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Social ties, clientelism, and the poor's expectations of future service provision

Receiving more, expecting less?

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Abstract: Are candidates who hand out clientelistic goods at election time less likely to provide services once they take office? This paper examines the poor's expectations of future service provision by candidates who hand out money and other goods versus those who do not. We hypothesize that the poor's expectations should depend on the density of social ties. To test this hypothesis, we use hierarchical models to analyse observational data and two conjoint experiments embedded in a unique survey of Kenyans, Malawians, and Zambians. The heavily clustered sampling design allows the investigation of community- and individual-level factors, while the large sample size allows us to focus on a subsample of over 14,000 poor respondents. In socially dense communities, we find that monetary handouts signal the candidate's ability to provide future services; in less socially dense areas, such handouts appear to be viewed as in lieu of future services. Greater information flows in socially dense communities may help poor voters to monitor candidates and hold them accountable. It is important to consider how communities' experiences with clientelism affect expectations of service provision. Development practitioners need to understand how social context affects not only the likelihood of vote-buying but also the distributive effects of clientelism.

Key words: vote-buying, clientelism, social ties, poverty, service provision

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1 Introduction

Are candidates who hand out money and other goods at election time less likely to provide services once they take office? Most scholars and policy makers believe vote-buying undermines public goods provision. For example, Khemani (2015) finds a negative association in the Philippines between health outcomes and areas with a greater prevalence of vote-buying. She suggests that when ‘politicians purchase political support through targeted transfers, they are likely to trade it off against the provision of broader public services on which poor people rely’ (Khemani 2015: 85). Keefer and Vlaicu (2017) concur, arguing that voters who accept these offers do not necessarily expect (or get) much after election day. However, as Kramon (2019) argues, the distribution of cash or other material goods during a campaign may be seen as a signal that the candidate can deliver services in the future. Thus, he finds that Kenyan voters prefer candidates who are reported to have publicly distributed fistfuls of cash during electoral campaigns.

A candidate’s future performance is particularly important to the needy,¹ who rely the most on the community goods and services provided by politicians. In this paper, we argue that the needy’s experiences with and expectations around candidates who give electoral handouts depend on the community contexts in which they live. In communities where most people know each other (i.e. communities with high social density), the information flow that supports clientelism is stronger. This makes it easier for candidates and brokers to recruit blocks of voters and monitor their behaviour. After elections, however, ties can facilitate accountability. The information flow that helps brokers to monitor voters also helps community members to recognize when politicians are shirking their duties and to make demands on politicians when they fail to deliver. Thus, while the poor in socially dense communities may be more likely to be offered electoral handouts, they are also more likely to expect (and experience) that the politicians that give handouts will subsequently deliver.

To explore how community social ties shape the relationship between electoral handouts and service provision, we analyse observational data and two conjoint experiments from a sample of needy individuals (n=14,117) embedded in a unique survey of Kenyans, Malawians, and Zambians.² The survey is exceptionally well suited to this study for several reasons. First, it was implemented using a heavily clustered sampling design,³ which afforded the collection of both individual- and community-level data on vote-buying and social density, thus allowing us to employ hierarchical models to determine whether electoral handouts were more prevalent in areas with high social density. Second, it included a conjoint experiment, allowing us to identify the effect of knowledge that a candidate provides electoral handouts on expectations of future service provision. Finally, the fact that the survey was conducted across three countries lends credence to its generalizability.

Our findings—that community social ties significantly shape how the needy respond to candidates who offer electoral handouts—have several important implications. First, the findings contribute to emerging research on the role of social density in electoral politics (Cruz 2019; Ravanilla et al.

¹ We use the terms ‘poor’ and ‘needy’ interchangeably in this paper. We define the poor/needy as individuals who cannot cover their own needs.

² Analyses presented here and elsewhere find important differences in the experiences and opinions of the poor (or needy) and less needy respondents. We plan to explore these differences more explicitly in a separate paper.

³ For additional information on the sampling, see Appendix A.

2021) by demonstrating how social ties condition expectations of service provision following elections, and by extending the empirical basis beyond the Philippines and India. Second, they help to reconcile competing visions of the relationship between electoral handouts and service provision: one vision that sees handouts as ‘prepayment’ in lieu of services (Keefer and Vlaicu 2017; Khemani 2015), and a second that sees them as a signal of future support (Kramon 2019). We find support for the first view in communities with low social density, while our findings in communities with high social density are consistent with the latter. Third, our findings provide insights into the distributional consequences of clientelism that are difficult to study observationally. These are particularly important given the prevalence of electoral handouts to the poor (Corstange 2016; Diaz-Cayeros et al. 2016; Stokes et al. 2013). Finally, our study provides novel insights into the importance of the stronger information flow associated with dense communities. We show that dense social ties affect the prevalence and nature of clientelism by enabling brokers and candidates to monitor voters. However, these ties also shape expectations of subsequent service delivery, most likely because information flows help community members to hold these candidates accountable.

The paper proceeds as follows. Section 2 outlines the current understandings of clientelism, social context, and service distribution, and it outlines the hypotheses. Section 3 gives an overview of the data and method, while section 4 presents the empirical findings regarding citizens’ exposure to electoral clientelism, the perception of candidates’ likelihood of fulfilling their campaign promises conditional on the community’s social density, and the relationship between social density and information flow. We discuss alternative explanations in section 5. The final section concludes by considering broader questions about the future of clientelism and its impact on poverty and inequality.

2 The distributional consequences of clientelism: the role of social density

Despite an enormous literature on clientelism, remarkably little is known about the distributional consequences of vote-buying. The vast majority of the literature on electoral clientelism focuses on which voters candidates target (for example, see Calvo and Murillo 2013; Gutiérrez-Romero 2014; Nichter 2008; Stokes 2005; Stokes et al. 2013; Zarazaga 2014), the role of brokers (Auerbach and Thachil 2018; Gottlieb 2017; Stokes et al. 2013; Szwarcberg 2012; Zarazaga 2014), and whether or not voters support candidates at the ballot box (Baldwin 2013; Kramon 2016; Weghorst and Lindberg 2013). Studies of electoral handouts and service provision are often based on the perception that the distribution of goods at election time and the voters’ electoral support are part of a quid pro quo arrangement. As noted above, this leads many analysts to assume that voters who accept electoral handouts do not expect future service provision, and to view correlations between vote-buying and low service provision as causally related (Keefer and Vlaicu 2017; Khemani 2015). To our knowledge, analysts have not identified the impact of electoral handouts on voters’ expectations of future service provision, disentangling the influence of electoral handouts from other candidate characteristics; nor have they considered how social contexts may shape these expectations.

The failure to examine the distributional consequences of electoral handouts reflects, in part, the challenges of studying vote-buying. Studies of clientelism often assume the contingent exchange of goods or services for voters’ support but fail to demonstrate contingency. As Hicken and Nathan (2020) note, there is relatively little evidence that candidates monitor voters. This calls into question the extent to which a candidate’s offer of money, goods, or services at election time ‘buys’ votes, and how voters can be made to reciprocate (e.g., Stokes 2005). Moreover, it raises questions over whether voters perceive the giving of gifts and services at election time as a quid pro quo exchange. The two scenarios discussed above—one in which handouts are viewed as vote-buying, and another in which handouts are signals of strength—are observationally equivalent: the

candidate gives handouts during a campaign, and voters support them. However, the expectations of service provision derived from this are very different. In the first scenario, voters do not expect long-term rewards when they accept the short-term offer. In the second scenario, gifts and money signal a candidate's ability to provide services; thus, voters believe that the candidate will continue to support them once elected.⁴ Studying the relationship between handouts and service provision requires us to distinguish these contingent offers from others that look the same on the surface.

Observational studies of vote-buying and service provision face further difficulties. Ideally, one would know which candidates engaged in vote-buying, which won, and whether they provided services once elected. One could then compare service provision from candidates who bought votes with service provision from those who did not. However, vote-buying is often clandestine, making it difficult to identify vote-buying candidates and the politicians elected. Brokers' ledgers, through which we could glean a better understanding of who is served and by whom, are also generally closed. Even if it were possible to identify elected officials who have engaged in vote-buying, the election of such candidates is most likely not random; thus, observational studies suffer thorny endogeneity problems (Khemani 2015). This is particularly problematic as vote-buying is expected to be cheaper and more likely in areas with poorer populations and inferior services (Calvo and Murillo 2004; Jensen and Justesen 2014; Magaloni et al. 2007). Thus, it is equally plausible that poorer services explain more prevalent vote-buying.

Experimental studies overcome some of these problems. Leight et al. (2020), using a laboratory experiment fielded in Kenya and the United States, found that subjects (acting as voters) were more willing to tolerate expropriation and reduce their welfare expectations when their votes were bought. They concluded that 'vote-buying increases politician rent-seeking and reduces voter welfare even in the absence of any effect on politician selection—and even when voters have full information around vote payments' (Leight et al. 2020: 2). This study was impressive, but it raised questions regarding external validity and was unable to lend insights into how social context may affect voters' perceptions of vote-buying.

Other scholars have employed survey experiments to gauge citizens' attitudes towards vote-buying. They have done so across a range of contexts, including Argentina (Weitz-Shapiro 2014), Kenya (Kramon 2019), Malawi (Kao et al. 2017), and South Africa (Justesen and Mares 2019). These studies focused on voters' support for candidates, rather than on their expectations of future service provision.⁵ They also drew some contradictory conclusions regarding fundamental issues, such as how much the poor welcome vote-buying (see for instance Kao et al. 2017; Kramon 2019). However, because they explored different types of handouts, used different methodologies, and did so in very different contexts, it is difficult to adjudicate debates or develop a better

⁴ The challenge of disentangling clientelism from election support and resource distribution based on other factors is yet more difficult with regard to more traditional, long-term exchanges of individual or collective goods based on personal relationships (for a review, see Pellicer et al. 2020). Paller (2019) points out that long-term distribution of resources is not only about elections, even when 'opinion leaders', who are often viewed as brokers or patrons, offer these services. Indeed, consider 'competitive clientelism' (Lust-Okar 2006), in which voters support candidates whose obligation to serve them is based on social relations (e.g., tribal, ethnic, or sectarian identities, co-locality, close kin), not votes cast. In such cases, voters support the candidate in an attempt to place him or her in a position that has access to resources, and candidates (successful or not) continue to aid voters based on other obligations. Such relationships highlight the difficulty of assuming that perceived exchanges reflect contingency. The experiment analysed in this paper is not well situated to explore such relationships, however.

⁵ Notably, Kramon (2019) examines service provision in chapter five, but his experiment is not sufficiently powered to draw conclusions.

understanding of how contexts shape the relationship between electoral handouts and service provision.

And there is good reason to expect that context shapes the relationship between voters and politicians. Social ties most likely affect whether or not individuals are offered handouts. Cruz (2019) and Ravanilla et al. (2021) find that social ties facilitate monitoring and make vote-buying more effective in the Philippines. Communities with dense social ties also are likely to have a greater sense of ‘we-ness’ (Singh 2011) and thus have ‘additional group-level incentives for voters to comply with vote-buying agreements’ (Cruz 2019: 383). As Spater and Wibbels (2021) show in their study in India, socially dense neighbourhoods also have more unified leadership and party support among the residents and thus can more effectively coordinate votes. In turn, the authors argue, they are more likely to act as ‘vote banks’. Given their stronger information flows, group-level incentives, and unified leadership, socially dense communities are attractive sites for vote-buying candidates. Thus, the poor in socially dense communities should be more likely to report experience with vote-buying candidates.

But what of the distributional consequences of vote-buying, and how do community social ties shape them? The two perspectives on electoral handouts—that they are part of a one-shot exchange, or that they are a signal of future support—yield different expectations. If electoral handouts are part of a one-shot exchange, poor individuals in socially dense communities will have lower expectations of service provision from vote-buying candidates than they do from those who do not make such promises. These voters would have ample experience with candidates offering handouts and would know that these offers are accepted at the expense of future services. However, if handouts signal a candidate’s ability and willingness to provide future assistance, a very different expectation emerges. In this case, stronger information flows, group incentives, and the ability to coordinate increase the likelihood that the community will be able to hold the candidate accountable. The poor in socially dense communities should view the candidate as capable of providing services and should believe they can hold the politician accountable. Thus, the poor in socially dense communities would be more likely to view candidates that offer handouts as providing future services, compared with the poor in less socially dense communities.

Consequently, we expect:

H1. Electoral handouts are more prevalent in contexts where information flows and monitoring are easier, group ‘block’ voting is possible, and leadership is strong.

If the poor view handouts as a quid pro quo exchange and have no expectations of future service provision:

H2a. Voters will expect candidates that give handouts to be less likely than other candidates to provide services in the future.

H2b. Voters in more or less socially dense communities will have the same expectations.

If the poor view handouts as a signal of the ability to help in the future:

H3a. Voters will expect candidates that offer handouts to be more likely than other candidates to provide future services.

H3b. Voters in dense communities will be more likely than those in less dense communities to expect candidates that give electoral handouts to provide future services.

3 Examining campaign handouts and service provision in Kenya, Malawi, and Zambia

We employ data from Kenya, Malawi, and Zambia to explore how social context affects the prevalence of electoral handouts and expectations regarding politicians that make such offers. These three countries are useful cases to explore the relationship between community contexts, handouts, and service provision expectations. They have large poor populations: 37 per cent of Kenyans (World Bank 2020a), 71 per cent of Malawians (World Bank 2020b), and 59 per cent of Zambians (World Bank 2020c) live under the international poverty line.⁶

Many are in need of assistance to access services (Apfelbacher et al. 2017; Taalo et al. 2015). Healthcare—the service delivery the candidate promises in this study—is a major concern. The Local Governance Performance Index (LGPI) in Malawi found that 80 per cent of respondents reported having suffered from a disease in the previous two years, and more than half reported being in poor or very poor health (GLD 2016). Njagi et al. (2020) report similar unmet needs in Kenya. Not only are the poor unable to afford healthcare, but catastrophic healthcare costs thrust many into poverty; each year, the costs of medical care, medicines, and other out-of-pocket expenses push an estimated 150,000 Zambians (Chitah and Jonsson 2015) and over 450,000 Kenyans⁷ into poverty (Barasa et al. 2017; see also Chuma and Maina 2012).

Citizens often seek help from their elected officials to address such problems. Kenya, Malawi, and Zambia are all multiparty democracies, in which members of parliament (MPs) play an active role in development. Constituency Development Funds (CDFs) in each country help MPs to support development projects (CLGF 2018; Ejdemyr et al. 2018; Harris and Posner 2019). Citizens expect personal assistance as well. In focus group discussions in Malawi and Zambia, citizens indicated that they expected representatives to solve a variety of issues: from providing spaces for marketers or pipes for agricultural irrigation, to building roads or equipping towns with water, sanitation, and hygiene structures, to (on a more personal level) assisting individuals to obtain healthcare or electricity, or even elevating a youth's talent in the arts or sport.

Such conditions provide fertile ground for clientelistic bargains, but they also call into question expectations regarding future service provision. In need of immediate financial support, the poor may be willing to exchange their votes for cash, with no expectation of future services. A 33-year-old Malawian woman explained:

A person can have their decision to vote ... but these party groups come with money and give to people to switch their person of choice. People do vote for those that they do not want because they have received money.⁸

At the same time, voters may have reason to expect, and demand, service provision from those they support, particularly as a community. As a 50-year-old businessman from Mandevu explained,

⁶ The percentages living under the national poverty lines in Kenya, Malawi, and Zambia are 36 per cent (2015–16), 52 per cent (2015), and 54 per cent (2016) respectively (World Bank 2020a, 2020b, 2020c).

⁷ This number reaches over 600,000 if transport costs are taken into account in Kenya (Barasa et al. 2017).

⁸ Focus group discussion in central Malawi, 18 September 2018.

‘resources and development are withheld from tribal groups who didn’t vote’⁹ but may be available to those who did. Exploring results from Kenya, Malawi, and Zambia, we can gain insights into the conditions under which individuals view campaign handouts as one-off, quid pro quo exchanges of support, and when they see them as a sign of future provision.

3.1 Survey design

We explore the impact of community social density on handouts and expected service provision using survey data from the LGPI in Kenya, Malawi, and Zambia (Lust et al. 2019). The surveys were carried out between May and October 2019 by the Programme on Governance and Local Development (see Appendix A for details).

The survey design has several unique advantages for studying the questions at hand. First, it was implemented using heavily clustered sampling, which allows us to derive community- and individual-level measures. This allows us to employ hierarchical models in our analyses. Second, the survey included observational measures of individuals witnessing and accepting electoral handouts as well as attitudes towards such handouts, allowing us to examine the extent to which community context is associated with the prevalence and perception of electoral handouts. Finally, it included two survey experiments that help us to identify the effect of candidates’ actions and characteristics on voters’ perceptions and to examine the relationship between social ties and information flows.

In the first experiment, respondents were presented with a hypothetical candidate and asked to what extent they believed the candidate would provide services if elected. The experiment varied the presence of clientelistic behaviour (e.g., passing out money or goods during campaigns) and candidate characteristics (e.g., co-ethnicity, co-locality, co-partisanship, gender). The experiment allowed us to address three problems inherent in a purely observational approach:

1. Candidates are not randomly distributed, thus making it difficult to separate expectations of different types of candidates from the communities that give rise to them.
2. Candidates make bundles of offers during campaigns. As one village headwoman in Zambia put it, candidates come with ‘chickens, meals, and a lot of sweet talk’.¹⁰
3. As discussed above, it is difficult to examine the link between campaign handouts and politicians’ service provision after elections, given the often clandestine nature of vote-buying and the data collection effort such an undertaking would require.

The experiment randomized aspects of the candidate’s campaign appeals and characteristics, thus helping to separate chickens from sweet talk, and candidates’ characteristics from campaigns. It also provided insights into the distributive consequences of clientelism beyond voters’ expectations. Voters’ expectations regarding future service provision were most likely based on past experiences, so the experiment allowed us to gauge voters’ expectations of different types of candidates, conditional on the community type, while providing insights into the distributional effects of clientelism as well.

We also examine a second experiment, which varied the candidate’s characteristics (e.g., ethnicity, religious affiliation, gender) and future performance. However, we focused on investigating the

⁹ Focus group discussion in Lusaka, Zambia, 13 August 2018.

¹⁰ Authors’ notes from interview with headwoman, Mulaisho Village District, Zambia, 3 November 2017.

impact of social density on the information flow within the community, as our variables of interest in this analysis are observational.

3.2 Measurement

We employ a measurement of poverty that focuses on unmet needs. Specifically, we rely on a survey question about whether respondents can cover their needs to measure individual-level wealth. The survey question reads as follows:

I will read out a few statements about your income. Please tell me which of the following statements is closest to your situation:

Our household income covers the needs well—we can save.

Our household income covers the needs all right, without much difficulty.

Our household income does not cover the needs, there are difficulties.

Our household income does not cover the needs, there are great difficulties.

Don't know.

Refuse to answer.

Based on these categories, we create a binary variable for individual-level poverty, with people who are unable to cover their needs coded as one, and zero otherwise.

Individual-level social ties to neighbours are measured using a survey question about whether the respondent knows most others living in the neighbourhood or village. Respondents are asked the following question:

In this village/neighbourhood, would you say:

You hardly know anyone at all?

You know few people?

You know many people?

You know almost everyone?

Don't know?

Refuse to answer?

Again, the variable is recoded as a binary variable, indicating whether people know many or almost everyone in the community or not.

To measure the density of social ties in the community, we create an aggregated measure of individual-level social ties by square kilometre. We calculate the share of respondents who know most others in the community from the full sample. This continuous variable is calculated for communities with at least 20 observations in the full sample. We drop communities with fewer than 20 observations from the sample.

As we are particularly interested in the expectations of future service provision among our poor respondents, we drop all respondents categorized as non-poor from our initial sample before we run our analysis. This leaves us with a sample of 14,117 poor respondents in over 600 communities for the observational analysis (see Table 1 for descriptive statistics).¹¹

Table 1: Number of poor respondents by context (survey sample)

Contextual variable	Mean	Standard deviation	Minimum	Maximum	Observations
Poor communities	0.79	0.17	0.05	1	14,117
Density of ties	0.65	0.22	0	1	14,117
Rural	0.62	-	0	1	14,117

Note: numbers are based on survey data from the survey sample of poor respondents (Lust et al. 2019). The contextual variables for the density of social ties and the poverty level of the community report the share of respondents who know most others/are economically poor in the neighbourhood or village. High population density is coded as a binary variable, with urban and rural as the two categories.

Source: authors' calculations.

4 Analyses and results

We now turn to our analyses and results. We undertake three sets of analyses. Using observational survey data, we first explore the prevalence of clientelistic handouts in socially dense and less dense communities, and whether these handouts are seen as morally acceptable by the respondents. Then we interrogate whether receiving handouts during the campaign affects respondents' expectations about the candidate's future performance, and how this varies with community density. Finally, we rely on findings from a second conjoint experiment to test our expectation that differences in respondents' future service provision expectations in more and less socially dense communities are driven by greater information about the politician's behaviour in socially dense communities. In all analyses, we use multilevel modelling to account for the nested structure of our theory and data. By specifying a hierarchical model, we correctly estimate the uncertainty of the estimates (Peugh 2010). Analyses presented below are calculated using Stata's 'mixed' command for linear multilevel regression.

4.1 Community social ties and campaign handouts

We draw on observational survey data to interrogate whether the practice of vote-buying is more prevalent and accepted in socially dense communities. We examine:

1. whether respondents believe vote-buying takes place in their area;
2. whether they have personally received gifts, money, or personal favours from one or more candidates in the past;
3. whether they think that it is morally acceptable for candidates to hand out gifts, money, or personal favours during election time.

(For exact question wording, see Appendix B). All three dependent variables are binary coded.¹² We also include contextual variables for the share of poor respondents in the community and

¹¹ The full LGPI sample includes 23,000 respondents in over 1,200 communities.

¹² Whether people received offers from one or multiple candidates was recoded as a binary variable, with zero for 'never received money or goods' and one for 'received money or goods from one or multiple candidates'. Distributions for the different answer categories for all three dependent variables are found in Appendix C.

whether the community is rural or urban. To calculate our contextual-level variables, we use a continuous variable representing the share of respondents who indicate that they cannot cover their needs well or that they know most people in the community. The urban-rural variable is a binary variable, determined by whether the individual is inside or outside a highly populated area (using Facebook-provided data) or near a city or trading centre. Again, communities with fewer than 20 respondents are dropped from the sample before we calculate the aggregated measure of community wealth.

We specify a two-level multilevel model, using the random intercept model as our baseline model. We include regional fixed effects and individual-level controls for gender, age, education, and the time the respondent has lived in the community in all our models. In the equation, we include i as the individual (respondent) and j as the community level in the equation. β_0 represents the constant, and β_1 includes the individual-level controls in the fixed part of the model. β_2 introduces the contextual variables for poor, socially dense, and highly populated communities. u_j represents the random effect and e_{ij} the residuals. The full model, including individual- and contextual-level controls, is specified as follows:

$$\text{(Table 2, M4-6) } \text{votebuying}_{ij} = \beta_0 + \beta_1 \text{individual_controls}_{ij} + \beta_2 \text{context_variables}_{ij} + \beta_3 \text{region}_{ij} + u_{0j} + e_{ij} \quad (1)$$

Table 2 reports findings from the observational analysis regarding the practice of vote-buying in the area, whether the respondent has personally received clientelistic offers, and whether they think offering such handouts is morally acceptable. Our analysis shows that the higher the share of people who know most others in the community, the more likely our poor respondents are to answer all three survey questions in the affirmative. We find a 16-percentage point increase in the likelihood of reporting that vote-buying occurs in the area (Model 4) and a 13-percentage point increase in the likelihood that respondents affirm they have personally received money or other goods (Model 5). Respondents are six percentage points more likely to think that vote-buying is morally acceptable (Model 6). The share of poor people in the community, or whether the community is located in an urban or rural area, does not appear to affect vote-buying experiences or whether it is perceived as morally acceptable by our respondents.

The focus of this paper is on the poor, but it is worth noting that the results are quite different for less needy respondents. We do not find less needy respondents to be more likely to report the practice in communities with higher social density. Similarly, they do not appear to think that vote-buying is morally acceptable when social ties to neighbours are denser within their community. However, less needy respondents are also more likely to report that they have personally received money or goods if they live in socially dense communities. Models using the full and wealthy samples are found in Appendix D.

Table 2: Observational analysis of vote-buying in the community

	Model (1): practice occurs	Model (2): personally received	Model (3): morally acceptable	Model (4): practice occurs	Model (5): personally received	Model (6): morally acceptable
Individual level						
<i>Age (18-34 as baseline)</i>						
35-55	-0.032*** (0.009)	-0.015 (0.016)	-0.066*** (0.009)	-0.032*** (0.009)	-0.014 (0.016)	-0.066*** (0.009)
>55	-0.036** (0.012)	-0.007 (0.022)	-0.070*** (0.012)	-0.036** (0.012)	-0.007 (0.022)	-0.070*** (0.012)
Female	0.004	-0.000	0.023**	0.004	-0.001	0.022**

	(0.008)	(0.014)	(0.008)	(0.008)	(0.014)	(0.008)
<i>Education (no schooling as baseline)</i>						
Some schooling	0.037** (0.013)	0.033 (0.023)	-0.061*** (0.013)	0.038** (0.013)	0.037 (0.023)	-0.060*** (0.013)
<i>Lived (less than a year as baseline)</i>						
More than one year	0.001 (0.014)	-0.023 (0.025)	-0.024+ (0.014)	-0.000 (0.014)	-0.022 (0.025)	-0.025+ (0.014)
All their life	0.006 (0.016)	-0.056* (0.028)	-0.015 (0.015)	0.003 (0.016)	-0.063* (0.028)	-0.018 (0.015)
Individual ties	0.008 (0.009)	0.082*** (0.017)	0.011 (0.009)	0.001 (0.010)	0.068*** (0.017)	0.005 (0.010)
Community level						
Social density				0.158** (0.049)	0.134* (0.058)	0.064* (0.032)
Share of poor				-0.035 (0.059)	0.048 (0.070)	0.023 (0.039)
Urban				-0.001 (0.017)	0.002 (0.019)	0.010 (0.011)
Controls						
<i>Region (Lilongwe as baseline)</i>						
Lusaka	0.551*** (0.029)	0.314*** (0.031)	0.008 (0.017)	0.577*** (0.031)	0.350*** (0.034)	0.025 (0.019)
Malawi border	0.141*** (0.026)	-0.032 (0.027)	-0.018 (0.015)	0.134*** (0.026)	-0.033 (0.027)	-0.017 (0.015)
Nairobi	0.618*** (0.031)	0.377*** (0.038)	-0.082*** (0.021)	0.636*** (0.035)	0.414*** (0.043)	-0.063** (0.024)
Zambia	0.607*** (0.028)	0.363*** (0.030)	0.099*** (0.017)	0.585*** (0.030)	0.355*** (0.032)	0.097*** (0.018)
Constant	0.129*** (0.030)	0.156*** (0.040)	0.302*** (0.022)	0.058 (0.060)	0.029 (0.074)	0.238*** (0.041)
Variance (constant)	0.025 (0.002)	0.012 (0.002)	0.004 (0.001)	0.024 (0.002)	0.011 (0.002)	0.004 (0.001)
Variance (residual)	0.162 (0.002)	0.177 (0.004)	0.169 (0.002)	0.162 (0.002)	0.177 (0.004)	0.169 (0.002)
Observations	11,654	4,016	12,101	11,654	4,016	12,101
Number of groups	627	594	627	627	594	627

Note: *** p<0.001, ** p<0.01, * p<0.5, + p<0.1. Standard errors in parentheses. The analysis is conducted using Stata's 'mixed' command for linear multilevel regression. The number of respondents in this analysis is lower than the total number of needy respondents in the full LGPI sample because these questions were randomly subsampled. This was due to time and space considerations in the survey. The number of observations for the question on whether respondents have personally received clientelistic handouts is particularly low as this question was only put to those who had previously responded that vote-buying occurred in the area. We also drop 'refuse to answer/don't knows' from the analysis.

Source: authors' calculations.

4.2 Campaign offers and expectations of service provision

Next we examine how campaign handouts affect citizens' expectations of future service provision. To do so, we employ a survey experiment embedded in the surveys in Malawi and Zambia, restricting our analysis here to 5,945 respondents in the 221 communities for which we have more than 20 respondents. We focus on the poor sample ($n=4,811$).

Design

The experiment begins with the following prompt:

Please listen closely as I read you the following description. I will then ask you a few questions about the person I now describe.

The interviewer then proceeds to read a vignette in which key attributes are randomly assigned. The key attributes in the experiment, and the treatment arms associated with each, are presented in Table 3.

Table 3: Experimental conditions

Category	Randomized arms
Actions at campaign rallies	<ol style="list-style-type: none"> 1. Visits communities, campaigning and handing out kitenges/lesos, hats, and T-shirts 2. Visits communities, campaigning and handing out money 3. Visits communities to campaign
Type of good distributed	<ol style="list-style-type: none"> 1. Promises to deliver better health services 2. Promises to provide personal assistance for accessing health centres, paying hospital bills and other fees
Type of distribution	<ol style="list-style-type: none"> 1. Voters who support him/her 2. Voters regardless of whether they support him/her 3. Communities who support him/her 4. Communities regardless of whether they support him/her
Endorser endowment	<ol style="list-style-type: none"> 1. Wealthy 2. Blank
Community actor expressing opinion	<ol style="list-style-type: none"> 1. Local elders urge you to vote for him/her 2. Party leaders urge you to vote for him/her 3. Ethnic leaders urge you to vote for him/her 4. Members of the candidate's family urge you to vote for him/her
Ethnicity	<ol style="list-style-type: none"> 1. Co-ethnic (ethnicity is piped in) 2. Non-co-ethnic (a randomly chosen, non-co-ethnic identity is randomly piped in)
Living status	<ol style="list-style-type: none"> 1. From a nearby village 2. From a village on the other side of the district
Partisanship	<ol style="list-style-type: none"> 1. Co-partisan (respondent's preferred party is piped in) 2. Non-co-partisan (a randomly chosen, non-co-party is piped in)
Gender	<ol style="list-style-type: none"> 1. Male 2. Female

Source: authors' compilation.

The treatment attributes are randomly chosen¹³ and included in a vignette:

Please imagine that a candidate is running in a {local/parliamentary} election. The candidate is a {male/female} {co-ethnic/non-co-ethnic} and {he/she} is running as member of the {co-party/other party} in your district. {He/she} {visits

¹³ For the distribution of treatment conditions, see Tables H3–H6 in Appendix H.

communities, campaigning and handing out kitenges, lesos, hats, and T-shirts/visits communities, campaigning and handing out money/visits communities to campaign} and {promises to deliver better health services/promises to provide personal assistance in accessing health centres, paying hospital bills and other fees} to {voters who support {him/her}/voters regardless of whether they support {him/her}/communities who support {him/her}/communities regardless of whether they support {him/her}}. {He/she} is from {nearby village/village on the other side of the district}. {Wealthy/0} local elders urge you to vote for {him/her}/{wealthy/0} party leaders urge you to vote for {him/her}/{wealthy/0} {candidate ethnic group} leaders urge you to vote for {him/her}/{wealthy/0} members of the candidate's family urge you to vote for {him/her}.

To provide a clear example: a respondent is read a description as follows, in which the italicized words correspond to a treatment arm. The interviewer has been trained to read the vignette carefully, paying close attention to the wording. Note that the vast majority of surveys are conducted in non-gendered languages, and thus the vignette does not place heavy emphasis on the candidate's gender:

Please imagine that a candidate is running in a *parliamentary* election. The candidate is a *female Chewa*, and she is running as a member of the *Malawi Congress Party* in your district. *She visits communities, campaigning and handing out kitenges, lesos, hats, and T-shirts*, and she *promises to provide personal assistance for accessing health centres, paying hospital bills and other fees to voters who support her*. *She is from a nearby village. Local elders urge you to vote for her.*

The interviewer reads eight follow-up questions. The vignette is restated when the interviewer asks the first, third, fifth, and seventh follow-up questions. The dependent variable of interest here is the sixth question,¹⁴ which gauges how likely the respondent believes the candidate would be to deliver on the promise. The question wording is: 'How likely do you think this candidate is to {deliver better health services/provide personal assistance for accessing health centres, paying hospital bills and other fees}?' It asks for a four-point Likert scale response. 'Don't know' are dropped from the analysis.

The experiment is only shown once to each respondent, and thus statistical adjustments for potential correlations in responses at the individual level are not needed. We include random slopes for the type of campaign activity. We allow the effect of receiving money, T-shirts, and hats during the campaign to vary across communities in our models. The equations include i as the individual (respondent) and j as the community level. The constant is represented by β_0 . In the fixed part of the models, β_1 is added for the type of handout, and β_2 includes all additional experimental

¹⁴ Other dependent variables in this experiment are as follows: 1. First, I would like to ask how likely you would be to vote for this candidate in the next election (four-point Likert scale response). 2. How likely do you think it is that this candidate will be able mobilize resources from central government (four-point Likert scale response)? 3. Who do you think the candidate will benefit most: your village or other villages? 4. Who do you think the candidate will benefit most: men or women? 5. Who do you think the candidate will benefit most: your ethnic group or other ethnic groups? 7. How likely do you think it is that the candidate, if elected, will exploit the office for his/her own gain (four-point Likert scale response)? 8. How likely do you think it is that this candidate, if elected, would refuse to help voters who did not vote for him/her (four-point Likert scale response)? For the distributions of all outcome variables, see Tables H1 and H2 in Appendix H.

controls. u_{0j} represents the random effect on the individual's expectations about future service provision, and e_{ij} represents the residuals.

We specify the basic random slope model including controls for all experimental arms and regional fixed effects as follows:

$$\text{(Table 4, M1) } \text{expectations}_{ij} = \beta_0 + \beta_1 \text{action}_{ij} + \beta_2 \text{experimental_controls}_{ij} + \beta_3 \text{region}_{ij} + u_{0j} + u_{1j} \text{action}_{ij} + e_{ij} \quad (2)$$

Then we add our contextual variables for the density of social ties to our model:

$$\text{(Table 4, M2) } \text{expectations}_{ij} = \beta_0 + \beta_1 \text{action}_{ij} + \beta_2 \text{experimental_controls}_{ij} + \beta_3 \text{social_density}_{ij} + \beta_3 \text{region}_{ij} + u_{0j} + u_{1j} \text{action}_{ij} + e_{ij} \quad (3)$$

Finally, we include cross-level interaction to empirically test whether the effect of receiving money or T-shirts and hats during the campaign—compared with no clientelistic appeal—varies by community social density:

$$\text{(Table 4, M3) } \text{expectations}_{ij} = \beta_0 + \beta_1 \text{action}_{ij} + \beta_2 \text{experimental_controls}_{ij} + \beta_3 \text{social_density}_{ij} + \beta_3 \text{region}_{ij} + \beta_4 \text{action} \times \text{social_density}_{ij} + u_{0j} + u_{1j} \text{action}_{ij} + e_{ij} \quad (4)$$

In the following, we present the analysis for the poor sample only (Table 4). Additional analyses using the full and wealthy samples are reported in Appendix D. We include the experimental arms as control variables and regional fixed effects in all our models.

Model 1 shows our basic random slope model findings, where we allow the candidate's campaign appeal to vary across communities. We find that poor respondents have lower expectations of future service provision if the candidate hands out money during the campaign ($p < 0.1$). We find a small and significant difference of 1.65 percentage points compared with when no clientelistic offers are made. The effect of handing out T-shirts and hats is negative but not statistically significant in our model. Nonetheless, it appears that handing out money or other material goods during the campaign negatively affects people's expectations about future service provision.

In Model 2, we include contextual variables for the density of social ties within the village or neighbourhood. We find that in general, respondents living in socially dense communities report lower expectations compared with those living in less dense communities. Yet the direct effect of community density is not significant in our model.

Model 3 includes a cross-level interaction between the type of activity and our contextual variable for the density of community ties. We find that respondents living in more socially dense communities report significantly higher expectations after receiving money from the candidate than when they do not receive handouts during the campaign. Yet our findings are significant only on the 90 per cent significance level. Marginal effects, shown in Figure 1, suggest that a candidate that hands out money during a campaign is increasingly expected to provide services in areas with higher levels of community density. Conversely, expectations decrease with candidates who hand out T-shirts and hats, or where no handout is mentioned.

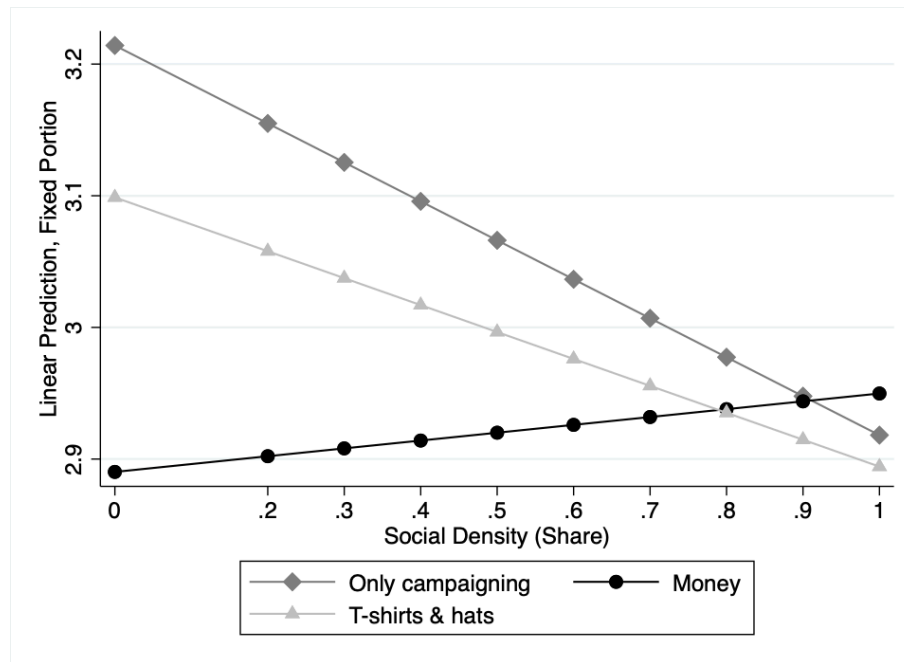
Table 4: Multilevel regression results with expectations about future service provision as dependent variable

	Model (1): basic random slope	Model (2): community density	Model (3): interaction model
Individual variables			
<i>Action type</i>			
Money	-0.066 ⁺ (0.035)	-0.066 ⁺ (0.035)	-0.324 [*] (0.159)
T-shirts, hats	-0.049 (0.035)	-0.049 (0.035)	-0.115 (0.156)
Community level			
Social density		-0.153 (0.112)	-0.296 ⁺ (0.165)
Interaction			
Money*Social density			0.356 ⁺ (0.214)
T-shirts and hats*Social density			0.091 (0.209)
Controls			
Co-ethnic	0.170 ^{***} (0.029)	0.170 ^{***} (0.028)	0.169 ^{***} (0.028)
Village nearby	0.023 (0.029)	0.023 (0.028)	0.023 (0.028)
Female	0.072 [*] (0.029)	0.073 [*] (0.029)	0.073 [*] (0.029)
Co-party	0.120 ^{***} (0.029)	0.120 ^{***} (0.029)	0.120 ^{***} (0.029)
Experimental arms	✓	✓	✓
Region	✓	✓	✓
Constant	2.919 ^{***} (0.065)	3.030 ^{***} (0.104)	3.133 ^{***} (0.136)
Variance (action)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.022 (0.006)	0.021 (0.006)	0.021 (0.006)
Variance (residual)	0.960 (0.200)	0.960 (0.020)	0.959 (0.020)
Observations	4,811	4,811	4,811
Number of groups	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.5, + p<0.1. Standard errors in parentheses. The analysis is conducted using Stata's 'mixed' command for linear multilevel regression. All experimental dimensions of the conjoint are included in the analysis. For tables including all values for the experimental arms, see Appendix D. For robustness checks using contextual controls, see Table G3 in Appendix G.

Source: authors' calculations.

Figure 1: Marginal effects for type of activity by community density (Model 3)



Note: Marginal effects are presented for the clientelistic handouts at different levels of community density.

Source: authors' illustration.

These results help to reconcile competing expectations: that campaign handouts are quid pro quo arrangements, and that they signal future service provision. We show that when individuals are in communities with high social density, they are more likely to believe that a candidate who distributes money at election time will provide services if elected. Indeed, those in socially dense communities come to have greater faith in candidates who distribute money than they do in candidates that distribute hats and T-shirts or for whom no handouts are mentioned. For these individuals, handouts signal future provision, not a one-off exchange of money for votes. However, they are seen as a quid pro quo exchange by those in low social density areas with no expectation of future service provision.

4.3 Information diffusion in the community

Finally, we test the theoretical mechanism that we expect to explain why social density moderates the relationship between handouts and future service delivery: information flow. We expect that stronger information flow in communities with high social density helps brokers and candidates to monitor voters' behaviour, facilitates the spread of information about the candidate's behaviour, and helps communities to hold the politician accountable. To empirically test this argument, we exploit a second conjoint experiment included in the survey. We briefly outline the experiment here. However, in this paper, we are not exploring the effects of these attributes on voters' expectations of the candidate, but rather how social density affects the information flow within the community. Respondents are not randomly assigned to socially dense and less dense communities; thus, the analysis presented in Table 5 is observational.

In the experiment, respondents are presented with a single profile of a parliamentary candidate running for election. The experiment randomly assigns different candidate attributes, including gender, ethnicity, and additional information on the candidate's performance during their last term in office. For a full list of candidate attributes and the mediator on past performance, see Appendix E. An example of how the vignette is read to respondents is presented below (with numbered italicized phrases representing randomized attributes):

(1. *Mediator*) During her last term in office, this MP distributed the budget that she received to support her constituents equally to all villages/neighbourhoods in the constituency. This MP is a (2. *Age*) 55-year-old, (3. *Ethnicity*) Kamba (4. *Gender*) woman from a (5. *Religion*, 6. *Devout* or blank) devout Catholic family of (7. *Wealth*) modest means. She is (8. *Origin*) originally from this area and lives in a village/neighbourhood (9. *Residency*) on the other side of the district.

The respondents are asked nine outcome questions following the experiment. In our analysis, we focus on responses to the following outcome question:

If this candidate kept CDF funds for their own gain or engaged in other corrupt behaviour, how likely would it be that you and others in your community would learn about it?

Very likely.

Somewhat likely.

Not likely.

Not at all likely.

Don't know.

Refuse to answer.¹⁵

We specify the basic random intercept model, including our contextual variables for social density, controls for all experimental arms, and regional fixed effects, as follows:

$$\text{(Table 5) information}_{ij} = \beta_0 + \beta_1 \text{experimental_attributes}_{ij} + \beta_2 \text{social_density}_{ij} + \beta_3 \text{region}_{ij} + u_{0j} + e_{ij} \quad (5)$$

After specifying the random intercept model (Table 5, Model 1), we include our contextual variable for the density of social ties in the community (Table 5, Model 2). Our findings indicate that respondents who live in socially dense communities are significantly more likely to be informed about the candidate's corrupt behaviour than those living in less dense communities. Respondents are 6.25 percentage points more likely to report that they and their neighbours would know about the corrupt behaviour of an MP if they live in dense communities ($p < 0.01$). These findings provide evidence that information flow is stronger in communities where people know most of their neighbours.

¹⁵ Other outcome questions in the experiment are: 1. Spending priorities: how likely do you think it is that this candidate would have the same priorities for spending that you have? 2. How likely do you think it is that this candidate holds the same moral values that you do? Recall that: {0 1}. 3. How likely do you think the candidate is to help the {0}? 4. How likely is it that this candidate would be open and transparent in 0 spending if 1 is elected? Recall that: {2 3}. 5. How likely do you think it is that this candidate can mobilize outside resources from the government, aid organizations, or other funders to help this area? 6. How likely do you think it is that the candidate, if voted into office again, will keep money or use the office for 0 own gain? 7. How likely do you think it is that this candidate will win re-election? Recall that: {0 1}. 8. How likely would it be that you and others in your community would sanction this behaviour by withholding votes or other types of support from the candidate if you learned {0} was corrupt?

Table 5: Multilevel regression results with information on corrupt behaviour of the candidate as dependent variable

	Model (1): basic random intercept	Model (2): community density
Individual variables		
Co-ethnic	-0.005 (0.021)	-0.005 (0.021)
Female	0.038+ (0.021)	0.038+ (0.021)
Age (55)	0.016 (0.021)	0.015 (0.021)
Local origin	-0.021 (0.021)	-0.021 (0.021)
Local residence	-0.055* (0.021)	-0.055** (0.021)
Wealthy	0.001 (0.021)	0.001 (0.021)
Community level		
Social density		0.249** (0.080)
Other experimental arms	✓	✓
Region	✓	✓
Constant	2.416*** (0.057)	2.303*** (0.067)
Variance (constant)	0.058 (0.007)	0.054 (0.007)
Variance (residual)	1.151 (0.016)	1.152 (0.016)
Observations	10,513	10,513
Number of groups	631	631

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$. Standard errors in parentheses. The analysis is conducted using Stata's 'mixed' command for linear multilevel regression. Random slopes models are specified. All experimental dimensions of the conjoint are included in the analysis. For tables including all values for the experimental arms, see Appendix D.

Source: authors' calculations.

5 Alternative explanations and nuances

The analyses presented thus far find considerable support for the theory that community social density moderates the relationship between campaign appeals and the expectation that candidates, if elected, would provide future services. However, one may still be concerned that other aspects of candidate characteristics shape these outcomes, or that social density is a proxy for more important aspects of the context, such as the level of poverty or urbanization.

There is reason to believe that voters are more likely to view candidates who share their identities as more credible and therefore expect them to be more likely to provide future services. Previous literature has shown that voters are more likely to support co-ethnic, co-local, or co-partisan candidates, in part because they believe such candidates are more likely to provide constituent services (Franck and Rainer 2012; Harris and Posner 2019; Lust-Okar 2006; Schneider 2019). As with much of Africa, ethnicity and partisanship play a role in Kenyan, Malawian, and Zambian

elections (see Bratton and Kimenyi 2008; Ferree 2020; Ferree et al. 2021; Norris and Mattes 2003; Osei-Hwedie 1998). Finally, the literature also suggests that women are less corrupt, providing some reason to believe voters are more likely to trust female candidates to fulfil their promises (Agerberg 2014).

One might expect that voters will have different expectations of candidates that give campaign handouts if they are co-ethnic, co-partisan, co-local, or female than if they are not. Consequently, we explore whether voters view handouts from a female candidate or one who shares their identity differently from handouts from candidates who are male or do not share their identity. To do so, we use data from the conjoint experiment presented in Table 3. We run same-level interactions between individual-level characteristics—co-ethnic, co-local, co-partisan, and female—and clientelistic handouts on respondents’ expectations about the candidate’s future service provision.

We report the findings from these interaction models in Table 7. Sharing similar social characteristics with the candidate appears to affect expectations about future performance, but it does not shape how respondents perceive handouts.¹⁶ We do find some evidence of an interaction between co-local candidates and handouts of T-shirts and hats. When the candidate is from a village nearby, poor respondents are less likely to expect service provision after receiving T-shirts and hats during the campaign. The marginal effect is -0.118 (0.05, $p < 0.05$), compared with 0.02 (0.05) for receiving T-shirts and hats from a non-local candidate. Overall, however, there is no evidence that handouts of money are viewed more or less positively when they are made by a candidate who shares the voter’s identity than when they are not.

Alternative contextual variables may also explain differences in perceptions of vote-buying and expectations about a candidate’s future service provision. For instance, scholars point to rural and urban poor communities as those where the monitoring of voters is easier (Stokes 2005) and traditional brokers and party operatives are available (Auerbach 2019; Auerbach and Kruks-Wisner 2020; Paller 2019). Similarly, we do not expect poverty levels to be as important a driver as dense social ties. Indeed, elsewhere we show considerable variation in the density of social ties across poor communities and that it is social density, not poverty level, that affects the nature of authority in such communities (Jöst and Lust 2021). We argue that social ties are a more direct and theoretically relevant driver of the relationship between handouts and expectations than either urban/rural contexts or the level of poverty within communities.

Nevertheless, we test whether we find a similar impact of social density on expectations of candidates that give electoral handouts when we examine urban versus rural communities, or differences in the share of poor respondents. We run the models presented in Table 4 with an aggregated measure of community poverty and our measure of population density, representing whether respondents live in an urban or rural community.

Findings in Table 8, Model 1 show that poor respondents are more likely to expect future services from a candidate when they live in communities with a higher share of needy individuals. However, we do not find similar effects for whether respondents live in rural or urban communities (Model 2). Moreover, the interactions in Table 8, Models 2 and 4 are insignificant: there is no indication that the impact of clientelistic handouts on expectations of future service provision is contingent on either the share of poor people in a community or its population density.

¹⁶ Marginal effects tables are reported in Appendix F.

Table 7: Multilevel regression models with same-level interactions between candidate characteristics and clientelistic handouts

	Model (1): co-ethnic	Model (2): co-partisan	Model (3): co-local	Model (4): female
Individual variables				
<i>Action type</i>				
Money	-0.076 (0.050)	-0.076 (0.050)	-0.053 (0.049)	-0.096+ (0.050)
T-shirts, hats	-0.024 (0.049)	-0.087+ (0.049)	0.019 (0.049)	-0.054 (0.049)
Co-ethnic	0.180*** (0.049)	0.170*** (0.028)	0.170*** (0.028)	0.169*** (0.028)
Co-partisan	0.120*** (0.029)	0.089+ (0.050)	0.120*** (0.029)	0.121*** (0.029)
Co-local	0.023 (0.028)	0.023 (0.028)	0.078 (0.050)	0.022 (0.028)
Female	0.072* (0.029)	0.072* (0.029)	0.071* (0.029)	0.050 (0.050)
Interactions				
<i>Action*Individual characteristic</i>				
Money*Individual characteristic	0.020 (0.070)	0.020 (0.070)	-0.025 (0.070)	0.060 (0.070)
T-shirts and hats*Individual characteristic	-0.050 (0.070)	0.074 (0.070)	-0.137* (0.070)	0.009 (0.070)
Controls				
Experimental arms	✓	✓	✓	✓
Region	✓	✓	✓	✓
Constant	2.913*** (0.068)	2.934*** (0.067)	2.891*** (0.068)	2.931*** (0.068)
Variance (action)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.021 (0.006)	0.021 (0.006)	0.021 (0.006)	0.022 (0.006)
Variance (residual)	0.960 (0.020)	0.960 (0.020)	0.959 (0.020)	0.959 (0.020)
Observations	4,811	4,811	4,811	4,811
Number of groups	221	221	221	221

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$. Standard errors in parentheses. The analysis is conducted using Stata's 'mixed' command for linear multilevel regression. Random slopes models are specified. All experimental dimensions of the conjoint are included in the analysis. For tables including all values for the experimental arms, see Appendix D. For marginal effects analyses, see Tables F1–F4 in Appendix F.

Source: authors' calculations.

Table 8: Multilevel models with expectations about future service provision by community context and clientelistic handouts

	Model (1): share of poor	Model (2): interaction	Model (3): rural vs urban	Model (4): interaction
Individual variables				
<i>Action type</i>				
Money	-0.066 ⁺ (0.035)	-0.136 (0.266)	-0.066 ⁺ (0.035)	-0.054 (0.043)
T-shirts, hats	-0.049 (0.035)	-0.232 (0.259)	-0.050 (0.035)	-0.086 [*] (0.043)
Interactions				
<i>Action*Share of poor in community</i>				
Money*Share of poor		0.080 (0.300)		
T-shirts and hats*Share of poor		0.208 (0.292)		
<i>Action*Urban communities</i>				
Money*Urban				-0.035 (0.074)
T-shirts and hats*Urban				0.108 (0.074)
Context variables				
Share of poor	0.296 ⁺ (0.159)	0.196 (0.236)		
Urban			0.024 (0.037)	-0.001 (0.057)
Controls				
Co-ethnic	0.170 ^{***} (0.028)	0.170 ^{***} (0.028)	0.170 ^{***} (0.028)	0.170 ^{***} (0.028)
Village nearby	0.021 (0.028)	0.022 (0.028)	0.023 (0.028)	0.022 (0.028)
Female	0.072 [*] (0.029)	0.072 [*] (0.029)	0.073 [*] (0.029)	0.071 [*] (0.029)
Co-party	0.120 ^{***} (0.029)	0.120 ^{***} (0.029)	0.120 ^{***} (0.029)	0.120 ^{***} (0.029)
Experimental arms	✓	✓	✓	✓
Region	✓	✓	✓	✓
Constant	2.644 ^{***} (0.161)	2.732 ^{***} (0.222)	2.909 ^{***} (0.066)	2.918 ^{***} (0.068)
Variance (action)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.021 (0.006)	0.021 (0.006)	0.021 (0.006)	0.021 (0.006)
Variance (residual)	0.960 (0.020)	0.959 (0.020)	0.960 (0.020)	0.959 (0.020)
Observations	4,811	4,811	4,811	4,811
Number of groups	221	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses. The analysis is conducted using Stata's 'mixed' command for linear multilevel regression. Random slopes models are specified. For marginal effects plots, see Appendix F. For robustness checks using WorldPop population density measures to proxy urbanization, see Tables G1–G2 in Appendix G.

Source: authors' calculations.

6 Discussion and conclusion

This paper sheds light on how community contexts affect experiences of electoral handouts and expectations of (and experiences with) such politicians' service provision. Leveraging observational data and two survey experiments embedded in a large, heavily clustered survey in Kenya, Malawi, and Zambia, it finds that community social density shapes experiences and expectations. Moreover, it does so in ways that help to reconcile two contradictory views of the distributive consequences of campaign handouts.

Analyses of the observational data demonstrate that the poor living in communities with dense social ties have a different relationship to campaign handouts than those living in communities with less dense ties. The poor in dense communities are significantly more likely to report that vote-buying occurs in their community and that they have personally received such an offer in the past. They are also more likely to think that vote-buying is morally acceptable. These findings suggest that vote-buying not only seems to be cheaper in these areas, but also that social norms and perceptions of vote-buying differ between socially dense and less dense communities.

Our findings also show that the poor in socially dense communities hold different views of candidates that give campaign handouts compared with those who live in less dense communities. These findings reconcile conclusions from other studies that demonstrate *quid pro quo* and 'signalling' views of handouts. In communities with less dense social ties, voters perceive candidates who hand out money as less likely to provide future services. However, in socially dense communities, a candidate's distribution of money appears to signal the candidate's ability to reward voters. Thus, voters anticipate that such candidates will provide future services if elected. In other words, in less socially dense communities, campaign handouts appear to be part of a *quid pro quo* bargain, while in socially dense communities they are a signal of strength.

Finally, we find support for our theoretical mechanism: that stronger information flow is greater in socially dense communities than in less dense communities. Thus, poor voters are more likely to know if a candidate is involved in corrupt behaviour where information is more easily disseminated. In return, they can sanction misconduct more effectively—i.e. by not voting for the candidate in the next election. This suggests not only that voters are socially monitored by their community and candidates, but also that they monitor politicians, holding them accountable for their actions.

Our research contributes to the current literature on clientelism and vote-buying in three important ways. First, it contributes to the study of the distributive consequences of clientelism, moving beyond the focus on how electoral handouts influence voter choice. Second, we recognize that the forces driving voters and politicians extend beyond election day, and importantly, we emphasize that the same factors that draw voters to the polls may also facilitate their ability to hold politicians accountable. Third, we explicitly link social context and the individual's expectations of future service provision in this study. While existing scholarship has primarily viewed communities with dense social ties as providing networks to facilitate voter monitoring by brokers and political candidates, we expand this view by showing that voters can better mobilize to hold politicians accountable where social ties are dense. This is important, as it shows that poor voters are not just cheaper to buy and easier to monitor, but they also have agency. Finally, this work underlines the importance of context more generally. Making sense of how social contexts shape clientelism, and the scope conditions this implies, is an important next step for future work.

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Appendix A: Survey sampling

The sampling of the LGPI was performed independently in five regions across three countries: Kenya, Malawi, and Zambia (although we did not field the following experiment in Kenya for logistical reasons). The regions included the capital cities of each country, and two areas along the shared border between Zambia and Malawi. Samples were stratified. Border regions were divided into strata that were up to 50 kilometres from the border and between 50 and 100 kilometres from the border; each area was divided into five subareas. Urban areas were divided into two concentric circles—up to 25 kilometres from the urban centre, and between 25 and 50 kilometres from the urban centre—and each was divided into four areas. The goal was to ensure that the respondents were distributed across the region and to include more and less urban and border areas. We aimed to divide the samples evenly across these regions and strata.

Satellite imagery data was employed to select sampling units. To do this, we divided the regions/bins into areas of one square kilometre and selected these areas using a randomized probability-proportionate-to-size method based on WorldPop estimates of population density. We then divided the chosen areas into hectares. The hectares were randomly numbered, and enumerators were asked to begin interviewing in the square-kilometre areas in the hectares, moving from those with the lowest numbers to those with the highest. They were asked to complete no more than five interviews in each hectare before moving on to the next, and to complete 30 interviews in each square kilometre. This strategy aimed to ensure that enumerators spread out across the square-kilometre unit.

Enumerators were instructed to enter sampling units using tablets to track their location and confirm they were in the correct area. They were asked to go to the centre of each hectare and then to move outwards, in separate directions, to additional houses. Within each household, one participant was randomly selected using the Kish method. Survey weights were designed to take sampling into account and correct for imbalances between the sample and census demographics for the area.

Appendix B: List of survey questions

B.1 Dependent variables

Sometimes we hear of candidates handing out gifts, money, or other personal favours during election time. When it comes to this area, would you say that this practice occurs? (No, Yes, Don't know, Refuse to answer)

In any election, did you accept gifts, money, or personal favours from one candidate or multiple candidates? (One candidate, Multiple candidates, I have never received gifts, money or personal favours, Don't know, Refuse to answer)

Do you think it is moral or immoral for candidates to pass out gifts, money, or personal favours during election time? (Moral, Immoral, Don't know, Refuse to answer)

Service provision

How likely do you think this candidate is to {0}? (Very likely, Somewhat likely, Not likely, Not at all likely, Don't know, Refuse to answer)

Information

If this candidate kept CDF funds for {0} own gain or engaged in other corrupt behaviour, how likely would it be that you and others in your community would learn about it? (Very likely, Somewhat likely, Not likely, Not at all likely, Don't know, Refuse to answer)

B.2 Individual wealth

I will read out a few statements about your income. Please tell me which of the following statements is closest to your situation: Our household income covers the needs well—we can save. Our household income covers the needs all right, without much difficulty. Our household income does not cover the needs, there are difficulties. Our household income does not cover the needs, there are great difficulties. Don't know. Refuse to answer.

B.3 Individual social ties

In this village/neighbourhood, would you say ... you hardly know anyone at all? You know few people? You know many people? You know almost everyone? Don't know? Refuse to answer?

Appendix C: Distributions of dependent variables

Table C1: Observational data on whether vote-buying occurs in the area (poor sample)

Occurs in area	Frequency	%
No	6,148	47.98
Yes	5,603	43.73
Don't know	764	5.96
Refuse to answer	298	2.22
Total	12,813	100

Source: authors' calculations.

Table C2: Observational data on whether the respondent has personally received offers (poor sample)

Personally received	Frequency	%
One candidate	679	15.88
Multiple candidates	690	16.14
Never	2,684	62.78
Don't know/refuse to answer	222	5.19
Total	4,275	100

Source: authors' calculations.

Table C3: Observational data on whether it is seen as morally acceptable (poor sample)

Moral/immoral	Frequency	%
Moral	2,811	21.94
Immoral	9,389	73.28
Don't know/refuse to answer	613	4.78
Total	12,813	100

Source: authors' calculations.

Appendix D: Additional analyses

Table D1: Observational analysis using the full sample

	Model (1): practice occurs	Model (2): personally received	Model (3): morally acceptable	Model (4): practice occurs	Model (5): personally received	Model (6): morally acceptable
Individual level						
Poor	0.035*** (0.009)	0.024 (0.016)	0.014 (0.008)	0.033*** (0.009)	0.011 (0.016)	0.010 (0.009)
<i>Age (18-34 as baseline)</i>						
35-55	-0.030*** (0.008)	-0.008 (0.014)	-0.064*** (0.008)	-0.030*** (0.008)	-0.008 (0.014)	-0.064*** (0.008)
>55	-0.024* (0.011)	-0.023 (0.021)	-0.077*** (0.011)	-0.025* (0.011)	-0.024 (0.021)	-0.077*** (0.011)
Female	-0.000 (0.007)	-0.006 (0.013)	0.020** (0.007)	-0.001 (0.007)	-0.004 (0.013)	0.019** (0.007)
<i>Education (no schooling as baseline)</i>						
Some schooling	0.043** (0.013)	0.039+ (0.022)	-0.065*** (0.012)	0.044*** (0.013)	0.044* (0.022)	-0.064*** (0.012)
<i>Lived (less than a year as baseline)</i>						
More than one year	0.014 (0.012)	-0.017 (0.021)	-0.018 (0.011)	0.014 (0.012)	-0.017 (0.021)	-0.018 (0.011)
All their life	0.017 (0.014)	-0.031 (0.025)	-0.003 (0.013)	0.014 (0.014)	-0.041+ (0.025)	-0.006 (0.013)
Individual ties	0.009 (0.008)	0.084*** (0.015)	0.014+ (0.008)	0.004 (0.009)	0.065*** (0.016)	0.008 (0.008)
Community level						
Social density				0.130** (0.046)	0.191*** (0.052)	0.077** (0.029)
Share of poor				-0.014 (0.054)	0.039 (0.060)	0.011 (0.034)
Urban				-0.002 (0.016)	0.012 (0.018)	0.012 (0.010)
Controls						
<i>Region (Lilongwe as baseline)</i>						
Lusaka	0.533*** (0.028)	0.273*** (0.029)	0.008 (0.016)	0.557*** (0.030)	0.315*** (0.031)	0.024 (0.017)
Malawi border	0.150*** (0.026)	-0.035 (0.026)	-0.010 (0.015)	0.144*** (0.026)	-0.039 (0.026)	-0.011 (0.015)
Nairobi	0.613*** (0.029)	0.343*** (0.033)	-0.074*** (0.018)	0.634*** (0.033)	0.387*** (0.037)	-0.056** (0.021)
Zambia	0.598*** (0.028)	0.346*** (0.029)	0.096*** (0.016)	0.580*** (0.030)	0.330*** (0.030)	0.091*** (0.017)
Constant	0.078** (0.029)	0.125** (0.040)	0.281*** (0.022)	0.010 (0.055)	-0.018 (0.062)	0.221*** (0.035)
Variance (poor)	0.002 (0.002)	0.000 (0.000)	0.000 (0.000)	0.002 (0.002)	0.000 (0.000)	0.000 (0.000)

Variance (constant)	0.023 (0.002)	0.012 (0.002)	0.004 (0.001)	0.023 (0.002)	0.011 (0.002)	0.004 (0.001)
Variance (residual)	0.168 (0.002)	0.186 (0.004)	0.166 (0.002)	0.168 (0.002)	0.186 (0.004)	0.166 (0.002)
Observations	14,928	5,154	15,563	14,928	5,154	15,563
Number of groups	631	623	631	631	623	631

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table D2: Observational analysis using the wealthy sample

	Model (1): practice occurs	Model (2): personally received	Model (3): morally acceptable	Model (4): practice occurs	Model (5): personally received	Model (6): morally acceptable
<i>Individual level</i>						
<i>Age (18-34 as baseline)</i>						
35-55	-0.015 (0.018)	0.042 (0.034)	-0.059*** (0.016)	-0.015 (0.018)	0.042 (0.034)	-0.058*** (0.016)
>55	0.015 (0.028)	-0.108* (0.050)	-0.120*** (0.025)	0.016 (0.028)	-0.107* (0.050)	-0.119*** (0.025)
Female	-0.014 (0.016)	0.032 (0.028)	0.012 (0.014)	-0.014 (0.016)	0.029 (0.028)	0.012 (0.014)
<i>Education (no schooling as baseline)</i>						
Some schooling	0.088* (0.037)	0.057 (0.071)	-0.103** (0.034)	0.093* (0.037)	0.072 (0.071)	-0.100** (0.034)
<i>Lived (less than a year as baseline)</i>						
More than one year	0.043+ (0.023)	-0.007 (0.040)	-0.007 (0.019)	0.042+ (0.023)	-0.007 (0.040)	-0.007 (0.019)
All their life	0.044 (0.031)	0.108* (0.053)	0.046+ (0.026)	0.037 (0.031)	0.077 (0.054)	0.042 (0.026)
Individual ties	0.024 (0.018)	0.093** (0.032)	0.023 (0.015)	0.015 (0.018)	0.054 (0.034)	0.016 (0.016)
<i>Community level</i>						
Social density				0.069 (0.066)	0.294** (0.094)	0.071 (0.048)
Share of poor				0.074 (0.076)	-0.014 (0.099)	0.004 (0.054)
Urban				-0.006 (0.023)	0.032 (0.032)	0.017 (0.017)

Controls						
<i>Region (Lilongwe as baseline)</i>						
Lusaka	0.471*** (0.046)	0.130* (0.061)	0.003 (0.033)	0.492*** (0.048)	0.154* (0.061)	0.012 (0.034)
Malawi border	0.186*** (0.047)	-0.035 (0.062)	0.012 (0.034)	0.181*** (0.047)	-0.057 (0.062)	0.008 (0.034)
Nairobi	0.583*** (0.048)	0.235*** (0.064)	-0.068+ (0.035)	0.612*** (0.052)	0.264*** (0.067)	-0.056 (0.037)
Zambia	0.545*** (0.048)	0.229*** (0.064)	0.069* (0.035)	0.540*** (0.050)	0.187** (0.066)	0.062+ (0.036)
Constant	0.032 (0.059)	0.135 (0.098)	0.304*** (0.048)	-0.060 (0.085)	-0.015 (0.122)	0.253*** (0.064)
Variance (constant)	0.027 (0.004)	0.009 (0.007)	0.006 (0.002)	0.027 (0.004)	0.006 (0.006)	0.006 (0.002)
Variance (residual)	0.184 (0.005)	0.212 (0.010)	0.155 (0.004)	0.184 (0.005)	0.212 (0.010)	0.155 (0.004)
Observations	3,500	1,216	3,692	3,500	1,216	3,692
Number of groups	583	455	586	583	455	586

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table D3: Empty model, random intercept, and random slope model (Table 4 in main text, poor sample)

	Model (1): null model	Model (2): random intercept model	Model (3): random slope model
<i>Action type</i>			
Handing out money		-0.071* (0.035)	-0.071* (0.035)
Handing out T-shirts and hats		-0.056 (0.035)	-0.056 (0.035)
Constant	2.957*** (0.018)	3.000*** (0.027)	3.000*** (0.027)
Variance (action)			0.000 (0.000)
Variance (constant)	0.024 (0.007)	0.024 (0.007)	0.024 (0.007)
Variance (residual)	0.983 (0.021)	0.982 (0.020)	0.982 (0.021)
Observations	4,811	4,811	4,811
Number of groups	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses. Intra-class-correlation: 0.023 (0.007).

Source: authors' calculations.

Table D4: Empty model, random intercept, and random slope model (Table 4 in main text, full sample)

	Model (1): null model	Model (2): random intercept model	Model (3): random slope model
<i>Action type</i>			
Handing out money		-0.061 ⁺ (0.033)	-0.061 ⁺ (0.033)
Handing out T-shirts and hats		-0.060 ⁺ (0.033)	-0.060 ⁺ (0.033)
Constant	2.961 ^{***} (0.017)	3.002 ^{***} (0.026)	3.002 ^{***} (0.026)
Variance (action)			0.000 (0.000)
Variance (constant)	0.027 (0.006)	0.027 (0.006)	0.027 (0.006)
Variance (residual)	0.984 (0.019)	0.984 (0.019)	0.984 (0.019)
Observations	5,604	5,604	5,604
Number of groups	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table D5: Multilevel regression results for Table 4 in main text (all values)

	Model (1): basic random slope	Model (2): community density	Model (3): interaction
<i>Action type</i>			
Money	-0.066 ⁺ (0.035)	-0.066 ⁺ (0.035)	-0.324 ⁺ (0.159)
T-shirts, hats	-0.049 (0.035)	-0.049 (0.035)	-0.115 (0.156)
Interactions			
<i>Action*Dense communities</i>			
Money*Dense communities			0.356 ⁺ (0.214)
T-shirts and hats*Dense communities			0.091 (0.209)
Context variables			
Social density		-0.153 (0.112)	-0.296 ⁺ (0.165)
Experimental arms			
Personal assistance	-0.036 (0.029)	-0.037 (0.029)	-0.036 (0.029)
Distribution type			
Communities regardless of support	0.005 (0.041)	0.005 (0.041)	0.004 (0.041)
Communities who support him/her	-0.186 ^{***} (0.040)	-0.185 ^{***} (0.040)	-0.185 ^{***} (0.040)
Voters who support him/her	-0.166 ^{***} (0.040)	-0.167 ^{***} (0.040)	-0.167 ^{***} (0.040)
Co-ethnic	0.170 ^{***} (0.029)	0.170 ^{***} (0.028)	0.169 ^{***} (0.028)

Village nearby	0.023 (0.029)	0.023 (0.028)	0.023 (0.028)
Female	0.072* (0.029)	0.073* (0.029)	0.073* (0.029)
Local council	0.120*** (0.029)	0.120*** (0.029)	0.120*** (0.029)
Co-party	0.170*** (0.029)	0.170*** (0.028)	0.169*** (0.028)
Endorser			
Ethnic leaders	0.003 (0.040)	0.003 (0.040)	0.003 (0.040)
Local elders	0.078+ (0.040)	0.079+ (0.040)	0.079+ (0.040)
Party leaders	0.053 (0.039)	0.054 (0.039)	0.054 (0.039)
Endowment	0.027 (0.029)	0.027 (0.029)	0.027 (0.029)
<i>Region</i>			
Lusaka	-0.135+ (0.071)	-0.165** (0.073)	-0.163* (0.074)
Malawi border	-0.038 (0.042)	-0.037 (0.042)	-0.037 (0.042)
Zambia border	-0.177** (0.062)	-0.161** (0.063)	-0.162* (0.063)
Constant	2.919*** (0.065)	3.030*** (0.104)	3.133*** (0.136)
Variance (action)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.022 (0.006)	0.021 (0.006)	0.021 (0.006)
Variance (residual)	0.960 (0.200)	0.960 (0.020)	0.959 (0.020)
Observations	4,811	4,811	4,811
Number of groups	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table D6: Multilevel regression results for Table 4 in main text with full sample

	Model (1): co-ethnic	Model (2): co-partisan	Model (3): co-local	Model (4): female
Individual variables				
<i>Action type</i>				
Money	-0.049 (0.046)	-0.064 (0.046)	-0.050 (0.046)	-0.053 (0.046)
T-shirts, hats	-0.038 (0.046)	-0.108* (0.046)	-0.005 (0.046)	-0.055 (0.045)
Co-ethnic	0.179*** (0.046)	0.163*** (0.026)	0.162*** (0.026)	0.162*** (0.026)
Co-partisan	0.112*** (0.026)	0.071 (0.046)	0.111*** (0.026)	0.112*** (0.026)
Co-local	0.042 (0.026)	0.042 (0.026)	0.079+ (0.046)	0.042 (0.026)
Female	0.068* (0.026)	0.068* (0.026)	0.067* (0.026)	0.071 (0.046)
Interactions				
<i>Action*Individual characteristic</i>				
Money*Individual characteristic	-0.12 (0.065)	0.019 (0.065)	-0.009 (0.065)	-0.005 (0.065)
T-shirts and hats*Individual characteristic	-0.037 (0.065)	0.102 (0.065)	-0.102 (0.065)	-0.004 (0.065)
Controls				
Experimental arms	✓	✓	✓	✓
Region	✓	✓	✓	✓
Constant	2.915*** (0.065)	2.944*** (0.064)	2.905*** (0.064)	2.922*** (0.064)
Variance (action)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.025 (0.006)	0.025 (0.006)	0.025 (0.006)	0.025 (0.006)
Variance (residual)	0.964 (0.019)	0.963 (0.019)	0.963 (0.019)	0.964 (0.019)
Observations	5,604	5,604	5,604	5,604
Number of groups	221	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Appendix E: Mediation experiment

Dimension	Randomized arms
Random ethnicity chosen	Co-ethnic Non-co-ethnic
Random religion/devoutness chosen	Devout Catholic Devout Presbyterian Devout Pentecostal Catholic Presbyterian Pentecostal
Age	35 55
Origin	Originally from this area Not originally from this area
Local living status	Living in a village/neighbourhood nearby Living in a village/neighbourhood on the other side of the district
Gender	Male Female
Class	Wealthy Modest
Mediator	During {0} last term in office, this MP distributed the budget that {1} received to support {2} constituents equally to all ethnic groups. During {0} last term in office, this MP distributed the budget that {1} received to support {2} constituents equally to all villages/neighbourhoods in the constituency. During {0} last term in office, this MP was more successful than most other MPs at securing funds for {1} district. During {0} last term in office, this MP met frequently with citizens in this area to listen to their problems and has given a clear and public accounting of how {1} used CDF funds.

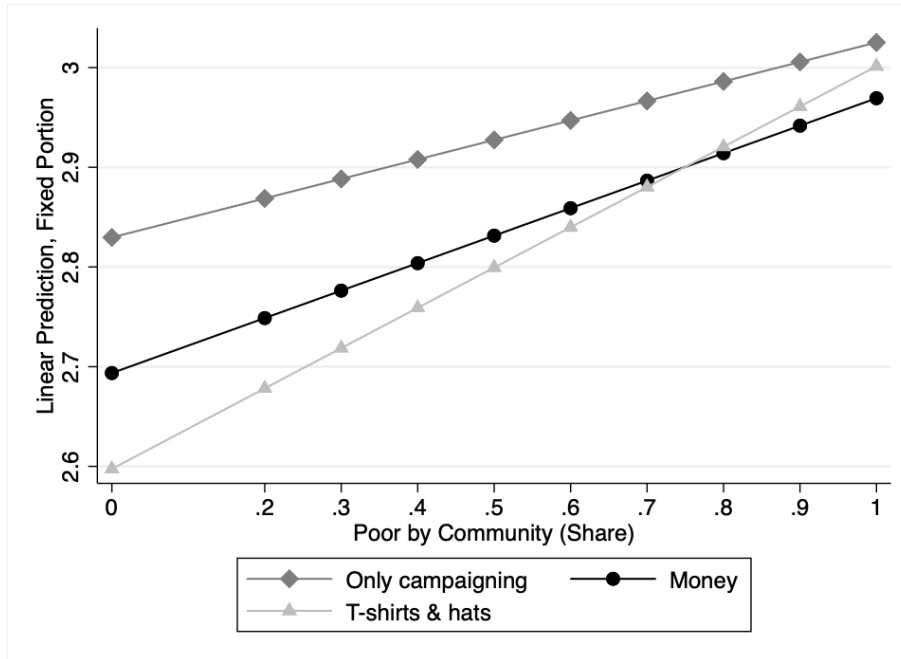
Note: attributes are randomly chosen and included in a vignette: '(Mediator) This MP is a (age), (ethnicity) (gender) from a (religion) family of (wealth). (pronoun) is (origin) and (local living status)'.

Source: authors' calculations.

Appendix F: Marginal effects

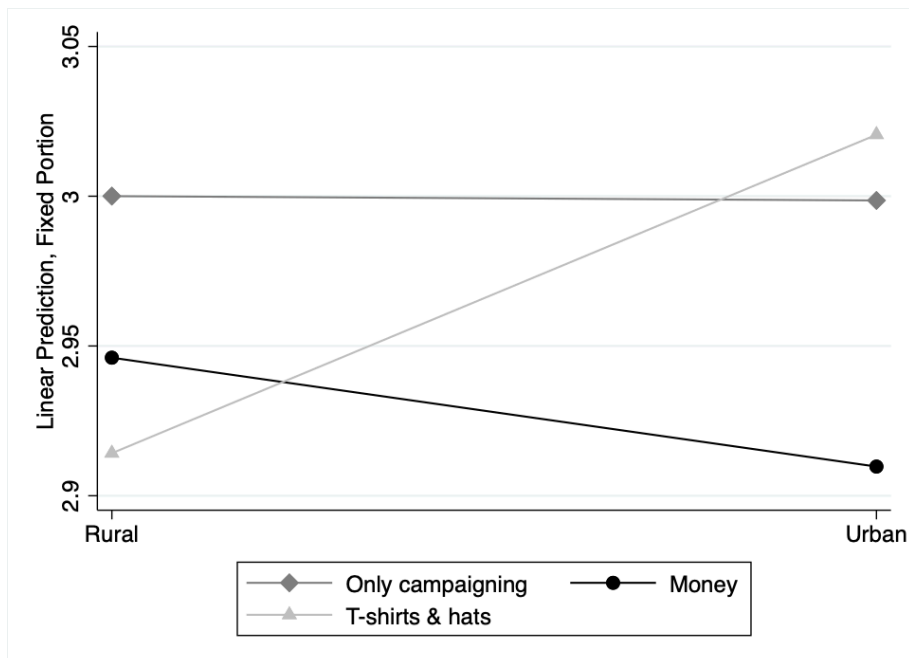
F.1 Marginal effects for cross-level interactions (poor sample)

Figure F1: Marginal effects for type of activity by share of poor (Table 8 in main text)



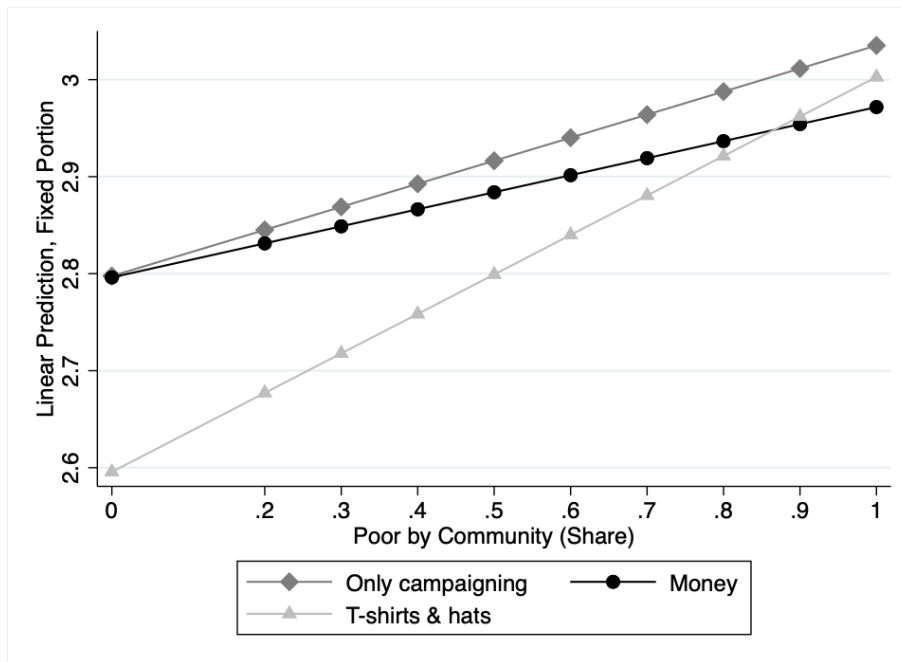
Source: authors' calculations.

Figure F2: Marginal effects for type of activity in urban and rural communities (Table 8 in main text)



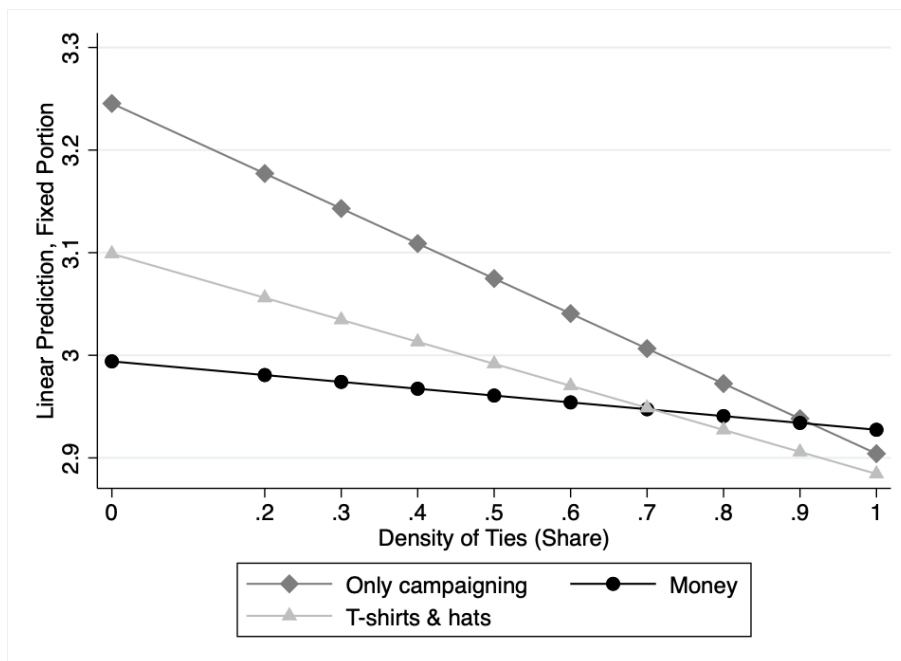
Source: authors' calculations.

Figure F3: Marginal effects for type of activity by share of poor in communities



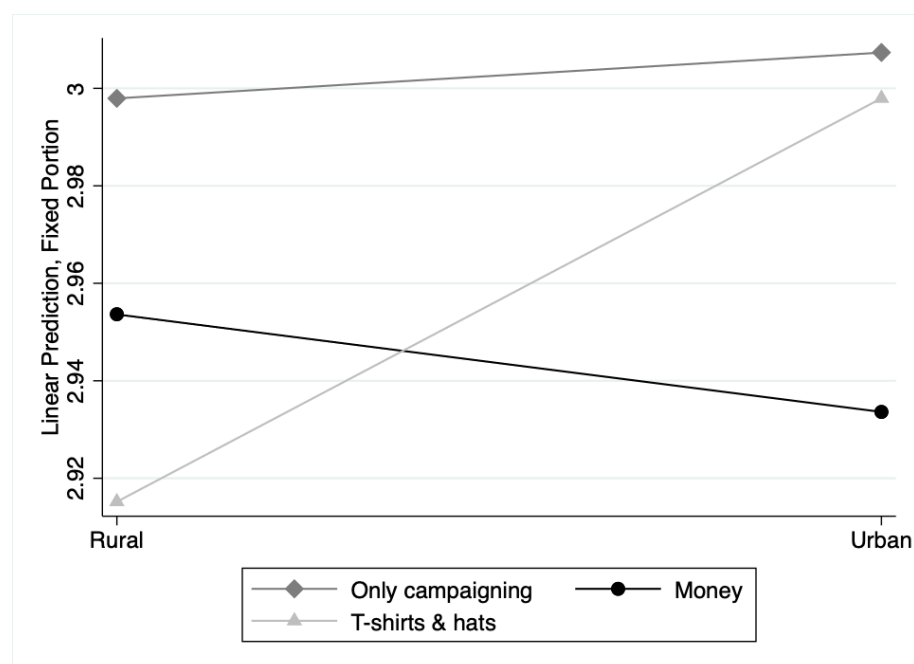
Source: authors' calculations.

Figure F4: Marginal effects for type of activity by community density



Source: authors' calculations.

Figure F5: Marginal effects for type of activity in urban and rural communities



Source: authors' calculations.

F.2 Marginal effects for same-level interactions between individual characteristics and clientelistic handouts

Table F1: Marginal effects for same-level interactions with co-ethnic (poor sample)

	Marginal effect
Action	
Receiving money	
Co-ethnic	-0.056 (0.050)
Non-co-ethnic	-0.076 (0.050)
Receiving T-shirts and hats	
Co-ethnic	-0.074 (0.049)
Non-co-ethnic	-0.024 (0.049)

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors in parentheses.

Source: authors' calculations.

Table F2: Marginal effects for same-level interactions with co-local (poor sample)

	Marginal effect
Action	
Receiving money	
Co-local	-0.078 (0.050)
Non-co-local	-0.053 (0.049)
Receiving T-shirts and hats	
Co-local	-0.118** (0.049)
Non-co-local	0.019 (0.049)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table F3: Marginal effects for same-level interactions with co-partisan (poor sample)

	Marginal effect
Action	
Receiving money	
Co-partisan	-0.056 (0.049)
Non-co-partisan	-0.076 (0.050)
Receiving T-shirts and hats	
Co-partisan	-0.013 (0.049)
Non-co-partisan	-0.087* (0.049)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table F4: Marginal effects for same-level interactions with female (poor sample)

	Marginal effect
Action	
Receiving money	
Female	-0.036 (0.049)
Male	-0.096* (0.050)
Receiving T-shirts and hats	
Female	-0.045 (0.050)
Male	0.054 (0.050)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table F5: Marginal effects for same-level interactions with co-ethnic (full sample)

	Marginal effect
Action	
Receiving money	
Co-ethnic	-0.061 (0.046)
Non-co-ethnic	-0.049 (0.046)
Receiving T-shirts and hats	
Co-ethnic	-0.075* (0.046)
Non-co-ethnic	-0.038 (0.046)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table F6: Marginal effects for same-level interactions with co-local (full sample)

	Marginal effect
Action	
Receiving money	
Co-local	-0.059 (0.046)
Non-co-local	-0.050 (0.046)
Receiving T-shirts and hats	
Co-local	-0.108** (0.046)
Non-co-local	-0.005 (0.046)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table F7: Marginal effects for same-level interactions with co-partisan (full sample)

	Marginal effect
Action	
Receiving money	
Co-partisan	-0.045 (0.046)
Non-co-partisan	-0.064 (0.046)
Receiving T-shirts and hats	
Co-partisan	-0.006 (0.045)
Non-co-partisan	-0.108** (0.046)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Table F8: Marginal effects for same-level interactions with female (full sample)

	Marginal effect
Action	
Receiving money	
Female	-0.057 (0.046)
Male	-0.053 (0.046)
Receiving T-shirts and hats	
Female	-0.055 (0.045)
Male	0.059 (0.046)

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Appendix G: Robustness checks

Table G1: Models using WorldPop population density data with expectations about future service provision as dependent variable (full sample)

	Model (4): urban communities	Model (5): interaction model
Individual variables		
<i>Action type</i>		
Money	-0.055+ (0.032)	0.071 (0.151)
T-shirts, hats	-0.057+ (0.032)	0.071 (0.149)
Interactions		
<i>Action*Urban communities</i>		
Money*Urban		-0.033 (0.038)
T-shirts and hats*Urban		-0.034 (0.038)
Context variables		
Urban	-0.005 (0.021)	0.019 (0.030)
Controls		
Experimental arms	✓	✓
Region	✓	✓
Constant	2.945*** (0.105)	2.802*** (0.128)
Variance (action)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.025 (0.006)	0.028 (0.006)
Variance (residual)	0.964 (0.019)	0.964 (0.019)
Observations	5,604	5,604
Number of groups	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses. Random slope models are specified.

Source: authors' calculations based on data from levels experiment included in LGPI (Lust et al. 2019) merged with population density data from WorldPop.

Table G2: Models using WorldPop population density data with expectations about future service provision as dependent variable (poor sample)

	Model (4): urban communities	Model (5): interaction model
Individual variables		
<i>Action type</i>		
Money	-0.066 ⁺ (0.035)	0.149 (0.168)
T-shirts, hats	-0.049 (0.035)	0.089 (0.164)
Interactions		
<i>Action*Urban communities</i>		
Money*Urban		-0.056 (0.043)
T-shirts and hats*Urban		-0.037 (0.042)
Context variables		
Urban	-0.004 (0.022)	0.027 (0.033)
Controls		
Experimental arms	✓	✓
Region	✓	✓
Constant	2.936 ^{***} (0.110)	2.764 ^{***} (0.139)
Variance (action)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.022 (0.006)	0.024 (0.007)
Variance (residual)	0.960 (0.020)	0.960 (0.020)
Observations	4,811	4,811
Number of groups	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses. Random slope models are specified.

Source: authors' calculations based on data from levels experiment included in LGPI (Lust et al. 2019) merged with population density data from WorldPop.

Table G3: Multilevel regression results with contextual controls (Table 4 in main text)

	Model (1): context variables	Model (2): Poor community *Action	Model (3): Social density *Action	Model (4): Population density *Action
Individual variables				
<i>Action type</i>				
Money	-0.065 ⁺ (0.035)	-0.122 (0.266)	-0.326 [*] (0.159)	-0.052 (0.043)
T-shirts, hats	-0.049 (0.035)	-0.236 (0.259)	-0.103 (0.156)	-0.086 [*] (0.043)
Interactions				
<i>Action*Share of poor in community</i>				
Money*Share of poor		0.065 (0.300)		
T-shirts and hats*Share of poor		0.213 (0.292)		
<i>Action*Spatial density</i>				
Money*Spatial density			0.359 ⁺ (0.214)	
T-shirts and hats*Spatial density			0.075 (0.209)	
<i>Action*Urban communities</i>				
Money*Urban				-0.037 (0.074)
T-shirts and hats*Urban				0.111 (0.074)
Context variables				
Share of poor	0.455 ^{**} (0.171)	0.358 (0.244)	0.460 ^{**} (0.171)	0.463 ^{**} (0.170)
Spatial density	-0.258 [*] (0.125)	-0.258 [*] (0.126)	-0.396 [*] (0.174)	-0.260 [*] (0.125)
Urban	0.018 (0.040)	0.019 (0.040)	0.019 (0.040)	-0.008 (0.059)
Controls				
Co-ethnic	0.169 ^{***} (0.028)	0.170 ^{***} (0.028)	0.169 ^{***} (0.028)	0.169 ^{***} (0.028)
Village nearby	0.022 (0.028)	0.022 (0.028)	0.021 (0.028)	0.020 (0.028)
Female	0.072 [*] (0.028)	0.072 [*] (0.029)	0.072 [*] (0.028)	0.071 [*] (0.028)
Co-party	0.119 ^{***} (0.029)	0.120 ^{***} (0.029)	0.119 ^{***} (0.029)	0.119 ^{***} (0.029)
Experimental arms	✓	✓	✓	✓
Region	✓	✓	✓	✓

Constant	2.676*** (0.172)	2.761*** (0.223)	2.772*** (0.194)	2.680*** (0.172)
Variance (action)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Variance (constant)	0.019 (0.006)	0.019 (0.006)	0.019 (0.006)	0.018 (0.006)
Variance (residual)	0.960 (0.020)	0.960 (0.020)	0.959 (0.020)	0.959 (0.020)
Observations	4,811	4,811	4,811	4,811
Number of groups	221	221	221	221

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1. Standard errors in parentheses.

Source: authors' calculations.

Appendix H: Distributions

H.1 Outcome variables

Table H1: Number of observations and percentage shares within each category of the dependent variables vote, corruption, clientelism, mobilize, and service provision

Answer choices	Vote		Corruption		Clientelism		Mobilize		Service provision	
	N	% share	N	% share	N	% share	N	% share	N	% share
Not at all likely	1,466	11.57	937	7.93	2,714	21.04	927	7.64	1,327	11.15
Not likely	2,433	19.20	3,235	27.38	4,892	37.93	2,462	20.29	2,439	20.49
Somewhat likely	2,261	17.84	3,459	29.27	2,406	18.65	3,333	27.46	4,047	34.01
Very likely	6,515	51.40	4,185	35.42	2,886	22.38	5,415	44.62	4,088	34.35
Total	12,675	100.00	11,816	100.00	12,898	100.00	12,137	100.00	11,901	100.00

Source: authors' calculations.

Table H2: Number of observations and percentage shares within each category of the dependent variables favour village and favour ethnic group

Answer choices	Favour village scale		Favour village binary		Answer choices	Favour ethnic group scale		Favour ethnic group binary	
	N	% share	N	% share		N	% share	N	% share
Other villages	2,842	23.01	2,842	59.79	Other ethnic groups	2,376	44.23	2,376	54.31
No favouritism	7,600	61.52			No favouritism	997	18.56		
Your village	1,911	15.47	1,911	40.21	Your ethnic group	1,999	37.21	1,999	45.69
Total	12,353	100.00	4,753	100.00	Total	5,372	100.00	4,375	100.00

Source: authors' calculations.

H.2 Treatments

Table H3: Number of observations and percentage shares within each level of the attributes election type, ethnicity, and living status

Attribute levels	Election type		Attribute levels	Ethnicity		Attribute levels	Living status	
	N	% share		N	% share		N	% Share
Parliamentary	6,580	50.50	Co-ethnic	6,495	49.85	Village nearby	6,442	49.44
Local council	6,450	49.50	Non-co-ethnic	6,535	50.15	Village far away	6,588	50.56
Total	13,030	100.00	Total	13,030	100.00	Total	13,030	100.00

Source: authors' calculations.

Table H4: Number of observations and percentage shares within each level of the attributes partisanship and gender

Attribute levels	Partisanship		Attribute levels	Gender	
	N	% share		N	% share
Co-party	6,584	50.53	Male	6,565	50.38
Non-co-party	6,446	49.47	Female	6,465	49.62
Total	13,030	100.00	Total	13,030	100.00

Source: authors' calculations.

Table H5. Number of observations and percentage shares within each level of the attributes actions at campaign rallies, type of future promise, and target of distribution

Actions at campaign rallies			Type of future promise			Target of distribution		
Attribute level	N	% share	Attribute level	N	% share	Attribute level	N	% share
Only campaigning	4,406	33.81	Healthcare service	6,601	50.66	Communities regardless of support	3,081	23.65
Campaigning + money	4,311	33.09	Personal assistance	6,429	49.34	Communities who support him/her	3,250	24.94
Campaigning + T-shirts and hats	4,313	33.10				Voters regardless of support	3,300	25.33
						Voters who support him/her	3,399	26.09
Total	13,030	100.00	Total	13,030	100.00	Total	13,030	100.00

Source: authors' calculations.

Table H6: Number of observations and percentage shares within each level of the attributes endorser and endorser endowment

Attribute level	Endorser		Attribute level	Endorser endowment	
	N	% share		N	% share
Ethnic leaders urge you to vote	3,214	24.67	None	6,553	50.29
Local elders urge you to vote	3,252	24.96	Wealthy	6,477	49.71
Member of candidate's family urge you to vote	3,342	25.65			
Party leaders urge you to vote	3,222	24.73			
Total	13,030	100.00	Total	13,030	100.00

Source: authors' calculations.