Understanding Vote Buying in Nepali Elections*

Jeevan Baniya[†], Stephen A. Meserve[‡], Daniel Pemstein[§], Brigitte Seim[¶]

Abstract

A growing literature posits that that vote buying dynamics depend on characteristics of the context and its voters. We explore vote buying in Nepal using a multi-methods approach combining survey experiments, semi-structured interviews, and focus group discussions. We find that vote buying in Nepal aligns with other contexts in some ways. A list experiment reveals approximately 25% of Nepali voters receive a vote-buying offer and, in an unmonitored yet contingent exchange, the same percentage vote for the offeror candidate or party. Cash and other private goods are the most common offers. In contrast to findings from other contexts, however, voter education level is the strongest predictor of refraining from vote buying in Nepal, and wealth is not a significant predictor. Our list experiment also finds that in Nepal clientelism appears to be a socially undesirable activity. Overall, our results support the increasingly dominant viewpoint that vote buying is highly context dependent.

Keywords: Comparative Political Economy, Political Development, Democratisation, Clientelism, Vote Buying, Nepal

^{*}The authors would like to thank Allen Hicken, Kristen Kao, Ellen Lust, Miquel Pellicer, and seminar participants at the University of Gothenburg and European Political Science Association annual meeting for feedback on this project. At NDSU, Anuj Shrestha programmed our survey instruments, handled data management, and provided all-around fantastic research assistance, while Privthi Awasthi and Prakash Pokhrel helped with translation. In Nepal, Keshav Bashyal, Dipak Basnet, Gruarav Chetri, Amit Gautam, Himalaya Kharel, and Manoj Suji expertly managed data collection teams, improved translations, and provided invaluable and extensive feedback on study and instrument design. This research was supported in part by a Google Faculty Research Award and by the V-Dem Institute through a sub-contract from the University of Gothenburg on Knut and Alice Wallenberg Foundation Grant 2013.0166 (PI: Staffan Lindberg).

[†]Social Science Baha, Kathmandu, Nepal, jbaniya@soscbaha.org

[‡]Department of Political Science, Northern Arizona University, USA, stephen.meserve@nau.edu

[§]Department of Political Science & Public Policy, North Dakota State University, USA, daniel.pemstein@ndsu.edu

Department of Public Policy, University of North Carolina - Chapel Hill, USA, bseim@ad.unc.edu

The literature on clientelism exploded over the last twenty years. Much of this work—both empirical and conceptual—has focused on vote buying. To a large extent, empirical reality in a small set of focus countries has driven theoretical frames for understanding both what vote buying is and how it works. Increasingly, however, social scientists emphasize that clientelism may be only imperfectly conceptually identifiable—you will know it if you see it—but, on the ground, politicians deploy vastly different techniques, tools, and structures. As a consequence, a great deal of the modern literature emphasizes substantial variation across contexts (for example, see Schaffer 2007, Mares & Young 2016, Auerbach, Bussell, Chauchard, Jensenius, Nellis, Schneider, Sircar, Suryanarayan, Thachil, Vaishnav, Vermaand & Ziegfeld 2021).

In this article, we seek to advance our empirical understanding of clientelism by examining the intricacies of vote buying in a single South Asian democratic context, Nepal. We use a nationwide survey and embedded list experiment to explore correlates of vote buying in the Nepal. With the list experiment, we investigate whether vote buying is a sensitive subject for our respondents and estimate its prevalence. Subsequently, we consider basic descriptive questions about how vote buying works in Nepal, including who buys votes, which constituents are more likely to accept targeted goods for their vote, and what goods politicians use to secure votes. Finally, we supplement the quantitative analysis with semi-structured interviews and focus group discussions with Nepali politicians, community leaders, media representatives, and voters.

We find that vote buying is widespread in Nepal, though not ubiquitous. Respondents report rates of vote buying among fellow citizens that far exceed our estimates of its prevalence in the list experiment, suggesting that respondent suspect of vote buying among their fellow citizens is higher than its actual practice. Nepali respondents report not only that they accepted gifts from politicians, but that those gifts influenced their vote. We also find that the surveyed Nepali voters find vote buying socially undesirable. Nepali parties generally

appear to use tangible private goods of immediate utility such as cash, alcohol, and basic foodstuffs as voter compensation, with an additional focus on contingent promises of public patronage jobs. Additionally, wealth is not a strong predictor of whether or not parties target voters for vote buying in Nepal, although parties do target less educated voters.

Put into context of the literature, the lack of an income effect on vote buying clashes with what might be the most common finding about clientelism.¹ By contrast, the social undesirability of vote-buying has no consistent pattern around the world, with some findings featuring strong undesirability (González-Ocantos, Kiewiet de Jonge, Melendez, Nickerson & Osorio 2012) and other contexts indicating no undesirability whatsoever (Kramon 2018). Finally, the private goods we find on offer in Nepal are fairly typical vis a vis the rest of the world.

We aim to situate Nepal's vote buying within the field's broad understanding of the varieties of clientelism. Nepal is economically and politically developing, with a growing middle class, relatively free and fair elections, and an increasingly institutionalized party system. These characteristics suggest that Nepal is a prime candidate for the transition away from vote buying, at least among some voters. The subnational unevenness of many of these factors geographically should create a great deal of variation in patterns of vote buying. Nepal, therefore, represents an excellent case for testing common theories about vote buying while holding a variety of other factors constant by not comparing across countries. Our evidence on the dynamics of vote buying in this context suggests that vote buying can be quite resilient, and that there is no group of voters who are wholly "immune" to its allure.

¹There are exceptions, though, see Bustikova & Corduneanu-Huci (2017).

1 Vote Buying in Nepal

Nepal's unique combination of political and economic features makes it a compelling context for studying vote buying. Nepal has a growing middle class and declining poverty (World Bank Group 2016), yet also high ethnic heterogeneity (CIA World Factbook 2023), inconsistent economic growth (0.4% in 2016 and 9.0% in 2017 (World Bank Group 2017), and double digit unemployment (World Bank Group 2017). Against this backdrop of decreasing inequality yet persistent uncertainty and scarcity, it is unclear whether vote buying should thrive or die. Nepal also has relatively high literacy and education rates (USAID 2023), which is theorized to contribute to the decline of clientelism (Carlin & Moseley 2015, Aidt & Jensen 2017).

Nepal is rapidly democratizing. The Varieties of Democracy (V-Dem) Electoral Democracy Index rates Nepal a 0.67 (on a scale from zero to one) in 2017, which is above the average of 0.48 for the South Asia region and comparable to the 2017 level of El Salvador (0.68) or South Africa (0.73) (Coppedge, Gerring, Knutsen, Lindberg, Skaaning, Teorell, Altman, Bernhard, Fish, Cornell, Dahlum, Gjerlow, Glynn, Hicken, Krusell, Lührmann, Marquardt, McMann, Mechkova, Medzihorsky, Olin, Paxton, Pemstein, Pernes, von Römer, Seim, Sigman, Staton, Stepanova, Sundstöm, Tzelgov, Wang, Wig, Wilson & Ziblatt 2018). Nepal held local and national legislative elections on November 26 and December 7 of 2017. These elections were marked by sporadic violence and manipulation, but were judged largely free and fair by observers (European Union Election Observation Mission 2018). Turnout reached nearly 70% during the 2017 elections, which were assessed to have "relatively stable and enduring political groups which compete for political influence at the national level" (Coppedge et al. 2018). Nepal also has a relatively institutionalized party system, scoring a 0.87 (on a scale from zero to one) in 2017 on V-Dem's Party Institutionalization Index (Coppedge et al. 2018). In particular, political parties in Nepal tend to have publicly avail-

able party platforms and national legislators tend to vote with their party on important bills (Coppedge et al. 2018).

The above background characteristics of Nepal, and the variation in their distribution, lead us to believe that there will be commensurate variation in vote buying behaviors which can be explored empirically. In general, behavioral and micro-level work on Nepal by economists and political scientists is not focused on testing mainstream theories of clientelism.² Most work focuses on characteristics somewhat unique to Nepal, especially development and foreign aid outcomes related to the Nepali earthquake and natural disasters (Eichenauer, Fuchs, Kunze & Strobl 2020, Le Billon, Suji, Baniya, Limbu, Paudel, Rankin, Rawal & Shneiderman 2020, Shakya, Basnet & Paudel 2022), and questions around civil conflict effects (Raut & Tanaka 2021). There are a few studies that focus on elections and its results (Lawoti 2005, Gulzar, Hai & Paudel 2021), but their focus has been on candidates, participation, and representation of various social groups. Beyond this, many other social science studies are descriptive in nature, focusing on institutions of democracy, decentralization and governance (Agrawal & Gupta 2005, Dahal, Uprety & Subba 2002, Gellner & Hachhethu 2018), maoist insurgency and counter-insurgency and its impacts and implications (Ogura 2008, Shneiderman 2003, Turin & Shneiderman 2004, Raut & Tanaka 2021), minorities, marginalized communities, and regional differences (Gellner 2007, Lawoti & Hangen 2013, Hangen 2010), and opposition and autocracy dynamics (Shah 2008, Shrestha & Adhikari 2010).

In order to narrow our focus theoretically, we specifically explore Nepali contingent vote buying behavior.³ This decision was, in part, driven by tractability but also by our qualitative data: as we will discuss, contingent vote buying is widespread in Nepal and considered

²Studies at the macro-level are more common (for example, Joshi & Mason 2011).

³We define contingent vote-buying as actors giving inducements to voters wherein "voters expect to receive benefits only if they respond with the patron's desired political behavior" (Hicken & Nathan 2020, 279). This focus limits our ability to draw conclusions about gift-giving, credibility buying, iterative or relational clientelism, and other less direct forms of vote appeals using private goods.

effective. To understand vote buying in Nepal, we focus on four basic questions pulled from the broader literature on clientelism: 1) How common and socially undesirable is vote buying? 2) Which voters sell votes? 3) What do politicians offer when buying votes? and 4) How are vote transactions monitored? This framework is consistent with a "varieties of clientelism" approach (Gans-Morse, Mazzuca & Nichter 2014, Schaffer 2007, Mares 2019), which argues there will be significant variation in the answers to these questions depending on the political context.

2 Data and Methods

To answer these questions in the context of Nepal, we combine survey data from Nepali voters with qualitative evidence from 32 semi-structured interviews and three focus group discussions with Nepali politicians, community leaders, media representatives, and voters. Our exploration of the first question about the prevalence, and social undesirability, of vote buying relies primarily on the survey data. Answering the second and third questions about which voters are susceptible to vote buying and the types of goods elites offer to Nepali voters relies on both quantitative and qualitative evidence. Finally, our engagement with the fourth question about the mechanics of vote buying involves analyzing our elite interviews. While we do not have a representative sample of brokers, like some other studies, we nevertheless have interview data from a variety of elites who would fit the definition of brokers.

2.1 Survey

We conducted a nation-wide survey of Nepali voters in the spring and summer of 2018, following legislative elections in late 2017.

2.1.1 Sample

Our sample was drawn at the level of the Village Development Committee (VDC), drawing on the 2011 census data. The VDCs were replaced by (rural) municipalities in 2017, though the overlap between the VDCs and the municipalities is significant, and we were able to map all of the old VDCs to current municipalities. There are (were) 3,939 VDCs in Nepal.

To ensure a sufficiently large population from which to recruit participants, we restricted the sample to VDCs with more than 500 people. Then, since candidates are more likely to engage in clientelism in competitive elections because their vote buying be more likely to affect electoral outcomes, we restricted the sample to VDCs within first-past-the-post (FPTP) constituencies where the winning candidate in the 2017 national legislative elections won 60% or less of the vote, and where there are six or more ethnic groups (using the ethnicity census data to calculate the effective number of ethnic groups). Next, to ensure variation on industry and education, we calculated the percentage of the population working outside agriculture and the percentage of the population who completed secondary school, and then restricted the population of VDCs to only those in the bottom and top quartiles of these two variables. These restrictions dropped the theoretical population of VDCs to 1,179.

Finally, from this restricted population of VDCs, we sampled 172 VDCs, stratifying on population density (as a proxy for rural vs. urban location of the community) and the percentage of homes with electricity (as a proxy for community average wealth). We removed 54 especially remote VDCs with prohibitive transportation costs from the sample, resulting in a sample of 117 VDCs.

Within each sampled unit, the enumeration team worked with a local facilitator (typically a well-educated community member with some research experience) to recruit 11 participants in advance of the research team's arrival. The sampling protocol the facilitators followed was designed to obtain a randomly specified wealth distribution at each site,⁴ critical for a

⁴This meant that each field site sampled participants with a potentially unrepresentative wealth distribu-

behavioral game that we conducted in conjunction with this study. In total, the projected sample included 1,278 individuals.

2.1.2 List Experiment

To examine the first research question - 1) How common and socially undesirable is vote buying? - we partially relied on a list experiment similar to ones González-Ocantos et al. (2012) fielded in Nicaragua and Kramon (2016) deployed in Kenya. List experiments provide one way to elicit sensitive information from participants. In particular, by obfuscating whether or not any given participant took part in a sensitive behavior, they provide a way to estimate the prevalence of such behavior within a sample, while assuring participants that their personal behavior will remain obscured. While list experiments can generate biased estimates when respondents misunderstand how they work (Kramon & Weghort 2019), when validated with objective measures, they have been shown to reduce bias, at the cost of efficiency (Rosenfeld, Kosuke & Shapiro 2016). We extensively piloted our list experiment to help ensure that respondents understood how it worked, and to make sure that the our control items were appropriate to the Nepali context. We also matched our experiment as closely as possible to similar studies in other contexts to maximize comparability with prior work.

First, enumerators read participants the following prompt:

Now I am going to read you a list of some things that people have told us happened to them during the election campaign for the national parliament. I am going to read you the whole list, and then I want you to tell me how many of the different things happened to you. Please do not tell me which of the things happened to you, just how many. If you would like me to repeat the list, I will do so.

tion, but because the distribution was assigned to sites at random, the wealth distribution across the overall sample should still be representative.

We randomly assigned participants to one of three groups: 1) control, 2) offer treatment, or 3) quid-pro-quo treatment. Enumerators read the following list of experiences to all three groups:

- 1. Politicians put up posters or signs in the area where you live.
- 2. You read the newspaper almost every day to learn about the campaign.
- 3. You met a politician personally to discuss his or her candidacy.
- 4. You discussed the campaign with a local party leader.

Additionally, enumerators read the following item to participants in the offer treatment group:

5. You received money, food, alcohol, material goods, or assistance obtaining small loans on behalf of a party or politician during the campaign.

Finally, enumerators read the following item to participants in the quid-pro-quo treatment group:

5. You voted for a party or politician because they, or their representative, gave you money, food, alcohol, material goods, or assistance obtaining small loans during the campaign.

The control items are almost identical to the ones that Kramon (2016) used in his study and have some overlap with those in González-Ocantos et al. (2012). Within our sample, the control group average was 2.5 and less than 1% of control group respondents reported a count of 0. But just under 8% of control group respondents reported a count of 4, indicating some possibility of downward bias among respondents in treatment conditions who might worry about revealing their behavior. Nonetheless, about 5% of respondents in each treatment condition reported a count of 5, so it is unlikely that truncation-driven downward bias would substantially exceed roughly three percentage points.

2.1.3 Direct Survey Questions

To finish answering the first research question - 1) How common and socially undesirable is vote buying? - we compared the estimates of vote buying prevalence drawn from the list experiment to direct survey questions about vote buying. This combination enables us to probe how common vote buying by respondents is, how normatively problematic vote-buying is perceived to be, and how common vote-buying is perceived to be by ordinary Nepali citizens.

First, we directly asked if participants would accept bribes for votes.

If a politician or party offered you a cash payment or material good in exchange for your vote, how likely would you be to accept it?

- Very likely
- Slightly likely
- Slightly unlikely
- Very unlikely

In case the above question is somewhat sensitive, we also asked respondents to estimate how prevalent vote buying is in their constituency by moving stones into piles (with instructions for the survey enumerators in brackets):

We understand that sometimes voters receive monetary compensation or materials from politicians or political parties in exchange for their vote in elections. We understand these exchanges happen for many reasons. Here are 10 stones that represent all the voters in this constituency. [Put the stones on the table.] Please separate these into two piles. Please move a stone here [point to the right of enumerator] for the voters you think would receive monetary compensation or materials from politicians or political parties in exchange for their vote, and please move a stone here [point to the left of

enumerator] for the voters you think would not do this. [Note that all the stones must be moved by the participant. Do not read answer options aloud, and instead just wait for the participant to move the stones, and then record their choices.]

Third, we asked participants to describe their attitudes about politicians who buy votes with money or loans:⁵

A candidate for national parliament is offering people who pledge their votes [a small amount of money/assistance obtaining small loans]. This behavior is:

- Very moral
- Slightly moral
- Slightly immoral
- Very immoral

We also asked a battery of questions of respondents appropriate to the Nepali context that, when combined with the questions above, allow us to answer the second research question - 2) Which voters sell votes? These questions measured respondent political participation, education, wealth, and urban-rural location. The Supplementary Material (SM) contains detailed descriptions of how we constructed political participation. Education, wealth, and urban-rural location play important roles in our results, so we briefly describe each measure here. Education is a dummy variable, set to one if the respondent reported completing a secondary education or higher. We constructed our wealth index using item response theory (IRT) to scale together responses to questions about relative wealth self-placement, largest income source, types of medical and educational services the respondent's family uses, home construction materials, and household fuel source. While there is no objective measure of wealth against which to validate the wealth measure, it behaves how we

⁵We randomized the type of offer.

would expect: the most discriminating indicators in the IRT show that wealthy individuals tend to have concrete or brick homes, use LPG to cook, have business provide their largest source of income, use private or Indian hospitals, and send their children to private schools. Less wealthy people tend to have unmortared stone homes, metal roofs, cook with wood, use health posts, and send their children to public schools. Our urban-rural measure is based on self-report: "Is your residence urban or rural?"

Finally, we use a direct survey question about politician vote buying offers to answer the third research question - 3) What do politicians offer when buying votes? We chose potential answers based on the semi-structured interviews and focus group discussions, which suggested that Nepali citizens in most environments were induced using private goods and quite tangible transactions. Nevertheless, we also included the possibility of patronage via jobs and access to loans, two less tangible transactions that approximate exchanges in longer-term relationships, using more public-facing goods, as one often finds in other contexts.

Did politicians running for national parliament, or their representatives, ever offer any of the following things directly to individual voters in return for their votes, in your constituency, during the last election? Check all that apply.

- Cash
- Food
- Alcohol
- Consumer goods
- Building materials
- Access to loans
- Jobs

3 Results

3.1 RQ1: How common and socially undesirable is vote buying?

Figure 1 reports the results of regressing participants' reported counts in the list experiment on dummy variables for treatment condition.⁶ Twenty-one percent of respondents report parties offered to buy their vote and 25% of respondents voted for a party because they did so. Both coefficient estimates are statistically significant, although the 95% confidence intervals are quite large, suggesting that 5-37% of Nepali voters receive vote-buying offers and 9-40% both receive offers and vote accordingly.

We note that, even with a large sample, we find no statistically significant difference between bribe-offering and bribe-taking. While we did not pre-specify this test of the fourth research question - 4) How are vote transactions monitored? - we take this as suggestive evidence that vote buying in Nepal has a largely quid-pro-quo nature even without explicit monitoring. In other words, though voting is purportedly secret in Nepal and there is no de jure monitoring, the de facto agreement between politician and voter seems to be a contingent vote-buying exchange: voters vote for the candidate that offered them a bribe.

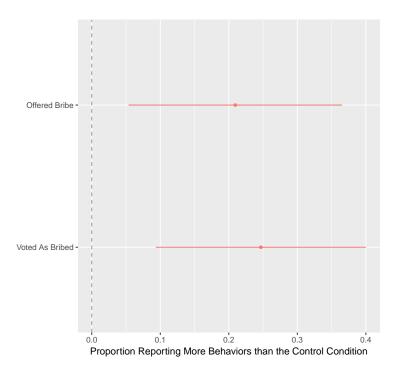
Interestingly, respondents believe that far more vote-buying occurs—or could occur—than the list experiment implies. The stone-moving task, where we asked participants to arrange 10 stones to indicate what proportion of voters they believed would take a bribe in exchange for their vote, indicates that participants believe that between 41 and 56 per cent of voters would sell their votes.⁷

On the other hand, we find substantial evidence of a desirability heuristic with respect

⁶Ordinary least squares regression is equivalent to the traditional difference in means estimator, which Ahlquist (2018) argues is more robust to measurement error than item count technique maximum likelihood estimators. This result is robust to the inclusion of controls for region, gender, age, caste, religion, literacy, education, urban-rural location, and income proxies (housing materials and cooking fuel), providing evidence for effective randomization.

⁷See SM for robustness tests.

Figure 1: List experiment results



to vote-buying in Nepal. When we asked participants directly how likely they would be to accept a bribe for their vote, 81% indicated that they were "very unlikely," 8% said "slightly unlikely," 6% said "slightly likely," and 4% maintained that they were "very likely" to take a bribe. So, while the list experiment indicates that about 25% of participants sold their votes during the election, less than half that number directly admitted that they would be either very or slightly likely to do so.

Respondents also overwhelmingly disapprove of vote buying. When asked about a hypothetical parliamentary candidate offering a small amount of cash or assistance in obtaining small loans⁸ in return for vote pledges, 79% of respondents described the behavior as "very immoral" and an additional 12% of respondents described it as "slightly immoral."

We find these results somewhat surprising, in light of our qualitative evidence. In particular, we found little reticence on the part of interview and focus group participants to discuss

⁸We randomized this treatment. Here we report aggregate responses.

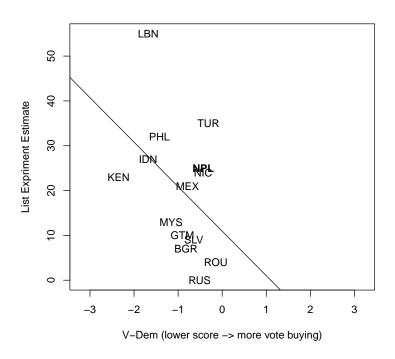
vote buying, even their own experience with accepting offers. They talked about exchanges of cash, food, and petrol for votes, ubiquitous feasts before elections, and a general openness of both brokers buying votes but also citizens demanding private goods for their votes. Yet, while Nepalis appear to regard clientelism, and vote-buying in particular, as endemic to the political process in Nepal, they regard such practices as inappropriate and are often unwilling to directly admit to engaging in them. We conclude that effective measurement of vote-buying in the Nepali context requires the use of techniques, like list experiments, to correct for social desirability bias.

To situate these results, Nepali citizens appear to be engaged in vote buying at a similar rate to those documented in other list experiments, at around 25% of respondents. While vote buying is well-studied, we uncovered only about a dozen publications and working papers that use list experiments to produce estimates of vote buying prevalence. Figure 2 plots the estimates in these studies against the Varieties of Democracy (V-Dem) project's expert-survey-based vote buying prevalence score (Coppedge et al. 2018). While the expert scores and list-experiment results correlate (r = -0.41), there is substantial noise in expert estimates, and one clearly gains substantial information by asking voters about their experiences.

Our finding of the social undesirability of vote buying in Nepal aligns with research on some contexts but not others. González-Ocantos et al. (2012) find their direct questions greatly underestimate the amount of clientelism relative to their survey experiment, while Kramon (2018) finds no difference whatsoever in Kenya across direct question and list experiment estimates. Much of the literature on India simply asks and analyzes direct questions about bribes and citizen demands for local public services, assuming its lack of social stigma (Kruks-Wisner 2018), despite that the fact that Indian respondents are only marginally more

⁹The list experiments use different designs and questions. Generally, we report vote buying prevalence, rather than vote selling (i.e., respondents report not only receiving offers but also accepting them) prevalence, when available.

Figure 2: Vote-buying prevalence estimates.



likely than Nepalis (13% to 18%) to admit they have sold their votes in response to a direct survey question (Transparency International 2020). In general, as in our study, the literature reveals that prevalence estimates vary between list experiments and direct self-report, emphasizing the need to more broadly deploy list experiments, and similar techniques, if we want to measure vote buying accurately.

3.2 RQ2: Which voters sell votes?

We next use a battery of demographic questions to sort through which types of individuals receive vote-buying offers.

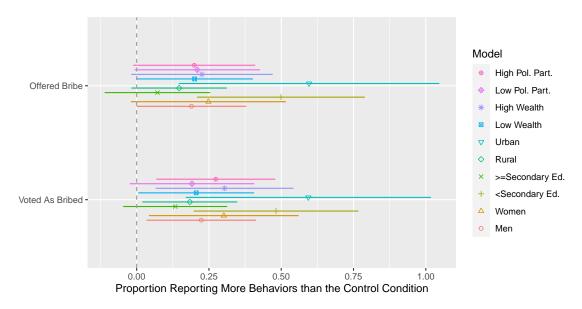


Figure 3: List experiment within demographic subsets

Figure 3 disaggregates the list experiment results, comparing treatment to control conditions within demographic subsets of respondents.¹⁰ We find no statistically significant

¹⁰To aid in interpretation of the figure, we report subset model regression coefficients—regressing experimental treatments on reported counts for split samples of male/female voters, voters with less than/at least a secondary education, rural/urban voters, voters with less/more than average wealth index scores, and voters with less/more than average political participation scores. However, we base evaluations of statistical significance on a model that interacts the treatment conditions with each of the demographic variables (wealth is interval in this model, while education and urban-rural are dummies) in a single regression. The

interactions between list experiment treatments and rural-urban location, wealth, or political participation.

In the literature at large, client wealth is, with few exceptions, considered the most important driver of vote-buying behavior and strongly determinant of responses in most surveys and survey experiments like ours. Indeed, we are only aware of a few studies disputing the primacy of personal wealth for predicting vote selling (e.g. Bustikova & Corduneanu-Huci 2017). Clientelism is usually either targeted at low-income areas by certain parties that specialize in clientelism (e.g., Peronists in Argentina) (Auyero 2000, Stokes 2005, Stokes, Dunning, Nazareno & Brusco 2013, Weitz-Shapiro 2014) or distributed more generally across parties, castes, and ethnicities (Auerbach & Thachil 2020). In contrast, our wealth index has a statistically *insignificant* relationship with vote-buying.¹¹

Similarly, we find that rural/urban splits do *not* determine who receives bribe offers or who sells votes in Nepal.¹² While this result is interesting, suggesting that parties try to capture urban and rural votes in equal measure, the results are not surprising, per se. In the literature, there is no steady result regarding whether urban or rural residents sell their votes more, though our finding does run counter to Auerbach & Kruks-Wisner (2020).

Our strongest result is that education is a durable predictor of which individuals are engaged in clientelism. In particular, respondents who self-report at least a secondary school education are both less likely to be the targets of vote buying offers and to cast votes in exchange for vote buying offers than participants with lower education levels. Point estimates from the list experiment indicate that only about 7-14% of voters with at least a secondary

split-sample and fully interactive results are consistent with one another: the only split-sample coefficients that are statistically significantly different from one another are for education and the only statistically significant interaction term is for the education dummy (p < 0.05 in both cases). See the SM for the regression table for the interactive model.

¹¹This null may be due to measurement error. While our wealth index has strong face validity, in terms of how items load onto the index, we have no objective measure of wealth against which to validate the index.

¹²This null could also be driven by measurement error. Urban-rural location is self-reported and may therefore be rather noisy.

education engage in either activity and these point estimates are not statistically significantly different from zero. On the other hand, the list experiment finds that just under 50% of voters with less than a secondary school education are either given a vote-buying offer or accept it and these estimates are statistically significant.

While education is often found to be a correlate of clientelism in other contexts, most studies ultimately conclude that wealth is the underlying cause of both education levels and vote selling tendencies.¹³ Our results, however, suggest that education operates independently of wealth in the Nepal context.¹⁴ Our result is unusual but not unprecedented: Çarkoğlu & Aytaç (2015) find an independent education effect while Carlin & Moseley (2015) find individual normative values about democracy confound the relationship. Possible psychological explanations for the relationship include education imbuing democratic values and hardening towards clientelism among voters, or education informing individuals about the negative and undesirable aggregate effect of clientelism on political and economic development. The micro-dynamics of how education shifts vote-buying patterns warrant further study, both in Nepal and elsewhere.

Before moving on, we want to stress that the qualitative portion of our study provided somewhat conflicting evidence as to which factors drive susceptibility to vote buying appeals. Most perceived that poorer individuals are susceptible to appeals. On the other hand, this observation was often accompanied by a characterization of these voters as disadvantaged in other ways as well—low caste status, low educational attainment (particularly literacy), or even broader low political engagement/political information. In short, while interviewees readily identified being poor as the key driver, it was not always obvious they were disentangling poverty from its other correlates. By contrast, at least one high-level interviewee with experience as a national chief of staff told us that he did not believe the transition

¹³Kramon (2016) even finds that voters with at least a primary education are *more* likely to be involved in vote buying.

¹⁴Note that our education dummy and wealth index are only moderately correlated, at 0.17.

to high incomes would change clientelistic relations but that it would merely increase the sophistication of the items and services offered.¹⁵

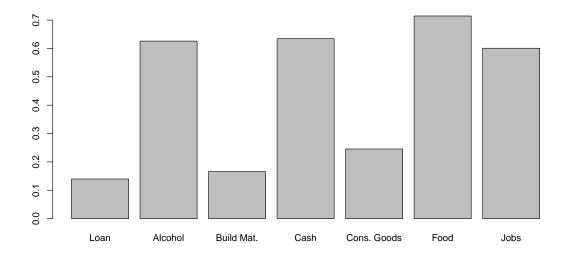
In considering rural versus urban voters, however, our qualitative evidence told a different story: almost every respondent specifically noted unequivocally that they felt rural status was a driver of clientelistic connections. That makes our null results for urban/rural quite surprising. One possible reason for the disconnect in quantitative and qualitative evidence could be that several interviewees split rural communities into a number of different subcategories (e.g., different elevation rural communities) with different sensitivity to clientelism, perhaps suggesting a more subtle connection between urbanity and vote buying worthy of future research.

3.3 RQ3: What do politicians offer when buying votes?

Nepali parties offer a wide array of targeted payments when attempting to buy votes. Figure 4 displays the proportion of survey respondents who indicated that parties offered various incentives in their constituencies. Alcohol, cash, food, and patronage jobs are all common, with 60% or more of participants indicating that parties offer those items in their constituencies. Loans, building materials, and consumer goods are all substantially less common.

¹⁵Author interview with former party secretary in Kathmandu.

Figure 4: Proportion of respondents indicating that politicians offered each of the following types of bribes in their consituency



These findings align with our qualitative evidence. It appears that the dominant form of vote buying in Nepal, with the notable exception of patronage, is direct exchange of highly fungible goods. A squatter settlement representative, for example, mentioned that all parties make the same promises about development of their communities, but the offers of cash, clothes and other materials were also made by some parties. A local community leader emphasized the role of a mix of direct cash payments, organizing parties with alcohol, and the provision of meat around election time to voters as important for victory. Similarly, several of our interviewees in rural areas mentioned pre-election feast activity distributing food and drink as part of a vote-buying operation. On the other hand, a former higher level party secretary emphasized the role of politicians providing favors with public agencies and/or help navigating bureaucratic red tape for citizens in exchange for votes as a form of clientelism in urban areas, which suggests more subtle, indirect exchanges which may not be

¹⁶Focus group response in Kathmandu.

¹⁷Author interview with local community leader in Dhading.

captured in our vote-buying treatments. 18

In sum, the Nepali voters in our sample tend to receive discrete, tangible benefits before elections—most often receiving cash, alcohol or food—with the notable exception of promises of patronage jobs. Across the world, the most universal vote-buying offer is cash, such as in UK/Ireland (Lehoucq 2007), gift-giving in Kenya (Kramon 2016), and the cash-for votes schema in Taiwan (Wang & Kurzman 2007). As in Nepal, politicians in other contexts also buy votes with other material goods like food, medicine, and other private goods, sometimes diverted from public entities (e.g. Auyero 2000). Ultimately, like Nepal, the literature now explains much of the product diversity within pure private good exchange by taking the perspective of the client themselves: what they need and therefore what they demand of brokers (Pellicer, Wegner, Bayer & Tischmeyer 2020, Nichter & Peress 2017).

3.4 RQ4: How are vote transactions monitored?

Our semi-structured interviews and focus group discussions documented ubiquitous, mostly unmonitored, vote buying across Nepal, sometimes with special comment given to vote-buying behavior in the Terai. We did not find qualitative evidence in our study that third parties were able to acquire information about vote choice directly. On the other hand, we did find that politicians and local elites felt that the system worked by either indirectly monitoring votes or simply via norms of reciprocity, creating quid pro quo transactions even if their agents could not determine in an iron-clad fashion if voters took benefits and then defected at the ballot box. One party leader, for example, emphasized that voters felt "compelled" to give a vote in return and that political actors would know if they defected.²⁰ This unmonitored conditionality is not atypical of literature, which finds direct vote monitoring

 $^{^{18}\}mathrm{Author}$ interview with former party secretary in Kathmandu.

¹⁹Mares & Young (2016) provide an excellent overview of the literature on the varieties of positive and negative inducements.

²⁰Author interview with major party leader.

"surprisingly rare" but quid pro quo still sustained in many contexts (Hicken & Nathan 2020, 281).

On the whole, an interviewed local community leader in Dhading described a somewhat chaotic local competitive clientelism scene where rival parties engage in a competition for votes before the election, all while monitoring each other. If a party was caught in especially obvious fashion, parties might claim fraud or appeal to the media. In his view, candidates engaged in clientelism would certainly be perceived as immoral, perhaps influencing the rest of their career as they were caught in a clientelistic political cycle. He also emphasized that there was virtually no effective monitoring of these votes or violation of the ballot box, reinforcing an increasingly common view of how vote buying is practiced in the literature. As discussed above, our list experiment results are consistent with this snapshot.

Broadly speaking, vote buying exchanges in Nepal are mostly consistent with a contingent vote-buying strategy, an exchange of private goods for votes in the vein of Stokes et al. (2013) through local elite brokers (Camp 2017, Keefer & Vlaicu 2008, Larreguy, Marshall & Querubín 2016, Nathan 2019). Compared to the system of workplace intimidation described by Frye, Reuter & Szakonyi (2019) or the unstructured gift giving and credibility buying outlined by Kramon (2018) in Kenya, clientelism in Nepal seems more instrumental and transactional rather than more institutional or reputation-based.

4 Conclusion

Overall, our results fit nicely with the prevailing literature on clientelism, which emphasizes the extensive variety in clientelist practices. Local political and economic context matter, and modes of clientelism are sensitive to cross-national differences in both top-down party strategy and bottom-up demand from voters. We also find a form of clientelism in Nepal—one with implied contingency, but little explicit monitoring—that is in line with a more

nuanced understanding about how vote-buying works in practice than is reflected in traditional models. Nonetheless, the specifics of the Nepal case—such as what sort of goods are on offer, and who sells their vote—are only somewhat consistent with finding from other studies. Thus, we think that perhaps the main take-away from this study is that it is important to further expand our understanding of the "varities of clientelism," and to broaden our empirical understanding of what clientelism means in different places. Such descriptive understanding is already causing us to re-evaluate core theoretical models. And yet, while a large body of literature studies clientelism, our descriptive grasp of its extent, and countours, remains limited.

References

- Agrawal, Arun & Krishna Gupta. 2005. "Decentralization and Participation: the Governance of Common Pool Resources in Nepal's Terai." World Development 33(7):1101–1114.
- Ahlquist, John. 2018. "List Experiment Design, Non-Strategic Respondent Error, and Item Count Technique Estimators." *Political Analysis* 26(1):34–53.
- Aidt, Toke S. & Peter S. Jensen. 2017. "From Open to Secret Ballot: Vote Buying and Modernization." Comparative Political Studies 50(5):555–593.
- Auerbach, Adam Michael & Gabrielle Kruks-Wisner. 2020. "The Geography of Citizenship Practice: How the Poor Engage the State in Ruraland Urban India." *Perspectives on Politics* 18(4):1118–1134.
- Auerbach, Adam Michael, Jennifer Bussell, Simon Chauchard, Francesca R. Jensenius, Gareth Nellis, Mark Schneider, Neelanjan Sircar, Pavithra Suryanarayan, Tariq Thachil, Milan Vaishnav, Rahul Vermaand & Adam Ziegfeld. 2021. "Rethinking the Study of Electoral Politics in the Developing World: Reflections on the Indian Case." Perspectives on Politics pp. 1–15.
- Auerbach, Adam Michael & Tariq Thachil. 2020. "Cultivating Clients: Reputation, Responsiveness, and Ethnic Indifference in India's Slums." *American Journal of Political Science* 64(3):471–487.
- Auyero, Javier. 2000. "The Logic of Clientelism in Argentina: An Ethnographic Account."

 Latin American Research Review.
- Bustikova, Lenka & Cristina Corduneanu-Huci. 2017. "Patronage, Trust, and State Capacity: The Historical Trajectories of Clientelism." World Politics 69(2):277–326.

- Camp, Edwin. 2017. "Cultivating Effective Brokers: A Party Leader's Dilemma." British Journal of Political Science 47(3):521–543.
- Carlin, Ryan E. & Mason Moseley. 2015. "Good Democrats, Bad Targets: Democratic Values and Clientelistic Vote Buying." *Journal of Politics* 77(1):14–26.
- Çarkoğlu, Ali & S. Erdem Aytaç. 2015. "Who gets targeted for vote-buying? Evidence from an augmented list experiment in Turkey." European Political Science Review 7:547–566.
- CIA World Factbook. 2023. "Nepal.".
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Agnes Cornell, Sirianne Dahlum, Haakon Gjerlow, Adam Glynn, Allen Hicken, Joshua Krusell, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Moa Olin, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Johannes von Römer, Brigitte Seim, Rachel Sigman, Jeffrey Staton, Natalia Stepanova, Aksel Sundstöm, Eitan Tzelgov, Yi-ting Wang, Tore Wig, Steven Wilson & Daniel Ziblatt. 2018. V-Dem Dataset v8. Technical report Varieties of Democracy Project.

URL: https://ssrn.com/abstract=3172819

- Corstange, Daniel. 2010. "Vote Buying under Competition and Monopsony: Evidence from a List Experiment in Lebanon." Annual Conference of the American Political Science Association.
- Cruz, Cesi. 2019. "Social Networks and the Targeting of Vote Buying." Comparative Political Studies 52(3):382–411.
- Dahal, Dev Raj, Hari Uprety & Phanindra Subba. 2002. Good Governance and Decentralization in Nepal. Kathmandu: Center for Governance and Development Studies in cooperation with Friedrich-Ebert-Stiftung.

- Eichenauer, Vera Z, Andreas Fuchs, Sven Kunze & Eric Strobl. 2020. "Distortions in Aid Allocation of United Nations Flash Appeals: Evidence from the 2015 Nepal Earthquake."

 World Development 136:1–17.
- European Union Election Observation Mission. 2018. "Final Report, Nepal: House of Representatives and Provincial Assembly Elections, 26 November and 7 December 2017.".
 - URL: https://eeas.europa.eu/sites/eeas/files/final_report_eu_eom_nepal_2017._23_march2018.pdf
- Frye, Timothy, Ora John Reuter & David Szakonyi. 2019. "Hitting Them with Carrots: Voter Intimidation and Vote Buying in Russia." *British Journal of Political Science* 49(3):857–881.
- Gans-Morse, Jordan, Sebastián Mazzuca & Simeon Nichter. 2014. "Varieties of Clientelism: Machine Politics During Elections." American Journal of Political Science .
- Gellner, David & Krishna Hachhethu, eds. 2018. Local Democracy in South Asia: MIcro-processes in Nepal and its Neighbors. Los Angeles: SAGE.
- Gellner, David N. 2007. "Caste, Ethnicity, and Inequality in Nepal." *Economic and Political Weekly* pp. 1823–1828.
- Gelman, Andrew & Donald B Rubin. 1992. "Inference from Iterative Simulation using Multiple Sequences." Statistical Science 7:457–511.
- González-Ocantos, Ezequiel, Chad Kiewet de Jonge & Covadonga Meseguer. 2018. "Remittances and Vote Buying." *Latin American Research Review* 53(4):689–707.
- González-Ocantos, Ezequiel, Chad Kiewiet de Jonge, Carlos Melendez, David W. Nickerson & Javier Osorio. 2012. "Vote Buying and Social Desirability Bias: Experimental Evidence from Nicaragua." *American Journal of Political Science* 56(1):202–217.

- González-Ocantos, Ezequiel, Chad Kiewiet de Jonge, Carlos Melendez, Javier Osorio & David W. Nickerson. 2020. "Carrots and sticks: Experimental evidence of vote-buying and voter intimidation in Guatemala." *Journal of Peace Research* 57(1):46–61.
- Greene, Kenneth. 2016. "Why Vote Buying Fails: Campaign Effects and the Elusive Swing Voter." Unpublished Manuscript. http://cpd.berkeley.edu/wp-content/uploads/2016/03/Greene-Why-Vote-Buying-Fails.pdf. Last Accessed 2/11/2022.
- Gulzar, Saad, Zuhad Hai & Binod Kumar Paudel. 2021. "Information, Candidate Selection, and the Quality of Representation: Evidence from Nepal." *Journal of Politics* 83(4):1511–1528.
- Hangen, Susan I. 2010. The Rise of Ethnic Politics in Nepal. Routledge.
- Hicken, Allen & Noah L. Nathan. 2020. "Clientelism's Red Herrings: Dead Ends and New Directions in the Study of Nonprogrammatic Politics." Annual Review of Political Science 23(1):277–294.
- Johnson, Valen E. & James H. Albert. 1999. Ordinal Data Modeling. New York: Springer-Verlag.
- Joshi, Madhav & T. David Mason. 2011. "Peasants, Patrons, and Parties: The Tension between Clientelism and Democracy in Nepal." *International Studies Quarterly* 55(1):151–175.
- Keefer, Philip & Razvan Vlaicu. 2008. "Democracy, Credibility, and Clientelism." *Journal of Law, Economics, and Organization* 24(2):371–406.
- Kramon, Eric. 2016. "Where is vote buying effective? Evidence from a list experiment in Kenya." *Electoral Studies* 44:397–408.

- Kramon, Eric. 2018. Money for Votes: The Causes and Consequences of Electoral Clientelism in Africa. Cambridge: Cambridge University Press.
- Kramon, Eric & Keith Weghort. 2019. "(Mis)measuring Sensitive Attitudes with the List Experiment: Solutions to List Experiment Breakdown in Kenya." Public Opinion Quarterly 83.
- Kruks-Wisner, Gabrielle. 2018. "The Pursuit of Social Welfare: Citizen Claim-Making in Rural India." World Politics 70(1):122–163.
- Larreguy, Horatio, John Marshall & Pablo Querubín. 2016. "Parties, Brokers, and Voter Mobilization: How Turnout Buying Depends Upon the Party's Capacity to Monitor Brokers." American Political Science Review 110(1):160–179.
- Lawoti, Mahendra. 2005. Towards a a Democratic Nepal. New Dehli: SAGE.
- Lawoti, Mahendra & Susan Hangen, eds. 2013. Nationalism and Ethnic Conflict in Nepal.

 Routledge.
- Le Billon, Philippe, Manoj Suji, Jeevan Baniya, Bina Limbu, Dinesh Paudel, Katharine Rankin, Nabin Rawal & Sara Shneiderman. 2020. "Disaster Financialization: Earthquakes, Cashflows and Shifting Household Economies in Nepal." *Development and Change* 51:939–969.
- Lehoucq, Fabrice. 2007. When Does a Market for Votes Emerge? In *Elections for Sale:*The Causes and Consequences of Vote Buying, ed. Frederic Charles Schaffer. Boulder:

 Lynne Rienner Publishers pp. 33–46.
- Mares, Isabela. 2019. "Varieties of Clientelism in Hungarian Elections." Comparative Politics 51(3):449–480.

- Mares, Isabela, Aurelian Muntean & Tsveta Petrova. 2017. "Pressure, Favours, and Votebuying: Experimental Evidence from Romania and Bulgaria." *Europe-Asia Studies* 69(6):940–960.
- Mares, Isabela & Lauren Young. 2016. "Buying, Expropriating and Stealing Votes." *Annual Review of Political Science* 19:267–288.
- Martin, Andrew, Kevin Quinn & Jong Hee Park. 2011. "MCMCpack: Markov Chain Monte Carlo in R." *Journal of Statistical Software* 42(9).
- Muhtadi, Burhanuddin. 2019. The Prevalence of Vote Buying in Indonesia: Building an Index. Singapore: Springer Singapore pp. 45–79.
- Nathan, Noah. 2019. Electoral Politics and Africa's Urban Transition: Class and Ethnicity in Ghana. New York: Cambridge University Press.
- Nichter, Simeon & Michael Peress. 2017. "Request Fulfilling: When Citizens Demand Clientelist Benefits." Comparative Political Studies 50(8):1086–1117.
- Ogura, Kiyoko. 2008. "Seeking State Power: the Communist Party of Nepal (Maoist)."

 Berghof Research Center for Constructive Conflict Management.
- Pellicer, Miquel, Eva Wegner, Markus Bayer & Christian Tischmeyer. 2020. "Clientelism from the Client's Perspective: A Meta-Analysis of Ethnographic Literature." *Perspectives on Politics* pp. 1–17. Firstview.
- Raut, Nirmal Kumar & Ryichi Tanaka. 2021. "Monitoring Health Services Delivery: Evidence from Civil Conflict in Nepal." World Development 146:1–16.
- Rosenfeld, Bryn, Imai Kosuke & Jacob N. Shapiro. 2016. "An Empirical Validation Study of Popular Survey Methodologies for Sensitive Questions." *American Journal of Political Science* 60:783–802.

- Schaffer, Frederic Charles. 2007. Why Study Vote Buying? In *Elections for Sale: the Causes and Consequences of Vote Buying*, ed. Frederic Charles Schaffer. Boulder: Lynne Rienner Publishers.
- Shah, Saubhagya. 2008. Civil Society in Uncivil Places: Soft State and Regime Change in Nepal. Washington DC: East-West Center Washington.
- Shakya, Shishir, Subuna Basnet & Jayash Paudel. 2022. "Natural Disasters and Labor Migration: Evidence from Nepal's Earthquake." World Development 151:1–14.
- Shneiderman, Sara. 2003. "Violent Histories and Political Consciousness: Reflections on-Nepal's Maoist Movement from Piskar Village." *Journal of the Association for Nepal and Himalayan Studies* 23(1):39–48.
- Shrestha, Celayne Heaton & Ramesh Adhikari. 2010. "Antipolitics and Counterpolitics in Nepal's Civil Society: The Case of Nepal's Citizens' Movement." VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations 21:293–316.
- Stan Development Team. 2015. "Stan: A C++ Library for Probability and Sampling, Version 2.9.0.".

URL: http://mc-stan.org/

- Stokes, Susan. 2005. "Perverse Accountability: A Formal Model of Machine Politics with Evidence from Argentina." American Political Science Review 99(3):315–325.
- Stokes, Susan C., Thad Dunning, Marcelo Nazareno & Valeria Brusco. 2013. Brokers, Voters and Clientalism: The Puzzle of Distributive Politics. Cambridge: Cambridge University Press.

- Transparency International. 2020. "Citizen's Views and Experiences of Corruption: Asia 2020." https://images.transparencycdn.org/images/GCB_Asia_2020_Report_Web_final.pdf.
- Turin, Mark & Sara Shneiderman. 2004. The path to Jan Sarkar in Dolakha district: Towards an Ethnography of the Maoist movement. In *Himalayan 'People's War': Nepal's Maoist rebellion*. London: Hurst Publishers pp. 79–112.
- USAID. 2023. "Nepal Country Dashboard.".
- Wagner, Matthew Louis. 2019. The Dynamics of Vote Buying in Developing Democracies:

 Party Attachment and Party Competition in Southeast Asia PhD thesis University of
 South Carolina.
- Wang, Chin-Shou & Charles Kurzman. 2007. The Logistics: How to Buy Votes. In *Elections* for Sale: The Causes and Consequences of Vote Buying, ed. Charles Schaffer. New York: Lynne Rienner Publishing Inc pp. 61–78.
- Weitz-Shapiro, Rebecca. 2014. Curbing Clientelism in Argentina: Politics, Poverty, and Social Policy. Cambridge: Cambridge University Press.
- World Bank Group. 2016. Moving up the ladder: Poverty reduction and social mobility in Nepal. World Bank.
- World Bank Group. 2017. "World Development Indicators.".

A List Experiment Vote-Buying Estimates

Table 1 provides the same information as figure 2 in the main text, and lists the source of each data point. This is unlikely to be an exhaustive set of list experiments about vote-buying and we welcome feedback on list experiment-based vote-buying prevalence estimates to add to this list.

Table 1: Vote-buying prevalence estimates.

Country	Election Year	V-Dem	List Expt. %	Source	
Bulgaria	2013	-0.822	7	Mares, Muntean & Petrova	
G				$(2017)^{'}$	
Guatemala	2011	-0.901	10	González-Ocantos, de	
				Jonge, Melendez, Osorio &	
				Nickerson (2020)	
Indonesia	2014	-1.683	27	Muhtadi (2019)	
Kenya	2007	-2.351	23	Kramon (2016)	
Lebanon	2009	-1.678	55	Corstange (2010)	
Mexico	2012	-0.788	21	Greene (2016)	
Malaysia	2018	-1.159	13	Wagner (2019)	
Nicaragua	2006	-0.433	24	González-Ocantos et al.	
				(2012)	
Nepal	2017	-0.431	23	This Paper	
Philippines	2010	-1.423	32	Cruz (2019)	
Romania	2014	-0.144	4	Mares, Muntean & Petrova	
				(2017)	
Russia	2011	-0.512	0	Frye, Reuter & Szakonyi	
				(2019)	
El Salvador	2014	-0.644	9	González-Ocantos,	
				Kiewet de Jonge & Meseguer	
				(2018)	
Turkey	2011	-0.313	35	Çarkoğlu & Aytaç (2015)	

B Tabular List Experiment Results

Table 2 presents regression model fits for the list experiment. The first column presents the results of using OLS to fit the standard difference in means test for the control and treat-

Table 2: List experiment regression models

	Dependent variable: item count				
	Diff. in Means	Balance Check	Interactive Model		
	(1)	(2)	(3)		
Offered Bribe	0.209***	0.220***	0.483***		
Voted As Bribed	$(0.079) \\ 0.247^{***}$	(0.076) 0.241^{***}	(0.170) 0.469***		
Pagian Mauntain	(0.078)	(0.075)	(0.169)		
Region Mountain		0.260 (0.394)			
Region Terai		0.032			
Man		$(0.100) \\ -0.045$	-0.043		
Age		$(0.071) \\ 0.001$	(0.115)		
		(0.003)			
Hill Dalit		0.134 (0.132)			
Hill Janajati		0.307*** (0.093)			
Other Caste		0.408** (0.165)			
Cerai Dalit		0.074			
Гегаі Janajati		$(0.192) \\ 0.113$			
•		(0.139)			
Terai Jat		0.065 (0.136)			
Christian		0.412*			
Iindu		$(0.240) \\ 0.152$			
slam		(0.116)			
siam		-0.298 (0.251)			
Kirat		-0.188 (0.216)			
Other Religion		0.725			
>=Secondary Ed.		$(0.465) \\ 0.092$	0.379***		
Jrban		$(0.081) \\ 0.072$	$(0.117) \\ -0.151$		
Pol. Part.		(0.096) 0.380***	(0.164) 0.381^{***}		
Vealth		(0.035) 0.009	$(0.061) \\ -0.068$		
Offered × Man		(0.043)	$(0.065) \\ 0.013$		
			(0.165)		
Bribed × Man			0.022 (0.162)		
Offered $\times >=$ Secondary Ed.			-0.494***		
Bribed × >=Secondary Ed			(0.170) $-0.442***$		
Offered × Urban			$(0.167) \\ 0.362$		
			(0.235)		
Bribed × Urban			0.348 (0.226)		
Offered × Pol. Part.			-0.039		
$Bribed \times Pol. Part.$			(0.085) -0.011		
Offered × Wealth			(0.084) 0.096		
Bribed × Wealth			(0.094) 0.107		
Constant	2.517*** (0.055)	2.157*** (0.192)	(0.092) 2.315*** (0.118)		
Observations	1,275	1,269	1,275		
\mathcal{E}^2	0.009	0.115	0.111		
Adjusted R ² Residual Std. Error	0.007 $1.152 (df = 1272)$	0.100 $1.099 (df = 1247)$	0.099 $1.097 (df = 1257)$		
Statistic	5.769^{***} (df = 2; 1272)	$7.710^{***} (df = 21; 1247)$	9.245^{***} (df = 17; 1257)		

Note: *p<0.1; **p<0.05; ***p<0.01

ment groups in the list experiment and corresponds to figure 1 in the main text. The second column adds a number of demographic control variables to the regression to help ensure that the experiment was balanced. Note that the coefficients for the treatment conditions are robust to the inclusion of these covariates—their magnitudes and standard errors are almost totally invariant to including these demographic controls—indicating good balance. The third column presents a model that interacts the treatment conditions with key demographics. This interactive model corresponds to the split-sample regressions plotted in figure 3; the statistical significance that we report in the main text is based on this model. In particular, this model shows that the effect of both treatments are heterogeneous with respect to education: the treatments are only statistically significant for less educated respondents and, among the less educated, both bribe offers and bought votes appear to occur among about half the population.

C Operationalization and Robustness of Stones Exercise

In the question asking respondents to estimate how prevalent vote buying is in their constituency by sorting 10 stones into piles, we calculated the vote-buying value in three ways, to account for variations in how participants arranged the stones. While enumerators were supposed to ensure that participants moved all stones, this did not always occur in practice. Across all participants, the average number of stones in the yes pile was 4.1. Among participants who moved all the stones, the average number of stones in the yes pile was 5.1. Among all participants the ratio of yes stones to no stones (i.e., ignoring unmoved stones) was 0.56.

D Measuring Political Participation

We asked respondents a battery of questions designed to measure political participation. Specifically we asked the following questions:

1.	Are :	you involved in any voluntary association or community group? If so, are you a leader,			
	activ	e member, or an inactive member?			
	(a)	Leader			
	(b)	Active Member			
	(c)	Inactive Member			
	(d)	Not involved			
2.	How	interested would you say you are in public affairs?			
	(a)	Very interested			
	(b)	Somewhat interested			
	(c)	Not very interested			
	(d)	Not all interested			
3.	How	frequently do you talk about politics with friends			
	(a)	Very frequently			
	(b)	Frequently			
	(c)	Almost never			
	(d)	Never			
4.	How	frequently do you talk about politics with friends			
	(a)	Very frequently			
	(b)	Frequently			
35					

	(c)	Almost never
	(d)	Never
õ.	How	frequently do you work for a political party or candidate
	(a)	Very frequently
	(b)	Frequently
	(c)	Almost never
	(d)	Never
ŝ.	How	frequently do you try to persuade others to vote for a certain candidate or party
	(a)	Very frequently
	(b)	Frequently
	(c)	Almost never
	(d)	Never
7.	How	frequently do you contact a local politician about a problem or to give them your views
	(a)	Very frequently
	(b)	Frequently
	(c)	Almost never
	(d)	Never
3.		frequently do you contact a national politician about a problem or to give them you
	views	
	(a)	Very frequently
	(b)	Frequently
	(c)	Almost never

(a)	Very frequently
(b)	Frequently
(c)	Almost never
(d)	Never
10. How	frequently do you vote in national parliamentary elections
(a)	Very frequently
(b)	Frequently
(c)	Almost never
(d)	Never
11. In th	ne last national parliamentary election, what did you do?
(a)	I voted in the last election
(b)	I decided not to vote in the last election
(c)	I did not have time to vote in the last election
(d)	I didn't vote for other reasons
(e)	I was prevented from voting
(f)	Was not registered to vote
We use	e one-dimensional Baysian factor analysis to estimate latent political participation

(d) Never

9. How frequently do you attend a political rally

from responses to this battery of questions. For simplicity, we assume a diagonal variance-

covariance structure; that is, we assume that the errors are independent across manifest

variables. The probability model is

$$y_{i,j} \sim \mathcal{N}(\lambda_j \cdot \phi_i, \psi_{jj}),$$
 (1)

where i indexes observations (country-years), j indexes manifest variables (firms), each ϕ_i is the latent censorship effort for observation i, each λ_j is the factor loading for the manifest variable j, and each ψ_{jj} is a diagonal element of the variance-covariance matrix, or error variance for manifest variable j, given our assumption of independent errors. We use vaguely informative conjugate priors:

$$\phi_i \sim \mathcal{N}(0, 1), \tag{2}$$

$$\psi_{ij} \sim \mathcal{IG}(0.01, 0.01),\tag{3}$$

$$\lambda_1 \sim \mathcal{TN}_{(0,\infty)}(0,10), \text{ and},$$
 (4)

$$\lambda_{j>1} \sim \mathcal{N}(0, 10). \tag{5}$$

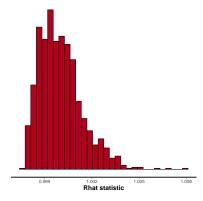
The standard normal prior on the latent traits (ϕ) establishes scale, while the priors on the remaining parameters are commonly used vague conjugates. Note that we use a truncated normal prior on the first element of the loading vector (λ) to identify the model with respect to rotation.

We implemented the models using Stan (Stan Development Team 2015). Figure 5 provides the source code. We standardized all manifest variables before fitting. We ran four chains for 5000 iterations each, discarding the first 1000 iterations and retaining every 10th iteration from each chain, simulating a sample of 1600 posterior draws.

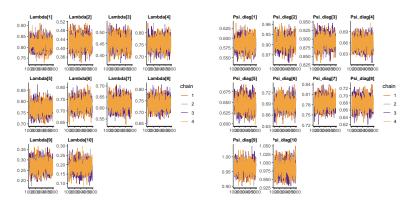
We converted each response into ordinal values before fitting the model. We treated the last question as a simple 0-1 voted/did not vote collapsing response categories. Figure 6 provides convergence diagnostics, including the distribution of Gelman & Rubin (1992)

```
data {
int<lower=1> N; // Country-years
int<lower=2> J; // # Manifest variables
real < lower = -999 > manifest[N,J]; // Data
real a[J]; // IG prior on Psi diagonal elements real b[J]; // IG prior on Psi diagonal elements
}
parameters {
real<lower=0> Psi_diag[J]; // Var-cov diagonal
real phi[N]; // Latent trait
\verb|real Lambda2p[J-1]|; \ /\!/ \ \textit{Remaining parameters}|
transformed parameters { // Roundabout way to constrain L1>0
\verb|real Lambda[J]|;
Lambda[1] = Lambda1;
for (i in 2:J)
Lambda[i] = Lambda2p[i-1];
model {
for (i in 1:N)
phi[i] ~ normal(0, 1);
Lambda[1] ~ normal(0,10)T[0,];
for (j in 2:J)
Lambda[j] normal(0, 10);
for (j in 1:J) {
    Psi_diag[j] ~ inv_gamma(a[j], b[j]);
    for (i in 1:N) if (manifest[i,j] != -999) {
        manifest[i,j] ~ normal(Lambda[j] * phi[i], Psi_diag[j]);
    }
```

Figure 5: Stan code



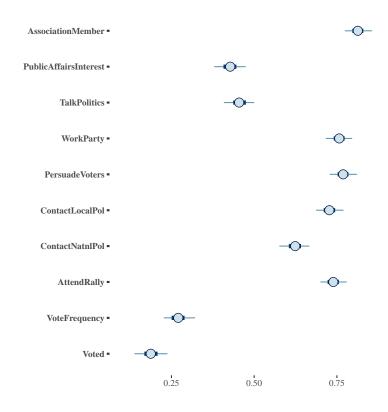
(a) \hat{r} Distribution



- (b) Factor Loading Traceplot
- (c) Error Variance Traceplot

Figure 6: Convergence checks

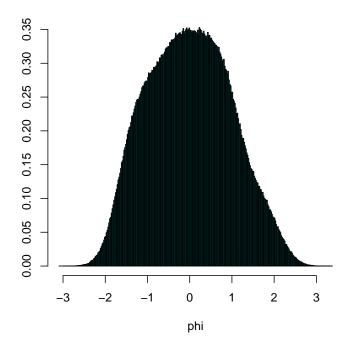
Figure 7: Factor loadings for the political participation index



convergence diagnostics, \hat{r} for all estimated parameters—all of which fall below 1.1, and traceplots for the factor loadings and error variance parameters, which display good mixing.

Figure 7 displays the factor loadings for the political participation model. As expected, all variables load positively on the latent trait. Association membership, working for a party, voter persuasion, contacting politicians, and rally attendance all load highly on the trait. Interest in public affairs and time spent talking about politics have medium to strong loadings. Voting frequency and whether a respondent reported voting in the last election—90 per cent of respondents claimed to have voted, despite an overall turnout number of less than 70 per cent—load weakly on the latent trait. Finally, figure 8 presents a histogram of the latent trait estimates, which are distributed roughly normally across the population.

Figure 8: Histogram of latent scores on the political participation index



E Measuring Wealth

We also created a wealth index from a battery of proxy indicators. First, all respondents to this survey participated in a lab-in-the-field study for which they were placed in groups of 9. We asked all participants to rate their perceived wealth, relative to their groups. We also asked all participants an array of questions about their life circumstances.

1. Do you think you are more or less wealthy than the average participant in your group?
(a) More wealthy
(b) Less wealthy
2. What is your largest source of income? Do not read options aloud. Select one.
(a) Subsistence farming/livestock rearing/fishing
(b) Commercial farming/livestock rearing/fishing
(c) Remittances
(d) Business income
(e) Wages in cash (agricultural)
(f) Wages in cash (non-agricultural)
(g) Salaries (Government, private, or NGO)
(h) Pension
(i) Allowance
(j) Rent/lease income
(k) Other (specify)
3. Where do your family members usually go for a health check-up/treatment when someone
in your family is sick? Mark up to three.

(a)	Health post
(b)	Local medical store
(c)	Government hospital
(d)	Private hospital/clinic
(e)	Traditional healer
(f)	Health institutions in India
(g)	Other (specify)
Wha	t type of school do your children (if applicable) attend for education?
(a)	Public/Government
(b)	Private/Boarding
(c)	Religious/Non-formal institutions
Wha	t is the primary construction material of your housing unit's exterior walls?
	t is the primary construction material of your housing unit's exterior walls? Grass/thatch/bamboo
(a)	
(a) (b)	Grass/thatch/bamboo
(a)(b)(c)	Grass/thatch/bamboo Plastic/Polythene
(a)(b)(c)(d)	Grass/thatch/bamboo Plastic/Polythene Mud/unburnt brick
(a)(b)(c)(d)	Grass/thatch/bamboo Plastic/Polythene Mud/unburnt brick Wood
(a)(b)(c)(d)(e)	Grass/thatch/bamboo Plastic/Polythene Mud/unburnt brick Wood Stone not packed with mortar
(a)(b)(c)(d)(e)(f)	Grass/thatch/bamboo Plastic/Polythene Mud/unburnt brick Wood Stone not packed with mortar Stone packed with mortar
(a)(b)(c)(d)(e)(f)(g)	Grass/thatch/bamboo Plastic/Polythene Mud/unburnt brick Wood Stone not packed with mortar Stone packed with mortar GI/Metal/Asbestos sheets

4.

5.

- 6. What is the primary construction material of your housing unit's roof?
 - (a) Grass/thatch/bamboo/wood/mud
 - (b) Plastic/polythene
 - (c) Handmade tiles
 - (d) Machine made tiles
 - (e) Burnt brick
 - (f) Stone
 - (g) Slate
 - (h) CGI/Metal/Asbestos sheets
 - (i) Concrete
 - (j) Other (specify)
- 7. What is the primary fuel source your household uses for cooking?
 - (a) Wood
 - (b) Sawdust
 - (c) LPG or similar
 - (d) Both LPG and wood
 - (e) Other natural material

We converted these questions into binary indicators, collapsing categories when they proved particularly rare. 21 We then used Bayesian item response theory modeling to construct a latent index from these binary indicators (Johnson & Albert 1999, ch. 6), fitting a model that assumes

$$p(y_{i,j} = 1|\theta) \sim \Phi(\beta_j \theta_i - \alpha_j),$$
(6)

21 See the replication package for details.

where θ_i is the latent wealth of participant i, α_j and β_j are parameters describing the "difficulty" and "discrimination" ability of item j, and y_{ij} is the binary response for participant i on item j. We use vaguely informative conjugate priors:

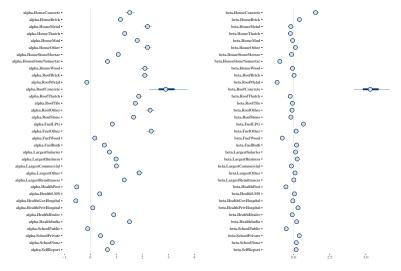
$$\theta_j \sim \mathcal{N}(0, 1), \text{ and},$$
 (7)

$$[\alpha_j, \beta_j] \sim \mathcal{N}_2(0, 4 \cdot \mathbf{I}_2).$$
 (8)

The standard normal prior on each θ_i establishes the arbitrary scale of the latent trait while the priors on the difficulty and discrimination parameters are vague. We restrict the θ_i score for a particular participant (specifically, i=337) with a response pattern highly consistent with wealth (self identifies as wealthy, has a concrete house, sends kids to private school, uses private and Indian hospitals, etc) to be positive to identify the model.²² We used the MCMCpack R package (Martin, Quinn & Park 2011) to fit the model, running a single chain for 100,000 iterations, after a 20,000 iteration burnin, and keeping every 100th draw from the chain, simulating a sample of 1000 posterior draws. Geweke and Heidelberg diagnostic tests produced results consistent with convergence, as did visual inspection of traceplots.

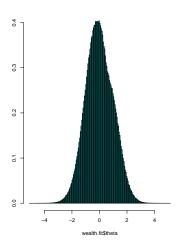
Figure 9 plots estimated item parameters (panels a and b) and the distribution of latent trait point estimates (panel c). Note that negative discrimination parameters mean that a participant exhibiting that trait tends to be less (latently) wealthy, while a positive discrimination parameter indicates that participants with that trait tent to be more wealthy. Higher difficulty parameters indicate that exhibiting a given trait tends to correlate with a latent wealth closer to the top of the scale. Overall, the item parameters are consistent with what we would expect: strong signals of wealth or poverty tend to be difficult and discriminating items. Inspecting the item parameters, we see that the most discriminating indicators show that wealthy individuals tend to have concrete or brick homes, use LPG to cook, to have

²²Cardinality—which way is up—is not identified by the data.



(a) Difficulty Parameters

(b) Discrimination Parameters



(c) Latent Scores

Figure 9: IRT Estimates

business provide their largest source of income, to use private or Indian hospitals, and to send their children to private schools. Less wealthy people tend to have unmortared stone homes, metal roofs, cook with wood, use health posts, and send their children to public schools. Self-reported relative wealth is not an especially discriminating nor difficult indicator, but does load positively with other indicators of wealth. The distribution of latent wealth within our sample resembles a normal density.