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BARCELONA

Essays on Political Economy: The Dynamics of Political Criminality, Dynasties, and Governance in Indian Democracy

Abhinav Khemka

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PhD in Economics

Essays on Political Economy.

The Dynamics of Political Criminality, Dynasties, and Governance in Indian Democracy

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Abstract

Voters around the world are often complicit in electing low-quality legislators to political office. This problem is particularly salient in India, where criminal and dynastic politicians often win elections. This thesis aims to investigate two main research questions: Why do voters elect criminal politicians? What is the effect of electing dynastic legislators to public office?

Chapter 2 examines whether ethnic voting can explain why citizens elect criminal candidates. Contrary to voter preference theory, I find that voters exhibit a stronger negative response to candidates accused of criminality when they belong to their preferred ethnic party. Voter support for the non-ethnic falls by 89.2% for violent charges. Coethnicity further reduces electoral support by 67% for violent criminals. This pattern holds regardless of the voters' level of news consumption or political knowledge, education status, and income. These findings suggest that the electoral success of criminal politicians could be attributed to other factors such as weak government institutions rather than the ability of voters to hold them accountable.

Chapter 3 examines whether voters are willing to forgive criminal politicians because they believe that they are more effective at providing them with public goods. In this paper, I argue that settings where government institutions are weak, and the state has limited capacity, allow criminal politicians to step in and take control over public goods using their delivery as a mechanism to buy voter support. To test this theory, I examine the effects of electing criminal politicians on India's largest workforce program. Using a regression discontinuity design, I find that in constituencies where a criminal politician won, the project completion rate falls by 68%, but work allocation increases by 36%. Program funds in criminal constituencies are disproportionately allocated to labor, rather than materials. These findings suggest that criminal politicians strategically target the wage dimension of the program as a mechanism to buy voter support.

Chapter 4, examines whether dynastic politicians exert less political effort than their non-dynastic counterparts? Using a pre-registered field experiment in India, this paper tests whether the state legislators political family connections affect their responsiveness to requests for help with common public goods provision. I find that dynastic legislators are on average more than 50% less responsive. Furthermore, the results reveal that there are no statistical differences in the response rate when citizens provide a clear signal of their party preferences, and the raised concern comes directly under the responsibility of the legislator. These findings suggest that dynastic legislators are willing to exert more political effort when this can affect their electoral support.

Keywords: criminal politicians, dynastic politicians, clientelism, political effort

Contents

1. Introduction	1
2. Ethnic Voting	7
2.1. Introduction	7
2.2. Electoral Context	11
2.2.1. Electoral Context in Bihar	11
2.2.2. Criminality in Bihar Politics	12
2.2.3. Caste in Bihar Politics	13
2.3. Data	14
2.3.1. Voter Data	14
2.3.2. Election Outcomes and Candidate Data	17
2.4. Empirical Strategy	19
2.5. Results	20
2.5.1. Main Results	20
2.5.2. Alternative Explanations	23
2.6. Conclusion	25
A. Theoretical Model	28
A.1. Setup	28
A.2. Benchmark Model	29
A.3. Moving to a Probabilistic Voting Model	30
A.4. Theoretical Model Extensions	31
B. Robustness Checks	35
C. Candidate Profile and Criminal Backgrounds	37
D. Survey Sampling	40
E. Survey Questionnaire	42
F. Candidate Affidavit	47
3. Manipulating the System	49
3.1. Introduction	49
3.2. Criminal Politicians and Public Goods Provision	53
3.3. MGNREGA Background	57
3.4. Electoral Context	59

Contents

3.5.	Data	60
3.5.1.	Election Outcomes and Criminality Data	60
3.5.2.	MGNREGA Outcomes	61
3.6.	Empirical Strategy	62
3.7.	Results	63
3.7.1.	RDD Validity	63
3.7.2.	Main Results	65
3.7.3.	Heterogeneous Effects	68
3.7.4.	Mechanisms	70
3.7.5.	Robustness	73
3.8.	Conclusion	76
A.	MGNREGA Flow Chart	78
B.	Data and Summary Statistics	79
C.	Robustness Checks	83
D.	RDD Validity Checks for Alternative Definitions of Crime	92
E.	Candidate Affidavit	95
4.	Political Dynasties	97
4.1.	Introduction	97
4.2.	Theoretical Discussion	100
4.3.	Experimental Design	101
4.4.	Electoral Context and Data	105
4.4.1.	Electoral Context	105
4.4.2.	Data	105
4.5.	Empirical Strategy	108
4.6.	Results	109
4.6.1.	RDD Validity	109
4.6.2.	Main Results	110
4.6.3.	Robustness	114
4.7.	Conclusion	115
A.	Data and Summary Statistics	116
B.	Robustness Checks	119
C.	RDD Validity for Strong Dynasts	120
5.	Conclusion	121
	References	122

1. Introduction

Why do low-quality politicians run for elections? How is it possible, in a democracy with free and competitive elections designed to maximize citizens' autonomy in choosing their political representatives, that politicians with questionable effectiveness are elected?

There are two central arguments on why politicians who work against citizens' best interest exist in democracies. The first argument is that low-quality citizens have more to gain from public office than good politicians. Caselli and Morelli (2004) theorize that low-quality politicians have a lower opportunity cost from running for office because they are more incompetent. Since they are also more likely to be corrupt, they can extract higher rewards once elected. This prevents high-quality politicians from entering politics, lowering the overall pool of candidates from which voters can choose. Thus, as long as the rewards for competent citizens to run for office are low enough, bad politicians get elected even in a perfect information environment. However, this theory does not explain why, in democracies with sufficient availability of clean candidates, citizens choose bad politicians. This leads to the question of why this disequilibrium of incompetent politicians exists in democracies in the long run?

A second argument holds that economic and political institutions can play an instrumental role in understanding why certain types of politician exist and persist in democratic settings. Acemoglu and Robinson (2008) theorize that weak economic institutions incentivize political elites to invest in *de facto* power. In fact, when political institutions favor citizens, political elites might invest even more in politics to avoid future costs. Since this *de facto* power often comes from the use of bribery, manipulating the political system, and undermining democratic institutions, this could lead to the election of ineffective politicians who are willing to maintain the *status quo* of political elites. However, this equilibrium can be offset if democratic institutions are strong enough.

The problem is how to strengthen government institutions, when today's politicians determine the political institutions in the future. Caselli and Morelli (2004) argue that low-quality politicians take policy actions that maximize their chances of re-election lowering the rewards for future office holders. Thus, this discourages competent politicians from entering politics and further worsens political institutions in the

Introduction

future. Likewise, several other scholars have shown that the best electoral strategy for low-quality politicians to maintain political power is to keep government institutions weak, corrupt, and ineffective (Manzetti and Wilson, 2007; Stokes, 2005).

This dissertation seeks to build on this existing literature to understand the causes and consequences of electing certain types of politician in democracies where government institutions are weak and often replaced by politics that deepen social divisions and promote corruption. Using a theoretical, experimental, and empirical approach, this dissertation explores two fundamental research questions: (i) Why do voters elect criminal politicians in democratic countries? (ii) What is the effect of electing dynastic politicians to public office?

My work takes place in the context of India. Despite holding massive free elections with multi-parties, politicians charged with criminal cases have been rising in the Indian legislature. In the 2024 national elections, 46% of elected officials faced some form of criminal allegations, up from 43% in 2019, 34% in 2014 and 2009¹. Similar trends can be observed in the state legislature, where states such as Bihar and Uttar Pradesh often elect criminally charged legislators in large numbers. This rise in criminally accused legislators is puzzling, since citizens have ample credible information on the candidates' criminal activities. Likewise, dynastic politicians seem to exist in large numbers in both the national and state legislatures in India. Some prominent examples include the *Nehru-Gandhi* family at the nation level, the *Yadav* family in the state of Bihar and the *Abdullah* family in the state of Jammu and Kashmir. Thus, India provides an ideal setting to explore why such political elites exist in democratic polities and what the potential costs of electing such legislators are.

The first two chapters of this dissertation attempt to answer one of the most puzzling questions in politics: Why do voters support corrupt or criminal politicians? In Chapter 2, I start with the premise that this voter behavior can be explained by some underlying mechanism. In other words, citizens have an affinity for good quality candidates, but some alternative factor is playing a mitigating effect. This underlying voter preference can explain their willingness to elect criminal politicians. In particular, I focus on whether citizens elect political candidates on the basis of their ethnicity rather than their qualifications. There are two main mechanisms for why voters might be prone to disregard criminality in favor of their ethnically preferred candidate. First, countries with weak institutions often promote ethnic cleavages, and political parties are often complicit in using these social divisions as an electoral strategy to target voters (Chandra, 2007; Horowitz, 2001). Second, since the availability of resources is often limited and controlled by certain political

¹The data on candidates' criminal records is collected from MyNeta, an open data platform run by the Association for Democratic Reform (ADR). Retrieved from <https://myneta.info>

groups, voters believe that candidates from shared ethnic groups would act in their best interest and provide them with better access to public goods. Thus, if citizens were putting a higher weight on ethnicity over probity, this could perhaps explain why criminal politicians win elections.

To conceptualize this idea, I develop a model using a two-candidate framework to show how the voters' response changes when they consider both ethnicity and criminality in their decision-making. Empirically, I test the predictions of the model by collecting voter data in the Indian state of Bihar during the 2020 state assembly elections. Bihar provides an ideal testing ground because it is well known for electing criminal politicians and for its communal politics. Thus, if voters were truly electing candidates on the basis of their ethnic ties rather than their quality, we should expect this phenomenon to be most prominent in a state like Bihar.

Contrary to voter preference theory, I find that voters exhibit a stronger negative response to candidates accused of criminality when they belong to their preferred ethnic party. Voter support for the non-ethnic falls by 89.2% for violent charges. Coethnicity further reduces electoral support by 67% for violent criminals. This pattern holds regardless of the voters' level of news consumption, political knowledge, education status, and income. Thus, my findings reveal that a distaste for candidates of disrepute seems to be the norm amongst a diverse type of voters. This leads to the question on how do we then explain the steady rise of criminal politicians in the Indian legislature?

Building on these findings, in Chapter 3, I relax the assumption that voters have a distaste for criminality and argue that they elect them to office not despite (but precisely) because they are criminals. My research is based on the works of several scholars who theorize that in democratic countries with weak institutional settings, criminal politicians not only win elections but prosper. Manzetti and Wilson (2007) theorize that when government institutions are weak and the state fails to deliver public goods to their citizens, it allows clientilistic networks to thrive. In such settings, criminal politicians can step in and take control over state resources, using their delivery as a mechanism to buy voter support. Since access to resources is often scarce and limited, this makes clientelism the best electoral strategy in the hands of corrupt or criminal leaders. Similar qualitative accounts can be found in the literature on India, where scholars have routinely found that citizens view criminal politicians as "Robin Hood" figures who are willing to go above the legal means to protect their rights and deliver public goods, where others have failed (Berenschot, 2011a, 2011b; Martin and Michelutti, 2017). In fact, Vaishnav (2017) shows that the access to money, muscle, and networks makes criminal politicians effective in "getting things done". Thus, if criminality is perceived as a signal of competence, voters could rationally elect criminal candidates to political office, even given their

Introduction

reputation.

Despite the availability of this rich qualitative evidence, there is little hard empirical evidence on whether criminal politicians actually deliver. Previous research has mostly found large negative effects of electing corrupt or criminal politicians on economic activity and democratic functioning (Chemin, 2012; Prakash et al., 2019; Solé-Ollé and Sorribas-Navarro, 2018). In this paper, I argue that criminal politicians are more strategic and only deliver goods that they can claim credit for and voters might care about. By dispensing short-term benefits, they give the appearance of being competent enough and that is why citizens elect them.

To test this theory, I estimate the causal effects of electing criminal politicians on the implementation of India's largest anti-poverty social program, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which aims at providing rural employment and improving village infrastructure. MGNREGA provides an ideal setting because it targets the poor and allows plenty of opportunities for politicians to claim credit for its delivery. Thus, giving politicians the perfect tool to build clientilistic relationships, making this the cheapest vote-buying mechanism at their disposal.

Since the election of a criminal politician is not random, I use a regression discontinuity design comparing only close elections where a criminal politician barely won or lost. I find that in constituencies where a criminal politician barely won, complete fewer projects relative to clean constituencies. In contrast, criminal constituencies observe an increase in work allocation compared to clean constituencies. In addition, these findings vary according to constituency characteristics such as reservation and partisan alignment. The results show that criminal politicians perform significantly better in constituencies with greater potential for electoral gains. Next, I examine whether my results can be explained by the criminal politician engaging in corrupt practices. I find no robust evidence that corruption is a potential mechanism. In fact, criminal politicians strategically target the labor expenditure of the program, rather than materials. Since the material component is often associated with rent seeking, these results suggest that criminal politicians are using the program to strategically deliver targeted benefits to their constituents.

In Chapter 4, I shift my focus from criminal politicians and concentrate on another puzzling phenomenon in politics: The existence of political dynasties. Previous literature highlights that factors such as a lower barrier to entry, name-recognition, and self perpetuation can explain why dynasties are a mainstay in politics (Dal Bó et al., 2009; Querubin et al., 2016). However, the consequences of electing dynastic politicians are unclear. Although some studies find positive effects of dynasties (Besley and Reynal-Querol, 2017; Labonne et al., 2019), others do not (Bragança et al., 2015; George et al., 2018). These papers mostly concentrate on the

effect of electing dynastic politicians on economic welfare. In this paper, I focus on estimating the effects of electing dynastic politicians on political effort. Since dynastic politicians often face less electoral competition and inherit their position, I hypothesize that they exert less effort once elected to public office.

To test this theory, I conduct a pre-registered audit experiment in India. In the experiment, I examine whether the state legislators' political family connections affect their responsiveness to requests for help with common public goods provision. Since data on political dynasties in India are limited, I carry out a large-scale data collection effort to tag all political family connections for the top two finishing legislators for all state assembly elections held between 2018 and 2023. I find that dynastic legislators are on average more than 50% less responsive. This response rate is reduced further when legislators have strong political family ties. Furthermore, the results reveal that there are no statistical differences in the response rate when citizens provide a clear signal of their party preferences, and the raised concern comes directly under the responsibility of the legislator. These findings suggest that dynastic legislators are willing to exert more political effort when this can affect their electoral support.

In addition to novel data collection, my dissertation contributes widely to the literature on the role of government institutions in democracy, political accountability, clientelism, and distributive politics. My findings shed light on one of the most important questions in politics, on why criminal politicians exist in democracies. The notion that citizens reward criminal politicians rather than reject them challenges some fundamental theories of democratic representation and political accountability.

My findings contradict existing theories that voters have a distaste for criminality and factors such as limited information, ethnic voting, and vote buying play a mitigating effect (Banerjee and Pande, 2011; Bratton, 2008; Ferraz and Finan, 2008). I show that voters rationally reward criminal candidates because they believe that they have the necessary trait to be effective in politics. In this respect, my work provides a link between the two competing strands of literature: one that theorizes that in democracies with weak institutional settings, criminal or corrupt politicians can not only persist, but thrive (Berenschot, 2011a, 2011b; Manzetti and Wilson, 2007; Martin and Michelutti, 2017; Vaishnav, 2017). And, the other that finds that electing criminal politicians leads to significant negative economic costs (Chemin, 2012; Prakash et al., 2019). My findings indicate that while criminal politicians reduce overall welfare, they compensate citizens by providing targeted benefits. By dispensing short-term benefits, they are able to signal to the voter their credibility, explaining their willingness to elect them.

The last chapter of my dissertation contributes to the small but growing literature that examines the effects of electing dynastic legislators (Asako et al., 2015; Besley and Reynal-Querol, 2017; Bragança et al., 2015; George et al., 2018). I contribute

Introduction

to this literature by showing the effects of electing dynastic legislators on political effort. My findings show that dynastic legislators on average exert less effort than non-dynasts. However, they can be incentivized to work harder when there are clear electoral rewards on offer. In this respect, my results support the research of George et al. (2018) who show that in India, dynasts with sons perform significantly better. They theorize that this is driven by their motivation to maintain political capital for future generations.

Lastly, this chapter adds to the literature that uses audit experiments in evaluating legislator performance. Previous research using email experiments tests whether the legislators' response to constituency-related queries is impacted by the race of voters (Butler and Crabtree, 2021; McClendon, 2016). Likewise, in the Indian context, there are few studies that have used some form of digital experimental design, such as Whatsapp, SMS, and emails, to gauge the responsiveness of legislators (Bussell, 2017; Gaikwad and Nellis, 2021; Vaishnav et al., 2019). A common theme in all of these audit experiments is that they test whether legislators discriminate between constituents. This study adds to this literature by showing that the characteristics of certain legislators can in itself affect their responsiveness.

There are wide implications of my dissertation on understanding the role of government institutions in democracies. My work highlights how weak institutions can lead to incompetent leaders being elected to office. In societies with deep social divisions and limited resources, politicians can exploit these conditions to maintain public support even when they work against the best interest of citizens. This opens up several questions on our understanding of democracies, political accountability, the role of institutions, and political representation. In Chapter 5, I discuss some of these implications and avenues for future research.

2. Condoning Criminality for Ethnicity ¹

“So what if he is a criminal? I vote for him because at least he is from my jati (caste).”

— Voter Interview, 16th March 2022

2.1. Introduction

In theory, free competitive elections would prevent corrupt or criminal politicians from being elected to office and discourage those in power from committing acts of misconduct (Besley, 2007; Caselli and Morelli, 2004). However, the empirical evidence is inconclusive: Although some studies find that voters hold bad politicians accountable (Klašnja, 2017), others do not (Chang and Kerr, 2017). What is prompting voters to routinely select candidates of disrepute for public office?

In this respect, India provides an ideal setting to examine why corrupt or criminal politicians win. Although holding massive democratic elections with multiple parties, voters often elect and re-elect criminally accused candidates at the polls. For example, in the last *Lok Sabha* (national) election of 2019, 43% of the Members of Parliament (MPs) faced criminal allegations, of which 30% were accused of “serious” crimes such as rape, kidnapping, and murder.²³ In comparison, in the previous 2014 national elections, 34% of the MPs faced criminal charges, of which 22% were accused of committing serious offenses.

One plausible explanation for this steady rise in the electoral success of criminal politicians could be attributed to the voters’ ethnic preferences, where they select

¹A version of this chapter titled “Why do voters elect criminal politicians?” is published in the *European Journal of Political Economy*, 82 (2024): 102527.

²The data on the candidates’ criminal records is collected from MyNeta, an open data platform run by Association for Democratic Reform (ADR). ADR has compiled the information available from the original candidate affidavits for all national and state elections. Retrieved from <https://myneta.info>

³The classification of serious crimes is taken from ADR. An explanation of the definition of serious crimes along with related IPCs is available on the ADR website: <https://adrindia.org/content/criteria-categorization-serious-criminal-cases>

candidates based on ethnic profiles rather than their qualifications. There are several mechanisms that directly or indirectly provide support for why voters might consider ethnicity in their decision making. First, in societies that have many social groups, individuals identify with only a few of them because they feel a sense of belonging or similarity to other members of their group (Klor and Shayo, 2010). This shared identity can come in various forms, such as race, language, or ethnicity, and voters observe some form of “in-group” positive externality from such candidates, perhaps explaining why they vote for them (Ansolabehere and Puy, 2016). Second, in weak institutional settings, citizens might be more prone to make their vote choices based on ethnic ties (Horowitz, 2001). Since these countries often tend to exhibit high ethnic cleavages and low information availability, citizens use ethnic cues rather than the qualification or electoral performance of the candidate in making their voting decisions. A third explanation argues that voters elect candidates from shared ethnic groups because they believe that such candidates would promote their interests or provide them with better access to resources (Chandra, 2007; Posner, 2005). This belief comes from the assumption that promises of patronage from coethnic candidates might be more credible since they have some form of moral obligation towards them. Regardless of the mechanism at play, the central theme in these theories is that voters might consider ethnicity in their decision-making. Hence, we can easily construe that if voters put a higher relative importance on the candidates’ ethnicity over their quality, this could perhaps explain why they fail to punish such politicians.

This leads to two main questions: Do voters make electoral decisions based on their ethnic preferences? Is this ethnic alliance so strong that voters are willing to ignore allegations of criminality? To address these questions, this article extends the standard deterministic voting model to include both ethnicity and criminal allegations in the voters’ decision making (provided in Section A of the Appendix). The novelty of this approach is the inclusion of the interaction between these characteristics. Using this setup, I show that while voters display a general aversion towards criminality, this punishment is often mitigated if the voter considers ethnicity in their underlying preferences. To empirically test this prediction, I use primary survey data in which 2000 voters in the Indian state of Bihar were asked questions about their vote choice for the assembly elections held in 2020. Using a conditional logit model, I examine whether voters elect candidates based on their ethnic identities and how this alters their support towards criminally accused candidates.

To further explore whether the electoral support for coethnic candidates accused of criminality depends on certain conditions, I test for two underlying mechanisms: first, I examine whether voters with lower levels of political information are more likely to side with their ethnic party even when they put forward candidates accused

of criminality. It is often argued that citizens vote for tainted candidates because they lack sufficient evidence of their wrongdoings (Costas-Pérez et al., 2012; Ferraz and Finan, 2008). Despite these studies providing sufficient credence to the information hypothesis, the impact of information campaigns on altering voter behavior in the Indian context has been inconclusive.⁴ One explanation for why information campaigns have not had the desired effect could be that criminality is a highly salient trait in Indian politics. In the days leading up to the election, this issue is often extensively covered in the local and national news, providing voters with ample credible information on the candidates' criminal backgrounds.⁵ However, one concern is that voters with limited knowledge about the candidates' criminal activities might be more inclined to support their ethnic party. For example, Chandra (2007) argues that in low information settings, citizens forgive politicians for their misconduct because they rely on ethnic cues in making their voting decisions, or they believe that the criminal allegations against their preferred candidates are more likely to be false. I test for this using two main instruments: the news consumption habits and the political knowledge of the voter.⁶

Another argument often made is that voters are willing to vote for criminal politicians because they might be more likely to provide them with patronage. Various scholars argue that voters view criminal politicians as “Robin Hoods”, who are capable of delivering public resources and that is why they elect them (Berenschot, 2011a; Vaishnav, 2017). This theory holds that in contexts with a lack of state capacity, criminal politicians can use their vast funds acquired through illegal activities and muscle power to either bribe or intimidate bureaucrats into delivering resources to their constituents, where others have failed. Another related explanation argues that criminal politicians might be more prone to engage in acts of providing side payments or vote buying (Bratton, 2008; Wade, 1985). Thus, if voters value tangible benefits over probity, we might expect them to have a stronger preference for their ethnic party. This is because they believe that if elected, their ethnic candidate would provide them with better access to public goods. (Posner, 2005). To test for this, I examine whether poorer or less educated voters are more

⁴Banerjee et al. (2011) using an experimental setting in the slums of Delhi, find no conclusive evidence that voters alter their behavior when presented with report cards on the performance of incumbents. Vaishnav (2017) using qualitative data across India argues that voters were not told anything they did not already know. His work shows that politicians often boast about their criminal reputation, and voters are well aware of the criminal allegations against them.

⁵Numerous articles in prominent local and national newspapers from *The Telegraph* to *The Times of India-Bihar* with headlines such as “Gangsters flex muscles in poll-bound Bihar” and “68% of elected MLAs in Bihar face criminal charges” are commonly published citing the number of candidates contesting with criminal allegations.

⁶The use of these instruments is not novel to this paper. Various existing studies have exploited these characteristics to examine the information hypothesis (Aarts and Semetko, 2003; Klačnja, 2017).

likely to forgive coethnic candidates accused of criminality. Allegedly, if voters were making decisions solely based on clientelistic reasons or immediate patronage on offer, we should observe that this effect is the most prominent among the poorest and least educated segments of society (Banerjee et al., 2014; Kyriacou, 2023).

I find that voters show a stronger aversion towards candidates accused of criminality when they belong to their ethnically preferred party. This pattern holds regardless of the voters' attributes such as their income, education, news consumption habits, and political knowledge. These findings suggest that even in the context of Bihar, a region well known for its caste politics and reputation for electing criminal legislators, the distaste for politicians of disrepute seems to be widespread.

This paper contributes to several strands of literature. Foremost, more narrowly, it contributes to the literature that evaluates the role of ethnic voting in the selection of bad-quality legislators in India. Although few existing studies have examined the ethnic voting hypothesis in the Indian context, the findings are mixed. At the aggregate level, several studies find that voters select parties solely based on their ethnic profile rather than policy platforms or candidate quality.⁷ On the contrary, individual-level studies using experimental designs have found that voters respond negatively to coethnic politicians when criminal accusations are made against them.⁸

This paper provides the first empirical evidence that uses actual survey election data rather than an experimental approach. Using non-experimental data in estimating individual voting behavior might be of interest for several reasons. First, field experiments due to design limitations generally tend to present voters with a binary option, where they have a clean uncontested choice between a good and a bad-quality hypothetical candidate. However, multiple candidates with criminal allegations often run in Indian elections. Moreover, these accusations of criminality are often met with denials and counter-accusations. Unlike in experimental settings, in real-world elections, this makes the voting decision much more complex than simply choosing between the good versus the bad quality candidate. Second, such studies rely on providing explicit ethnic cues to voters to reveal their preferences, either via using popular ethnic surnames (Banerjee et al., 2014) or imagery (Chauchard, 2016). Previous research has shown that although voters may consider ethnicity

⁷Chandra (2007) using data from 1984 to 1998 finds that Schedule Caste voters are more likely to vote for their ethnic party in Indian states with higher representation of coethnics in elite positions. She concludes that India can be described as a “patronage democracy”, where voters choose parties by counting the heads of coethnics in positions of power and prestige within the party organization. Banerjee and Pande (2011) find that in Uttar Pradesh, regions with increased voter ethnicization tend to elect lower quality candidates. This is because the ethnically dominant party has a comparative advantage, irrespective of electoral performance or candidate attributes.

⁸Both Banerjee et al. (2014) and Chauchard (2016) using an experimental setting in Uttar Pradesh show that although voters display a strong preference for their ethnically preferred party or candidate, this ethnic voting advantage is often mitigated if the candidate is of lower quality.

in their decision making at the polls, when informed about their choice, they are unwilling to disclose their ethnic preferences (Carlson, 2016). A related concern is that ethnic voting can be highly sensitive, and slight changes in ethnic cues or the voters' perception can alter the response significantly (Adida, 2015). Thus, using non-experimental data allows me to directly test the voters' response toward coethnic candidates and whether this can explain the electoral success of criminal politicians on the ballot.

Second, this paper contributes to the burgeoning body of literature examining the effects of information campaigns in altering the voter response in the Indian context (see, Banerjee et al., 2011; George et al., 2018). This paper modestly adds to this literature by providing further evidence that voters punish criminal politicians regardless of their news consumption habits or political knowledge.

Beyond India, these findings have wider applications. There has been a recent increase in the number of corrupt or criminal officials in various developing countries such as (not limited to) Brazil, Pakistan, the Philippines, and Nepal. Since these countries often have similar institutional settings, these results are particularly relevant to policymakers who are trying to find solutions to solve this perplexing problem.

Lastly, this paper adds to the comparative literature that has previously examined the role that ethnic voting plays in the selection of bad-quality officials in other developing and mature democracies around the world (Adida et al., 2017; Carlson, 2015; Chang and Kerr, 2017; Lindberg and Morrison, 2008). The findings in this paper highlight that although ethnicity plays an integral role in the voting decision, this is often mediated when the coethnic candidate is accused of committing serious acts of misconduct.

The remainder of the paper is structured as follows. Section 2.2 describes the electoral context. Section 2.3 and 2.4 describe the data and the empirical strategy, respectively. Section 2.5 discusses the results. Section 2.6 provides some policy implications and concludes.

2.2. Electoral Context

2.2.1. Electoral Context in Bihar

Bihar is arguably one of the most important political states in India. With a population of over 100 million (8.6% of the nation's share), it is the third largest in

the country and holds one of the largest state elections in the world.⁹ It is also one of the poorest states in India, with about 34% having income levels below the national average. About two thirds of the population in Bihar is engaged in agricultural activities and nearly 89% reside in rural areas. Literacy rates are close to 80% among men and 70% among women. Bihar's total GDP was approximately 80 billion dollars in 2019 contributing to 2.8% of the national GDP (Reserve Bank of India, 2022).

2.2.2. Criminality in Bihar Politics

The “criminalization” of Indian politics is hardly a new phenomenon, where political parties are often guilty of fielding tainted candidates and voters of selecting them. Although there has been a steady upward trend in the criminalization of politics in the country, the severity of the problem was unknown until recently. In 2003, the Indian Supreme Court in a landmark judgment made it mandatory for political candidates to submit an affidavit that included a comprehensive detail of their criminal records. Remarkably, the release of these affidavits revealed that criminal politicians existed at all levels of government and the problem was even more acute in certain states such as Bihar and Uttar Pradesh.

Although the law aimed to provide better information to voters, recent uptake of criminal politicians in India suggests that the judgment has failed to have the desired effect of decriminalizing politics. For example, as Figure C.1 shows in the 2010 and 2015 elections, the number of criminal MLAs increased from 49% in the 2005 elections to 58%. Surprisingly, the number of MLAs with serious offenses was even higher and increased from 29% in 2010 to 35% in 2010 and 40% in 2015. Similar trends can be observed across the country at the state and national levels. In 2020, 54% of the 4,676 sitting MLAs and MPs had some form of criminal allegations against them.

Although Section 8 of the Representation of People's Act bars individuals who have been convicted for more than two years from participating in elections for at least six years after their incarceration, there is no such bar forbidding candidates facing trial from contesting. Since these court cases can drag on for years, candidates can freely compete in elections, making Section 8 almost ineffective. This also incentivizes criminally accused candidates to run for political office since once in power, they can manipulate the judiciary in throwing out the charges against them. Subsequently, the Supreme Court in 2020, citing the recent rise in criminal candidates, ordered parties to highlight candidate criminal records on their social

⁹The data for Bihar demographics is collected from the Census of India (2011). Retrieved from <https://censusindia.gov.in/census.website/data/census-tables>

media platforms in various vernacular languages. However, since all parties are equally complicit, this law has had little effect in curbing the criminalization of Indian politics. This was highlighted in the Bihar 2020 assembly elections, where the state recorded the second highest number of legislators facing criminal cases in India, with nearly 68% of MLAs being accused of criminal charges, including more than 50% of them being charged with committing serious crimes. The staggering number of politicians with criminal or corruption cases in Bihar politics is disturbing. Although recent government measures are a step in the right direction, crime is intertwined in the fabric of Indian politics, and the steady uptake in criminal politicians suggests that there are other crucial factors at play in explaining why voters continue to support criminal candidates on the ballot.

2.2.3. Caste in Bihar Politics

Politics in Bihar is closely intertwined with the caste system in India. Generally, caste refers to a hierarchical social group in which affiliations are determined by birth. Caste plays an integral role in an individual's identity and ability to acquire resources. It is well known that voters identify with politicians based on their religion or caste. Parties are often complicit in engaging with a few ethnic groups to gain a comparative advantage and further secure their vote banks (Banerjee and Pande, 2011; Chandra, 2007).

Elections in Bihar are dominated by the Hindu voter, which comprises more than 80% of the population. However, in certain regions, Muslim voters can influence election results. The Hindu society can be further divided into three broad caste groups: Upper Caste, Other Backward Caste (middle caste), and Schedule Caste/Tribe (lower caste). Amongst the Other Backward Caste (OBCs), arguably, the caste can be further segregated into two sub-castes: *Yadav* and *non-Yadav OBCs*.¹⁰

Political parties generally cater to one or two of these caste groups, and these relationships are traditionally well established. From the five main parties contested in the Bihar 2020 elections: BJP, BSP, JD (U), RJD, and LJP, their ticket allocation, and the electoral representation at the assembly legislature highlight the persistence of ethnic voting. BJP predominately catering to the upper caste, fielded about 50% upper caste candidates, even though the group only comprises 16% of the state population.¹¹ In terms of representation, 30% of upper caste candidates that were

¹⁰*Yadav* is a prominent *jati* or sub-caste accounting for about 14% of Bihar's total population. While the *Yadav* community traditionally belonged to the lower caste mainly involved in agricultural activities, they often tend to wield significant political power (Gupta, 1992).

¹¹The data on candidate caste background has been retrieved from the SPINPER Project and TCPD-ILD Dataset.

elected more than half belonged to BJP.¹² Likewise, RJD, whose core voter base is the Muslim and *Yadav* community, fielded 12.5% and 33.3% of their candidates from these two groups respectively. Of these, 45.4% were electorally successful. JD (U) gave tickets to two-thirds of candidates belonging to non-Yadav OBCs, with a maximum of their winning seats coming from these communities. Finally, BSP and LJP gave most of their tickets to candidates belonging to SC/ST caste groups. These trends seem to suggest that parties regularly field specific ethnic candidates and that citizens seem to routinely vote for them, highlighting the extent of polarization in Bihar politics.

2.3. Data

2.3.1. Voter Data

The Bihar state assembly elections were held during the months of October-November 2020. I collected primary voter data during the months of January-April 2022 in two districts of Bihar: Muzaffarpur and Samastipur.¹³

The sampling strategy was as follows: In total, there are 21 constituencies in both these districts, out of which about one-fifth of the constituencies are reserved for Schedule Caste/Tribe (SC/ST) candidates. Since there is no choice for voters except to select a candidate from a reserved ethnicity in these constituencies, they were removed from the sampling procedure. This provided a sample of 17 constituencies to choose from. From the list of general constituencies, five constituencies were chosen at random from each district. Next, using the coverage maps of the polling stations provided by the Bihar Election Commission, 2 polling booths were randomly chosen within each of the constituencies sampled.¹⁴ Finally, within each polling booth, 100 respondents were randomly chosen for the survey using the voter list generated by the Bihar Election Commission for the 2020 assembly elections.¹⁵ This procedure provided a complete size of 2000 voters in the 10 assembly constituencies. A brief description of the sample size is provided in Table D.1.

In addition, Bihar, being predominantly an agricultural state, faces a high level of seasonal labor migration, and some voters in the sample size were unavailable to be surveyed. For this reason, the survey team was provided with 50 additional

¹²Similarly, in the assembly polls of 2015, BJP fielded 65 upper caste candidates with 53 of them securing electoral victory.

¹³See Figure D.1 for the location of Bihar in India and the constituency-level map of Bihar.

¹⁴The polling and voter list is provided in the Bihar Chief Electorate Office. Retrieved from <http://ele.bihar.gov.in/pdfsearch>

¹⁵The sampled polling booth comprised of about 1000 registered voters, out of which 10%-12% were randomly picked for the survey.

substitutes in each polling booth. To avoid the risk of pre-selecting the easiest respondents, the substitutes were randomly selected beforehand. Surveyors were instructed to first attempt to locate the original respondent and failing to do so to note the reason and then move on to the substitute list.

A month before the survey, I recruited and trained the field team. The field team consisted of eight surveyors and two supervisors. A few days before the survey, a pilot study was conducted in a non-sampled polling area to test the responses to the questionnaire. After making the relevant changes, the survey was translated and coded using a standard Open Data Kit (ODK) platform. In the final sample, 76% of the respondents were from the original list and 24% were substitutes. About 90% of the substitutions were made because the respondent had permanently moved or were temporarily unavailable. Once the respondent was located, the response rate was extremely high, with fewer than 1% refusing to participate in the survey. Among the respondents who participated, 27 of them did not vote in the 2020 elections mainly for personal reasons or because they had voter identification problems and 4% did not recall who they voted for.¹⁶ Therefore, these observations were dropped, providing a final sample size of 1892 voters.

To further ensure that the responses were not affected by any observer effects, the enumerators were instructed to conduct the survey only when the respondent was alone. If this was not possible, respondents were asked for an alternative time for when the survey could be conducted. In addition, to make women feel comfortable giving the survey alone, they were only surveyed by women enumerators. Lastly, to check the precision of the data, 20% of the respondents who participated in the main survey were randomly selected to be surveyed again. For this purpose, two independent backcheckers were hired to contact them a few days later remotely. The backcheckers asked a few predetermined questions from the main survey and reported to the supervisor if any errors were detected. The supervisor then personally visited the respondent to make further inquiries and, if required, the survey was conducted again or the respondent was replaced using the substitute list.

Some sections included in the survey were on the demographic and socioeconomic characteristics of the respondents, their news consumption habits, general political knowledge, voting preferences, and how political parties engaged with them during

¹⁶The high voter turnout in the survey could be attributed to several factors. First, the survey was conducted only in rural areas where voter turnout generally tends to be high. Second, the elections took place immediately after the COVID lockdown, allowing migrant workers to return home and participate in the electoral process. Third, it could be that a fraction of the respondents who did not recall who they voted for or were substituted included voters who did not turn out. Fourth, a post-poll survey conducted by Lokniti CSDS reported a similar voter turnout of 97% with a sample size of 3612 respondents. However, one concern with the Lokniti CSDS survey was that the reported turnout might suffer from overestimation due to sampling errors.

Ethnic Voting

the election campaign. The relevant version of the survey questionnaire is provided in Section E of the Appendix. In terms of demographics, as presented in Table 2.1, on average more than half of the respondents were female, slightly higher than the state average.¹⁷ 48% of the respondents were literate and only 6% possessed a college degree. The average monthly household income was just above 10,000 Indian Rupees (approximately 123 US\$). Most of the respondents were Hindu, with 13% upper caste, 14% *Yadav*, 48% *non-Yadav* OBCs, and 18% belonging to the SC/ST category. In terms of caste break, the sample was mostly similar to the state average.

Table 2.1.: Voter Profile

Variable	Mean	S.D.	Min	Max	State Avg.
Age	46.48	15.82	18	100	43.22
Male	0.48	0.50	0	1	0.52
Literate	0.48	0.50	0	1	0.48
College Degree	0.06	0.24	0	1	0.09
Household income (in thousands)	10.22	10.20	0.03	150	7.40
Hindu	0.93	0.25	0	1	0.84
Upper Caste	0.13	0.34	0	1	0.24
Yadav	0.14	0.34	0	1	0.15
Non-Yadav OBC	0.48	0.50	0	1	0.43
SC/ST	0.18	0.47	0	1	0.18
NREGA worker	0.17	0.38	0	1	0.08
Attended political rally	0.17	0.38	0	1	0.18
Joined party media platform	0.07	0.26	0	1	0.07
Read political manifesto	0.19	0.39	0	1	NA
High News Frequency	0.39	0.49	0	1	NA
High Political Knowledge	0.43	0.50	0	1	NA

Notes: The voter profile is based on the final sample size of 1892 respondents. The state average data is taken from the Lokniti CSDS Bihar Post-poll 2020 survey that included a sample size of 3,612 respondents from 37 assembly constituencies. NA indicates data for which the state averages are not available.

To reveal the voting preferences of the respondents in the 2020 assembly elections, they received a full list of candidates who contested in their respective constituency, along with the names and symbols of the parties they represented. The respondents were asked to mark their choice and hand over the list to the surveyor. Each of the candidates was given a unique code which the surveyor then entered into the survey. For respondents who did vote in the 2020 state assembly elections, as Figure D.2 documents, 33% of them claimed to have made their choice based on various

¹⁷The state average data is taken from the Lokniti CSDS Bihar Post-poll 2020-Survey Findings. Lokniti is part of the Center for the Study of Development Societies, which specializes in conducting election-related surveys. The full report is available at https://www.lokniti.org/media/PDF-upload/1606577835_22658400_download_report.pdf

development issues such as government performance, unemployment, and economic growth. 14% of the voters claimed to have voted for some form of loyalty to the candidate or party, while the largest fraction of the voters chose the candidates based on some clientelistic issues, such as better access to resources or government schemes.

The survey also included questions on news consumption habits and political knowledge to gauge how informed the voter was. First, to measure news consumption, respondents were asked questions about how much political news they saw, listened to, and read using various platforms such as newspapers, television, and the internet. Using this information, I constructed a binary variable news frequency, which takes a value of 1 if the respondent consumed political news on a daily or weekly basis and 0 otherwise. The data revealed that only 39% of the respondents in the sample size consumed news frequently. Second, to assess the political knowledge of the respondents, nine simple questions were asked such as the MLA's name and the party they were affiliated to.¹⁸ Remarkably, given the simplicity of the questions, only 43% of the respondents in the survey were found to have a high level of political knowledge.

Lastly, since the main interest of this study is to check whether ethnicity played a role in the selection of criminal candidates, a respondent was defined as a coethnic if they voted for their ethnically preferred party. Specifically, the variable scores 1 if an upper caste respondent selected a BJP candidate, a *Yadav* or Muslim respondent selected a RJD candidate, a *non-Yadav* OBC respondent selected a JD(U) candidate, and a SC/ST respondent selected a candidate from BSP or LJP, otherwise the variable scores a 0. Although some of these parties contested under an alliance, this was not taken into consideration to avoid any overestimation issues.

2.3.2. Election Outcomes and Candidate Data

Data on election outcomes for the Bihar state assembly elections held in 2020 were collected from the Trivedi Centre for Political Data (TCPD).¹⁹ The data includes various election-related information such as constituency names, their reservation status, candidate names, their affiliated party, electoral size and turnout, registered number of voters, and the vote share received by each candidate.

The data for criminal accusations and the background of the candidates was

¹⁸A full breakdown of the voter response to all the questions is provided in Table D.2. I defined a dummy variable political knowledge which equals 1 if the respondent at least answered more than half of the questions correctly and 0 otherwise.

¹⁹TCPD has compiled the data for all the elections held both at the national and state level from the original reports available from Election Commission of India (Agarwal et al., 2021). The data is available at <https://lokdhaba.ashoka.edu.in/>

collected from MyNeta, an open data repository run by ADR. This information is available on the ECI website in the form of PDF affidavits (Figure F.1). ADR has re-entered and compiled this data, making it freely available to the public to provide better access and transparency.

Although all the information about the candidates was collected, the primary interest was the information about their criminal background. Using this data, criminal charges were separated into two types of crimes: violent and non-violent. In this paper, violent crimes refer to those that are related to bodily harm.²⁰ Using this definition, I construct a dummy variable that equals 1 if the candidate is accused of violent allegations and 0 otherwise. Likewise, non-violent crimes take a value of 1 if the candidate faced any form of charges other than violent ones and 0 otherwise.

In the ten assembly constituencies sampled, the average electoral turnout was similar and the average margin of victory between the top two candidates was less than 10% regardless of the number of criminal candidates contesting. Of the 185 competing candidates, as presented in Tables C.1, on average most were men and belong to the Hindu community, and less than half of them had a college degree. In terms of criminal accusations, a simple look at the distribution of candidates with criminal charges and the different types of charges highlights the severity of the problem (Tables C.2-C.3). Of the 185 candidates, more than 31% of the candidates faced at least one criminal charge, of which more than 50% faced violent allegations. The problem is even more acute for the top-finishing candidates. Among the top 3 candidates, more than 75% had criminal charges and 50% faced violent charges. Among the winners, 9 out of 10 sitting MLAs had a criminal record, with 2 of them facing allegations of violent offenses. Looking at the criminal candidates by political representation, a high number of them belonged to the most popular parties. Of the 30 candidates selected by popular parties, 20 of them had some form of criminal record, of which 5 were accused of committing violent offenses (Table C.4). Lastly, a comparison between non-criminal versus criminal candidates revealed that criminal candidates had a higher likelihood of belonging to a national party or being an incumbent (Table C.5). However, when the sample is restricted to the top three finishing candidates, there appears to be no evidence of statistical differences in their characteristics. Since the analysis in this paper is limited to the top three finishing candidates, this provides some assurance that the findings capture the effect of criminal allegations rather than any other correlated candidate characteristics.

²⁰Violent crimes include murder, attempt to murder, rape, kidnapping, extortion, and armed robbery.

2.4. Empirical Strategy

The main aim of this paper is to investigate whether coethnic voting can explain why voters support criminal politicians at the polls. Do voters elect politicians along ethnic lines? Is this ethnic preference so strong that voters are willing to overlook allegations of wrongdoing?

There are several challenges involved in estimating the effect of candidate traits on voting behavior in multi-candidate elections, which make common econometric choice models such as multinomial logit inadvisable (see, Alvarez and Nagler, 1998). One solution is the conditional logit model, which allows one to estimate choices when multiple parties or candidates are available. There are several advantages of using this methodology: first, as the theoretical model predicts, the vote choice for one candidate is dependent on the characteristics of the other. The conditional logit precisely accounts for this by estimating the likelihood of the selection of one candidate conditional on the attributes of the alternatives. A second advantage of the conditional logit is that it allows grouping the data for each decision maker, meaning that it controls for any individual-level voter fixed effects.

To estimate the conditional logit model, the data is stacked such that, for each voter, there are multiple rows, where each row indicates the alternatives available. In formal terms, the model can be specified as follows:

$$\Pr(y_i = p/x_i, z_i) = \frac{\exp(z_{ip}\psi + x_i\beta_p)}{\sum_{j=1}^J \exp(z_{ij}\psi + x_i\beta_j)}$$

Where y_i is the outcome that measures the probability that an individual i chooses an alternative party p from a set of choices. In this case, it is a binary variable that takes a value of 1 for the party the voter chose in the Bihar 2020 assembly elections and 0 otherwise. z_{ip} indicates a variable that measures the characteristics of alternative p relative to the case i . In this model, alternatives p are represented by the parties that finished in the top three positions in their respective constituency. In general, for each variable z_k , there are J values of the variable for each case, but only the single parameter ψ . x_i contains case-specific independent variables for case i and β_p represents coefficients for the effects of alternative p relative to the base alternative (in this case, the clean non-ethnic).

To measure the ethnic preferences of the voter, the model includes a dummy variable *coethnic* which takes the value of 1 if the voter chose a party belonging to their ethnic group and 0 otherwise. To account for criminal accusations, I include two types of charges: violent and non-violent. To capture whether coethnic voting strengthens or weakens the electoral support towards criminality, interaction terms between each type of allegation and coethnicity are included in the model. The

model further controls for various observable candidate characteristics such as their age, income in logs, education status, and incumbency. Lastly, since Indian elections are mostly party-centric, I account for this by including party fixed effects, defined as a dummy variable indicating the party the candidate belongs to.

To further explore whether the voters' response towards criminal candidates belonging to their ethnically preferred party alters under certain conditions, I test two main alternative explanations. First, I test whether the strength of coethnic voting towards criminal candidates weakens depending on the voters' news consumption habits or level of political knowledge. Second, I examine whether poor or illiterate voters show a higher tendency to forgive coethnic politicians accused of criminality.

There are two potential concerns to consider when using the above empirical strategy. First, it could be that the parties' decision to field criminal candidates in certain constituencies over others depends on their winning probability. However, in the sampled constituencies, fewer than half of the parties contested in the previous elections and largely ran under a different alliance. Therefore, it is less likely that they could rely on their previous voter support. This provides some assurance that the results are not endogenous to the party's expectations. Another concern is that the conditional logit model imposes the IIA property on the individual voter. For the IIA property to hold, requires an assumption that the voter has clear distinct choices. One solution is the use of probit models that relax the assumption of IIA, allowing an examination of the full choice set available to voters, while explicitly allowing voters to observe some parties as close alternatives (Alvarez and Nagler, 1998). Hence, to check the robustness of the results, I estimate the model using probit regressions with individual voter fixed effects.

2.5. Results

2.5.1. Main Results

Table 2.2 provides the estimates for the conditional logit, where the main outcome measures the vote choice of the respondent conditional on the alternative available. Columns (1)-(2) provide estimates without including the interaction term between coethnicity and criminality. Columns (3)–(5) present the results with the inclusion of the interaction term. Columns (2), (4), and (5) include candidate controls for their age, income, education, and incumbency. All columns include controls for party-fixed effects.

The initial findings suggest that voters display a strong tendency to vote for their ethnically preferred party. When candidates are accused of criminality, the coefficient

for both types of criminal charges is statistically significant and negative, implying a decrease in voter support. Note that this negative voter response is substantially higher for violent charges than for non-violent ones. This suggests that respondents in the survey were not only able to evaluate candidates based on their criminal records but were cognizant of the different types of criminal charges. In column (2), the results remain consistent with the inclusion of candidate controls.

Looking at the main specification of interest in columns (3)-(4), we see that the voters' negative response is stronger for criminal candidates belonging to the ethnically preferred party. In the absence of criminal allegations, voters are 2.58 times more likely to side with their ethnic party.²¹ However, coethnicity reduces electoral support for candidates accused of violent charges. The probability of voting for the non-ethnic falls by 89.2% for violent crimes. This electoral punishment is stronger for the coethnic, where voter support plummets further by 67%. This finding is contrary to the existing literature that tends to find that the voters' response towards corruption or criminality is often mitigated by the politicians' ethnicity (Banerjee and Pande, 2011; Chauchard, 2016). In this respect, these results are in line with recent literature that shows that local politicians perceive that a scandal in their national party has a greater impact on the party image relative to scandal in other parties (Schönhage and Geys, 2022). Likewise, from the voter perspective, Reuter and Szakonyi (2021) find that voters withdraw their support from ruling parties when they commit election fraud, and this effect is larger among core voters. Frederiksen (2023) show that voters punish partisan politicians equally for undemocratic behavior, whereas the punishment is even larger when the parties' policies are aligned with that of the voter. These studies theorize that voters have an *ex-ante* belief that either their aligned party is more likely to run fairer elections or have a higher expectation from them to be democratically compliant.

In contrast, voters do not seem to show the same willingness to punish coethnics for non-violent accusations. This could be attributed to the fact that criminality is a highly visible trait in Indian politics and voters might be willing to trade probity for their ethnically preferred party for so-called "weaker" allegations. For example, in the sample, 60% of the candidates faced some form of criminal charges. Thus, if voters expect all politicians to be equally complicit, it makes sense for them to side with the coethnic even if they have a general distaste towards criminality. However, when these same ethnic parties field violent criminals, the voter response might

²¹The magnitude of the results can be interpreted using the odds ratio, which is the natural metric for conditional logit models. To extract the odds ratio, we can simply take the exponential of the coefficient term, where an odds ratio of value greater than one represents a positive effect, while an odds ratio of value less than one represents a negative effect. Column 5 reflects the odds ratio for the coefficients presented in column 4.

be larger (relative to the non-ethnic violent criminal) because they have a higher expectation from their aligned party to field relatively cleaner candidates. While this might provides some intuition behind the results, the data does not allow us to further disentangle if this effect is a result of the voters' having some prior expectations from their ethnic party or if any alternative factors are influencing their decision-making. Lastly, when looking at the estimates for the non-ethnic parties, voter support falls by 40% for non-violent charges. These results are consistent with the estimates of a probit regression (reported in Table B.1 of the Appendix). Coethnicity reduces electoral support for candidates with violent allegations by 48.47% ($p < .001$).

In summary, the baseline findings suggest that voters show a strong distaste for candidates accused of criminality regardless of their ethnic affiliation. Voters withdraw their support for the non-ethnic candidate when they face criminal allegations. However, this electoral punishment is much larger for the coethnic violent criminal candidates relative to that of the violent non-ethnic criminal candidates. Lastly, the respondents in the survey not only display a strong contempt for criminal politicians, but seem to be highly aware of the severity of different charges. The voters' negative response towards violent charges is always more pronounced relative to non-violent charges.

Table 2.2.: Conditional Logit Estimates on Vote Choice in Bihar 2020 State Assembly Elections

	(1)	(2)	(3)	(4)	(5)
					<i>Odds Ratio</i>
Coethnic	1.003*** (0.081)	1.083*** (0.090)	0.958** (0.173)	0.948*** (0.203)	2.581*** (0.524)
Violent Criminal	-1.268*** (0.224)	-2.116*** (0.275)	-1.298*** (0.236)	-2.228*** (0.301)	0.108*** (0.0324)
Coethnic × Violent Criminal			-0.875*** (0.307)	-0.844** (0.331)	0.430** (0.142)
Non-Violent Criminal	-0.362*** (0.137)	-0.425** (0.212)	-0.436*** (0.162)	-0.511** (0.231)	0.600** (0.139)
Coethnic × Non-Violent Criminal			0.225 (0.218)	0.394 (0.252)	1.483 (0.374)
Party Fixed Effects	Yes	Yes	Yes	Yes	Yes
Candidate Controls	No	Yes	No	Yes	Yes

Notes: The table reports conditional logit estimates for 1892 respondents. The dependent variable takes the value of 1 if the respondent chose the candidate and 0 otherwise. The data is grouped at the voter level accounting for individual voter-fixed effects. In columns (1) and (3), the estimates do not include any candidate controls. In columns (2) and (4) the estimates include candidate controls for their age, income in logs, education, and incumbency. Column (5) reflects the odds ratio for the coefficients estimated in column (4). All models include party-fixed effects. Standard errors are given in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

2.5.2. Alternative Explanations

In this subsection, I examine whether certain conditions mitigate the voters' negative response toward the coethnic candidate accused of criminality. First, I test whether the voter is more likely to side with their ethnically preferred party if they have limited knowledge of the candidates' criminal activities. In low information environments, voters might place a higher weight on the candidates' ethnicity. Likewise, in contexts where candidates face multiple accusations that are often met with counter-accusations and denials, voters might be more likely to believe that their ethnically preferred candidate is falsely accused. To test this theory, I examine whether voters with lower levels of news consumption or political knowledge are more likely to support their ethnic party even when they present candidates accused of criminality on the ballot. Table 2.3 provides no support for this argument. Just as before, the voters' negative response is stronger for violent criminal candidates belonging to their ethnic party. Voter support for the non-ethnic falls by 63.58% for violent accusations. Coethnicity further reduces support by 67.54%. In the same vein, the overall pattern holds when looking at the estimates for political knowledge. Coethnicity further plummets support by 60.82% for candidates accused of violent crimes. The probit regressions confirm these results, where coethnicity reduces the probability of voting for criminal candidates, even when the respondents exhibit low levels of news consumption or political knowledge. In general, these results do not suggest that the effect of ethnic voting for criminal candidates varies by political information.²² If this was the case, we would observe a very different pattern where less informed voters would be more likely to support their ethnically aligned candidate, despite the criminal allegations against them.

Next, I examine whether patronage voting can mitigate the voters' electoral punishment towards their ethnically preferred party for acts of criminality. To test for this, I examine whether less educated or poorer voters are more likely to vote for the coethnic candidate. Several scholars argue that patronage voting can be strongest amongst these segments of society, since they have more immediate needs, making them more likely to exchange votes for any resources that might be on offer (Banerjee et al., 2014; Stokes et al., 2013). Since these voters also tend to have stronger ethnic preferences, they might be willing to excuse their ethnically preferred candidate for their criminal conduct because they believe that they would provide them with patronage (Posner, 2005). Columns (5)-(8) do not seem to suggest that the voters' education or income reduces the electoral punishment toward the coethnic accused of

²²As a robustness check, I examine the effect of ethnic voting on electoral support for criminal politicians using the full range of both the information variables. The results of this exercise are provided in Tables B.2-B.3. In both cases, the estimates are qualitatively and quantitatively similar to those of the main findings.

Ethnic Voting

criminality. Coethnicity further reduces electoral support by 64.88% for candidates accused of violent charges regardless of their education level. Similar trends can be observed when looking at the level of income: coethnicity reduced the electoral support for criminal conduct. Again, these results are confirmed by probit estimates. Violent allegations against both the coethnics and non-ethnic groups are negative and significantly distinguishable from zero ($p < .001$). On average, these results do not provide any evidence in support of the argument that voters are willing to excuse their ethnic party for giving tickets to criminally accused candidates because they believe that they would provide them with some form of patronage. Instead, the distaste for politicians accused of hard-hitting crimes seems to be widespread among a diverse set of voters.

Lastly, as a robustness check, I examine whether other voter characteristics such as gender, age, and the reason for voting can alter their response to criminal candidates (reported in Table B.4 of the Appendix). All things equal, the results do not suggest that the coethnic voting effect is dependent on these factors. The only interesting aspect of these results is that respondents who make their vote choice based on candidate or party loyalty have a higher likelihood to forgive coethnics alleged of violent crimes. This result supports the predictions of the theoretical model that voters with sufficiently strong ethnic preferences might be more likely to excuse their coethnic party, even when they put forward criminally accused candidates. These findings, combined with the baseline estimates, suggest that voters generally show a strong contempt for criminal candidates regardless of ethnicity. However, sometimes this punishment effect can be mitigated if the voter is so deeply committed to their caste-preferred party that they seem to value ethnic alignment over the probity of the candidate.

Table 2.3.: Impact of Voter Characteristics on Vote Choice in Bihar 2020 State Assembly Elections

	News Frequency		Political Knowledge		Literacy		Income	
	Low	High	Low	High	Illiterate	Literate	Poor	Not Poor
Coethnic	1.220*** (0.227)	-0.592* (0.330)	1.253*** (0.232)	-0.639* (0.331)	1.242*** (0.244)	-0.553* (0.328)	0.971*** (0.181)	-0.0370 (0.578)
Violent Criminal	-1.010*** (0.274)	-0.652** (0.308)	-1.055*** (0.271)	-0.496 (0.314)	-1.191*** (0.290)	-0.218 (0.307)	-1.308*** (0.241)	0.187 (0.545)
Coethnic \times Violent Criminal	-1.125*** (0.360)	0.537 (0.546)	-0.937** (0.375)	0.0586 (0.511)	-1.046*** (0.397)	0.323 (0.499)	-0.891*** (0.316)	0.0939 (1.042)
Non-Violent Criminal	-0.279 (0.189)	-0.335* (0.203)	-0.227 (0.193)	-0.416** (0.205)	-0.420** (0.195)	-0.227 (0.204)	-0.393** (0.166)	-0.441 (0.325)
Coethnic \times Non-Violent Criminal	-0.0370 (0.285)	0.576 (0.429)	-0.272 (0.285)	-0.0289 (0.301)	1.164*** (0.432)	0.489 (0.428)	0.235 (0.230)	-0.0796 (0.714)
Candidate controls	Yes		Yes		Yes		Yes	
Party FE	Yes		Yes		Yes		Yes	
N	5499		5499		5499		5499	

Notes: The table reports conditional logit estimates with voter fixed effects for 1892 respondents. The dependent variable takes the value of 1 if the respondent chose the candidate and 0 otherwise. In columns (1)-(2) a voter is defined to have low news frequency if they do not consume news on a daily or weekly basis and high news frequency otherwise. In columns (3)-(4) a voter is defined as having low political knowledge if they responded to less than half of the political questions incorrectly and high political knowledge otherwise. In columns (5)-(6) a voter is defined as illiterate if they cannot read and write in the vernacular language and literate otherwise. In columns (8)-(9) a voter is defined as being poor if they own a below poverty line card or have a household income below 10,000 Rupees and not poor otherwise. All models include party fixed effects and candidate controls for their age, income in logs, education, and incumbency. Standard errors are given in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

2.6. Conclusion

In this paper, I estimate the effects of ethnic voting on the selection of criminally accused political candidates in the Indian state of Bihar during the 2020 assembly elections. The main findings suggest that voters show a strong distaste for their ethnically preferred party when they give tickets to candidates accused of criminality. This negative response is larger when the coethnic candidate faces violent charges relative to the non-ethnic violent candidate. This pattern holds even when voters are separated by education, income, news consumption habits, and political knowledge. Although Indian voters are often criticized for evaluating candidates solely on parochial issues, be it caste, patronage, or clientelism, the findings in this paper show a very different pattern. Instead, a distaste for candidates of disrepute seems to be the norm amongst a diverse type of voters, even in a region well-known for electing candidates of disrepute to political office and its communal politics.

These results are contrary to the vast body of literature that finds that ethnic voting promotes clientelism (Chandra, 2007), increases racial division (Ferree, 2010), and harms democracy (Horowitz, 2001). Similarly, research indicates that the public's reaction to corruption, whether from party members or voters, is frequently influenced by the ethnic affiliation of politicians (Banerjee and Pande, 2011; Chang and Kerr, 2017) or their partisan alignment (Anduiza et al., 2013; Schönhage and Geys, 2023). In this respect, the findings of this paper add to the small but growing comparative politics literature that shows that the effect of ethnic voting can be mediated by the candidate's quality or other non-ethnic factors (Banerjee et al., 2014;

Carlson, 2015; Chauchard, 2016; Chauchard et al., 2019).

How do we then explain the steady rise of criminal politicians in the Indian legislature? A supply-side issue where there is a lack of availability of viable clean alternatives could contribute to why voters are willing to look the other way when it comes to so-called “weaker” charges. However, it does not account for the steady rise of candidates accused of heinous crimes being elected to political office. The results in this paper show that voters display a strong negative response to candidates accused of committing violent offenses, regardless of their ethnic background. However, in practice, during the past two Bihar state assembly elections, 45% of the winning candidates have had serious allegations against them. Then why is this willingness to punish criminal candidates not translating into actual electoral behavior?

It is often claimed that since the Indian voter is less educated or poorer, this is purely an information constraint problem, or the voter is simply making their decision on clientelistic issues. However, the results do not support this claim. This is consistent with the ethnographic literature on India, where several scholars have shown that voters are quite aware of criminal records and candidates do not attempt to mask their reputation (Berenschot, 2011a; Vaishnav, 2017). Thus, information campaigns are unlikely to inform voters about anything that they do not already know. Likewise, other studies have argued that voters elect corrupt or criminal politicians regardless of the expectation of *quid pro quo* exchange (Auerbach et al., 2022; Vaishnav, 2017). These scholars theorize that when elections are conducted using secret ballots and there is a diverse set of voters, the ability for politicians to monitor voters is often challenging and probabilistic at best.

Two plausible alternative mechanisms could be contributing to the rise of criminal legislators in India: first, partly it might simply come down to hard cold cash. Criminal politicians tend to be substantially wealthier than clean candidates. Indian elections are fiercely competitive, with the average margin of victory often less than 10%. Thus, any comparative advantage can be telling in terms of election outcomes. Criminal politicians can use their excess wealth to not only pay political rent, but also run expensive electoral campaigns, which can sometimes translate into votes. This comparative advantage is further exacerbated by the lack of oversight when it comes to election financing in India. For example, Kapur and Vaishnav (2013) find that the key difference between developed and developing countries is the lack of accountability in electoral finance, making the use of illicit funds a crucial factor in determining election results.

Another contributing factor could be that voters truly believe that criminality serves as a signal of competency. This is particularly relevant in the Indian context. With a lack of state capacity and weak rule of law, criminal politicians can be often viewed as having the ability to “get things done” (Vaishnav, 2017). There is a large

body of qualitative work in India showing that criminal politicians are viewed as effective strongmen willing to go above the law to protect individual rights and deliver resources to their constituents (see, Berenschot, [2011a](#), [2011b](#); Martin and Michelutti, [2017](#)). However, recent empirical studies do not support this claim and find that criminal politicians worsen overall economic activity (for e.g., Chemin, [2012](#); Gehring et al., [2019](#); Prakash et al., [2019](#); Zakharov, [2019](#)). However, these studies are limited to looking only at broad constituency outcomes that the local politician might not have much control over or voters might care less about.

The empirical question then is, in settings where the formal state has failed, whether criminal politicians are truly able to provide certain targeted resources to their constituents. If so, the challenge remains for reformers to think about ways to further strengthen local state capacity and improve governance to change the voters' perception and translate their willingness to punish criminal candidates into actual electoral outcomes.

Appendix

A. Theoretical Model

In this section, I develop a theoretical model using a two-candidate framework to illustrate the effect of voters' ethnic preferences on the selection of criminal candidates.²³ The model approach is broadly based on two strands of literature: first, it draws on the literature that extends conventional voting models to include identity issues such as race, language, or religion (see, Akerlof and Kranton, 2000; Ansolabehere and Puy, 2016; Karakas and Mitra, 2021). Second, it draws on the literature that evaluates voting and election outcomes with the inclusion of valence components, where all voters have a similar position on certain issues such as higher candidate quality, crime rates, or economic growth (for e.g., Ansolabehere and Snyder Jr, 2000; Groseclose, 2001; Schofield, 2004). I add to this literature by analyzing the interaction between both identity and valence issues in voters' decision-making. Identity issues in the model refer to the ethnic preferences of the voter such that they evaluate ethnically aligned candidates or parties in one way but other candidates or parties differently. Valence issues in the model indicate candidate quality such that voters hold a homogeneous distaste for candidates accused of criminality. The model aims to examine whether voters consider both these dimensions in their decision making and how this consideration affects voting and electoral outcomes.

A.1. Setup

Assume that the political environment has two candidates j and k that belong to a vector $C = \{j, k\}$. The total population of voters denoted as n is divided into two groups: μ representing the share of ethnic voters and $1 - \mu$ denoting the share of neutral voters. Ethnic voters are assumed to value the ethnic background of the candidate, such that they derive a positive utility from a candidate belonging to their ethnicity denoted as $e > 0$, and a negative utility from a non-ethnic denoted as $e < 0$. A neutral voter does not consider ethnicity when making their choice such that $e = 0$. Furthermore, following Banerjee et al. (2014), I assume that the voter is sincere, that is, they prefer good quality candidates. The voters derive a positive utility of 1 from a non-criminal candidate and a negative utility of -1 from a criminal candidate. In particular, the voter observes a vector denoted as (c_j, c_k) , that can either equal to $(1, 1)$, $(-1, 1)$, $(1, -1)$, or $(-1, -1)$. Voters also value several candidate

²³The model is simplified by using only two candidates for illustrative purposes. Extending the model with more candidates would not qualitatively affect the main conclusions of the model and introduce unnecessary complexity.

characteristics such as incumbency, party affiliation, education, etc., denoted as x . Lastly, the ethnic profile of the candidates is assumed to be pre-determined, where j is always the coethnic meaning that they belong to the same ethnic background as the voter and k is the non-ethnic. Thus, for an individual voter i from a set of voters $V = \{1, 2, \dots, n\}$, the utility derived from voting for the candidate j can be expressed as:

$$u_{ij} = \alpha_i e_{ij} + \beta_i c_j + \gamma_i x_j \quad (\text{A.1.1})$$

where e_{ij} denotes the ethnic preference that the voter i has for candidate j and it is assumed that it is known to the voter. This seems plausible since ethnic alliances are historically established, making it difficult for parties to switch. c_j indicates if candidate j has a criminal record or not. x_j denotes the utility the voter gets from the inherent characteristics of candidate j . $\alpha, \beta, \gamma > 0$ are the weights that the voter assigns to each issue and are also known to the voter. The voter knows what they like.

The voting game occurs as follows: Each party chooses a single candidate to run from a constituency, and then voting occurs. The best response for the voter is to choose the candidate that maximizes their observed utility, such that a voter i votes for candidate j if $\Delta u_i > 0$ and k if $\Delta u_i < 0$ and is indifferent when $\Delta u_i = 0$, where $\Delta u_i = u_{ij} - u_{ik}$. Thus, a voter i chooses candidate j if

$$\begin{aligned} \Delta u_i &= \alpha_i (e_{ij} - e_{ik}) + \beta_i (c_j - c_k) + \gamma_i (x_j - x_k) > 0 \\ &= \alpha_i \Delta e + \beta_i \Delta c + \gamma_i \Delta x > 0 \end{aligned} \quad (\text{A.1.2})$$

where, $\Delta e = e_{ij} - e_{ik}$, $\Delta c = c_j - c_k$, $\Delta x = x_j - x_k$. To examine the effect of ethnic voting on criminality, for simplicity, Δx is normalized to zero, which means that candidates differ only on two dimensions: ethnicity and criminality. This assumption allows us to directly evaluate the effects of ethnic voting on the voter response by considering different cases where one or both candidates have criminal charges against them.

A.2. Benchmark Model

In the first case, assume that both candidates j and k have the same criminal background. Using equation A.1.2, a voter i chooses candidate j only if $\alpha_i \Delta e > 0$. Thus, a neutral voter always remains indifferent between both candidates, since $\Delta u_i = 0$. In contrast, since $\Delta u_i > 0$, an ethnic voter will always select candidate j . The basic intuition here is straightforward: Given two candidates of similar quality, the coethnic will always have a comparative advantage. This advantage depends on

the value of μ : An increase in μ that implies a rise in the ethnic population leads to a corresponding increase in voter support for the coethnic candidate j and vice versa. Likewise, if candidate k is accused of criminality, it is easy to construe that no one will ever vote for them, since for all voters $\Delta u_i > 0$.

Moving on to the most interesting case, where only the coethnic candidate j is accused of criminality. Thus, a voter i will choose candidate j if $\alpha_i \Delta e > 2\beta_i$. This means that the choice depends on the weight the voter attaches to the two dimensions and how much they value e . Note that I do not make any assumption on e . Therefore, for a constant given weight, since $\Delta e > 0$, as the $\lim \Delta e \rightarrow \infty$, the voter will always vote for the coethnic. This means that if voters value ethnicity more than quality, they might vote for the coethnic regardless of their criminal record. Similarly, as the voter moves towards neutrality or the $\lim \Delta e \rightarrow 0$, the higher the probability the voter will bite the bullet and shift towards the non-criminal candidate. The intuition here is simple: If ethnicity matters more than probity, then this should trump candidate quality, including even those voters who dislike criminality. Lastly, the neutral voter will behave similarly as before, where their alliance will completely shift towards candidate k .

This result has two main implications: first, ethnic voting always plays a mitigating effect on criminality. This means that even though voters have a general distaste towards criminality, their relative utility derived from voting for a criminal coethnic is always higher in comparison to a criminal non-ethnic. Second, note that while in the previous case the nonethnic criminal had zero chance of winning, in this case the criminal ethnic candidate could win. These predictions put together show that the quality threshold required for an ethnic candidate is always lower in comparison to that of a non-ethnic.

To summarize, the model, under some general assumptions and conditions, predicts that voters on average favor coethnics. When their ethnically preferred candidate faces criminal charges, it reduces the likelihood that the voter chooses them. Regardless of this distaste for criminality, in certain circumstances, the criminal coethnic can win depending on the fraction of ethnic voters in the region. On the other hand, the neutral voter always prefers the better-quality candidate. Thus, the benchmark model shows how the ethnic preferences of the voter can sometimes mitigate their response towards criminal allegations.

A.3. Moving to a Probabilistic Voting Model

A voter i utility for candidate j can be expressed as $u_{ij} + \varepsilon_{ij}$, where ε_{ij} is assumed to be a realization of a random variable $\varepsilon_{ij} \in (-\infty, \infty)$. As before, a voter chooses candidate j over k if $\Delta u_i + \varepsilon_{ij} - \varepsilon_{ik} > 0$. Let $\varepsilon = \varepsilon_{ij} - \varepsilon_{ik}$, which implies that the

probability voter i votes for candidate j over candidate k is measured by $Pr(\Delta u_i > \varepsilon)$. Thus, equation A.1.2 can be re-written as:

$$Pr(Vote_i = j | j \text{ or } k) = Pr(\alpha_i \Delta e + \beta_i \Delta c + \gamma_i \Delta x > \varepsilon) \quad (\text{A.3.1})$$

Since the dependent variable is a binary choice, equation A.3.1 can be expressed in probability terms, such that a voter i chooses candidate j over candidate k if

$$Pr(Vote_i = j | j \text{ or } k) = \frac{P_{ij}}{P_{ik}} = \frac{e^{u_{ij}}}{e^{u_{ik}}} = \frac{e^{\psi Z_{ij}}}{e^{\psi Z_{ik}}} \quad (\text{A.3.2})$$

where Z represents all the observed explanatory variables and ψ represents the parameters obtained from the model. Note that since ε is assumed to be independent and identically distributed, the probability ratio depends only on the attributes of j and k and is independent of all other alternatives available. This is referred to as the independence of irrelevant alternatives or the IIA property. Thus, using equation A.1.2, we can directly estimate the likelihood of voting for a binary option given a set of observed explanatory variables.

This can be further generalized to multiple candidates such that $C = \{1, 2, \dots, m\}$. McFadden (1973) proves that if the IIA property holds or if $(\varepsilon_1, \varepsilon_2, \dots, \varepsilon_m)$ is distributed independently and identically, then the addition of other candidates would not alter the probability. Thus, the probability that a voter i chooses candidate j over every other pair of choices $j, l \in C$ can be expressed as:

$$Pr(Vote_i = j | (1, 2, \dots, m)) = \frac{P_{ij}}{P_{il}} = \frac{e^{u_{ij}}}{e^{u_{il}}} = \frac{e^{\psi Z_{ij}}}{e^{\psi Z_{il}}} \quad (\text{A.3.3})$$

where, for every pair of candidates $j, l \in C$, we can estimate the coefficients by using a conditional logit model. Hence, this setup provides a clear intuition behind the use of a conditional model approach with various directly testable implications and guidelines for the selection variables.

A.4. Theoretical Model Extensions

Introducing the Uniformed Voter

The benchmark model relies on the assumption that the voter has perfect information on the candidates' criminal records. We can easily construe that this information may be noisy. For example, a voter might have to get access to electronic prints or affidavits on the candidates' criminal charges and then should have the ability to interpret this information correctly. We can expect this noise to be dependent on several factors, such as the literacy of the voter or their general interest in politics.

Now assume that a voter still has a distaste for criminal candidates but might not know the true value of c . In particular, the voter now has the prior belief that (c_j, c_k) can equal $(1, 1)$, $(-1, 1)$, $(1, -1)$ or $(-1, -1)$, but this information is noisy. Hence, a voter i 's expected knowledge of the criminality status of the candidate can be written as:

$$c_i^e = \eta c_i + (1 - \eta) c_i^* \quad (\text{A.4.1.1})$$

where η is the probability that the voter is informed. Assume that $\eta \neq 1$, meaning that the voter has imperfect information on criminality. c_i^* is the mean difference between the actual level of criminality and what the uninformed voter believes. Therefore, using equation A.1.2, we can express that voter i will vote for candidate j if:

$$\Delta u_i = \alpha_i \Delta e + \beta_i \Delta c^e > 0 \quad (\text{A.4.1.2})$$

where, $\Delta c^e = c_{ij}^e - c_{ik}^e$. As before, we can re-evaluate the effect of information by looking at the three cases again.

In the first case, there are two plausible scenarios: First, the ethnic voter has similar beliefs about the criminal status of both candidates such that $\eta_j = \eta_k$. Thus, the probability of voting for candidate j does not change regardless of how informed the voter is. Alternatively, the voter might believe that accusations against the non-ethnic candidate are more likely to be true than against the candidate of their ethnic preference such that $\eta_k > \eta_j$. This belief comes from the assumption that a voter with strong ethnic preferences might be more prone to believe that their preferred candidate might be falsely accused. This would lead to an increase in Δu . This implies that compared to the case with perfect information, the likelihood of voting for the ethnic candidate would increase. Note that regardless of the voter's expected knowledge of the criminality status, the voting outcome does not change if the voter values ethnicity or $e > 0$.

Moving to the second case, where candidate k faces criminal charges, does not alter the voter response. This result holds due to two reasons: first, for the ethnic voter $\Delta u_i > 0$, so they will never choose candidate k . Second, neutral voters will always shift their preferences towards the clean candidate if $\Delta c^e > 0$. The intuition here is straightforward: since the neutral voter only evaluates candidates based on their quality, even a modest indication of criminal allegations against one candidate, should completely shift their alliance towards the clean alternative.

Again we can observe the most significant effect of information when the coethnic candidate j faces criminal charges. Now voter i prefers candidate j if $\alpha_i \Delta e > \beta_i \Delta c^e$. Since $\eta \neq 1$, the expected belief of the voter is always lower than the true value or

$\Delta c^e < 2$. This implies that imperfect information always increases the likelihood that a voter chooses the criminal coethnic. The intuition here is that as the voter's expected belief gets closer to the true criminality status or as η rises, the $\lim \Delta c^e \rightarrow 2$, lowers the probability the voter selects the criminal candidate. Likewise, as η falls, implying $\lim \Delta c^e \rightarrow 0$, the voter will solely base their decision on the ethnicity of the candidate. Again, this result ought to be obvious: the lower the information the voter has on the criminality of the candidate, the higher the weight they will put on ethnicity. Lastly, the neutral voter will act as before and completely shift their alliance towards the clean candidate k . Therefore, all things equal, the model predicts that low information availability increases the relative importance of ethnic cues in the voter's decision-making. Also note that compared to the case with perfect information, a reduction in information availability further reduces the quality threshold required for a coethnic to win.

Introducing the Clientelistic Voter

Now consider the voter response towards criminality when they consider clientelistic issues in their decision-making. As discussed earlier, voters might value the patronage on offer in terms of either resources or direct benefit. In such a case, the voters' preferences might be more malleable toward the ethnic party if they believe that electing them to office would provide them with better access to public resources. Thus, the utility of voter i for candidate j can be expressed as

$$u_{ij} = \alpha_i e_{ij} + \beta_i c_j + \gamma_i x_j + \delta_i B_{ij}^e \quad (\text{A.4.2.1})$$

where, $\delta > 0$ and B_{ij}^e is the expected benefit that voter i believes can be obtained from the candidate j . I assume that the voter believes that:

$$B_{ij}^e = \sigma e_{ij} - \kappa c_j \quad (\text{A.4.2.2})$$

where the voter considers both the ethnicity and candidate quality within themselves to acquire resources from the government. Note that I assume that the voter evaluates both ethnicity and criminality as a positive signal for the delivery of the resources. This assumption is based on two main theoretical foundations: First, as discussed earlier, there is sufficient literature that shows voters believe that candidates belonging to their ethnic group would be more likely to provide them with patronage or promote their best interest once they are in power (Posner, 2005). Second, qualitative works have found that criminal politicians might be more prone to engage in clientelistic strategies or might be better suited to "get things done" (Vaishnav, 2017). Thus, if criminal politicians are perceived to be more competent, voters might

observe a positive expected benefit from criminality. As before, a voter i will vote for candidate j if:

$$\Delta u_i = \alpha_i \Delta e + \beta_i \Delta c + \delta_i \Delta B^e > 0 \quad (\text{A.4.2.3})$$

where, $\Delta B^e = B_{ij}^e - B_{ik}^e$. Using this setup, we can re-evaluate the three cases.

Case one does not need much interpretation. Since both candidates have the same criminal record, the ethnic voter will always choose candidate j and the neutral voter would remain indifferent between both candidates. However, note that the model predicts that the bias towards the coethnic is even stronger. Since $e_{ij} > 0$, this directly implies that $\Delta B^e > 0$. In case two, when only the non-ethnic candidate k faces criminal allegations, we can easily construe that the ethnic voter will not alter their response unless $\delta_i \kappa > \beta$ and e_{ij} is sufficiently small. Likewise, a neutral voter will vote for candidate j if $\beta_i > \delta_i \kappa$. This implies that the neutral voter's decision is based on how much they value probity over getting resources and their expectation that the criminal candidate would be better at delivering these resources. This result shows that if the voter thinks that the criminal politician is more competent, this mitigates their distaste for criminality. Also note that in comparison to the benchmark model, where no one ever chose the criminal candidate, now some neutral voters will shift their preference towards the criminal.

Moving to the third case, the implications of patronage voting are quite straightforward. Holding other things constant, compared to the benchmark model, the ethnic voter will always vote for candidate j unless $\delta_i \Delta B^e > 2\beta_i$. This implies that the weight the voter attaches to candidate quality has to be larger than in the model without patronage. This result should be intuitively clear: since $B_{ij}^e > 0$, it has a positive effect on the voters' utility through both dimensions. First, the stronger the ethnic bias of the voter, the greater their expectation that a candidate belonging to their ethnic group would serve in their best interest. Second, if the voter believes that criminal politicians are more likely to distribute resources or κ increases, this would lead to a corresponding increase in the expected benefit or B^e . To offset this effect, β_i needs to be much larger in comparison to the benchmark model. To conclude, all things equal, we can observe that clientelistic voting plays a mitigating effect on criminality regardless of the candidates' ethnicity.

B. Robustness Checks

Table B.1.: Probit Estimates on Vote Choice in Bihar 2020 State Assembly Elections

	News Frequency			Political Knowledge		Literacy		Income	
	All	Low	High	Low	High	Illiterate	Literate	Poor	Not Poor
Coethnic	0.780*** (0.107)	0.946*** (0.137)	-0.383* (0.202)	0.863*** (0.140)	-0.172 (0.202)	0.787*** (0.148)	-0.015 (0.201)	0.773*** (0.112)	0.0985 (0.333)
Violent Criminal	-1.629*** (0.134)	-1.481*** (0.149)	-0.353** (0.155)	-1.559*** (0.153)	-0.114 (0.153)	-1.510*** (0.154)	-0.291 (0.153)	-1.626*** (0.136)	-0.00977 (0.246)
Coethnic × Violent Criminal	-0.663*** (0.177)	-0.865*** (0.212)	0.485 (0.342)	-0.599*** (0.223)	-0.187 (0.321)	-0.579** (0.239)	-0.167 (0.316)	-0.656*** (0.183)	-0.0362 (0.626)
Non-Violent Criminal	-0.435*** (0.0949)	-0.326*** (0.114)	-0.240* (0.138)	-0.354*** (0.117)	-0.160 (0.137)	-0.252** (0.119)	-0.382*** (0.138)	-0.412*** (0.0982)	-0.188 (0.212)
Coethnic × Non-Violent Criminal	0.311** (0.128)	0.190 (0.164)	0.265 (0.248)	0.165 (0.166)	0.328 (0.248)	0.361** (0.176)	-0.114 (0.246)	0.327** (0.135)	-0.151 (0.393)
Candidate controls	Yes	Yes		Yes		Yes		Yes	
Party FE	Yes	Yes		Yes		Yes		Yes	
N	5499	5499		5499		5499		5499	

Notes: The table reports probit estimates with voter fixed effects for 1892 respondents. The dependent variable takes the value of 1 if the respondent chose the candidate and 0 otherwise. Column (1) provides estimates for the baseline specification. In columns (2)-(3) a voter is defined to have low news frequency if they do not consume news on a daily or weekly basis and high news frequency otherwise. In columns (4)-(5) a voter is defined as having low political knowledge if they responded to less than half of the political questions incorrectly and high political knowledge otherwise. In columns (6)-(7) a voter is defined as illiterate if they cannot read and write in the vernacular language and literate otherwise. In columns (8)-(9) a voter is defined as being poor if they own a below poverty line card or have a household income below 10,000 Rupees and not poor otherwise. All models include party fixed effects and candidate controls for their age, income in logs, education, and incumbency. Standard errors are given in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B.2.: Impact of News on Vote Choice in Bihar 2020 State Assembly Elections

	News Consumption			
	Never	Daily/Weekly	Monthly	> Month
Coethnic	1.194*** (0.269)	-0.568 (0.360)	0.405 (0.565)	-0.628 (0.737)
Violent Criminal	-1.001*** (0.302)	-0.664** (0.333)	0.231 (0.526)	-0.891 (0.848)
Coethnic × Violent Criminal	-1.008** (0.397)	0.416 (0.572)	-1.134 (0.890)	0.580 (0.210)
Non-Violent Criminal	-0.383 (0.210)	-0.244 (0.223)	0.503 (0.365)	-0.114 (0.467)
Coethnic × Non-Violent Criminal	-0.021 (0.344)	0.562 (0.470)	-0.697 (0.692)	1.428 (0.960)
Candidate controls	Yes			
Party FE	Yes			
N	5676			

Notes: The table reports conditional logit estimates for 1892 respondents. The dependent variable takes the value of 1 if the respondent chose the candidate and 0 otherwise. The data is grouped at the voter level accounting for individual voter-fixed effects. In columns (1)-(4), the estimates indicate the full range for the frequency of news consumption. All estimates include party fixed effects and candidate controls for their age, income in logs, education, and incumbency. Standard errors are given in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Ethnic Voting

Table B.3.: Impact of Political Knowledge on Vote Choice in Bihar 2020 State Assembly Elections

	Political Knowledge								
	Zero	One	Two	Three	Four	Five	Six	Seven	Eight
Coethnic	1.289*** (0.425)	1.377 (0.866)	-0.212 (0.638)	-0.541 (0.679)	-0.0601 (0.679)	-0.363 (0.659)	-0.640 (0.575)	-0.618 (0.731)	-1.308* (0.727)
Violent Criminal	-1.447*** (0.421)	1.045 (0.707)	0.665 (0.623)	0.533 (0.606)	0.250 (0.582)	-0.284 (0.672)	0.132 (0.529)	0.033 (0.642)	-0.980 (0.765)
Coethnic \times Violent Criminal	-1.061 (0.659)	-0.977 (1.125)	0.218 (0.941)	0.531 (0.992)	0.005 (1.082)	0.581 (0.989)	-0.081 (0.896)	0.048 (1.040)	-16.27 (4451)
Non-Violent Criminal	-0.162 (0.312)	-0.224 (0.463)	-0.068 (0.440)	0.066 (0.468)	-0.217 (0.426)	-0.291 (0.452)	-0.560 (0.358)	-0.830* (0.444)	-0.262 (0.446)
Coethnic \times Non-Violent Criminal	-0.420 (0.508)	-1.257 (1.000)	0.489 (0.802)	0.994 (0.874)	-0.013 (0.835)	0.702 (0.847)	1.611** (0.727)	0.809 (0.954)	2.054** (0.959)
Candidate controls	Yes								
Party FE	Yes								
N	5676								

Notes: The table reports conditional logit estimates for 1892 respondents. The dependent variable takes the value of 1 if the respondent chose the candidate and 0 otherwise. The data is grouped at the voter level accounting for individual voter-fixed effects. In columns (1)-(9) the estimates indicate the number of total questions the voter answered correctly. All models include party fixed effects and candidate controls for their age, income in logs, education, and incumbency. Standard errors are given in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

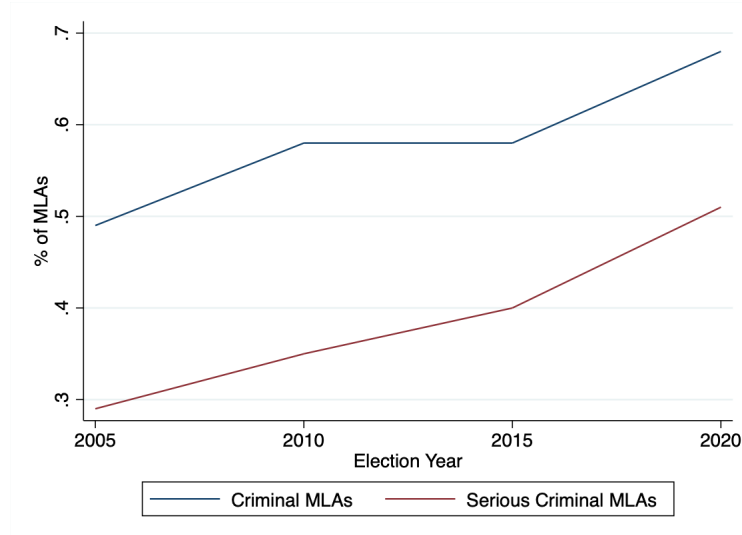
Table B.4.: Voter Heterogeneous Effects on Vote Choice in Bihar 2020 State Assembly Elections

	Gender		Age		Voting Reason		
	Female	Male	Young	Old	Development	Clientelism	Loyalty
Coethnic	0.993*** (0.289)	-0.139 (0.374)	1.033*** (0.252)	-0.215 (0.379)	0.825** (0.323)	0.348 (0.407)	-0.524 (0.632)
Violent Criminal	-2.226*** (0.362)	-0.043 (0.348)	-2.417*** (0.330)	0.469 (0.351)	-2.199*** (0.384)	-0.071 (0.378)	0.102 (0.587)
Coethnic \times Violent Criminal	-0.723* (0.419)	-0.258 (0.536)	-0.915** (0.391)	0.180 (0.544)	-1.119** (0.503)	0.128 (0.585)	3.307** (1.311)
Non-Violent Criminal	-0.612** (0.276)	0.167 (0.246)	-0.510** (0.254)	-0.002 (0.243)	-0.391 (0.293)	-0.169 (0.269)	-0.125 (0.394)
Coethnic \times Non-Violent Criminal	0.317 (0.350)	0.213 (0.464)	0.281 (0.315)	0.275 (0.468)	0.495 (0.401)	-0.478 (0.507)	1.068 (0.761)
Candidate controls	Yes		Yes		Yes		
Party FE	Yes		Yes		Yes		
N	5676		5676		5676		

Notes: The table reports conditional logit estimates for 1892 respondents. The dependent variable takes the value of 1 if the respondent chose the candidate and 0 otherwise. The data is grouped at the voter level accounting for individual voter-fixed effects. In column (1)-(2) the estimates are generated by gender. In columns (2)-(3) the estimates are generated by age where a young voter is defined as having an age below 50 and an old otherwise. In columns (4)-(6) the estimates are generated using the response of voters on their main voting reason in the Bihar 2020 elections (See Section 4.1 for more details). All models include party fixed effects and candidate controls for their age, income in logs, education, and incumbency. Standard errors are given in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C. Candidate Profile and Criminal Backgrounds

Figure C.1.: % of MLAs with Criminal Records in Bihar State Assembly Elections



Data Source: Association for Democratic Reform (ADR)

Table C.1.: Profile of Candidates in Bihar 2020 State Assembly Election

Variable	All candidates	Top 3	Winner
Age	43.13 (11.55)	51.60 (10.32)	47.40 (8.401)
Male	0.908 (0.290)	0.933 (0.254)	1 (0)
College Degree	0.459 (0.50)	0.533 (0.507)	0.600 (0.516)
Hindu	0.914 (0.282)	0.900 (0.305)	0.800 (0.422)
Income (in Thousands)	16693.50 (42872.20)	48956.80 (87537)	34260.8 (28730.90)
Liabilities (in Thousands)	1134.30 (3192.20)	2217.80 (2885.30)	2246.9 (2587.90)
National Party	0.054 (0.227)	0.20 (0.407)	0.30 (0.483)
N	185	30	10

Notes: The table reports the candidate profile for all candidates contesting in the Bihar 2020 state assembly elections with mean coefficients and the standard deviation in parentheses.

Table C.2.: Distribution of Candidates by Number of Criminal Charges in Bihar 2020 State Assembly Election

Frequency	All Candidates	Top 3	Winner
0	127	7	1
1	20	6	1
2-4	26	10	4
4-6	6	4	3
> 6	6	3	1
<i>N</i>	185	30	10

Notes: The table reports the number of criminal charges for all candidates contesting in the Bihar 2020 state assembly elections.

Table C.3.: Distribution of Candidates by Type of Criminal Charges in Bihar 2020 State Assembly Election

Type	All Candidates	Top 3	Winner
None	127	7	1
A. Non-Violent			
Corruption	14	4	1
Other Charges	22	3	6
B. Violent	22	6	2
<i>N</i>	185	20	10

Notes: The table reports the distribution of candidates by the type of criminal accusations for all the candidates contesting in the Bihar 2020 assembly elections. The definition of violent and non-violent crimes is provided in Section 2.3.2. Corruption is defined as charges that lead to a financial loss to the government using the classification provided by the Indian Penal Code system.

Candidate Profile and Criminal Backgrounds

Table C.4.: Criminal Candidates Running from Popular Parties in Bihar 2020 State Assembly Election

	Non-Criminal	Non-Violent	Violent	Total
BJP	0	2	1	3
BSP	2	1	1	4
CPI(M)	0	0	1	1
INC	1	0	0	1
JD(U)	3	2	1	6
LJP	4	3	0	7
RJD	0	7	1	8
N	10	15	5	30

Notes: The table reports the distribution of criminal candidates running from popular parties in the Bihar 2020 assembly elections from the ten assembly constituencies included in the sample size.

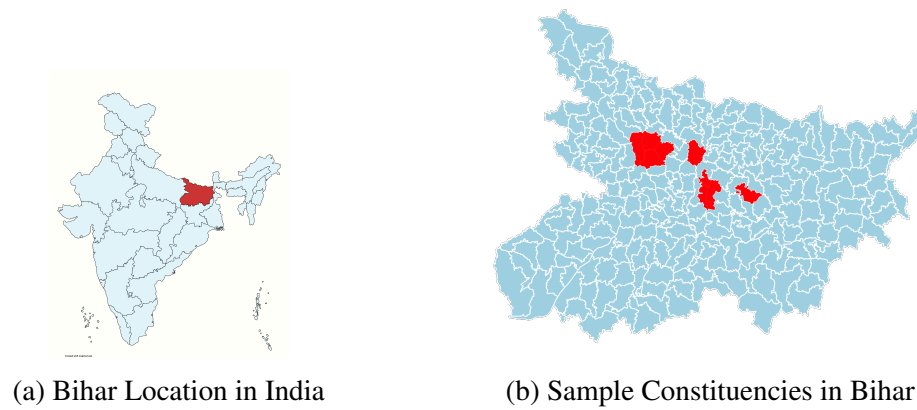
Table C.5.: Non-Criminal vs Criminal

Variable	Non-Criminal	Criminal	Diff
Age	42.29 (11.53)	44.97 (11.49)	-2.674 (-1.465)
Education (in years)	11.49 (5.210)	11.83 (4.867)	-0.339 (-0.419)
Income (in thousands)	14675.70 (46762.4)	21111.80 (32719.1)	-6436.10 (-0.947)
National Party	0.0236 (0.152)	0.121 (0.329)	-0.097** (-2.749)
Incumbency	0.016 (0.125)	0.138 (0.348)	-0.122*** (-3.503)
N	127	58	185

Notes: The table reports a comparison of criminal versus non-criminal candidates for candidates contesting in the Bihar 2020 assembly elections. The coefficients presented are means along with the standard deviation in parentheses. The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

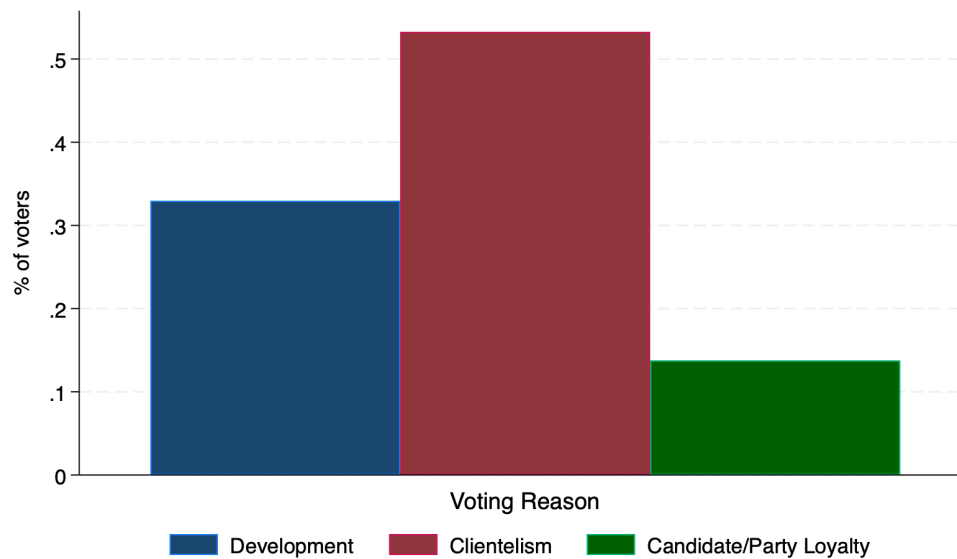
D. Survey Sampling

Figure D.1.: Survey Sample Area



Notes: Figure (a) shows the location of the state of Bihar in India. Figure (b) shows the 10 assembly constituencies within Bihar where the survey was conducted.

Figure D.2.: Main Reason for Voting in Bihar 2020 State Assembly Election



Notes: The figure reported is based on responses of 1892 respondents.

Table D.1.: Sample Size

District	AC Name	Obs.
Muzaffarpur	Baruraj	177
Muzaffarpur	Gaighat	194
Muzaffarpur	Kanti	137
Muzaffarpur	Paroo	194
Muzaffarpur	Sahebganj	196
Samastipur	Bhibutpur	198
Samastipur	Hasanpur	198
Samastipur	Samastipur	198
Samastipur	Sarairanjan	200
Samastipur	Ujiarpur	200

Notes: The table reports the responses of 1892 voters from the ten assembly constituencies across the two districts. The final sample size only includes those voters who completed the survey and voted in the Bihar 2020 elections.

Table D.2.: Voter Response to Political Awareness Questions

Variable	Mean	S.D.
MLA name	0.64	0.48
MLA party	0.48	0.50
MLA Term Limit	0.93	0.25
Chief Minister name	0.65	0.48
Chief Minister party	0.41	0.49
Prime Minister name	0.74	0.44
Prime Minister party	0.57	0.50
Lok Sabha vs Rajya Sabha difference	0.16	0.36
Who elects Rajya Sabha members	0.07	0.26

Notes: The table reports the responses of 1892 respondents who completed the survey. The structure of the questions, along with the choices, is provided in Section D of the survey module.

E. Survey Questionnaire

Bihar 2020 Assembly Elections Voter Survey

Location:

Surveyor ID:

District Name:

- ☐ Muzzafarpur
- ☐ Samastipur

PC ID:

AC ID:

Polling ID:

Voter Name: _____

Consent:

Hello, My name is _____. I have come from IEB a research organization at the University of Barcelona. We want to find out the opinions of people on politics and elections, and for this purpose, we are interviewing voters. The findings of this study will be used for research purposes only. This survey is an independent study and is not linked to any political party or government agency. All information you provide will be kept confidential. This survey will take about 20 to 25 minutes.

Do you agree to participate in this interview?

- ☐ Yes
- ☐ No → End Survey

Voter Contact No.: _____.

A. Demographics

A1. What is your gender?

- ☐ Male
- ☐ Female

A2. What is your age in years? _____. **Surveyor:** Keep in mind that age is recorded in completed years. Enter -90 if not tell or know.

A3. How many years have you been living here for? _____.

A4. What is your religion?

- ☐ Hindu

- Muslim
- No Response

A5. What is your caste community?

- General/Upper Caste
- Other Backward Caste (OBC)
- Schedule Caste (SC)
- Schedule Tribe (ST)
- No Response

A6. Which sub-caste or *jati* you belong to? _____

A7. Can you read and write?

- Yes
- No

A8. What is your occupation?

- Laborer
- Farmer
- Shop Owner
- Medium/Big businessman
- Skilled Worker
- Semi-Skilled/ Unskilled Worker
- Clerical Jobs
- Government Employee
- Service/Professional Job
- Dairy/Fishery/Animal Farming
- Housewife/Student/ Retired
- Unemployed
- Other (Please Specify):
- No Response

A9. What is your monthly household income (including all family members currently living with you)? Rs. _____

B. Voting

B1. Did you vote in the assembly elections held between October and November of 2020?

- Yes → B1.1
- No → B1.0
- No Response → B1.0

B1.0 What was the main reason which you could not vote for in the assembly elections of 2020? Surveyor: Do not read options aloud.

- Out of Station
- Personal issues
- Voter ID issues
- Health issues
- Bad candidates
- Fear of coronavirus
- Voting does not make a difference
- No interest in voting
- Other (Please Specify):
- No Response

B1.1 What was the most important factor for you in deciding whom to vote for in the assembly elections of 2020? Surveyor: Do not read options aloud.

- Government Performance
- Economic Growth/Development
- Inflation
- Improvement of public goods (Roads, electricity, water, toilet)
- Access to development program
- Voting for a particular party
- Removing NDA

- Bringing back NDA
- Caste of candidate/party
- Dissatisfied with current MLA performance
- Crime or corruption scandals
- Voting for a particular ideology
- Other (Please Specify):
- No Response

B1.2 Which party/candidate did you vote for in the assembly elections of 2020?

_____ **Surveyor:** Hand over the list of candidates and parties to the respondent and enter the relevant code. Enter -90 if no response.

C. Information

How often do you read/listen/watch news using the following methods?

Daily/Weekly Monthly Over a month Never

Newspapers

Television

Social media/internet

WhatsApp

D. Political Knowledge

D1. Can you please tell me the name of the MLA in your assembly constituency?

D2. Can you please tell me which party the MLA in your assembly constituency belongs to? _____

D3. Can you please tell me what is the term limit of a MLA?

- Five Years
- Others/ Don't Know

D4. Can you please tell me the name of the Chief Minister (CM) of Bihar?

- Nitish Kumar
- Others/ Don't Know

Ethnic Voting

D5. Can you please tell me which party the CM of Bihar belongs to?

- Janata Dal (United) (JD(U))
- Others/ Don't Know

D6. Can you please tell me the name of the Prime Minister (PM) of India?

- Narendra Modi
- Others/ Don't Know

D7. Can you please tell me which party the PM of India belongs to?

- Bhartiya Janta Party (BJP)
- Others/ Don't Know

D8. Can you please tell me the difference between *Lok Sabha* and *Vidhan Sabha*?

- Lok Sabha is the legislative body at the central level and Vidhan Sabha is the legislative body at the state level.
- Others/ Don't Know

D9. Can you please tell me who elects members to the *Rajya Sabha*?

- Lok Sabha MP
- Others/ Don't Know

END OF SURVEY.

F. Candidate Affidavit

Figure F.1.: Example of Candidate Affidavit

प्ररूप 26
(नियम 4क देखिए)

WELFARE STAMP
BIHAR
₹25
पच्चीस रुपये
RUPEES TWENTY FIVE
BRST1437317J2002M
01-OCT-2020

16/10/2020

No. 02 Date 16/10/2020

16/10/2020

निर्वाचन क्षेत्र

98- साहेबगंज

(निर्वाचन क्षेत्र का नाम)

से बिहार विधान सभा (सदन का नाम) के निर्वाचन के लिए रिटर्निंग आफिसर के समक्ष अम्बथी द्वारा नाम-निर्देशन पत्र के साथ प्रस्तुत किया जाने वाला शपथ पत्र

भाग-क

मैं, राजू कुमार सिंह
पुत्र/पुत्री/पत्नी श्री उदय प्रताप सिंह आयु 50 वर्ष,
जो ग्राम- आनन्दपुर सरायी, पौ- बाडाडाउद
थाना- पारु, जिला- मुजफ्फरपुर, बिहार, पिन-
843112 (डाक का पूरा पता लिखें) का/की निवासी हूँ और उपरोक्त निर्वाचन के लिए अम्बथी हूँ, सत्यनिष्ठा से प्रतिज्ञा करता हूँ/करती हूँ, शपथ पर निम्नलिखित कथन करता हूँ/करती हूँ :-

(1) मैं विकासशील इंसान पार्टी (राजनैतिक दल का नाम) द्वारा खड़ा किया गया अम्बथी/एक स्वतंत्र अम्बथी के रूप में लड़ रहा हूँ।
(जो लागू न हो उसे काट दें)

(2) मेरा नाम 98- साहेबगंज (निर्वाचन-क्षेत्र और राज्य का नाम) में भाग सं० 201 के क्रम सं० 1301 पर प्रविष्ट है।

(3) मेरा/मेरे 7004761388 संपर्क दूरभाष संख्या/संख्याएं हैं/हैं और शुन्य मेरा ईमेल पता (यदि कोई हो) है तथा मेरा/मेरे सोशल मीडिया खाता/खाते (यदि कोई हो) निम्नलिखित हैं/हैं।

(i) शुन्य

(ii) शुन्य

(iii) शुन्य

ANNEXURE-(I)

राजू कुमार सिंह

मुकदमा का ब्योरा:-

क्र० सं०	न्यायालय का नाम	मामला सं०	संज्ञान लेने के आदेश की तारीख	धारा एवं अपराध
1	एस०डी०जे०एम०, प०	पारू थाना काण्ड सं०-67/06	24.01.2008	323,504 भा०द०वि०
2	दीपक कुमार, जे०एम० पू०	नगर थाना काण्ड सं०-394/10	05.11.2012	188 भा०द०वि०
3	एस०डी०जे०एम०, प०	देवरिया थाना काण्ड संख्या-91/10	07.09.2012	341, 323, 504, 379/34 भा०द०वि०
4	एस०डी०जे०एम०-3	पारू थाना काण्ड सं०-115/15	अनुसंधान जारी	147, 148, 143, 341, 353, 504/34 भा०द०वि० एवं 27 आर्मस एक्ट
5	न्या० दण्डाधिकारी, प्रथम श्रेणी	पारू थाना काण्ड सं०-116/15	अनुसंधान जारी	147, 148, 149, 341, 323, 447, 307, 504, 506, भा०द०वि० एवं 27 आर्मस एक्ट
6	एस०डी०जे०एम० प०	पारू थाना काण्ड सं०-14/17	एस०डी०जे०एम०, गुज० जी०आर०नं०-117315	302/34 भा०द०वि० एवं 27 आर्मस एक्ट
7	एस०डी०जे०एम०-1, पू०	साहेबगंज थाना काण्ड सं०-165/05	एस०डी०जे०एम०-1, पूर्वी, गुज०	188 भा०द०वि०
8	जे०एम०प्रथम श्रेणी, पटना सिविल कोर्ट	न्यायालय मुकदमा संख्या-1426/सी०डब्लू-20/12	श्रीमती आरती जयसवाल, प्रथम न्यायिक दण्डाधिकारी, पटना।	420, 426, 120 (सी०) भा०द०वि० एवं 138 एन०आई०एक्ट
9	श्रीमती सरीका बहालिया, उप० न्या०द०-14, एस०डी०जे०एम०, पटना।	गौधी मैदान पटना काण्ड संख्या-491/2017	एस०डी०जे०एम०-14, पटना,	341,342, 323,330,504,506/34 भा०द०वि०
10	साकेत न्यायालय, नई दिल्ली।	फतेहपुर बेरी, नई दिल्ली, काण्ड सं०-01/2019	अनुसंधान जारी जमानत पर	302 भा०द०वि० एवं 27 आर्मस एक्ट

Notes: The figure shows the first page and the relevant page with criminal charges from the candidate affidavit for the Bihar 2020 assembly elections. The full version of the affidavit is available on the ECI website.

3. Manipulating the System: Clientelism and Criminality in Politics

3.1. Introduction

The electoral success of low-quality politicians is often associated with having adverse effects on the distribution of resources and overall economic activity (Besley, 2006; Caselli and Morelli, 2004). However, citizens around the world are often complicit in supporting candidates of disrepute. Why do voters despite having the option to do so, fail to “throw the rascals out”?

A dominant argument often made is that this is purely an information constraint problem. This explanation holds that voters generally have a distaste for venal candidates but do not punish them simply because they lack the awareness to do so (Ferraz and Finan, 2008; Winters and Weitz-Shapiro, 2013). However, recent evidence suggests that even when voters receive credible information on the criminal activities of candidates, they show a willingness to support them (Banerjee et al., 2011; Boas et al., 2019).

A counterargument to the information hypothesis is that voters might be more prone to forgive probity if there are direct benefits on offer (Manzetti and Wilson, 2007). In other words, citizens might be making a strategic decision to support criminal politicians if they are more effective at providing them with better access to public goods. This lack of voter response to bad quality legislators can be most prominent in countries that exhibit weak government institutions and the state cannot fulfill its basic responsibilities, allowing clientelism to prosper (Easterly and Levine, 1997; Stokes, 2005). In such an environment, criminal politicians can take control of state resources and use their delivery as a mechanism to buy voter support.

Although there is some literature linking corruption or criminality with clientelism (Manzetti and Wilson, 2007; Vaishnav, 2017), existing research shows that the electoral success of low-quality legislators is often associated with adverse effects on various components of the economy, such as household consumption and private in-

vestment (Chemin, 2012; Nanda and Pareek, 2016), economic development (Prakash et al., 2019), and government trust (Solé-Ollé and Sorribas-Navarro, 2018). I argue that despite the detrimental effects corrupt or criminal politicians have on long-term growth, these same politicians might be more effective in providing certain resources to their constituents. In particular, to gain an electoral advantage, criminal politicians leverage their reputation and access to wealth to strategically deliver targeted benefits that they can claim credit for and voters might care more about. By doing so, they can convey that criminality serves as a positive signal of competence and this is why voters might support them.

To test this theory, I examine the effects of electing criminal politicians on the delivery of one of India's largest government programs, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). MGNREGA is India's largest anti-poverty social program aimed at providing rural households with 100 guaranteed working days at a basic minimum wage. In addition to generating employment, the program aims to improve village infrastructure (e.g., roads, toilets, and canals).

The Indian case provides an ideal setting to examine this hypothesis for several reasons. First, despite holding massive free democratic elections with multiple parties, politicians accused of criminality are frequently elected at all levels of government. For example, in the last concluded *Lok Sabha* (national) elections of 2019, 43% of the Members of Parliament faced criminal accusations against them, up from 34% in 2014 and 30% in 2004.¹ Second, since the availability of resources is limited and often heavily mediated by middlemen, India is a potential scenario for clientelistic networks to thrive.

I take advantage of the Indian Supreme Court judgment in 2003, mandating all political candidates contesting in Indian elections to submit an affidavit disclosing information on their criminal background. Leveraging the data from these affidavits, I test if the election of a Member of the Legislative Assembly (MLA) with a criminal record impacts the delivery of MGNREGA on two main outcomes: number of projects completed ("Projects Completed") and number of days worked ("Work Days") annually. In particular, I test the effect of electing a criminally accused politician in MGNREGA in the state of West Bengal during the 2011 to 2020 period. I focus on West Bengal because it is one of the better performing states in terms of allotting jobs and utilizing funds under the scheme.² The program often suffers from implementation issues that can lead to substantial variation in access across Indian

¹The data on candidates' criminal records is collected from MyNeta, an open data platform run by the Association for Democratic Reform (ADR). Retrieved from <https://myneta.info>

²The Hindu (2018). "Bengal tops in rural job scheme, T.N. is second". Retrieved from <https://www.thehindu.com/news/national/bengal-tops-in-rural-job-scheme-tn-issecond/article23041918.ece>

states.³ Thus, using data from West Bengal ensures that the estimates in this paper are at the lower bound.

An important challenge in estimating the impact of criminal politicians on policy outcomes is that it is highly unlikely that the selection of an MLA with a criminal record is random. For example, criminal candidates might be more likely to run and be elected to office from certain constituencies over others. Thus, constituencies that elect a criminal politician may not be comparable to those that elect a non-criminal. To overcome this endogeneity problem, I use a regression discontinuity (RD) design, comparing constituencies where a criminal candidate barely won to constituencies where they barely lost. Given the close margin of victory, the success of criminal candidates in these constituencies should be close to random (Lee and Lemieux, 2010). I find that criminal politicians have substantial effects on the delivery of MGNREGA. The election of a criminal politician leads to an annual decrease in the number of Projects Completed by 68% and an increase in the work allocation by 36% relative to the mean value of the dependent variable. I further find that this effect is more pronounced for legislators who run for re-elections in the subsequent election cycle, are accused of serious criminal allegations, and contest from non-reserved constituencies. These results suggest that criminal politicians are more inclined to deliver government benefits to their constituents when there are potential electoral benefits on offer.

Next, I explore whether these results are driven by some underlying rent-seeking activities. For this purpose, I construct various measurements that might be indicative of corruption and find no robust evidence that corruption is a potential mechanism. Instead, I find that criminal politicians spend a larger portion of the funds on the labor component of the program rather than on the materials. Since material expenditure is often the portion that provides opportunities to engage in rent-seeking (Afridi and Iversen, 2013; Das and Maiorano, 2019), these results suggest that criminal politicians systematically target the wage dimension of the program as a tool to connect with their voters.

This paper makes several contributions to the existing literature. Foremost, this paper contributes to the ever-growing literature trying to explain why voters elect bad-quality legislators in democratic countries. The existing literature provides several explanations for this surprising voter behavior, such as lack of adequate information (Ferraz and Finan, 2008), ethnic voting (Banerjee and Pande, 2011), patronage voting (Kitschelt and Wilkinson, 2007), and vote buying (Bratton, 2008).

³For example, certain states commonly perform better, while others lag behind (e.g., poorer states like Bihar, Uttar Pradesh, and Jharkhand) This variation is a result of low bureaucratic and fiscal capacity that can often lead to higher leakages in the program (Imbert and Papp, 2015; Muralidharan et al., 2016).

These theories rely on the assumption that criminality is an undesirable quality and these factors play a mitigating effect. My findings reveal that voters might rationally reward such politicians because they believe this to be a necessary trait in politics.

Second, this paper contributes to the broader literature on distributive politics. The findings of this paper are difficult to reconcile with the standard models of distributive politics, such as elite capture theories. For example, Anderson et al. (2015) finds that landlord elites in Indian villages impede the implementation of pro-poor policies to keep labor compliant and wages low. In return, they gain control over village politics by offering social insurance to the poor majority, leading to elite capture through clientelistic trading. Several other studies show that vote buying is often negatively correlated with public goods provision (Acemoglu et al., 2014; Blattman et al., 2019). In contrast, the results of this paper can be explained by political clientelism that can significantly differ from elite capture. Bardhan and Mookherjee (2012) theorize that politicians often target the poor to gain voter support by providing short-term public goods. This can give the appearance of successful implementation of pro-poor programs, but often comes at the expense of providing long-term public goods. This pattern of using clientelistic strategies can be found in several case studies in which politicians distribute targeted public resources to consolidate political power (Kitschelt and Wilkinson, 2007; Stokes et al., 2013). This paper adds to this literature by providing evidence showing how criminal politicians can use clientelism as an effective tool to maintain public support.

Third, more narrowly, the results in this paper bridge the gap between the two competing strands of literature in India: one that uses qualitative fieldwork argues that criminal politicians might be more adequate to “get things done” (Martin and Michelutti, 2017; Vaishnav, 2017), and the other that finds that criminal politicians have adverse effects on overall economic welfare (Chemin, 2012; Prakash et al., 2019). I find that despite the reduction in overall program efficiency, the election of a criminal politician can have a positive effect on specific policy outcomes. This might explain why voters perceive such politicians to be competent and vote for them on the ballot. Lastly, while this paper concentrates on the Indian case, criminal politicians are not limited to India.⁴ Thus, these findings might be of relevance to various developing countries that are struggling with similar situations.

The rest of the article is structured as follows: Section 3.2 provides a theoretical discussion of why criminal politicians might be better at providing better access to government schemes. Sections 3.3 and 3.4 discuss the background of MGNREGA and the electoral context, respectively. Section 3.5 describes the data. Section 3.6 introduces the empirical strategy. Section 3.7 presents the validity of the RD design,

⁴Several developing countries have reported a rise in criminal politicians being elected to office, such as (but not limited to) Brazil, Indonesia, Pakistan, the Philippines, and Nepal.

the results, and its robustness. Section 3.8 provides some policy implications and concludes.

3.2. Criminal Politicians and Public Goods Provision

The electoral success of criminal politicians is often associated with having detrimental effects on economic welfare and democratic functioning. Yet, such politicians are regularly elected to public office, despite this reputation. In this paper, I argue that the election of criminal politicians might not always lead to adverse effects. When electorally motivated, these same politicians can use their criminal networks and reputation to move the bureaucratic wheel, diverting resources to their constituents. Under such conditions, if criminal politicians are more effective in providing targeted benefits, citizens might be willing to support them, even if they are criminals.

The argument I propose has several theoretical and empirical foundations. Several studies have shown that politicians are willing to engage in distributive politics to garner voter support. Aidt and Shvets (2012) find that in the United States senators seeking re-election are willing to bring the “pork” home, despite amplifying the common pool problem. Scholars have argued that this behavior of legislators acting solely based on their parochial interests can be most prevalent in countries that have limited state capacity and the formal state is unable to meet the basic needs of citizens (Manzetti and Wilson, 2007; Stokes, 2005). Such conditions allow corrupt politicians to step in and gain control over state resources and, in turn, use the delivery of public goods as a mechanism to buy votes. Since access to public goods in such societies is scarce, citizens are willing to exchange votes for any resources that might be on offer. This makes clientelism a winning electoral strategy in the hands of corrupt or criminal politicians.

India provides a potential scenario for such clientelistic networks to thrive, since access to resources is often heavily mediated with corrupt actors and government institutions are weak. For example, Vaishnav (2017) in his seminal work on understanding the nexus between criminals and politics in India, theorizes that criminal politicians possess various channels that equip them with the necessary skills to provide better access to public goods for their supporters. First, criminal politicians have vast access to money acquired through various illegal enterprises. On average, criminal politicians tend to be significantly richer than clean politicians.⁵ They can use this cash not only to run expensive election campaigns but also to pay the finan-

⁵ADR (2022). “What explains the increasing entry of criminals and wealthy candidates into politics?”

cial bribes necessary to move the bureaucratic wheel. Second, criminal politicians are often construed as effective strongmen who are willing to go above the legal means to protect the right of citizens and influence the distribution of resources. They can coerce bureaucrats into diverting resources to their constituencies by using this reputation as a tactic, either by showing a willingness to ‘flex their muscles’ or by creating the perception that they are capable of doing so. Lastly, in developing countries, controlling resources requires strong ties with middlemen, bureaucrats, and other local leaders. In this respect, criminal enterprises often foster strong networks by generating employment and rent-seeking opportunities for several state actors. In turn, criminal politicians can activate these networks to dispense resources to their supporters. Similar accounts can be found in the ethnographic literature on India, showing that citizens view criminal politicians as having the ability to “get things done” or “Robin Hood” figures (Berenschot, 2011a, 2011b; Martin and Michelutti, 2017). Thus, if criminality serves as a positive credibility cue and criminal politicians have the necessary tools to supply benefits, voters might be rationally rewarding them, even if (but precisely because) they are criminals. Despite the availability of this rich qualitative literature, there is a lack of empirical evidence showing whether criminal politicians improve public goods provision.

In this respect, MGNREGA provides an ideal backdrop to test this hypothesis. First, empirical studies have found that welfare schemes such as MGNREGA are often used as instruments to win elections.⁶ This is because MGNREGA is implemented at the village level and local politicians can often claim credit for its delivery (Gulzar and Pasquale, 2017). Second, by providing a minimum wage, the program targets the poor. There is a general agreement in the literature that clientelism is more likely to be stronger among the poorest and least educated voters (Kitschelt, 2000; Stokes et al., 2013). Since these segments of society have more immediate needs, they might be more prone to overlook probity for any short-term benefits on offer. This provides an ideal prospect for criminal politicians to target these types of voters and further strengthen clientelistic relationships, making this the best vote-buying tool at their disposal. In short, if criminal politicians are truly motivated by electoral incentives, we should expect this to be prominent when comparing criminal and clean politicians in a program of MGNREGA’s importance.

To further substantiate this argument, I examine whether the program delivery varies at the constituency level. Since constituencies tend to differ in terms of

⁶Zimmermann (2015) find that in regions with better implementation of MGNREGA in terms of job allocation, observe a rise in voter turnout and electoral benefits for the incumbent. Dey and Sen (2016) report that the ruling state party often spent more on MGNREGA funds in their aligned constituencies. In these aligned constituencies, candidates running from the ruling party in the preceding elections often win with larger vote shares and have higher chances of being re-elected.

electoral competition, we might expect that the incentives of criminal politicians to deliver might depend on the electoral gains on offer. To test for this, first, I examine whether the alignment of a constituency with the state government affects program delivery. The existing literature suggests that political leaders target partisan constituencies to expand their political networks and improve clientelistic relationships with their core voter base (Dasgupta, 2016; Dey and Sen, 2016). Thus, if criminal politicians aim to consolidate their chances of re-election, they should perform significantly better in such constituencies. Conversely, since these constituencies often exhibit higher rent-seeking opportunities due to better access to resources, if criminal politicians are motivated by corruption, this should be most prevalent in partisan constituencies (Arulampalam et al., 2009). Second, I explore whether there is any effect of MGNREGA's delivery depending on the constituency reservation status. Seats reserved for the SC/ST category often elect candidates with a lower likelihood of being re-elected and less experience (Chattopadhyay and Duflo, 2004). Since incumbents from reserved seats are less likely to run and win, this could influence the incentives for criminal politicians to deliver the program to their constituents.⁷ Lastly, I investigate whether program outcomes vary depending on whether the criminal incumbent runs for re-election. Studies have shown that electoral incentives can influence politicians' behavior to attract voters by refraining from rent-seeking and improving public goods provision (Besley, 2006; Frey, 2021). Thus, if criminal politicians are primarily driven by electoral incentives, we should expect them to maximize their position in power by performing significantly better in such constituencies.

Next, I examine whether corruption is a potential mechanism that can explain the results. First, I test whether there is any discrepancy in the average expenditure incurred across constituencies. There is sufficient evidence that officials are often complicit in reporting excess wages or overestimating expenses under the scheme (Gulzar and Pasquale, 2017; Niehaus and Sukhtankar, 2013). Thus, if criminal politicians were stealing funds from the program, we should expect to observe difference in average expenditure when comparing criminal and clean constituencies.

Second, I test whether there is any deviation between the mandated 60:40 material-labor expenditure rule between criminal and clean constituencies. MGNREGA stipulates that 60% of the expenditure must be spent on labor and the remaining 40% on materials. This law is supposed to ensure that areas do not differ in terms of the number of durable assets created and the number of work days offered under the scheme. However, due to the lack of proper monitoring, this rule is not always adhered to. Thus, if criminal politicians were engaging in corrupt practices, they

⁷For example, in the sample 1.14% of the SC/ST reserved incumbents recontested. Of which, 43.75% won in their respective constituencies in the subsequent election.

should take advantage of this lack of accountability by targeting the material portion. There are several reasons for this: first, MLAs are often known to have strong ties with local contractors. Several works have found that MLAs direct projects to their preferred contractors and in exchange contractors use the profits to either fund election campaigns or provide political rents.⁸ Second, the material component provides the only potential source for embezzling funds in the program. This problem has been further exacerbated by the introduction of direct wage payments into the beneficiaries' bank accounts in 2008. Although in the initial years of MGNREGA, stealing from wage funds was pretty easy, the introduction of direct wage payments and other technological systems has made this nearly impossible.⁹ Thus, if criminal politicians are mainly interested in amassing wealth either by rewarding contractors or stealing, we would expect them to concentrate their efforts on the material dimension of the program rather than on labor expenditure.

In contrast, if criminal politicians aim to engage in clientelism, we should expect them to concentrate their efforts on the labor component of the program. There are two main explanations for this: First, following standard models of the literature on distributive politics, criminal politicians should concentrate their efforts on distributing more jobs if electoral concerns are what drives them (Stokes et al., 2013). In fact, we should expect that voters would have little interest in the material expenditure incurred in the program. For example, Olken (2007) finds that when citizens participate in the monitoring of a road construction program in Indonesia, it led to a significant reduction in missing labor expenditure, but there was no effect on the material component. The author suggests that this could be explained as either the villagers found it easier to detect missing wages or they simply were more concerned with their private interests. Likewise, Goyal (2024) using data from India's largest rural road construction program finds that voters do not punish incumbents for poor quality or costly roads, suggesting that voters do not hold politicians responsible for corruption in the distribution of common public goods. This lack of voter accountability is especially relevant in the context of MGNREGA, which self-selects poor

⁸For example, Lehne et al. (2018) using data from a rural road construction road program in India find that the share of contractors whose names match those of a winning politician increased by 83% when a new politician was elected to office. Likewise, Kapur and Vaishnav (2013) finds strong evidence of links between contractors and politicians in the cement industry, where cement consumption was highly dependent on the election cycle. Beyond India, there is a growing level of micro-evidence showing that politicians have strong links to contractors and local firms (see, Khwaja and Mian, 2005; Mironov and Zhuravskaya, 2016).

⁹Das and Maiorano (2019) conduct in-depth interviews with program implementers in West Bengal and find that it is becoming increasingly difficult and costly to steal from the labor component of the program with little electoral rewards. Likewise, Jenkins and Manor (2017) provides a list of 22 different ways to steal from the program, but shows how most of these methods have become obsolete after the introduction of direct bank payments and other e-governance systems.

households. Since these households often have more immediate needs, we can easily construe that they might be more concerned with getting jobs than about the material dimension. This combined with the fact that Indian elections are fiercely competitive, makes providing access to more work opportunities a cheap vote-buying tool for politicians. Second, the expenditure rule creates a trade-off between the material and wage dimensions. Thus, MLAs must choose between engaging in corrupt practices or distributing more jobs to their citizens.

Lastly, I examine whether the findings can be explained by criminal politicians stealing from the program by over-reporting the number of beneficiaries registered in the scheme or the number of work days. MGNREGA has a history of having fake households registered in the scheme that do not officially exist (“ghost workers”) or a higher number of days worked reported under the scheme than actual work days (“ghost days”)¹⁰ Although I cannot directly observe the differences between the actual and reported data, I perform several robustness checks to ensure that this is not a potential channel driving the results.

3.3. MGNREGA Background

Enacted in 2005, MGNREGA was established to guarantee each rural household up to 100 days of employment in agricultural and local public work projects. Although any household can apply for the scheme, the program pays minimum wages, leading to “self-targeting” of poorer households. With a budget of about 900 billion Rupees (approximately 10 billion US\$) in 2021-22, MGNREGA employs about 113 million households, making it not only the largest workforce program in India but in the world.¹¹ Furthermore, the program aims to improve the infrastructure of the local village (for example, irrigation of the ditches and the construction of unpaved roads) and more than 50 million local infrastructure projects have been completed under the scheme.

The implementation of MGNREGA is highly complex and the Ministry of Rural Development (MoRD) provides a detailed 232-page document with comprehensive guidelines for implementation, execution, and rights under the program.¹² I highlight a few of the key features of the program below.

The implementation of MGNREGA involves the central, state, and the three levels

¹⁰As mentioned earlier, the introduction of direct wage payments and other technological systems has significantly reduced corruption in labor expenditure.

¹¹The data on the program is available on the national MGNREGA public data portal. Retrieved from https://mnregaweb4.nic.in/netnrega/dynamic2/dynamicreport_new4.aspx

¹²For more details see the MGNREGA Operational Guidelines, 2013 4th edition. Available at <https://drdashimla.nic.in/guideline/nrega.pdf>

Manipulating the System

of rural government in India known as the *Panchayat Raj*: *Zilla Parishad* at the district level, the *Panchayat Samiti* at the block level, and the *Gram Panchayat* (GP) at the village level. The program follows a bottom-up approach, where requests for work days and project approvals flow up the administrative chain, and funds flow down from the central or state government to the GPs and the beneficiaries' accounts. At the GP level, a village council meeting known as the *Gram Sabha* or *Sansad* is the primary forum for discussion of priority activities to be carried out in one year and for citizens to demand work. Based on the recommendations formulated in the *Gram Sabha* meeting, the GP prepares an annual plan and forwards it to the program officer (PO) at the block level. The PO reviews the annual plans of the individual GPs for technical feasibility and submits a consolidated statement of the approved proposals at the block level known as the Block Plan to the *Panchayat Samiti*. The *Panchayat Samiti* which includes the BDO and the MLA, approves the block plan and forwards it to the District Program Coordinator (DPC). The DPC then scrutinizes these proposals, consolidating them into a district plan proposal with a block-wise shelf of projects (arranged by the GPs). For each project, the district plan indicates (1) the time frame, (2) the person-days of labor to be generated, and (3) the full cost. This plan is forwarded to the *Zilla Parishad* that provides the final approval for all projects within their district. Once a project is green-lit by the district bureaucracy, the GP must execute at least 50% of the projects, as well as monitor and audit the implementation of the MGNREGA. In addition to these responsibilities, the GPs are the main body in charge of the execution of the program and are responsible for initiating and evaluating projects, registering households, issuing job cards, and allocating employment.

In terms of funding, MGNREGA is financed by the central and state government. The central government covers 75% of the material and wage expenses for semi-skilled and skilled workers and 100% of the wage costs of unskilled workers. The state government is mandated to provide the funds for the remaining expenses. Additionally, 60% of the total expenditure on projects must be spent on wages and the rest 40% on materials. Once projects are approved, funds are released from the central and state governments to the district and GPs. After due verification of the work and the muster rolls, the wages are transferred directly to the beneficiary accounts. Figure A.1 provides a detailed flow chart of the implementation and funding flow in MGNREGA.

Although the program is highly decentralized, MLAs can influence the implementation and allocation of resources at different levels of the administrative chain. First, project approvals are made at the block level, where the BDOs decide which new projects to implement and their location. The MLA has considerable power over BDOs because they can influence their employment and future transfers (Maiorano,

2014). This gives the MLA the power to intimidate BDOs to allocate projects in their preferred communities and to choose selected works that could be more visible and desirable to their voters (Aiyar and Samji, 2009; Maiorano, 2014). Second, at the village level, the GPs execute the program, with one of their main responsibilities being the allocation of jobs. The MLA can pressurize GPs to provide work selectively to their core voters. In exchange, the MLA can help GPs get projects off the ground or provide them with resources to run for re-elections (Alsop et al., 2001). In short, while the implementation of the program involves all levels of the government, MLAs have ample opportunities to divert resources to their constituents by pressuring or greasing the wheels of the bureaucratic chain.

3.4. Electoral Context

West Bengal, with a population of approximately 91 million, is the fourth most populous state in India. It is also one of the most politically significant states, with the third-largest number of seats at the national level and the second-largest number of state assembly seats. Like the rest of India, MLAs are elected for five years from a single-member constituency using the first-past-the-post voting structure, with an allowance for coalitions if a single party attains no majority.

Crime is deeply woven into the fabric of West Bengal politics. Although the rise of political candidates contesting in Indian elections is hardly a new phenomenon, the extent of the problem was not known until 2003. In a landmark judgment, the Supreme Court made it mandatory for all political candidates competing in Indian elections to submit a public affidavit. These affidavits included comprehensive details of the candidate's education, assets, liabilities, and criminal record. Remarkably, the release of these affidavits revealed that criminal candidates were regularly elected to office at both the national and state levels.

Despite the laws of the country prohibiting convicted candidates from contesting in elections, there is no such bar that forbids candidates facing trial from running. This incentivizes criminally accused candidates to compete for political office, since once in power they can potentially manipulate the judiciary to throw out the charges against them (Vaishnav, 2017). The government is cognizant of this problem and the recent uptake of criminal politicians has been frequently debated in the Indian parliament, but no serious action has been taken. Consequently, the Indian Supreme Court in 2018, instructed the parliament to make a law that at minimum prevents candidates accused of serious crimes from contesting in elections and to create special fast-track courts to expedite trials. Since all political parties are equally complicit in giving tickets to criminal candidates, little interest has been shown

in passing the bill. The Supreme Court made another ruling in 2020, mandating political parties to highlight the candidates' criminal records on their social media platforms in various vernacular languages. However, this law has also had little effect in curbing the rise of criminal politicians. For example, as presented in Figure B.1, in the 2021 West Bengal state assembly elections, 49% of the 294 winning MLAs had some form of criminal charges against them, up from 38% in 2016, and 34% in 2011. Of these, 39% of the MLAs were accused of "serious" offenses (such as rape, kidnapping, and murder) in 2021, up from 32% in 2016, and 24% in 2011. The electoral success of criminal politicians is not limited to politics in West Bengal, and a similar uptake can be observed throughout the country. While these measures are a step in the right direction, the current trend suggests that there may be other mechanisms at play that might explain the rise of criminal politicians in the Indian legislature.

3.5. Data

3.5.1. Election Outcomes and Criminality Data

Data on election outcomes for the West Bengal state assembly elections for the period between 2011-2021 are collected from the Trivedi Centre for Political Data (TCPD).¹³ In total, 3684 candidates contested from 572 election races in the two election cycles. The sample size is further restricted to mixed election races, where one of the top two candidates had a criminal accusation against them, providing a sample size of 249 election races. Furthermore, some of the constituents are in urban areas and do not qualify for the MGNREGA scheme.¹⁴ Thus, these observations are dropped from the analysis, providing a final sample size of 142 election races.

The main variable of interest is the criminal accusations of the political candidates. Originally, the candidate affidavits are available on the ECI website in PDF form (Figure E.1). Association of Democratic Reform (ADR), an organization created as an election watchdog, has entered and compiled these data, making them freely available to the public.¹⁵

In the baseline specification, I define a criminal politician as a criminal if they are

¹³TCPD has compiled the data for all the elections held both at the national and state level from the original reports available from Election Commission of India (Agarwal et al., 2021). The data is available at: <https://lokdhaba.ashoka.edu.in/>

¹⁴MGNREGA is a village-level program only applicable in rural areas. To ensure that the constituencies are similar, I consider only constituencies that have a minimum rural population of above 100,000.

¹⁵ADR has created a dedicated website called MyNeta, which provides data on the candidate's party affiliation, education, age, assets, liabilities, and criminal record: <https://myneta.info>

accused of any criminal charges and 0 otherwise. To further explore the robustness of the criminality variable, I examine different definitions of criminal charges. This is motivated by several reasons: First, it could be that certain candidates are “falsely” accused. This is particularly important in the Indian context since court cases can be dragged on for years, incentivizing political rivals to make false accusations to gain an electoral advantage (Prakash et al., 2019).¹⁶ While there is no way to distinguish “false” charges from the “true” ones, I test the impact of “serious” charges on MGNREGA outcomes to alleviate this concern. Since serious charges such as rape and murder are harder to fabricate, they might be more likely to be true. Second, it could be that the type of crime matters, and certain charges can have stronger treatment effects. For example, a politician accused of common theft might differ significantly from a politician accused of murder. For this purpose, I use the ADR definition that classifies serious crimes according to the nature of the crime and the sentencing period.¹⁷ Next, I look at the effect of corruption charges on MGNREGA outcomes using the definition provided by Prakash et al. (2019), who consider corruption charges as ones that lead to financial loss to the government.¹⁸

Tables B.1 and B.2 provide the distribution of candidates by number and type of criminal charges, respectively. We can observe that the number of criminal candidates seems to be largely concentrated at the top. Of the total of candidates who contested in the elections, 17.83% of them faced some form of charges, of which 21.61% finished in the top two positions. Likewise, of the 488 candidates accused of serious charges, 17.45% finished among the top two. Lastly, of the 216 candidates accused of corruption, 23.6% of them were able to secure the top two pole positions.

3.5.2. MGNREGA Outcomes

MGNREGA data is collected from the public data portal from 2011 to 2021. The data is available at the GP or village cluster level and include various indicators on the program such as how much work was demanded, allocation of work, the status of the projects, and the expenses incurred. I collect data on the number of projects completed, the number of days worked, the number of job cards issued, and the expenditure incurred on each component. Since the main objective of the program

¹⁶Several studies have used the data on criminal allegations against politicians in India and have found no evidence that suggest that these allegations are false. For example, see Prakash et al. (2019) and Vaishnav (2011).

¹⁷Explanation of the definition of serious crimes along with the related IPCs is available on ADR website: <https://adrindia.org/content/criteria-categorization-serious-criminal-cases>

¹⁸Prakash et al. (2019) define the following IPCs as corruption charges: 171B, 171E, 230-262, 272-276, 378-420, and 466-489D. Some examples of the charges included are bribery, counterfeiting, theft, cheating, extortion, and misappropriation.

is to improve local infrastructure and provide rural employment, I consider two main outcomes: the number of Projects Completed and the number of Work Days. Additionally, to account for any variation in population, all outcomes are divided by per 1000 residents.

One concern with MGNREGA outcomes is that the data is available at the GP level, and mapping GPs to their respective constituencies is not straightforward. This is because in India the administrative units (such as districts, blocks) do not necessarily perfectly align with the political (constituencies) unit. To overcome this problem, data from the most recent delimitation based on the 2001 census were used to map assembly constituencies. Original delimitation orders are available on the ECI website in PDF form. To ensure precision, I extract this data and manually map the constituencies to their respective GPs. In total, 1055 GPs are mapped to the 93 unique constituencies in the sample.¹⁹ Looking at Table B.3, we can observe that a simple comparison of MGNREGA outcomes per 1000 residents between treatment and control shows that criminal constituencies on average complete fewer projects, provide more work days, and incur a higher expenditure bill relative to clean constituencies.

3.6. Empirical Strategy

If the electoral success of criminal candidates was random, we could compare constituencies where a criminal candidate won to constituencies where a non-criminal won as a counterfactual. However, the selection of criminal candidates is highly endogenous. In other words, it could be that criminal candidates are more likely to run and win in certain constituencies than others, which would bias the estimates. To overcome this problem, I use an RD design, comparing constituencies where criminal politicians barely won to ones where they barely lost. As the margin of victory approaches zero, the success of criminal candidates in such a constituency should be as if it were random, allowing an estimation of the causal effects of electing a criminal politician (Lee and Lemieux, 2010). More formally, the empirical benchmark model that this paper estimates:

$$y_{ijt} = \alpha + \beta criminal_{jt} + \delta_1 MV_{jt} + \delta_2 criminal_{jt} \times MV_{jt} + \gamma_t + \varepsilon_{ijt} \quad (3.1)$$

¹⁹Figure B.2 provides a constituency map of West Bengal, highlighting the treatment groups in the sample.

where y_{ijt} is the main outcome that measures MGNREGA outcomes in GP i in constituency j at time t . $Criminal_{jt}$ is a dummy variable that equals 1 if a candidate has criminal accusations against them and 0 otherwise. The coefficient β captures the local average treatment effect of electing a criminal politician in constituency j at time t on the outcome of interest. MV_{jt} is the forcing variable and measures the margin of victory between criminal and clean candidates. Positive values indicate the difference between the vote share received by a criminal winner and that of a clean runner-up. Negative values indicate the difference between the vote share received by a clean winner and that of a criminal runner-up. γ_t accounts for the year fixed effects. Lastly, since the implementation of MGNREGA can vary at both the village and the constituency level, standard errors are clustered at both levels and are denoted as ε_{ijt} .

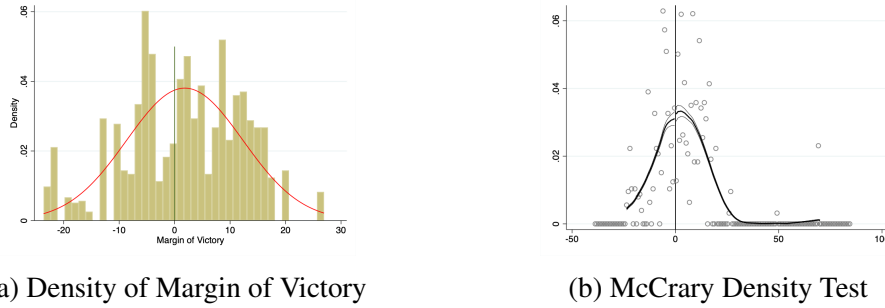
To estimate the regression, I use the bandwidth proposed by Calonico et al. (2014) or the CCT bandwidth denoted as h . As robustness checks, I estimate the regression using the optimal bandwidth proposed by Imbens and Kalyanaraman (2012) or the IK bandwidth, double the optimal bandwidth ($2h$), and half the optimal bandwidth ($h/2$).

3.7. Results

3.7.1. RDD Validity

There are two main assumptions required to validate the use of a RD design (Imbens and Lemieux, 2008). The first assumption is that there should be no manipulation of the running variable. In particular, if a criminal candidate knows that an election race is close, they may be willing to rig or manipulate the election to win. If this were the case, we would expect that there would be a larger number of criminal candidates around the threshold. A visual inspection of the density of the margin of victory provided in Figure 3.1 does not provide any evidence of the sorting of criminal candidates at the threshold. More formally, a McCrary (2008) density test confirms that the density of the running variable is similar below and above the cut-off.

Figure 3.1.: Continuity of Margin of Victory between Criminal and Clean Candidates



Notes: The forcing variable is the margin of a victory that measures the difference between the vote share received by a criminal candidate and that of a clean candidate. Positive values indicate the difference between the vote share received by a criminal winner and that of a clean runner-up. Negative values indicate the difference between the vote share received by a clean winner and that of a criminal runner-up. The estimated size of the discontinuity in the margin of victory (log difference in height) is 0.043 (s.e. 0.05).

The second main assumption of the RD design is that the observable characteristics that can potentially affect the outcome should be continuous throughout the threshold. Although the constituency and candidate characteristics can differ throughout the sample, they should be identical at the discontinuity.²⁰ Due to a lack of data availability, it is not possible to formally test every characteristic. However, a formal test for the effect of electing criminal politicians on MNREGA outcomes at time $t - 1$, several constituency characteristics (such as alignment with the state ruling party, SC/ST reserved status, total votes cast in logs, voter turnout, and total electoral size in logs) and candidate characteristics (income and liabilities in logs, age, gender, possession of a high school degree, and incumbency status) provided in Table 3.1 show no statistical evidence of imbalances.²¹ Thus, these diagnostic checks combined provide sufficient evidence for the use of an RD design.

A related concern is that the RD estimate may capture the effect of criminality and all potential compounding candidate characteristics and constituency-level characteristics that distinguish criminal and clean candidates (Marshall, 2022). To alleviate this concern, first, I estimate the RD effect by including a variety of candidate and constituency-level controls that account for any potential impact of these compounding differentials. Next, I estimate the RD effect by including candidate characteristics using the propensity score-based weighting technique. The results of these robustness checks are provided in Tables C.1-C.2 and I find no evidence that any other characteristic captures the effect of electing criminal politicians on the outcome of interest. However, since we cannot control for all (un) observable characteristics, I intentionally interpret the findings as the effect of electing a criminal

²⁰A description of the constituency and candidate profile for the full sample is provided in Table B.4 and Table B.5.

²¹The effect of electing criminal politicians on MNREGA outcomes at time $t - 1$ is restricted to the second election cycle due to lack of data availability.

candidate, rather than the effect of criminality alone.

Table 3.1.: Balance of Covariates

Variable	Coefficient	S.E.	Obs.	Bandwidth
Projects Completed/1000 capita ($t - 1$)	-0.081	7.267	111	4.099
Work Days/1000 capita ($t - 1$)	-1,566	1,291	165	5.497
Partisan Constituency	-0.097	0.358	2459	4.934
SC/ST Reserved Constituency	-0.256	0.317	3254	6.106
Total Votes (in logs)	0.0169	0.069	2107	4.479
Voter Turnout	-0.539	2.515	2334	4.664
Electoral Size (in logs)	0.031	0.082	3074	5.863
Winner Income (in logs)	-0.648	0.769	3464	6.766
Runner-up Income (in logs)	0.442	0.805	2724	5.319
Winner Liabilities (in logs)	-0.168	3.957	2954	5.790
Runner-up Liabilities (in logs)	0.501	3.678	1982	4.270
Winner Age	-6.673	5.256	3684	7.503
Runner-up Age	-1.102	4.877	3719	7.822
Winner Gender	-0.101	0.176	2954	5.774
Runner-up Gender	-0.065	0.123	2334	4.665
Winner High School Degree	-0.030	0.263	3464	6.861
Runner-up High School Degree	-0.018	0.139	2394	4.597
Winner Incumbent	-0.119	0.111	1492	3.334
Runner-up Incumbent	0.001	0.233	2279	4.597

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

3.7.2. Main Results

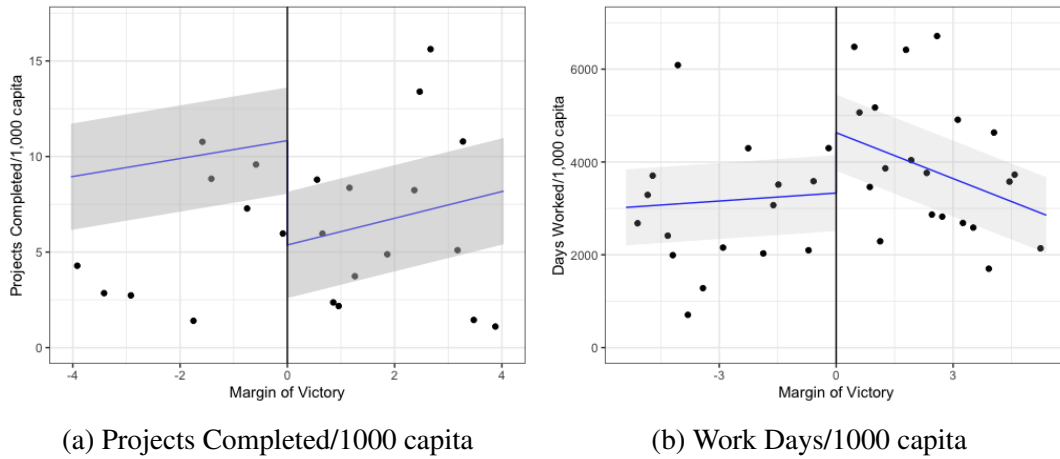
Figure 3.2 provides a graphical illustration of the main results of electing a criminal politician on MGNREGA outcomes. The plots are generated using a local linear regression with a triangular kernel and an optimal bandwidth criterion proposed by Calonico et al. (2014). A positive margin of victory indicates a constituency where a criminal candidate won against a non-criminal candidate, while a negative margin of victory implies that the criminal candidate lost and the non-criminal won. The vertical line represents the change in discontinuity when the margin is equal to zero and reflects the causal effect of electing a criminal candidate on MGNREGA outcomes.

The RD figure in panel (a) shows a clear drop at the threshold, implying that

Manipulating the System

constituencies that elect a criminal politician complete fewer projects per 1000 capita relative to constituencies that elect a clean candidate. In contrast, in the RD figure in panel (b), we can observe a clear increase at the discontinuity, implying that at the threshold, constituencies that elect a criminal MLA observe a rise in work allocation per 1000 capita in comparison to constituencies that elect a clean MLA.

Figure 3.2.: Effect of Electing Criminal Politicians on MGNREGA



Notes: The forcing variable is the margin of a victory that measures the difference between the vote share received by a criminal candidate and that of a clean candidate. Positive values indicate the difference between the vote share received by a criminal winner and that of a clean runner-up. Negative values indicate the difference between the vote share received by a clean winner and that of a criminal runner-up. In Figure 2(a), the y-axis represents the annual number of Projects Completed per 1000 residents. In Figure 2(b), the y-axis represents the annual number of Work Days per 1000 residents. In both figures, the x-axis represents the margin of victory. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level. The scatter plot represents the evenly spaced mimicking variance (esmv) number of bins using spacing estimators. The gray shaded area represents the 95% confidence interval. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014).

In terms of magnitude, the estimates are presented in Table 3.2. Column (1) reflects the estimates provided in Figure 3.2. In Panel A, the results are statistically significant and indicate a negative effect of electing criminal politicians on Projects Completed: On average, in constituencies where a criminal politician barely won, complete 5.26 fewer projects per 1,000 residents compared to constituencies where they barely lost. These magnitudes are substantial. To put this into context, this implies a 68% decrease in the project completion rate relative to the mean value of the dependent variable, which corresponds to a reduction of approximately 0.39 standard deviations. Also note that these estimates are yearly, meaning that during a full constituency term of five years, a criminal politician can have an extremely large impact on generating assets under the scheme. For robustness, the estimates are generated using several alternative bandwidths in columns (2)-(4). The results in column (2) with IK bandwidth are quantitatively similar to those in the main specification. Doubling the bandwidth in column (3) decreases the estimates slightly.

However, halving the bandwidth in column (4) increases the magnitude.

Looking at Work Days in Panel B, the results show that constituencies where criminal MLA barely won observe a rise of 1295 Work Days per 1000 residents (implying a 36% higher work allocation relative to the mean value of the dependent variable). This corresponds to an increase in work days of about 0.33 standard deviations. Again, using various alternative bandwidths, the results remain mostly robust. In terms of magnitude, in column (2) with IK bandwidth the estimates increase slightly. In column (3) doubling the bandwidth the magnitude reduces, but remain quantitatively and statistically significant. Finally, halving the bandwidth in column (4) the estimates lose statistical power.

Table 3.2.: Effect of Electing Criminal Politicians on MGNREGA

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-5.264*** (1.313)	-5.504*** (1.879)	-3.436*** (1.205)	-6.440*** (2.138)
Observations	2459	1492	4679	1118
Bandwidth Size	4.916	3.407	9.832	2.458
Panel B: Work Days /1000 capita				
Criminal	1,295*** (477.3)	1,309*** (470.6)	1,147*** (333.4)	746.2 (765.4)
Observations	2724	2764	5044	1183
Bandwidth Size	5.340	5.458	10.68	2.670
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of Projects Completed per 1000 residents. In panel B, the outcome measures the annual number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

In the next specification, I estimate the effects of electing criminal politicians on labor expenditure per 1000 capita. The results are presented in Table 3.3. In column (1) the estimates show that constituencies that barely elect a criminal politician spend 193,118 Rupees (2350 US\$) more per 1000 residents in comparison to constituencies that barely elect a clean politician. Again, these magnitudes are huge: this reflects a 42% increase in the wage bill relative to the mean value of the dependent variable, implying an increase of approximately 0.32 standard deviations. To provide further perspective, an average constituency comprises approximately 270,000 residents,

which implies a higher wage bill of approximately 52.14 million Rupees (626,000 US\$). The average project cost ranges between 0.15 million Rupees (1,800 US\$) and 0.46 million Rupees (5,600 US\$). This means that if these extra funds spent on wages were allocated efficiently, they could have potentially been used to complete anywhere between 113 and 348 projects annually. The implied returns are so high that even though criminal politicians generate more employment for their constituents, they seem to reduce overall welfare significantly.

Table 3.3.: Effect of Electing Criminal Politicians on MGNREGA Labor Expenditure

	(1)	(2)	(3)	(4)
Labor Expenditure/1000 capita				
Criminal	193,118*** (62,455)	186,256*** (70,727)	171,649*** (44,093)	155,489 (103,659)
Observations	2459	1982	4869	1118
Bandwidth Size	5.103	4.351	10.21	2.551
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. The outcome measures the total labor expenditure per 1000 residents. The models include year-fixed effects and the standard errors are clustered at the gp and constituency level. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

3.7.3. Heterogeneous Effects

Until now, the estimates provided have focused on the overall cost of electing criminal politicians. However, this effect might vary at the constituency level. In particular, constituencies might differ in terms of the electoral reward on offer, which in turn could affect the delivery of the program. To test for this, in the first specification, I examine if there is any impact on the MGNREGA outcomes if the constituency belongs to the same party as that of the state ruling government. As discussed earlier, several studies highlight that politicians target partisan constituencies to improve their clientelistic relations with their core voters by providing better access to funds and work allocation under the scheme.²² Figure 3.3 does not provide statistical evidence that criminal politicians running from partisan constituencies perform better.

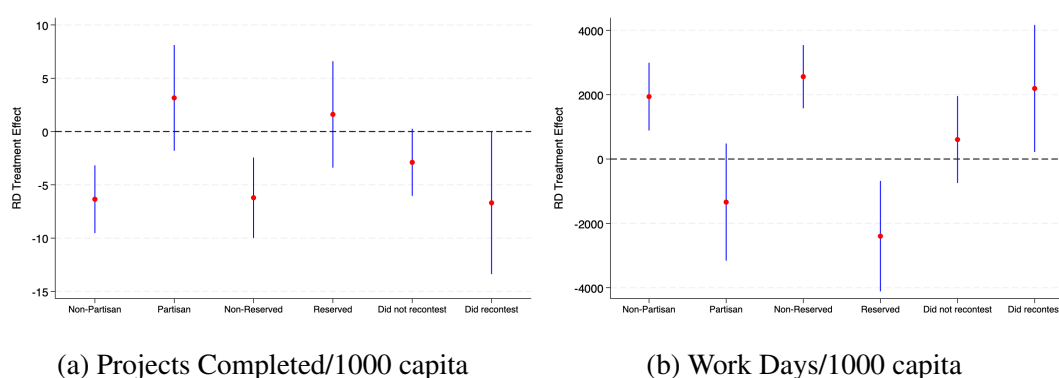
²²For example, Das and Maiorano (2019) find that in the state of Andhra Pradesh, the state ruling party often spends more on materials in their core partisan constituencies. Likewise, Dasgupta (2016) using an RD design in the state of Rajasthan show that the allocation of labor is significantly larger in areas where the ruling party barely won versus areas in which they barely lost.

When looking at both the project completion rate and work allocation, the results suggest that there is no effect of partisanship on the program delivery.

In the next specification, I look at whether there are differences in the delivery of the program depending on the reservation status of the constituency. Generally, constituencies reserved for SC/ST candidates differ from non-reserved constituencies in several ways, such as candidate profiles, socioeconomic characteristics, and electoral rewards. Looking at Figure 3.3 panel (a), there is no evidence that reserved constituencies have a lower project completion rate relative to non-reserved constituencies. However, in panel (b), we can observe that the positive effect on Work Days is concentrated primarily in non-reserved constituencies. The results show that the positive effect on the allocation of work reduces by approximately 94% in reserved constituencies. This finding is consistent with the argument that criminal politicians are more likely to provide higher work allocation if there are electoral benefits on offer. Since incumbents in reserved constituencies often face a lower probability of re-election, it makes sense that criminal politicians are less motivated to provide resources to their constituents.

In the final specification, I explore how the results change depending on whether the criminal incumbent contested the next election. Looking at Figure 3.3, we can see that in constituencies where the criminal incumbent seeks re-election, there is a further drop in the project completion rate. In contrast, the positive effect on work allocation is concentrated in these constituencies. This seems to suggest that criminal politicians seeking re-elections use their position of power to strategically allocate more work days to their constituencies to maximize their electoral advantage.

Figure 3.3.: Effect of Electing Criminal Politicians by Constituency Characteristics



Notes: The figure provides the treatment effect of electing a criminal politician on MGNREGA. In panel (a), the outcome measures the annual number of projects per 1000 residents. In panel (b), the outcome measures the number of Work Days per 1000 residents. Partisan indicates constituencies that are aligned with that of the state government. Reserved indicates constituencies that are reserved for the SC/ST category. Did Recontest indicate constituencies where the criminal incumbent ran for re-election in the subsequent election. All models include year-fixed effects and the standard errors are clustered at the gp and constituency level. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014).

3.7.4. Mechanisms

The results in this paper show that the election of criminal politicians has large average effects on the delivery of MGNREGA. To shed light on this phenomenon, this section examines whether these findings are the result of corruption or whether the criminal politician is using the delivery of the program to strategically provide targeted benefits to their constituents. To test this hypothesis, several measurements that could serve as indicators of corruption within the program are estimated.

As a first measurement of corruption, I look at whether there is any discrepancy in the average expenditure incurred across constituencies. In particular, I test if there are any differences in the wages paid per workday and the material expenditure per project. Since beneficiaries working under the program are paid the same minimum wage, if criminal politicians were truly generating higher employment, we should observe no discontinuity in wages paid per workday between criminal and clean constituencies. Likewise, if criminal politicians were stealing from the material component of MGNREGA, there should be visible differences in the average cost of materials when comparing criminal and clean constituencies.²³ Table 3.4 provides the estimates for this specification. In both Panels A-B, the estimates provide no statistical evidence of any average expenditure differentials between criminal and clean constituencies.

²³The data only provides the reported material expenditure and there is no way of measuring discrepancies between the actual and observed expenditure. To account for this, only the material expenditure incurred for completed projects is included. Since these projects are often verified by social audit teams, the measurement error should be relatively small.

Table 3.4.: Effect of Electing Criminal Politicians on MGN-REGA Average Cost

	(1)	(2)	(3)	(4)
Panel A: Wages per WorkDay				
Criminal	0.538 (7.054)	0.675 (7.032)	3.484 (4.974)	11.10 (11.83)
Observations	1978	1978	4171	878
Bandwidth Size	4.203	4.223	8.407	2.102
Panel B: Material Expenditure per Project				
Criminal	-18,743 (25,657)	-6,442 (21,711)	-1,911 (19,973)	28,749 (29,138)
Observations	2993	4474	5211	1286
Bandwidth Size	6.026	9.873	12.05	3.013
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the wages paid per workday. In panel B, the outcome measures the material expenditure incurred on each project. The model includes year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Second, I test if there is any deviation between the mandated 60:40 material-labor expenditure rule between criminal and clean constituencies. Table 3.5 provides the estimates of this specification. In particular, the outcome measures the proportion of the total expenditure spent on material less than the 40% mandated requirement. In column (1) we can see that criminal politicians spend significantly less on the material component than the legal requirement. Criminal constituencies observe a drop in material expenditure by 7.20% less than the required threshold relative to clean constituencies. In columns (2)-(4) the estimates mostly remain robust and statistically meaningful across a range of alternative bandwidths. Since the MLA has to choose between distributing more jobs or spending more on materials, these findings suggest that criminal politicians seem to prefer the latter.

Table 3.5.: Effect of Electing Criminal Politicians on MGNREGA Material Ratio

	(1)	(2)	(3)	(4)
	Material Expenditure Ratio less 40%			
Criminal	-0.072*** (0.019)	-0.050*** (0.016)	-0.051*** (0.014)	-0.047* (0.027)
Observations	3064	4417	5343	1315
Bandwidth Size	6.028	9.753	12.06	3.014
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. The outcomes measures the difference between the percentage of total expenditure on material less the mandated requirement of 40%. The model includes year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Next, I examine whether the higher number of work days in criminal constituencies can be explained by the existence of ghost workers or ghost days.²⁴ Although there is no direct method to measure the existence of ghost workers or ghost days, I conduct two main robustness checks to provide indirect evidence that this is not a potential mechanism driving the results.

First, I compare the number of job cards issued under the program between criminal and clean constituencies. Each worker must apply for a new job card when relocating to a new GP to indicate their willingness to work under the scheme. Table C.3 presents the estimates for this specification. The results do not suggest that the findings can be explained by a higher number of job cards issued when comparing criminal and clean constituencies. While this does not entirely eliminate the possibility of ghost workers, it does provide some reassurance that this issue is not more prevalent in criminal constituencies.

Second, I examine the robustness of the results to omitted variable bias using the method developed by Oster (2019). The model predicts how much larger the unobservables would have to be relative to the observables (δ) for the treatment effect to be null ($\beta = 0$). Table C.4 presents the results for this specification.²⁵

²⁴A related concern is that the positive effect on the number of work days could be the result of some variation in the employment demand. Although most studies have found insignificant migration effects of MGNREGA (see, Muralidharan et al., 2016), if citizens are aware that criminal constituencies are more likely to offer better work opportunities, this could perhaps encourage them to migrate to these areas.

²⁵Panel A provides the estimates for Project Completed per 1000 capita. In column (1) the estimated δ is -8.345. This implies that the unobservables to the observables need to be 8.345 times larger for the treatment effect to be zero.

Panel B column (1) shows the baseline estimates with a δ of 2.04, which means that the unobservables would need to be 2.04 times larger than the observables for the treatment effect to be zero. In columns (2)-(4), with the inclusion of various constituency and candidate controls, the coefficient remains qualitatively similar, while the R-squared and δ increase. This provides further assurance that the findings are not the result of omitted variable bias, making it less likely that ghost days can explain most of the effects.

3.7.5. Robustness

Access to Resources

In this subsection, I estimate whether there are any differences in the material expenditure incurred between criminal and clean constituencies. It could simply be that certain constituencies have better access to certain resources (i.e., materials) than others. There is enough anecdotal evidence to suggest that there could be variation in the amount of money provided for purchasing materials in certain areas or significant hold-ups in the release of funds due to bureaucratic inefficiencies. The untimely release (or lack) of funds could perhaps explain why certain areas have a higher project completion rate than others. In addition, criminal constituencies may be undertaking a larger number of capital-intensive projects. Since these projects tend to incur a higher expenditure on materials and be more time-consuming, this could perhaps explain the negative difference in the number of Projects Completed, rather than the criminal politician simply being inefficient. Table C.5 does not support this argument. If this were the case, we would observe a significantly lower allocation of the material component when comparing criminal and clean constituencies.

Alternative Definitions of Crime

In this subsection, I examine whether the delivery of MGNREGA differs depending on the type of criminal charges.²⁶ As mentioned earlier, there are several reasons to investigate alternative definitions of criminality, especially in the Indian context. In the first specification, I examine the effect of serious criminal charges on the main outcomes of interest. In particular, I compare constituencies where a winner has at

²⁶RD validity checks for these specifications are provided in Figure D.1 and Tables D.1-D.2. Although the treatment and control groups are mostly balanced across both constituency and candidate characteristics, in constituencies where a corrupt criminal barely won, had a lower likelihood of being SC/ST reserved and observed a lower voter turnout. In Table C.8, the estimates control for these imbalances. The results remain robust and qualitatively similar to the baseline findings. However, the coefficients increase in magnitude and suggest that corrupt politicians have higher treatment effects compared to the baseline estimates.

Manipulating the System

least one serious charge (and a runner-up who has no serious charges) to constituencies where the candidate has no serious charges (and a runner-up who has at least one serious charge). The results of this exercise are presented in Table C.6. The estimates remain consistent with those of the baseline findings: constituencies that barely elect a criminal politician accused of serious charges observe a drop in the number of Projects Completed and a rise in the Work Days relative to constituencies where they barely lost. However, the magnitude of the coefficients is larger in comparison to the main results, implying that the election of serious criminals has potentially higher costs. Likewise, in Table C.7, I define a politician as a criminal if they face corruption charges against them. Again, the results are consistent and show that in constituencies where a corrupt politician barely won exhibit a drop in the project completion rate and a rise in work allocation compared to constituencies where they barely lost. Overall, these results suggest that the main findings are robust to these alternative definitions of crime, making it more likely that the criminal charges against the candidates are true.

Timing of RD Effect

Until now, the MGNREGA outcomes included the full-time period of the MLA term between 2011 and 2020. One potential issue is that the MGNREGA data does not perfectly coincide with the election timeline. To account for this, I restrict the sample to include data only after the year the MLA was elected. In particular, for every election cycle t , I estimate the effect of electing criminal politicians on MGNREGA outcomes at time $t + 1$. Table C.9 presents the estimates for this exercise and suggests that the results remain qualitatively similar and robust.

Another concern is that the effect of the MGNREGA outcomes might be strongest before the elections. If criminal politicians are motivated by re-election incentives, they could potentially be diverting more resources to their constituencies closer to the election cycle. To account for this, for every election held in time t , I drop the observations at time $t - 1$. The results of this exercise are presented in Table C.10. The results remain robust with those of the baseline. However, the magnitude of both outcomes reduces slightly.

Next, I examine whether there is any variation in MGNREGA outcomes over time. Due to implementation issues, there might be a high level of annual volatility in MGNREGA. To test for this, I consider two alternative measurements: first, I estimate the effect of electing criminal politicians separately for each year of their term. Figure C.1 presents the results of this exercise with a graphical illustration of the RD effect. In panel (a), the estimates for Projects Completed show that the effect is not instantaneous and increases over time. In the first year that the criminal

politician is elected, the coefficient is not statistically significant. In the second and third years, the coefficient is statistically significant and of a magnitude similar to those of the baseline. In the fourth year, the estimates increase slightly in magnitude. In the last year, the negative effect is the largest, nearly double in magnitude. In contrast, in panel (b), the positive effect on Work Days is immediate and mostly consistent in terms of magnitude across the years. Overall, these results suggest that the effect of electing criminal politicians on the MGNREGA outcomes is mostly robust throughout their term.

Lastly, to account for the year-to-year variation, I test the effect of electing criminal politicians on the MGNREGA outcomes averaged over the entire election term of five years. Table C.11 presents the results of this exercise. Looking at Projects Completed, we can observe that the estimates are statistically significant for various bandwidths, albeit the magnitude reduces slightly in comparison to the baseline. Likewise, the coefficient for Work Days is statistically significant for the main and double bandwidths. However, the coefficient loses statistical power at lower bandwidth levels.

Addressing Extreme Values

In this subsection, I explore the robustness of the results by accounting for any outliers in the sample. In the first specification, the results are estimated by excluding very large values.²⁷ While these issues should not be directly correlated with the effects of electing a criminal politician, I test for this in Table C.12 by dropping the five largest values from the sample for both outcomes. Another concern is the presence of zeros in certain village clusters.²⁸ I address this issue in Table C.13 by dropping any observations with a 0 from the sample. In both cases, the estimates are qualitatively and quantitatively similar to the main findings. These results suggest that the findings are robust to any extreme values in the sample.

Sensitivity of RD Specification

In this subsection, I test the robustness of the RD estimates by using different levels of bandwidth and varying the polynomial order. Figure C.2 provides estimates for both MGNREGA outcomes at different bandwidth levels. For Projects Completed presented in panel (a), we can observe that reducing the bandwidth

²⁷Certain regions are more densely populated or have higher state capacity which might explain the differences in MGNREGA outcomes across regions.

²⁸This could be driven by several factors. First, certain projects might take longer to complete than one time period. Second, regions with scarcer inhabitants might have a lower requirement for local infrastructure or demand for work.

though the estimates remain statically significant, the confidence interval is relatively large. Increasing the bandwidth to larger values, the estimates remain mostly stable. Likewise, the point estimates for Work Days in panel (b) are statically significant at higher bandwidths but lose statistical power at lower bandwidth levels.

Next, I estimate the treatment effects by varying the functional form. Tables C.14-C.15 report the findings of this exercise using a linear, quadratic, and cubic function with the $CCT(h)$, IK , $2h$, and $h/2$ bandwidths for Projects Completed and Work Days, respectively. In general, the results are consistent with those of the baseline estimates. Although using high-order polynomials or smaller bandwidths, the estimates for Work Days lose statistical power.

3.8. Conclusion

This paper attempts to find a solution to one of the most puzzling problems in politics: Why do voters support corrupt or criminal politicians? Contrary to popular belief that criminality or corruption is an undesired characteristic, my findings reveal that voters might be rationally rewarding such candidates because of their ability to provide them with targeted benefits. Despite reducing overall program efficiency, constituencies that elect criminal politicians observe a substantial rise in work allocation. The results further show that criminal politicians systematically target the wage dimension of the program, rather than materials. These findings suggest that criminal politicians compensate voters through the delivery of government schemes. Specifically, criminal politicians seem to strategically provide benefits that voters might care more about. Thus, as long as they can dispense such clientelistic goods, voters might be willing to excuse the criminal allegations against them. This is consistent with the findings of several studies that corrupt politicians engaging in pork-barrel or patronage politics can persist in democratic governments (Kitschelt, 2000; Pereira and Melo, 2015; Winters and Weitz-Shapiro, 2013). This willingness to support corrupt politicians becomes even stronger when government institutions are weak and access to resources is limited (Manzetti and Wilson, 2007). In polities of such kind, voters have no choice but to support corrupt governments for any resources they can muster.

This creates a major challenge for reformers, since the politicians in charge of strengthening state capacity and democratic functioning might have little incentive to do so. As several scholars have noted, if the politician is a criminal or corrupt, their best electoral strategy would be to pursue clientelism by engaging in parochial politics (Chandra, 2007), deepening social divisions (Vaishnav, 2017), and keeping institutions weak (Stokes, 2005). Under such conditions, voters might have an incen-

tive to reward criminal politicians because of their ability to sell themselves as being competent and having what it takes to “get things done” in politics. Thus, curbing the demand for criminal politicians is a long-drawn process, since strengthening state capacity is slow and particularly challenging in the hands of criminal leaders.

In summary, this paper provides one of the mechanisms that could explain why voters tend to support criminal or corrupt politicians. Although this is one piece of the puzzle, the findings in this paper provide a logic for why criminal politicians not only persist but thrive in democratic countries.

A. MGNREGA Flow Chart

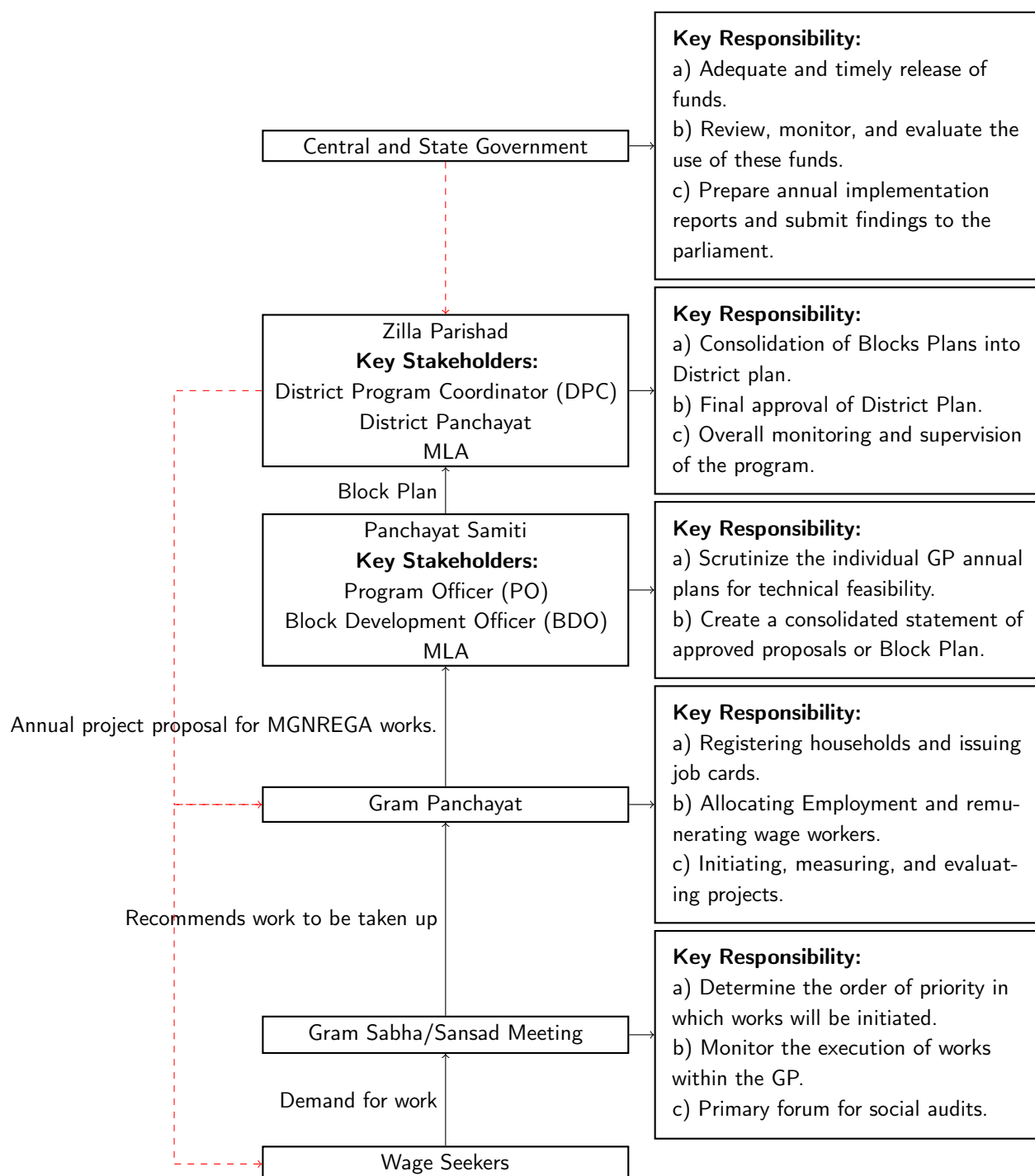
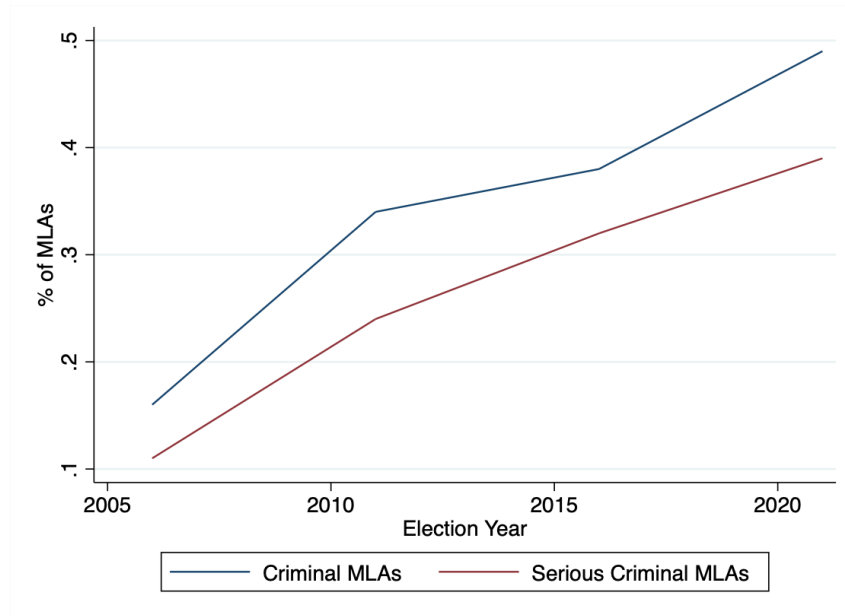


Figure A.1.: MGNREGA Functioning

Notes: The red dashed line represents the flow of funds for MGNREGA.

B. Data and Summary Statistics

Figure B.1.: % of MLAs with Criminal Records in West Bengal State Assembly Elections



Data Source: Association for Democratic Reform (ADR)

Table B.1.: Distribution of Candidates by Number of Criminal Charges

	Winner	Runner-up	All
0	53	89	3027
1	28	29	334
2-4	40	20	224
4-6	11	0	33
Above 6	10	4	46
<i>N</i>	142	142	3684

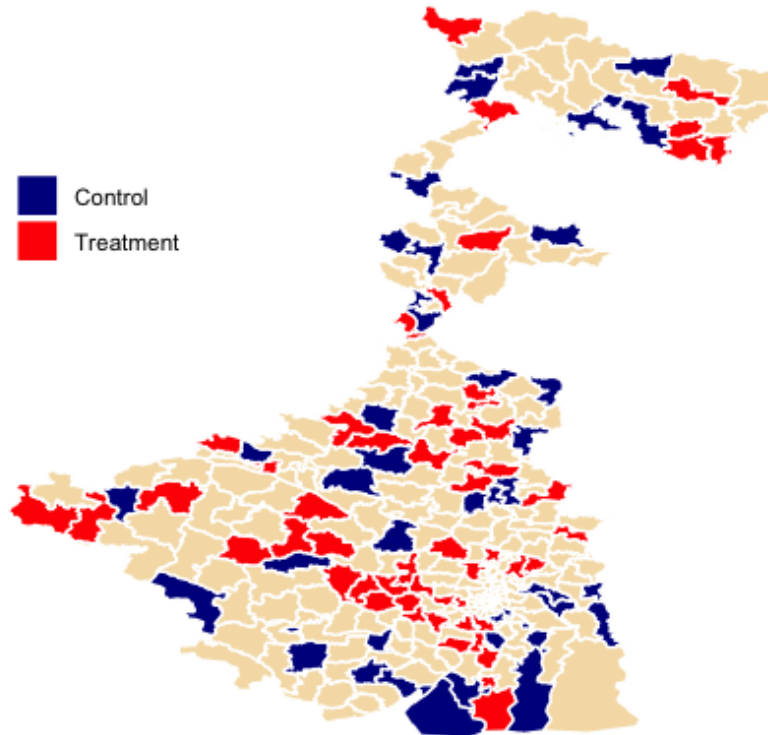
Notes: All refers to all the candidates that contested in West Bengal State Assembly Elections in 2011 and 2016.

Table B.2.: Distribution of Candidates by Number of Criminal Charges

	Winner	Runner-up	All
None	53	89	3027
Any Crime	89	53	169
Serious	54	31	488
Corrupt	32	19	216

Notes: All refers to all the candidates that contested in West Bengal State Assembly Elections in 2011 and 2016.

Figure B.2.: West Assembly Constituency Map by Treatment Group



Notes: The constituencies where a criminal politician won represent the treatment group and are marked in red. Constituencies where a criminal politician lost represent the control group and are marked in dark blue.

Table B.3.: MGNREGA Outcomes per 1000 Residents

	Control	Treatment	Average
Projects Completed	7.897 (14.58)	7.547 (12.77)	7.690 (13.54)
Days Worked	3576.10 (3402.10)	3608.20 (4311)	3595.10 (3965.70)
Job Cards Issued	187.30 (112.90)	178.70 (212.10)	182.20 (178.50)
Labor Expenditure	444373.70 (531105)	467855 (654192.30)	458287.80 (607135.60)
Material Expenditure	144486.80 (311119.50)	148488.90 (414672)	146858.30 (375923.30)
Total Expenditure	588860.60 (759418)	616343.90 (1008164.90)	605146.10 (915062.20)

Table B.4.: Constituency Profile

Variable	Control	Treatment	Total/Average
Constituencies	53	89	142
Gram Panchayat	650	940	1590
Rural Population (in Thousands)	315.20 (84.82)	240.80 (66.01)	271.10 (82.76)
SC/ST Reserved AC	0.385 (0.487)	0.213 (0.410)	0.282 (0.450)
Partisan AC	0.471 (0.499)	0.662 (0.473)	0.584 (0.493)
Log of Total Votes	12.02 (0.136)	12.06 (0.111)	12.04 (0.123)
Voter Turnout	87.08 (4.057)	84.31 (4.217)	85.44 (4.369)
Log Electoral Size	16.49 (0.165)	16.49 (0.131)	16.49 (0.146)

Manipulating the System

Table B.5.: Candidate Profile

Variable	Winner			Runner-up		
	Control	Treatment	Average	Control	Treatment	Average
Incumbent	0.328 (0.470)	0.394 (0.489)	0.367 (0.482)	0.212 (0.409)	0.271 (0.444)	0.247 (0.431)
National Party	0.905 (0.294)	0.941 (0.236)	0.926 (0.262)	0.905 (0.294)	0.941 (0.236)	0.926 (0.262)
Age	53.62 (9.685)	53.27 (8.942)	53.41 (9.253)	50.18 (8.237)	51.40 (11.90)	50.90 (10.58)
Log Income	14.26 (1.409)	14.90 (1.192)	14.64 (1.323)	14.21 (1.308)	14.53 (1.495)	14.40 (1.430)
Log Liabilities	3.072 (5.211)	7.152 (6.428)	5.490 (6.290)	4.445 (1.308)	4.496 (1.495)	4.475 (1.430)
Graduate	0.790 (0.407)	0.771 (0.420)	0.779 (0.415)	0.767 (0.294)	0.825 (0.236)	0.801 (0.262)

C. Robustness Checks

Table C.1.: RD Specification with Covariates

	(1)	(2)	(3)
Panel A: Projects Completed/1000 capita			
Criminal	-3.500*** (1.231)	-5.264*** (1.313)	-3.500*** (1.231)
Observations	4359	2459	2459
Bandwidth Size	9.020	4.916	9.020
Panel B: Work Days/1000 capita			
Criminal	1,297*** (430.2)	1,295*** (477.3)	1,297*** (430.2)
Observations	3254	2724	2724
Bandwidth Size	6.235	5.340	6.235
Constituency Controls	Yes	No	Yes
Candidate Controls	No	Yes	Yes
Bandwidth Type	CCT (h)		
Method	Local Linear		

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the measured outcome is the annual number of projects per 1000 residents. In panel B, the measured result is the annual Work Days per 1000 residents. All models include year-fixed effects and the standard errors are clustered at both the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.2.: RDD with Propensity Score Matching

	(1)	(2)
	Projects Completed/1000 capita	Days Worked/1000 capita
Criminal	-2.959** (1.469)	962.8** (437.7)
Observations	3024	3109
Bandwidth Size	5.843	5.919

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In column (1), the outcome measures the annual number of Projects Completed per 1000 residents. In column (2), the outcome measures the annual number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression with a triangular kernel and include weights for the candidate characteristics generated using the propensity score matching procedure. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Manipulating the System

Table C.3.: Effect of Electing Criminal Politicians on MGN-REGA Work Demand

	(1)	(2)	(3)	(4)
Job Cards Issued/1000 capita				
Criminal	-36.23 (32.90)	-79.51 (61.65)	-20.35 (20.58)	-64.96 (58.27)
Observations	3074	1118	5404	1357
Bandwidth Size	5.907	2.612	11.81	2.953
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. The outcomes measures the number of job cards issued per 1000 residents. The model includes year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.4.: Effect of Electing Criminal Politicians on MGNREGA:Omitted Variable Selection

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-5.264*** (1.314)	-3.500*** (1.222)	-3.553*** (1.250)	-3.500*** (1.222)
Observations	2,459	4,359	4,359	4,359
R-squared	0.175	0.212	0.204	0.212
Delta	-8.345	-4.489	-4.381	-4.489
Constituency Controls	No	Yes	No	Yes
Candidate Controls	No	No	Yes	Yes
Panel B: Work Days /1000 capita				
Criminal	1,295*** (477.5)	1,297*** (455.6)	1,373*** (442.7)	1,297*** (455.6)
Observations	2,724	3,254	3,254	3,254
R-squared	0.135	0.144	0.114	0.144
Delta	2.040	2.464	2.583	2.464
Constituency Controls	No	Yes	No	Yes
Candidate Controls	No	No	Yes	Yes

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of Projects Completed per 1000 residents. In panel B, the outcome measures the annual number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). To calculate the delta, I set $R^2_{max} = 1.3R^2$ as proposed by Oster (2019). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.5.: Effect of Electing Criminal Politicians on MGN-REGA Material Expenditure

	(1)	(2)	(3)	(4)
	Material Expenditure/1000 capita			
Criminal	-36,749 (30,786)	-45,442* (27,121)	-11,501 (29,038)	67,834 (52,357)
Observations	1492	1982	3464	728
Bandwidth Size	3.376	4.230	6.752	1.688
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. The outcome measures the total material expenditure per 1000 residents. The model includes year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.6.: Effect of Electing Criminal Politicians on MGNREGA (Serious Criminals Only)

	(1)	(2)	(3)	(4)
	Panel A: Projects Completed/1000 capita			
Criminal	-6.208*** (1.268)	-5.146*** (1.253)	-4.659*** (1.239)	-6.572*** (1.979)
Observations	2017	2847	3197	933
Bandwidth Size	5.349	8.583	10.70	2.675
	Panel B: Work Days/1000 capita			
Criminal	1,634*** (491.7)	861.5 (668.6)	835.4** (363.4)	478.3 (731.7)
Observations	2107	1202	3247	1107
Bandwidth Size	5.795	3.418	11.59	2.897
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of projects per 1000 residents. In panel B, the outcome measures the number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Manipulating the System

Table C.7.: Effect of Electing Criminal Politicians on MGNREGA (Corrupt Criminals Only)

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-4.333** (1.697)	-9.739*** (2.376)	-2.673* (1.484)	-8.687*** (2.354)
Observations	1441	485	2011	739
Bandwidth Size	6.236	2.303	12.47	3.118
Panel B: Work Days/1000 capita				
Criminal	2,292*** (664.4)	1,240 (885.4)	1,395*** (509.5)	985.2 (926.2)
Observations	1441	784	2071	739
Bandwidth Size	6.510	3.829	13.02	3.255
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the corrupt candidate won and 0 otherwise. In panel A, the outcome measures the annual number of projects per 1000 residents. In panel B, the outcome measures the number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.8.: Effect of Electing Criminal Politicians on MGNREGA with Covariates (Corrupt Criminals Only)

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-6.224*** (1.831)	-10.25*** (2.415)	-1.710 (1.584)	-8.991*** (2.368)
Observations	1281	485	1836	555
Bandwidth Size	5.046	2.303	10.09	2.523
Panel B: Work Days/1000 capita				
Criminal	3,338*** (646.6)	2,460*** (860.3)	2,159*** (506.9)	1,972** (915.0)
Observations	1441	784	2071	739
Bandwidth Size	6.302	3.829	12.60	3.151
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the corrupt candidate won and 0 otherwise. In panel A, the outcome measures the annual number of projects per 1000 residents. In panel B, the outcome measures the number of Work Days per 1000 residents. Both models include year-fixed effects and controls for constituency reservation status and voter turnout. The standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.9.: Effect of Electing Criminal Politicians on MGNREGA at Time t+1

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-5.985*** (2.123)	-6.038*** (2.236)	-4.200*** (1.479)	-7.498** (3.753)
Observations	1275	1183	2831	572
Bandwidth Size	3.591	3.407	7.181	1.795
Panel B: Work Days /1000 capita				
Criminal	1,438*** (549.0)	1,417** (568.8)	1,309*** (380.3)	819.8 (883.6)
Observations	2127	1947	3971	936
Bandwidth Size	5.284	5.006	10.57	2.642
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

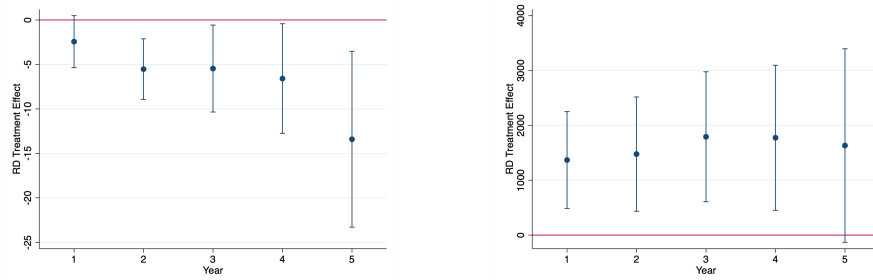
Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of projects per 1000 residents. In panel B, the outcome measures the number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.10.: Effect of Electing Criminal Politicians on MGNREGA Before Election Period t-1

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-3.913*** (1.285)	-4.023*** (1.349)	-3.891*** (1.040)	-4.164*** (1.273)
Observations	3296	1452	5404	1588
Bandwidth Size	8.346	4.022	16.69	4.173
Panel B: Work Days /1000 capita				
Criminal	1,234*** (413.3)	1,239*** (411.2)	1,070*** (290.7)	1,083* (651.7)
Observations	2216	2216	4140	1036
Bandwidth Size	5.504	5.557	11.01	2.752
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of projects per 1000 residents. In panel B, the outcome measures the number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure C.1.: Effect of Electing Criminal Politicians on MGNREGA by Year



(a) Projects Completed/1000 capita

(b) Work Days/1000 capita

Notes: The figure provides the treatment effect of electing a criminal politician on MGNREGA each year. Year 1 indicates the year the politician was elected to office. In panel (a), the outcome measures the annual number of projects per 1000 residents. In panel (b), the result measures the number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014).

Table C.11.: Effect of Electing Criminal Politicians on MGNREGA for Full Election Period

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-4.835*** (1.315)	-5.292*** (1.964)	-2.985** (1.219)	-6.372*** (2.121)
Observations	2394	1357	4559	1048
Bandwidth Size	4.846	2.981	9.691	2.423
Panel B: Work Days/1000 capita				
Criminal	1,434*** (480.2)	896.8 (603.1)	1,283*** (333.7)	780.4 (768.3)
Observations	2724	1732	5044	1183
Bandwidth Size	5.346	3.994	10.69	2.673
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the average number of projects per 1000 residents. In panel B, the outcome measures the average of Work Days per 1000 residents. Both models include fixed effects for the election cycle, and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C.12.: Addressing Extreme Values (< Top 5 Values)

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-4.929*** (1.410)	-5.045** (1.971)	-3.377*** (1.177)	-6.766*** (2.291)
Observations	1979	1289	4234	877
Bandwidth Size	4.231	2.848	8.463	2.116
Panel B: Work Days /1000 capita				
Criminal	1,305*** (486.3)	1,263** (514.9)	1,215*** (336.8)	764.2 (785.0)
Observations	2611	2391	4864	1117
Bandwidth Size	5.193	4.772	10.39	2.596
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of Projects Completed per 1000 residents, excluding the top 5 extreme values. In panel B, the outcome measures the annual number of Work Days per 1000 residents, excluding the top 5 extreme values. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

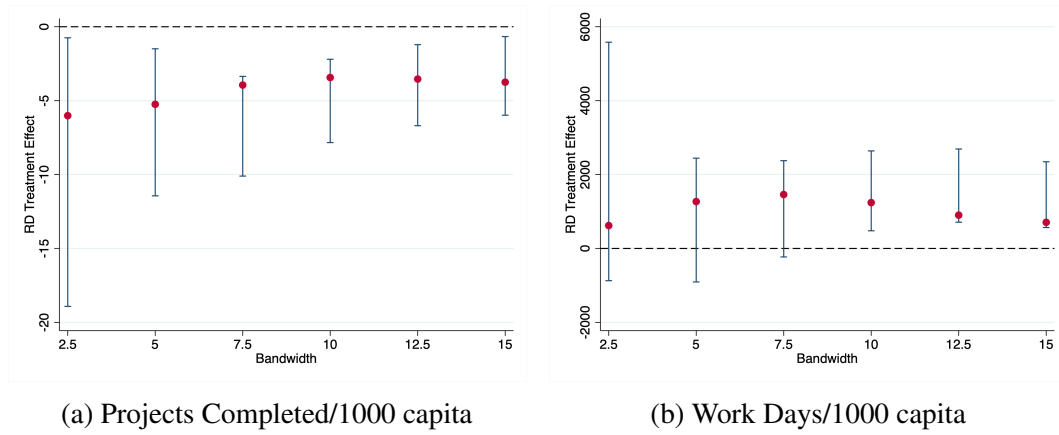
Table C.13.: Addressing Extreme Values (Excluding Zeros)

	(1)	(2)	(3)	(4)
Panel A: Projects Completed/1000 capita				
Criminal	-5.101*** (1.341)	-5.502*** (1.970)	-3.768*** (1.165)	-5.354** (2.125)
Observations	2992	1513	5114	1286
Bandwidth Size	5.948	3.503	11.90	2.974
Panel B: Work Days /1000 capita				
Criminal	1,374*** (486.3)	1,335*** (514.9)	1,028*** (336.8)	950.5 (785.0)
Observations	2795	2554	5004	1229
Bandwidth Size	5.700	5.216	11.40	2.850
Bandwidth Type	CCT (h)	IK	$2h$	$h/2$
Method	Local Linear			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. In panel A, the outcome measures the annual number of Projects Completed per 1000 residents excluding zeros. In panel B, the outcome measures the annual number of Work Days per 1000 residents excluding zeros. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Manipulating the System

Figure C.2.: RD Estimates for Different Bandwidths



Notes: The figure provides the treatment effect of electing a criminal politician on MGNREGA for different bandwidths. In panel (a), the measured outcome is the annual number of projects per 1000 residents. In panel (b), the measured outcome is the number of Work Days per 1000 residents. Both models include year-fixed effects and the standard errors are clustered at the gp and constituency level. RD estimates are based on a local linear regression using a triangular kernel.

Table C.14.: RD Estimates with Different Functional Forms

	(1)	(2)	(3)	(4)
Projects Completed/1000 capita				
Linear	-5.264*** (1.313)	-5.504*** (1.879)	-3.436*** (1.205)	-6.440*** (2.138)
Quadratic	-6.494** (2.555)	-7.961** (3.487)	-5.153*** (1.439)	-9.754** (4.880)
Cubic	-10.51** (4.143)	-13.43** (6.472)	-7.604*** (2.326)	-6.322 (7.895)
Observations	2459	1492	4679	1118
Bandwidth Size	4.916	3.407	9.832	2.458
Bandwidth Type	CCT (h)			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. The outcome measured is the annual number of projects per 1000 residents. All models include year-fixed effects and the standard errors are clustered at the gp and constituency level and given in parentheses. The optimal bandwidth uses a mean-squared error optimal bandwidth selector with a triangular kernel proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

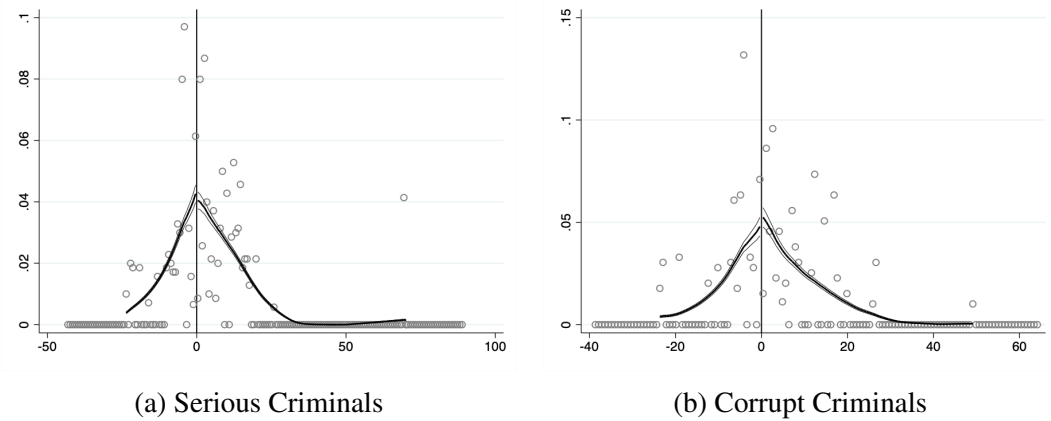
Table C.15.: RD Estimates with Different Functional Forms

	(1)	(2)	(3)	(4)
	Work Days /1000 capita			
Linear	1,295*** (477.3)	1,309*** (470.6)	1,147*** (333.4)	746.2 (765.4)
Quadratic	837.1 (814.0)	828.8 (800.8)	1,644*** (538.2)	2,134 (1,608)
Cubic	1,503 (1,419)	1,448 (1,354)	898.1 (750.9)	11,150*** (2,745)
Observations	2724	2764	5044	1183
Bandwidth Size	5.340	5.458	10.68	2.670
Bandwidth Type	CCT (h)			

Notes: The dependent variable criminal is a dummy that equals 1 if the criminal candidate won and 0 otherwise. The outcome measured is the annual number of Work Days per 1000 residents. All models include year-fixed effects and the standard errors are clustered at both the gp and constituency level and given in parentheses. The optimal bandwidth uses a mean-squared error optimal bandwidth selector with a triangular kernel proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

D. RDD Validity Checks for Alternative Definitions of Crime

Figure D.1.: McCrary Density Tests for Alternative Definitions of Crime



Notes: The forcing variable is the margin of a victory, which is the difference between the vote share received by a criminal candidate and that of a clean candidate. Positive values indicate the difference between the vote share received by a criminal winner and that of a clean runner-up. Negative values indicate the difference between the vote share received by a clean winner and that of a criminal runner-up. In panel (a), a criminal equals 1 if they face serious allegations against them and 0 otherwise. In panel (b), a criminal equals 1 if they face corruption allegations against them and 0 otherwise.

Table D.1.: Balance of Covariates (Serious Criminals Only)

Variable	Coefficient	S.E.	Obs.	Bandwidth
Partisan Constituency	0.083	0.364	2417	7.174
SC/ST Reserved Constituency	-0.422	0.275	2982	9.743
Total Votes (in Logs)	0.017	0.056	2292	6.331
Voter Turnout	-2.446	2.053	2212	6.079
Electoral Size (in Logs)	-0.011	0.067	2322	6.393
Winner Income (in logs)	-0.341	0.867	2357	7.138
Runner-up Income (in logs)	0.842	0.768	2982	9.402
Winner Liabilities (in logs)	0.893	3.724	3047	9.823
Runner-up Liabilities (in logs)	0.169	3.676	2357	6.731
Winner Age	-3.665	4.863	2212	5.931
Runner-up Age	0.160	5.491	2357	6.787
Winner Gender	0.108	0.072	1622	4.554
Runner-up Gender	-0.183	0.159	2322	6.409
Winner High School Degree	-0.044	0.250	3719	7.746
Runner-Up High School Degree	0.180	0.141	2212	6.011
Winner Incumbent	-0.041	0.089	1877	4.920
Runner-up Incumbent	-0.015	0.260	1812	4.838

Notes: The dependent variable criminal is a dummy that equals 1 if the serious criminal candidate won and 0 otherwise. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D.2.: Balance of Covariates (Corrupt Criminal Only)

Variable	Coefficient	S.E.	Obs.	Bandwidth
Partisan Constituency	-0.066	0.347	1476	6.971
SC/ST Reserved Constituency	-0.649**	0.324	1781	8.571
Total Votes (in Logs)	-0.016	0.072	1476	6.774
Voter Turnout	-2.750*	1.498	1781	8.795
Electoral Size (in Logs)	-0.063	0.083	1441	6.552
Winner Income (in logs)	-0.374	0.784	1781	8.572
Runner-up Income (in logs)	1.351	1.085	1836	11.160
Winner Liabilities (in logs)	-0.654	5.882	1441	6.520
Runner-up Liabilities (in logs)	-2.336	4.621	1441	6.231
Winner Age	-8.250	5.350	1781	8.511
Runner-up Age	4.599	6.398	1781	8.888
Winner Gender	0.023	0.031	954	4.091
Runner-up Gender	-0.290	0.204	1441	6.169
Winner High School Degree	-0.044	0.250	3719	7.746
Runner-Up High School Degree	0.043	0.284	1356	5.989
Winner Incumbent	0.130	0.136	1721	8.283
Runner-up Incumbent	0.262	0.348	1321	5.336

Notes: The dependent variable criminal is a dummy that equals 1 if the corrupt criminal candidate won and 0 otherwise. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Calonico et al. (2014). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

E. Candidate Affidavit

Figure E.1.: Example of Candidate Affidavit

SI.No..... 22/116

भारतीय गैर न्यायिक

बीस रुपये

रु.20

भारत

INDIA

Rs.20

TWENTY RUPEES

INDIA NON JUDICIAL

পশ্চিমবঙ্গ পশ্চিম বঙ্গাল WEST BENGAL 20AA 138033

AFFIDAVIT TO BE FILED BY THE CANDIDATE ALONG WITH
NOMINATION PAPER
BEFORE THE RETURNING OFFICER FOR ELECTION TO
LEGISLATIVE ASSEMBLY OF WEST BENGAL
FROM 280, ASANSOL DAKSHIN

I, TAPAS BANERJEE Son of Late Saroj Ranjan Banerjee aged - 62
years, resident of 2 No, Mohishila Colony, PO: Asansol, PS:
Asansol (south) : Dist: Burdwan, Pin-713303, a candidate at the
above Election, do hereby solemnly affirm and state on oath as
under :



GOVT. OF W.B.
NOTARY
Asansol Dakshin
W.B.
Regd. No.
1372837
ASIM BANERJEE

17 MAR 2016

Manipulating the System

(ii) The Following cases(s) is/are pending against me in which cognizance has been taken by the court {other than the case mentioned in item (i) above }:

Sl. No.	Offence	Description
(a)	Name of the court, Case No and Date of Order taking cognizance :	<p>Ltd ACJM : Asansol :-</p> <ol style="list-style-type: none"> 1) Asansol (south) PS: 164/2006 (GR 840/2006) 2) Asansol (South) PS: 276/95 3) Hirapur Ps : 158/2009 dt 19/01/2009 4) Asansol (South) PS: GR 1599/96;321/96 <p>Ltd SDJM Asansol: -</p> <ol style="list-style-type: none"> 1)Asansol (south): 9/93 (GR 43/93) 2) Asansol GRPS :-65/90 dt 28/05/1990 <p>Ltd. ACJM In-charge:-</p> <ol style="list-style-type: none"> 1) NGR 816/2014 Asansol PS: GDE 1293/2014 dt 21/04/2014 under 32 Police Act.
(b)	The details of cases where the court has taken cognizance. Sections of the Act and description of the offence for which cognizance taken:	<ol style="list-style-type: none"> 1) Asansol-6RPS cases No 65/90: U/S: 147/332/427/342 IPC—9MPO Act;108IR Act 2) Asansol (south) PS-276/95 : U/S 148/149/323/516 IPC 3) Asansol(south)-164/2006; U/S 143/447/427/186/353/ GR-840/2006 4) Asansol (South)- 09/93;u/s147/148/149/353/323/427/435 IPCV 5) Hirapur PS—158/2009; u/s 143/342/352/86/353 IPC 6) NGR 816/2004; GDE No.- 1293/2014 7) Asansol (south) PS: 321/96 u/s 143/448/427/506 : 3/4 T P Act
(c)	Details of Appeal(s)/ Application (s) for revision (if any) filed against the above order(s)	NIL

6) I have not been convicted of an offence(s){ other than any offence(s) referred to in sub-section (1) or sub section (2), or covered in subsection (3), of section 8 of the Representation of the People Act,1951(43 of 1951) and sentenced to imprisonment for one year or more.

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

17 MAR 2016

Notes: The figure shows the first page and the relevant page with criminal charges for the winner elected from the Asansol Dakshin constituency in the West Bengal 2016 state assembly elections. The full version of the affidavit is available on the ECI website.

4. Effort or Entitlement? An Audit Experiment with Dynastic Legislators¹

4.1. Introduction

Political power is often unequally distributed, where certain individuals enjoy an electoral advantage over others. This *de facto* power can come from various characteristics such as ethnicity (Banerjee and Pande, 2011) or incumbency (Lee, 2008). One prominent example of this phenomenon is political dynasties, where candidates belonging to political families are persistently elected to public office. Dynastic politicians are a mainstay in politics in various parts of the world, such as Japan, the Philippines, and the United States.

The literature highlights that lower barrier to entry to politics, name recognition, and self-perpetuation can explain why political dynasties exist (Dal Bó et al., 2009; Querubin et al., 2016). The existence of dynasties has led to a small but growing literature that examines the effects of electing such legislators to public office. For example, Besley and Reynal-Querol (2017) show that the election of dynastic politicians can have potentially positive effects on economic performance. Likewise, Labonne et al. (2019) find that political dynasties can serve as a gateway for women to enter politics in Indonesia. In contrast, several country-specific studies in Brazil (Bragança et al., 2015), India (Dar, 2018; George and Ponattu, 2019) and Japan (Asako et al., 2015) find that the success of dynastic political power often has negative effects on economic growth. This paper departs from these existing studies and measures the effects of electing dynastic legislators on political effort.

Since political effort is not directly measurable, I conduct a pre-registered field experiment involving 4020 Members of the Legislative Assembly (MLAs) in India to test whether the legislators' response to common voter concerns is affected by their political family connections. India provides an ideal setting, as political dynasties

¹The experiment was approved by the University of Barcelona Institutional Review Board [IRBIRB00003099] and is pre-registered with AsPredicted, a platform managed by the University of Pennsylvania Wharton Credibility Lab.

are prevalent at both the nation and state levels, with members of prominent families often holding political office for generations. Some examples include the *Nehru-Gandhi* family at the nation level, the *Yadav* family in the state of Bihar and the *Abdullah* family in the state of Jammu and Kashmir.

The experiment I use is an adaptation of previous audit experiments conducted by Butler and Broockman (2011) and McClendon (2016).² In this experiment, each legislator receives an email from a hypothetical voter inquiring about issues related to the provision of common public goods. I further randomize the emails in two different treatment groups. First, I test whether legislators' responses differ depending on how responsible they are for the raised concern. Second, I test whether dynastic legislators are more likely to respond when voter provides a clear partisan preferences. I argue that since dynastic politicians might have stronger electoral incentives to preserve their political legacy for future family members (George and Ponattu, 2019), they might strategically be more responsive when they believe direct electoral benefits might be on offer. Lastly, I test whether the strength of the political family connection matters. For example, dynasts with "strong" political connections such as fathers or spouses may differ from dynasts with "weak" connections such as uncles or cousins.³ Since strong dynasts have greater name recognition and face lower political competition, they may differ in the level of political effort they are willing to exert.

There are two potential challenges in evaluating the effect of electing dynastic politicians on legislator efforts. First, it is highly unlikely that the selection of a dynastic legislator is at random. It could be that certain dynastic candidates are more likely to run and win in certain constituencies than others. To overcome this endogeneity problem, I use a regression discontinuity (RD) design, comparing constituencies where a dynast politician barely won to constituencies where they barely lost. Given the close margin of victory, the success of dynastic candidates in these constituencies should be close to random (Lee and Lemieux, 2010). Using this setup, I examine the impact of electing a dynastic politician on political effort at the constituency level in all Indian state assembly elections from 2018 to 2023.

A second challenge is that, while political dynasties are prevalent throughout the Indian political landscape, data on political family ties are limited.⁴ To overcome

²Butler and Broockman (2011) and McClendon (2016) use an email experiment to test whether the legislators' response to constituency-related queries is impacted by the race of voters in the United States and South Africa, respectively.

³In particular, I define a candidate to have a strong dynastic link if their parent, spouse, or several family members had previously contested and won a national or state election.

⁴As per my knowledge, three studies have attempted to collect data on political families in India. Chhibber (2013) using data from 2009 Indian national elections tag parties that have dynastic only at the top positions within the party framework. Tantri and Thota (2017) collect data on the

this challenge, I compile all political family ties for the top two finishing legislators for all state assembly elections held between 2018 and 2023 ($N = 8040$).⁵ I find that dynastic politicians are widespread in India: About 15% of the candidates who came in the first two pole positions have links to family members who previously contested in a state or national election. Of these, 85% have strong dynastic family ties.

A preview of the results shows that less than 4% of the legislators who were emailed responded to the request. Although this level of responsiveness seems extremely low, it is consistent with other studies that have reported relatively low response rates for audit experiments in India.⁶ Despite the low response rate, I find significant differences in the response rate when comparing dynast to non-dynast legislators: dynastic politicians are 6.8 percentage points less likely to respond. This response rate falls further by 0.6 percentage points when the legislator has strong family connections. When looking at the various treatment groups, I only find significant differences in the response between dynastic and non-dynastic legislators in cases where the voters provide no clear signal of their partisan alignment. Looking at the results by the type of subject, there are no statistical differences in response rate when the subject matter comes directly in the purview of the legislators' responsibilities. These results suggest that dynastic legislators show a higher willingness to exert effort when this could potentially affect their electoral support.

The rest of the article is structured as follows: Section 4.2 presents the theoretical discussion. Section 4.3 discusses the experimental design. Sections 4.4 and 4.5 describe the data and introduce the empirical strategy, respectively. Section 4.6 presents the validity of the RD design, the results, and its robustness. Section 4.7 provides some policy implications and concludes.

dynastic backgrounds of national legislators who contested in the 2009 Indian elections. The most comprehensive collection of data on the dynastic background is carried out by George and Ponattu (2019). They collect data for legislators who finished in the top two positions in national elections from 1999-2014. However, they restrict their analysis to only parental or spousal links and do not consider connections to state legislators.

⁵A detailed explanation of the political background data collection strategy and how dynasts are identified is provided in Section 4.4.2

⁶Bussell (2017) using WhatsApp messages MLAs to request help obtaining street lamps or ration cards and reports a response rate of 9%. Likewise, Vaishnav et al. (2019) sends emails to MPs asking for assistance in enrolling in a government scheme and finds precisely the same response rate. Gaikwad and Nellis (2021) rely on SMS technology to send requests for voter registration issues and reports a response rate between 10% and 15%.

4.2. Theoretical Discussion

Ideally, citizens should be able to directly communicate with legislators about any problems or questions they may have, and it is the responsibility of elected legislators to address these concerns. However, legislators with political family connections may be less diligent, resulting in reduced responsiveness to their constituents.

There are several reasons why dynastic politicians might differ from their non-dynastic counterparts in terms of the political effort they are willing to exert. First, since dynasts often inherit their position due to their predecessors' legacies, they often enjoy an electoral advantage and face less political competition, which reduces their willingness to exert effort and perform well in office. For example, George and Ponattu (2019) theorize that moral hazard is a potential reason why dynasts underperform. They find that a significant fraction of political capital is hereditary where politicians who have had parents previously in power enjoy a substantial vote share advantage than non-dynastic politicians. A second reason why dynasts might exert less effort is that they enjoy a selection advantage compared to non-dynasts due to a lower barrier to entry into politics and name recognition (Dal Bó et al., 2009). This is related to the literature showing that women politicians often have to perform better than men because they face stronger constraints to get political nominations and have lower voter approval rates (Anzia and Berry, 2011). Likewise, there is a growing body of literature on family firms that shows that when these firms are run by family CEOs, they significantly under perform compared to when competent professionals are hired due to negative selection (Bloom and Van Reenen, 2007). In summary, we should expect that dynasts might be more likely to shirk their legislative duties because they inherit their positions by self-perpetuation, name recognition, or voter bias.

H1: Dynastic legislators exert less political effort than non-dynastic legislators.

Following Hypothesis 1, we can expect that all dynasts are not equal. Since strong dynasts come from more prominent political families and have a stronger political base, they might exert less effort than weak dynasts. To test this hypothesis, I examine whether the response rate differs by separating the sample between strong and weak dynastic politicians.

H1a: Strong dynasts exert less political effort than weak dynasts.

Do dynasts always underperform? I argue that when presented with clear electoral incentives, dynastic politicians might be willing to exert effort. Although dynastic politicians might exert overall less political effort, they can be incentivized to work

harder when there are clear electoral rewards on offer. This is driven by their motivation to maintain their political legacy for future generations. For example, George and Ponattu (2019) show that dynasts with sons perform significantly better because they have an incentive to consolidate political capital for future generations. Thus, if dynastic politicians are looking to build political capital for the future, they might be strategically exerting effort to signal to the voter of their competence.

H1b: Dynastic legislators exert more effort when they believe it will significantly impact their electoral support compared to non-dynastic legislators.

4.3. Experimental Design

Using a pre-registered experimental design similar to the approach taken in Butler and Broockman (2011) and McClendon (2016), I send emails to all Indian state legislators currently in office from February to April 2023. The experimental design is as follows: I send emails using a fictitious gmail account that only indicated the first name of the constituent to all current MLAs with working email addresses.⁷ Email addresses for legislators that were unavailable or bounced back have been discarded (approximately 25%).⁸

To measure whether dynastic legislators exert less effort than their counterparts, I examine the responsiveness of the legislator dichotomously, according to whether the legislator replies to the emails. In particular, I construct a binary variable that scores a 1 if the MLA responded to the sender with (1) a solution to the raised concern, or (2) if the MLA provided the information for the relevant department, or (3) if the MLA forwarded or cc'ed their email to the relevant authority, or (4) if the MLA asked for additional information.

To test whether dynasts are more likely to respond when they believe it will impact their electoral support, I randomly alter the emails in two different treatment arms. First, half of the emails contains a query on the lack of water supply in the legislator's constituency, which comes under the jurisdiction of the municipal cooperation. Thus, the MLA is not directly responsible for this problem, but can instruct the relevant authority to address the concern. The other half of the emails contain a query on the expenditure made under the MLAADS scheme. The funds in this scheme are allocated to each MLA to address particular local needs in their

⁷Locating email addresses was not straightforward since many were missing or incomplete. In cases where email addresses had problems, various alternative sources were used, such as candidate affidavits, personal websites, and civil organization websites.

⁸There are in total 4123 state assembly seats in India, out of which 13 are vacant. Of the remaining 4110, email addresses for 270 legislators could not be found and 790 emails were bounced back providing a list of 3050 working email addresses.

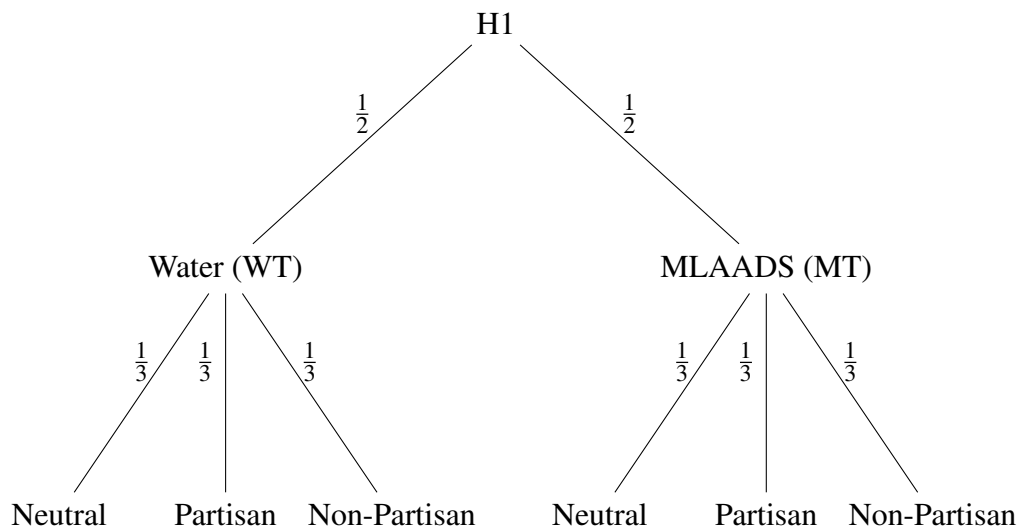
constituency. The unique feature of this scheme is that the expenditure of these funds is completely at the discretion of the MLA without any oversight from other government departments. Since the MLA has complete authority over choosing whether to exhaust the allocated budget and the type of projects to undertake, they are directly responsible for addressing any questions related to the scheme. By altering the subject matter, I can test whether dynast politicians are only willing to exert effort when confronted with questions that come directly under their duties, since this might affect their electoral support.

Second, I randomly alter the text of the email to suggest that the voter is neutral by not providing any indication of their partisan preferences, supporting the MLA's party, or supporting the opposition party. By randomly altering the text, I can directly test whether there are any differences in the response rate between dynast and non-dynast legislators depending on the voters' partisan alignment.

Beyond the main treatment, I take various additional steps to ensure that no alternative mechanisms could alter the legislators' response. First, ethnicity can play a key role in the way legislators engage with their constituents in India (Banerjee and Pande, 2011). Since last names can often indicate the ethnicity or caste of the sender, this information was not included in the email. Additionally, a natural first name was chosen for the experiment to avoid sending any signal of the sender's religion. Second, the use of emails itself might be an indicator of the socioeconomic class of the constituent. Although email usage is widely spreading in India, legislators might get the signal that well-educated or richer constituents have a higher likelihood to correspond via email. Although groups that use emails might differ because legislators in the experiment receive the same treatment, this should not potentially affect the results. Lastly, all emails are translated into the most spoken vernacular language of the state, such as Bengali in West Bengal and Tamil in Tamil Nadu.

Figure 4.1 provides a graphical representation of the experimental design along with the treatment arms. Box 1 shows the structure of the email.

Figure 4.1.: Experimental Design



Box 1: Email sent to MLA

From: samark101080@gmail.com

To: **MLAs Email Address**

Subject: *Subject Matter*

Dear **MLA name**,

[WT] *I am writing to you regarding my concern about the lack of a regular water supply in my area. I was inquiring about the steps your office is taking to fix the problem and / or if you could provide me with the contact details of the department to which I can speak about this problem?*

[MT] *I am writing to you regarding acquiring information on the MLA Development Funds. I would like to know what projects have already been carried out and how much of these funds have been used and what future projects have been planned under the scheme. I would appreciate if your office could provide me with these relevant details and / or if you could provide me with the contact details of the department that I can speak to regarding this?*

While I am a supporter of the opposition party/As a supporter of (MLA party-name)], I wanted to bring this matter to your attention as my representative. I would be very grateful to receive your response and I am sure that my family and friends would be happy to know that I heard back from you. Thank you for your time.

Sincerely,

Samar

Notes: The bold text represents the treatment groups and the italic text represents the subtreatment groups.

Ethical Considerations

Three main ethical issues were considered in the formulation of the experimental design: First, the decision to use deception and waive informed consent in the experimental design was not taken lightly. Since the main objective of this study is to examine political effort, a slight use of deception is necessary in the experimental design. If politicians were aware that they were participating in a study, this could potentially change their behavior. As a result of this knowledge, the findings would be biased. Using fictitious constituents with mild deception allows us to draw valid inferences, which would not be possible if the politicians were informed beforehand. Thus, only by using deception can the effect of electing dynastic legislators on political effort be captured. This is interesting not only as a research perspective but also for society in general.

In this respect, this study joins a growing body of literature in the field of political science that uses audit experiments to generally test some form of discrimination (such as race or gender) in how the treatment group responds to a type of request (for example, an email sent, a job or housing application, etc.). An in-depth review of studies that have used such experimental designs is provided in Butler and Crabtree (2021). The experimental design proposed in this project is closest to that of Butler and Broockman (2011) and McClendon (2016). The experiment used in this study is an adaptation of these works and aims to capture the response of politicians based on their family connections.

A second concern was to reduce any potential harm the experiment might cause the legislator. Various steps were taken to maintain the anonymity of the legislators' responses. Any personal identifiers are separated from the response data to ensure that the reported behavior cannot be identified to any particular legislator (pseudonymized). In addition, any personal data are encrypted and stored separately with limited access to the researchers involved in the study.

Lastly, further considerations were made to reduce the burden placed on the legislators' time. Although some burden was essential to gauge how much effort and time the politician exerts, the subject matter chosen was fairly easy to respond to. Additionally, since the query falls mostly under the legislators' duties, this reduces any potential concerns that the experiment takes the legislators' time from dealing with crucial matters in their constituency.

4.4. Electoral Context and Data

4.4.1. Electoral Context

The state government in India follows a parliamentary structure with two houses: Upper House (*Vidhan Parishad*) where members are nominated and Lower House (*Vidhan Sabha*) whose members are elected. Those elected to the Lower House, the focus of this study, are elected using a “first-past-the-post” system for a period of five years into a single-member constituency. The state legislatures in India have various responsibilities, such as proposing bills and making laws, allocating funds for development projects, and providing access to public schemes.

4.4.2. Data



Data on all candidates who contest the 2018-2023 Indian State Assembly election were collected from the Trivedi Centre for Political Data (TCPD).⁹ In total, 44109 candidates contested from 4123 assembly constituencies.

To identify the dynastic ties of politicians, I exploit several data sources using a multi-step approach. To my knowledge, this is the most comprehensive novel data collection effort in the context of India. I take advantage of the Indian Supreme Court judgment in 2003 mandating all political candidates contesting at national and state elections to submit an affidavit disclosing information on their backgrounds. In addition to various attributes of the candidate, the affidavit contains the name of the candidate’s parent or spouse. Originally, these affidavits are available on the ECI website as PDF forms. Association of Democratic Reform (ADR), an organization created as an election watchdog, has entered and compiled the data, making them freely available to the public.¹⁰ I first extract the name of the parent or spouse from the MyNeta repository. Then I search the database for all national and state elections ever held and tag a politician as a dynast if their father or spouse had previously contested in Indian elections at the state or national level. Figure 4.2 provides an example of how MyNeta was used to identify family ties between politicians.

⁹TCPD provides data for all the elections held both at the national and state level from the original reports available from the Election Commission of India (Agarwal et al., 2021). The data includes various election-related information, such as constituency names, their reservation status, electoral size, turnout, candidate names, their affiliated party, and their election results. The data is available at: <https://lokdhaba.ashoka.edu.in/>.

¹⁰ADR has created a dedicated website called MyNeta that provides data on the candidates; party affiliation, education, age, assets, liabilities, and criminal record: <https://myneta.info>.

Figure 4.2.: Identify Dynastic Politician using MyNeta

	<p>KUNWAR SUSHANT SINGH (Winner)</p> <p>BARHAPUR (BIJNOR)</p> <p>Party:BJP</p> <p>S/o D/o W/o: Kunwar Sarvesh Kumar</p> <p>Age: 33</p> <p>Name Enrolled as Voter in: 26-Thakurdwara (Uttar Pradesh) constituency, at Serial no 807 in Part no 103</p> <p>Self Profession:Agriculture & Salary</p> <p>Spouse Profession:House Wife</p>
	<p>KUNWAR SARVESH KUMAR</p> <p>MORADABAD (UTTAR PRADESH)</p> <p>Party:BJP</p> <p>S/o D/o W/o: Late Rampal Singh</p> <p>Age: 72</p> <p>Name Enrolled as Voter in: 26 Thakurdwara (Uttar Pradesh) constituency, at Serial no 841 in Part no 95</p> <p>Self Profession:Agriculture and Pension</p> <p>Spouse Profession:Agriculture</p>

Notes: This figure shows how I used the MyNeta repository to identify dynastic ties between two politicians. Kunwar Sushant Singh is the MLA from Barhampur in the state of Uttar Pradesh. His father, Kunwar Sarvesh Kumar Singh, served as a five-term MLA from Thakurdwara constituency from 1991 to 2007 and 2012 to 2014 until he was elected as Member of Parliament (MP) from Moradabad Lok Sabha General Election in 2014. The highlighted field in Panel A shows the father's name that was used to search the database for family ties between politicians.

Although this provides us with a comprehensive list of family ties, to identify other family connections such as siblings, cousins, or uncles, I collect this data using several sources, such as information available on civil organization websites, newspapers, online news coverage, and Wikipedia. I write an algorithm to search for the legislators' names and to tag websites which include certain keywords such as dynast, family, and different family relationships. Using this procedure, I scrape the data from these websites to tag other political connections. Figure 4.3 for an example shows how Wikipedia was used to identify dynastic relationships.

Figure 4.3.: Identify Dynastic Politician using Wikipedia

Shivpal Singh Yadav

Article Talk

From Wikipedia, the free encyclopedia

Shivpal Singh Yadav (born 16 February 1955) is a politician and educationist from [Uttar Pradesh](#), India. He was born in [Saifai village, Etawah district](#), and is a younger brother of [Samajwadi Party](#) leader late [Mulayam Singh Yadav](#) and uncle of the former Chief Minister of Uttar Pradesh [Akhilesh Yadav](#). He is a Member of the [Uttar Pradesh Legislative Assembly](#), representing the [Jaswantnagar](#) seat in Etawah district, from 1996 till now. He is also the National General Secretary of [Samajwadi Party](#) and was appointed on 29 January 2023.

In 2018 he founded his own party named [Pragatisheel Samajwadi Party \(Lohiya\)](#), which was merged into [Samajwadi Party](#) in 2022.^[5]

Early life and education [edit]


Shivpal Singh Yadav was born in [Saifai](#) village, [Etawah district](#) in 1955 to Sughar Singh Yadav and Murti Devi. He has studied in [Kanpur University's K.K. P.G. College, Etawah](#) and [University of Lucknow's Lucknow Christian College](#) and earned BA (1976) and BPED (1977) degrees respectively.

Family [edit]

See also: [Political families of Uttar Pradesh](#)

Shivpal is the youngest among 5 brothers. Ratan Singh Yadav, [Mulayam Singh Yadav](#), Abhay Ram Yadav and Rajpal Singh Yadav are his elder brothers. He has 1 sister Kamla Devi Yadav.

[Rajya Sabha MP Ram Gopal Yadav](#) and his sister Geeta Yadav are his cousins.



Shivpal Singh Yadav

Member of the [Uttar Pradesh Legislative Assembly](#)
Incumbent

Assumed office
17 October 1996

Preceded by [Mulayam Singh Yadav](#)

Constituency [Jaswantnagar](#)

Cabinet Minister in [Uttar Pradesh Government](#)

In office
15 March 2012 – 24 October 2016

In office
6 September 2003^[1] – 11 May 2007

State president, [SP in Uttar Pradesh](#)

In office

Notes: This figure shows how Wikipedia was used to find the family connections between politicians. Shivpal Singh Yadav is the MLA from the Jaswantnagar constituency in Uttar Pradesh since 1996. The highlighted text shows that he is a younger brother of Mulayam Singh Yadav who was first elected as a MLA in the same constituency in 1967 and later became the Chief Minister of Uttar Pradesh. He is also the uncle of Akhilesh Yadav who is the current Chief Minister. His cousin Ram Gopal Yadav was a MP from of Sambhal constituency from 2004 to 2008. This is one of the examples of how Wikipedia was used to tag various political family connections.

Lastly, I manually check whether each political family connection is coded correctly to ensure precision. Using this procedure in the baseline specification, I define a binary variable that equals 1 if the politician has any political family ties and 0 otherwise. Lastly, to distinguish between strong and weak dynasts, I construct a dummy variable strong dynast that equals 1 if the candidate has had a parent, spouse, or several family members who have previously contested and won a national or state election and 0 otherwise. Since the process of identifying family ties is complicated by restricting the sample to only strong dynasts, it also provides some assurance that the data are not affected by outliers.

Given the setup of the RD design, I only consider elections where one of the top two candidates has a political family connection. Therefore, this provides a smaller sample of 740 election races with 1480 candidates. Table 4.1 shows the prevalence of dynastic politicians in the Indian legislature. 17% of the current MLAs have some form of political family connections. Of these, more than 85% belong to strong political families. Likewise, Figure A.1 shows the share of dynastic MLAs in Indian states.

Table 4.1.: Distribution of Dynastic Candidates

	Top 2 Candidates			RDD Sample		
	Winner	Runner-up	All	Winner	Runner-up	All
Non-Dynast	3327	3522	6849	293	447	740
Weak Dynast	101	78	179	60	42	102
Strong Dynast	592	420	1012	387	251	638
Total	4020	4020	8040	740	740	1480

How prominent is dynasty politics in India compared to the world? Figure A.2 provides the number of dynastic legislators in various parts of the world. As the figure shows, India seems to have more dynastic legislators than most countries except Japan. For example, Dal Bó et al. (2009) using data from 1789 to 1996 finds that about 9% of US Congressman had relatives previously in Congress. Likewise, Fiva and Smith (2018) find that in 7% of the legislators in the 2013 Norway national elections had some form of political family connection. Smith and Martin (2017) and Bragança et al. (2015) show that 14% of the legislators in the Irish Parliament in 2016 and 14.8% legislators in the 2012 Brazilian municipal elections had connections with previous family members who had held public office. In contrast, Asako et al. (2015) finds a substantially higher number of dynastic legislators in the lower house of parliament using data from the lower house elections between 1996 and 2012.

4.5. Empirical Strategy

Using a RD design, I estimate the effect of electing dynastic politicians on legislative effort. Since dynastic candidates might be more likely to run and be elected to office in certain constituencies over others, I exploit only close elections, comparing constituencies where a dynast barely won to constituencies where they barely lost. Given the close margin of victory, the success of dynasts in such a constituency should be close to random. The empirical benchmark model that this paper estimates is the following:

$$y_{ist} = \alpha + \beta \text{dynast}_{ist} + \delta_1 MV_{ist} + \delta_2 \text{dynast}_{ist} \times MV_{ist} + \gamma_s + \epsilon_{ist} \quad (4.1)$$

where, y_{ist} is the main outcome that measures political effort in constituency i in state s at time t . dynast_{ist} is a dummy variable that equals 1 if a candidate has dynastic ties and 0 otherwise. The coefficient β captures the local average treatment

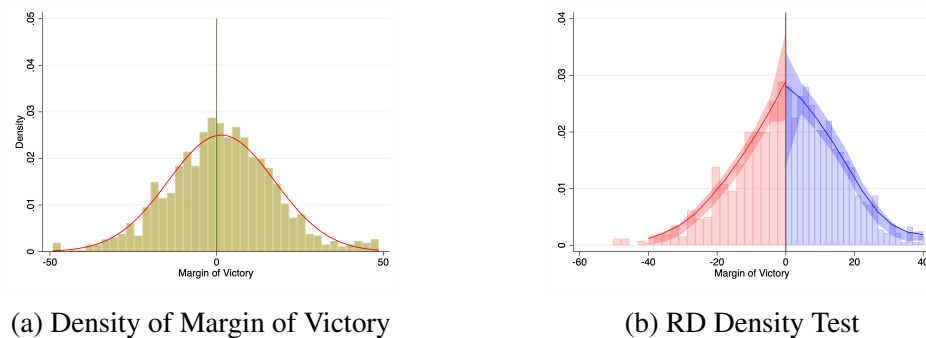
effect of electing a dynast in constituency i in state s at time t on the outcome of interest. MV_{ist} is the forcing variable and measures the margin of victory between the dynast and non-dynast candidates. Positive values indicate the difference between the vote share received by a dynast winner and that of a non-dynast runner-up. Negative values indicate the difference between the vote share received by a non-dynast winner and that of a dynast runner-up. Since the response rate can be affected by the timing of state elections and the severity of the request in the region, γ_s accounts for any state-level variation. ε_{ist} denotes the robust standard error. To estimate the regression, I estimate a local linear regression using the bandwidth proposed by Imbens and Kalyanaraman (2012) denoted by h .

4.6. Results

4.6.1. RDD Validity

To validate the use of an RD design, two main assumptions must be met (Imbens and Lemieux, 2008). The first assumption is the absence of manipulation of the running variable. Specifically, if a dynastic candidate anticipates a close election, they might attempt to rig or manipulate the results to secure a win. In this case, we expect to observe a higher concentration of dynastic candidates near the threshold. A visual inspection of the density of the margin of victory in Figure 4.4 shows no evidence of dynastic candidates clustering at the threshold. More formally, the density test proposed by Cattaneo et al. (2020) does not provide statistical evidence of sorting.

Figure 4.4.: Continuity of Margin of Victory between dynast and non-dynast candidates



Notes: The forcing variable is the margin of a victory that measures the difference between the vote share received by a dynast candidate and that of a non-dynast candidate. Positive values indicate the difference between the vote share received by a dynast winner and that of a dynast runner-up. Negative values indicate the difference between the vote share received by a non-dynast winner and that of a dynast runner-up. The Cattaneo et al. (2020) density test provides a t-value = -0.886 with a p-value = 0.38 for the continuity test at the cut-off point.

The second assumption of the RD design is that the observable characteristics that could potentially influence the outcome should be continuous throughout the threshold. Although the characteristics of the constituents and candidates can vary throughout the sample, they should be identical at the point of discontinuity.¹¹ Table 4.2 presents formal tests for a range of constituency and candidate characteristics.¹² Thus, these validity checks provide sufficient evidence for the use of a RD design.

Table 4.2.: Balance of Covariates

VARIABLES	Coefficient	SE	Bandwidth	Obs.
SC/ST Reserved Constituency	-0.001	0.075	17.12	529
Total Votes (in Logs)	0.088	0.122	18.53	553
Voter Turnout	-4.309	3.503	13.04	443
Electoral Size (in Logs)	0.197	0.168	14.43	476
Winner Income (in Logs)	0.408	0.316	10.87	377
Runner-Up Income (in Logs)	-0.689**	0.274	16.45	516
Winner Liabilities (in Logs)	0.436	0.479	9.458	267
Runner-Up Liabilities (in Logs)	-0.639	0.435	11.29	310
Winner Male	0.015	0.082	8.776	318
Runner-Up Male	0.088	0.064	15.25	491
Winner Incumbent	-0.011	0.103	10.41	358
Runner-Up Incumbent	-0.135	0.114	9.165	325
Winner Criminal Record	-0.372	0.641	11.14	387
Runner-Up Criminal Record	-0.196	0.506	13.93	465

Notes: RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

4.6.2. Main Results

A preview of the field experiment provided in Figure A.3 shows that only 4% of the Indian legislators responded to the emails: Of the 4020 legislators currently in office, about 24% of the email addresses could not be located or were not working. Of the 3050 emails successfully sent, I received 102 responses.¹³ Despite the low response rate, as Figure A.4 shows, the response rate was not similar between non-dynast and

¹¹A description of the constituency and candidate profile for the full sample is provided in Table A.1

¹²Although the treatment and control groups are mostly balanced across both constituency and candidate characteristics, in constituencies where a dynast candidate barely lost, have lower income levels. Although this should not affect the outcome of interest, Table B.1 provides the estimates with the inclusion of various constituency and candidate controls and remain robust and qualitatively similar to the baseline findings.

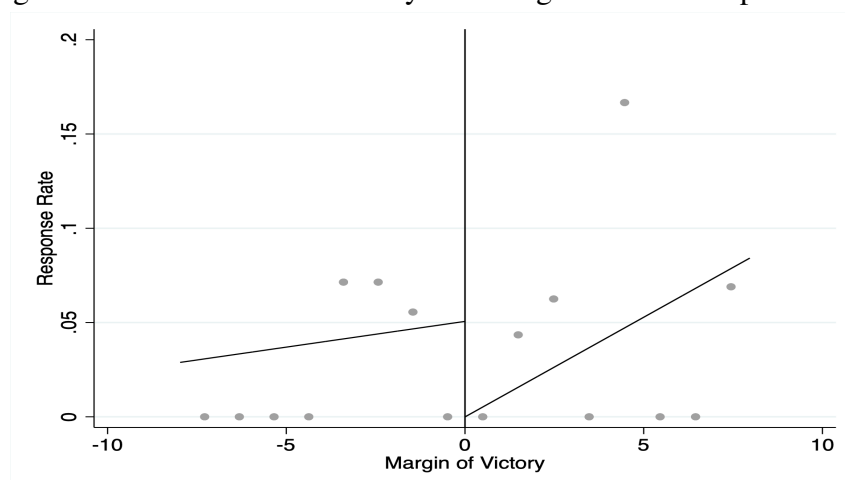
¹³The response rate remains similar when restricting the sample to the RDD specification.

dynast legislators.

Are dynastic legislators less responsive than non-dynastic legislators? Figure 4.5 presents the graphical illustration of the RD specification estimating the differences in responsiveness between dynastic and non-dynastic legislators dichotomously. The plot is generated using a local linear regression with a triangular kernel and an optimal bandwidth criterion proposed by Imbens and Kalyanaraman (2012). A positive margin of victory indicates a constituency where a dynast candidate won against a non-dynast candidate. A negative margin of victory implies that the dynast candidate lost and the non-dynast won. The vertical line represents the change in discontinuity when the margin is equal to zero and reflects the causal effect of the legislator's political family connection on the response rate.

The RD figure shows a clear drop at the threshold, implying that dynastic legislators are less likely to respond to constituents relative to non-dynastic legislators. In terms of magnitude, Table 4.3 column (1) reflects the estimates provided in Figure 4.5 and indicate that the response rate falls by 6.8 percentage points which implies a drop of more than 50% in comparison to the mean of the non-treated group at the cut-off.

Figure 4.5.: Effect on Election Dynastic Legislators on Response Rate



Notes: The figure provides the treatment effect of electing a dynastic legislator on the response rate. The forcing variable is the margin of a victory that measures the difference between the vote share received by a dynastic candidate and that of a non-dynastic candidate. Positive values indicate the differences between vote share received by a dynast winner and that of a dynast runner-up. Negative values indicate the difference between the vote share received by a non-dynast winner and that of a dynast runner-up. The y-axis represents the response rate which equals 1 if the legislators replied and 0 otherwise. The model includes state fixed effects with robust standard errors. The scatter plot represents the evenly spaced mimicking variance (esmv) number of bins using spacing estimators. The RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012).

Table 4.3.: Effect on Election Dynastic Legislators on Response Rate

	(1)	(2)
	All Dynasts	Strong Dynasts
RD Estimate	-0.068** (0.030)	-0.074** (0.030)
Observations	289	298
Bandwidth Size	7.969	8.796

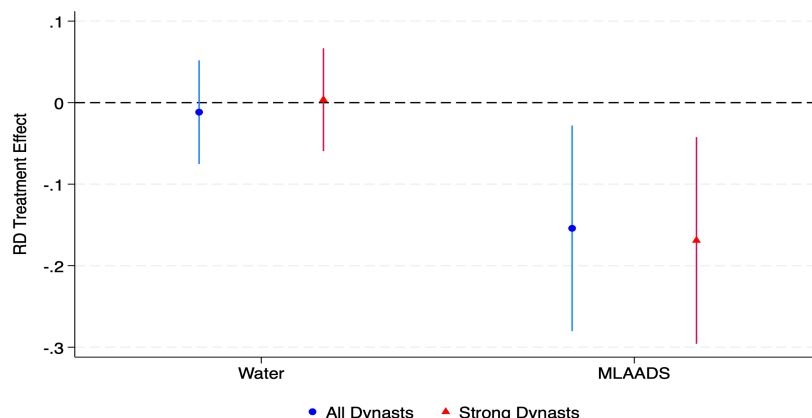
Notes: The table provides the treatment effect of electing a dynastic legislator on the response rate. All models include state fixed effects with robust standard errors. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Does this response rate change if the legislator has strong political family connections?¹⁴ Table 4.3 column (2) presents the results of this exercise and suggests that constituents do not enjoy the same response rate from legislators with strong dynastic links: strong dynasts are 0.6 percentage points likely to respond than weak dynasts.

Next, I test whether this response rate varies by the subject matter. As mentioned earlier, dynastic legislators might behave differently when confronted with issues that directly come under their duties because they might believe that this can affect their electoral support. Figure 4.6 shows the differences in response between dynast and non-dynast legislators when the subject of treatment is altered between the request for assistance in solving the problem of irregular water supply and the MLA development fund. The results show that there seems to be no differences in the response rate between dynast legislators and their counterparts when questions are raised on their allocation of the constituency development scheme. However, voters do not enjoy the same responsiveness when legislators are asked to provide a solution to the lack of water supply in their constituencies: the response rate falls by around 15 percentage points. Likewise, when the sample is restricted to strong dynasts, we can see that the pattern remains consistent. These results suggest that dynastic legislators might be willing to exert as much effort as their colleagues when they believe that this could impact their electoral support.

¹⁴RD validity checks for these specifications are provided in Figure C.1 and Table C.1.

Figure 4.6.: Effect on Election Dynastic Legislators on Response Rate by Subject Matter

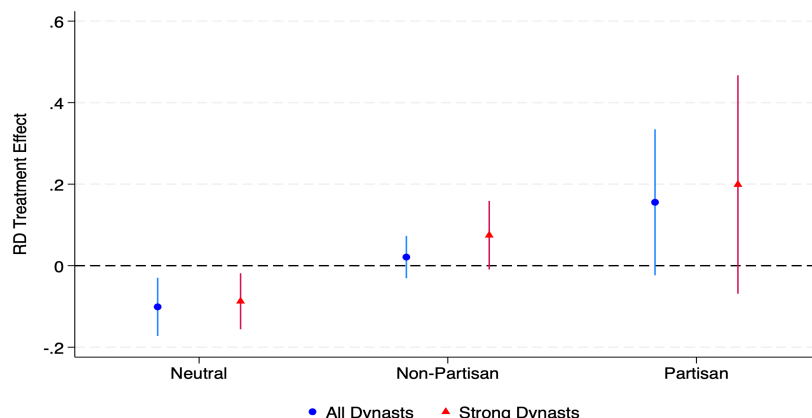


Notes: The figure provides the treatment effect of electing a dynastic legislator on the response rate for each subject matter. The blue line represent the estimates for the MLAADS treatment and the red line for the irregular water supply treatment. The circles represent coefficients for all dynasts and the triangles for the strong dynast sample. All models include state fixed effects with robust standard errors. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012).

In the last specification, I randomly alter the emails to indicate whether the constituents had any partisan preferences.¹⁵ Figure 4.7 provides the results of this exercise. We can again see a clear pattern in which the negative response rate is concentrated for the neutral treatment group. When the voter sends a clear signal of their partisan preferences, dynast legislators are more likely to respond as their non-dynast counterparts. Again, this pattern holds when the sample is restricted to only strong dynasts. These results are in line with the previous specification that dynast legislators are willing to exert effort when they believe this could affect their electoral support.

¹⁵Dynastic politicians are mainly concentrated in the top two political parties with 46% of them representing BJP, 42% in Congress, and the remaining 12% spread across various regional parties. This provides some assurance that the estimates capture the effect of electing dynastic politicians rather than political ideology.

Figure 4.7.: Effect on Election Dynastic Legislators on Response Rate by Partisan Preferences



Notes: The figure provides the treatment effect of electing a dynastic legislator on the response rate by the constituents' partisan alignment. The blue line represent the estimates for neutral voters, red line for partisan voters, and green line for non-partisan voters. The circles represent coefficients for all dynasts and the triangles for the strong dynast sample. All models include state fixed effects with robust standard errors. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012).

4.6.3. Robustness

I first examine the sensitivity of the estimates using different levels of bandwidth. Figure B.1 provides the results for this exercise. Looking at the figure, we can observe that the estimates remain stable for a range of bandwidth specifications but lose statistical power at extremely low and high bandwidth levels. In the next specification, I estimate the RD effect by varying the functional form. Figure B.2 presents the estimates for the response rate using a linear, quadratic, and cubic function. Looking at the figure we can see that the estimates remain robust for the linear and second-order polynomial. However, when the results are estimated with the cubic function, although they loose statistical power are along the lines of the baseline specification.

In the last robustness check, I estimate the results including various covariates in the model. One concern could be that the baseline estimates might capture not only the effect of electing dynastic politicians, but all potentially compounding candidate and constituency-level factors that can differentiate dynastic from non-dynastic candidates (Marshall, 2022). In Table B.1, I account for this by estimating the results, including a range of candidate and constituency level controls. In columns (1)-(3), the estimates include constituency controls for whether the constituency was reserved for SC/ST, the log of total votes casted, voter turnout, and the log of the constituency electoral size. In columns (2)-(4), the reported estimates include candidate controls

for their gender, age, income, liabilities, criminality, and incumbency for both the winner and the runner-up. In general, the results remain robust and similar in magnitude to the baseline specification, suggesting that the findings capture the effect of electing dynastic legislators rather than any other characteristic.

4.7. Conclusion

This paper examines the causal effects of electing dynastic legislators on political effort. Using an experimental approach, I test the responsiveness of legislators to email requests for common voter concerns as a proxy measurement for political effort. In the experiment, I further randomize the emails to test whether the response varies by the subject matter and partisan alignment of the sender. Using a close election regression discontinuity design, I find that dynastic legislators are significantly less responsive than their counterparts. This lack of political effort is more pronounced when legislators belong to prominent political families. However, dynastic legislators show a willingness to exert effort when the raised concern comes directly under their responsibility or the voter sends a clear partisan signal.

From a policy perspective, these findings have two main implications. First, while India has taken great strides towards making the government more digitally accessible, this does not seem to translate to citizens being able to communicate with their representatives. Many MLAs do not even have their email addresses on their website, or the ones provided are inaccurate. In addition, even official government email addresses often bounce back. Since this could easily be fixed, it seems that neither the government nor the legislator seem very interested in improving online communication.

Second, the findings of this paper have significant implications for democratic governance and political accountability. This paper shows that political dynasties are less likely to exert political effort. This is in lines with the research of several other studies showing that the election of dynastic politicians has a large negative impact on economic welfare (Bragança et al., 2015; Dar, 2018; George and Ponattu, 2019). An explanation for the negative effect of dynasties could be that they inherit their positions. While, previous family members might have established their political foundations through hard-work, this allows their descendants to take advantage of their legacies and shirk their responsibilities. This perpetuates dynastic politics since voters are often unaware of the implications of electing political dynasties. Thus, while this is beyond the scope of this paper, citizens might benefit from understanding the potential differences in representation offered by dynastic versus non-dynastic politicians, which might even make dynasts to act as better legislators.

A. Data and Summary Statistics

Figure A.1.: Share of Dynastic Legislators across India

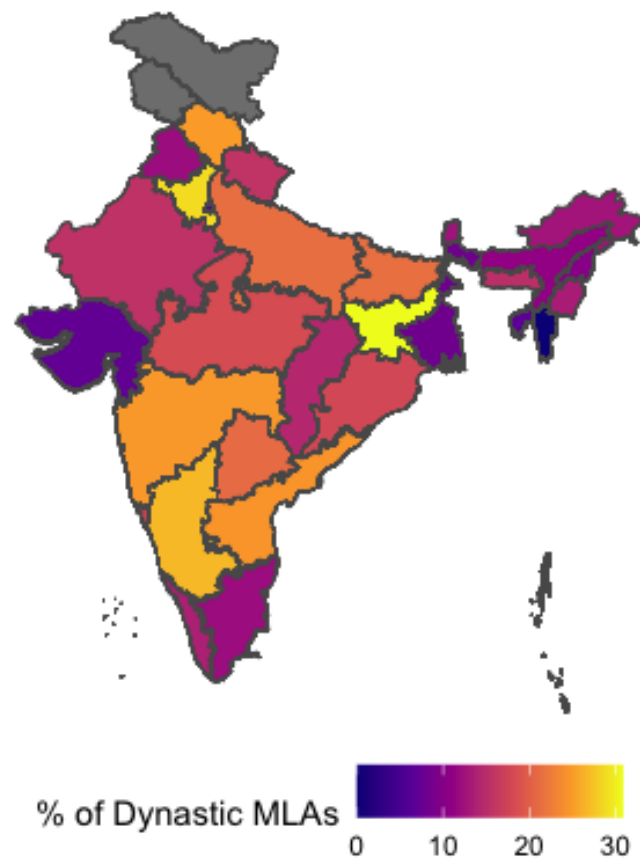


Figure A.2.: Dynastic legislators across countries

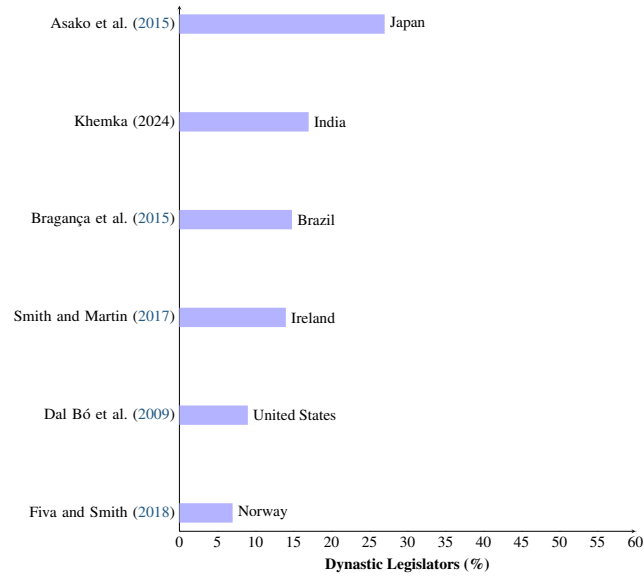


Table A.1.: Constituency and Candidate Characteristics

Variable	Dynast	Non-Dynast	Total/Average
Constituencies	693	3327	4020
SC/ST Reserved AC	0.280 (0.449)	0.168 (0.375)	0.260 (0.439)
Total Votes (in Logs)	11.87 (0.665)	11.96 (0.517)	11.89 (0.641)
Electoral Size (in Logs)	12.34 (0.773)	12.43 (0.644)	12.36 (0.752)
Turnout Percentage	64.78 (16.42)	64.68 (15.56)	64.76 (16.26)
Incumbent	0.390 (0.488)	0.402 (0.491)	0.392 (0.488)
High School Degree	0.807 (0.394)	0.895 (0.307)	0.823 (0.382)
Income (in Logs)	17.57 (1.490)	18.34 (1.415)	17.71 (1.506)
Liabilities (in Logs)	15.18 (1.941)	15.84 (1.936)	15.30 (1.956)
Male	0.931 (0.254)	0.801 (0.400)	0.907 (0.290)
Criminal Record	0.473 (0.499)	0.462 (0.499)	0.471 (0.499)

Notes: Dynast refers to assembly constituencies where a dynast legislator won.

Figure A.3.: Overall Response Rate

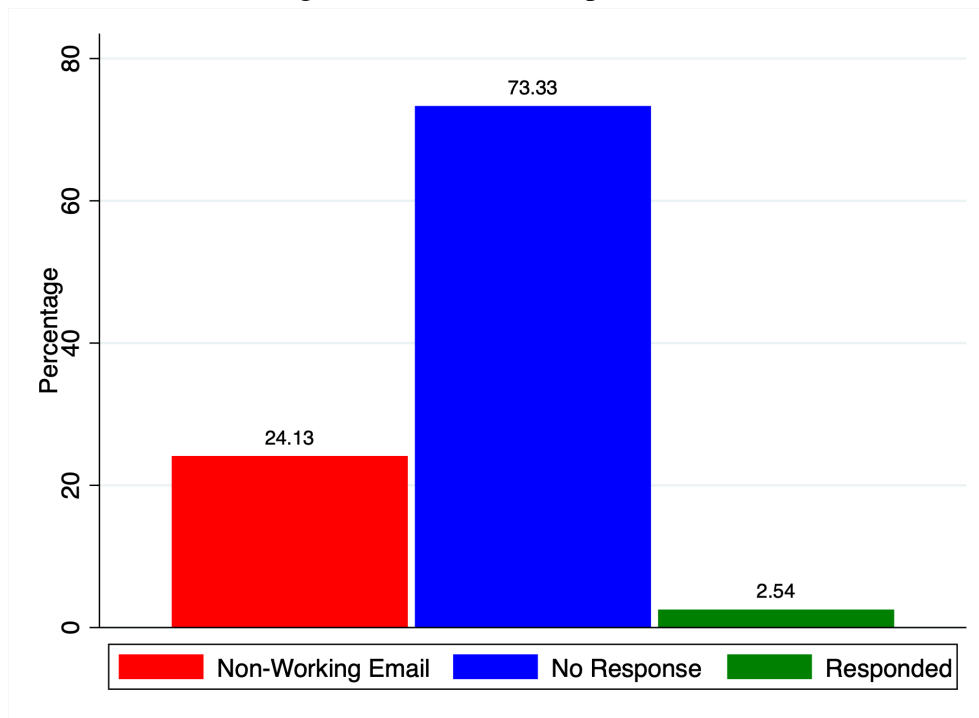
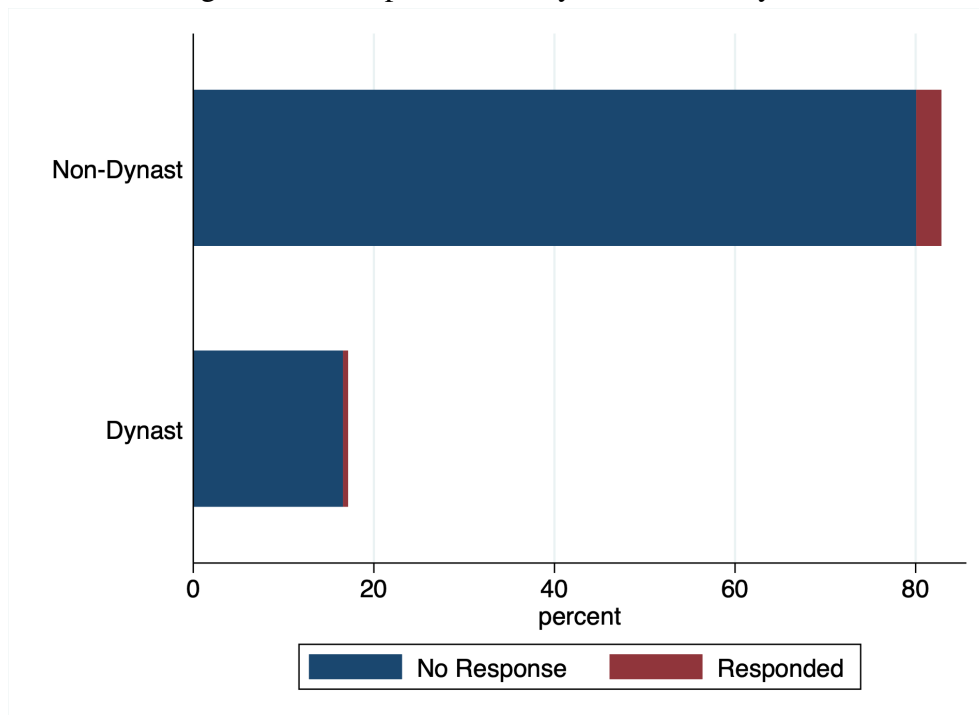
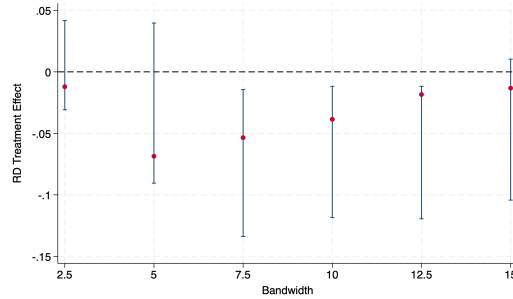


Figure A.4.: Response Rate: Dynast vs Non-Dynast



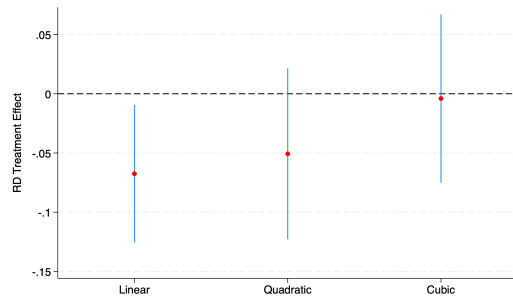
B. Robustness Checks

Figure B.1.: RD Estimates for Different Bandwidths



Notes: The figure provides the treatment effect of electing a dynastic legislator on the response rate at different bandwidth levels. All models include state fixed effects with robust standard errors. RD estimates are based on a local linear regression using a triangular kernel.

Figure B.2.: RD Estimates for Different Functional Forms



Notes: The figure provides the treatment effect of electing a dynastic legislator on the response rate for different functional forms. All models include state fixed effects with robust standard errors. The optimal bandwidth uses a mean-squared error optimal bandwidth selector with a triangular kernel proposed by Imbens and Kalyanaraman (2012).

Table B.1.: RD Specification with Covariates

	(1)	(2)	(3)	(4)
	All Dynasts		Strong Dynasts	
RD Estimate	-0.068** (0.030)	-0.046* (0.028)	-0.064* (0.033)	-0.076** (0.037)
Observations	289	196	271	184
Bandwidth Size	7.969	7.969	7.969	7.969
Constituency Controls	Yes	No	Yes	No
Candidate Controls	No	Yes	No	Yes

Notes: In column (1)-(2) the estimates provide the effect of electing a dynastic legislator on the response rate. In column (3)-(4) the estimates provide the effect of electing a strong dynastic legislator on the response rate. RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C. RDD Validity for Strong Dynasts

Figure C.1.: Manipulation Test for Strong Dynasts

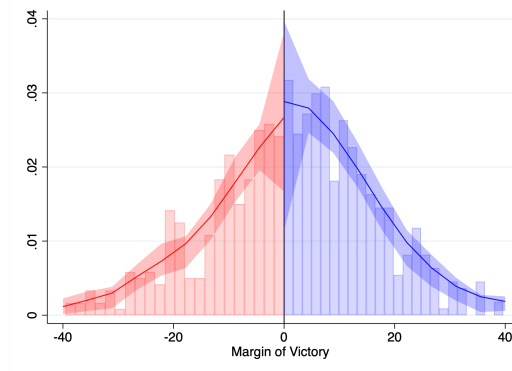


Figure C.2.: RD Density Test

Notes: The forcing variable is the margin of a victory that measures the difference between the vote share received by a strong dynast candidate and that of a non-strong candidate. Positive values indicate the difference between the vote share received by a strong dynast winner and that of a non-strong runner-up. Negative values indicate the difference between the vote share received by a strong dynast winner and that of a non-strong dynast runner-up. The Cattaneo et al. (2020) density test provides a t-value = -0.209 with a p-value = 0.83 for the continuity test at the cut-off point.

Table C.1.: Balance of Constituency Characteristics

VARIABLE	Coefficient	SE	Bandwidth	Obs.
SC/ST Reserved Constituency	0.00316	0.0743	16.96	477
Total Votes (in Logs)	-0.0771	0.139	11.92	387
Turnout Percentage	-0.436	4.374	8.400	283
Electoral Size (in Logs)	-0.0628	0.184	10.51	341
Winner Income (in Logs)	0.185	0.244	18.05	491
Runner Income (in Logs)	-0.707**	0.311	12.48	396
Winner Liabilities (in Logs)	0.0422	0.517	9.152	245
Runner Liabilities (in Logs)	-0.548	0.410	11.76	305
Winner Male	0.0234	0.0831	9.737	321
Runner-up Male	0.0880	0.0676	14.22	434
Winner Incumbent	-0.0592	0.0903	14.05	429
Runner-Up Incumbent	-0.263**	0.128	7.823	267
Winner Criminal Record	-0.328	0.357	23.92	568
Runner-Up Criminal Record	0.286	0.418	9.637	318

Notes: RD estimates are based on a local linear regression using a triangular kernel. The optimal bandwidth uses a mean-squared error optimal bandwidth selector proposed by Imbens and Kalyanaraman (2012). The asterisks denote the significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

5. Conclusion

This dissertation has examined the causes and consequences of electing certain types of politicians to public office. In this dissertation, I present two central arguments. First, in democracies with weak institutions, criminal politicians exploit the system to deliver targeted benefits to their voters. In turn, voters believe that criminality serves as a positive signal of competence. Thus, as long as criminal politicians can dispense such clientelistic goods, voters will continue to elect them, even if they are criminals. Second, I find that while dynastic politicians on average perform worse than non-dynasts, this can be offset when they are electorally motivated. In other words, dynastic politicians strategically exert effort when this could affect their future political capital.

My findings have broader implications for understanding democracies and the role of institutions. I show how weak government institutions and the states inability to provide resources to their citizens allow criminal politicians to step in and act as problem solvers. This creates a symbiotic relationship between citizens and criminals. Criminals use the distribution of public goods to stay in power. And, citizens rely on them for any resources they can muster. Although this coexistence might seem puzzling in a democratic framework, Vaishnav (2017) argues that if we look at politics as a marketplace where both parties are acting in their best interest, this can explain why such a market survives.

This leads to the question, if the existence of criminal politicians is the market equilibrium, how do we break this chain. In this respect, my findings are dire for countries with weak government institutions. Since strengthening government institutions and improving state capacity is a long-drawn process, this becomes even more challenging in the hands of ill-suited politicians. Several scholars discuss why the best electoral strategy for these politicians is to pursue clientelism by engaging in parochial politics (Chandra, 2007), deepening social divisions (Vaishnav, 2017), and keeping institutions weak (Stokes, 2005). This not only helps them maintain the *status quo*, but keep the rewards from public office low enough to discourage competent politicians from entering (Caselli and Morelli, 2004).

My dissertation opens up several avenues for future research. First, my work concentrates on a particular type of setting in which dishonest politicians are only able to maintain support under certain conditions. In particular, in democracies

Conclusion

where the government institutions are at the weakest and there is scarce availability of resources, create an environment which criminal or corrupt politicians can exploit. Although this limits the scope of my research, these conditions exist in a wide range of countries throughout the world such as Indonesia, Brazil, Jamaica, Pakistan, and Nigeria. Since these countries have democratic institutions close to those of India, it would be interesting to check whether criminal or corrupt politicians use similar strategies to stay in power.

Second, criminal politicians use redistribution as a mechanism to signal their credibility, and voters elect them in exchange for these short-term benefits on offer. However, this addresses only one of the mechanisms for why voters tend to support criminals. Voter preferences are much more complex and non-homogeneous. We can easily construe citizens of different backgrounds consider a range of other factors in making their voting decision. Likewise, criminal politicians have other skills at their disposal, such as their networks and muscle power which can they use to coerce, provide social insurance, and protection (Vaishnav, 2017). Thus, given the complex interaction between government institutions, voter preferences, and criminality, there is much more work to be done to understand why criminal politicians continue to win elections.

Third, my dissertation provides an opportunity to better understand the political dynasties. Although voters may elect dynasts because of their political legacies, we know little about whether voters would hold them accountable if they knew about their performance. An experimental design where voters are provided credible information on their performance (such as report cards) could provide some evidence to better understand the mechanism behind the existence of political dynasties. Another interesting avenue for research could be to understand when dynasts are willing to work much harder. My findings reveal that dynasts do not always underperform and can be motivated to work when this affects their future political capital. These findings are in no way conclusive and provide an opportunity to explore different strategies that dynastic candidates might be using to maintain their *status quo*. Finally, it would also be interesting to collect other measures of political effort such as parliamentary attendance, proposing bills, taking part in committees, and so on to further shed light on the consequences of electing dynastic legislators.

In summary, this dissertation has attempted to answer why certain types of politician exist in democratic countries. I shed light on how weak government institutions and limited state capacity can create a paradox in which inefficient politicians routinely get elected to office. My analysis suggests that there is considerable work to be done to understand the interaction among voter preferences, the incentives of politicians, and government institutions to solve this problem. Hopefully, this dissertation has provided a modest insight into these various unanswered questions.

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Assajos d'economia política

Resum

El capítol 2 examina si el vot ètnic pot explicar per què els ciutadans trien candidats criminals. Contràriament a la teoria de la preferència dels votants, trobo que els votants mostren una resposta negativa més forta als candidats acusats de criminalitat quan pertanyen al seu partit ètnic preferit. El suport dels votants als no ètnics cau un 89,2% per càrrecs violents. La coetnicitat redueix encara un 67% el suport electoral als delinqüents violents. Aquest patró es manté independentment del nivell de consum de notícies o de coneixement polític, l'estatus educatiu i els ingressos dels votants. Aquestes troballes suggereixen que l'èxit electoral dels polítics criminals es podria atribuir a altres factors, com ara les dèbils institucions governamentals, més que a la capacitat dels votants de fer-los responsables.

El Capítol 3 estudia si els votants estan disposats a perdonar polítics criminals perquè creuen que són més efectius a l'hora de proporcionar béns públics. En aquest capítol, argumento que en contextos amb institucions dèbils i una capacitat Estatal limitada, els polítics criminals prenen el control dels béns públics, utilitzant-ne la provisió per comprar suport electoral. Per verificar aquesta teoria, examino els efectes de l'elecció de polítics criminals en el programa laboral més gran de l'Índia. Fent servir un disseny de discontinuïtat de regressió, els resultats mostren que en les circumscripcions on guanya un polític criminal la taxa de finalització de projectes disminueix un 68%, mentre que l'assignació de llocs de treball augmenta un 36%. A les circumscripcions criminals, els fons del programa es destinen desproporcionadament a la mà d'obra en detriment dels materials. Aquests resultats suggereixen que els polítics criminals apunten estratègicament a la dimensió salarial del programa com a mecanisme per comprar suport electoral.

El Capítol 4 investiga si els polítics dinàstics exerceixen menys esforç polític que els seus homòlegs no dinàstics. Utilitzant un experiment de camp preregistrat a l'Índia, aquest article analitza si les connexions polítiques familiars dels legisladors estatals afecten la seva disposició a respondre a les sol·licituds d'ajuda amb la provisió de béns públics comuns. L'anàlisi mostra que els legisladors dinàstics són, de mitjana, més d'un 50% menys reactius. Aquesta taxa de resposta es redueix encara més quan els legisladors tenen forts vincles familiars polítics. A més, els resultats revelen que no hi ha diferències estadístiques en la taxa de resposta quan els ciutadans proporcionen un senyal clar de les seves preferències de partit i la preocupació plantejada és directament responsabilitat del legislador. Aquests resultats suggereixen que els legisladors dinàstics estan disposats a exercir més esforç polític quan això pot afectar el seu suport electoral.

Paraules clau: polítics criminals, polítics dinàstics, clientelisme, esforç polític