (2007) consider the role of competition, both within and across parties, while Beath et al. (2014) study the role of electoral rules, exploiting a field experiment in Afghanistan. We share with many of these papers an emphasis on microeconomic identification, taking advantage of the timing of the RTI Act’s passage and the implementation of demonetization to credibly identify the effects of disclosure on political selection.

## 2 Background and Data

### 2.1 Background on asset disclosure laws, demonetization, and their potential impact on political selection

Prompted by a general desire to increase transparency in the public sector, a movement for freedom of information began during the 1990s in India. These efforts eventually resulted in the enactment of the Right to Information Act (2005), which allows any citizen to request information from a “public authority,” among other types of organizations. During this period, the Association for Democratic Reforms (ADR) successfully filed public interest litigation with the Delhi High Court requesting disclosure of the criminal, financial, and educational backgrounds of candidates contesting state elections. Disclosure requirements regarding politicians’ wealth, education and criminal records were de facto introduced across

---

<sup>4</sup>A number of scholars have examined how greater transparency and information disclosure affect the functioning of government transfer programs. Banerjee et al. (2015), for example, look at the effects of providing Indonesian villagers with more information on a subsidized rice program, while Reinikka and Svensson (2011) examine the impact of publicizing leakage of school fund transfers in Uganda.

all states beginning with the November 2003 assembly elections in the states of Chhattisgarh, Delhi, Madhya Pradesh, Mizoram, and Rajasthan.

Candidate affidavits provide a snapshot of the market value of a contestant's assets and liabilities at a point in time, just prior to the election for which candidacy is filed. In addition to reporting her own assets and liabilities, a candidate must disclose the wealth and liabilities of her spouse and dependent family members. This requirement prevents simple concealment of assets by putting them under the names of immediate family members. Criminal records (past and pending cases) and education must also be disclosed.

Punishment for inaccurate disclosures may include financial penalties, imprisonment for up to six months, and disqualification from political office. While there have been a handful of revelations of politicians' asset misstatements<sup>5</sup> and at least one prosecution (against Jharkhand minister Harinarayan Rai, for failing to disclose assets) for the most part, popular accounts focus instead on the very high level of asset accumulation implied by these disclosures.<sup>6</sup>

High-profile reports of politicians' wealth accumulation began at least as early as November 2008, the first election cycle when asset growth could be calculated from public disclosures. For example, *Tribune India*, an English language daily newspaper, reported on a Delhi Election Watch study on MLAs' wealth accumulation in office. The article observed that: "[The] DEW found that a total of 45 sitting legislators were re-contesting elections and most have shown a huge increase in their assets from 2003 to 2008. The study reveals that of these sitting lawmakers, there are a few who have registered a growth of more than 1,000 per cent in their assets in last five years." The story illustrates both that watchdog groups made immediate use of the data produced by disclosures, and that they found a ready audience for their work.

Finally, the findings of Chauchard et al. (2016) indicate that this information is relevant for Indian voters' opinions of candidates. Using a vignette experiment conducted in 2015 in

---

<sup>5</sup>For example, Firstpost India reported that Himachal Pradesh MLA Anil Kumar failed to declare ownership of a pair of properties in his 2007 disclosure.

<sup>6</sup>See, for example, "How the political class has looted India," *The Hindu*, July 30, 2012, [<http://www.thehindu.com/opinion/lead/how-the-political-class-has-looted-india/article3700211.ece>].

the northern state of Bihar, Chauchard et al. (2016) show that voters associate politicians' asset accumulation very directly with corruption, and voice strong disapproval of it; they do not, however, find that a politician's initial wealth affects voters' evaluations. Based on these results, it is plausible that information on incumbents' wealth accumulation could impact voters' choices.

None of the preceding discussion rules out the existence of under-reporting or otherwise misleading disclosures. However, overall it suggests that disclosures included at least *some* information on candidate attributes that appeared to be relevant to voters and, furthermore, that this information was then communicated to the public via the media and civil society organizations.<sup>7</sup>

The possible existence of under-reporting suggests the relevance of a second unanticipated shock that affected the ability of politicians and others to hide their assets. On November 8, 2016, India's Prime Minister Narendra Modi announced, in an unscheduled live address on national television, that all 500 and 1000 rupee bills would be invalidated that day at midnight, and that bill holders would have 50 days to exchange their notes for new currency, or deposit old notes in bank accounts. The stated purpose of this "demonetization" was to curtail black market transactions and limit corruption.

About 90 percent of the old bills were deposited in banks (99 percent of the old bills reentered the banking system overall), plausibly making it much more difficult for cash assets to remain undisclosed. We thus argue that demonetization serves as a second shock to politicians' willingness to run for office by reducing opportunities for misreporting.

---

<sup>7</sup>Taking account of noisy or misleading disclosures could in fact bias our results in either direction. To the extent that they are recognized as such by the public, they would bias our analysis against finding any relationship between disclosure and political selection. If ability to hide assets is positively correlated with ability to win elections, the bias may go in the other direction. While we cannot rule out the latter possibility, our results on demonetization – which increased the cost of hiding assets, and decreased rerun rates – suggest that the existence of hidden assets more plausibly biases our analysis against finding a disclosure-selection relationship.



## 2.2 Data

### 2.2.1 State Assembly Election Data

The principal data on elections are collected from the Statistical Reports of Assembly Elections provided by the Election Commission of India (ECI).<sup>8</sup> Legislative Assembly elections are held regularly in all of India’s 28 states as well as in two Union Territories (Delhi and Puducherry), and Members of the State Legislative Assembly (MLAs) are elected from each of the state’s assembly constituencies (ACs) in first-past-the-post voting.

The average electoral cycle is five years. Critical to our identification strategy (both for the introduction of disclosure laws as well as demonetization), elections are staggered across states with at least some elections being held in almost every year.

It is rare for elections to diverge from a cycle of exactly five years, alleviating concerns about the sorting of elections around the passage of disclosure requirements. For example, all of the states that held elections in November 2003 (Chhattisgarh/Madhya Pradesh, NCT of Delhi, Rajasthan, Mizoram) also held elections in the same month 5 years earlier (November 1998). The same is true for the states with elections in February 2003 (Himachal Pradesh, Meghalaya, Nagaland, Tripura) which all had previous elections in February 1998. (Additionally, election dates are set well in advance, making it that much less likely that sorting would be a concern.)

For each state and union territory, we collect data from all available reports beginning up to five elections prior to the first election with mandated disclosure of candidate affidavits (henceforth referred to as election  $e(1)$ ). Table 1 provides an overview of the state assembly elections in our sample, along with some general descriptive statistics. For 23 of the 30 states, we observe three elections following the implementation of disclosure requirements.

Overall, the data consist of 31,999 assembly constituency elections, comprising a total of 317,899 candidate observations with information on candidate name, gender, party, and vote

---

<sup>8</sup><https://www.eci.gov.in/past-elections-statistics/>

outcome, as well as information on constituency-level reservation status (Scheduled Caste (SC), Scheduled Tribe (ST), or “General”)<sup>9</sup>, voter turnout, and electorate.<sup>10</sup> For post-2003 elections, reports also include candidate age and caste category (i.e., Scheduled Caste, Scheduled Tribe, or General). On average, each constituency covers an electorate of about 149,000. Voter turnout in ACs averages 65.71 percent (standard deviation of 13.65 percent) and five percent of candidates are women.

**Matching Candidates:** For each assembly constituency election, we match winners and runners-up with candidates who contest in the subsequent election for that constituency. We begin by employing a fuzzy matching algorithm that accounts for differential spelling of names across elections. Due to the many commonalities across names, in a second step we manually check the set of all probable matches, discarding those matches that prove unlikely to be the same candidate. For example, “A.R.KRISHNAMURTHY” (Santhamarahalli AC in Karnataka election 1999) is not the same candidate as “KRISHNA MURTHY MS” in the subsequent election. On the other hand, “RATHOD ANIL (BHAIYYA) RAMKISAN” and “ANILBHAIYYA RAMKISAN RATHOD (B.COM)” (Ahmednagar South constituency in Maharashtra elections 1999 and 2004) are a match even though the names in the ECI reports are somewhat distinct

After elections during the 1980s, five smaller states experienced reorganizations which resulted in changes in the number and naming of constituencies (for example, Arunachal Pradesh had 30 ACs in the 1984 election and 60 ACs in the 1990 election). We do not attempt to match candidates in those years, which occur decades prior to the policy change of interest in our paper.

---

<sup>9</sup>SC and ST constituencies are reserved for candidates classified as SC or ST, in accordance with a policy introduced to promote the representation of historically under-represented groups. General Caste candidates cannot compete in these constituencies.

<sup>10</sup>We focus consideration on the 133 elections in 22 states for experiment 1 (introduction of financial disclosure requirements), exclusively considering the single winning candidates in Table 5 (18,972 candidates) and the runners-up candidates in Appendix Table A-1 (18,902 candidates); and focus on the 10 states with 39 elections for experiment 2 (demonetization shock), exclusively considering the single winning candidates in Table 6 (5,981 candidates) and the runners-up candidates in Appendix Table A-5 (5,980 candidates). Table 1 provides additional details on the elections included in these tests.

Asset disclosure requirements commenced with the November 2003 state elections and all assembly elections had mandatory disclosure of candidate affidavits by 2008. While we match candidates within constituencies prior to disclosure, post-disclosure matching is done within state. This accounts for politicians who choose to rerun but switch constituencies within a state across elections. This is largely necessitated by renumbering and boundary-shifting of constituencies between elections post-2003, and allows for a consistent comparison of rerun probabilities of candidates at  $e(0)$  – the last election prior to disclosure – with rerun probabilities of contestants at  $e(-1)$  and earlier.

This approach may cause an *upward bias* when comparing rerun probabilities of candidates at  $e(1)$  – the first election with disclosure – with rerun probabilities of contestants at  $e(0)$ , since within-state matching is more likely to generate a candidate match than within-constituency matching. Given this upward bias, we argue that our estimates of asset disclosure on rerun propensity (which is negative) are plausibly biased toward zero. (This approach also alleviates possible concerns of increased labor mobility over time and within state that would otherwise not be accounted for in within-constituency matching.<sup>11</sup>)

For candidate  $i$  in state  $s$  who stood for election at time  $t$ , we define the indicator variable  $RunNext_{ist}$  to denote whether  $i$  was also a candidate in the next election. We define the state-election level variable  $Disclosure_{st}$  to denote whether asset disclosures are required at time  $t$ .

Recall that we will examine the impact of disclosure on both rerun probabilities as well as electoral success conditional on standing for reelection. In our rerun analysis, our main interest will be in studying the *RunNext* probabilities of MLAs. In a set of placebo regressions, we will examine the rerun decisions of politicians who stood for office at  $t$  but came in second (the “runners-up” sample). To study the impact of disclosure on electoral success, we define  $Winner_{ist}$  as an indicator variable denoting that candidate  $i$  in state  $s$  was elected at time  $t$ .

Over the entire sample of assembly constituency elections, winners on average rerun 72.66

---

<sup>11</sup>We further verify that *across*-state mobility is virtually non-existent, i.e., politicians are state-bound.

percent of the time while runners-up rerun 42.29 percent of the time. Focusing on the restricted sample of constituencies in which both the incumbent and runner-up stand for office in the next election, in the pre-disclosure period the incumbent is 5.7 percentage points less likely to win than the runner-up. In the post-disclosure period, incumbents are 4.1 percentage points *more* likely to win.<sup>12</sup>

We are able to observe detailed candidate characteristics only in the post-disclosure period, making it impossible to examine the effect of disclosure on wealth accumulation. For the purposes of this paper, we thus focus primarily on variation in the state-level introduction of financial disclosures rather than variation in the contents of the disclosures themselves. We utilize the affidavits here for the purpose of matching candidates across elections, at the state level, in the post-RTI era as necessitated by the redistricting that took place in 2008. These affidavits were gathered from either the GENESYS Archives of the Election Commission of India (ECI)<sup>13</sup> or the various websites of the Office of the Chief Electoral Officer in each state. (A sample affidavit is shown in the Appendix. For further details, see Fisman, Schulz, and Vig (2014).)

### 2.2.2 Additional state and local variables

We will include a number of variables in our analysis that reflect constituency, district, or state-level attributes. In particular, we obtain local GDP information from Indicus Analytics, an Indian subsidiary of Nielsen that offers data and economic analysis services. These district-level data, which are built up from both government data and surveys across a range of sectors, are employed by a range of users, from investors to marketing firms. Their data are also used by a number of government agencies, including the Planning Commission and the Reserve Bank of India. These data are available for 2002 - 2015. To put these data in a per capita form, we interpolate district-level populations using the Censuses of 2001 and 2011, assuming

---

<sup>12</sup>If we use the entire sample of recontesting winners and runners-up (i.e., we do not condition on both winner and runner-up recontesting in the same constituency), the pre-disclosure incumbency advantage is 1.6 percentage points, whereas the post-disclosure advantage is 9.2 percentage points.

<sup>13</sup><https://www.eci.gov.in/candidate-political-parties/link-to-candidate-affidavits/>

constant percentage growth.<sup>14</sup> Given the challenges in constructing local GDP measures, analyses using these figures should be treated with some caution.

We include a number of additional variables (including literacy rates; state-level GDP level and growth; SC/ST concentration; and measures of corruption) to compare states that held elections just before versus just after disclosure rules went into effect, and to examine the heterogeneity of responses to disclosure. We provide definitions and sources for these variables in Table 2. Of particular importance, we use constituency population data from the 2001 Census (used by the Delimitation Commission to determine constituency boundaries) to generate *PopDev*, the absolute deviation of constituency population from the district average. This is the variable that Iyer and Reddy (2013) show is highly predictive of extent of redistricting. Following Iyer and Reddy (2013), we will additionally include interactions for *Population* and *Population\_Squared* as an alternative approach to controlling for delimitation propensity.

### 3 Hypotheses and Empirical Strategy

#### 3.1 Discussion of Hypotheses

There are several ways that disclosure requirements could, in theory, impact a politician’s decision to run for office. In this section we lay out the primary effects that one could potentially expect, as a way of guiding the interpretation of the results in the next section. In the Appendix, we provide a formal model which illustrates how the collection of findings we report in our empirical analysis can be reconciled with a straightforward and intuitive model of political selection.

As we note in the introduction, if disclosure raised concerns over privacy and/or voters

---

<sup>14</sup>While district-level income data are partly available via government websites, these data are notoriously unreliable, as reflected in the wide within-district variance in GDP growth rates. It is not uncommon to find districts in which growth veers from double-digit growth to double-digit decline from year to year. To take one extreme example, Jalor district in Rajasthan, according to government statistics, had GDP growth in the years 2001-2005 of 40.0, -24.3, 46.4, and -14.7 percent. This works out as a five year growth rate of just over 7 percent, but with unrealistically wild variation from year to year.

took a politician’s *level* of wealth as a signal of impropriety, we would expect politicians to be more likely to opt out of running for reelection as soon as disclosure is required. Additionally, recall that, beyond a description and valuation of assets, disclosures included information on candidate education and criminal activity (including convictions as well as cases pending). If politicians opt out of running because they do not wish to reveal criminal behavior, or because they fear information on education or criminality will reduce their chances of winning (and hence they do not wish to pay the cost of running), we would once again anticipate an immediate impact of disclosure on re-run rates. Furthermore, particularly for non-financial revelations, we would expect this effect to be comparable for incumbents and runners-up in the prior election.

However, our expectation of an immediate impact of revealing one’s wealth (or criminality or education) is tempered by the findings of Banerjee et al. (2011), which finds that voters are unresponsive to information about an incumbent’s wealth *level*, criminal record, or education (the paper does not provide information on asset growth), and also the results of Chauchard et al. (2016), which shows via a vignette experiment that voters disapprove of politicians with high wealth accumulation, but do not disapprove of politicians with high wealth levels.

If voters respond to politicians’ asset *growth* (as an indication of politician rent extraction while in office), we expect a one period lag in politicians’ response to disclosure rules: a snapshot of a politician’s assets only shows whether he is wealthy, not whether he became wealthy while in office.

In the context of such models, it is natural to conceive of the implementation of disclosure rules as complementary to policy changes that bolster the credibility of disclosures. We interpret demonetization as one such policy shock, given that it arguably made it harder to politicians (and others) to hide financial assets. We thus assert that the impact of disclosure rules will be more pronounced after demonetization.

The preceding discussion also suggests that there is an ambiguous effect of disclosure on the quality of politicians that choose to stand for office. If privacy concerns lead high-quality

politicians to opt out of political life as a result of financial disclosure, the resultant negative selection may lead to lower reelection rates of those who do remain in politics. However, if rent-seeking politicians self-select out of politics, the improved pool of incumbent politicians will have relatively high reelection probabilities (coincident with the change in rerun probability, whether one or two periods after the passage of disclosure rules).

Finally, since financial disclosure serves as an alternative source of information on candidate quality, voters may plausibly attend less to other (noisy) measure of candidate quality when relevant information on politician wealth (or growth in wealth) becomes available.

In our empirical analyses, we will provide evidence linking disclosure rules to politician rerun rates and (conditional on standing for reelection) election rates. These findings will help to adjudicate among the disparate and potentially counteracting effects we describe above.

### 3.2 Empirical Design

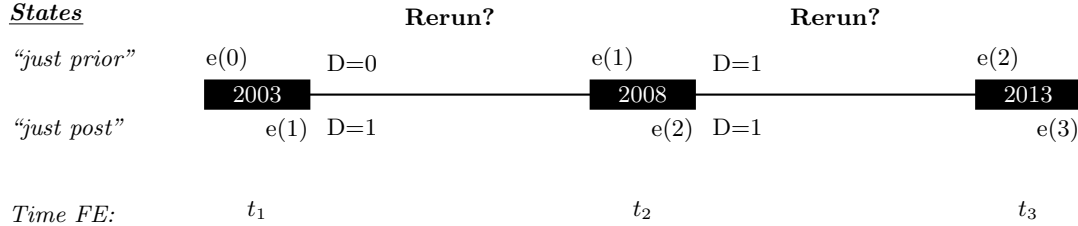
Our main empirical challenge is distinguishing the effect of disclosure on incumbent exit and reelection rates from general time trends. As noted in the preceding section, the precise timing of elections is helpful in making this distinction — if all state assembly elections took place concurrently, it would be impossible to separate the effects of disclosure from the time trends that are evident in the data. Furthermore, the interpretation of our main results as resulting from disclosure (rather than correlated political shifts) is bolstered by our analysis of the second shock to disclosure, the unexpected demonetization that took place in November 2016. We have data on elections for 10 states surrounding the demonetization event, evenly split between pre- and post-demonetization. All 10 states are synced with respect to disclosure laws — all are in their third post-disclosure election cycle when demonetization occurs. (Finally, we argue that it is less likely that correlated political shifts would *also* have so distinct an effect on winners versus runners-up, as we document in our analysis below.)

As we detail in Section 2.1, five states held elections concurrent with the advent of asset disclosure requirements (Chhattisgarh, Delhi, Madhya Pradesh, Mizoram, and Rajasthan) in

November 2003. In just the eight months preceding November 2003, four other states held elections. In all of these cases, the election schedule was set well before the timing of disclosure requirements, which were created as a result of a court ruling, became apparent. A total of 22 states held elections in the 36 month window around the November 2003 implementation of disclosure requirements, 11 in the 18 months prior to this date (*just before* states), and 11 in the 18 months that followed (*just after* states). See Table 1 for details on timing.

Table 3 compares the basic attributes of *just before* and *just after* states. We observe no significant differences between the two in terms of preexisting attributes, including literacy, income, corruption (as measured by Transparency International’s state-level ranking), population, Scheduled Caste concentration, or voter turnout, or changes in these attributes (e.g., GDP and turnout growth). This lack of differences in observables between the two groups lends credibility to our claim that sorting of elections around November 2003 is essentially random.<sup>15</sup>

Figure 1: **Outline of Empirical Strategy**



Notes: This figure lays out the general identification strategy employed in our analysis focusing on the subset of states that held elections in 2003, *just prior* to and *just post* the implementation of financial disclosure requirements for contestants in state assembly elections. Our variable of interest is the rerun decision (incumbent selection) of MLAs elected at  $e(\tau)$ , depending on whether re-contesting required the revelation of politician asset *growth* ( $D = 1$ ) or not ( $D = 0$ ). The timing of elections further allows us to control for general time trends using time period fixed effects.

Figure 1 lays out the general identification strategy employed in our analysis, focusing on the subset of states that held elections in 2003, *just prior* to and *just post* the implementa-

<sup>15</sup>Note that Uttar Pradesh constitutes a significant fraction of the *just before* constituencies in our sample. Our findings on the effects of disclosure are slightly stronger if we omit it from our analysis. Furthermore, given that turnout and GDP per capita are low in Uttar Pradesh, its exclusion leads to better balance on observables.



tion of financial disclosure requirements. Observe, in particular, that at calendar time 2003, politicians in some states had yet to face disclosure requirements, while in others — where the election occurred just months later — disclosures were already required. By 2008, all state assembly candidates had to file asset disclosures. However, candidates in *just post* states were making disclosures for the second time, thus revealing their asset accumulation while in office, while candidates in *just prior* states made disclosures for the first time, revealing only their wealth levels. Our estimating equation exploits this difference in the timing of elections to separate disclosure effects from time trends. As noted above, this timing of demonetization in the election cycle is distinct, occurring amidst 10 elections that all occurred in the third post-disclosure period.

The basic intuition of our analysis of the implementation of disclosure laws is captured in Panel A of Table 4, where we show the *RunNext* probability of MLAs as a function of elections relative to the advent of asset disclosures. Focusing on elections immediately around the introduction of disclosure requirements, we observe an increase in rerun probability between  $e(-2)$  and  $e(-1)$  for the *just before* subsample, for which elections span the years 1993 and 1997. For the *just after* subsample over approximately the same time period (1993 - 1998), we similarly observe a small increase in the rerun rate. (Rerun rates are also very similar for the last election of the 1980s in each group.) This suggests some common time trend between the two groups. However, in 2003 the two sets of states diverge – for politicians in the *just before* subsample elected in 2002-2003 at  $e(0)$ , the probability of standing for reelection continues to increase. By contrast, for those elected in *just after* states in 2003-2004 at  $e(1)$ , there is a steep drop in rerun probability. Interestingly, one election cycle later, MLAs in *just after* states experience a drop in rerun probability. The fact that the drop in rerun probability appears to be timed to election cycles relative to disclosure requirements, rather than timed to calendar date, helps to bolster our claim of a causal effect of disclosure.

In Panel B of Table 4 we show a comparable table to examine the rerun probabilities for runner-up candidates. For this group of “placebo” candidates, we observe no drop in their odds of recontesting, indicating that the decrease in rerun rates for MLAs associated with

disclosure does not reflect a general decline in interest in running for office coincident with the advent of disclosure rules.

Before proceeding to our main specification, we note that Table 4 also shows some divergences between the two subsamples in the first two election cycles in the 1980s (we do not have earlier data to extend the comparison further back in time). This will add noise to the identification of a post-disclosure drop in *RunNext*. While these differences raise some concerns about comparability, they occurred nearly two decades prior to the implementation of disclosure laws, and are driven in large part by large increases in two large “just post” states, Madhya Pradesh and Orissa. These increases led to near-identical rerun rates for the two groups of states by the late 1980s.<sup>16</sup>

In summary, the clear similarity in rerun rates over the three election cycles preceding the disclosure law, combined with the very strong balance between just before and just after states, gives us greater confidence that unobserved differences are unlikely to be driving our results.

Our main specification for examining candidates’ rerun decisions is given by:<sup>17</sup>

$$RunNext_{ist} = \alpha_s + \gamma_t + \beta Disclosure_{st} + \delta' Controls_{ist} + \epsilon_{ist} \quad (1)$$

where  $RunNext_{ist}$  indicates whether a candidate who ran at  $t$  also chose to run for office in the next election, while  $Disclosure_{st}$  indicates that disclosures were required at time  $t$  in state  $s$ . Throughout, we report standard errors clustered multi-way at the state level and at the year level (Petersen (2009), Cameron and Miller (2015)).<sup>18</sup> The specification, by focusing on the rerun decisions of politicians in office, thus assesses whether a candidate’s decision to stand for office is affected by disclosures that would allow the public to infer his asset *growth* while serving in office (since, by standing for reelection, a candidate will provide voters with

---

<sup>16</sup>In unreported analyses, we confirm that our results are not sensitive to using this shorter time period instead.

<sup>17</sup>Results are essentially unchanged if we use a Probit or Logit instead of the linear model.

<sup>18</sup>For robustness, we also estimate bootstrapped standard errors clustered at the state level, using the wild cluster method of Cameron, Gelbach, and Miller (2008). Results are qualitatively similar and available from the authors.

snapshots of wealth from the beginning and end of his term).

The  $\gamma_t$  terms absorb any time-specific effects. We include a total of eight time period fixed effects to account for groupings of elections. For example, there is one time dummy for the period 2002-2004, which allows us to absorb the effects of having an election in this time period. This focuses our comparison of rerun rates of politicians in *just before* versus *just after* states in those years. When we turn to examining the effects of demonetization in Section 4.2, we will use an analogous specification, again identifying the effect of the shock based on the differential timing of elections around the event.

We provide several additional pieces of analysis in Section 4.3 on voter preferences, which involve examining how incumbency disadvantage is affected by disclosure. This will require a more involved discussion on the estimation of incumbency advantage and related issues, which we defer to Section 4.3.1.

## 4 Results

We begin by examining the effect of the implementation of financial disclosures on rerun rates for the full sample. We then focus on the subset of states with elections in the months surrounding demonetization (all of which are “just before” states that are synced with respect to disclosure laws) to explore the effect of this second shock to financial disclosures. The first set of analyses focuses on the existence of disclosure requirements, whereas the second set of analyses emphasize the incremental effect of increasing the cost of hiding assets during the post-disclosure period as a result of demonetization.

### 4.1 Effect of disclosure on running for election

Table 5 provides results on the effect of asset disclosure on politicians choosing to exit. If disclosure laws are effective in providing voters or enforcement authorities with information on rent-seeking, we conjecture that exit rates will increase post-disclosure.

The sample consists of those states that had elections between 2002 and 2004 (listed in Panels (A) and (B) of Table 1). Throughout we include both time period and state fixed effects. In column (1) of Table 5 we estimate that asset disclosures are associated with a 13.2 percentage points decrease in the recontesting probability of legislative assembly members in the second post-disclosure period. This decline, relative to a pre-disclosure base of about 75 percent, is large in magnitude and significant at the 1 percent level. This estimate changes only slightly to 12.7 percentage points ( $p\text{-value} < 0.01$ ) when restricting the sample to only those states with elections in 2003; see Appendix Table A-2.

We add candidate-level controls in column (2), as well as constituency-level controls in column (3). These additions have little impact on the coefficient on *Disclosure*. Finally, in columns (4) and (5) we aggregate data to the district-election and state-election level respectively, using the district- and state-election averages of *Rerun* as the dependent variable. The point estimates (and significance) of the *Disclosure* coefficient are very similar to those obtained in our constituency-level regressions.

In Appendix Table A-3 we repeat these analyses, further setting  $Rerun = 1$  for incumbents who switch from state politics to running for the national legislature, the Lok Sabha (on average, about 12 percent of exiting MLAs contest in the subsequent Lok Sabha election). This leads to a slight increase of our point estimates on the effect of disclosure. In Appendix Table A-4, we further control for district-level fixed effects; results are near-identical to those reported in Table 5. Finally, in Appendix Figure A-1 we show point estimates for the coefficient on *Disclosure* for subsamples that leave out one state at a time to ensure that the results are not driven by a single large, influential state. We find that the point estimates change little across subsamples.

We obtain a clearer sense of the pattern across elections in Figure 3, which plots rerun probabilities of winners and runners-up over election cycle time. In Panel A, we show the pattern for the winners sample, which reveals a drop in recontesting rates in the election immediately following the advent of asset disclosure requirements (e(1)). In the second elec-

tion ( $e(2)$ ), recontesting rates revert to close to their pre-disclosure (i.e.,  $e(0)$ ) level. This reversion is consistent with disclosure resulting in a shift toward candidates who are not averse to making disclosures so that, after disclosure-averse incumbents self-select out, the rerun rate reverts to its preceding level. This interpretation would suggest that the “selection” effect from disclosure dominates the “moral hazard” effect, in which candidates run for office for a single term, expecting to exploit their position then exit before a second disclosure is required. If the moral hazard effect dominated, one would expect a permanent drop in the rerun rate. The preceding discussion is, however, entirely suggestive. It is not possible, based on these patterns alone, to discern whether there is a one-time drop in recontesting rates as certain “types” of candidates opt out of standing for office, or whether there is a permanent drop, coupled with a secular increase in the rerun rate.

In Panel B of Figure 3 we show the analogous patterns for the runners-up sample. Notably, there is no difference between pre- and post-disclosure rerun probabilities. In particular, there is no difference between the probabilities of runners-up standing for reelection at  $e(0)$ ,  $e(1)$  or  $e(2)$ . Thus, while disclosure is associated with a drop in rerun rates of elected politicians, it had no impact on the rerun decisions of runners-up who, we argue, present a credible comparison set of political aspirants.<sup>19</sup>

In Appendix Figure A-2, we show the recontesting rates of MLAs and runners-up for just the 23 states for which we have data from the third post-disclosure election (i.e.,  $e(3)$ ). We observe near-identical patterns to those of the full sample.

## 4.2 Effect of demonetization on running for election

As noted earlier, while the Supreme Court ruling mandated financial disclosures by all candidates for state and national office, assets could potentially be hidden and remain undisclosed.

---

<sup>19</sup>We also present regression results for the rerun decisions of runners-up in Appendix Table A-1. We estimate a precisely estimated zero effect from disclosure across all specifications. Interestingly, the coefficients on other covariates are similar for winners and runners-up: gender, prior candidacy, and incumbency are all significant and of the same sign. Vote margin is positive for winners but (as would be expected) very negative for runners-up.

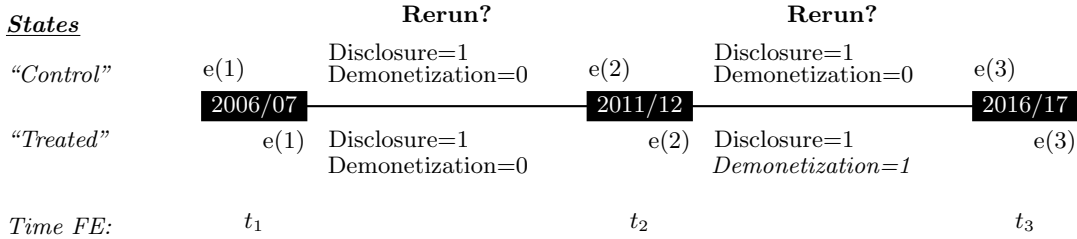
Overall, this would most plausibly lead to a downward bias in our estimates above – politicians would under-report asset returns rather than opting out of office.

As discussed in Section 2.1, demonetization served as a shock to the ability of politicians to hide income so that, by the same argument, we expect that disclosure will have a larger selection effect post-demonetization. That is, disclosure rules and policies that increase the cost of hiding assets are plausibly complements.

We focus our analysis in this section on 10 states which all had their third post-disclosure election in the months surrounding demonetization. Five states (Assam, Kerala, Puducherry, Tamil Nadu, and West Bengal) had elections shortly before the demonetization announcement (April or May, 2016), while five states (Goa, Manipur, Punjab, Uttarkhand, and Uttar Pradesh) had elections in the months following demonetization (February and March, 2017). For this subsample, we run a specification closely paralleling Equation (1), substituting an indicator variable denoting post-demonetization elections,  $Demonetization_{st}$ , for  $Disclosure_{st}$ .

Figure 2 illustrates our identification strategy for this section in more detail.

Figure 2: **Outline of Empirical Strategy – Demonetization**



Notes: This figure illustrates the identification strategy employed in our analysis of elections surrounding demonetization. “Control” states, which held elections shortly before the demonetization announcement, include Assam, Kerala, Puducherry, Tamil Nadu, and West Bengal. “Treated” states, which held elections in the months following demonetization, include Goa, Manipur, Punjab, Uttarkhand, and Uttar Pradesh. Our variable of interest is the rerun decision (incumbent selection) of MLAs elected at  $e(\tau)$ , depending on whether re-contesting required the revelation of politician asset *growth* after demonetization ( $Demonetization = 1$ ) or not ( $Demonetization = 0$ ). The timing of elections further allows us to control for general time trends using time period fixed effects.

We present these results in Table 6. Across all specifications, we observe a coefficient on  $Demonetization$  of about -0.12, indicating that demonetization was associated with a drop

of rerun rates of approximately 12 percentage points.

Figure 4 shows the distinct patterns in rerun rates for states with elections pre- versus post-demonetization. The graph depicts the rerun rates for pre- and post-demonetization states over the four elections that have taken place since 2000. In this graph, we demean the rerun rate at the state level for ease of exposition. The effect we document in our main analysis is the drop in rerun rate between 2007 and 2012. Recall from Panel A of Figure 3 that there is a rebound in the rerun rate in the third election following the passage of disclosure rules. We see in Figure 4 that this rebound comes entirely from states that hold elections before the demonetization announcement – for those holding elections in the post-demonetization period, the rerun rate drops, and remains low. Finally, we repeat our analysis for runners-up in Appendix Table A-5. Paralleling our findings on the effect of the change in disclosure laws, we observe no effect of demonetization on runners-up.

#### **4.2.1 Main Robustness Checks**

We begin by presenting a robustness test for our comparisons of winner versus runner-up candidates. Throughout, we have highlighted the distinct effect of disclosure rules on winners relative to runners-up. But the two groups may differ on other dimensions, raising concerns of unobserved differences that might also drive their differential responses to disclosure rules. In Table 7 we present results based on Equation (1) for both winners and runners-up, limiting the samples to cases in which the vote margin was relatively narrow (either 10% or 5%). For these samples of winners and runners-up, which are more plausibly similar on unobservables, we again find a negative effect of disclosure on the rerun rate for winners, but no such effect for runners-up.

Perhaps the primary potential confound to our analysis is the outcome of India’s Delimitation Commission, which began the process of redrawing state and national election boundaries in 2001. Elections with the newly created boundaries were first held in Karnataka in May, 2008 — exactly one election cycle after disclosure requirements were put in place. Redistricting

could plausibly affect recontesting decisions, as candidates facing a very different electorate may be less inclined to stand for reelection.

We take two approaches to probing whether our results could plausibly result from delimitation. In our main approach, we show that our results are virtually identical if we limit our sample of constituencies to those that were left relatively unchanged by delimitation. Second, following Iyer and Reddy (2013) we look at whether our findings differ based on whether pre-delimitation population made a constituency vulnerable to significant redistricting.

Our main approach takes advantage of the Assembly Constituency map files developed by Sandip Sukhtankar.<sup>20</sup> The maps allow us, via GIS software, to compute the overlap in constituencies pre- versus post-delimitation. We generate two intuitive measures of overlap that capture distinct aspects of redistricting. First, we generate a *Splintering Index* which provides a Herfindahl-style concentration index of all new constituencies that, at least in part, lie within the old constituency. We take one minus the concentration index so that it is increasing in the extent of splintering. For example, if three newly-created constituencies lie inside the old constituency, trisecting it into three equal parts, the constituency will have a Splintering Index of  $1 - 3 \times \left(\frac{1}{3}\right)^2 = \frac{6}{9}$ . A constituency in which there is only a single new constituency inside the old constituency will have a Splintering Index of zero.

It is possible, however, that even a non-splintered constituency may differ pre- versus post-delimitation, because of new areas added to the old constituency. We therefore also generate an *Expansion Index*, to capture this different margin of constituency change, as defined by the percentage difference in size between the total area of all new constituencies that intersect with the old constituency, and the old constituency (minus 1). For example, suppose that in the preceding example the old constituency covered 100 square kilometers, and each of the three new constituencies cover 60 square kilometers. Then the expansion index will be 0.8 (i.e.,  $\frac{3 \times 60}{100} - 1$ ). In Appendix B, we provide the interested reader with more details on the construction of our delimitation indexes.

---

<sup>20</sup>These may be accessed at <http://faculty.virginia.edu/sandip/data.html>, last accessed January 28, 2019.



These indexes capture distinct features of redistricting – across all constituencies their correlation is quite small ( $\rho = 0.11$ ). We take constituencies that are in the bottom tercile of both groups as our main approach of defining a “low-delimitation” subsample. This consists of all constituencies with *SplinteringIndex*  $\leq 0.29$  (median of 0.09) and *ExpansionIndex*  $\leq 0.94$  (median of 0.20). (The upper bound of the Splintering Index emphasizes that many constituencies remained relatively intact – for example, any case in which less than 75% of the original constituency is taken up by a single new one will have a Splintering Index greater than 0.29. For the Expansion Index, the relatively high upper bound of our “low-delimitation” sample can be accounted for, in part, by a newly drawn constituency containing a small amount of the old one.)

We repeat the analyses presented in Table 5 on this subsample of 606 “low delimitation” constituencies; the results, shown in the first three columns of Appendix Table A-6, are very similar to the full sample results. In the rest of the table, we repeat this exercise, using the bottom tercile of each index separately to define the low delimitation subsample. Again the results are very similar to those reported in the main text.

As a second, simpler approach to assessing the potentially confounding effects of delimitation, we follow Iyer and Reddy (2013) in employing population deviation from the district mean (scaled by the mean), as well as population and population squared, as measures of constituency-level propensity for delimitation.<sup>21</sup> The motivation for this approach comes from the Delimitation Commission’s mandate, which had as its explicit goal to redraw boundaries such that, “the population of each parliamentary and assembly constituency in a State shall, so far as practicable, be the same throughout the State” (Delimitation Commission of India, 2004). One particular constraint on the Delimitation Commission was that all constituencies had to remain within administrative districts, making the Commission’s task, in effect, one of equalizing constituency populations within each district. Indeed, Iyer and Reddy (2013) show that deviation from the district average is an extremely good predictor of the extent of

---

<sup>21</sup>They additionally find that share male and share literate are predictive of delimitation but unfortunately these variables are not available at the constituency level for most states.

redistricting.<sup>22</sup>

We present these results in Appendix Table A-7. In the first column, we allow the effect of *Disclosure* to vary with the absolute percentage deviation of constituency population from the district average (*PopDev*). The coefficient on the interaction term *Disclosure \* PopDev* is small and statistically insignificant. In column (2) we include interactions with population and population squared; again neither interaction term approaches significance. In the rest of the table we present specifications that control for population and population squared as measured in 2001 interacted with time dummies; the results are largely unchanged.

Beyond these empirically-oriented approaches to assessing the role of redistricting in driving our results, we also believe that some of the results reported in preceding sections are also difficult to reconcile with redistricting as the primary explanation for the decline in rerun rates. First, if delimitation were driving the result, we might expect to see a drop in the rerun rates of runners-up, who were similarly confronted with redrawn constituency boundaries. Yet, as we observe at the end of the preceding section, runners-up exhibit no such change in their rerun rates. Second, delimitation cannot explain our results on demonetization, in which our analyses focuses on rerun rates in elections that all take place after delimitation took place. As a result, the redrawing of electoral boundaries cannot account for the relatively low rerun rates we document in states affected by demonetization. Overall, while we cannot completely rule out a possible role of delimitation, the available evidence does not support this view.

#### 4.2.2 Heterogeneous effects of disclosure on running for election

We now turn to exploring whether disclosure rules had heterogeneous effects on rerun rates as a function of state-level attributes. We first consider whether the effect of *Disclosure* on exit rates differs according to state-level corruption. Corruption could, in theory, amplify or dampen the effects of disclosure on selection. It could increase the effects of disclosure if, for example, corruption increases the rents available to politicians. Alternatively, high corruption

---

<sup>22</sup>Iyer and Reddy argue that, furthermore, delimitation was “politically neutral for the most part.”

states may be corrupt precisely because voters put less weight on rent seeking, in which case disclosure will have less effect on exit if corruption is high.

Columns (1) and (2) of Table 8 include an interaction term,  $Disclosure * Corruption$ , using two separate state-level measures of corruption. First, we use a perception-based corruption measure provided in a 2005 study on corruption by Transparency International India (*CorrIndex*). This report constructs an index for 20 Indian states based on perceived corruption in public services using comprehensive survey results from over 10,000 respondents. We also use an indicator variable, *BIMARU*, to denote constituencies located in the states of Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh which have been singled out for corruption and dysfunction (“bimar” means sick in Hindi; see Bose (2007)).

The coefficient on  $Disclosure * CorrIndex$  is negative, significant at the 10 percent level. Given the standard deviation on *CorrIndex* of 0.71 (the difference between, say, Gujarat and Jharkhand, or Madhya Pradesh and Bihar), the coefficient of -0.04 implies that a one standard deviation increase in corruption will result in *Disclosure* increasing incumbent exit by 2.8 percentage points. We obtain qualitatively similar results (significant at the 1 percent level) using *BIMARU* as our measure of corruption. These findings suggest that asset disclosures, at least in the context of Indian reforms, had a *greater* effect on self-selection of political candidates in high corruption environments.

In Column (3) we include the interaction of disclosure with margin of victory. If disclosure served to weed out politically weak (low margin) candidates (which could also potentially explain the incumbency effects we discuss below), we would expect this term to have a positive effect. Its coefficient is instead very small, negative, and statistically insignificant. (We obtain similar results if we measure political weakness in other ways, for example by whether the politician’s party forms part of the state government.)

Finally, in Column (4) we include the interaction  $Disclosure * Newspaper\ Circulation$ , which is marginally significant (at the 10 percent level) and positive. This implies that dis-

closure has *less* of an effect in areas with more readership.<sup>23</sup> This is consistent with the view that high circulation areas have better-informed voters and more responsive governments to begin with, as suggested by Besley and Burgess (2002), as well as Gentzkow, Shapiro, and Sinkinson (2011), leading to a more muted effect from greater transparency. The weaker impact of disclosure in high circulation areas also fits with the recent theoretical contribution of Boffa et al. (2016), which argues that rent extraction is a decreasing and convex function of voter information. Thus, alternative sources of information may be substitutes in limiting rent extraction.<sup>24</sup>

### 4.3 Positive selection of candidates: Disclosure and incumbency disadvantage

In organizing our analysis in Section 3, we argued that disclosure plausibly increases exit rates because low ability (or high rent-seeking) politicians self-select out of office, anticipating that they would not be reelected even if they chose to rerun. We examine whether the increased exit rates documented above are associated with the positive selection of candidates, in the sense of being more preferred by the electorate. That is, we explore whether disclosure leads to higher *reelection* rates for incumbents (i.e., the politicians who choose to recontest).

#### 4.3.1 Effect of disclosure on incumbency disadvantage

As Anagol and Fujiwara (2016) and Linden (2004) have shown, incumbents in India have traditionally suffered from a disadvantage at the polls.<sup>25</sup> If disclosure leads to positive selection (from the electorate’s perspective) in the candidates that stand for office, the success of politicians who choose to run for reelection will be higher, i.e., the incumbency disadvantage will decline. Conversely, if higher-quality (but disclosure-averse) politicians self-select out of

---

<sup>23</sup>For completeness, we include in Appendix Table A-8 an additional set of results on the heterogeneity of the effect of disclosure by candidate or constituency attributes.

<sup>24</sup>Of course, one might argue the opposite, since the media and disclosure may play complementary roles in informing the electorate. As we have emphasized throughout, the theory is largely ambiguous on the predicted effects of disclosure — our contribution is to document the observed patterns in a policy relevant setting.

<sup>25</sup>Klasnja and Titunik (2016) show that there is an incumbency disadvantage in a large number of developing economies.

office as a result of disclosure, we expect that the incumbency disadvantage will become even stronger.

We investigate the effect of disclosure on incumbents' electoral success by comparing their election rates against a comparison group of politicians who were runners-up in the election in which the incumbent was previously elected. In our main analysis, we include in our sample all constituency elections in which both the winner and runner-up choose to rerun. Below, we provide further discussion on the rationale for using this approach to estimating incumbency advantage, and describe a series of robustness checks to ensure that our findings are not sensitive to our specification or sample restrictions.

The timing in our specification parallels that of our exit analysis. We thus estimate the probability that an incumbent (or runner-up) at time  $t$  is reelected at time  $t + 1$ , and in particular examine whether this probability is affected by disclosure at time  $t$  (implicitly assuming that asset *growth* is the information of relevance to voters):

$$\begin{aligned} \text{Winner}_{ist+1} = & \alpha_s + \gamma_t + \beta_1 \text{Winner}_{ist} * \text{Disclosure}_{st} + \beta_2 \text{Winner}_{ist} \\ & + \beta_3 \text{Disclosure}_{st} + \delta' \text{Controls}_{ist} + \epsilon_{ist} \end{aligned} \quad (2)$$

The direct effect of *Winner* captures the incumbent (dis)advantage in an election where disclosure is *not* required. The interaction term *Winner \* Disclosure* captures the change in incumbency advantage that comes with disclosure.

We present the results in Table 9. Column (1) indicates a pre-disclosure incumbent disadvantage of 5.7 percent, comparable to estimates from Linden (2004). The interaction term, *Winner \* Disclosure*, has a coefficient of 0.097, indicating that incumbents have a (weak) electoral advantage relative to challengers after the advent of disclosure requirements. The inclusion of a range of controls (column (2)) has very little effect on the estimated incumbency disadvantage, or how it is affected by disclosure. In columns (3) - (5) we limit the sample to close elections: those won by 10, 5 and 3 percent respectively. Unsurprisingly, the pre-disclosure incumbency disadvantage is far stronger in relatively close elections, but in

column (3) the coefficient on the interaction term *Winner \* Disclosure* is largely unchanged. In columns (4) and (5), the interaction term is marginally smaller in magnitude (but remains significant at the 5 percent level). (When we split the sample of constituencies based on distance from the mean district population (our measure of delimitation propensity) we observe that there is, if anything, a bigger shift in incumbency disadvantage among constituencies that are quite close to their district averages, as shown in Appendix Table A-9.)<sup>26</sup>

Overall, our data suggest that disclosure leads to greater reelection probabilities for incumbents who self-select to stand for reelection, as conjectured in Section 3.

In concluding this subsection, we observe that measuring incumbency advantage is a field unto itself. First, we emphasize that, given the multi-candidate nature of Indian elections, measuring incumbency advantage requires that we provide an appropriate benchmark against which to measure incumbent electoral success. (This stands in contrast to, for example, elections in the United States, in which there are generally only two viable candidates fielded by the major parties. In two-candidate systems, 50% provides a natural benchmark.) We argue that the runner-up’s probability of victory serves as the most natural point of comparison. To gain an appreciation of why this is so, consider a closely contested election between two candidates that was essentially decided by a coin toss. If an equally preferred candidate enters the subsequent race together with the current candidates (runner-up and incumbent) and each candidate receives one-third of the vote in expectation, then simply comparing the incumbent’s winning probability between two elections will present a misleading picture of incumbency advantage. Our preferred approach, presented in Table 9, further restricts the sample to cases in which the incumbent and the runner-up both recontest, allowing us to further keep the counterfactual candidate constant.

We additionally note that our results are not sensitive to the method employed to estimate

---

<sup>26</sup>We also repeat our analysis of incumbency advantage focused on the low-delimitation subsamples defined in Section 4.2.1. We present these analyses in Appendix Table A-10; the results are very similar to those reported in the main text. Note that in the appendix table we omit the 5% and 3% vote margin results to conserve space; these results are very similar, both in terms of magnitude and statistical significance, as those reported in the main table; these results are available from the authors.

incumbency advantage. If, following Anagol and Fujiwara (2016), we measure incumbency advantage using a regression discontinuity design for  $Disclosure = 0$  and  $Disclosure = 1$  samples separately, we obtain very similar estimates of a change in incumbency disadvantage associated with disclosure. The estimated discontinuities are -25.5% and -20.1% for the  $Disclosure = 0$  and  $Disclosure = 1$  samples respectively, estimates that are close to the incumbency disadvantage estimates in the narrow margin results presented in Table 9. Finally, in Appendix Table A-11 we present results paralleling those in Table 9, but including all winners and runners-up in our analysis (rather than just winner and runner-up pairs of constituencies in which both rerun). This has little impact on our measure of incumbency disadvantage, nor on disclosure’s impact on incumbency advantage.

#### 4.4 Signal value of economic growth

We finally turn to explore whether other measures of candidate quality receive less weight post-disclosure, given the additional information on candidate quality that is conveyed via disclosures. To assess this possibility empirically, we focus on GDP growth per capita as a signal on politicians’ performance. We examine whether growth affects candidates’ reelection prospects, and whether this relationship is attenuated post-disclosure. Since GDP growth is available only at the district level, we use the following (district-level) specification:<sup>27</sup>

$$\begin{aligned} Winner_{dst+1} = & \alpha_s + \gamma_t + \beta_1 GDPGrowth_{dst} * Disclosure_{st} + \beta_2 GDPGrowth_{dst} \\ & + \beta_3 Disclosure_{st} + \delta' Controls_{dst} + \epsilon_{dst} \end{aligned} \quad (3)$$

$Winner_{dst+1}$  captures the fraction of incumbents in district  $d$  that are reelected at  $t + 1$ . Observe that, in contrast to our incumbency advantage regressions above, the measure we employ here captures both selection ( $RunNext$ ) and success conditional on choosing to run. In Appendix Table A-12, we disaggregate the effect of GDP growth into its impact on candidate self-selection versus candidate success conditional on choosing to run. Our point estimates

---

<sup>27</sup>We obtain very similar point estimates with similar standard errors in constituency-level specifications, proxying for AC-level GDP growth with district-level growth.

suggest a larger role for GDP growth on electoral success than on self-selection, but these results are too noisy to allow for any decisive interpretation.

In column (1) of Table 10, we begin by showing the relationship between district GDP growth and the fraction of candidates reelected, excluding the interaction term  $GDPGrowth_{dst} * Disclosure_{st}$ . Consistent with the findings of, for example, Wolfers (2007) past economic performance is a significant predictor of reelection. A one standard deviation increase in GDP growth (0.059) increases the fraction of politicians that remain in office by 2.5 percentage points, or 11 percent of a standard deviation. When we add  $GDPGrowth_{dst} * Disclosure_{st}$  in column (2), we find that the relationship between GDP growth and reelection rates exists only in the pre-disclosure period: the coefficient on the direct effect of GDP growth increases from 0.429 to 0.578, while the coefficient on the interaction term is negative but of a near-identical magnitude.<sup>28</sup> We add district-level controls in column (3), which has only a modest effect on our point estimates (the interaction term is now significant at the 1 percent level). Following Brender and Drazen (2008), in columns (4)-(6) we also consider the role of GDP growth in the election year, to account for the electorate’s emphasis on recent economic performance. Using election year growth generates very similar results.

Our results are thus consistent with voters using disclosures to assess candidates. In the pre-disclosure period, GDP growth was predictive of electoral success. This pattern disappears in the post-disclosure period, consistent with voters using alternative performance metrics to evaluate politicians.

## 5 Conclusion

In this paper we provide, to our knowledge, the first empirical analysis of the effects of asset disclosure laws on political selection, in the context of state-level legislative elections in India. Because disclosure laws were implemented in November 2003 amidst a wave of state elections,

---

<sup>28</sup>We do not wish to imply that, in the post-disclosure period, GDP growth is unrelated to reelection – the confidence intervals in column (2) allow for a quantitatively important relationship. Rather, we emphasize that the large and statistically significant interaction term implies a lesser role for GDP growth.



we are able to distinguish the impact of disclosure from general time trends. Our analysis is further enriched by the surprise demonetization that occurred in 2016, which allows us to explore the potential complementarities between financial disclosure rules, and constraints on hiding financial assets.

We find that disclosure leads to a higher exit rate of incumbents, an improvement in the reelection rate of those who remain, and an untethering of the correlation between economic growth and electoral success. Moreover, these patterns are found only for incumbent MLAs rather than runners-up candidates who, we argue, present a credible comparison group of non-elected political aspirants. We exploit what we argue is a complementary shock to asset transparency created by India’s surprise demonetization, which is also associated with a decline in rerun rates for politicians, but not runner-up candidates.

We argue that these findings are most easily reconciled with a model in which disclosure leads to the selection of politicians more preferred by the electorate. In this sense, our findings are optimistic: disclosure laws have the effect that models of electoral accountability would predict—and transparency advocates would have hoped for.

There are several directions that we hope to take in future research. First, as we observe at the outset, the efficacy of disclosure laws surely varies between countries and circumstances. It will be useful to examine the effects of disclosure in other settings. We may also benefit from a more intensive study of the consequences of India’s disclosure laws. Most obviously, we have observed only a few electoral cycles since disclosure rules were put in place. It will be illuminating to see how disclosure impacts Indian politics over a longer time horizon, as more data becomes available in the future.

## References

- Anagol, Santosh and Thomas Fujiwara, forthcoming, *The Runner-Up Effect*, Journal of Political Economy.
- Banerjee, Abhijit, Rema Hanna, Jordan Kyle, Benjamin A. Olken and Sudarno Sumarto, 2015, *Tangible Information and Citizen Empowerment: Identification Cards and Food Subsidy Programs in Indonesia*, Working Paper.
- Banerjee, Abhijit and Rohini Pande, 2007, *Parochial Politics: Ethnic Preferences and Politician Corruption*, Working Paper.
- Banerjee, Abhijit V., Selvan Kumar, Rohini Pande and Felix Su, 2011, *Do Informed Voters Make Better Choices? Experimental Evidence from Urban India*, Working Paper.
- Barro, Robert, 1973, *The Control of Politicians: An Economic Model*, Public Choice 14, 19-42.
- Beath, Andrew, Fotini Christia, Georgy Egorov and Ruben Enikolopov, 2014, *Electoral Rules and Political Selection: Theory and Evidence from a Field Experiment in Afghanistan*, Working Paper.
- Besley, Timothy, 2005, *Political Selection*, Journal of Economic Perspectives 19(3), 43-60.
- Besley, Timothy and Robin Burgess, 2002, *The Political Economy of Government Responsiveness: Theory and Evidence from India*, Quarterly Journal of Economics 117(4), 1415-1451.
- Besley, Timothy, Olle Folke, Torsten Persson and Johanna Rickne, 2013, *Gender Quotas and the Crisis of the Mediocre Man: Theory and Evidence from Sweden*, Working Paper.
- Boffa, Federico, Amedeo Piolatto, and Giacomo AM Ponzetto, 2016, *Political centralization and government accountability*, Quarterly Journal of Economics 131(1), 381-422.
- Brender, Adi and Allan Drazen, 2008, *How Do Budget Deficits and Economic Growth Affect Reelection Prospects? Evidence from a Large Panel of Countries*, American Economic Review 98(5), 2203-2220.
- Brennan, Geoffrey and James M. Buchanan, 1980, *The Power to Tax: Analytical Foundations of a Fiscal Constitution*, Cambridge University Press.
- Cameron, A. Colin, Jonah B. Gelbach and Douglas L. Miller, 2008, *Bootstrap-Based Improvements for Inference with Clustered Errors*, The Review of Economics and Statistics 90(3), 414-427.
- Cameron, A. Colin and Douglas L. Miller, 2015, *A Practitioner's Guide to Cluster-Robust Inference*, The Journal of Human Resources 50(2), 317-372.
- Casey, Katherine 2015, *Crossing Party Lines: The Effects of Information on Redistributive Politics*, American Economic Review 105(8), 2410-2448.
- Chauchard, Simon, Marko Klasnja, and S.P. Harish, 2016, *Private Gains, Public Office: A Vignette Experiment in India*, Working Paper.
- Dal Bó, Ernesto, Federico Finan, Olle Folke, Torsten Persson and Johanna Rickne, 2016, *Who Becomes a Politician?*, Working Paper.
- Diamond, Douglas, 1991, *Debt Maturity Structure and Liquidity Risk*, Quarterly Journal of Economics 106(3), 709-737.

- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, 2010, *Disclosure by Politicians*, American Economic Journal: Applied Economics 2(2), 179-209.
- Eggers, Andrew and Jens Hainmueller, 2009, *MPs for Sale? Estimating Returns to Office in Post-War British Politics*, American Political Science Review 103(4), 513-533.
- Ferejohn, John, 1986, *Incumbent Performance and Electoral Control*, Public Choice 50, 5-25.
- Ferraz, Claudio and Frederico Finan, 2008, *Exposing Corrupt Politicians: The Effects Of Brazil's Publicly Released Audits on Electoral Outcomes*, Quarterly Journal of Economics 123(3), 703-745.
- Fisman, Raymond, Nikolaj Harmon, Emir Kamenica and Inger Munk, 2015, *Labor Supply of Politicians*, Journal of the European Economic Association 13(5), 871-905.
- Fisman, Raymond, Florian Schulz and Vikrant Vig, 2014, *The Private Returns to Public Office*, Journal of Political Economy 122(4), 806-862.
- Folke, Olle, Torsten Persson and Johanna Rickne, forthcoming, *Preferential Voting and the Selection of Party Leaders: Evidence from Sweden*, American Political Science Review.
- Gagliarducci, Stefano and Tommaso Nannicini, 2013, *Do Better Paid Politicians Perform Better? Disentangling Incentives from Selection*, Journal of the European Economic Association 11(2), 369-398.
- Gentzkow, Matthew, Jesse M. Shapiro and Michael Sinkinson, 2011, *The Effect of Newspaper Entry and Exit on Electoral Politics*, American Economic Review 101(7), 2980-3018.
- Iyer, Lakshmi and Maya Reddy, 2013, *Redrawing the Lines: Did Political Incumbents Influence Electoral Redistricting in the World's Largest Democracy?*, Working Paper.
- Klasnja, Marko, 2015, *Corruption and the Incumbency Disadvantage: Theory and Evidence*, Journal of Politics 77(4), 928-942.
- Klasnja, Marko, 2016, *Increasing rents and incumbency disadvantage*, Journal of Theoretical Politics 28(2), 225-265.
- Klasnja, Marko, and Rocio Titunuk, 2016, *The Incumbency Curse: Weak Parties, Term Limits, and Unfulfilled Accountability*, American Political Science Review, forthcoming.
- Linden, Leigh, 2004, *Are Incumbents Always Advantaged? The Preference for Non-Incumbents in India*, Working Paper.
- Persson, Torsten, and Guido Tabellini, 2000, *Political Economics: Explaining Economic Policy*, MIT Press.
- Petersen, Mitchell A., 2009, *Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches*, Review of Financial Studies 22(1), 435-480.
- Reinikka, Ritva and Jakob Svensson, 2011, *The power of information in public services: Evidence from education in Uganda*, Journal of Public Economics 95(7), 956-966.
- Wolfers, Justin, 2007, *Are Voters Rational? Evidence from Gubernatorial Elections*, Working Paper.
- Banerjee, Abhijit V., Selvan Kumar, Rohini Pande and Felix Su, 2011, *Do Informed Voters Make Better Choices? Experimental Evidence from Urban India*, Working Paper.

Table 1: Overview of State Assembly Elections

Notes: This Table provides an overview of the state assembly elections in our sample along with some general descriptive statistics (this data corresponds to the gray-shaded election years). Election e(1) indicates the first election post the information disclosure reform of 2003. Panel (A) lists states that had elections immediately following the disclosure reform (2003/04) and Panel (B) lists the subset of states that had elections just prior to the reform (2002/03). Panel (C) list the remaining states in our sample. For elections e(0) and e(1) this table also shows the month of the election year in parentheses. States in bold further comprise the sample of states that is used to investigate the effects of demonetization on politician selection. Years shown in brackets indicate elections for which subsequent candidate rerun information is not available. \*Carved out of Madhya Pradesh; \*\*carved out of Uttar Pradesh; \*\*\*carved out of Bihar (all in 2000). Source: Statistical Reports on General Elections, Election Commission of India, New Delhi (various years).

(A) Just post States													
Election period e(t)										Election Statistics			
e(3)	e(2)	e(1)	e(0)	e(-1)	e(-2)	e(-3)	e(-4)	Electorate	Constituencies	Total	Contestants	Turnout	
[2014]	2009	2004(5)	1999(10)	1994	1989	1985	1983	57,892,259	294	3,655			72.4%
[2014]	2009	2004(10)	1999(10)	1995	1990	[1984]	1980	749,948	60	157			74.8%
[2013]	2008	2003(11)	--	--	--	--	--	15,218,560	90	1,066			70.5%
[2013]	2008	2003(11)	1998(11)	1993	[1983]	1977	--	10,726,573	70	875			57.6%
[2013]	2008	2004(5)	1999(10)	1994	1989	1985	1983	40,363,725	224	2,242			64.7%
[2013]	2008	2003(11)	1998(11)	1993	1990	1985	1980	36,266,969	230	3,179			69.3%
[2014]	2009	2004(10)	1999(10)	1995	1990	1985	1980	75,968,312	288	3,559			59.5%
[2013]	2008	2003(11)	1998(11)	1993	1989	1987	[1984]	611,618	40	206			80.0%
[2014]	2009	2004(5)	2000(2)	1995	1990	1985	1980	27,194,864	147	1,288			65.3%
[2013]	2008	2003(11)	1998(11)	1993	1990	1985	1980	36,273,170	200	2,194			66.3%
[2014]	2009	2004(5)	1999(10)	1994	1989	1985	1979	300,584	32	167			81.8%
2013.5	2008.5	2003.6	1998.7	1993.9	1989.4	1984.8	1981.0	301,566,582	1,675	18,588			
(B) Just prior States													
Goa	[2017]	2012	2007(6)	2002(5)	1999	1994	1989	[1984]	1,010,246	40	202		70.5%
Gujarat	--	[2012]	2007(12)	2002(12)	1998	1995	1990	1985	36,593,090	182	1,268		59.8%
Himachal Pradesh	--	[2012]	2007(12)	2003(2)	1998	1993	1990	1985	4,604,443	68	336		71.6%
Jammu & Kashmir	--	[2014]	2008(10)	2002(10)	1996	[1987]	1983	1977	6,461,757	87	1,354		61.2%
Manipur	[2017]	2012	2007(2)	2002(2)	2000	1995	1990	1984	1,707,204	60	308		86.7%
Meghalaya	--	[2013]	2008(3)	2003(2)	1998	1993	1988	1983	1,214,636	60	331		89.5%
Nagaland	--	[2013]	2008(3)	2003(2)	1998	1993	1989	1987	1,302,266	60	218		87.2%
Punjab	[2017]	2012	2007(2)	2002(2)	1997	1992	1985	1980	16,775,702	117	1,043		75.5%
Tripura	--	[2013]	2008(3)	2003(2)	1998	1993	1988	1983	2,037,998	60	313		92.5%
Uttar Pradesh	[2017]	2012	2007(5)	2002(2)	1996	1993	1991	1989	113,549,350	403	6,086		46.0%
Uttarakhand**	[2017]	2012	2007(2)	2002(2)	--	--	--	--	5,985,302	70	785		59.5%
2017.0	2012.2	2007.2	2002.2	1997.2	1993.0	1989.1	1985.3	191,241,994	1,207	12,244			

(continued on next page)

(Table 1 cont.)

	Election period e(t)										Election Statistics			
											Electorate	Constituencies	Total Contestants	Turnout
	e(3)	e(2)	e(1)	e(0)	e(-1)	e(-2)	e(-3)	e(-4)						
(C) Other States														
Assam	[2016]	2011	2006(5)	2001(5)	1996	1991	1985	1983	17,434,019	126	997	75.8%		
Bihar	--	[2010]	2005(10)	2000(2)	1995	1990	1985	1980	51,385,891	243	2,135	45.9%		
Haryana	[2014]	2009	2005(2)	2000(2)	1996	1991	1987	1982	12,735,888	90	983	72.0%		
Jharkhand***	[2014]	2009	2005(2)	--	--	--	--	--	17,766,202	81	1,390	57.0%		
Kerala	[2016]	2011	2006(5)	2001(5)	1996	1991	1987	1982	21,483,937	140	931	72.4%		
Puducherry	[2016]	2011	2006(5)	2001(5)	1996	1991	1990	1985	659,420	30	218	86.0%		
Tamil Nadu	[2016]	2011	2006(5)	2001(5)	1996	1991	1989	1984	46,603,352	234	2,586	70.8%		
West Bengal	[2016]	2011	2006(5)	2001(5)	1996	1991	1987	1982	48,165,201	294	1,654	82.0%		
	2015.7	2010.5	2005.7	2000.7	1995.7	1990.7	1986.7	1982.0	216,233,910	1,238	10,894			

Table 2: **Variable Definitions**

Variable	Description
<b>Disclosure</b>	Dummy variable indicating that asset disclosures were required at time $t$ (and therefore, recontesting at $t+1$ would require the disclosure of wealth accumulation over the election cycle).
<b>Demonetization</b>	Dummy variable indicating that recontesting elections will require the disclosure of subsequent affidavits in the post-demonetization regime.
<b>RunNext</b>	Dummy variable for whether a candidate runs in the subsequent election.
<b>Winner</b>	Dummy variable indicating whether the contestant won the election at $t$ (Relevant only for specifications with samples that include both election winners and runners-up (e.g., Table 9).
<b>Female</b>	Dummy indicating the gender of the candidate (1 = Female).
<b>Margin</b>	Vote share difference between winner and runner-up (scale of 0 to 1).
<b>PriorRunner</b>	Dummy variable taking on a value of 1 if the candidate contested the preceding election ( $t-1$ ).
<b>PriorWinner</b>	Dummy variable taking on a value of 1 if the contesting candidate won the preceding election ( $t-1$ ).
<b>SC/ST Constituency</b>	Dummy variable indicating whether the constituency of the candidate is that of disadvantaged groups, so-called Scheduled Castes and Tribes (SC/ST).
<b>No. Candidates in AC</b>	Number of candidates contesting assembly constituency election at $t$ .
<b>Voter Turnout in AC</b>	Voter turnout in AC election at $t$ .
<b>AC Electorate</b>	Total electorate of assembly constituency at $t$ .
<b>PopDev</b>	Absolute percentage deviation of assembly constituency population from the district average as of last election prior to delimitation.
<b>Newspaper coverage</b>	Normalized state-level newspaper circulation per capita as of 2001 (winsorized at the 5 percent level to mitigate the impact of extreme outliers). Demeaned for ease of interpretation. Source: Open Government Data Platform India.
<b>CorrIndex</b>	Survey-based state corruption index (based on perceived corruption in public services) as reported in the 2005 Corruption Study by Transparency International India. The index takes on a low value of 2.40 for the state of Kerala (perceived as “least corrupt”) and a high value of 6.95 for Bihar (perceived as “most corrupt”). Demeaned for ease of interpretation.
<b>BIMARU</b>	Indicator variables to denote constituencies located in the states of Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.
<b>Literacy</b>	District-level literacy rate based on Census 2001 (scale of 0 to 1). Demeaned for ease of interpretation.
<b>GDPGrowth</b>	District-level growth in GDP per capita (in real terms, unless otherwise stated). Annualized growth rates are measured over the election term, or if indicated, over the year preceding the election. Sources: Indicus Analytics, Censuses of 2001 and 2011.

Table 3: Comparison of *just before* and *just after* States

Notes: This table provides some descriptive statistics for the two subsets of states that had elections *just before* and *just after* the disclosure event. Data are sourced from 2001 census publications by the Government of India and from the Reserve Bank of India (RBI). *Voter Turnout* refers to the turnout in the 2002-2004 state elections and *Change in Voter Turnout* to the change in turnout between the 2002-2004 elections and the previous elections. *GDP p.c.* measures the per capita net state domestic product at factor cost (Rs, 2003-04). *Avg. GDP p.c. growth/year* is the average yearly growth rate in GDP per capita in the three years prior to 2003/04. *Per Capita Availability of Power (kWh)* and state-wise *Capital Expenditure/GDP* are as of 2003/04 (Source: RBI). *Corruption Index* measures state-level corruption (Source: Corruption Study 2005, Transparency International India (June 30, 2005)). *Delimitation Propensity* is a measure of population size imbalance and defined as the average of absolute differences (in percent) of constituency populations from the average population of all constituencies within a district. *Proportion Low-Delimitation* measures the fraction of ACs that form our low-delimitation subsample. Standard deviations are reported in brackets and t-statistics for tests of differences in state-level means are shown in parentheses.

Variables	<i>Just after States</i>	<i>Just before States</i>	(T-stat)
Total Constituencies (ACs)	1,675	1,207	
% Reserved constituencies (SC/ST)	29.0%	29.8%	
Population/AC	248,842	229,568	
Size/AC (sq. kms.)	1,092	741	
Literacy Rate	68.1%	68.5%	(-0.09)
	[10.3%]	[8%]	
GDP p.c.	22,203	24,203	(-0.43)
	[9,905]	[11,627]	
Avg. GDP p.c. growth/year	6.2%	5.8%	(0.47)
	[1.7%]	[1.9%]	
Per Capita Availability of Power (kWh)	599	651	(-0.28)
	[469]	[380]	
Capital Expenditure/GDP	11.7%	10.0%	(0.52)
	[9.8%]	[4.4%]	
Corruption Index	4.97	4.69	(0.57)
	[0.64]	[1.15]	
SC/ST Concentration	37.6%	36.4%	(0.11)
	[23.3%]	[27.8%]	
Voter Turnout	67.8%	68.1%	(-0.06)
	[7.2%]	[14.4%]	
Change in Voter Turnout	0.8%	-0.2%	(0.37)
	[4.8%]	[5.6%]	
Delimitation Propensity	15.4%	15.3%	(0.03)
	[4.7%]	[4.9%]	
Proportion Low-Delimitation	22.1%	21.6%	(0.31)
	[41.5%]	[41.2%]	

Table 4: **Disclosure and Recontesting**

Notes: This Table shows rerun-probabilities of state assembly election winners and runners-up for the states shown in Panels (A) and (B) of Table 1. Election  $e(1)$  indicates the first state election post the information disclosure reform of 2003 and the corresponding probability shows the fraction of candidates that rerun in the following election, which subjects the candidate to multiple asset disclosures. *Avg. year* is the candidate-weighted average of election years at  $e(t)$  (e.g., weighted average of 2003 and 2004 for the just post event states at  $e(1)$ ).

Panel A: Winners

“Just Prior to Event” States			“Just Post Event” States		
Election	Avg. year	Prob( <i>RunNext</i> )	Election $e(t)$	Avg. year	Prob( <i>RunNext</i> )
e(-5)	1981.6	0.740	e(-4)	1981.1	0.569
e(-4)	1985.3	0.772	e(-3)	1984.8	0.637
e(-3)	1989.1	0.759	e(-2)	1989.4	0.769
e(-2)	1993.0	0.749	e(-1)	1993.9	0.741
e(-1)	1997.2	0.819	e(0)	<b>1998.7</b>	<b>0.786</b>
e(0)	<b>2002.2</b>	<b>0.834</b>	e(1)	<b>2003.6</b>	<b>0.669</b>
e(1)	<b>2007.2</b>	<b>0.774</b>	e(2)	2008.5	0.758
e(2)	2012.2	0.778	e(3)	2013.5	n/a

Panel B: Runners-up

“Just Prior to Event” States			“Just Post Event” States		
Election	Avg. year	Prob( <i>RunNext</i> )	Election $e(t)$	Avg. year	Prob( <i>RunNext</i> )
e(-5)	1981.6	0.400	e(-4)	1981.1	0.327
e(-4)	1985.3	0.461	e(-3)	1984.8	0.360
e(-3)	1989.1	0.450	e(-2)	1989.4	0.417
e(-2)	1993.0	0.459	e(-1)	1993.9	0.425
e(-1)	1997.1	0.486	e(0)	<b>1998.7</b>	<b>0.440</b>
e(0)	<b>2002.2</b>	<b>0.501</b>	e(1)	<b>2003.6</b>	<b>0.444</b>
e(1)	<b>2007.2</b>	<b>0.515</b>	e(2)	2008.5	0.452
e(2)	2012.2	0.565	e(3)	2013.5	n/a



Table 5: **Disclosure and Recontesting of Winning Candidates**

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (4) and (5) we aggregate data to the district-election and state-election level, using the district and state-election averages of Rerun as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
			RunNext		
Disclosure	-0.132*** (0.026)	-0.133*** (0.026)	-0.136*** (0.025)	-0.113*** (0.027)	-0.121** (0.051)
Female		-0.064*** (0.018)	-0.061*** (0.018)		
Margin		0.040 (0.032)	0.057 (0.037)		
PriorRunner		0.055*** (0.017)	0.053*** (0.017)		
PriorWinner		0.043*** (0.013)	0.043*** (0.013)		
SC/ST Constituency			-0.015 (0.013)		
No. Candidates in AC			-0.001 (0.001)		
Voter Turnout in AC			0.114** (0.050)		
log(AC Electorate)			0.028* (0.015)		
Observations	18,972	18,361	18,361	2,771	133
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.039	0.05	0.051	0.136	0.586

Table 6: **Effect of Demonetization on running for election**

Notes: This Table investigates how the advent of demonetization, announced in November 2016, affects the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample consists of MLAs of 10 states, five of which held elections just prior to the demonetization announcement (Assam, Kerala, Puducherry, Tamil Nadu, and West Bengal), and five of which held elections just after demonetization (Goa, Manipur, Punjab, Uttarakhand, Uttar Pradesh), and includes all elections between 1996-2017. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Demonetization* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits in the post-demonetization regime (which, arguably, affects the ability of politicians and others to hide income). In columns (4) and (5) we aggregate data to the district-election and state-election level, using the district and state-election averages of Rerun as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
			RunNext		
Demonetization	-0.119*** (0.031)	-0.115*** (0.034)	-0.119*** (0.036)	-0.095*** (0.035)	-0.085** (0.035)
Female		-0.066*** (0.020)	-0.058*** (0.020)		
Margin		(0.174) (0.125)	(0.151) (0.117)		
PriorRunner		0.049* (0.027)	0.047* (0.027)		
PriorWinner		0.022 (0.022)	0.021 (0.021)		
SC/ST Constituency			-0.072*** (0.015)		
No. Candidates in AC			0.001*** (0.000)		
Voter Turnout in AC			0.115 (0.069)		
log(AC Electorate)			0.061 (0.040)		
Observations	5,981	5,902	5,902	787	39
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.066	0.071	0.077	0.255	0.85

Table 7: Recontesting Responses to Disclosure Rules and Winning Status: Close Elections

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of winners (W) and runners-up (RU) candidates, focusing on elections in which the vote margin was relatively narrow (margins of 10% or 5%). The sample includes candidates of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if the candidate ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					RunNext			
Disclosure	-0.139*** (0.039)	0.01 (0.034)	-0.119*** (0.042)	0.01 (0.024)	-0.139*** (0.036)	0.009 (0.032)	-0.127*** (0.039)	0.013 (0.028)
Female					-0.046** (0.018)	-0.072*** (0.024)	-0.039* (0.020)	-0.058*** (0.022)
Margin					0.099 (0.192)	-1.728*** (0.170)	1.215*** (0.412)	-2.871*** (0.360)
PriorRunner					0.055*** (0.014)	0.080*** (0.021)	0.047** (0.018)	0.078*** (0.021)
PriorWinner					0.046*** (0.013)	0.111*** (0.015)	0.050*** (0.016)	0.092*** (0.016)
SC/ST Constituency					-0.027 (0.018)	-0.003 (0.019)	-0.041* (0.021)	0.002 (0.026)
No. Candidates in AC					-0.001*** (0.000)	-0.001 (0.001)	0 (0.001)	-0.001 (0.002)
Voter Turnout in AC					0.05 (0.077)	0.014 (0.055)	0.053 (0.070)	0.073 (0.092)
log(AC Electorate)					0.031 (0.020)	-0.005 (0.027)	0.035 (0.021)	-0.029 (0.035)
Subsample	W	RU	W	RU	W	RU	W	RU
Close Elections:	Margin  ≤ 10		Margin  ≤ 5		Margin  ≤ 10		Margin  ≤ 5	
Observations	9,475	9,475	5,284	5,284	9,233	9,233	5,146	5,146
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.035	0.029	0.039	0.037	0.045	0.068	0.052	0.066

Table 8: **Robustness and Heterogeneity**

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). Columns (1) and (2) investigate how exit rates differ by state-level corruption using a perception-based corruption measure (*CorrIndex*) as well an indicator variable (*BIMARU*) for states which have been singled out for corruption and dysfunction (the measures are described in more detail in section 4.2.1). Column (3) includes an interaction of disclosure with margin of victory and column (4) with newspaper circulation. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)
		RunNext		
Disclosure	-0.124*** (0.032)	-0.115*** (0.035)	-0.129*** (0.027)	-0.143*** (0.023)
Disclosure*CorrIndex	-0.040* (0.022)			
Disclosure*BIMARU		-0.061*** (0.013)		
Disclosure*Margin			-0.035 (0.096)	
Margin			0.078** (0.034)	
Disclosure*Newspaper coverage				0.198* (0.110)
Observations	16,240	18,972	18,902	17,712
Time FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
R-squared	0.03	0.04	0.039	0.04

Table 9: **Disclosure and Incumbency Advantage**

Notes: This Table investigates the effect of the disclosure reform on the subsequent electoral success of re-contesting candidates. This sample consists of paired constituency winners and runners-up of the “just post” and “just prior” states shown in Table 1. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (2) - (5) we add candidate-level and constituency-level controls as well as national and state party fixed effects, and columns (3) - (5) further restrict the sample to elections decided by close margins. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
	<i>Winner<sub>t+1</sub></i>				
Disclosure*Winner	0.097** (0.041)	0.101** (0.042)	0.112*** (0.038)	0.083** (0.034)	0.079** (0.037)
Winner	-0.057 (0.040)	-0.059 (0.041)	-0.179*** (0.039)	-0.225*** (0.039)	-0.229*** (0.034)
Disclosure	-0.063** (0.030)	-0.067* (0.034)	-0.077** (0.033)	-0.025 (0.031)	-0.007 (0.035)
Female		-0.034 (0.024)	-0.031 (0.030)	-0.013 (0.049)	-0.007 (0.065)
PriorRunner		-0.01 (0.013)	-0.019 (0.016)	0.007 (0.016)	-0.002 (0.015)
PriorWinner		0.051*** (0.019)	0.047** (0.022)	0.02 (0.024)	0.016 (0.023)
SC/ST Constituency		-0.025*** (0.008)	-0.034*** (0.011)	-0.03 (0.021)	-0.035 (0.023)
No. Candidates in AC		-0.002* (0.001)	-0.002** (0.001)	-0.002*** (0.001)	-0.002 (0.001)
Voter Turnout in AC		0.079*** (0.028)	0.073* (0.038)	0.023 (0.047)	0.007 (0.077)
log(AC Electorate)		-0.012 (0.029)	-0.022 (0.032)	-0.015 (0.033)	-0.032 (0.040)
Close Elections:			Margin  ≤ 10	Margin  ≤ 5	Margin  ≤ 3
Observations	12,302	11,982	7,316	4,374	2,760
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.008	0.013	0.034	0.053	0.055

Table 10: **GDP Growth and Electoral Outcomes**

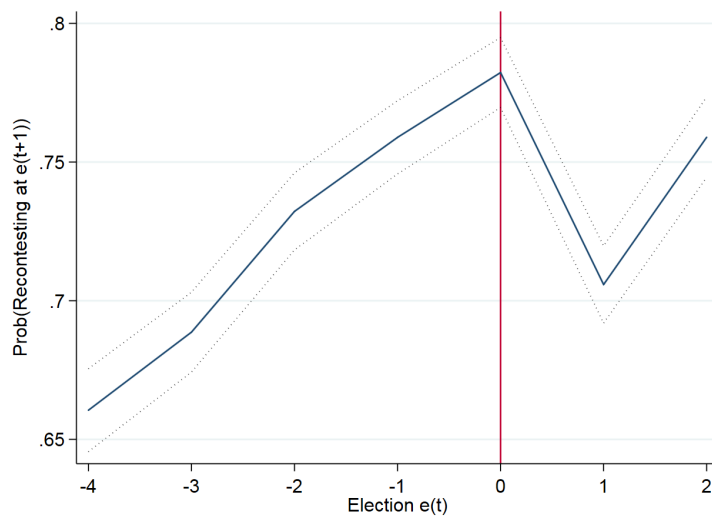
Notes: The dependent variable captures the fraction of incumbents in district  $d$  that are reelected at  $t + 1$  (the measure captures both selection (*RunNext*) and success conditional on choosing to run). Columns (1)-(3) use *average* growth in real GDP per capita, and columns (3)-(6) use growth in real GDP per capita during the *election year*. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	<i>Average growth</i>			<i>Election-year growth</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Winner<sub>t+1</sub></i>			<i>Winner<sub>t+1</sub></i>		
GDPGrowth	0.429*** (0.136)	0.578*** (0.169)	0.572*** (0.139)	0.332*** (0.077)	0.426*** (0.099)	0.409*** (0.114)
Disclosure*GDPGrowth		-0.542** (0.254)	-0.676*** (0.214)		-0.375* (0.202)	-0.427 (0.280)
Disclosure		-0.026 (0.035)	-0.02 (0.031)		-0.029 (0.027)	-0.029 (0.027)
Female			-0.044 (0.082)			-0.044 (0.084)
Margin			0.619*** (0.220)			0.607** (0.228)
PriorRunner			-0.078* (0.043)			-0.078* (0.041)
PriorWinner			0.157*** (0.041)			0.159*** (0.040)
SC/ST Constituency			-0.07 (0.042)			-0.071 (0.043)
No. Candidates in AC			0 (0.003)			0 (0.004)
Voter Turnout in AC			-0.222* (0.124)			-0.221* (0.132)
log(AC Electorate)			-0.043 (0.027)			-0.042 (0.030)
Observations	1,088	1,088	1,086	1,088	1,088	1,086
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.103	0.108	0.154	0.103	0.107	0.153

Figure 3: **Recontesting**

Notes: The following graphs show time series of re-run probabilities over election cycle time. Election  $e(0)$  indicates the last election prior to disclosure and the figure plots the percentage of winners at  $e(t)$  that re-contested in the subsequent election  $e(t+1)$ . Election  $e(1)$  indicates the first election post the information disclosure reform of 2003. Panel A plots probabilities for Members of the Legislative Assemblies (MLAs) and Panel B plots probabilities for corresponding election runners-up. 95% confidence intervals are indicated by dotted lines.

Panel A: Winners



Panel B: Runners-up

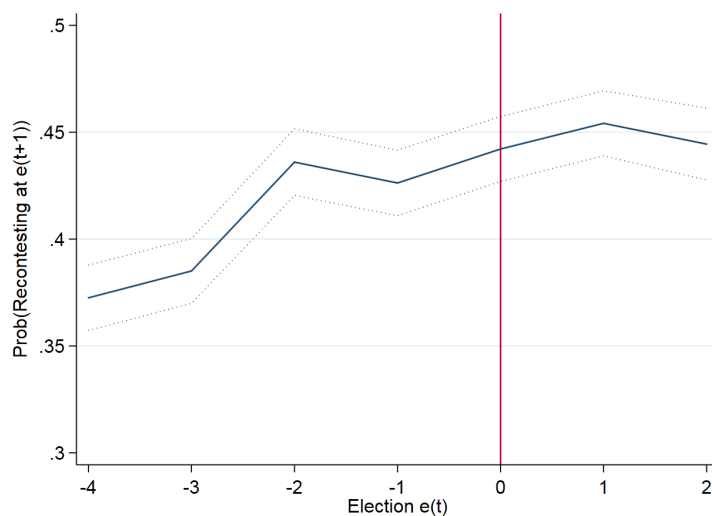
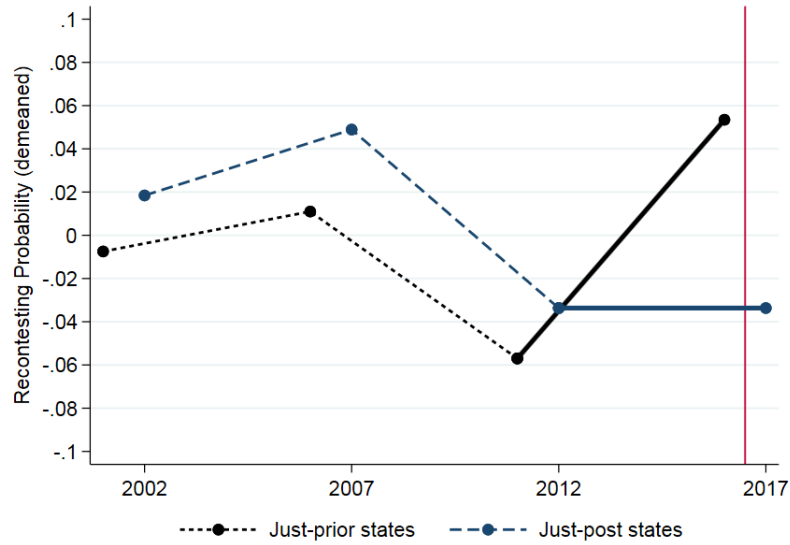


Figure 4: **Recontesting around Demonetization**

Notes: The graph shows how the advent of demonetization, announced in November 2016, affected the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample consists of MLAs of 10 states, five of which held elections “just prior” to the demonetization announcement (Assam, Kerala, Puducherry, Tamil Nadu, and West Bengal), and five of which held elections “just post” demonetization (Goa, Manipur, Punjab, Uttarakhand, Uttar Pradesh). For ease of exposition rerun rates are demeaned at the state state.





## A Appendix: A model of disclosure and political selection

We present a stylized model of asymmetric information in which voters are forced to pool high- and low-quality candidates (i.e., public-minded and rent-seeking) in the absence of disclosure. Our model provides a set of intuitive predictions on the consequences of disclosure for political selection, and the resultant economic consequences.<sup>29</sup> The reader should not interpret our model as generating a set of structural parameters to be estimated. Alternative modeling assumptions or constraints on parameter values may generate distinct predictions — rather, our purpose is to illustrate how our set of empirical analyses may be generated by a spare and straightforward model of political selection.

### A.1 Model Setup

We consider an economy with 2 periods (during which politicians hold office) and 3 dates ( $t=1$ ,  $t=2$ ,  $t=3$ ) marking the beginning and end of each period. A pool of incumbents is assigned at  $t=1$ . Politician ability is given by  $\theta$ , which can be high or low, i.e.,  $\theta \in \{\theta_H, \theta_L\}$ . Ability type is private information. For the pool of incumbents at  $t=1$ , the probability that a politician is of high ability is given by  $p$ . This initial pool of officeholders can stand for reelection at date  $t = 2$ . (We could base our model on different preferences or talents over rent extraction rather than ability to generate public welfare. This would generate an identical set of predictions.)

Each period, politicians invest public resources that generate publicly observable benefits  $B$ , such as government-provided social services or economic growth. We assume that these benefits are realized at the end of each period, with  $B \in \{B_H, B_L\}$ . The probability that  $B = B_H$  is given by  $\theta$  and we assume that  $1 > \theta_H > \theta_L = 0$ . That is, while the payoff is risky for high ability types, the “investment returns” are low with certainty for low ability politicians. We further assume that ability type is persistent and that (if relevant) public benefits are drawn independently across periods. At the beginning of the legislative cycle, a politician also chooses whether to engage in rent extraction, so that realized rents are  $\mathcal{R} \in \{R, r\}$ , where  $R > r$ , initially unobservable to voters. If the officeholder decides to engage in rent seeking ( $\mathcal{R} = R$ ), then benefits will be low with certainty, i.e.,  $B = B_L$ .<sup>30</sup>

Politicians have preference over both public service and private rents. Each period a politician’s utility is given by  $U = \alpha \cdot B + \mathcal{R}$ . We further assume that high ability politicians prefer to “behave”, that is,  $\alpha \cdot \theta_H \cdot (B_H - B_L) > R - r$ . Following the first period realization of  $B$ , at  $t = 2$  politicians have the choice of standing for reelection. Running an election campaign incurs costs of  $k$  (in our two-period setting there is no re-contesting at  $t = 3$ ). For simplicity, we normalize outside option wages and salaries to zero, assume a discount rate of zero, and

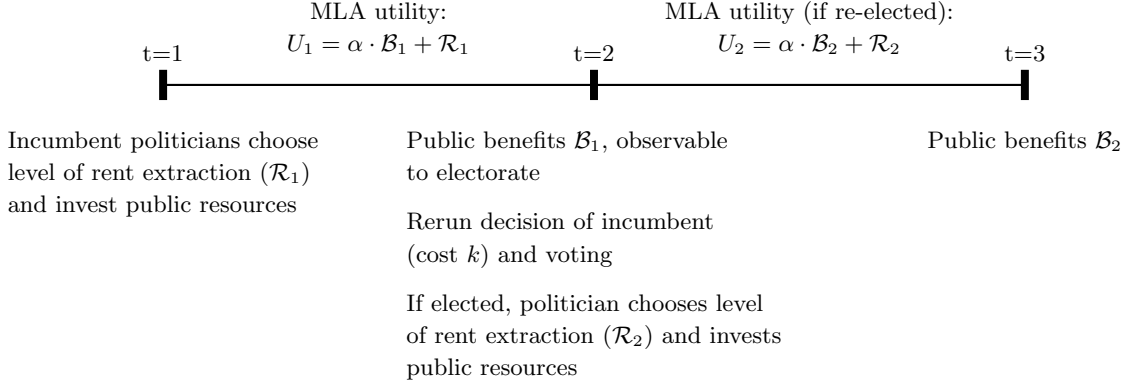
---

<sup>29</sup>The structure of our model is inspired by Diamond (1991).

<sup>30</sup>This assumption can also be motivated based on non-verifiable “investment” in the community that is stolen by the politician.

assume that all agents are risk-neutral. Figure 5 summarizes the time line for the model.

Figure 5: **Timeline**



**Electorate preferences and pool of challengers at  $t=2$ :** We model elections at  $t = 2$  as follows. An incumbent politician faces a single outside contestant who is of high ability ( $\theta = \theta_H$ ) with probability  $\tilde{p}$ . We think of this challenger as emerging as the result of a longer, multi-candidate campaign, and hence  $\tilde{p}$  becomes apparent only as the election approaches. We model this in practice as being reflected in uncertainty over the value of  $\tilde{p}$ , assuming that it is distributed uniformly between 0 and 1 but initially unknown to both the electorate and the candidate. Thus, only as the election campaign nears completion, (*after* incurring cost  $k$  by the candidate but *before* voting) will the draw of  $\tilde{p}$  be learned by the electorate.

The electorate's preference at  $t = 2$  is to elect candidates to maximize expected public benefits ( $\mathcal{B}_2$ ) over the following period. While prior to the disclosure reform, voters observe only  $\mathcal{B}_1$  over the first period, the disclosure of politician asset returns allows the electorate to observe the level of rent extraction,  $\mathcal{R}_1$ , as well. In the pre-disclosure period the probability of reelection if past growth is low is thus simply  $p(H \mid B_L)$ , or  $\left(\frac{p-p\theta_H}{1-p\theta_H}\right)$ .

We make two additional assumptions, to ensure that (1) campaigning expenses are low enough that low ability candidates always recontest pre-disclosure, and that (2) post-disclosure of  $\mathcal{R}$ , low ability politicians have insufficient incentive to “pretend” to be high type by choosing  $\mathcal{R}_1 = r$ .

**Assumption 1 (*Running Incentives*)**  $\left(\frac{p-p\theta_H}{1-p\theta_H}\right) \cdot (\alpha B_L + R) > k$ . That is, in the absence of learning through asset return disclosures, campaign expenses are low enough to ensure that low ability incumbents always choose to stand for reelection at  $t = 2$ .

**Assumption 2 (*No Mimicking/Pooling*)**  $\alpha \cdot B_L + R > (\alpha \cdot B_L + r) + \left(\frac{p-p\theta_H}{1-p\theta_H}\right) (\alpha \cdot B_L + R) - k$ . That is, it is suboptimal for low ability politicians to choose  $\mathcal{R}_1 = r$ .

**Lemma 1** *Let  $\phi = \Pr(\theta = \theta_H | \mathcal{I})$  where  $\mathcal{I}$  is the information set of the electorate (e.g., realization of  $\mathcal{G}$  only prior to disclosure). At  $t=2$ , before running a campaign, a re-contesting incumbent politician expects to be reelected with probability  $\phi$ .*

Lemma 1 follows directly from the assumptions on recontesting at  $t = 2$ . Thus, a politician's objective function can be succinctly written as:  $U = \alpha \cdot \mathcal{B}_1 + \mathcal{R}_1 + [\phi \cdot (\alpha \cdot \mathcal{B}_2 + \mathcal{R}_2) - k] \cdot \mathbb{1}_{\{\text{rerun}\}}$  where  $\mathbb{1}_{\{\text{rerun}\}}$  is an indicator for whether the incumbent recontests at  $t = 2$ .

## A.2 Standing for reelection in the absence of disclosure

Conditional on being elected at  $t=2$ , H-type and L-type candidates choose  $\mathcal{R}_2^H = r$  and  $\mathcal{R}_2^L = R$ , respectively (individual rationality). Further, if public benefits are *high* in the first period ( $\mathcal{B}_1 = B_H$ ), the incumbent candidate type is revealed perfectly to the electorate as high ability. The politician thus chooses to rerun and is elected with certainty. If public benefits are *low* in the first period ( $\mathcal{B}_1 = B_L$ ), then the electorate cannot infer the incumbent's type. By Assumption 1, both high and low ability type candidates choose to rerun and are elected with probability  $\phi = \left( \frac{p - p\theta_H}{1 - p\theta_H} \right)$  (which is less than unity).

Thus, pre-disclosure we get the following prediction: Observable public benefits serve as a (noisy) signal of candidate ability and is thus predictive of electoral success. Further, the rerun rate without disclosure (which, given our parameter assumptions, leads to the extreme case where all incumbents recontest), serves as a benchmark to compare against the rerun rates when disclosures are required.

## A.3 Political selection with disclosure of asset growth

With disclosure of  $\mathcal{R}_1$ , incumbent type is perfectly revealed though the disclosure of asset returns  $\mathcal{R}_1$  alone (by Assumption 2 only low ability incumbents choose  $\mathcal{R}_1 = R$ ). The previously noisy signal of ability,  $\mathcal{B}$ , loses relevance. Since types are revealed, by Lemma 1, all low ability politicians exit the sample at  $t = 2$ .

Thus, we get the following additional predictions, summarized below as Proposition 1.

**Proposition 1** *Disclosure of asset growth of incumbents will result in the following:*

- **(Increased Exit)** *Relative to the pre-disclosure period, there will be higher exit of incumbents at  $t = 2$  when contesting requires the disclosure of asset returns.*
- **(Reelection)** *Since, under disclosure, only high ability incumbents choose to recontest and are elected with probability 1, re-contesting incumbents are more likely to be reelected. That is, disclosure leads to positive selection. (Improved Pool) Since only low ability*

*incumbents choose to exit, their replacements, even if chosen randomly, will be of higher expected ability.*

- **(Signal relevance)** *Under disclosure, observable public benefits  $\mathcal{B}$  are less informative as a signal of candidate ability, and hence is less predictive of incumbent reelection.*

These intuitive propositions follow straightforwardly from the parameter restrictions, when combined with Lemma 1. In particular, whereas there is pooling of high and low types when  $\mathcal{B}_1 = B_L$  in the absence of disclosure, all low ability incumbents exit under disclosure, leading to higher exit. It immediately follows that the electoral success of incumbents who, under disclosure, are revealed as high ability, will improve (*reelection*). Since only low ability incumbents choose to exit, disclosure will also lead to politicians of higher expected ability (and hence higher expected  $\mathcal{B}$ ) (*improved pool*).<sup>31</sup> The perfect separation of high and low ability incumbents under disclosure leads to the irrelevance of alternative signals of quality (or, under a more general model, revelation of an additional quality signal will reduce reliance on existing signals) (*signal relevance*).

## B Appendix: Construction of Delimitation Indexes

Using Assembly Constituency map files developed by Sandip Sukhtankar and GIS software, we compute the geographic area overlap in constituencies pre- versus post-delimitation. We generate two intuitive measures of overlap that capture distinct aspects of redistricting, described below, and then create subsamples of constituencies with low-delimitation intensity.

### B.1 Splintering Index

First, we generate a *Splintering Index* which provides a Herfindahl-style concentration index of all new constituencies that, at least in part, lie within the old constituency. Specifically, for each pre-delimitation constituency, we first identify all intersecting (post-delimitation) constituencies. Then, for each such intersecting constituency, we compute the fraction of the geographical area of the old constituency that is absorbed by the new constituency. Based on these fractions, we compute a Herfindahl-style concentration index. Our *Splintering Index* is defined as one minus the concentration index so that it is increasing in the extent of splintering. For example, if three newly-created constituencies lie inside the old constituency, trisecting it into three equal parts, the constituency will have a Splintering Index of  $1 - 3 \times (\frac{1}{3})^2 = \frac{6}{9}$ . A constituency in which there is only a single new constituency inside the old constituency will have a Splintering Index of zero.

---

<sup>31</sup>Our arguments in this section are in line with the model of Klasnja (2016), which focuses directly on corruption and the incumbency disadvantage. See also Klasnja (2015) for evidence from Romania.

Using the splintering index distribution of all assembly constituencies, we partition the sample into terciles and consider the bottom tercile of the distribution as being of low intensity of redistricting .

## B.2 Expansion Index

It is possible, however, that even a non-splintered constituency may differ pre- versus post-delimitation, because of new areas added to the old constituency. We therefore also generate an *Expansion Index*, to capture this different margin of constituency change, as defined by the percentage difference in size between the total area of all new constituencies that intersect with the old constituency, and the old constituency (minus 1). In constructing the expansion index, we only include intersecting constituencies that cover some minimum geographical area (5% threshold) of the original constituency.<sup>32</sup> For example, suppose that in the preceding example the old constituency covered 100 square kilometers, and each of the three new constituencies cover 60 square kilometers. Then the expansion index will be  $0.8 \left( \frac{3 \times 60}{100} - 1 \right)$ .

Using the expansion index distribution of all constituencies, we partition the sample into terciles and consider the bottom tercile of the distribution as being of low intensity of redistricting.

Finally, we take constituencies that are in the bottom tercile of both groups as our main approach of defining a “low-delimitation” subsample.

---

<sup>32</sup>This threshold restriction is also partly motivated by a desire to reduce the impact of noise in the shapefiles.

Table A-1: **Disclosure and Recontesting of Runners-up**

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of state assembly election runners-up (“Placebo test”). The sample includes runners-up for the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if the candidate ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (4) and (5) we aggregate data to the district-election and state-election level, using the district and state-election averages of Rerun as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
			RunNext		
Disclosure	0.001 (0.024)	-0.004 (0.021)	-0.004 (0.021)	0.001 (0.024)	0.022 (0.043)
Female		-0.096*** (0.013)	-0.098*** (0.014)		
Margin		-0.720*** (0.090)	-0.726*** (0.086)		
PriorRunner		0.083*** (0.018)	0.082*** (0.018)		
PriorWinner		0.112*** (0.018)	0.112*** (0.017)		
SC/ST Constituency			0.022 (0.015)		
No. Candidates in AC			-0.001 (0.001)		
Voter Turnout in AC			-0.006 (0.070)		
log(AC Electorate)			(0.002) (0.025)		
Observations	18,902	18,361	18,361	2,767	133
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.035	0.1	0.101	0.12	0.648

Table A-2: **Disclosure and Recontesting** (*States with elections in 2003 only*)

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the states that held elections in 2003, prior to and post the implementation of disclosure requirements. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (4) and (5) we aggregate data to the district-election and state-election level, using the district and state-election averages of *Rerun* as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
	RunNext				
Disclosure	-0.127*** (0.043)	-0.134*** (0.046)	-0.135*** (0.039)	-0.117*** (0.041)	-0.06 (0.063)
Female		0.006 (0.016)	0.009 (0.014)		
Margin		0.033 (0.129)	0.051 (0.123)		
PriorRunner		0.054*** (0.017)	0.054*** (0.017)		
PriorWinner		0.043 (0.028)	0.044 (0.027)		
SC/ST Constituency			-0.041 (0.032)		
No. Candidates in AC			-0.001 (0.001)		
Voter Turnout in AC			-0.034 (0.136)		
log(AC Electorate)			0.073*** (0.009)		
Observations	4,070	3,954	3,954	665	37
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.03	0.041	0.044	0.081	0.566

Table A-3: **Disclosure and Recontesting of Winners (*incl. switchers*)**

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election or contested a parliamentary election (Lok Sabha) at the time of or before the next state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (4) and (5) we aggregate data to the district-election and state-election level, using the district and state-election averages of Rerun as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
			RunNext		
Disclosure	-0.144*** (0.025)	-0.148*** (0.026)	-0.152*** (0.024)	-0.123*** (0.026)	-0.126** (0.049)
Female		-0.067*** (0.021)	-0.064*** (0.021)		
Margin		0.046* (0.026)	0.063** (0.028)		
PriorRunner		0.044*** (0.016)	0.042*** (0.016)		
PriorWinner		0.055*** (0.015)	0.055*** (0.015)		
SC/ST Constituency			-0.012 (0.012)		
No. Candidates in AC			-0.001 (0.001)		
Voter Turnout in AC			0.130** (0.060)		
log(AC Electorate)			0.043** (0.017)		
Observations	18,282	17,671	17,671	2,660	128
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.041	0.053	0.055	0.143	0.591



Table A-4: **Disclosure and Recontesting** (*District fixed effects*)

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In column (4) we aggregate data to the district-election level, using the district-election averages of Rerun as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)
		RunNext		
Disclosure	-0.130*** (0.027)	-0.128*** (0.026)	-0.133*** (0.025)	-0.111*** (0.030)
Female		-0.061*** (0.020)	-0.058*** (0.020)	
Margin		0.065** (0.032)	0.085** (0.035)	
PriorRunner		0.050*** (0.016)	0.048*** (0.016)	
PriorWinner		0.032** (0.012)	0.032** (0.012)	
SC/ST Constituency			-0.021 (0.013)	
No. Candidates in AC			-0.001*** (0.000)	
Voter Turnout in AC			0.164** (0.070)	
log(AC Electorate)			0.054** (0.021)	
Observations	18,737	18,257	18,257	2,767
Time FE	Yes	Yes	Yes	Yes
District FE	Yes	Yes	Yes	Yes
R-squared	0.07	0.078	0.08	0.299

Table A-5: **Effect of Demonetization on running for election: Runners-up**

Notes: This Table investigates how the advent of demonetization, announced in November 2016, affects the re-contesting propensities of runners-up (“Placebo test”). The sample consists of runners-up of 10 states, five of which held elections just prior to the demonetization announcement (Assam, Kerala, Puducherry, Tamil Nadu, and West Bengal), and five of which held elections just after demonetization (Goa, Manipur, Punjab, Uttarakhand, Uttar Pradesh), and includes all elections between 1996-2017. The dependent variable is an indicator that takes on a value of 1 if the candidate ran in the subsequent state election. *Demonetization* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits in the post-demonetization regime (which, arguably, affects the ability of politicians and others to hide income). In columns (4) and (5) we aggregate data to the district-election and state-election level, using the district and state-election averages of Rerun as the dependent variable. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
			RunNext		
Demonetization	0.019 (0.037)	0.043 (0.042)	0.046 (0.039)	0.014 (0.043)	0.031 (0.051)
Female		-0.084*** (0.007)	-0.085*** (0.005)		
Margin		-0.652*** (0.084)	-0.633*** (0.087)		
PriorRunner		0.059** (0.025)	0.058** (0.026)		
PriorWinner		0.149*** (0.023)	0.149*** (0.022)		
SC/ST Constituency			0.008 (0.018)		
No. Candidates in AC			0 (0.000)		
Voter Turnout in AC			0.207*** (0.054)		
log(AC Electorate)			-0.052* (0.029)		
Observations	5,980	5,902	5,902	787	39
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.101	0.161	0.163	0.306	0.878

Table A-6: Disclosure and Recontesting of Winning Candidates: Low Delimitation Constituencies

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the 22 states shown in Panels (A) and (B) of Table 1. Using measures of overlap of geographical areas of constituencies pre- and post-delimitation (*Splintering Index* and *Expansion Index*), the samples only include ACs in the bottom tercile of the distribution, i.e., constituencies that are least affected by delimitation. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
					RunNext				
Disclosure	-0.143*** (0.036)	-0.147*** (0.034)	-0.148*** (0.035)	-0.122*** (0.029)	-0.118*** (0.030)	-0.119*** (0.030)	-0.128*** (0.034)	-0.133*** (0.033)	-0.136*** (0.033)
Female		-0.012 (0.052)	-0.012 (0.052)		-0.061*** (0.020)	-0.061*** (0.020)		0.004 (0.040)	0.006 (0.041)
Margin		0.014 (0.062)	0.012 (0.060)		0.021 (0.061)	0.025 (0.060)		0.029 (0.054)	0.041 (0.055)
PriorRunner		0.058* (0.030)	0.057* (0.030)		0.055** (0.024)	0.054** (0.024)		0.069*** (0.022)	0.068*** (0.023)
PriorWinner		0.025 (0.023)	0.026 (0.023)		0.051*** (0.015)	0.051*** (0.015)		0.018 (0.020)	0.019 (0.020)
SC/ST Constituency			-0.011 (0.023)			-0.009 (0.016)		-0.03 (0.022)	
No. Candidates in AC			-0.004** (0.002)			-0.001 (0.001)		-0.003* (0.002)	
Voter Turnout in AC			-0.01 (0.083)			0.026 (0.072)		0.055 (0.068)	
log(AC Electorate)			0.071* (0.040)			0.028 (0.020)		0.075** (0.038)	
AC Subsample	Low Splintering Index & Low Expansion Index			Low Splintering Index			Low Expansion Index		
Observations	3,411	3,300	3,300	5,909	5,725	5,725	5,199	5,043	5,043
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.049	0.055	0.057	0.042	0.053	0.053	0.052	0.06	0.062

Table A-7: **Robustness: Other delimitation measures**

Notes: This Table investigates the effect of multiple asset disclosures on the re-contesting propensities of members of the legislative state assemblies (MLAs). The sample includes MLAs of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). Column (1) controls for possibly confounding effects of the redrawing of constituency boundaries by allowing the effect of *Disclosure* to vary with the absolute percentage deviation of constituency population from the district average (*PopDev*). Column (2) provides an alternative specification that includes interactions with population (measured in 100,000) and population squared. Column (3) controls for population and population squared as measured in 2001 and column (4) further interacts these with time dummies (interactions are not shown in the table). All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)
		RunNext		
Disclosure	-0.133*** (0.027)	-0.107** (0.052)	-0.110** (0.042)	-0.188*** (0.055)
Disclosure*PopDev	0.059 (0.047)			
PopDev	-0.036 (0.037)			
Disclosure*Population		-0.018 (0.027)	-0.011 (0.024)	0.048 (0.060)
Disclosure*Population_Squared		0.001 (0.002)	0.001 (0.002)	-0.003 (0.005)
Population		0.003 (0.027)	-0.022 (0.015)	-0.091 (0.065)
Population_Squared		0 (0.002)	0.001 (0.001)	0.004 (0.005)
Observations	15,856	18,971	15,856	15,856
Time FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
R-squared	0.043	0.039	0.043	0.045

Table A-8: **Exit and Other Heterogeneity**

Notes: The sample includes members of the legislative state assemblies (MLAs) of the 22 states shown in Panels (A) and (B) of Table 1. The dependent variable is an indicator that takes on a value of 1 if an MLA ran in the subsequent state election. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	RunNext					
Disclosure	-0.132*** (0.026)	-0.131*** (0.027)	-0.121*** (0.014)	-0.136*** (0.023)	-0.113*** (0.030)	-0.14 (0.086)
Disclosure*Literacy	0.259** (0.108)					
Literacy	-0.118** (0.059)					
Disclosure*Female		-0.026 (0.029)				
Female		-0.064*** (0.024)				
Disclosure*PriorRunner			-0.02 (0.014)			
PriorRunner			0.089*** (0.010)			
Disclosure*PriorWinner				0.023* (0.014)		
PriorWinner				0.074*** (0.009)		
Disclosure*SC/ST Constituency					-0.066*** (0.022)	
SC/ST Constituency					-0.001 (0.010)	
Disclosure*Voter Turnout in AC						0.006 (0.135)
Voter Turnout in AC						0.126** (0.062)
Observations	18,695	18,972	18,426	18,426	18,972	18,902
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.041	0.04	0.048	0.047	0.04	0.04

Table A-9: **Disclosure and Incumbency Advantage (*controlling for delimitation propensity*)**

Notes: This Table investigates the effect of the disclosure reform on the subsequent electoral success of re-contesting candidates. This sample consists of paired constituency winners and runners-up of the “just post” and “just prior” states shown in Table 1. We split the sample of constituencies based on distance from the mean district population (our measure for extent of delimitation propensity). Panel A shows results for constituencies that are quite close to their district averages and Panel B shows results for constituencies that are relatively far from their district averages. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (2) - (5) we add candidate-level and constituency-level controls as well as national and state party fixed effects, and columns (3) - (5) further restrict the sample to elections decided by close margins. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
<i>Winner<sub>t+1</sub></i>					
<b>Panel A: Constituencies with low extent of delimitation propensity</b>					
Disclosure*Winner	0.148*** (0.042)	0.152*** (0.041)	0.173*** (0.063)	0.119 (0.076)	0.081 (0.054)
Winner	-0.054 (0.036)	-0.05 (0.036)	-0.160*** (0.045)	-0.224*** (0.058)	-0.197*** (0.039)
Disclosure	-0.071* (0.038)	-0.067* (0.039)	-0.075 (0.046)	0.007 (0.047)	0.013 (0.038)
<b>Panel B: Constituencies with high extent of delimitation propensity</b>					
Disclosure*Winner	0.081 (0.051)	0.088* (0.051)	0.100** (0.040)	0.072* (0.041)	0.095* (0.052)
Winner	-0.059 (0.049)	-0.067 (0.050)	-0.194*** (0.039)	-0.226*** (0.034)	-0.255*** (0.042)
Disclosure	-0.067** (0.031)	-0.073** (0.036)	-0.085*** (0.031)	-0.053 (0.033)	-0.033 (0.054)
Close Elections:			Margin  ≤ 10	Margin  ≤ 5	Margin  ≤ 3
Controls	No	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes

Table A-10: Disclosure and Incumbency Advantage: Low Delimitation Constituencies

Notes: This Table investigates the effect of the disclosure reform on the subsequent electoral success of re-contesting candidates. This sample consists of paired constituency winners and runners-up of the “just post” and “just prior” states shown in Table 1. Using measures of overlap of geographical areas of constituencies pre- and post-delimitation (*Splintering Index* and *Expansion Index*), the samples only include ACs in the bottom tercile of the distribution, i.e., constituencies that are least affected by delimitation. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of subsequent affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (2), (5), and (8) we add candidate-level and constituency-level controls as well as national and state party fixed effects, and columns (3), (6), and (9) further restrict the sample to elections decided by close margins. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	<i>Winner<sub>t+1</sub></i>								
Disclosure*Winner	0.167*** (0.045)	0.168*** (0.041)	0.172*** (0.049)	0.107** (0.049)	0.108** (0.046)	0.114*** (0.042)	0.150*** (0.052)	0.155*** (0.050)	0.175*** (0.044)
Winner	-0.081 (0.056)	-0.077 (0.053)	-0.204*** (0.051)	-0.075 (0.049)	-0.074 (0.048)	-0.200*** (0.044)	-0.082 (0.051)	-0.078 (0.048)	-0.199*** (0.044)
Disclosure	-0.046 (0.037)	-0.052 (0.037)	-0.084*** (0.018)	-0.017 (0.032)	-0.028 (0.034)	-0.055** (0.026)	-0.052 (0.038)	-0.06 (0.039)	-0.091** (0.037)
Female		-0.144* (0.077)	-0.158* (0.085)		-0.089** (0.045)	-0.121*** (0.046)		-0.076 (0.056)	-0.104* (0.058)
PriorRunner		-0.013 (0.024)	-0.017 (0.039)		-0.024 (0.019)	-0.034 (0.026)		-0.012 (0.015)	-0.01 (0.031)
PriorWinner		0.084** (0.039)	0.091 (0.057)		0.063** (0.029)	0.066 (0.043)		0.080* (0.043)	0.095** (0.047)
SC/ST Constituency		-0.01 (0.020)	-0.002 (0.024)		-0.023 (0.018)	-0.023 (0.021)		-0.015 (0.014)	-0.013 (0.018)
No. Candidates in AC		-0.002 (0.002)	-0.004** (0.002)		-0.002*** (0.001)	-0.004*** (0.001)		-0.002* (0.001)	-0.003* (0.002)
Voter Turnout in AC		0.139 (0.086)	0.086 (0.087)		0.071 (0.076)	0.042 (0.068)		0.069 (0.073)	0 (0.087)
log(AC Electorate)		-0.041* (0.022)	-0.057 (0.040)		-0.042** (0.020)	-0.064*** (0.028)		-0.013 (0.017)	-0.036 (0.024)
Close Elections:			Margin  ≤ 10			Margin  ≤ 10			Margin  ≤ 10
AC Subsample	Low Splintering Index & Low Expansion Index			Low Splintering Index			Low Expansion Index		
Observations	2,374	2,314	1,376	4,034	3,940	2,396	3,568	3,488	2,056
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.013	0.025	0.057	0.011	0.017	0.045	0.012	0.02	0.054

Table A-11: **Disclosure and Incumbency Advantage (*full sample*)**

Notes: This Table investigates the effect of the disclosure reform on the subsequent electoral success of re-contesting candidates. This sample consists of *all* constituency winners and runners-up of the “just post” and “just prior” states shown in Table 1. *Disclosure* is an indicator that is defined as 1 if recontesting will require the disclosure of *subsequent* affidavits (which allows measurement of wealth accumulation over the election cycle). In columns (2) - (5) we add candidate-level and constituency-level controls as well as national and state party fixed effects, and columns (3) - (5) further restrict the sample to elections decided by close margins. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

Variables	(1)	(2)	(3)	(4)	(5)
	<i>Winner<sub>t+1</sub></i>				
Disclosure*Winner	0.074*	0.077*	0.070**	0.057**	0.042
	(0.040)	(0.042)	(0.029)	(0.025)	(0.033)
Winner	0.012	0.008	-0.122***	-0.175***	-0.184***
	(0.041)	(0.042)	(0.033)	(0.030)	(0.028)
Disclosure	-0.069*	-0.072*	-0.086**	-0.036	-0.021
	(0.038)	(0.041)	(0.033)	(0.029)	(0.036)
Female		-0.037*	-0.054**	-0.041	-0.041
		(0.021)	(0.024)	(0.037)	(0.052)
PriorRunner		-0.025*	-0.028	-0.02	-0.025
		(0.014)	(0.017)	(0.017)	(0.022)
PriorWinner		0.074***	0.058***	0.040**	0.043*
		(0.015)	(0.017)	(0.017)	(0.023)
SC/ST Constituency		-0.032***	-0.037***	-0.028	-0.047**
		(0.007)	(0.012)	(0.019)	(0.022)
No. Candidates in AC		-0.001	-0.002*	-0.002*	-0.001
		(0.001)	(0.001)	(0.001)	(0.001)
Voter Turnout in AC		0.124*	0.101	0.061	0.057
		(0.067)	(0.061)	(0.056)	(0.074)
log(AC Electorate)		0.011	-0.005	-0.001	-0.008
		(0.032)	(0.044)	(0.039)	(0.031)
Close Elections:			Margin  ≤ 10	Margin  ≤ 5	Margin  ≤ 3
Observations	22,320	21,656	11,740	6,741	4,217
Time FE	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.013	0.019	0.026	0.04	0.047



Table A-12: **GDP Growth and Electoral Outcomes** (*disaggregation of effects*)

Notes: The table disaggregates the effect of GDP growth into its role in candidate self-selection versus candidate success conditional on choosing to run. In Panel A, the dependent variable captures the fraction of incumbents in district  $d$  that recontest at  $t + 1$  and in Panel B, the dependent variable captures the fraction of incumbents in district  $d$  that are reelected at  $t + 1$ , conditional on recontesting. Columns (1)-(3) use *average* growth in real GDP per capita and columns (3)-(6) use growth in real GDP per capita during the *election year*. All specifications include state fixed effects and time fixed effects to control for general time trends. Standard errors multi-way clustered at the state level and at the year level are given in parentheses. Coefficients with \*\*\*, \*\*, and \* are statistically significant at the 1%, 5%, and 10% levels, respectively.

## Panel A: Recounting

Variables	<i>Average growth</i>			<i>Election-year growth</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
		RunNext			RunNext	
GDPGrowth	-0.236 (0.181)	-0.133 (0.191)	-0.112 (0.161)	0.042 (0.158)	-0.074 (0.156)	-0.039 (0.147)
Disclosure*GDPGrowth		-0.159 (0.401)	-0.24 (0.377)		0.334 (0.462)	0.242 (0.456)
Disclosure		-0.124*** (0.029)	-0.137*** (0.026)		-0.153*** (0.030)	-0.165*** (0.028)
Female			-0.044 (0.053)			-0.046 (0.051)
Margin			-0.227 (0.155)			-0.238 (0.150)
PriorRunner			0.033 (0.052)			0.028 (0.052)
PriorWinner			0.136** (0.062)			0.138** (0.062)
SC/ST Constituency			-0.02 (0.028)			-0.016 (0.029)
No. Candidates in AC			0.001 (0.005)			0.002 (0.005)
Voter Turnout in AC			-0.239*** (0.081)			-0.233*** (0.080)
log(AC Electorate)			-0.079 (0.064)			-0.072 (0.061)
Observations	1,088	1,088	1,086	1,088	1,088	1,086
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.103	0.121	0.156	0.101	0.121	0.156

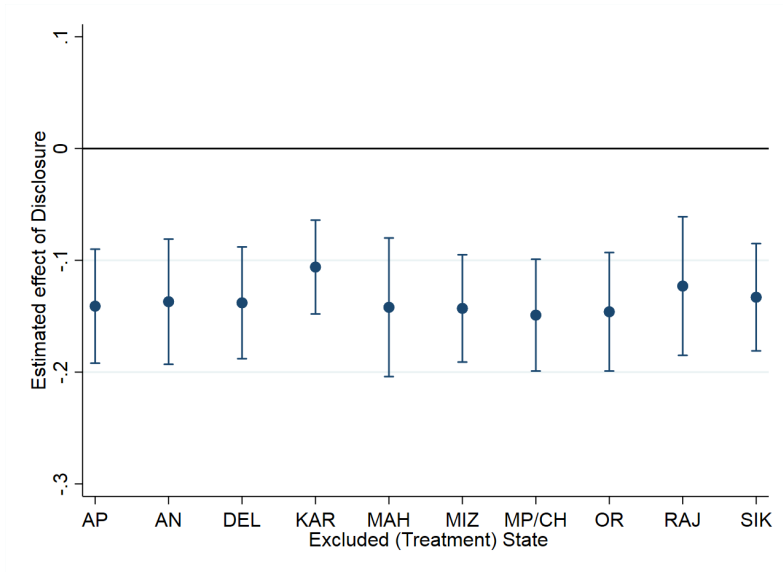
Panel B: Winning (conditional on recontesting)

Variables	<i>Average growth</i>			<i>Election-year growth</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Winner<sub>t+1</sub></i>			<i>Winner<sub>t+1</sub></i>		
GDPGrowth	0.627*** (0.193)	0.728*** (0.152)	0.703*** (0.139)	0.337*** (0.111)	0.497*** (0.130)	0.445** (0.190)
Disclosure*GDPGrowth		-0.476 (0.465)	-0.659 (0.522)		-0.578*** (0.201)	-0.610** (0.245)
Disclosure		0.037 (0.056)	0.056 (0.048)		0.051 (0.036)	0.058** (0.029)
Female			0.012 (0.113)			0.013 (0.114)
Margin			1.099*** (0.325)			1.093*** (0.334)
PriorRunner			-0.107** (0.047)			-0.105** (0.045)
PriorWinner			0.094** (0.044)			0.095** (0.042)
SC/ST Constituency			-0.102** (0.040)			-0.106** (0.042)
No. Candidates in AC			-0.001 (0.003)			-0.001 (0.003)
Voter Turnout in AC			-0.189 (0.169)			-0.191 (0.174)
log(AC Electorate)			-0.021 (0.038)			-0.023 (0.034)
Observations	1,072	1,072	1,070	1,072	1,072	1,070
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.085	0.086	0.142	0.08	0.083	0.139

Figure A-1: **Robustness**

Notes: The following graphs show estimated effects of disclosure on retesting probabilities of incumbents, individually excluding each treatment state (Panel A) or control state (Panel B) from the estimation. Specifically, the graphs show point estimates and 95 percent confidence intervals of the estimated effect of disclosure (Table 5, Column (3)) for each subsample of states.

Panel A: Exclusion of “treatment” states



Panel B: Exclusion of “control” states

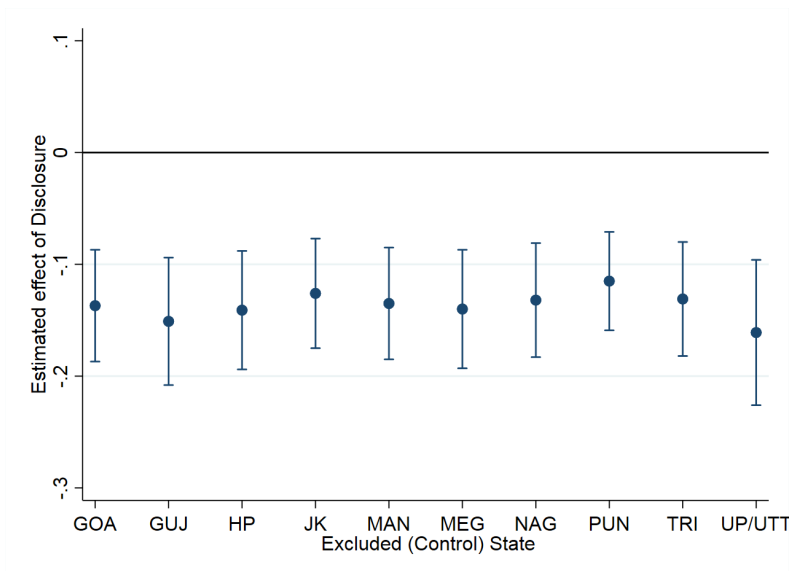
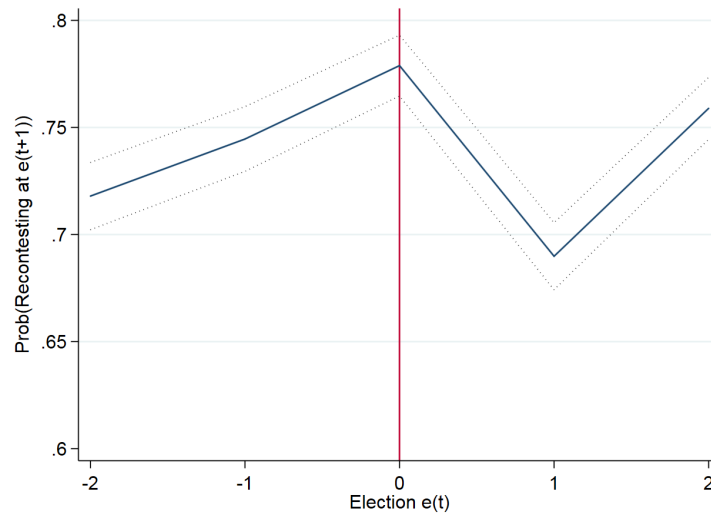


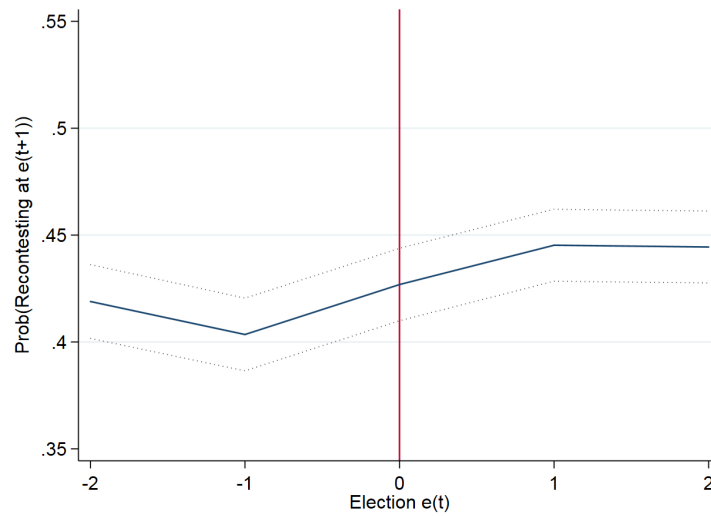
Figure A-2: **Recontesting - States with 3 post-disclosure elections**

Notes: The following graphs show time series of re-run probabilities over election cycle time for the subset of 23 states with three elections post disclosure. Election  $e(0)$  indicates the last election prior to disclosure and the figure plots the percentage of winners at  $e(t)$  that re-contested in the subsequent election  $e(t+1)$ . Election  $e(1)$  indicates the first election post the information disclosure reform of 2003. Panel A plots probabilities for Members of the Legislative Assemblies (MLAs) and Panel B plots probabilities for corresponding election runners-up. 95% confidence intervals are indicated by dotted lines.

Panel A: Winners



Panel B: Runners-up



## Sample Affidavit



3825 7.4.2003 10/-  
 55-20-50. 25/8/03  
 55-20-50. 20/5/03  
 55-20-50. 20/5/03  
 55-20-50. 20/5/03  
 K. RAMAKRISHNA  
 STAMP VENDOR  
 PONNUR -

### ANNEXURE - 1

AFFIDAVIT TO BE FURNISHED BY CANDIDATE ALONG WITH NOMINATION PAPER  
 BEFORE THE RETURNING OFFICER

for election to the Andhra Pradesh Legislative Assembly (Name of the House)  
 from 97 Ponnur constituency  
 (Name of the Constituency)

I, Narendra Kumar Dhulipalla Son of Late Veeraiah Chowdary aged 36 years, resident of Chintalapudi Village, Ponnur Mandal candidate at the above election, do hereby solemnly affirm and state on oath as under :-

(Strike out whichever not applicable)

- (1) The following case is pending against me in which cognizance has been taken by the court.
  - (i) Section of the Act and description of the offence for which cognizance taken :  
 Section 147 - roiting, 148-roiting armed with dedly weapon, 188- dis obedience to order duly promulgated by public servant, 427- mischief, R/W 149 unlawful assembly of I.P.C.
  - (ii) The Court which has taken cognizance:  
 The court of Judicial Magistrate of I Class Ponnur
  - (iii) Case No. :  
 CC 128/99 on the file of Judicial Magistrate of I Class Ponnur, later on tranfer to the Court of V Additional Munsif Magistrate, Guntur. The same was renumbered C.C. 46/2001 and the same is pending there.
  - (iv) Date of order of the Court taking cognizance.:  
 7-8-1999.
  - (v) Details of applicatins for revision etc., if any, filed against above order taking cognizance:  
 At the instance of one of the accused in the above case i.e., A4 Chittinani Pratap, the Honourable High Court of A.P. by its order dated 23-1-2003 and passed in Cr. M.P. 206/2003 in Cr. P. 332/2003 stayed all further proceedings in the above said case pending inthe court of V A.M.M. Court, Guntur.

244793  
 P. JAYA RAJU  
 ADVOCATE & NOTARY  
 Near Market  
 PONNUR - 522 124

*(Signature)*

(2) That I give herein below the details of eh assets (immovable, movable, bank balance, etc.) of myself, my spouse and dependents.

**A. Details of Movable Assets :**

(Assets in joint name indicating the extent of joint ownership will also have to be given)

S. No.	Description	Self	Spouse Name Jyothirmai D.	Dependent -1 Name : D. Vaishnavi	Dependent -2 Name : D. Vydeepthi	Dependent -3 etc., name
1.	Cash					
2.	Deposits in banks, Financial Institutions and non Banking Financial Companies	Rs. 13,000 S.B.A/c. No. 600570, SBH, Assembly Ext. Counter, Hyderabad Rs. 6160 A/c. No. 01190005860, SBH, Ponnur. Rs. 11,000 A/c. No. 1, Chaitanya Grameena Bank, Ponnur. Joint A/c. with wife Rs. 11,012 A/c. No. 13115, Andhra Bank, Ponnur.				
3.	Bonds, Debentures and shares in companies	Rs. 10,000 shares in Dhulipalla Milk Line(P) Ltd. worth of Rs. 1,00,000.				
4.	Other Financial instruments NSS, Postal Savings, LIC Policies, Etc.,	LIC Policy No. 64165615 for Rs. 2,00,000 LIC Policy No. 672872728 for Rs. 5,00,000	LIC Policy No. 672872729 for Rs. 5,00,000			
5.	Motor Vehicles (details of make, etc.,)		Ambassador AP7F 9999 model 2000 value of Rs. 2,00,000			
6.	Jewellery (give details of weight and value)	30 gms. worth of Rs. 13,500	800 gms. worth of Rs. 3,60,000	50 gms. worth of Rs. 22,500	50 gms. worth of Rs. 22,500	
7.	Other Assets such as values of claims/ interests					

Note :- Value of bonds / Shares / Debentures as per teh latest market value in Stock Exchange in respect of listed companies and as per books in case of non-listed companies should be given.

\*Dependent here means a person substantially dependents on teh income of teh candidate.

*P. Jaya Raju*  
P. JAYA RAJU M.Com., B.L.  
ADVOCATE & NOTARY  
Near Market  
PONNUR - 522 124

B. Deatils of Immovable Assets :

(Note : Properties in joint ownership indicating teh extent of joint ownership will also have to be indicated.

S. No.	Description	Self	Spouse Name Jyothimai D.	Dependent -1 D. Vaishnavi	Dependent -2 D. Vydeepthi	Dependent - 3 etc., name
1.	<b>Agriculture Land</b> Location(s) Survey Number(s) Extent (Total measurement) Current market value	Vallabharaopalem Vill. Ponnur Mdl. Survey Nos. 750-7, 0-34Cents 750-9, 0.37 Cts. 750-4, 1.41 Cts. 750-1, 0.70 Cts. 750-6, 0.17 Cts. 750-10, 0.17 Cts. Total Acre 3.16 Cents worth of Rs. 6,00,000 Enguturu Vill. Amaravathi Mdl. Survey Nos. 271-1A, 271-1C Ac 1-65 Cts worth of Rs. 82,500	Marripudi Vill. Bapatla Mdl. Survey Nos. 42/2, 0-67 Cts. 79/1, 0.06 Cts. 78/1, Ac. 4.09 Cts. Total Acre 4.82 Cents worth of Rs. 9,50,000 Pundla Vill. Bapatla Mdl. Survey Nos. 272-1 Ac. 2.93 Cts. 284-1, Ac. 1.10 Cts. 284-2, 0.92 Cts. 284-3, 0.80 Cts. 284-4, 0.97 Cts. 284-5, 0.80 Cts. 176-1,2 0.12 Cts. Total Acre 7.64 Cts worth of Rs. 12,00,000			
2.	<b>Non-Agriculture Land</b> Location(s) Survey Number(s) Extent (Total measurement) Current market value	Chintalapudi Vill. Ponnur Mdl. House site 2 Cts worth of Rs. 10,000	Sai Baba Road, Koretapadu, Guntur D. No. 42-43-44, Plot No.18, Yards 239 worth of Rs.3,00,000			
3.	<b>Buildings (com- mercial and residential</b> Location(s) Survey/Door Number(s) Extent (Total measurement) Current market value					
4.	<b>Houses / Apart- ments etc.</b> Location(s) Survey/Door Number(s) Extent (Total measurement) Current market value					
5.	<b>Others</b> Such as interest in property					

*[Handwritten Signature]*

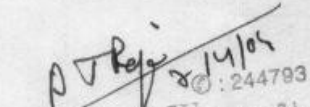
*P. Raja*  
P. JAYA RAJU M.Com., B.L.  
ADVOCATE & NOTARY  
Near Market  
PONNUR - 522 124



(3) I give herein below the details of my liabilities / overdues to public Financial institutions and Government dues :-

(Note : Please give separate details for each item)

S. No.	Description	Name and address of bank/ Financial Institution (s) / department(s)	Amount outstanding as on 31-03-2004
(a) (i)	Loans from Banks	1. Chintalapudi PACS	Ac.No. 249 Rs. 25,000-00
		2. S.B.H., Ponnur towards my share in Dhulipalla Milk Line PLtd., Mulukuduru	Rs. 16966
(ii)	Loans from Financial Institutions		
(iii)	Government dues :-		
(a)	Dues to department dealing with Government accommodation		
(b)	Dues to department dealing with Supply of water		
(c)	Dues to department dealing with Supply of Electricity		
(d)	Dues to department dealing with Telephones		
(e)	Dues to department dealing with Telephones		
(f)	Other dues if any		
(b) (i)	Income Tax including surcharge (Also indicate the Assessment year upto which Income Tax Return filed. Give also Permanent Ac- count Number (PAN)		
(ii)	Wealth Tax (Also indicate the as- sessment year upto which Wealth Tax return filed.)		
(iii)	Sales Tax (Only in case of Proprietary Business)		
(iv)	Property Tax		

  
 P. JAYA RAJU  
 ADVOCATE & NOTARY  
 Near Market  
 PONNUR - 522 124

*Debar*

(4) My educational qualifications are as under :-

(GIVE DETAILS OF SCHOOL AND UNIVERSITY EDUCATION

(Name of School / University and the year in which the course was completed should be given.)

Z.P.H.S., Ananthavarapadu

from 1981 - 1982

S.S.C

Andhra Lyola College, Vijayawada

from 1982 - 1984

Intermediate

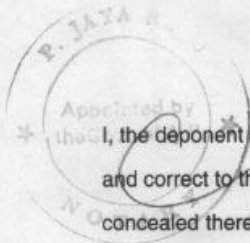
University of Mysore, Mysore

from 1984 - 1989

B. Tech.

  
DEPONENT

Verification



I, the deponent above named, do hereby verify and declare that the contents of this affidavit are true and correct to the best of my knowledge and belief, no part of it is false and nothing material has been concealed therefrom.

Verified at Ponnur this the 24 day of April 2004.

  
DEPONENT



*P.J. Raju for P. Jaya*  
P. JAYA RAJU M.Com., B.L.  
ADVOCATE & NOTARY  
Near Market  
PONNUR - 522 124



3993 7.4.2004 10/-  
 Sold To ...  
 For whom ...  
 K. RAMAKRISHNA  
 STAMP VENDOR  
 PONNUR -

**ANNEXURE XIII C**  
 (CHAPTER V, PARA 9.3)

FORM 26  
 (SEE RULE 4A)

Affidavit to be furnished by the candidate before the returning officer for election to A.P. Legislative Assembly (name of the House) from 97 Ponnur Constituency (name of the constituency).

I, Narendra Kumar Dhulipalla son of Late Veeraiah Chowdary aged about 36 years resident of Chintalapudi Village, Ponnur Mdl. candidate at the above election, do hereby solemnly affirm/state on oath as under:

1. I am accused of any offence(s) punishable with imprisonment for two years or more in a pending case(s) in which a charge(s) has/have been framed by the court(s) of competent jurisdiction.

If the deponent is accused of any such offence(s) he shall furnish the following information.

- (i) Case/First information report No./Nos 38/98 of Ponnur (Town) Police Station.
- (ii) Police Station(s) Ponnur Town, District(s) Guntur, State(s) A.P.
- (iii) Section(s) of the concerned Act(s) and short description of the offence(s) for which the candidate has been charged:  
 Section 147-Rioting, 148-Rioting armed with deadly weapon, 188-disobedience to order duly promulgated by public servant, 427- mischief, R/W, 149- unlawful Assembly of I.P.C.
- (iv) Courts which framed the Charge(s):

The Court of Judicial Magistrate of I Class, Ponnur in C.C. 128/99.

P. J. Raju  
 P. JAYA RAJU M.Com., B.L.  
 ADVOCATE & NOTARY  
 Near Market  
 PONNUR - 522 124

*[Signature]*

(v) Date(s) on which the charge(s) :

7-8-1999.

(vi) Whether all or any of the proceeding(s) have been stayed by any court(s) of competent jurisdiction:

At the instance of one of the accused in the above case i.e., A4 Chitineni Pratap the Honourable High Court of A.P. by its order dated 23-1-2003 and passed in C.R. P. 206/2003 in CRMP 332/2330 stayed all further proceedings in the above said case pending in the court of V A.M.M. Court Guntur.

2. I have not been convicted of an offence(s) other than any offence(s) referred to in sub-section (1) or sub-section 92), or covered in sub-section (3), of the Representation of the People Act, 1951 (43 of 1951) and sentenced to imprisonment for one year or more.

I have not been convicted.

If deponent is convicted and punished as aforesaid, he shall furnish the following information.

(i) Case/First information report No./Nos. ----

(ii) Court(s) which punished ----

(iii) Police Station(s) ----

(iv) Section(s) of the concerned Act(s) and short description of the offence(s) for which the candidate has been charged ----

(v) Date(s) on which the sentence(s) was/were pronounced -----

(vi) Whether the sentence(s) has/have been stayed by any court(s) of competent jurisdiction --

Place : Ponnur

Date : 7-4-2004

Signature of Deponent.

#### VERIFICATION

I, the above named deponent do hereby verify and declare that the contents of this affidavit are true and correct to the best of my knowledge and belief, no part of it is false and nothing material has been concealed therein.

Verified at Ponnur this 7th day of April 2004.

Signature of the deponent

Note : "The columns in this Form which are not applicable to the deponent may be struck off"



*PJRaj*  
*5/4/04*  
© : 244793  
**P. JAYA RAJU** M.Com., B.L.  
ADVOCATE & NOTARY  
Near Market  
PONNUR - 522 124