WHOSE SIDE ARE YOU ON?
IDENTIFYING THE DISTRIBUTIVE PREFERENCES OF LOCAL POLITICIANS IN INDIA

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Abstract

The literature on decentralized public programs suggests that errors in the targeting of anti-poverty programs are rooted in the capture of these programs by local elites or local politicians. Consistent with the literature on moral economy in political science and experimental economics, we argue that voters in contexts of rural poverty prefer local leaders who target subsistence benefits to the poor. In a high-information village context, where voters and leaders know each other, we argue that local elections lead to the selection of local leaders with pro-poor preferences over the distribution of these benefits. We show this with a novel theory of local politicians' social preferences. We test our theory with unique data from a behavioral measure, conducted in the context of a lottery with a modest cash prize in rural India, that captures a scenario in which local leaders have full discretion and anonymity over allocation among members of their rural communities. We analyze our data using a novel estimation strategy that takes the characteristics of the pool of potential beneficiaries into account in decisions over allocation under a budget constraint. We find that local leaders have strong preferences for targeting the poor, and particularly those they believe supported them politically in the past. This article suggests that free and fair elections at the local level can powerfully encourage pro-poor targeting even in contexts of weak institutions and pervasive poverty. It also makes a fundamental contribution to research on distributive politics by challenging research in this area to demonstrate the effect of electoral strategies and other distortions on allocation relative to local leaders' baseline distributive preferences.

For every rupee spent by the government for the welfare of the common man, only 17 paise reached him
– Rajiv Gandhi, 1985.

1 Introduction

Ensuring that anti-poverty programs reach the poor is a central challenge that low-income countries face. Central governments in these contexts generally lack the capacity to target the poor programmatically or monitor local agents involved in policy implementation on a large scale (Keefer 2007; Bardhan 2002). Here, targeted distribution is characterized by a substantial degree of local discretion, whether at the hands of bureaucrats under centralized states, or local leaders where implementation of these programs is decentralized (Bardhan and Mookherjee 2000). Accordingly, some level of bias in targeting relative to a programmatic ideal in which only the poor receive benefits from these programs is unavoidable. For instance, research shows that a large share of anti-poverty benefits have been diverted to the non-poor (Besley et al. 2012; Niehaus et al. 2013; Bardhan and Mookherjee 2006). Scholarship also shows evidence of targeting along partisan and ethnic lines, which also leads to the exclusion of a substantial share of the poor (Stokes et al. 2013; Dunning and Nilekani 2013; Calvo and Murillo 2013; Chandra 2004; Habyarimana et al. 2009). In this context, governments must determine the best among imperfect options to encourage pro-poor targeting. Following the logic of the moral economy in subsistence-based populations (Scott 1977, 1985; Henrich et al. 2001), we argue that devolving responsibility over the selection of beneficiaries to directly elected local leaders is the best among imperfect options.

This article engages the debate over whether devolving responsibility over anti-poverty programs to elected local governments will lead to more or less pro-poor targeting. Those who take the former position suggest that decentralization encourages pro-poor targeting because local leaders have fine-grained information on the economic needs of members of their localities (Alderman 2002; Alatas et al. 2012), and formal mechanisms of selection and local accountability make elected local politicians more likely to be responsive to the needs of their poor constituents (Seabright 1996; Faguet 2004; De Janvry et al. 2012). On the other hand, research on elite capture suggests that decentralized targeting is susceptible to capture of these programs by political and economic elites (Besley et al. 2012; Bardhan and Mookherjee 2002, 2006). A central concern in this research is that the poor often lack the capacity to hold local leaders accountable in contexts of inequality where poverty is pervasive. Accordingly, there is a broad perception that local leaders use their discretion to bias the allocation of anti-poverty benefits to themselves, their relatives or co-ethnics, and the non-poor to the detriment of program goals (See Besley et al. 2012). An important implication of this view is that local leaders have anti-poor distributive preferences.[1]

Theory and evidence suggest that the concern of elite capture may be overstated. For instance, empirical research on local distribution in India shows that within-village targeting is broadly pro-poor (See Besley et al. 2004; Bardhan and Mookherjee 2006; Dasgupta and Beard 2007). Beyond India, research on the targeting of conditional cash transfers similarly shows that targeting is generally progressive while losses in efficiency to elite capture are relatively minor, even when leaders determine beneficiaries behind closed doors (Alatas et al. 2012, 2013). Moreover, work on elite capture contrasts with research on the moral economy, which suggest that even when economic inequality is high, a broad preference and social expectation to target the poor with subsistence benefits is widespread (Scott 1977, 1985). It also contrasts with work on social insurance, which argues that individuals in subsistence-based societies characterized by high-information and dense social ties contribute resources to the poor because they may need similar assistance in the future (Coate and Ravillion 1993; Ravillion and Dearden 1988; Fafchamps 1992). Extensive evidence from lab games in economics similarly finds that altruism and relative inequality aversion are widespread, particularly in contexts of dense social ties (Ekel and Grossman 1996; Camerer and Fehr

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[1]Alternatively, local elites who have anti-poor preferences may pressure local leaders to target the non-poor (See for example Kothari 2008).

2003; Charness and Rabin 2002).[2] Consistent with this body of research, we argue that free and fair elections, where the conditions of moral economy hold, are likely to lead to the selection of pro-poor local leaders.

This article provides a novel theory of local politicians' distributive preferences, which we test with a unique behavioral measure that identifies local politicians' baseline preferences over the selection of beneficiaries. Consistent with moral economy and experimental research on social preferences in psychology and economics, we argue that elected leaders in a subsistence-based village setting have preferences for pro-poor targeting of subsistence benefits because voters who have these preferences select leaders of this type through local elections. This is possible under local democracy because voters overwhelmingly know candidates in village elections personally and have interacted with them in the past. This means that village politicians' distributive preferences are observable prior to elections. Moreover, along with providing voters with a mechanism to screen out anti-poor local leaders, we argue that local democracy screens out those with highly exclusive distributive preferences, such as those with preferences to target only co-ethnics or family members because these leaders cannot recruit the minimum winning coalition necessary to be elected in the first place. Unlike the programmatic ideal, however, local democracy cannot ensure that all poor villagers are targeted. Local elections may encourage pro-poor targeting by screening out leaders who are anti-poor or likely to exclude most voters, but additional constraints are required to expand pro-poor targeting beyond those perceived as certain or plausible political allies.

We test our theory with a unique behavioral measure, *distributive preferences*, based on a lottery conducted in 84 gram panchayats (GPs) across rural Rajasthan, India. We asked village council presidents, or sarpanch, to allocate five tokens among ten voter survey respondents in any denomination they wished, and told them that each token would increase the chance a particular voter would win a 200 rupee ($3.65 USD) cash prize– approximately equivalent to one day of agricultural daily wage labor. Token allocation and the distribution of the prize were done privately.[3] This isolates distributive preferences from the threat of social sanctions and the constraints of efficiency-maximizing electoral mobilization, which may induce sarpanch to allocate tokens in a way that deviates from their underlying preferences. We analyze this measure using a novel statistical strategy that takes the characteristics of the pool of possible beneficiaries within a GP into account rather than making the inappropriate assumption that villagers within the same GP can be treated as independent. We find that sarpanch have strongly pro-poor preferences and a preference to target those they perceive have supported them in the past.

This article makes both theoretical and empirical contributions to research on clientelism and distributive politics more broadly. First, we provide a revised explanation for the well-established correlation between targeted distribution and poverty in the literature on vote buying (Brusco et al. 2004; Calvo and Murillo 2004).[4] Our theory of distributive preferences situates local leaders in the high-information setting in which they live, and suggests that local elections encourage pro-poor targeting, through a screening mechanism, irrespective of electoral strategies designed to win the next election. As long as elections are free and fair, this should be the case even where formal and informal accountability mechanisms are weak. More generally, this article suggests that local leaders' underlying (non-strategic) preferences are more pro-poor than theories of elite capture and clientelism suggest.

Second, we contribute to the debate on whether parties strategically target core or swing voters as a strategy to win elections. This work suggests that parties should target swing voters because they are pivotal to election outcomes (Stokes 2005), target passive supporters to induce turnout (Nichter 2008), or target core supporters to increase efficiency (Calvo and Murillo 2013; Diaz-Cayeros et al. 2012). Our theory of distributive preferences suggests that core targeting may be less strategic than the existing literature suggests. Moreover, we establish an important benchmark for adjudicating between an array of evidence

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[2]Altruism refers to levels of giving in dictator games; distribution based on inequality aversion refers to giving more to those who are relatively poorer than the allocator when that information is revealed in lab games.

[3]Sarpanch were not told who won the lottery and lottery winners were not told that the sarpanch was involved in determining the winner.

[4]See Stokes et al. (2013) for an overview of arguments and evidence for targeting of the poor under clientelism.

of both core and swing targeting. We argue that in order to establish that the allocation of benefits is evidence of core or swing targeting, scholars should demonstrate that targeting is more core or swing than the allocations local leaders prefer, irrespective of their impact on elections. This is critical because if we see, for example, that the allocation of campaign handouts matches the allocation we would see in our scenario, it is plausible that targeting is a function of preferences rather than electoral strategy.

Third, we test our theory with a unique measure, distributive preferences, which isolates local leaders' preferences from social, institutional, and political constraints as well as the influence of other actors who formally or informally influence the selection of beneficiaries to targeted anti-poverty programs. This critically allows us to avoid inferring preferences and strategies of particular actors from policy outcomes, which are the result of multiple actors with different incentives.[5] Finally, we employ a statistical strategy that takes into account the non-independence and multi-level nature of data of the type used in this paper. This also provides an important empirical contribution to the literature on distributive politics.

This article proceeds as follows. In the next section, we provide a theory that explains why voters select local politicians with pro-poor preferences through local elections. In section 3, we introduce the case of India. The following section describes the research design and survey in which it was embedded. Subsequently, we provide empirical results.

2 A Theory of Distributive Preferences Under Local Discretion

In this section, we develop a theory that explains why voters in a context of high information and dense social ties elect pro-poor local leaders, or sarpanch in our context.

2.1 Subsistence-Based Communities and the Moral Economy

In many poor, subsistence-based communities, like those in rural India,[6] central state institutions cannot effectively target the poor. In such settings, informal social institutions are often used to mitigate economic and security risks in what is referred to as a "moral economy" (Scott 1977, 1985; Rosenzweig 1988). These informal social institutions maintain order and yield greater welfare for those in the community (Bowles and Gintis 1998).

The assumption of large subsistence-based populations generates distributional preferences for targeting the poorest people in the community in two ways. The average person may understand that to allow a significant portion of the community to fall below subsistence level would have dire consequences for the entire community in terms of sustainability, health and conflict. Furthermore, the process of risk mitigation requires individuals to protect each other over a long time horizon. To fail to protect another member of the community in the present is to lose protection in the future (Fafchamps 1992). The maintenance of such preferences is predicated upon reasonably dense social networks, where each individual is reasonably socially connected to each other.

This principle is corroborated by evidence from lab experimental games, which consistently show that greater social integration, and lower social distance, has positive impacts on altruistic behavior or "other-regarding preferences"[7] (Hoffman, McCabe, and Smith 1996). It is also consistent with another strand

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[5]This is particularly common in research on below poverty line (BPL) card distribution in India (See Dunning and Nilekani 2013; Markussen 2011; Besley et al. 2004). A similar problem concerns inferring party strategies from the receipt of handouts in election campaigns (See for example Brusco et al. 2004).

[6]Almost by definition, the selection of "villages" in India entails looking at subsistence-based populations. According to the Indian census definitions, the population must be fairly small (less than 5000 person), not particularly dense, and more than 75% of the men need to be employed in agriculture. This generally leads to populations where a significant portion is engaged in subsistence farming. As we discuss later, we select particularly poor populations that are more likely to be at the subsistence level.

[7]This is typically defined as preferences to benefit another person at a personal cost.

of this literature that individuals generally display "inequality aversion." That is, when interacting with someone who is much poorer, individuals display greater levels of other-regardedness (Charness and Rabin 2003).

2.2   Local Democracy

Unlike the case with parliamentary or state elections in which voters have limited information on candidates or even the principle of distribution they employ in office (See Chandra 2004), local elections in our context take place in a context of dense social networks and high information where voters know candidates personally, have accumulated information on the reputations of candidates and their families, and have interacted with these individuals on a regular basis over many years. Through previous interactions and interactions with candidates in their capacity as elected or unelected local leaders, it is plausible that voters are able to develop reasonably accurate priors on the targeting preferences of candidates. In a context of moral economy and free and fair local elections, which allows voters to express their true preferences at the polls, we should expect voters to elect pro-poor local leaders. Furthermore, in a local context characterized by this level of close contact, local leaders know the demographic characteristics of their constituents and have well-formed beliefs about voters' past reciprocal behaviors. This is consequential where distribution is subject to a budget constraint and the discretion of local leaders.

In sum, we make the assumption that in a local democracy voters can truthfully express their preferences at the polling booth. Voters' preferences are formed based on close observation of the preferences and past behaviors of the candidates. Similarly, local leaders know a lot about their constituents and have well-formed beliefs about how they have behaved toward them in the past. In a subsistence-based setting, this means that the median voter is likely to prefer distributional outcomes consistent with a moral economy, and vote for a leader likely to implement a pro-poor distribution. Leaders can implement such a distribution due to their knowledge about their constituents (See Alderman 2002).

2.3   The Preferences of Local Leaders

Many traditional forms of social organization, such as kinship, tribe, or ethnic group, have a traditionally-appointed leader, such as a family elder, a chief, or an ethnic/religious leader, who wields power in the distribution of resources over the community to maintain the moral economy. Naturally, this pattern of social protection may lead to exclusive patterns of risk mitigation where, for instance, certain ethnic groups disproportionately reap the benefits of a moral economy. In our context, rather than relying on traditional leaders, villages are endowed with democratically-elected leaders over a fixed constituency (GP). Unlike the case where unelected leaders have discretion over allocation, local democracy, through elections, gives a plurality of voters the chance to screen out leaders with preferences for narrow distribution.

Our approach is to adapt what is known about "social preferences" (e.g., fairness, altruism, and reciprocity) from a large literature in psychology and economics (See Gintis et al. 2003; Ekel and Grossman 1996; Fafchamps 1993) to the distributional preferences of constituency-level leaders over a constrained budget. More precisely, to understand these preferences, we imagine a scenario in which the leader has full discretion in distributing individual-level or household-level goods that are limited in supply. This means that the leader must make decisions about who receives the good and who is excluded from the good.

A leader's allocation to another person is driven by two motivations: other-regardedness and personal benefit. Other-regardedness, as described above, is the idea that the leader allocates to certain individuals because he or she wishes to help the other person, irrespective of personal benefit. The psychology and economics literature has consistently shown that other-regarding preferences are held widely over the population. Leaders may also allocate to individuals because they derive some personal benefit from doing

so, like building a larger personal coalition or increasing the chances of getting elected. Our theoretical and empirical approach is to isolate the motivation of other-regardedness, which we view as the "unstrategic" distributive preferences of an elected local leader. This provides a baseline from which we can understand how the distribution of benefits is shaped by social or institutional constraints and motivations for the strategic building of electoral coalitions.

2.4 Distributional Preferences of Elected Local Leaders

In this subsection, we describe the utility function of local leaders in allocating resources to another person in some detail. In doing so, we are able to develop a framework to understand how local democracy selects leaders with certain types of underlying distributive preferences.

2.4.1 Distributional Preferences Based on Demographic Attributes

Leaders have preferences over the distribution of goods over the entire constituency. Even if the leader prefers to target the poorest members of the constituency, consistent with the moral economy, he or she may display serious demographic biases in targeting, conditioning distribution on, for instance, shared ethnicity (Posner 2005; Chandra 2004) or kinship (Besley et al. 2012). We refer to a leader who targets with serious demographic biases as a "narrow-based" allocator, and one who does not significantly condition upon demographic factors as a "broad-based" allocator.

Leaders with (locally observed) distributive preferences that exclude those who are not co-ethnics or kin are unlikely to be selected by the median voter, as politicians must construct a minimum winning coalition in multi-ethnic constituencies.[8] In particular, because candidates must win a plurality of support from voters of multiple groups, and even the allegiances of co-ethnics are divided, we should not see a plurality of voters elect a sarpanch who is likely to exclude all but a small share of the GP population.[9] The level of exclusion is even more extreme along the lines of kinship or friendship, which rules out such narrower forms of allocation. Accordingly, selection by local democracy predicts leaders with broad-based distributional preferences.

2.4.2 Distributional Preferences Conditioned on Behavior

Even conditioning on demographic attributes, leaders are likely to have underlying distributive preferences towards certain individuals. The lab experimental literature has repeatedly demonstrated that individuals are likely to display other-regarding preferences towards those who are believed to have displayed preferences towards them (Charness and Rabin 2005); that is, a person is more likely to reciprocate towards those whom she believes have helped her, and hurt those whom she believes have hurt her.[10] Crucially, the leader generates positive utility from the very act of reciprocation to a helper, and disutility from allocating to a non-helper. There may be no direct personal benefit from this act of allocation. It is important to note that this preference is conditioned upon the past *behavior* of the individual, not a demographic characteristic.

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[8]In many of our study areas, there is a rotating system of quotas whereby candidates for sarpanch are restricted by caste eligibility criteria, which change from one election to the next. This means that a majority of voters will be unable to vote for a co-ethnic in any election (Dunning and Nilekani 2013).

[9]Even in a scenario with a majority ethnic group, competing candidates are likely to be from the majority ethnic group. In this situation, a minority ethnic group may become a pivotal actor in the election.

[10]This is often referred to as "positive" and "negative" reciprocity or "fairness" (Hoffman et al. 1999), and it is explicitly distinguished from a cooperative game or quid-pro-quo exchange. It is a form of other-regarding preferences.

Leaders want to be leaders. That is, they generate "ego rents" from being elected, either due to career advancement or a gain in status.[11] In a context in which politicians and voters know each other, visible supporters of the leader should be seen as helping the leader more than visible opponents. This may be due to social ties, similar beliefs, or other types of affinities. By this logic, we should expect local leaders to prefer allocation to supporters over non-supporters rather than having equivalent distributive preferences for supporters and non-supporters or favoring the latter over the former. Unlike the case with co-ethnic targeting, any voter can opt in to become a supporter of a local leader or his party. Practically, voters may signal weak or strong support for a local leader, which affects a local leader's distributive preferences. At the same time, this act of reciprocation from the leader may cause some deviation from the programmatic ideal. That is, those who are poor, and would have been targeted under some anti-poverty program, may be excluded from benefits if they do not support the local leader.

2.4.3 Personal Benefits and Building an Electoral Coalition

Leaders have personal motivations as well. Their patterns of allocation may reflect personal benefits that can be accrued from recipients. As mentioned above, leaders receive ego rents from being elected to office. In such a situation, local leaders have an incentive to allocate limited resources in order to build an electoral coalition. This has been the focus of a significant literature on allocation during the electoral period (Stokes 2005; Calvo and Murillo 2004, 2013; Dunning and Nilekani; Stokes et al. 2013). A pure electoral maximizer prefers to target swing voters (Stokes 2005, Lindbeck and Weibull 1993, Dixit and Londregan 1996), those who are on the fence about whom to support. However, since one's own supporters are likely to be socially closer, they may be targeted more efficiently. In such a scenario, it may make sense to allocate more to one's own supporters. The motivation to target supporters is quite different from targeting according to distributive preferences; leaders do not generate positive utility from merely reciprocating for electoral support. They only generate positive utility from enlarging or solidifying their electoral coalitions.

Our approach is to isolate underlying distributional preferences for local leaders by generating a scenario in which the leader has full discretion in allocation but cannot derive a personal benefit from it, electoral or otherwise. We suggest that in such a scenario, local democracy should generate broad-based pro-poor targeting in subsistence-based societies. Because central institutions cannot easily bind local leaders, they are free to reciprocate allocation towards their supporters. In short, local democracy effectively selects leaders consistent with a moral economy over the entire constituency, but this leader will condition allocation on existing electoral support even if he cannot personally benefit from it, leading to some deviation from the programmatic ideal.

2.5 Theoretical Implications

By isolating distributive preferences from personal benefit, we provide a framework for understanding how electoral strategies should change distribution based on distributive preferences alone. This has important implications for existing theories. First, a consensus in research on vote buying suggests that benefits should be targeted to the poor because poor voters are most responsive to low-value handouts (Brusco et al. 2004; Stokes 2005; Stokes et al. 2013; Calvo and Murillo 2004). Our theory suggests that elected local leaders are likely to target the poor irrespective of its impact on elections. If pro-poor targeting is driven by an electoral strategy, we should see more pro-poor targeting when allocation is public, particularly close to elections, than the allocation we expect from distributive preferences alone. Second, Stokes (2005) predicts swing targeting toward the poor because the vote preferences of core and opposition voters are unresponsive to targeted benefits, while Calvo and Murillo (2004, 2013) argue that we should see core targeting because it is more efficient. Our theory predicts targeting of supporters

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[11]They may also gain corruption benefits, but we do not test that in this paper.

irrespective of its electoral impact. If local politicians target benefits to core or swing voters to impact future elections, we should see a deviation from distributive preferences toward targeting core or swing voters. Third, our theory suggests that elected local leaders are unlikely to narrowly restrict benefits to co-ethnics where demographics require multi-ethnic coalitions (Dunning and Nilekani 2013). This challenges the view that ethnic targeting preferences are primary where local leaders have full discretion (See Besley et al. 2004). Finally, our theory has implications for understanding the impact of social pressure and institutional constraints on targeting outcomes. Social pressure may take the form of elite capture, in which economic elites pressure a local leader with pro-poor preferences to target anti-poverty benefits to the non-poor (Bardhan and Mookherjee 2006), or social pressure to target anti-poverty benefits to the poor due to a socially enforced norm to target the poor. Institutional constraints in a programmatic context ensure full pro-poor targeting through state oversight. By considering targeting outcomes relative to the targeting we would expect if local leaders acted on their underlying distributive preferences, our framework provides a way to conceptualize the impacts of each of these constraints.

3   The Case of India

We test our theory in rural India and in the northwestern state of Rajasthan specifically. In this section, we demonstrate that Rajasthan meets the scope conditions of our theory and describe the institution of the gram panchayat (GP), and the power sarpanch have over targeted distribution.

3.1   Moral Economy and Local Democracy in Rajasthan

Rajasthan is a predominantly rural state where poverty is pervasive. According to estimates based on consumption data from the 2004-5 National Sample Survey, Rajasthan has a rural poverty rate of 19 percent, which is just below the 22.5 percent average for Indian states and substantially below the 29 percent all-India rural poverty rate (Dev and Ravi 2007).[12] For this study, we sampled from predominantly rural sub-districts (blocks) in which at least 20 percent of households were identified as below poverty line (BPL).[13] This ensures that our data reflect a context of subsistence where anti-poverty benefits are salient.

Second, gram panchayats in Rajasthan provide an example of genuine local democracy. The 73rd amendment, passed in 1993, gave the Panchayat Raj (local government) system constitutional status and imposed federal requirements for elections of panchayat members and further integration of local government and government development functions. Sarpanch are directly elected by a plurality of the electorate of the entire GP.[14] Sarpanch in our data were elected in the fourth election cycle since the 73rd amendment was passed. Moreover, a vigilant, independent Election Commission (ECI) ensures that the ballot is genuinely secret in India (Sridharan and Vaishnav forthcoming; Banerjee 2014). This is consistent with Indian voters' own perceptions of ballot secrecy. The National Election Survey of India (2009) finds that only 13 percent of respondents believe that their votes can be monitored most or all of the time, and the same survey finds that only 16 percent of respondents believe voters feel obliged to vote for those who distribute benefits to them before the election.

Third, local democracy in Rajasthan is characterized by high information and dense social ties. The 73rd amendment of the Indian constitution provided for decentralized democracy, allowing for electoral con-stituencies (GPs) which include several villages, which themselves have dense social networks.[15] More-

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[12]This takes into account the 17 most populous states.

[13]Rural population data comes from the 2001 Census of India. Data on BPL households comes from the Government of Rajasthan.

[14]Note that party symbols are not permitted on the ballot in elections to the GP. Nonetheless, research shows that parties have penetrated the GP (Yadav and Palshikar 2008; Dunning and Nilekani 2013).

[15]There are an average of only 1100 households per GP in sampled GPs. Sarpanch reported to know 95 percent of voters personally.

over, candidates for sarpanch generally served as unelected fixers or elected ward members prior to contesting elections for sarpanch (See Manor 2000; Krishna 2007).[16] This means that voters can feasibly observe the distributive preferences of candidates in elections for sarpanch prior to election day.

Fourth, The 73rd amendment to the Indian constitution imposed federal requirements for quotas for women and marginal groups: scheduled castes, scheduled tribes, and other backward castes. For example, in Rajasthan's 2010 GP elections, quotas for marginal groups the scheduled castes, scheduled tribes, and other backward castes applied to 18, 21, and 40 percent of sarpanch elections respectively. 53 percent of seats across all caste categories were reserved for women. Eligibility status based on these quotas rotates with each new election cycle and no position for sarpanch may be reserved for the same caste group in consecutive elections (Chauchard 2014). Since this makes it unlikely that the same politician will be eligible for re-election, sarpanch do not generally face re-election incentives. Thus, selection is the primary formal mechanism through which GP elections impact allocation of selective benefits.[17]

Rajasthan also provides a hard case to test our theory that elected local leaders should have broad-based distributive preferences. Existing studies characterize India as a context of patronage politics where access to the state is mediated by ethnic (demographic) biases (Chandra 2004; Wilkinson 2007; Lodha 1999; Hoff and Pandey 2006). Similarly, ethnicity (e.g., caste) is highly socially and politically salient in Rajasthani village life. Village populations are ethnically segregated, caste discrimination is pervasive, (Chauchard 2014), caste remains a powerful predictor of vote preferences (Lodha 2009), and local political factions are historically organized along the lines of jati (sub-caste) or kinship (Iqbal 1964). In short, there is reason to believe that many unelected leaders in Rajasthan hold narrow distributive preferences biased toward co-ethnics, who are likely to live in their neighborhoods, or family members who also live in close proximity. Given the small size of any one caste, however, local democracy requires *elected* local leaders to cultivate a multi-ethnic coalition (Dunning and Nilekani 2013).

3.2 Sarpanch and Targeted Distribution in India

Gram panchayats play a significant, yet limited, role in selecting beneficiaries to central and state anti-poverty programs at the implementation stage (Besley et al. 2012; Dunning and Nilekani 2013; Kochar 2008). GPs oversee the allocation of below poverty line (BPL) cards, which are required for eligibility to benefits provided through the Public Distribution System (PDS),[18] and play an important role in the implementation of the Mahatma Gandhi National Rural Employment Guarantee program (MGNREGA), which guarantees 100 hours of paid labor (on government infrastructure projects) to all Indian citizens. Officially the list of BPL households is to be determined by a government census and then vetted in village meetings, or gram sabhas, and all citizens have a right to work under MGNREGA. Since these meetings are often not held, sarpanch have substantial discretion over final allocation (Niehaus et al. 2013). Studies show considerable inclusion and exclusion errors with respect to BPL cards as well as evidence of partisan targeting (Ram 2009; Dunning and Nilekani 2013; Markussen 2011). At the same time, bureaucrats at the local and block levels must sign off on the beneficiary list. Higher-level politicians can also exert their considerable influence on sarpanch, and bureaucrats and state procedures limit the power of the sarpanch over final allocation. In short, sarpanch are influential but by no means determinative actors when it comes to targeted distribution. This means that inferring the preferences or distributive strategies of sarpanch from policy outcomes is problematic. Unlike policy outcomes, our measure uniquely captures the targeting preferences of sarpanch.

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[16]31 percent of sarpanch in our data served as ward members previously. An additional 32 percent had a family member currently or previously in elective office, which provides information on candidates' families' distributive preferences.

[17]In our context, the threat of social sanctions may incentive elected sarpanch to target benefits fairly through informal mechanisms. We hope to explore this in future research.

[18]This includes a range of subsidies from cooking oil to healthcare.

4 Data and Measurement

4.1 Sampling

Our lottery measure of distributive preferences was embedded in cross-referenced elite and voter surveys conducted in 84 GPs across Rajasthan from January to February 2013.[19] The sample generalizes to voters and GP politicians in rural, moderately poor contexts where inter-party competition is non-trivial. This yields a sample that fits the contextual features outlined in our theory. To achieve this, we excluded blocks with less than 75 percent rural populations to reduce the chance of sampling peri-urban villages;[20] those with less than 20 percent of below poverty line (BPL) households to ensure that the lottery benefit would be salient;[21] and blocks where the median margin of victory across Panchayat Samiti (block-level) ward elections was greater than 15 percent to increase the chance of sampling competitive GPs.[22] Twelve eligible blocks were sampled from 7 districts across six of Rajasthan's seven divisions. We asked block party presidents – party organizers immersed in the politics of GPs in their block – to characterize the level of competition across GPs and excluded non-competitive GPs to increase the chance of sampling GPs where inter-party competition is non-trivial.[23] Interviews were carried out with heads of household, randomly sampled from a voters list, in one randomly sampled ward in each sampled GP. We provide descriptive statistics for the elite and voter survey samples in the appendix.

4.2 Measuring Distributive Preferences

To identify local politicians' distributive preferences, we embedded a lottery with a 200 Indian Rupee ($3.64 USD) prize in a survey of sarpanch. Elite respondents were shown a page of names and photographs of 10 randomly sampled voters obtained from publicly available voters lists. Sarpanch were given 5 tokens and asked to allocate them in any denomination they wished across these 10 villagers. Respondents were told that a lottery with a 200 rupee prize (a little more than one day of agricultural wage labor) would be held at the end of the survey, and that each token a particular villager received would make their chance of winning the prize 'much higher'.[24] Practically, we included each voter survey respondent's name on slips of paper once at minimum and added one additional slip per token. This means that if a sarpanch gave all of his five tokens to one person, the probability that this individual's name was picked was approximately four times that of all other sampled respondents from his GP. If he gave one token to each person, villagers who received tokens were seven percentage points more likely to win the prize than those who received no tokens.

Our lottery measure, distributive preferences, has several important features. First, there are half as many tokens as potential beneficiaries. This requires elite respondents to exclude at least five individuals; if a sarpanch respondent chose to allocate more than one token to any particular individual, the number of villagers who were excluded increased. A budget constraint that limits the supply of benefits below the level of demand is a fundamental characteristic of targeted distribution in developing countries where state capacity is insufficient for full coverage of the poor as in programmatic targeting.[25] Second, token

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[19]95 GPs were sampled in all, however nonresponse and coding errors on our lottery measure reduced the number of GPs for analysis to 84.

[20]2001 Census of India

[21]We used 2002 Government of Rajasthan data on Below Poverty Line households. See http://bpl2002.raj.nic.in/

[22]Block-level elections are the lowest level at which the Election Commission allows party symbols on the ballot and the lowest level at which election results are centrally available. Thus, block election results are the most local source of data on partisan competition.

[23]This was required because GP election results were not available.

[24]The survey instrument is provided in the appendix.

[25]For example, below poverty line (BPL) cards in theory are provided to all households below a state mandated poverty line, and the Indian government constitutionally guarantees all citizens 100 days of paid labor through the Mahatma Gandhi National Rural Employment Guarantee (MGNREGA) Act. Nonetheless, numerous studies show that budget constraints result in significant

allocation and allocation of the lottery prize were both private. The allocation of tokens was kept secret and lottery winners were not told that the sarpanch was involved in the lottery.[26] As an additional precaution to ensure that privacy was maintained, and to minimize conflict during or after the survey, we allocated one lottery ticket at minimum to each voter survey respondent. This gave survey respondents who received zero tokens a seven percent chance of winning the lottery. This means that token allocation affected the probability of winning the lottery but did not determine it.

By keeping token allocation private, we isolate the distributive preferences of sarpanch from constraints that induce allocation that violates their baseline preferences. First, our design ensures that sarpanch did not allocate tokens according to an electoral strategy since they cannot receive credit or blame for lottery outcomes. For instance, If privacy was not upheld, sarpanch may have allocated tokens to more swing voters than they would prefer to target according to their distributive preferences. Second, token allocation is unconstrained by village economic elites, who may pressure sarpanch to target the non-poor (Bardhan and Mookherjee 2000), or bureaucrats and politicians from outside the village whose preferences are not shaped by the high-information, socially dense context of the GP. Third, state institutions that determine eligibility criteria do not affect our measure. While these actors and institutions shape targeting outcomes, our measure allows us to isolate the preferences of sarpanch so we can compare policy outcomes against this benchmark.

Our lottery measure has important benefits over previous approaches. First, since we collected data on voters' partisan preferences one day before token allocation, endogeneity cannot affect voters' partisan preferences. This contrasts with work that relies on self-reported responses to survey questions on their partisan preferences and benefit receipt after an election campaign. Second, our measure is an improvement over dictator games, which share our goal of measuring preferences over allocation. In these games, a dictator makes an offer of his choosing from a limited pool of money and keeps the rest for himself. The receiver is passive and takes what is offered. Recent work varies the identity of receivers to understand how ethnic identity and other receiver characteristics affect allocation of a fixed budget (See Habriyama et al. 2009). A key advantage of our measure is that it allows multiple voter and dyadic characteristics to vary simultaneously, which allows us to be agnostic as to which characteristics local leaders prioritize.

5 Empirical Strategy and Results

In this section, we explain our empirical strategy and test the observable implications of our theory. Our lab game design is particularly geared towards measuring the underlying (non-strategic) preferences of local leaders in targeting outcomes. Our data demonstrate that local leaders display pro-poor preferences but condition allocation on the strength of sociopolitical connectedness. That is, while leaders target the poor, they strongly prefer to allocate towards those whom they believe have electorally supported them, and even more so towards co-partisans. Consistent with the moral economy, this suggests that voters elect political leaders who prefer to target the poor; however, these same leaders prefer to reciprocate based on the strength of support shown towards them. Crucially, these behaviors of local leaders are observed when no electoral or personal benefit is received from allocation decisions.

In section 2, we argued that the local electoral logic should rule out selection of leaders who target narrowly, i.e., based on relatively impermeable boundaries such as ethnicity and kinship. Consistent with this view, we find no perceptible co-ethnic targeting in the data, suggesting that selected leaders are broad-based allocators. Moreover, we find that sarpanch target non-supporters at a higher rate when there are a small number of supporters in a sampled ward within a GP. This suggests that broad-based distributive preferences exists to some extent even when boundaries are permeable.

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exclusion.

[26]Lottery prizes were delivered as electronic payments in the form of cell phone credit.

Finally, we argued that while local democracy in moral economies may ensure that pro-poor targeting occurs, targeting outcomes are less efficient than the programmatic ideal because leaders condition allocation on sociopolitical connectedness. In order to demonstrate this fact, we designed a "pro-poor cue" to put pressure on local leaders to target the poor. This cue induced sharper targeting of the poor, and diminished reciprocation based on socio-political connectedness.

In sum, we find that local democracy in moral economy settings induces broad-based pro-poor targeting. However, this method of targeting yields inefficiencies because allocation is conditioned upon sociopolitical connectedness with the elected leader. This inefficiency may be mitigated with social or institutional constraints and pressures to allocate to the poor irrespective of personal connection. Section 5.1 discusses the statistical method to analyze the form of data collected as well as how each of the variables of interest is operationalized in this study. Section 5.2 discusses the empirical results in detail.

5.1 Empirical Strategy

5.1.1 Statistical Model

There are two major empirical challenges in estimating allocation behavior in this setting. First, the method must account for the fact that the allocator (in this case the sarpanch) can only allocate a maximum of 5 tokens. Thus, the allocation to potential receivers (in this case the voters) in the same GP cannot be treated as truly independent. In particular, giving a token to one individual in the population implies that there are fewer tokens to distribute over the rest of the population. In order to rectify this problem, one has to recognize that the average number of tokens over the population is always identical (the number of tokens divided by the number of voters). If the sarpanch were randomly choosing recipients for tokens, then each voter would have the identical number of tokens in expectation (the average). Thus, if a voter has a desirable attribute, we expect her to receive a *premium*, an expected number of tokens above the average. The proposed statistical strategy models these premiums, constraining the average number of tokens over the population properly.

This non-independence property across potential receivers applies to desirable attributes of the voters as well. For instance, the number of co-partisans in the population mediates the relative premium in allocation for a co-partisan receiver by the allocator, i.e., the premium decreases as the number of co-partisans increases. If the allocator wishes to target only co-partisans (with no other distinction between individuals) and there are five co-partisans, the allocator can give one token to each co-partisan without difficulty. If, however, there are more than five co-partisans, then it is a certainty that at least one co-partisan will receive no token. Thus, the relative premium of being a co-partisan is inversely related to the number of co-partisans in this situation.

Here, we briefly outline a regression-based strategy to analyze data of the form collected in this study. The key observation that allows for identification of the empirical model is that mean allocation in a gram panchayat is always identical, the number of tokens divided by the number of potential receivers, or 5/10 = 0.5. This implies that if all the predictors are centered around their means at the gram panchayat level, the constant term in a regression is fixed. In particular, let y_{iv} denote the allocation given to potential receiver i in gram panchayat $v \in \{1, \ldots, V\}$. Consider predictors $x_1, \ldots, x_J$. Let us denote the mean of predictor x_j in gram panchayat v as $\overline{x}_{jv}$. Since the number of tokens is in the form of count data, a Poisson regression (accounting for over dispersion) is appropriate. A quasipoisson regression model provides the same mean function as poisson regression, λ_i, for observation i, but allows for over dispersion by estimating variance $\sigma^2 \lambda_i$ at observation i.[27] The model can be written as below:

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[27] In the standard poisson distribution, the variance is fixed at λ_i, the same as the mean.

$$y_i \sim Poisson(\lambda_i, \sigma^2) \text{ where } \sigma^2 \text{ denotes an overdispersion parameter} \qquad (5.1)$$

$$\lambda_i = \exp(\beta_0 + \beta_1(x_{1iv} - \overline{x}_{iv}) + \cdots + \beta_J(x_{Jiv} - \overline{x}_{Jv}))$$

$$y_i = \lambda_i + \varepsilon_i \text{ where } \varepsilon_i \sim N(0, \sigma^2 \lambda_i)$$

Looking at the equation above, and given our previous arguments, it is apparent that $exp(\beta_0)$ is fixed at 0.5 ($\beta_0 \approx -0.69$), which effectively addresses the first concern of non-independence due to a budget constraint on the number of tokens. The non-independence due to the effect of the number of individuals with a particular attribute in a gram panchayat (like co-partisanship) is addressed by mean-centering variables at the gram panchayat level. However, the salience of each attribute may still vary across GPs; in order to address this issue, we fit a two-level hierarchical regression model with the higher level as the gram panchayat. In addition, a stochastic term is added to the higher level in order to capture the effect of all other attributes at the gram panchayat level that have not been explicitly included in the regression equation. This also addresses the concern that the data are clustered by gram panchayat.

The complete regression model is then written as:

$$y_i \sim Poisson(\lambda_i, \sigma^2) \text{ where } \sigma^2 \text{ denotes an overdispersion parameter} \qquad (5.2)$$

$$\lambda_i = \exp(\beta_0 + \beta_1(x_{1iv} - \overline{x}_{iv}) + \cdots + \beta_J(x_{Jiv} - \overline{x}_{Jv}))$$

$$y_i = \lambda_i + \varepsilon_i \text{ where } \varepsilon_i \sim N(0, \sigma^2 \lambda_i)$$

$$\beta_{jv} = \beta_j + b_{jv}; \quad b_{jv} \sim N(0, \sigma_V^2) \quad \text{s.t.} \quad v \in \{1, \ldots, V\}$$

where β, σ and σ_V denote parameters in the regression model, x_{iv} denotes a predictor for individual i in gram panchayat v.

In order to implement this model for interaction terms, we mean-adjusted each predictor at the gram panchayat level (for the main effects), and then took the desired interaction term of the mean-adjusted predictors, which was mean adjusted again.[28] All models were estimated using the `blmer` function (`blme` package) in statistical framework R, which quickly estimates the relevant posterior distribution using Laplace approximation.[29]

In sum, a simple relationship between an attribute(s) of interest and the expected number of tokens received can be misleading. The relationship may be due to the dependency structure in the data or due to a specific GP, as opposed to a general population-wide phenomenon. Correcting for dependency within the gram panchayat, while varying the coefficients in the regression equation at the gram panchayat level addresses these concerns. The desired estimations result from the fixed (i.e., non-random) coefficients in the model.[30]

5.1.2 Measures

The dependent variable in the analysis is the number of tokens given to an individual in the lottery game described above. The game was played in two iterations. First, sarpanch were asked to allocate tokens without any prompting of prospective targets. A second iteration explicitly asked the sarpanch to allocate the tokens in the same manner as below poverty line (BPL) cards. The goal of this second prompt was not to deduce how sarpanch allocate BPL cards; rather, we wanted to understand how sarpanch would

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[28]This is akin to adjusting by the covariance between the predictors at the gram panchayat level.

[29]The covariance matrix of the random effects has a Wishart prior, and all fixed coefficients have flat priors in the models.

[30]All of the intervals presented in this paper are generated from 1000 simulations of the fixed coefficients with respect to the estimated variance-covariance matrix of the fixed coefficients.

respond when given an explicit cue to target poorer individuals. The analyses rely on a number of predictors which are described in detail in the following two paragraphs.

In order to construct our measure of sarpanch perceptions of electoral support, we asked the sarpanch whether each of the voters voted for him. If the sarpanch answered in the affirmative, the individual was coded as a perceived electoral "supporter." Otherwise, the individual was coded as a "non-supporter." Although officially elections at the gram panchayat level in India are non-partisan, the partisan affiliation of the sarpanch is broadly an open secret (Dunning and Nilekani, 2013). We asked both voters and sarpanch whether or not they feel close to any particular party, and then asked them to name the party to which they feel close. When the voter reported that he or she feels close to the same party reported by the sarpanch, the voter was coded as a "co-partisan." Otherwise, the voter was coded as a "non-co-partisan." This measure of co-partisanship, since it explicitly measures preference, indicates a stronger connection between sarpanch and voter than mere previous support. The ethnicity measure categorizes the sarpanch and voters into the categories of upper caste, other backward caste (OBC), scheduled caste (SC), scheduled tribe (ST), and other.[31] We defined a co-ethnic as any voter who fell into the same category as the sarpanch. We also analyze receipt of two anti-poverty benefits: a below poverty line (BPL) card, which is required for eligibility to a wide range of anti-poverty benefits including subsidized food and kerosene, and subsidizing housing, including new construction and repairs, through the Indira Awas Yojana (IAY) program. We verified receipt of a BPL card by asking respondents to show interviewers their ration cards. Housing benefits were self-reported, although new homes built through this program are generally visibly identified as beneficiaries.

Finally, we construct a measure of personal assets in some detail to understand the economic need of the respondents. In order to construct the asset measure, we relied on answers to survey questions that were readily verifiable. In particular, the measure is constructed upon whether the respondent owns: 1) a "pucca" or permanent house; 2) a scooter/motorcycle; 3) a bicycle; 4) a television; 5) proper toilet facilities; 6) a refrigerator; 7) a fan; 8) mobile phone; and 9) electric pump set. Each of these variables is a binary variable, and a 2-parameter item response model (Gelman and Hill, 2007) was fit using Markov Chain Monte-Carlo (MCMC) using the program `JAGS` to construct an asset index.[32] The asset index was then standardized to have mean 0 and standard deviation 1 within each GP for the purpose of interpretability. The value of the asset index for an individual can be interpreted as the number of standard deviations the individual's asset score differs from the mean asset score of the gram panchayat.

5.2 Results

5.2.1 Asset Wealth

In a moral economy, we argued that local democracies elect leader with pro-poor preferences; accordingly, we hypothesize that tokens are disproportionately allocated to those who have low asset index values. The data strongly support this claim.

Figure 1 plots the estimated impact of the asset measure on expected number of tokens for the voter, both without (regular tokens) and with (BPL tokens) an explicit cue for targeting the poor . As described above, the asset measure is normalized to have mean 0 and standard deviation 1 inside each gram panchayat. This means that the curves and coefficients are to be understood with respect to standard deviations from the mean asset wealth among sampled voters in the gram panchayat. For instance, a value of -1 for the

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[31]Ethnicity is typically quite difficult to define in the Indian context. We used two different definitions of co-ethnicity, jati and varna, which yield substantively similar results.

[32]Let $y_{ik} \in \{0,1\}$ denote a binary outcome variable for person i and object k, $1 \leq k \leq K$. A two parameter item response model fits:

$$P(y_{ik} = 1) = logit^{-1}(\alpha_i - \beta_k)$$

where β_k is a parameter placing the object on a wealth scale and α_i is the value of the asset index for individual i.

asset measure means that the voter is one standard deviation below the mean asset wealth in the gram panchayat. The model predicts an 18% increase in allocation without the pro-poor cue and a 24% increase in allocation with the pro-poor cue for an individual with asset wealth one standard deviation below the gram panchayat mean.

Figure 1: Expected Number of Tokens vs. Asset Wealth

(a) Regular Tokens

(b) BPL Tokens

(c) Coefficent Estimates
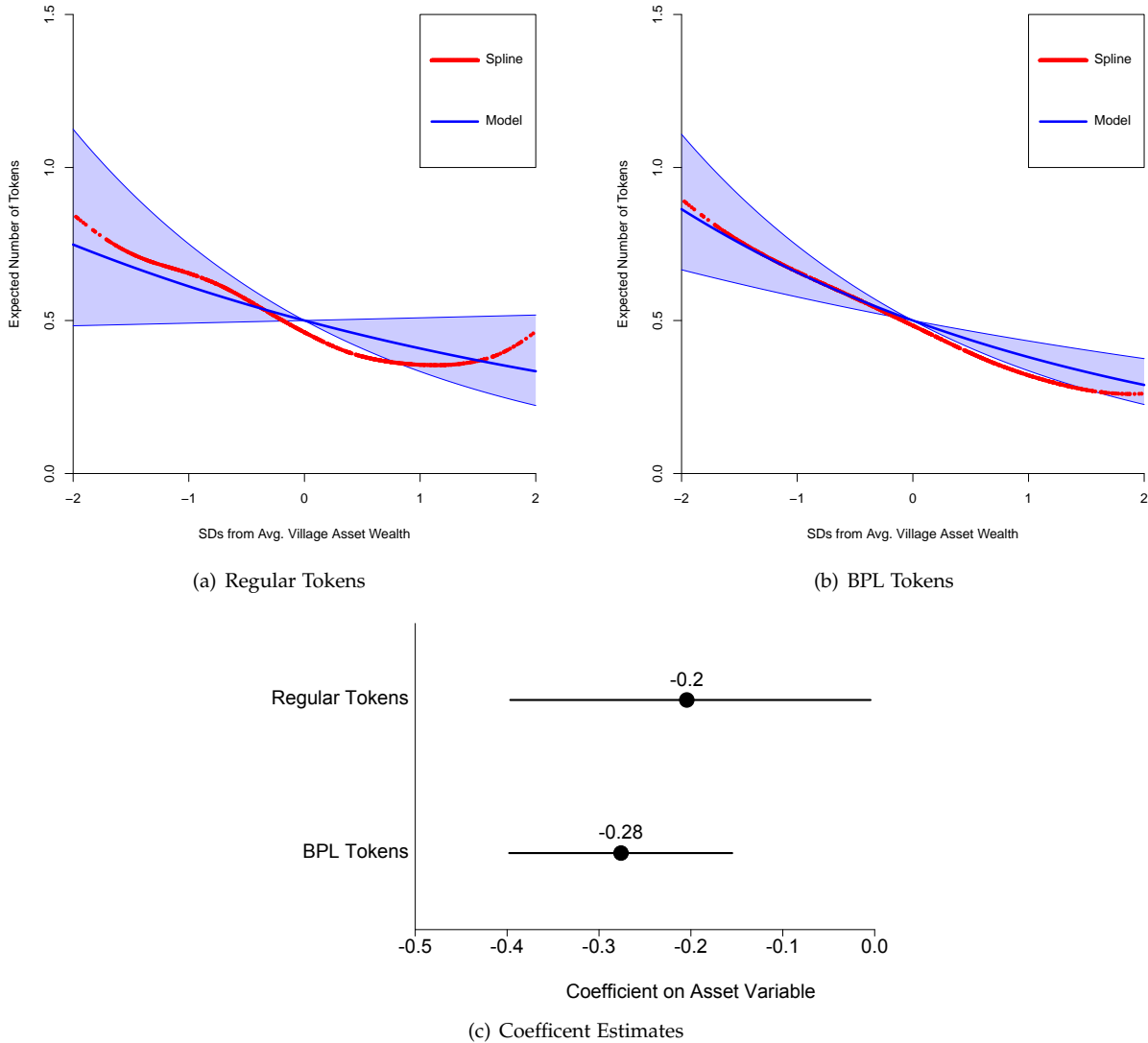
Figures 1(a) and 1(b) plot the expected number of tokens as a function of distance (in standard deviations) from the mean wealth in the gram panchayat from equation 5.2 without and with a cue for BPL distribution, respectively. The curves are plotted along with 90% posterior intervals. The red dots result from a (penalized) thin-plate regression spline model relating the expected number of tokens to asset wealth which does not control for the data dependencies described in this section.

The blue curves in figures 1(a) and 1(b) plot the estimated impact from the model described in subsection 5.1 with a 90% posterior interval without and with cues for pro-poor targeting, respectively. The overlaid red dots come from a flexible (penalized) thin-plate regression spline model,[33] although it is important to note that the spline does not model dependencies within and across gram panchayats as in our strategy. In both of these models, there is a statistically significant trend towards targeting the poorest voters in the GP, as there is a strong negative association between asset wealth and expected number of tokens.

Without an explicit pro-poor cue (figure 1(a)) there is considerably more variance in the data and the spline picks up some non-monotonicity among wealthier voters. With an explicit pro-poor cue (figure 1(b)) there is stronger targeting towards poorer voters with much less variance and both models find the expected number of tokens monotonically decreasing in the wealth of the voter. Nonetheless, as the graphs show, the regression model and the spline produce largely similar results for the poorer 50% of the voters in each gram panchayat. This gives us confidence that the functional assumptions of the regression model are not seriously driving the results on asset wealth.

Figure 1(c) displays the regression coefficients and 90% posterior intervals without and with the pro-poor cue, respectively. Consistent with our expectations, the coefficient on asset wealth is significant in both regressions, with the magnitude greater and variance smaller when there is an explicit pro-poor cue. This demonstrates the noticeable targeting of poorer voters in the data regardless of cue, and provides some evidence that sarpanch are further responsive to explicit pro-poor cues.

5.2.2 Electoral Support and Co-Partisanship

We argue that political connectedness serves as a natural basis for targeted forms of distribution. A weak form of this is past support. Citizens are free to support any candidate they wish, and a previous vote for the sarpanch constitutes a minimal level of support for the elected leader. Co-partisanship reflects a stronger political tie to the local leader because it constitutes a more committed level of support and integration into the leader's partisan network.[34] Evidence supports our expectation that the local leader is likely to use this form of sociopolitical connectedness as the basis for reciprocating in distribution.

Figure 2 reports the estimated expected number of tokens for perceived electoral supporters and non-supporters without and with the pro-poor cue and further subdivides the effects by co-partisanship. In figure 2(a), we find that there is a strong targeting bias towards perceived electoral supporters, irrespective of cue. In other words, if the sarpanch believes the voter supported him in the last election, then he is willing to give significantly more tokens to that voter as compared to a non-supporter regardless of a pro-poor cue. When we further subdivide the results by whether the voter is a co-partisan of the sarpanch, in figure 2(b), we see more nuanced results. When there is no pro-poor cue, the sarpanch allocates more towards co-partisans; however, when we introduce a pro-poor cue, this co-partisan effect disappears. This suggests that sarpanch chooses to reciprocate to voters based on the strength of the sociopolitical connection, but this effect is mitigated by social pressures to target the poor.

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[33]A penalized spline model flexibly fits the pattern of the data while trying to prevent overfitting. In the models displayed, the 839 observations are split into 50 bins, equally spaced in terms of quantiles.

[34]Co-partisanship may also coincide with social ties and shared beliefs.

Figure 2: Expected Tokens and Electoral Support

(a) Effects of Electoral Support
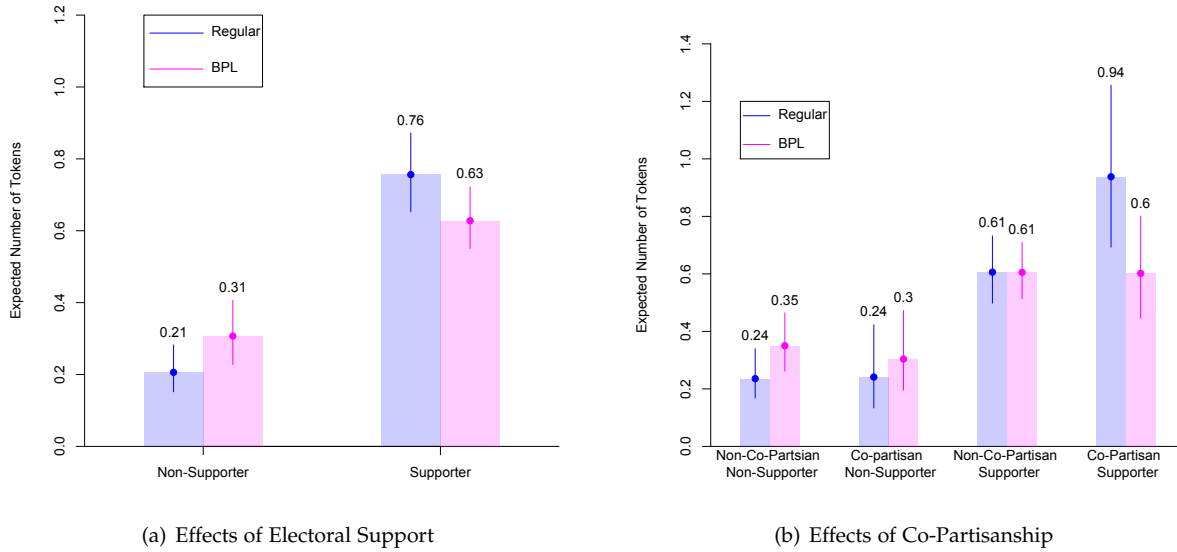
(b) Effects of Co-Partisanship

Figure 2(a) reports the estimated expected number of tokens for perceived electoral supporters and non-supporters without and with the pro-poor cue using the model in equation 5.2 with 90% posterior intervals. The differences are statistically significant. Figure 2(b) further subdivides the expected number of tokens by co-partisanship without and with the pro-poor cue. Without the pro-poor cue, there is greater targeting towards co-partisans. However, this effect disappears when we introduce the pro-poor cue.

5.2.3 Broad-Based Targeting and Co-Ethnicity

In section 2, we argued that the local democracy should induce the selection of leaders with broad-based targeting preferences who do not target narrow groups with relatively impermeable boundaries. Unlike ethnicity or kinship, the categories of electoral support and partisan support are free to entry for every citizen. In any democratic system, a politician must construct pluralities of support. A support base with fixed or slowly moving boundaries, like co-ethnicity, is subject to decay (e.g., through competing co-ethnic leaders). Furthermore, it is highly unlikely that, in an ethnically fragmented society like India, any one caste group will form a plurality of the electorate.[35]

Figure 3 displays the average allocation when electoral support is further subdivided by co-ethnicity. While co-ethnicity may have a small (statistically insignificant) effect on allocation among non-supporters, it clearly has no effect for electoral supporters. If anything, it seems that co-ethnicity leads to lower allocation among supporters. This provides strong evidence that sarpanch in our sample are broad-based allocators who only condition allocation upon sociopolitical connectedness.

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[35]One potential fixed boundary that may serve as the basis for targeted/biased distribution is kinship. Except in a few areas, the kinship network of the sarpanch is unlikely to be large enough to constitute a winnable support base. Rather, kinship targeting is closer to the logic of personal corruption and not a sociopolitical strategy. Accordingly, Besley, Pande and Rao (2012) find that households of GP politicians are more likely to receive below poverty line (BPL) cards, a coveted benefit. The sample size of kin is too small in this data to make definitive claims about whether the non-household kin of the sarpanch also reap similar benefits.

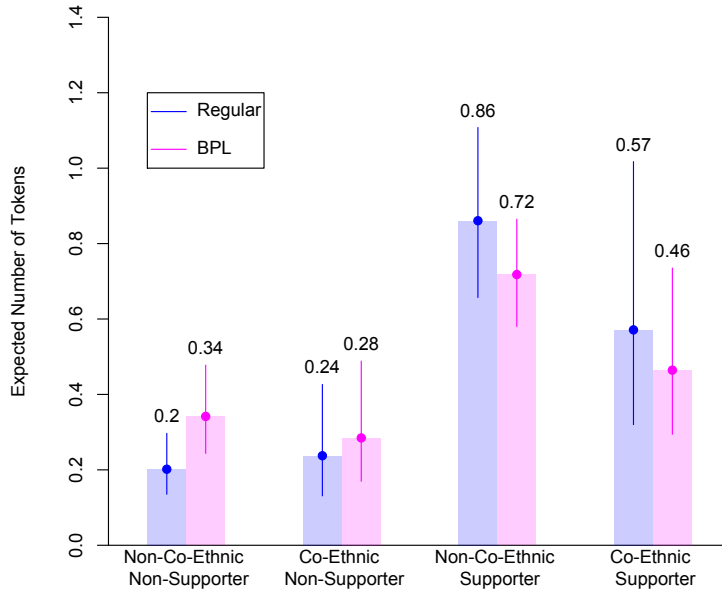Figure 3: Electoral Support and Co-Ethnicity

Figure 3 subdivides the expected number of tokens due to electoral support by co-ethnicity with 90% posterior intervals. There are no significant differences due to co-ethnicity among supporters or non-supporters.

5.2.4 Combining Electoral Support and Asset Wealth

Analyzing the interplay between electoral support and asset wealth yields many interesting insights into the structure of allocation in this setting. Figures 4(a) and 4(b) display the the expected number of tokens at the mean level of electoral support (68%) without and with the pro-poor cue, respectively. The two graphs display very similar behaviors, showing pro-poor targeting in both populations, with far more pronounced pro-poor targeting among electoral supporters. Without a pro-poor cue, the gap between supporters and non-supporters in allocation is much greater, with even the wealthiest supporters predicted to receive more than poor non-supporters. Under a pro-poor cue, the allocations to the wealthiest supporters and non-supporters largely converge, and poorer non-supporters receive more than wealthier supporters.

Of course, the curves in figure 4 only correspond to the mean level of support. We may wonder how the relative interaction between pro-poor targeting and the premium associated electoral support changes at different levels of electoral support in the gram panchayat. Figure 5 plots the curves for the expected number of tokens predicted at 20%, 50%, and 80% electoral support, respectively.

Figure 4: Electoral Support vs. Asset Wealth
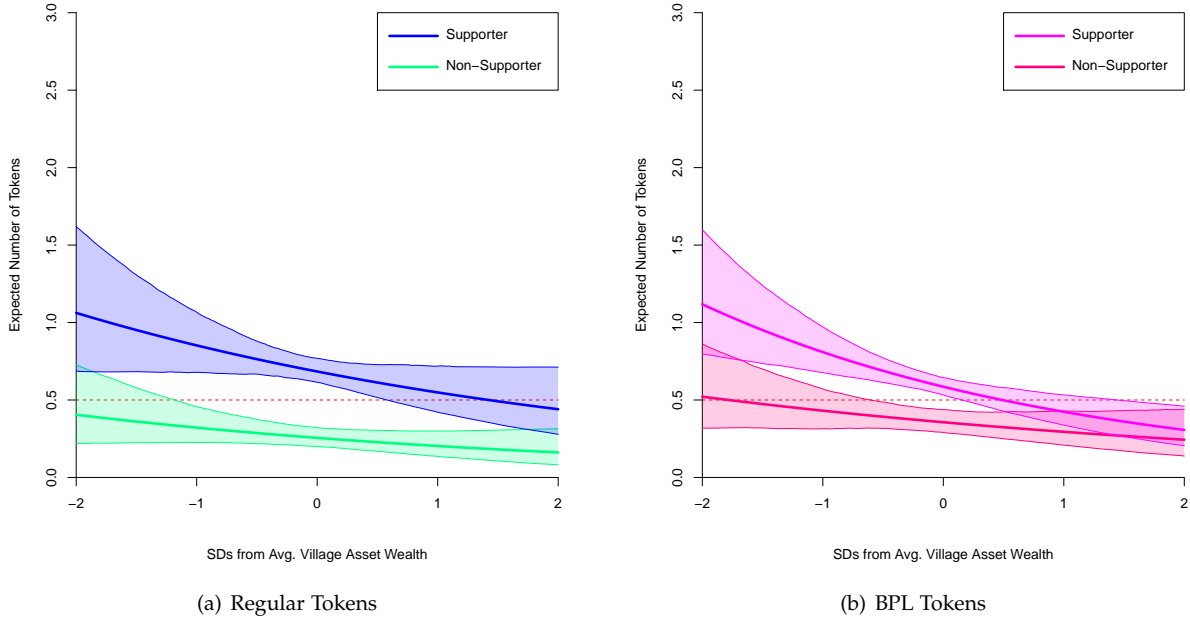
(a) Regular Tokens

(b) BPL Tokens

Figures 4(a) and 4(b) display the the expected number of tokens at the mean level of electoral support (68%) without and with the pro-poor cue, respectively, with 90% posterior intervals.

The graphs in figure 5 demonstrate some of the more complicated dynamics at play in this setting. First, as argued above, as the percentage of people in gram panchayat with a desirable attribute (e.g., electoral support) increases, the relative premium in allocation to voters exhibiting that attribute decreases. In this case, the relative premium associated with electoral support decreases as the percentage of support in the gram panchayat increases; this is because the curve for supporters shifts downwards as the percentage of support increases. Second, the logic of broad-based targeting in a local democracy implies that as the share of supporters decreases, the sarpanch needs to accommodate non-supporters at a higher rate. Note that since the sarpanch are not restricted in how many tokens they give to each individual, they are not forced to accommodate non-supporters at a higher rate in this lab setup. Nonetheless, as the percentage of support decreases, the expected number of tokens, and thus the share of allocation, to non-supporters increases. This is seen because the curve associated with non-supporters shifts downward as the percentage of support increases. This provides strong evidence that the sarpanch is responsive to their level of support in the gram panchayat.[36]

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[36]Recall that the level of support refers to sampled voters from one randomly selected ward in a GP.

Figure 5: Interaction Between Asset Wealth and Electoral Support at Different Levels of Support

(a) 20% Support
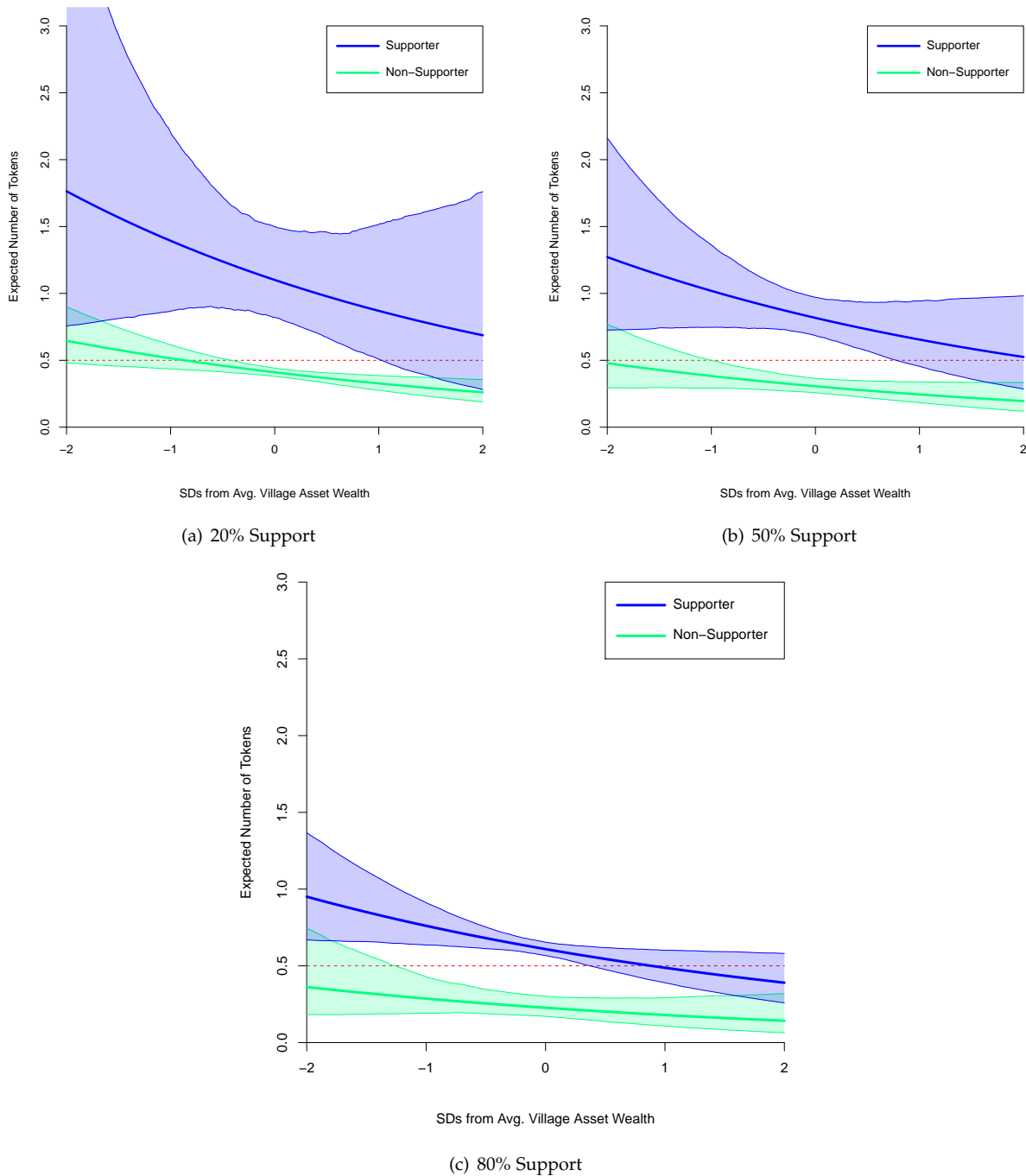
(b) 50% Support

(c) 80% Support

Figure 5 plots the curves for the expected number of tokens predicted as a function of distance (in standard deviations) from mean wealth in the gram panchayat at 20%, 50%, and 80% electoral support, respectively. The data are displayed when there is no pro-poor cue and with 90% posterior intervals.

5.2.5 Robustness and Connection to Actual Distribution

One concern is that the effects we observe are driven by "Hawthorne effects," that is, sarpanch behave in a way that would satisfy the researcher. If this were the case, however, we would not expect to see allocation towards supporters (instead of just the poorest people in the GP), which differs from the programmatic ideal of distribution. In order to test whether our results are driven by Hawthorne effects, we test the percentage of gram panchayats in which, according to our data, sarpanch target their supporters more heavily. Without the pro-poor cue, supporters were targeted more heavily than non-supporters in 87% of gram panchayats, providing evidence that the observed results aren't purely driven by Hawthorne effects. With the pro-poor cue, supporters were targeted more heavily than non-supporters in 76% of gram panchayats, providing marginally more pressure to target the poor without personal biases.

A second concern is that our lab method is too disconnected from, and thus has little relevance for, the actual distribution of benefits. In order to understand the applicability of our measured preferences for actual distribution, we compared our lab behavior to the actual distribution of benefits. In particular, we focus our comparison on whether voters received two benefits, below poverty line (BPL) status and Indira Awas Yojana (IAY) benefits. The first benefit entitles a household to purchase foodstuffs at a reduced price, and the second benefit entitles households to build a home using a government grant. There are only a small number of households that receive IAY benefits, and they must have BPL status to quality for these benefits. As such, the intended recipients of IAY benefits are particularly needy households that should be targeted more heavily.

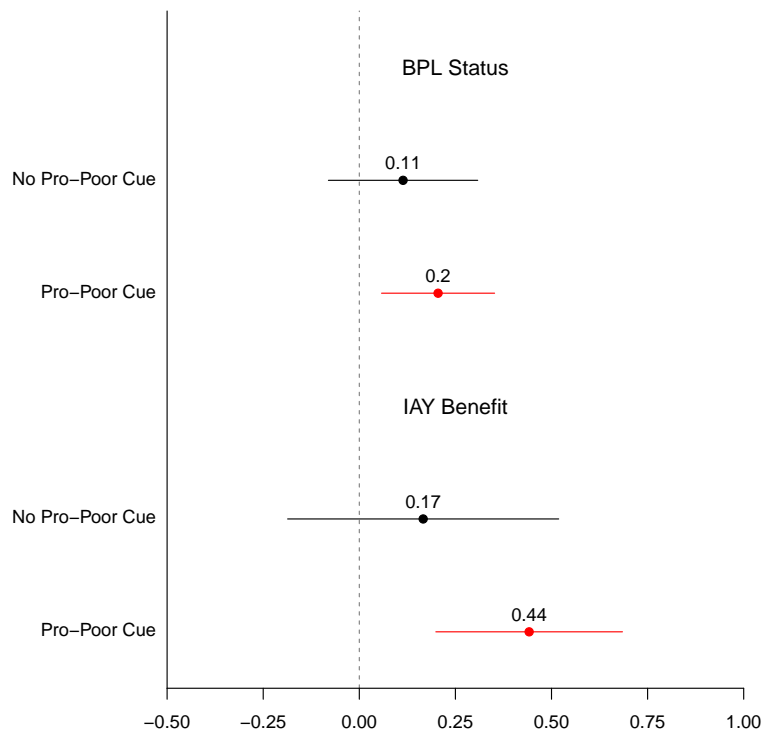Figure 6: Relation Between Lab Measures and Actual Distribution

Figure 6 looks at the relationship between whether a voter has received a benefit, either BPL status or an IAY benefit, and token allocation. In particular, an over dispersed Poisson model, as in the models above, is fit to the data without varying slopes. The graph above reports the coefficients from models looking at the relationship of BPL Status and IAY benefits, respectively, on token allocation without and with the pro-poor cue. The red intervals correspond to statistically significant relationships. Allocation with a pro-poor cue shows coefficients of large magnitude that are statistically significant.

Figure 6 displays the coefficients of an overdispersed Poisson model, relating whether a voter has a benefit (BPL and/or IAY) and whether he or she received a token.[37] While the coefficients are large, when there is no pro-poor cue, voters do not receive significantly more tokens if they have a benefit. On the other hand, when there is a pro-poor cue, we find that voters who have benefits are also much more likely to receive a token, and the effects are highly significant. Consistent with the discussion above, the estimated coefficients are much larger for the IAY benefits than for BPL status. Having BPL status raises the expected number of tokens to a voter by 22% under the pro-poor cue, and receipt of IAY benefits raises the expected number of tokens to a voter by 55% under the pro-poor cue. This provides very strong evidence that our lab setup, when creating pressures to allocate to the poor, can be reasonably associated with actual distribution. Furthermore, we believe our basic setup, without a pro-poor cue, reasonably approximates underlying distributional preferences where the leaders are not constrained by the pressures of building an electoral coalition and have low social or institutional pressures to distribute benefits in a particular manner.

6 Conclusion

This article shows that elected local leaders have pro-poor preferences in a scenario in which electoral strategies and other constraints do not shape allocation. Influential theories suggest that either local leaders have anti-poor preferences (or weigh the preferences of the non-poor over those of the poor), or target the poor in order to buy votes or induce turnout according to a quid pro quo exchange. This article suggests that targeting may be shaped by leaders' underlying preferences as well. If Stokes et al.'s (2013) conclusion that local agents can violate the wishes of higher-level leaders and target voters according to their own motivations is correct, understanding and measuring local leaders' distributive preferences is critically important to understanding the distributive outcomes we observe. To this end, our theory posits that where the requirements of a moral economy hold, the median voter holds pro-poor preferences. As a result, a plurality of the electorate will select leaders with pro-poor distributive preferences, which is observable in this setting. The logic of majoritarian elections similarly rules out narrow targeting along the lines of shared ethnicity or kinship, which are closed to most voters in an ethnically diverse context like India. While this article suggests that local discretion among elected leaders in this setting is considerably more pro-poor than existing research suggests, it also shows that there is no substitute for effective institutional and social constraints that encourage pro-poor targeting. This is clear from the more progressive distribution we see under a pro-poor cue as compared to our measure of distributive preferences without any cue. That anti-poverty benefits are allocated in a manner correlated with the former measure give us some confidence that pro-poor constraints, although imperfect, exist in India.

This article sets the agenda for future research on targeted distribution. First, existing research primarily views distribution in terms of electoral strategies (See for example Dixit and Londregan 1996; Stokes 2005; Calvo and Murillo 2013; Gans-Morse et al. 2014). Our results show evidence of pro-poor targeting toward supporters when distribution cannot plausibly shape allocation and local leaders have full discretion. This poses a challenge for empirical work from the core-swing debate. If this work wishes to establish an electoral strategy of core or swing targeting, it should demonstrate that this pattern is significantly different than the allocation we would see if leaders simply acted on their underlying preferences. We provide an empirical strategy that will allow scholars to do so in future work.[38] Moreover, our statistical contribution makes it possible to accurately estimate these effects.

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[37]Note that we are not interested here in differential premiums based on the number of people with BPL status or IAY benefits in the gram panchayat; we are simply interested in whether these benefits are related to token allocation overall. Accordingly, we do not use varying slopes in these models.

[38]For example, we plan to compare our private measure, distributive preferences, to publicly visible distribution close to elections in future work. This will allow us to see if there is more targeting of poor people, core, and swing voters when electoral strategy is likely to come into play in local leaders' allocation decisions.

Second, we argue that free and fair local elections provide voters with an important screening mechanism. This suggest that elected local politicians will target more broadly and in a more pro-poor manner than unelected leaders such as party activists, ethnic leaders (e.g., tribal chiefs), or unelected village headmen. Since, democratic decentralization under flawed elections and administrative decentralization without elections lack this screening mechanism, we should expect leaders in these institutional contexts to be less pro-poor. This is an empirical question for scholars working in different settings or those studying different types of local agents than the leaders we study here. We believe that developing comparative insights across countries, institutional designs, and leader types will lead to important advances in this research agenda (See Grossman 2014).

Third, we argue that distributive outcomes cannot be used to accurately infer the targeting strategies of parties or politicians unless this takes place in a context of full discretion. This is rarely the case in our setting due to the number of actors and constraints involved in the selection of beneficiaries. This means that policy outcomes (e.g. BPL card allocation) are likely to be shaped by the preferences and motivations of politicians and bureaucrats living outside local subsistence communities, and therefore outside of the moral economy context critical to our theory. This opens up numerous opportunities for future research that explores the conditions under which local politicians are unable to act on their plausibly pro-poor preferences. First, are policy outcomes significantly less pro-poor when politicians from outside the village setting play a role in the selection of beneficiaries? For example, scholars should explore whether policies designed to have more local discretion are more pro-poor than those that retain discretion at the state and district levels. Second, when elected politicians need the cooperation of local bureaucrats, who are unelected and likely to live outside the village, are distributive outcomes less pro-poor than local leaders' pro-poor preferences?[39] The answers to these questions have important theoretical and policy implications.

Finally, this article suggests that social pressure, among other constraints, can push distribution in a more progressive direction than a scenario of full discretion. At the same time, social pressure can also push benefits in an anti-poor direction as the theory of elite capture suggests. This article takes a first step toward addressing several important questions along these lines. First, future work should explore the conditions under which information campaigns that increase social pressure to target the poor encourage pro-poor distribution.[40] Second, it is an empirical question whether pro-poor social pressure or anti-poor social pressure are most potent when distribution is public. To explore this, we plan to explore whether varying the value and visibility of benefits leads to allocations that diverge from local leaders' underlying preferences in a more or less progressive direction. More broadly, future work should explore the conditions under which elites block local leaders from pro-poor targeting. This has profound implications for designing policies that increase the chance that targeted benefits reach the poor.

In summary, this article lays out an argument for why elected local leaders in the context of a moral economy are likely to have pro-poor distributive preferences. This offers an important challenge to existing theories as well as a wide array of promising avenues for future research. Since state capacity is unlikely to be sufficient for programmatic targeting in this context, this article suggests that decentralized targeting to elected local leaders may be the best option to make targeting more pro-poor. That said, state constraints and pro-poor social pressure can have a powerful complimentary effect on pro-poor targeting. Future research should focus on these mechanisms with the goal of designing more efficient anti-poverty programs.

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[39]This is particularly relevant in India where local bureaucrats and sarpanch must both sign off on the list of households identified as eligible for BPL cards.

[40]This opens up many possibilities for field experiments that explore different mechanisms through which social pressure can be most effective to this end.

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Appendix

Table 1: **Sarpanch Characteristics**

Characteristic	Mean	Standard Deviation
Male	.54	.5
Upper Caste	.25	.43
Other Backward Caste	.37	.48
Scheduled Caste	.2	.4
Schedule Tribes	.18	.38
Illiterate	.18	.38
Prior Terms as Sarpanch	.14	.47
Prior Terms as Ward Member	.38	.65
Knows Voter	.95	.21

Descriptive statistics from the elite survey based on the full sample of 95 GPs– prior to restrictions on the token measure.

Table 2: **Voter Characteristics**

Characteristic	Mean	Standard Deviation
Male	.99	.1
Upper Caste	.1	.29
Rajputs	.113	.32
Jats	.1	.3
Other Backward Caste	.37	.48
Scheduled Caste	.48	.36
Schedule Tribes	.06	.24
Muslims	.1	.3
Illiterate	.36	.48
Co-Ethnics	.32	.47
Supporters	.69	.46
Co-Partisans	.34	.47
Co-Partisan Supporters	.25	.3

Table 3: Descriptive statistics from the voter survey based on the full sample of 95 GPs– prior to restrictions on the token measure. Upper castes excludes Rajputs and Other backward castes excludes Jats.

Survey Instrument: Distributive Preferences

1	
नाम : महेन्द्र	
पिता का नाम : हरिचन्द्र	
मकान संख्या : 54	
आयु : 28 लिंग : पुरूष	

2	
नाम : भगवाना	
पिता का नाम : बादरा	
मकान संख्या : 18	
आयु : 50 लिंग : पुरूष	

3	
नाम : मनाराम	
पिता का नाम : अचलाराम	
मकान संख्या : 51	
आयु : 21 लिंग : पुरूष	

4	
नाम : केशाराम	
पिता का नाम : राणाराम	
मकान संख्या : 19	
आयु : 40 लिंग : पुरूष	

5	
नाम : जगदीश	
पिता का नाम : हरचन्दराम	
मकान संख्या : 25	
आयु : 25 लिंग : पुरूष	

6	
नाम : मंगलाराम	
पिता का नाम : केसाराम	
मकान संख्या : 32	
आयु : 30 लिंग : पुरूष	

7	
नाम : श्रवण कुमार	
पिता का नाम : जेठाराम	
मकान संख्या : 38	
आयु : 27 लिंग : पुरूष	

8	
नाम : मकनाराम	
पिता का नाम : छोगाराम	
मकान संख्या : 41	
आयु : 38 लिंग : पुरूष	

9	
नाम : निम्बाराम	
पिता का नाम : रूग्गाराम	
मकान संख्या : 45	
आयु : 50 लिंग : पुरूष	

10	
नाम : मल्लाराम	
पिता का नाम : सकराराम	
मकान संख्या : 53	
आयु : 30 लिंग : पुरूष	

Prompt: *Although I do not have the funds to pay all respondents for their time, I wanted to make a small contribution to the village by running a game with a modest cash prize of 200 rupees for one head of household as part of this research... In this game, your answers will be kept secret. No voters or GP politicians in this village will know your choices in this game. I will first show you voters list information on 10 people from this gram panchayat who were selected at random. I will ask if you know these people and then I will give you 5 tokens that you can divide among these 10 people any way you want. All of the voters I mention have a chance to win the prize because everyone will have their name in the box at least once. But if you give someone a token, the chance their name will be picked will become much higher. This means that you should give tokens to the person you would most like to win the prize. Based on your selections, I will put slips of paper with names into a box and the sarpanch or a child of the sarpanch will pick a name out of that box. The name picked out of the box will receive the 200 RS prize, which will be delivered by a member of the research team who has no affiliation to any party, government agency, or NGO.*