# Private Gains, Public Office: A Vignette Experiment in India*

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## Abstract

In many developing democracies, elected representatives amass large private wealth during their tenure in office, yet we lack micro-level evidence on citizens' attitudes toward politicians' wealth accumulation. Relying on a conjoint experiment and original survey data, this article explores voters' reactions to information about incumbents' wealth increase in North India. Contrary to arguments suggesting that voters favor "bad types" or that they are indifferent to information about wealth, our analyses reveal that voters strongly disapprove of politicians' wealth increase, and that they unambiguously associate extreme wealth accumulation with corruption. Why then do voters frequently select such candidates when they go to the polls? While partly attributable to a lack of precise information among voters, our results suggest that this problem would not be entirely eliminated by informing voters. This is because voters weigh probity less than candidate ability, and because politically important subgroups of voters remain lenient toward wealth accumulators.

**Keywords**: Representation; Wealth accumulation; Corruption; India

# 1 Introduction

In many democracies, elected representatives derive direct or indirect financial gains from their service in office (Eggers and Hainmueller, 2009; Querubin and Snyder, 2013). The potential for wealth accumulation is especially high in many developing countries, where resources distributed by the state are large and the monitoring mechanisms are weak, thereby opening the door to illegal gains (e.g. Acemoglu et al., 2008; Fisman, Schulz and Vig, 2012; Klašnja, 2015). For example, when Ukrainian protesters stormed the Mezhyhirya estate of the former president Victor Yanukovych, they found extreme opulence, from an ornate replica of a 19th century merchant ship floating on an artificial waterway, to a private zoo populated with ostriches and deer, to parks dotted with ancient Greek and Roman-style fountains and statues.[1] After Ferdinand Marcos, the former president of the Philippines, was forced to flee during the "People Power" revolution, the protesters found more than five hundred gowns and thousands of handbags and pairs of shoes belonging to the former First Lady Imelda Marcos; the state recovered approximately $1.6 billion in cash and assets from the family and their associates in subsequent years.[2] Systematic data from India, a country we focus on in this paper, further demonstrate this: as illustrated by Figure 1, the average nominal wealth accumulation over a 5-year period among Indian state legislators is around 350 percent. By comparison, the average nominal household wealth increase in India over a similar time period is around 17%.[3]

How do voters react to such levels of wealth accumulation by politicians? Scholars have shown that candidate characteristics such as class and affluence matter for representation (Carnes, 2013; Gilens, 2014). However, we lack micro-level evidence on voters' attitudes

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[1]See for example `http://www.bbc.com/news/world-europe-26307745`.

[2]See for example `http://www.cnn.com/2006/WORLD/europe/11/07/day.numbers/index.html`.

[3]The real average increase in the incumbent MLAs' wealth (in 2014 rupees) is about 190%. The data for the household wealth increase (`http://ihds.umd.edu/assetscale.html`) do not allow us to calculate the real change, but it is likely even lower than the nominal increase.

Figure 1: Large Wealth Accumulation among State Legislators in India
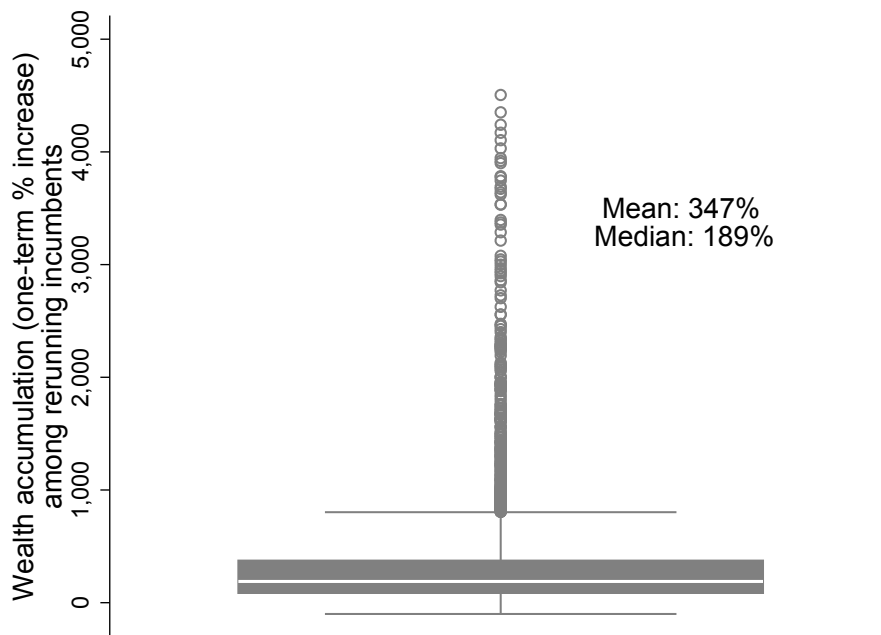


Source: the Association of Democratic Reforms, National Elections Watch, `http://myneta.info/`.

towards incumbents' wealth accumulation, despite a growing tendency for mandatory public disclosure of officials' assets (Djankov et al., 2009). Do citizens associate large wealth accumulation with corruption; with ability or entrepreneurship; or remain indifferent? This article constitutes the first credible micro-level attempt at gauging citizens' reactions. Further, building on a growing literature that seeks to understand why voters select potentially "bad types" (e.g. Banerjee and Pande, 2011; Klašnja, Tucker and Deegan-Krause, Forthcoming; Weitz-Shapiro and Winters, 2013), we develop a typology of the mechanisms that may lead voters, including informed ones, to condone large wealth accumulation in office.

To address these questions, we rely on original data from India where wealth accumulation is prominent (as shown in Figure 1), and where declarations of wealth are a mandatory and publicly released precondition for candidacy. While we also collect descriptive data on citizens' level of information about the wealth of their representatives, the centerpiece of

our strategy is a conjoint experiment (Hainmueller, Hopkins and Yamamoto, 2014). In this lab-in-the-field experiment, we ask a socially, politically and ethnically diverse sample of citizens of the northern Indian state of Bihar to evaluate a variety of fictional but realistic politician profiles. This strategy presents a number of advantages over its alternatives. First, because our experiment is lab-based, we are able to ensure that our respondents receive and understand information about wealth accumulation.[4] Second, relying on fictional but realistic politicians allows us to randomly vary their characteristics, thus ensuring high internal validity of our results.[5] Third, contrary to more traditional survey experiments, we manipulate a large number of relevant candidate characteristics, increasing the realism of our experiment. We also believe that such rich profiles lessen the risk of social desirability in the responses, since it was very hard for the respondents to guess the main objective of our experiment. The comprehensiveness of our randomizations also likely made it easier for respondents to endorse a politician with a controversial characteristic in front of our interviewers, since the interviewers were very unlikely to guess which (among many) politician characteristics was driving this reaction.

Overall, this design allows us to measure the relative weight respondents place on each candidate attribute, including wealth accumulation, and also explore potential interactions between wealth accumulation and other politician and citizen attributes that likely play a role in citizens' political evaluations, such as ethnicity and party affiliation. While these revealed preferences should not be equated to voting decisions, they nonetheless provide us with new insights about the kinds of politicians that voters generally value and prefer.

Our results indicate that voters strongly disapprove of incumbents' wealth accumulation.

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[4]A field experiment involving the dissemination of information through flyers or radio, by contrast, does not guarantee that voters would receive, process and understand this information.

[5]As we discuss below, voters might react differently to real politicians, say because of familiarity or because they may expect clientelistic benefits. However, manipulating the characteristics of real politicians is both unethical and practically impossible. We believe that benefits of our ability to randomly vary politicians' characteristics make up for the limitations of having our respondents rate fictional profiles.

Moreover, our respondents view greater wealth accumulators as more "corrupt." In the North Indian context, where "criminal politics" is a salient problem (Chauchard, N.d.; Vaishnav, 2011), they also see greater wealth accumulators as more likely to be "violent." Each of these effects is large, significant and increasing with the size of wealth accumulation. Negative evaluations of politicians' wealth increase are also quite robust to the addition of information about its legality. Although respondents more strongly disapprove of wealth accumulation tainted by illegality, they disapprove of high wealth accumulation even when it is presented as legal. Because wealth accumulation is one among many manipulated attributes, and because these effects are large, we deem it unlikely that these effects owe entirely to a survey effect or to social desirability bias. While these negative reactions may not be entirely surprising in other contexts, they contradict prominent arguments suggesting that Indian voters favor "bad types" (Vaishnav, 2011), or that their preferences are primarily determined by the prospect of patronage or ethnic favoritism (Chandra, 2004).

If voters disapprove of wealth accumulation, why do they so often elect wealth accumulators? The most obvious answer is that voters in the real world, contrary to participants in our conjoint experiment, lack information about politician behavior (Ferraz and Finan, 2008; Przeworski, Stokes and Manin, 1999). Examining citizens' awareness of the degree of wealth accumulation of their representatives from a separate survey, we do find evidence in support of this idea. While our respondents overwhelmingly believe that representatives are rich and accumulate large amounts of wealth in office, they are not very good at guessing correctly the actual wealth or wealth accumulation of their own representatives or those in their state more broadly.

While a lack of precise information likely matters, providing specific information about each candidate does not necessarily mean that voters would systematically reject wealth accumulators. This is due to the structure of voters' preferences. There are three important reasons why informed voters may be lenient toward wealth accumulators, *even if they dis-*

*approve of wealth accumulation.* A first possibility is that voters' reactions to information about wealth accumulation may be mitigated by other characteristics of politicians. For instance, wealth-accumulating politicians belonging to a voter's preferred party or ethnicity may not be penalized, but those belonging to other parties or groups may be unambiguously rejected. A second rationale has to do with how voters weigh different candidate characteristics. Voters may reject wealth accumulation but place relatively lower weight on this factor in comparison to other factors, such as party, ethnicity, or performance in office. A third mechanism hypothesizes the existence of heterogenous effects across different groups of voters. Even if voters on average reject wealth accumulators, wealth accumulators may win elections because sizable and/or influential groups of voters have developed a political culture that is more tolerant of corruption and "muscular politics" (Michelutti, 2008; Witsoe, 2011). Building on recent anthropological work on political culture among lower-caste groups in North India, we argue that such a political culture is likely to exist among ethnic groups that have a history of under-privilege and under-representation.

We do not find support for the first mechanism: no politician characteristic significantly mitigates the negative effect of wealth accumulation. However, we find support for the latter two mechanisms. Our respondents weighed information about a politician's record in office more heavily than information about wealth accumulation. That is, they rated large wealth accumulators with a good record more positively than politicians with lower wealth accumulation and a bad record. Second, in keeping with the intuition that some groups should be more tolerant of rapid wealth accumulation by elected representatives than others, we examine results for *Yadavs*, a numerically and politically important lower-caste group once excluded from political institutions that has become a key political force in Bihar in recent decades. We find that Yadavs are more lenient toward co-ethnic than non-co-ethic "wealth accumulators." We find similar results among partisans of the RJD – the party most clearly identified with Yadavs in Bihar – compared to partisans of other major parties

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(JDU and BJP).

Altogether, our results suggest that real-world voters may disapprove of wealth accumulation, and that information would likely impact voters' evaluations if it was more broadly publicized (Ferraz and Finan, 2008; Pande, 2011). However, our results also highlight the limits of information dissemination. Unless probity becomes the most important decision criterion for most voters, more widely publicized asset disclosures may not automatically prevent the election of candidates with suspiciously high wealth accumulation.

# 2 Wealth Accumulation and Representation in Comparative Perspective

How should we expect democratic voters to react to information suggesting that their representatives accumulated wealth while in office? Relatedly, why do wealth accumulators win elections? In this section, we survey the existing literature and outline our theoretical expectations.

## 2.1 Reactions to Wealth Accumulation: Contradictory Expectations

Over the past few years, scholars have begun examining the private returns to holding political office, helped in part by the increasingly common practice of mandatory public declarations of politicians' assets (Djankov et al., 2009). This literature shows that politicians often enjoy higher growth in wealth than similar non-politicians, in countries as diverse as India (Bhavnani, 2012; Fisman, Schulz and Vig, 2012), Romania (Klašnja, 2015), 19th Century Colombia (Acemoglu et al., 2008), Lithuania (Baltrunaite, 2014), and the United

States during the Civil War (Querubin and Snyder, 2013).[6]

This new evidence raises the question of how voters may react to politicians' wealth increase. Scholars have recently shown that voters react to candidates' class or wealth (Carnes, 2013; Carnes and Lupu, 2015a; Sadin, 2015), as well as other characteristics, such as race and gender (e.g. Mansbridge, 1999; Sanbonmatsu, 2002; Schwindt-Bayer, 2006; Stephens-Davidowitz, 2014), or ethnicity (Chauchard, Forthcoming; Franck and Rainer, 2012). Yet, to the best of our knowledge, we have no systematic evidence on how citizens evaluate politicians' private wealth accumulation while in office.

A priori, it is not clear how voters may react to information about wealth accumulation. On the one hand, voters may view wealth accumulation negatively, especially if citizens' own income changes are out of line with those of the politicians, or if they are not presented with an explanation for this wealth accumulation. Voters may then suspect politicians of illegal and corrupt acts. On the other hand, private wealth increase need not necessarily be equated with corruption, and may be viewed by voters as a signal of skill, drive, or intelligence. President Obama's 1995 and 2005 books ("Dreams from My Father" and "The Audacity of Hope", respectively) had reportedly sold more than 4 million copies as of 2010, likely increasing his wealth by more than \$5 million without any allegations or perceptions of illegitimate acts.[7] In the aftermath of the *Mani pulite* ("Clean Hands") investigations that exposed systemic corruption in Italian politics, Silvio Berlusconi's supporters touted his \$13.5 million in net annual earnings as a signal of *uomo forte* - a strong man who would employ his business acumen for effective as well as incorruptible leadership.[8] In

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[6]This evidence is related to a growing literature showing that politically-connected economic interests can reap large benefits (Acemoglu et al., 2008; Ferguson and Voth, 2008; Fisman, 2001), presumably in return for bribes and favors to politicians and bureaucrats (e.g. Fang, Gu and Zhou, 2015; Hongbin, Hanming and Lixin, 2011).

[7]See http://www.nytimes.com/2008/04/17/us/politics/17obama.html.

[8]See Francesco Giumelli and Davide Maneschi, "Why Italians Vote for Berlusconi," *The New York Times*, February 26, http://www.nytimes.com/2013/02/27/opinion/global/why-italians-vote-for-berlusconi.html?_r=0.

developing democracies, wealth accumulation may also be read as the promise of patronage and clientelism, as it is not uncommon for politicians to rely on their private wealth as they court voters ahead of elections or seek to maintain their allegiance afterwards (Lindberg, 2003; Björkman, 2014). Given these contradictory expectations, our first aim in this study is to understand whether voters react positively, negatively, or remain indifferent to information about wealth accumulation by their political representatives.

## 2.2   Why May Voters Tolerate Large Wealth Accumulation?

Figure 1 showed that recontesting state legislators in India on average multiply their wealth by more than 100% over the course of a single term. This suggests that wealth accumulators are frequently elected and re-elected. Therefore, our second objective is to explore *why* voters often select such politicians. To address this question, we draw from and build on the literature on the effect of citizens' perceptions of corruption (e.g. Anderson and Tverdova, 2003; Klašnja, Tucker and Deegan-Krause, Forthcoming), and on the experimental literature assessing the effect of information dissemination campaigns (Chong et al., 2015; Ferraz and Finan, 2008; Pande, 2011) on citizens' political preferences and vote choices.

The reasons as to why voters select wealth accumulators at the polls depends on whether they react positively or negatively to information about wealth. If voters valued wealth accumulation (and possibly if they were indifferent to it), the answer should be simple: wealth accumulators would win elections because they benefit from a form of valence. If voters disapproved of wealth accumulation, however, a different explanation is required. The literature on public opinion on corruption has shown that voters in developing democracies do not always punish corrupt politicians at the polls (e.g. Aidt, Golden and Tiwari, 2011; Banerjee and Pande, 2011; Klašnja and Tucker, 2013). By contrast, while they have not generated specific evidence regarding wealth accumulators, micro-level studies in India and elsewhere have shown that voters often penalize candidates whom they see as corrupt or

criminal (Barbera, Fernandez-Vazquez and Rivero, Forthcoming; Chauchard, N.d.; Weitz-Shapiro and Winters, 2013). What explains this paradox? Why do voters end up electing candidates with an attribute – corruption or wealth accumulation – that they may generally disapprove of?

Two types of explanations can be cited: information-related and preference-related explanations. According to information-based explanations, voters may support problematic candidates because they do not have enough information. Voters may not know that incumbents are accumulating wealth, or *which* incumbents are wealth accumulators, or what the sources of incumbents' wealth increase are. The consequence is simply that the lack of information prevents voters from "throwing the rascals out" (Przeworski, Stokes and Manin, 1999; Aidt, Golden and Tiwari, 2011).

These information-based explanations imply that informing voters would resolve the problem. Preferences-based explanations however suggest that information dissemination may not suffice. Voters may end up choosing candidates with attributes that they disapprove of not because they lack information, but rather because of the structure of their preferences. At least three different mechanisms may explain why voters who are fully informed of politicians' wealth accumulation – and disapprove of it – may nevertheless support them at the polls. A first possibility is that while voters may react negatively to rapid wealth accumulation, not every wealth accumulator may be equal in their eyes. In the Indian context, this idea is best illustrated by the work of Vaishnav (2011) on "criminal politics" in the state of Bihar. Voters overall penalize criminals but nonetheless tend to celebrate those known criminals who are their co-ethnics. More generally, voters' reactions to wealth accumulation may be mitigated by other politician characteristics, such as ethnicity or party affiliation. Similarly, voters may excuse wealth accumulation by politicians who otherwise "deliver" good performance in office or come from a modest background.

Second, assuming that voters take several factors into consideration when evaluating

candidates, they may disapprove of wealth accumulation but put relatively less weight on this factor compared to the other factors mentioned above. This idea is suggested by the model of Banerjee and Pande (2011): informed voters may prefer a corrupt politician to a "clean" one if they weigh ethnicity more than probity. The results of Chauchard (N.d.) illustrate this logic: in a vignette-experiment in the Northern Indian state of Uttar Pradesh, voters strongly penalized criminal candidates, yet they also often evaluated criminals from their own caste more positively than "clean" candidates from some particularly disliked groups.[9]

Third, and relatedly, heterogeneous effects may exist among voters. Even if voters on average reject wealth accumulators, they may win elections because sizable and/or influential groups of voters have developed a political culture that is more tolerant of corruption and "muscular politics". Building on recent anthropological work on "vernacular understandings of democracy" (Schaffer, 1998; Michelutti, 2008) and political culture among lower-caste groups in North India (Michelutti, 2008; Witsoe, 2011), we argue that such a political culture is likely to exist among ethnic groups that have a history of under-privilege and under-representation. In ethnically polarized contexts, voters from such groups may be motivated by local dominance over other groups or by a "politics of dignity" (Jaffrelot, 2011) more than by promises of good governance and development. As described by Witsoe (2011), one such group in Bihar is the *Yadavs*, the largest subcaste in the state. Once excluded from political institutions, Yadavs have over the past decades become a significant political force opposing the Congress, a party largely seen as embodying the domination of the upper castes.[10] According to this argument, we may expect Yadav voters to hold less negative

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[9]Another reason why voters may put less weight on wealth accumulation is due to a form of selection bias: if wealth accumulators are able to crowd out candidates with no penchant for wealth increase, then few politicians on offer would exhibit no wealth accumulation. This in turn would make it hard for voters to discriminate among politicians based on wealth accumulation, and would induce them to place more weight on other candidate characteristics.

[10]At present, there are two well-established Yadav-dominated political parties in North India: the Samajwadi Party led by the Uttar Pradesh leader Mulayam Singh Yadav, and in Bihar the Rashtriya Janata Dal

preferences toward wealth accumulators than other groups.

# 3    Research Design

In order to gauge citizens' reactions and explore why informed voters may choose wealth accumulators, this article primarily relies on a conjoint experiment (Hainmueller, Hopkins and Yamamoto, 2014). In this experiment, we randomly manipulated a number of relevant characteristics of political candidates, including their wealth accumulation during a previous term in office, and asked a sample of citizens in Madhepura district, in the northern Indian state of Bihar, to evaluate each profile on several dimensions.

Vignette experiments are useful in order to measure the relative weight respondents place on a series of attributes, as well as to explore potential interactions between these attributes. Though we presented these politicians as real incumbents to our respondents, our vignettes relied on *fictional* politicians. This provides us with an important advantage: it allowed us to randomly vary many of their characteristics, which would have been impossible and unethical with real politicians.[11] While this advantage gives our experiment a high degree of internal validity, it has an important limitation. Namely, respondents might react differently to real-world politicians whom they know or stand to benefit from compared to unknown and fictional profiles described in our vignettes.[12]

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(RJD), guided by Laloo Prasad Yadav and his wife Rabri Devi. Mulayam Singh Yadav and Laloo Prasad Yadav have become key figures on the contemporary political scene in India. They are either perceived as heroes, as modern Robin Hoods who steal from the rich to help the poor, or as goondas (gangsters, musclemen) who exploit state resources (Witsoe, 2011).

[11]Because many voters know the identity of likely candidates in their district, these fictional politicians were presented as incumbents in other, non-neighboring districts of Bihar. Since some voters may have known the identity of the incumbents from other districts immediately before the election, we ran the experiment seven months before the state elections of October 2015. In less than 4% of the cases did our interviewers report not being confident that the respondent perceived the politicians as real. Our results are robust to excluding these observations.

[12]They may for instance vote for a known wealth accumulator if they expect to benefit from such a candidate in the real world, but reject wealth accumulators they do not know in the context of our study. While we cannot evaluate the extent to which this feature of the design has an impact on our results – all our vignettes featured fictional candidates from other districts – we doubt that it would overturn our results

To limit the challenges from implementing a complex survey of a partially literate population in rural India (Chauchard, 2013), in a context in which privacy is traditionally hard to achieve, we implemented this experiment in a lab-based setting. The following subsections present the context of this study before detailing the design of our experiment.

## 3.1 Context: Wealth and Politics in Bihar, India

While recent scholarship suggests that political representatives amass wealth in office in a variety of countries (see above), two interrelated reasons lead us to focus on India. First, candidates for state and national legislatures in India are required by law to disclose their assets in order to register their candidacy. While these data are made publicly available online, and are on occasion publicized by local media and the civil society, the extent to which the average voter is aware of this information remains unclear. Focusing on India hence allows us to measure what voters' reactions might be if they were *unambiguously* aware of this information. The second reason is that wealth accumulation by incumbents in India is on average very large: according to the data compiled by the Association for Democratic Reforms, a leading civil society organization in this field, the *median* Indian state representative increases the value of their assets by 152% over the course of a single term (see also Figure 1). Cases of extreme wealth accumulation in office are commonplace, making the *mean* level of wealth accumulation even higher.

We focus on Bihar for two reasons. First, as shown in Figure A1 in the Supplementary Appendix, Bihar is fairly representative in terms of state legislators' wealth increase; it ranks squarely in the middle in terms of average wealth accumulation (331% for rerunning incumbents between 2010 and 2015). Second, we focus on this state to provide a credible

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altogether. As discussed below, we mainly focus on whether respondents perceive each candidate to be a "good representative" rather than on their voting decisions, and so we capture more primitive preferences. Presumably, these evaluations are at least to some degree correlated with the respondents' evaluations of real politicians. Besides, we find very similar results when we asked the respondents to evaluate how good the politician would be *for them personally*.

justification for our experiment: since the elections in Bihar were taking place in the Fall of 2015, the state provided us with a relevant setting to measure likely voter evaluations of prospective candidates in early 2015. What additionally motivated us is the fact that Bihar is widely known in India as one of the more corrupt or "backward" states – and as a state in which several leaders and parties have over the last decades engaged in unconventional forms of politics (alternatively referred to as "*goonda raj*" or as "muscular politics").

Given the lab-based set-up of the experiment – described at length below – data collection could only realistically take place in one location in Bihar. Because we wanted rural voters to constitute the majority of the sample (the population of Bihar is overwhelmingly rural) we selected Madhepura district among the list of districts whose headquarter city counted fewer than 50,000 inhabitants. While limiting ourselves to this location allowed for better monitoring of the experimental procedure of the study – hence enhancing the internal validity of the study – this by definition limited the representativeness of our results. In light of this, it is important to highlight that Madhepura is not an outlier within Bihar. While Madhepura used to be known in Bihar as a stronghold for the RJD (and generally as a Yadav stronghold), this is less true today, and the district resembles many other districts in Bihar on a number of relevant dimensions (see Table A1 in Section A1 in the Supplementary Appendix).

## 3.2   Sampling

In order to maximize the social, age and ethnic diversity of participants in our experiment, recruiters from the survey team were tasked with finding potential participants blocked by age and ethnicity at a randomly selected sample of locations. Upon arriving to a randomly selected location within a perimeter of twenty kilometers around our lab, monitors enumerated the four largest ethnic communities living at this location and then targeted an equal number of respondents from each ethnic group. Within each group, an equal number of flyers were distributed to people below and above 35 years of age. Once a potential respondent

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was identified, the enumerator wrote down the participant's name on two sets of invitations, giving one to the participant and keeping the other. This allowed us to match the participant with the invitation once they visited the lab. The participants were informed on the flyer that the study would entail responding to questions about "social and political issues." Upon receiving an invitation, respondents were promised 50 rupees for participating in the study, which they received after the completion of the study. Since the lab was located on the outskirts of Madhepura, and stood very close to a well-known bus station, both rural and urban voters participated in the study (23% of participants lived within an urban polling station). More importantly, this sampling strategy allowed the research team to sample from two different assembly constituencies (Madhepura and Singheshwar), hence ensuring that participants did not all have the same state assembly representative. The sample of 1,020 respondents who came to the lab was diverse on a host of politically relevant variables, as seen in Table A2 in the Supplementary Appendix.[13]

## 3.3  Lab Procedure

Upon arriving to the lab, the identity of the respondents was verified with the invitation cards. Once participants were cleared to participate, they were assigned to an interview room in which a short "background survey" took place privately. In this brief survey, the respondents were asked several demographic questions, including an open-ended question about their self-identified ethnicity, a response which served as the basis for a part of the ethnicity treatment we describe further below.[14]

At the end of this interview, respondents were invited to wait for a few minutes in a waiting area until they could participate in a seemingly unrelated study on "political and

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[13]While we have no easy way of comparing the composition of our sample to the overall demographics of Madhepura due to the lack of sufficiently detailed district-level data, our sample included respondents from a diversity of castes, age groups and classes.

[14]The questionnaire for the background survey can be found in Section A7 in the Supplementary Appendix.

social personalities." While they waited, the research team prepared the instrument for the second interview. During this interview, we presented each respondent with a series of three experimental vignettes, each of which listed a number of attributes of a "current state legislator and likely candidate in the upcoming state elections."[15]

Each vignette featured a photograph and a summary of the attributes of the politician, presented in bullet points (see the example in Figure 2). The information presented as part of these profiles is frequently featured in media profiles of state parliamentarians. Because of a relatively high prevalence of illiteracy, respondents were not readily invited to read the information from the profiles; instead, interviewers summarized the information from a carefully practiced script while showing the profile to the respondent. After the vignette was shown and summarized by the interviewer, the respondents were asked to evaluate the politician on several dimensions. Following the experiment, the respondents participated in another short survey, which identified respondents' knowledge about and involvement in politics. The post-treatment survey can be found in Section A7 in the Supplementary Appendix.

## 3.4    Summary of Manipulations

As noted by Hainmueller, Hopkins and Yamamoto (2014), conjoint vignettes allow for richer profiles and more realistic experiments than more traditional survey factorial designs. This is important from a methodological standpoint, as it allows us to reduce the risk of "masking" of the effects of interest because of composite or multi-dimensional treatments (Hainmueller, Hopkins and Yamamoto, N.d.). For example, given our focus on wealth accumulation, it is important to include (and randomize) information on initial wealth as well, in order to avoid masking the effect of wealth accumulation with a potential effect of baseline level of wealth

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[15]The respondents were debriefed at the end of the post-treatment survey that the politicians showed in the vignettes were in fact fictional. The debriefing script is available upon request.

(i.e. large wealth accumulation by an initially poor politician may be viewed differently than by a rich politician).[16] This richness is also useful in order to limit social desirability: if each profile contains many pieces of information, it becomes virtually impossible for respondents to guess the subject of researchers' investigations; relatedly, it makes it easier for them to endorse a politician with a controversial characteristic in front of an enumerator, insofar as that enumerator cannot guess which (among many) politician characteristics is driving the respondent's reaction. Accordingly, each vignette included *ten* manipulations, summarized in Table A3 in the Supplementary Appendix.

In light of our hypotheses, our key manipulations concern the incumbent candidate's *wealth* and *wealth accumulation* since his election in 2010 (i.e. during the period 2010-2015). As mentioned above, we decoupled the information on wealth accumulation from the information on initial wealth at the beginning of his current term in office in 2010. This initial wealth information was always presented before the wealth accumulation information. The values were: 5 lakhs, 8 lakhs, 45 lakhs, 85 lakhs, 2 crores and 4 crores rupees.[17] These values correspond roughly to the 5th, 10th, 25th, 50th, 75th, 90th, and 95th percentile of the distribution of the self-reported 2010 household wealth among MLA incumbents in Bihar, respectively. The interviewer described the treatment as follows: "candidates for office are required to report their assets and the assets of their immediate family members as they declare their candidacy. At the beginning of his term in 2010, this politician had [*amount*] in assets," where [*amount*] corresponds to the randomly selected amount.[18]

We also use seven different variations to convey information about the size of wealth

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[16]That said, Hainmueller, Hopkins and Yamamoto (N.d.) demonstrate that the benefit of reducing the risk of masking must be weighted against the risk of overwhelming respondents with too much information, thus inducing "survey satisficing." We do not see evidence of this issue in our data: our interviewers reported that close to 90% of respondents were giving focused and attentive responses. Our choice of attributes was guided by how real-world candidates are usually presented, and was limited to the key attributes outlined below.

[17]A lakh is 100,000 rupees; a crore is 10 million rupees.

[18]For presentational purposes, we group these treatments into three categories when presenting most of our results below: below median, median-75th percentile, above 75th percentile.

accumulation. The variations are as follows: did not increase, slightly increased, increased two, three, five, ten, and thirty times. These values roughly correspond to the 5th, 10th, 25th, 50th, 75th, 90th, and 95th percentile in the distribution of household wealth increase among the rerunning MLA incumbents in Bihar for the period 2005-2010.[19,20] For politician profiles with no increase in wealth, the interviewer described the informational treatment as follows: "the wealth of this incumbent did not increase during his term in office. Since he had [*initial amount*] in 2010, he now still has [*initial amount*]." When the manipulation included an increase in wealth, the interviewer described the treatment as follows: "the wealth of this incumbent [increased by *multiplier condition*] during his term in office. Since he had [*initial amount*] in 2010, he now has [*ending amount*]," where [*multiplier condition*], [*initial amount*] and [*ending amount*] correspond to the amounts and multipliers in the wealth and wealth accumulation variations. For presentational purposes, in the presentation of most of the results, we group these treatments into three categories: no increase, below-median increase, and above-median increase.

Conditional on wealth increase, we also varied the perceived legality of wealth accumulation. The interviewer described wealth accumulation as being "mainly due to successful business deals and real estate operations in the district, [none of which/many of which] have been deemed suspicious by the press."

Beyond these three wealth-related manipulations, the experiment also featured five ma-

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[19]These values correspond to nominal increases that are not deflated. We chose to focus on nominal rather than real increases for two reasons. First, when the wealth increase is discussed in the public, such as by the Association for Democratic Reforms or the media, it is overwhelmingly in nominal terms. Second, most respondents are unlikely to distinguish between nominal and real increases, and presenting this information would only complicate the experiment.

[20]We draw the values based on the sample of rerunning incumbents because otherwise we cannot calculate the wealth increase. We focus on incumbents because they are usually the most visible candidates in any given election race. While focusing on rerunning incumbents may produce some selection bias in the values of wealth accumulation we use, it covers the same sample that the voters would likely be most attentive to if they themselves focused on wealth accumulation in their vote choices. Also, these estimates of wealth accumulation are likely downward-biased, since it is plausible that the highest wealth accumulators tend to underreport their wealth increase by hiding assets outside of their household. However, once again, these are likely the only data the voters would be able to use.

nipulations related to other candidate attributes commonly presented in press and media profiles of Indian politicians: party affiliation, ethnicity, perceived record, social background, and criminal charges. A candidate's ethnicity and party affiliation are the main predictors of citizens' evaluations in India (Chandra, 2004; Chauchard, N.d.). Information about candidates' social background and perceived record are also commonly highlighted. Moreover, any criminal charges that a candidate faces have to be reported on the publicly available affidavits.

Regarding the ethnicity of the candidate, we ensured that one of the three politicians rated was from the subcaste as the respondent, which we knew from the background survey; for the remaining two profiles, we randomly drew from a list of the eleven largest subcastes in Madhepura. The party of the candidate was simply a random draw among the RJD, JD(U), BJP and the Congress (INC), the parties that get the lion's share of the vote in Bihar.[21] Regarding record in office, politicians were described as having been "[very active/not very active] in terms of development and infrastructure," and having done "[a lot/very little] for his constituency." For the social background treatment, we varied whether politicians hailed from a "poor," "middle income" or "rich" family. Finally, for the criminal charges treatments, the interviewer described the politician as either "not charged in any criminal cases" or "charged in several criminal cases."

The remaining two manipulations are not of direct theoretical interest to this study: the face of the politician (one picture is presented in Figure 2), and the district in which the politician planned to run. Accordingly, we do not focus on these manipulations in the rest of this article, although we show in Table A6 in the Supplementary Appendix that by and large they have null effects, and do not interact with our key wealth accumulation treatments.

Overall, the experimental vignettes were the product of three sets of randomizations (an

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[21]While major parties do not provide tickets to groups on a proportional basis, all four major parties did in 2015 run candidates from each of these castes or religious groups. Accordingly, we deliberately do not restrict the matches between parties and groups.

example is shown in Figure 2). First, the ordering of the bullet points was randomized (the three wealth attributes were randomized as a block, with initial wealth appearing first, followed by the wealth accumulation information – size and legality). Second, the particular value of each attribute (e.g. the party) was randomized.[22] Finally, the three vignettes were presented in random order to the participants.

Figure 2: Sample experimental vignette



| | समुदाय: भूमिहार |
| | विकास: बहुत कम किया |
| | मध्य वर्ग परिवार |
| | जिला: मधुबनी |
| | कई आपराधिक आरोप हैं |
| | बीजेपी |
| | 5 लाख, थोड़ी बढ़ी 6 लाख तक, गैरकानूनी कामों का संदेह हैं |

The vignette is in Hindi, as shown to the respondents. The conditions in the vignette are as follows: ethnicity – Bhumihar; record in office – did very little; family background: middle-class; district – Madhubhani; criminal charges – several; party – BJP; wealth information – 5 Lakhs, increased a little bit to 6 lakhs, suspicion of illegality.

Section A5 in the Supplementary Appendix shows through a series of diagnostic tests that our randomizations were successfully implemented. A number of respondents' pre-treatment characteristics are balanced across our manipulations (Table A4). Moreover, our treatment effects – discussed below – are stable across the three vignettes (Table A5) and with respect to the order of the candidate attributes (Table A2); in other words, we do observe either vignette- or attribute-order effects.

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[22]All the attributes except ethnicity and the legality of wealth accumulation were randomized unconditionally and with repetition. The legality treatment was randomized conditional on the wealth accumulation treatment not being "did not increase." The ethnicity treatment was partly conditional on the respondent's stated ethnicity, according to the procedure detailed in the text. Finally, the photograph was randomized without repetition, to ensure that the photograph would differ for each politician profile.

## 3.5 Outcome Variables

After they had read and thoroughly explained the content of each vignette, interviewers asked the respondent the following questions, in a fixed order:

- Politicians' job is to address their constituents' problems. On a scale from 1 to 5, how good a representative do you think this politician would be in that respect?

  1. Very bad / 2. Bad / 3. Neither bad nor good / 4. Good / 5. Very good

- On a scale from 1 to 5, how likely do you think this person is corrupt?

  1. Very unlikely / 2. Unlikely / 3. Neither unlikely nor likely / 4. Likely / 5. Very likely

- On a scale from 1 to 5, how likely do you think this politician engages in violent activities?

  1. Very unlikely / 2. Unlikely / 3. Neither unlikely nor likely / 4. Likely / 5. Very likely

In our discussion of the results, we primarily focus on the first outcome, which we term *representation rating*, but we also occasionally discuss the results based on the *corruption rating* and the *violence rating*.[23]

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[23]We also asked two other outcome questions; a yes/no vote question: "would you consider voting for such a candidate?" and another representation question, as follows: "Politicians sometimes help some of their constituents more than they help others. On a scale from 1 to 5, how good a representative do you think this politician would be for you personally?" The latter question had the same 1-5 rating options as the main representation rating question. The results for both questions are very similar to the main representation rating question, and we therefore omit them from the discussion. Figure A5 in the Supplementary Appendix shows the results for the vote question.

# 4 Additional Data on Knowledge about Wealth Accumulation

In addition to the survey containing the conjoint experiment, we also ran a separate short survey focusing on citizens' knowledge about wealth accumulation among Bihar representatives on a smaller sample of 323 respondents several weeks after we completed the data collection on the conjoint survey. We measured respondents' awareness about wealth accumulation among state legislators in Bihar as a whole, as well as among respondents' own representatives in their constituencies. While the conjoint experiment allows us to evaluate reactions among respondents who are by design informed, these data (discussed in Section 6.2.1) allow us to describe citizens' baseline levels of awareness of real politicians' wealth accumulation.

# 5 Estimation

We follow the guidelines of Hainmueller, Hopkins and Yamamoto (2014) in analyzing our conjoint experiment. By virtue of the three sets of randomizations described in Section 3.4 (the values of each attribute, the order of the attributes in the candidate profile, and the order of the vignettes), the conjoint design allows us to estimate separate causal effects for each of the treatment components described in the previous section. Also, because the estimates represent effects on the same outcomes, the conjoint design allows us to compare the attribute effects on the same scale. This fits our purpose well: to compare the effect of information about our key attribute of interest – a candidate's wealth accumulation – with information about the other candidate characteristics.

Following Hainmueller, Hopkins and Yamamoto (2014), our main effect of interest is the average marginal component effect (hereafter also referred to as the AMCE). The AMCE

is the marginal effect of a change in the value of an attribute, averaged over the joint distribution of all other attributes. For example, the above-median wealth increase AMCE represents the ceteris paribus change in the respondent's candidate rating when the respondent is shown a candidate profile with above-median wealth increase, compared to a profile with another value of wealth accumulation. The ceteris paribus is obtained by calculating this wealth increase effect for every combination of the other attributes, and then taking the weighted average, where the weights are based on the frequency with which each combination of the other attributes appears in our sample. In practice, calculating the AMCE is straightforward. As described by Hainmueller, Hopkins and Yamamoto (2014), it involves running a regression of our rating outcome on a set of dummy variables, one for each value of each attribute, excluding one category for each attribute as the reference category.[24] The coefficient on each dummy variable then gives the AMCE for that particular value of the attribute, relative to the reference category.[25] It should be noted that for two attributes – party and ethnicity – we examine the effect of co-partisanship and co-ethnicity between the respondent and the candidate profile, rather than the effects of a candidate's party and ethnicity per se, which are not of theoretical interest.[26]

Finally, as described above, we are also interested in whether the wealth accumulation effects interact with the other candidate attributes, such as record in office, or whether these effects are different for certain groups of respondents. These effects are also calculated in a straightforward fashion, by adding the appropriate interaction terms to the regression and

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[24]We describe in the next section the base category for each attribute we use to calculate the AMCEs.

[25]Since the information about the legality of wealth accumulation is conditional on some wealth increase, we need to include not just the dummies for each value of wealth accumulation and legality, but also their pairwise interactions. Of course, the AMCE for the legality of wealth accumulation is not defined for profiles featuring no wealth increase.

[26]For the ethnicity treatment, the procedure to calculate the AMCE is somewhat different than for the other AMCEs. As described above, the complication is that one of the vignettes features a candidate ethnicity that was not randomized, but rather matched the ethnicity of the respondent. To account for this, we use the indicator for the matched vignette as an instrument for the co-ethnicity indicator. To save on space, we describe the procedure in more detail in Section A4 in the Supplementary Appendix.

incorporating them when calculating the AMCEs.

# 6 Results

## 6.1 How Do Respondents React to Information About Wealth Accumulation?

To answer this question, we start by showing the AMCE of information about wealth accumulation and other attributes on candidate ratings.

To retrieve these effects, we specify a base category for each candidate attribute, to which we compare the effects of other attribute categories. Our base politician profile shares the partisan affiliation and ethnicity of the respondent, has a good record in office, no criminal charges, comes from a poor background, has below median initial wealth, and did not increase his wealth during the current term in office. Doing so allows us, for example, to examine the effect of providing information on below-median wealth accumulation relative to no wealth increase, or the effect of a non-co-partisan versus a co-partisan politician. In the rest of this article, our effects for any attribute are always relative to the base category, unless stated otherwise.

Figure 3 presents the AMCE for each of our manipulations (compared to the reference category) on our main outcome variable, the representation rating.[27] As can be seen from the estimates at the bottom of the figure, respondents strongly *penalized* candidates who were presented as having accumulated greater wealth while in office. The treatment effects

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[27]All the graphs presenting the results, including Figure 3, show the 95% confidence intervals based on the respondent-clustered standard errors. Also, all the graphs exclude the AMCEs for photographs and districts, because we are theoretically not interested in them. We also exclude the AMCE for legality of wealth accumulation, because of strong collinearity in respondents' answers to outcome questions between the two legality conditions, across the different values of wealth accumulation. The legality AMCEs we are able to estimate are always negative and statistically significant, however. The results are available upon request.

of "below median" and "above median" (relative to no increase) are both negative and statistically significant, implying that both groups of wealth increase led respondents to rate candidates significantly worse.[28] However, the size of the wealth increase does matter. Higher levels of wealth accumulation result in a progressively lower rating. The magnitude of these effects is not trivial. On a 1-5 rating scale, the effect size (for 'above median' wealth increase) is between 0.5 and 1, suggesting that a simple informational treatment about a politician's wealth increase has a negative effect on evaluations ranging from 12.5% to 25% percent.

Figure 3: Candidate attribute effects on representation rating
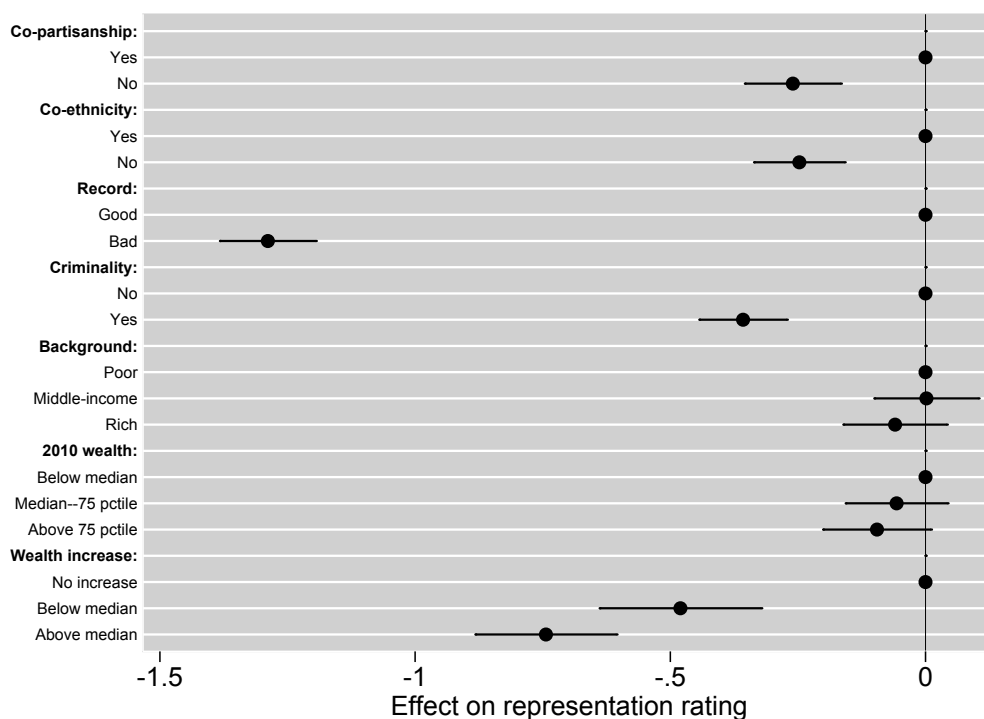


Aside from wealth increase, many of the other treatments also have an effect on respondents candidate representation rating. Both a non-co-partisan and a non-co-ethnic are rated

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[28]As can be seen in Table A4 in the Supplementary Appendix, where we disaggregate the wealth results to include all seven values, any increase in wealth, even as small as 20%, has a significant negative effect on what the respondents think of the candidate as a representative.

worse than a co-partisan or co-ethnic politician; a politician with a bad record in office is rated worse than one with a good record; a politician with criminal charges is rated worse than one with no such charges against him. These results are not surprising. An important finding emerging from Figure 3, however, is that the effect of information on wealth accumulation is larger than the effect of most of these other manipulations. The wealth increase treatment is stronger than ethnicity, partisanship and even criminality of the politician. This finding suggests that wealth accumulation was an important consideration for our respondents, far more than current arguments – typically focusing on the role of ethnicity, party and criminality – have so far acknowledged.

Why do respondents rate wealth accumulators less favorably? To answer this question, Figure 4 in turn examines responses to the two other outcome questions our participants answered. Information about wealth accumulation significantly increased the respondents' propensity to view the candidate as both more corrupt (left panel) and more violent (right panel of Figure 4).[29] Moreover, the effect of wealth accumulation is stronger on the respondents' corruption ratings, especially in relation to criminality, which is a stronger predictor of the respondents' violence rating. These findings are intuitive: they suggest that our respondents view wealth accumulation as indicative of a "bad" candidate, especially so in terms of corruption.[30]

Importantly, the coherent negative effect of wealth accumulation across our three dependent variables is not entirely driven by the information about the legality of wealth increase. As mentioned above, we randomly varied whether a candidate's wealth accumulation was deemed illegal or not by the press. Figure 5 examines the effect of wealth accumulation sepa-

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[29]Our respondents may vary in what they see as corrupt or violent behavior, but on average, their views correlate consistently negatively with their evaluations of wealth accumulation.

[30]Results in Figures 3 and 4 contain many treatment effects. One concern may be that some of the statistically significant AMCEs we report may have arisen simply by chance as a consequence of performing multiple comparisons. Figure A3 in the Supplementary Appendix shows that none of our results are substantively affected by applying a multiple-comparison correction.

Figure 4: Candidate attribute effects on corruption violence ratings
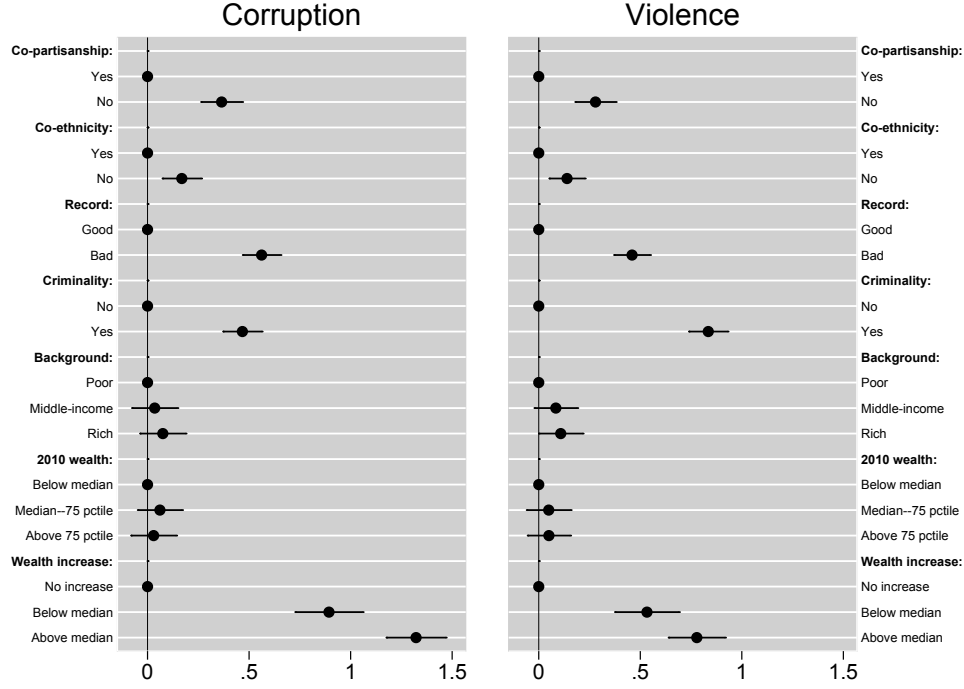


rately for these two conditions.[31] As expected, information about wealth increase lowers the rating of a politician when there are suspicions of illegality, and the rating is monotonically decreasing with higher levels of wealth increase. More importantly, even when respondents are explicitly told that there is no suspicion of illegality, information about wealth increase results in a lower rating. The effects are statistically significant at the 90% level for the five-fold increase, and at the 95% when the wealth increase is 10 times or more their initial wealth. Such large wealth increase is not unheard of – seven state legislators in Bihar had wealth accumulation between 2010 and 2015 in excess of 1000%. In short, these findings suggest that wealth accumulators are rated lower compared to other candidates, even if no allegation of illegality is explicitly brought up against them.

These negative effects are unlikely to be due to respondents' anti-rich bias, since we also

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[31]Since this information was only provided when there was an increase in wealth, the baseline category is a 20% increase, rather than no increase.

Figure 5: Effect of wealth increase based on legality
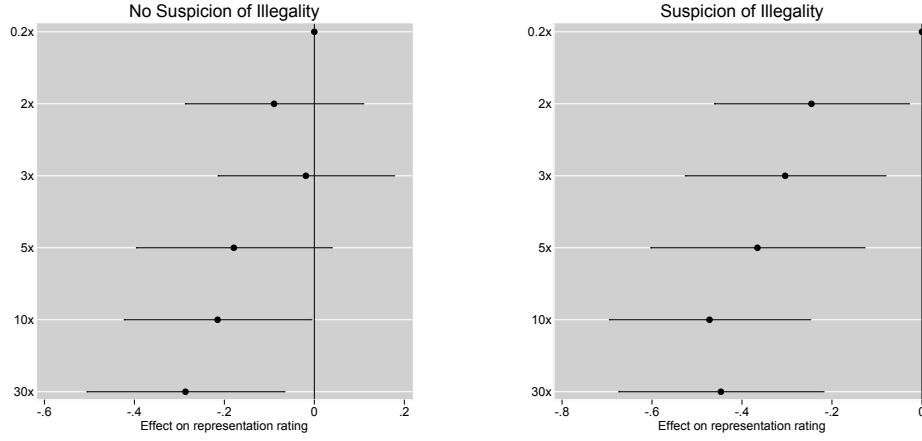


manipulated the candidates' initial level of wealth, and the effects are noticeably smaller and generally statistically indistinguishable from zero. Moreover, because wealth accumulation is one among many manipulated attributes in our design, and because these effects are large, we deem it unlikely that they owe entirely to a survey effect or to social desirability bias. The wealth accumulation treatment was one among ten other treatments, and was not in any way emphasized by the interviewers. Therefore, the respondents could not have known that we were primarily interested in this treatment, nor would they have felt pressured not to endorse a wealth accumulator in front of the interviewer.[32] Besides, we have no reasons to believe that wealth accumulation would be more sensitive a treatment than ethnicity or criminality. Accordingly, we interpret these lab-based reactions as evidence that Bihar voters overall strongly disapprove of large wealth accumulation.

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[32]One way to gauge the size of the desirability effect is to examine the variation in the wealth accumulation AMCE with respect to the order in which the wealth attributes were presented. For example, it may be that social desirability bias would be greater when the respondents heard the information about wealth accumulation first. As discussed above and shown in Figure A2 in the Supplementary Appendix, we do not find any evidence that the effect varies with the order in which the information about wealth accumulation was presented.

## 6.2 Why do Voters Select Wealth Accumulators?

If voters disapprove of wealth accumulation as much as our respondents did in this experiment, why do they so often elect wealth accumulators at the polls? As mentioned in Section 2, two types of explanations exist: information-related and preference-related explanations. According to the former, voters would choose such characters simply because they lack precise – or any – information about politicians' private wealth accumulation, contrary to the participants in our experiment. According to the latter, voters would choose wealth accumulators not because they lack information, but rather because the structure of their preferences sometimes favors wealth accumulators despite negative reactions to wealth increase. In this section, we first utilize data we collected about citizens' knowledge of real-world politicians' wealth accumulation in order to explore information-based explanations (Section 6.2.1). We then return to our vignette-experiment to explore why an electorate that is informed, as were our respondents, might nonetheless tolerate wealth accumulators (Sections 6.2.2, 6.2.3, and 6.2.4).

### 6.2.1 How Much Information do Voters Really Have?

Despite candidate affidavits being publicly available, it is not clear how much information citizens do have about wealth accumulation in the real world. Accordingly, voters may select wealth accumulators simply because they do not have (precise) information.[33] To address this question, we collected data a few weeks after the end of our conjoint study from a separate sample on the awareness among respondents about wealth and wealth accumulation among Bihar state legislators. We asked respondents to answer three questions about an average MLA in Bihar, as well as *their current* MLA: to give their best guess on the total assets in

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[33]Making inferences about voters' knowledge is also important from a methodological standpoint, as one possibility for such strong effects of information about wealth accumulation in our conjoint experiment is that this type of information is novel to many respondents, in contrast to information on the party, ethnicity, or even record in office. Our results, discussed below, do not provide strong support for this possibility.

2010; state their opinion on whether the representative (average Bihari or their own) has gotten richer since 2010, and if so, give their best guess of the size of the wealth increase.[34] For the best guesses, we offered the same seven categories as those in our conjoint experiment, in order to structure the responses and decrease measurement error.

Figure 6 presents the respondents' best guesses about wealth (left panel) and wealth accumulation (right panel) of *the average Bihar MLA*. The actual average and median 2010 wealth and wealth accumulation are indicated beneath each graph.[35] Figure 7, in turn, shows the respondents' best guesses about *their own MLA*'s 2010 wealth (top panel) and 2010-2015 wealth accumulation (bottom panel). Our respondents were from one of two constituencies. The guesses made by respondents represented by Chandra Shekhar, in the constituency of Madhepura, are shown in the left panel, and the guesses of the respondents represented by Ramesh Rishidev, in the constituency of Singheshwar, are shown in the right panel. The actual wealth and wealth increase of these two state legislators are also indicated on each graph.

Two key findings emerge from Figures 6 and 7. Importantly, respondents appear to be keenly aware of the fact that state legislators are rich and that they accumulate wealth in office. 94% of respondents (not shown) correctly thought that an average Bihar MLA increased their wealth during the current term in office (90% of respondents correctly stated that their own MLA increased their wealth). Besides, more than 95% of those who thought that an average MLA in Bihar increased their wealth suspected that the wealth increase was large (double or more). Figure 7 in turn suggests that our respondents are quite well informed about their own representatives. Close to a third of respondents guessed closest to both their MLAs actual 2010 wealth *and* actual wealth accumulation. Also, the respondents were generally aware that Ramesh Rishidev increased his wealth more than Chandra Shekhar

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[34]The questions are reproduced in Section A7 in the Supplementary Appendix.

[35]For the actual wealth accumulation, we focus on the subset of MLAs elected in 2010 who reran in 2015 here, since we can only have data on wealth accumulation among the rerunning MLAs.

Figure 6: Respondents' guesses and actual wealth and wealth increase among Bihar MLAs
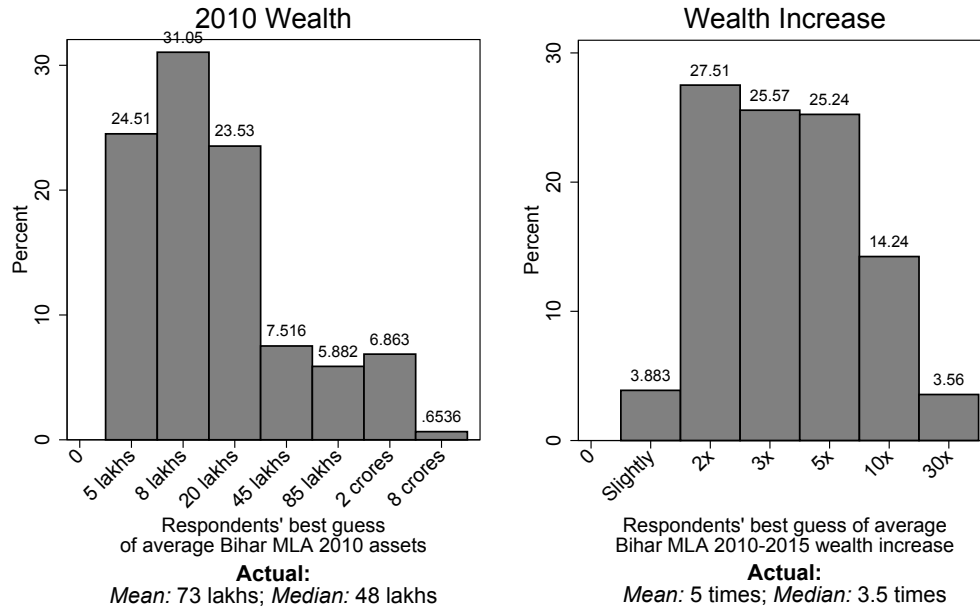


did (approximately six-fold and two-fold, respectively).[36]

While this suggests that they are generally aware that MLAs are rich and increasing their wealth, we cannot however conclude that voters are fully and precisely informed. More than three-quarters of the respondents underestimate the 2010 wealth of Bihar MLAs, and about half of the respondents underestimate their wealth accumulation. While the respondents are better at guessing their own representatives' wealth and wealth accumulation, there is still sizable heterogeneity. For example, about half of the respondents underestimate Ramesh Rishidev's wealth increase, and even more respondents overestimate Chandra Shekhar's wealth increase.

Given this mixed evidence, it is difficult to entirely reject information-based explanations. Respondents' guesses suggest that they are aware that the political class benefits from office,

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[36]The difference between the two distributions is significant at $p < .1$.

Figure 7: Respondents' guesses and actual wealth and wealth increase among own MLAs

## 2010 Wealth



## 2010-2015 Wealth Increase
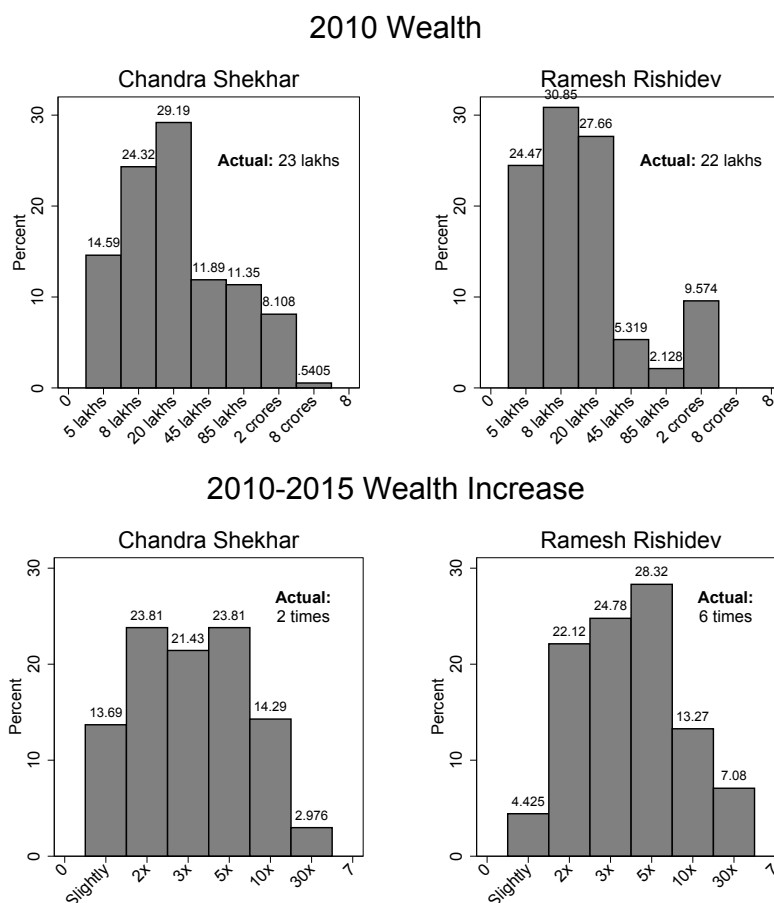


and that these benefits are large, but also that respondents have trouble precisely distinguishing among different politicians.

While this suggests that *more precise* information might reduce the chance that wealth accumulators get re-elected, it does not mean that it would altogether eliminate it. This is because the structure of respondents' preferences might in turn lead them to prefer wealth accumulators, even though they disapprove of wealth accumulation. Accordingly, the following subsections return to our conjoint experiment to explore three potential reasons why this may be the case. The first reason why voters may tolerate wealth accumulators is that voters' reactions to information about wealth accumulation may be mitigated by other factors. Another possibility is that voters take several factors into consideration when evaluating

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candidates, and while they reject wealth accumulation they weigh this factor less relative to other factors. The third mechanism hypothesizes the existence of heterogeneous effects among voters, with some groups of voters being relatively indifferent to information about wealth accumulation.

### 6.2.2 Is the Effect of Wealth Accumulation Mitigated by Other Factors?

We first test whether respondents were likely to excuse or even favor wealth accumulators with particular attributes. Our results unambiguously suggests that this is not the case. As mentioned above, the most theoretically relevant dimensions in Indian politics on which voters may be more discerning about wealth increase are record, party and ethnicity. Accordingly, here, we focus on the interactions between wealth accumulation and these characteristics of candidates. In Table A7 in the Supplementary Appendix, we show the results for the interactions between wealth increase and the other politician attributes.

The top panel of Figure 8 first examines whether the effect of higher wealth accumulation for candidates with a good record in office (left graph) is different than for a candidate with a bad record (middle graph). This is not the case: the differences in the wealth increase AMCEs between the politicians with good and bad records in office (right graph in the top panel) are close to zero and statistically insignificant, suggesting that the respondents do not excuse wealth accumulation based on a candidate's record. Similar patterns emerge as we examine the interactions between wealth accumulation and partisanship (middle panel of Figure 8. It does not matter whether the candidate is a co-partisan (left graph) or not (middle graph): information about wealth increases results in a lower score for either type of candidate, and as with the politician's record, the difference is statistically insignificant (right graph). Finally, ethnicity is typically mentioned as a major factor in Indian politics and an ethnically-driven voter could favor politicians who accumulate wealth in office if they share the same ethnicity. However, as seen in the bottom panel of Figure 8, we similarly do not find such interaction

effects in our study. The respondents punish wealth accumulation irrespective of whether the candidate is a co-ethnic (left graph) or non-co-ethnic (right graph), and the difference is once again statistically indistinguishable from zero (right graph). In sum, there is no evidence in our data that the respondents excuse wealth accumulation of politicians based on either their record, party affiliation or ethnicity. We similarly do not find consistent and statistically significant interaction effects for *any* of the other attributes, such as family background, criminal charges, or the initial level of wealth (Table A7 in the Supplementary Appendix).[37]

Figure 8: Interaction Effects with Wealth Increase



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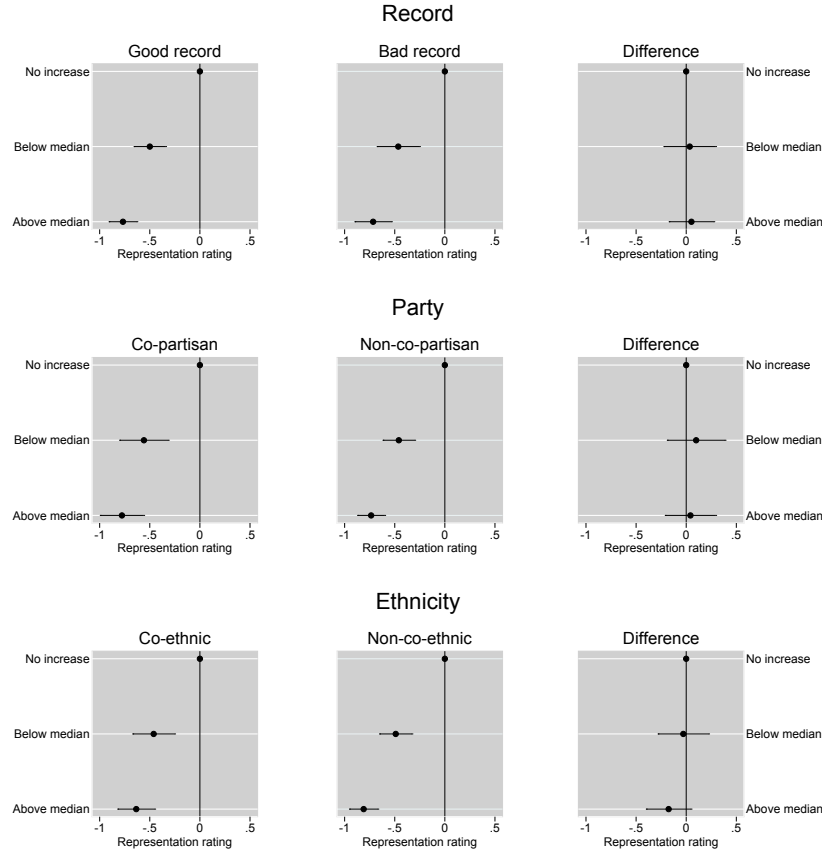
[37]We also do not find consistent interaction effects between *respondents'* income and a candidate's wealth accumulation. See Table A8 in the Supplementary Appendix.

### 6.2.3 Do Respondents Weigh Wealth Accumulation Less Than Other Factors?

While our results above show that voters penalize wealth accumulators, are there instances where a politician might be able to offset the negative effects of having acquired more wealth? In Figure 3, the only treatment that has a stronger effect than wealth increase is a politician's record while in office. Candidates who have a disappointing record in terms of development are rated much lower than candidates with a good record on these dimensions. This suggests that candidates with a good record may be able to offset wealth accumulation while in office.
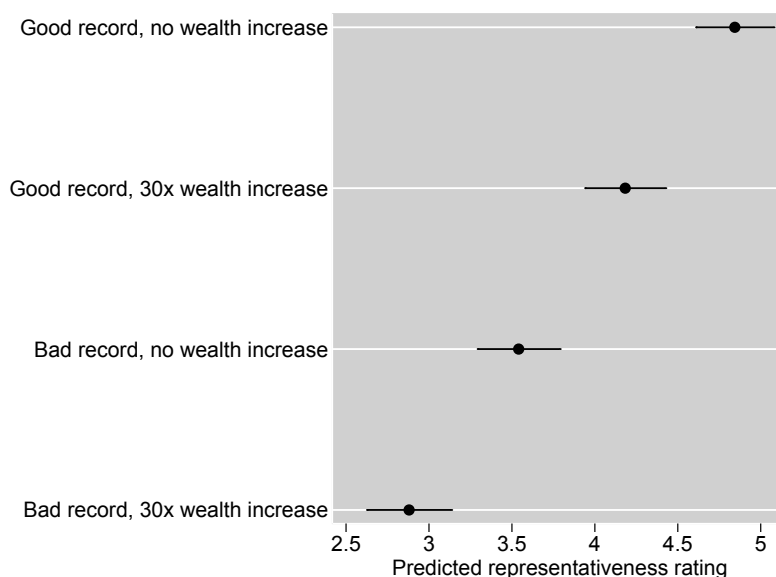
Figure 9: Record vs Wealth Increase



Figure 9 confirms this: politicians who increase their wealth but have a good record are rated higher those with a bad record and no wealth increase. As expected, politicians with a good record and no wealth increase are rated the highest and those with a bad record and wealth increase are rated the lowest. This suggests that our respondents – who overall penalized wealth accumulators – still rated wealth accumulators with a good record more positively than they rated candidates with lower wealth increase – those generally deemed less corrupt or violent – with a bad record. This finding provides support for the weight

mechanism: voters weighed at least one other factor of their choices more heavily than they weighed information about wealth accumulation. This relative importance placed on a politician's ability to 'deliver' may thus be a reason why voters often select candidates whom they know to be accumulated wealth in office, and dislike for doing so.

### 6.2.4 Are Some Groups of Respondents Indifferent to Information About Wealth Accumulation?

A third mechanism explaining why an informed electorate might elect or reelect wealth accumulators has to do with heterogeneous effects across different groups of voters. Even if voters on average dislike wealth increase, wealth accumulators may win elections because sizable and/or influential groups of voters have developed a political culture that is more tolerant of – or even encourages – corruption and "muscular politics" (Michelutti, 2008; Schaffer, 1998; Witsoe, 2011). Recent anthropological work about lower-caste groups in North India (Michelutti, 2008; Vaishnav, 2011; Witsoe, 2011) has argued that such a political culture is likely to exist among ethnic groups that have a history of under-privilege and under-representation. In ethnically polarized contexts, voters from such groups may be motivated by local dominance over other groups more so than by good governance and development (Jaffrelot, 2011).

To test this argument, we separately examine the results for Yadavs, a large lower-caste group once excluded from political institutions that has become a key political force in Bihar in recent decades. While the AMCE of wealth accumulation for Yadavs is not different from the non-Yadav sample (Figure A6 in the Supplementary Appendix), we find in Figure 10 that Yadavs (top panel) are noticeably more lenient toward co-ethnic wealth accumulators (relative to non-co-ethnics) than non-Yadavs are (bottom panel). The AMCE for below-median wealth increase is statistically indistinguishable from zero for Yadavs' co-ethnic candidates (top left graph), and both below- and above-median AMCEs are smaller

in magnitude than for non-Yadavs' co-ethnic candidates (bottom left graph). However, both Yadavs and non-Yadavs penalize the non-co-ethnics in a similar fashion (middle top and bottom graphs). Therefore, Yadavs are considerably more lenient than non-Yadavs toward their co-ethnics than non-Yadavs (top and bottom right-most graphs).

Figure 10: Interaction effects with wealth increase for Yadavs
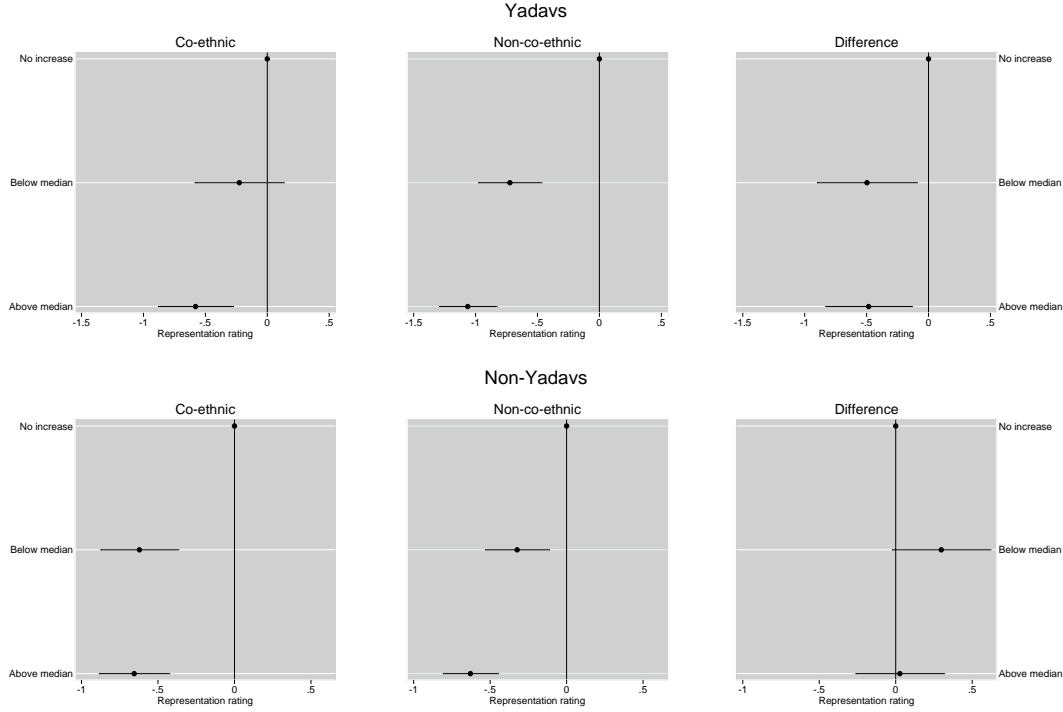


We find similar patterns among partisans of the RJD – the party most clearly identified with Yadavs in Bihar. First, RJD supporters overall penalize wealth accumulation much less than supporters of other parties (Figure A7 in the Supplementary Appendix). Moreover, Figure 11 shows that RJD supporters (top panel) are essentially unconcerned with wealth accumulation among co-partisan candidates (top left graph), whereas they generally penalize non-partisans' wealth accumulation (middle graph). In contrast, the partisans of other major parties (JD(U) and BJP, middle and bottom panels, respectively) penalize both co-partisans (left graphs) and non-co-partisans (right graph) at a similar rate (right graphs).

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Given the numerical and political importance of Yadavs in Bihar, and the electoral relevance of the RJD (a party that was part of the winning coalition in November 2015), this finding may explain why so many wealth-accumulating politicians are elected in the state, in spite of the fact that the electorate overall dislikes politicians with this attribute.

# 7   Implications and Conclusion

Our original experiment suggest that North Indian voters strongly disapprove of politicians' wealth increase. They view wealth accumulators as more corrupt and more prone to violence, both of which are relatively common in the state of Bihar and India more generally. What is more, respondents penalize our hypothetical candidates for large wealth accumulation even when it is presented as likely legal, not just when it is presented as potentially illegal.

These results are puzzling in light of the fact that Indian political incumbents rapidly increase their wealth. If they disapprove of wealth accumulation, why do voters so often elect wealth accumulators? We examine two types of explanations: information-based and preference-based explanations. First, and more obviously, we show - based on another original survey - that these preferences in part owe to the fact that voters do not have very precise information about politicians' wealth and wealth accumulation, even though they overwhelmingly believe that their representatives are rich and accumulate wealth rapidly. Exploring the preference-based explanations, we however show that wealth accumulators also likely benefit from the structure of voter preferences. We examine three preference-based arguments: that certain types of wealth accumulators may be tolerated or actively favored; that voters may weigh wealth increase less than some other characteristics, even if they disapprove of wealth accumulation; and that groups of formerly under-privileged voters may have developed a political culture more tolerant of corruption. While we find no evidence for the first of these three preference-related arguments, we find strong evidence

in favor of the latter two arguments. Voters weigh candidates' effort in office more than wealth increase, thus favoring candidates with large wealth increase and good record compared to candidates with little or no wealth increase and a bad record. Finally, in line with recent arguments about the political culture of certain lower-caste groups in North India, we find that Yadavs, a politically important ethnic groups with a history of under-privilege and under-representation, is considerably more tolerant of wealth accumulation than other groups.

These results contribute to several literatures. They first add to the growing comparative literature on the electoral success of politicians who carry attributes that democratic theory usually thinks of as disqualifying. While this literature has explored the rationale for the election of corrupt politicians (e.g. Rundquist, Strom and Peters, 1977; Klašnja and Tucker, 2013; Weitz-Shapiro and Winters, 2013) or criminal candidates (Chauchard, n.d.; Vaishnav, 2011), we focus on a related but so far neglected dimension: extreme wealth accumulation. We show that this information would likely impact voters' evaluations if it was more broadly publicized, especially given an increasing number of countries with mandatory asset declarations (Djankov et al., 2009). In that sense, these results contribute to the evidence in favor of the need for greater transparency as a precondition for accountability (Ferraz and Finan, 2008; Hollyer, Rosendorff and Vreelend, Forthcoming; Pande, 2011). However, our results also suggest that these informational effects may remain limited, for two reasons. First, in line with a common explanation for the electoral success of corrupt politicians (e.g. Banerjee and Pande, 2011; Barbera, Fernandez-Vazquez and Rivero, Forthcoming), voters may weigh information about wealth accumulation less than other attributes of candidates. Second, our evidence suggests that reactions to information about wealth accumulation are heterogeneous. When politically or numerically important groups of voters condone high levels of wealth accumulation, wealth accumulators should continue to win elections.

Finally, we believe our study points to a number of potentially interesting avenues for

further research. In the U.S. and elsewhere, scholars have shown that politicians are often more responsive to rich voters than those with lower incomes (Bartels, 2009; Carnes, 2013; Carnes and Lupu, 2015$b$; Gilens, 2014), potentially in part because those politicians belong to the upper class themselves. A rapidly enriching political class may only exacerbate such representational inequality, which is all the more a concern given the strong disapproval of wealth accumulation we uncover in our data.

Relatedly, while our study focuses on the consequences of politicians' wealth accumulation for public opinion, it may be interesting to study other consequences of rapid enrichment of the political elite. In developing countries, it is for instance likely that high returns to public office increase overall levels of economic inequality in the population. In India, simple calculations suggest that high returns to office do accentuate already large inequalities. Recent data on wealth distribution in India suggests that the *median* Indian state legislator (MLA) would have comfortably sat among the top 1% *at the beginning of her term in office*.[38] Assuming an average real 5-year increase in wealth of about 1,000% (the real rate of accumulation over a term, based on affidavit data), the ability of elected representatives to accumulate wealth in office however implies that *all* legislators - *including legislators from the poorest 10% of all state legislators at the beginning of their term* - do end up as part of the 1% after a single term in office. This is bad news in several respects. While it implies that representatives are increasingly dissimilar from the population, it also imply that they are becoming increasingly similar - i.e. homogeneously very rich - as a group. Worse, this suggests that high returns to office - and the corruption that enable these returns - may contribute to increasing already large levels of inequalities in society.

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[38]Based on Credit Suisse estimates, (`https://publications.credit-suisse.com/tasks/render/file/?fileID=5521F296-D460-2B88-081889DB12817E02`, page 147).

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Figure 11: Interaction effects with wealth increase for specific political parties