Just Rewards? Local Politics and Public Resource Allocation in South India

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What factors determine the nature of political opportunism in local government in South India? To answer this question, we study two types of policy decisions that have been delegated to local politicians—beneficiary selection for transfer programs and the allocation of within-village public goods. Our data on village councils in South India show that, relative to other citizens, elected councillors are more likely to be selected as beneficiaries of a large transfer program. The chief councillor's village also obtains more public goods, relative to other villages. These findings can be interpreted using a simple model of the logic of political incentives in the context that we study. JEL codes: R51, H11, H72

Locally elected officials increasingly are responsible for the allocation of local public goods and for selecting beneficiaries for transfer programs in many low-income settings. Yet when it comes to how citizens access and use their political clout as politicians and as voters, our knowledge remains limited. In this paper, we use village and household data on resource allocation by elected village councils in South India to evaluate the nature of political opportunism in a decentralized setting.

In 1993, a constitutional amendment in India instituted village-level self government, or Gram Panchayats (GP). A typical GP comprises several villages with chief village councillor (the Pradhan) resident in one of them. The amendment also required political reservation of a fraction of councillor positions for historically disadvantaged groups (low castes and women).

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On political selection, we find that elected councillors are disproportionately drawn from politically and economically advantaged households. This effect is muted among councillors elected from reserved positions. However, irrespective of reservation status, the Pradhan is always more likely to belong to the village with the most electoral clout. Here, we define a village's electoral clout as the fraction of winning coalitions formed from among all villages in a GP in which that village is decisive to maintaining the coalition's majority status.

To examine political opportunism we consider two policy outcomes: beneficiary status for an important anti-poverty program (Below the Poverty Line [BPL] card) and allocation of public goods across villages belonging to the same GP.

The BPL card program entitles households to buy food below market prices, while the GP oversees selection of beneficiary households. To identify political opportunism in BPL card allocation we exploit within-village variation in access to political power. Controlling for wealth, education, and asset-based eligibility, a politician is more likely to have a BPL card than a nonpolitician. The effect of being a politician on the likelihood of getting a BPL card is of the same magnitude as the effect of being landless, despite the fact that politicians are significantly more likely to own land and assets that make them officially ineligible for BPL card. Thus we interpret BPL card ownership by politicians as a prima facie measure of opportunism. Moreover, such opportunism is correlated with worse targeting. In villages where the Pradhan has a BPL card (and/ or reports that s/he decides BPL card targeting), the average landless person is less likely to obtain a BPL card. The use of political office to access BPL cards appears to be limited to nonreserved politicians. However, as reserved politicians are also more likely to be eligible for BPL cards, the likelihood of having a BPL card ends up being similar for reserved and nonreserved politicians. However, reserved politicians appear to do a better job targeting lower castes.

Turning to cross-village resource allocation, we find that, after controlling for a village's electoral clout, being the Pradhan's village is correlated with greater access to public goods. This difference in public good provision between the Pradhan's village and other villages in the GP is absent in census data prior to decentralization. Thus, to the extent electoral clout matters, it appears to do so by determining *which* village is the Pradhan's village.

The richness of our household and village data allows us to to control for obvious sources of omitted variable bias. In our analysis of BPL card allocation we exploit within-village variation in political power. That said, a causal interpretation of our findings relies on the identifying assumption that access to political power and access to public resources are not jointly determined by unobserved individual characteristics (in the case of BPL cards) or village characteristics (in the case of public goods).

We also relate our findings to political economy models of resource allocation. The observed patterns in the data are consistent with a simple political economy model where politicians have a cost advantage in both accessing public transfer programs and in targetting public goods to their own group.

The results on cross-village allocation of public goods are consistent with a model of agenda control in which a minimal winning coalition will prevail with resources allocated favorably within the coalition.

Taken together, our results suggest that local democracy per se does not eliminate rent extraction. However, institutions that influence selection procedures (plurality rule and mandated reservation) change the nature of resource allocation. At the same time, electoral competition appears to have yielded limited incentive effects; while voters state lower satisfaction with opportunistic politicians, political opportunism persists.

Our findings contribute to a growing empirical literature on local government in low-income settings. There is literature on how local governments represent voter preferences. Foster and Rosenzweig (2004) and Faguet (2004) provide evidence from India and Bolivia that decentralization benefits the median voter. Other studies focus on the role of political reservation. Chattopadhyay and Duflo (2004) and Beaman and others (2009, 2010) show that political reservation for women altered public good allocation in Indian villages. In previous work, we have found that reservation for lower castes improves targeting of lower caste households for home-improvement programs (Besley and others 2004a). In addition, we document the fact that the Pradhan's village received more public goods. This paper pushes this research agenda forward by explicitly looking at the nature of political opportunism in Panchayats. We use new data on BPL card allocation to evaluate personal gains to politicians. In the case of cross-village allocation of public goods, we explicitly examine the selection of the Pradhan's village and whether accounting for the electoral clout of villages mutes the Pradhan-village effect.

Our cross-village analysis of public good provision is related to recent work by Chattopadhyay and others (2006). Using data on public goods allocation across hamlets, they find that low-caste Pradhans provide more public goods in low-caste hamlets. However, unlike this study, they do not find evidence for greater public good provision in the Pradhan village. A possible explanation is the apparently greater entrenchment in our setting; unlike in Chattopadhyay and others (2006), political reservation does not alter the likelihood that the most populous village in the GP will be the Pradhan's village.

The remainder of the paper is organized as follows: In Section I we describe the institutional setting and in Section II we provide a theoretical framework which motivates our empirical analysis. Section III describes the data, and Section IV the results. Section V concludes.

I. BACKGROUND

A 1993 constitutional amendment made a three-tier elected local government obligatory throughout India. Our focus is on the lowest tier of local self-government—a popularly elected village council called the Gram Panchayat (GP).

We use data from the four South Indian states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Each Indian state separately decided which policies to decentralize to the GP and how to demarcate the physical boundaries of a GP. Apart from Kerala, where each village is mandated as a separate GP, all states in our sample use a population criterion. In all cases, a GP is subdivided into wards (the population per ward varies between 300 and 800) and elections occur at the ward level.

The GP council consists of elected ward members and is headed by the Pradhan. The 73rd constitutional amendment mandated political reservation of a certain fraction of Pradhan positions in each state in favor of historically disadvantaged lower castes and women. Only individuals belonging to the group benefiting from reservation can stand for election in a seat reserved for that group. The law requires that one-third of Pradhan positions in every state be reserved for women while the extent of caste reservation reflects the group's population share in the state. In all states, the caste reservation status of a GP is first assigned, and then one-third of the positions in both caste-reserved and caste-unreserved categories are reserved for women. Thus, a significant fraction of positions are reserved for women belonging to lower caste groups. Finally, the amendment also mandated the formation of a village-level supervisory body consisting of all adults registered in the electoral rolls of a GP, the Gram Sabha.

A GP has responsibilities of civic administration with limited independent tax-raising powers.² It is typically responsible for beneficiary selection of government welfare schemes and the construction and maintenance of village public goods. While Panchayat legislation requires that the Pradhan decide the choice of beneficiaries and public good allocation in consultation with villagers and ward members, final decision-making powers remain vested with the Pradhan.

Since 1997 the Indian government has used a targeted public food distribution system which provides BPL cardholders subsidized food while charging a near-market price for the others. In 2000–01, for our sample states, the annual income gain from having a BPL card was roughly 5 percent of an agricultural labor household's annual expenditure.³ The cost of the subsidy is borne by the federal government and the cost of surveying households and food

- 1. The average population per GP is 1,650 in Andhra Pradesh, 6,500 in Karnataka, over 20,000 in Kerala, and 4,000 in Tamil Nadu. The much higher population of Kerala GP reflects the high population density in Kerala villages—at 819 pp sq. km, Kerala is roughly thrice as densely populated as the rest of India.
- 2. On average, roughly 10 percent of a GP's total revenue comes from own revenues with the remainder consisting of transfers from higher levels of government.
- 3. Under the public food distribution system BPL households enjoy a 50 percent subsidy on up to 20 kg of food grains per month. Planning Commission (2005) calculations suggest that the effective annual income gain was Rs. 1025 in Andhra Pradesh, Rs. 520 in Karnataka, Rs. 1414 in Kerala and Rs. 809 in Tamil Nadu. We combine these figures with data from the 1999 National Sample Survey to compute the implied income gain for an agricultural household.

disbursement is borne by the state government. Hence, BPL card allocation does not impact the Panchayat budget. However, many GP-administered welfare schemes, for example, employment and housing schemes, restrict eligibility to BPL households.

BPL eligibility is determined by a combination of state-specific income and asset criteria. To identify BPL-eligible households, the GP, together with state government officials, conducts a census collecting the relevant information. GP politicians bear substantial responsibility for conducting this survey. They choose the village surveyors and, using the survey results, prepare a preliminary 'BPL' list of recipients. The BPL eligibility criteria used by the four states in our sample was broadly similar. A household was typically eligible if the annual household income placed it below the state poverty line and if it did not own land. In addition, households were automatically excluded from BPL eligibility if they owned any of a defined set of assets (Attanasova and others (2010)). Our survey contained information on four of these assets: phone ownership, color TV ownership, motorized vehicle ownership, and water pump ownership. We use this information to create an indicator variable *noassets*.

The preliminary BPL list is supposed to be finalized at a Gram Sabha meeting. However, in reality politicians enjoy substantial discretion in selecting BPL households, and villager oversight is relatively limited. While 76 percent of the villages we surveyed held a Gram Sabha in the past year, only 20 percent of households report ever having attended a Gram Sabha. Moreover, beneficiary selection was discussed in only 22 percent of Gram Sabha meetings (Besley, Pande and Rao (2005)). This is also reflected in politician perceptions—only 9 percent of the 540 politicians whom we surveyed stated that the Gram Sabha decided the final BPL list; by contrast, 87 percent believed that this power lay with a Panchayat official.

Turning to public goods provision, GP officials allocate both the resources raised by taxing households and the funds transferred from the state government. While the category of expenditure for state funds is often specified, the GP has complete discretion over which villages and, within villages, which areas are to benefit from such expenditure.

II. THEORETICAL ISSUES

In this section, we discuss some background theoretical issues which we use to think about the empirical findings. We consider the implications of a view that GP politicians use their political authority in a self-interested way to influence transfers within and between villages.

The basic structure is to consider V villages in a GP labeled v = 1, ... V. Each village comprises a group of citizens, some of whom are poor. We

^{4.} The central government uses the Planning Commission's poverty estimates to release food grains to each state. Each state government decides district-wise BPL card quota. Within a district, a BPL quota is determined at the GP level.

consider spending which can be targeted to villages (public goods) and spending which can be targeted to poor individuals (BPL cards).

Between-village targeting

The GP allocates a budget of size B across the villages each with a share of population π_{ν} , and village public expenditures which are denoted by G_{ν} with

$$\sum_{v=1}^{V} \pi_v G_v = B.$$

A stylized representation is to think in terms of resource allocation controlled by a village council with a set of representatives—one for each village. Within each GP, one elected representative is the Pradhan and possesses agenda setting power. The public resources in G_{ν} generally take the form of very local public goods—for example, roads and water. That is why the issue of intervillage allocation is so important to villagers.

Suppose that the Pradhan proposes an allocation to other council members and that this must be agreed to by a majority of council members in order to be accepted. If the village council cannot agree to a public good allocation, then the status quo is that each district gets at least \underline{G} and the Pradhan's village gets $B - \underline{G}$. This defines a simple bargaining game between the Pradhan and other elected representatives. The Pradhan knows that he can offer \underline{G} to (V - 1)/2 of the villages and get $T - \underline{G} \frac{(V-1)}{2}$ for his own village. The remaining villages get nothing, which exceeds what his village would get in the status quo. While this is simple and extreme, it is indicative of what will happen in a wide variety of circumstances where there is a fixed agenda power.

Summarizing, resource allocation in the agenda setting model has the feature that the allocation of public spending to village v, denoted by G_v^* , follows:

$$G_{v}^{*} = \begin{cases} B - \underline{G} \frac{(V-1)}{2} & \text{if village } v \text{ is the Pradhan's village;} \\ \underline{G} & \text{if village } v \text{ is in the winning coalition} \\ \hline 0 & \text{otherwise.} \end{cases}$$

The key empirically relevant observation from the agenda setter model is the resource advantage for the Pradhan's village.

Given this advantage, it is obviously in the interest of every village to capture the Pradhan's chair. And we would expect the largest village to have an advantage in this process. However, we should not ignore the possibility of coalition formation during the electoral process. A candidate in one village

^{5.} The classic analysis of agenda setting is by Romer and Rosenthal (1978). Riker (1962) first proposed the importance of minimum winning coalitions in legislative bargaining.

^{6.} Things are more complex in models such as Baron (1991) where agenda setting power varies randomly over time.

may withdraw from the race for Pradhan and deliver the votes from his village to another candidate in exchange for belonging to a winning coalition ex post. For example, with three villages of equal size, a candidate from one village could drop out with a coalition of two-third of the voters supporting a remaining candidate. This would be credible if the winning candidate could reward the village whose candidate dropped out. A coalition proof equilibrium would then be one where there is no candidate who could drop out of the race and benefit in this way. Following this logic, we should expect each Pradhan to assemble a minimal winning coalition in which he gets (just over) half the support of either the voters or the ward members in a GP.

There are typically many winning coalitions possible for any given allocation of population across villages. For example, in the case of three villages with a third of the population each, there are six possible winning coalitions each containing two-thirds of the population. A village is the Pradhan's village in two out of these six coalitions. But there is no obvious reason to expect any one of these coalitions to prevail in practice. In order to remain agnostic about which coalition will form, we choose an ex ante measure of the each village's "power" by computing the fraction of winning coalitions (i.e., with more than half the population) formed from among all villages in a GP in which that village is decisive in maintaining a coalition containing 50 percent of the GP population. A coalition with more than half the GP population is assumed to be winning with the Pradhan being chosen randomly from among the coalition partners. In an ex ante sense, we expect villages with a larger power score of this kind to have a greater chance of being the Pradhan's village ex post. A village is more powerful if there are more coalitions in which it is decisive.

On this basis, any village with more than half the GP population has a power score of one. In a One or Two village GP a single village is powerful. The interesting cases arise for GPs with more than two villages in which case the power of a village is a nonlinear function of the vector of village populations.

Thus we suppose that the power variable is a determinant of the location of the Pradhan's viilage and will explore empirically whether a village's power score predicts whether it will become the Pradhan's village. We can also test whether, independent of the pattern of political control, power influences final resource allocation.

Within-village targeting

The members of the elected council also control households' access to transfers from the state. A key decision which we focus on here is whether or not a household receives a BPL card. Such cards are intended to be for the poor. But to target them effectively requires (i) that all of the poor can be identified, and (ii) that the village council wants to target only the poor. A benevolent policy maker would target only the poor and mistakes would occur only if there are *information costs*. Nonbenevolent policy makers may choose to target

according to political preference or self-interest, which creates *political and agency costs*. One role of political institutions is to reduce the size of such costs, either by picking more honest politicians or by creating better electoral incentives to help disadvantaged groups.

Within villages, elected politicians play a key role in deciding who receives a transfer, thus political incentives should matter. There are probably good reasons to believe that politicians are fairly well-informed about who is poor in a village so the main focus is on political and agency costs.

When deciding how to allocate BPL cards, we expect two basic components of a politician's payoff to matter: (i) their basic preference about who should get such cards, and (ii) the incentives and constraints due to the political process.

There are several models of within-village politics which could be used to motivate how the allocation of BPL cards could be affected by politics. First, there may be political distortions due to the use of strategic transfers to gain election as in a probabilisic voting model as reviewed in Persson and Tabellini (2000) and used to model Panchayats by Bardhan and Mookherjee (2010). These would tend to give a policy advantage to key groups of "swing" voters. Another class of models stresses the possibility of ex post rent-seeking by politicians as in a political agency framework of the kind reviewed in Besley (2006). These would tend to motivate reasons why politicians themselves would benefit from holding office.

Political reservation could make a difference in either of these frameworks by changing the targeting strategies of politicians who compete for office or by affecting the types of politicians selected (such as their honesty, competence or identity). One important role of reservation in theory is to try to change who holds office with a view toward changing policy outcomes. But reservation could also change incentives since a reserved politician faces a lower probability of being elected again since their seat may not be reserved in the future.

This suggests that the allocation of BPL cards will vary across reserved and unreserved politicians. We should also test for the possibility that political office is used for personal gain by politicians who reward themselves with BPL cards.

Given that one important role of politicians is to allocate BPL cards, there is an interesting question of whether the politicians are selected from a particular group. In standard Downsian models of political competition, selection does

7. A survey of all households in one village in Uttar Pradesh provides evidence for the idea that such costs depend on the household type. Das Gupta, Hoff and Pandey (2011) find that many low and middle caste households reported that they obtained a ration card with difficulty, if at all. However, 19 percent reported that they did not obtain a card even after making repeated visits to request one. In contrast, most high caste households reported that they obtained a ration card easily; for 63 percent of high caste, compared to 34 percent of SC and OBC, the ration card was delivered to their homes. The survey also found that for non-SC households, the level of wealth had no effect on the probability that it obtains a Below Poverty Line ration card and, in line with the arguments developed here; targeting appears to be based only on political favoritism.

not matter since electoral strategy determines the policy outcome. However, citizen-candidate approaches as developed in Besley and Coate (1997) and Osborne and Slivinski (1996) examine a world where, because of difficulties of commiting to policies up front, the identity of candidate matters. Such models could be used to see whether politicians are drawn from among the village elite. This would depend, in general, on the costs of entry, participation in political networks and the form of electoral coalitions. The first two are more likely to favor educational and income elites. However, how the last influence matters is unclear since it depends on whether the poor can mobilise around specific candidates which serve their interests. We would expect political reservation to affect selection as in Chattopadhyay and Duflo (2004) and Pande (2003).

III. DATA

Our analysis uses survey data from over 500 villages which we collected between September and November 2002. The sample villages are distributed across nine boundary districts in the four southern states of India—Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. We randomly sampled six GPs in three blocks in each district. In GPs with less than four villages, we sampled all villages; otherwise, we sampled the Pradhan's village and two randomly selected villages.

In each village we conducted a Participatory Resource Appraisal (PRA) in which we obtained information on community demographics and public good provision, and surveyed an elected Panchayat official. In the Pradhan's village the Pradhan was interviewed; otherwise, we interviewed a randomly selected village councillor was interviewed. In a random subsample of three GPs per block (259 villages) we conducted household interviews in surveyed villages. We surveyed 20 households in each village where we required that four be scheduled caste or tribe (SC/ST) households. Household selection was random, and we alternated between male and female respondents. Our final household sample size is 5,180.

Table 1 provides some descriptive statistics. While the average respondent has over four years of education, politicians are significantly more educated. Average land holdings are 2.2 acres; however, among politicians this figure rises to 5.7 acres. Politicians elected from non-reserved seats are significantly more landed than those elected from reserved seats. Only 7 percent of the villager respondents, but 25 percent of the politicians, belong to a family where someone held a political position. Finally, 21 percent of village households and 25 percent of politician households possess a BPL card. Thus, while for the

- 8. At the time of survey at least one year had lapsed since the last GP election in each state.
- 9. To account for the higher GP population in Kerala we sampled three GPs per block and six wards per GP—the Pradhan's ward and five randomly selected wards.

TABLE 1. Descriptive Statistics

	Overall		Politicians			
	Mean	Non-politicians	All	Unreserved	Reserved	
Household sample						
Respondent characteristics						
Years of Education	4.49	4.33	7.28	8.00	6.51	
	(4.55)	(4.49)	(4.36)	(3.88)	(4.63)	
Land owned in acres	2.26	2.07	5.71	6.82	4.65	
	(4.77)	(4.38)	(8.24)	(9.21)	(7.05)	
Family political history (%)	6.70	5.70	25.70	27.30	24.54	
	(25.00)	(23.20)	(43.70)	(44.63)	(43.11)	
SC/ST (%)	22.90	23.00	22.96	6.89	37.99	
	(42.00)	(42.00)	(42.00)	(25.38)	(48.60)	
Female (%)	49.10	49.80	35.30	15.32	54.12	
	(49.90)	(50.00)	(47.80)	(36.09)	(49.91)	
Beneficiary Status (% households)	, ,	, ,	,	,	,	
BPL card (%)	21.95	21.60	25.37	26.81	24.01	
,	(41.30)	(41.00)	(43.50)	(44.38)	(42.79)	
No assets (%)	68.30	70.40	29.60	16.47	41.93	
(11)	(46.50)	(45.60)	(45.70)	(37.16)	(49.43)	
Perceptions (% non-politicians)	(/	(,	(,	(,	(/	
Pradhan looks after village needs (%)		38.40				
(,		(48.63)				
Pradhan keeps election promises (%)		36.10				
		(48.03)				
Village facilities better than		7.40				
neighboring villages (%)		(26.20)				
Village sample		(20.20)				
Overall GP activism	0.14					
overall of activism	(0.61)					
Village population	1524.80					
vinage population	(1339.50)					
Power	0.39					
Tower	(0.35)					
Pradhan's Village (%)	38.31					
Trauman's vinage (70)	(48.66)					
Pradhan reserved (%)	54.40					
Trauman Teserveu (70)	(49.85)					
Indirect elections (%)	58.77					
munect elections (/o)	(49.20)					
	(49.20)					

Notes: 1. Years of education refer to respondent's years of education. Land owned is the acres of land owned by respondent's household. Family political history =1 if any household member has held a political position. SC/ST=1 if the respondent is a scheduled caste or scheduled tribe and female =1 if the respondent is a female. BPL card is a dummy =1 if household has a BPL card. No asset is an indicator variable =1 if the household doesnot possess any of the following: (i) phone, (ii) color TV, (iii) motorized vehicle, and (iv) water pump.

- 2. Each perception variable = 1 if the respondent agrees with the statement and zero otherwise.
- 3. Overall GP activism is the average standardized public good provision, where we average across the following categories: roads, transport, electricity, water, sanitation, irrigation, education, and health. Pradhan reserved = 1 if the position of the Pradhan is reserved for women or low caste. Pradhan's village = 1 if the Pradhan lives in that village. Power measures the propensity for a village to belong to all the possible voter coalitions which contain more than half the voter population in the GP.
 - 4. Source: Descriptive statistics from survey data described in the text.

most part politicians belong to the political and economic elite, it appears that they have a greater chance of having a BPL card than a randomly selected non-politician household. Moreover, respondents are critical of local politicians—less than 40 percent believe the Pradhan looks after village needs or keeps election promises. Less than 10 percent of the respondents believe that their village facilities are better than in neighboring villages.

Turning to village-level variables, over half of Pradhan positions are subject to some form of reservation. Roughly 30 percent of both the caste-reserved and caste-unreserved Pradhan positions are reserved for women.

Within a block, the assignment of reservation status for the Pradhan position is, in effect, random. Consistent with this, in Besley and others (2004a) we show that public good provision in 1991 was statistically indistinguishable in GPs with and without a reserved Pradhan.

To measure public good provision, we collected information on the number of public good investments during the PRA. We collected data for the following categories: roads, village transport, water, sanitation, irrigation, electricity, education and health. For each category, we construct a count variable denoting how many investments occurred in the village since the last GP election. We then construct a standardized investment measure for each category (z-score) by subtracting the mean for non-Pradhan villages and dividing by the corresponding standard deviation.

To measure the electoral clout of village v in a GP with n villages we consider all coalitions of size less than n with a population greater than half the GP population as winning coalitions. The "own" coalition of village v is the number of winning coalitions which include v and no longer remain a winning coalition when v is removed. For each village we construct a variable which we call "power" which is the ratio of the own coalition size of v to the total number of winning coalitions in the GP. From this calculation, the average village in our sample belongs to 39 percent of the winning coalitions in the GP. We then measure the electoral clout of village by whether it is the Pradhan's village (i.e. the Pradhan lives in it).

IV. EMPIRICAL ANALYSIS

The main hypotheses that we test, following on from the discussion above, are:

- Agenda Setting: The Pradhan's village will receive a larger share of Panchayat resources than other villages in the GP.
- Self-interest: Politicians are more likely to have a BPL card than other citizens, all else equal.
- Group Targeting: Households are more likely to have a BPL card if a politician from their own group is in office.

As a background, we first examine the correlates of being a politician and of being the Pradhan's village. We then examine whether the structure of political authority affects individuals' and villages' propensity to receive public goods.

Selection of Pradhan Village

We estimate the following village-level linear probability model:

$$P_{vgb} = \beta_b + \delta_1 X_{vgb} + \eta_{vgb}.$$

 P_{vgb} is a dummy variable for village v in GP g in block b which is equal to one if the Pradhan lives in that village. We use β_b to denote block fixed effects and X_{vgb} is a vector of village characteristics. GPs in Kerala consist of one village and hence, by definition, each village is a Pradhan's village. We therefore exclude the Kerala villages from these regressions. We cluster standard errors by GP.

The results are in Table 2. In column (1), the independent variable of interest is in log village population. A 1 percent increase in village population increases the probability that the village is the Pradhan's village by 0.24 percent. In column (2) we include other measures of a village's political power—whether the village is the GP Headquarters and the number of wards in the village. Both variables are positively correlated with village population and also predict the choice of the Pradhan's village. That said, the effect of village population is robust to the inclusion of these additional variables.

In columns (3) and (4), we investigate the importance of a village's relative population share within a GP. We argued above that since GP elections are based on plurality rule, a village's relative population share should be the relevant determinant of which village captures the Pradhan's chair. In column (3) we see that a 1 percent increase in the share of GP population living in a village increases its likelihood of being the Pradhan's village by 0.6 percent (this is the difference in the coefficients on the log of village population and the log of the GP population). In column (4) we measure a village's population influence within a GP by its 'power'—the percentage of winning coalitions in the GP that a village belongs to. This variable positively predicts the Pradhan's village, and its inclusion renders the effect of a village's own population variable insignificant. The effect of the power variable is large: a move from a power of one to a power of one-third reduces the probability of being the Pradhan's village by roughly 25 percent. In column (5) we show that the importance of village demographics in predicting the Pradhan's village is not influenced by the reservation status of the Pradhan's position.

Overall, these results demonstrate an important role for the population structure across villages in predicting the location of the Pradhan's village. It also tells us that, at the very least, it will be important to control for village population when we investigate whether living in the Pradhan's village yields a benefit in terms of public good provision.

	(1)	(2)	(3)	(4)	(6)
Village population	0.247	0.153	0.258	0.063	0.044
0 1 1	(0.037)	(0.036)	(0.042)	(0.040)	(0.040)
Number of wards in village		0.059	0.039	0.038	0.057
		(0.011)	(0.011)	(0.013)	(0.019)
GP Head quarter		0.220	0.156	0.155	0.148
		(0.083)	(0.086)	(0.090)	(0.097)
GP population			-0.237		
			(0.034)		
Power				0.385	0.209
				(0.133)	(0.115)
Village Population*					0.008
Pradhan reserved					(0.017)
Number of wards in village*					-0.003
Pradhan reserved					(0.018)
GP Headquarter*					-0.094
Pradhan reserved					(0.145)
Power*					-0.112
Pradhan reserved					(0.235)

TABLE 2. Selection of Pradhan Villages

Notes: 1. OLS regressions reported with robust standard errors, clustered by GP in parentheses. All regressions include block fixed effects.

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3. Source: Authors' analysis based on survey data described in the text.

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Holding Political Office

We now look at the selection of politicians and investigate whether individual characteristics affect the likelihood that the respondent is an elected politician. We estimate a linear probability model of the form

$$p_{i\nu} = \alpha_{\nu} + \rho x_{i\nu} + \varepsilon_{i\nu}, \tag{1}$$

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where $p_{i\nu}$ is a dummy variable for whether respondent i is a politician in village v, α_v is a village fixed effect and $x_{i\nu}$ is a vector of individual and household characteristics. The regression exploits within-village variation to estimate the effect of household and individual characteristics on political selection. Standard errors are clustered at the village level.

Table 3 reports the results. In column (1) we see that two socioeconomic characteristics increase the likelihood that the respondent is a politician: education and owning land. An additional year of education increases the probability of being a politician by 0.6 percent and an additional acre of land by 0.6 percent. Politicians are also 7 percent less likely to lack the assets that make a household eligible for a BPL card. Thus we would be surprised, based on

^{2.} The dependent variable is a dummy variable = 1 if the Pradhan lives in the village. These regressions exclude Kerala GPs which are one-village GPs. Village population and GP population are entered in logs.

TABLE 3. Selection of Politicians

Doman domat are wishla		Politician		Pradhan					
Dependent variable	(1)	(2)	(3)	(4)	(5)	(6)			
Female	-0.004	-0.017	0.014	0.146	-0.060	0.245			
	(0.006)	(0.004)	(0.004)	(0.065)	(0.060)	(0.059)			
SC/ST	0.045	0.005	0.042	0.187	-0.010	0.232			
	(0.009)	(0.006)	(0.007)	(0.083)	(0.064)	(0.078)			
Education	0.006	0.003	0.004	0.017	0.018	0.004			
	(0.001)	(0.001)	(0.001)	(0.009)	(0.008)	(0.008)			
Land owned	0.006	0.005	0.002	0.001	0.003	-0.001			
	(0.002)	(0.001)	(0.001)	(0.005)	(0.005)	(0.004)			
No assets	-0.071	-0.047	-0.027	-0.178	-0.072	-0.137			
	(0.008)	(0.006)	(0.006)	(0.073)	(0.063)	(0.066)			
Family political	0.118	0.076	0.049	0.073	0.113	-0.021			
history	(0.020)	(0.017)	(0.016)	(0.067)	(0.056)	(0.065)			
Sample	Villagers and	Villagers and	Villagers and	All Politicians	Village Councillors	Village Councillors and			
•	Politicians	Unreserved	Reserved		and Unreserved	Reserved Pradhans			
		Politicians	politicians		Pradhans				
N	5397	5269	5261	536	423	452			

Notes: 1. OLS regressions reported with robust standard errors, clustered by village, in parentheses. All regressions include control for respondent age and age squared. Regressions in columns (1)–(3) include village fixed effects and in columns (4)–(6) GP fixed effects.

^{2.} The dependent variable in columns (1)–(3) regressions is a dummy = 1 if the respondent is a politician, and in columns (4)–(6) regressions is a dummy = 1 if the respondent is a Pradhan. The explanatory variables are as defined in notes to Table 1.

^{3.} Source: Authors' analysis based on survey data described in the text.

eligibility, to observe politicians being more likely to have a BPL card. Finally, a respondent belonging to a family with a history of political participation is 11 percent more likely to be a politician.¹⁰

In columns (2) and (3) we separately examine the propensity of being elected to an unreserved and reserved position respectively. In both cases we observe positive selection on education and family political history. However, reserved politicians are poorer as measured by land ownership. They are also significantly more likely to belong to population groups that benefit from reservation—female and SC/ST.

In columns (4)-(6) of Table 3, we restrict the sample to Pradhan villages, and the dependent variable to whether the respondent is the Pradhan. We observe very similar patterns of selection. However, the results tend to be less significant which could simply reflect the much smaller sample size.

These results confirm the impression formed in the raw data (reported in Table 1) that politicians are from a political and economic elite. However, this is somewhat less true for politicians elected from reserved seats. 12

Between-Village Allocation of Public Goods

To examine resource allocation between villages we estimate a regression of the form

$$Y_{vgk} = \beta_b + \rho P_{vgk} + \theta X_{vgk} + \varepsilon_{vgk}, \tag{2}$$

where Y_{vgk} is the standardized measure of public good provision for public good k in village v in GP g. β_b are block fixed effects, P_{vgk} is an indicator variable for the Pradhan's village and X_{vgk} are controls for village demographics. We cluster standard errors by GP.

The public good categories are roads, transport, water, education, health, sanitation, electricity, and irrigation. Our standardized measure—the construction of which was discussed in the data section above—allows us to compare results across subcategories. Finally, following Kling and others (2007), we obtain an overall index by taking the average of equally weighted standardized components of these public good measures. To estimate the covariance matrix (for both subcategories and the overall index) we use a seemingly unrelated regression (SUR) model. The results are reported in Table 4.

Column (1) of Table 4 shows that, as predicted by the proposed agenda setting model, public good provision is 0.2 standard deviation higher in the

- 10. We have also estimated these regressions including party affiliation variables. A respondent affiliated with the party in power in the state is roughly 7 percent more likely to be a politician.
- 11. Further disaggregation shows that family political history is positively correlated with selection only for women. The absence of a political history effect for SC/STs reflects the recent entry of these groups in politics on the back of reservation.
- 12. Village meeting data also shows that reservation significantly reduces the likelihood that the Pradhan is an economic or political oligarch.

TABLE 4. Political Power and Public Good Provision

	Overall provision			D 1	T.	W/ .	T1	C ::	Tools of too	Edi.	TT 1.1.
	(1)	(2)	(3)	Roads (4)	Transport (5)	Water (6)	Electricity (7)	Sanitation (8)	Irrigation (9)	Education (10)	Health (11)
Pradhan Village	0.206	0.168	0.130	0.285	0.180	0.217	0.057	0.118	-0.011	0.100	0.090
	(0.048)	(0.047)	(0.047)	(0.107)	(0.113)	(0.101)	(0.082)	(0.091)	(0.101)	(0.094)	(0.074)
Village population			0.092	0.193	-0.016	0.104	0.071	0.148	0.078	0.031	0.129
			(0.051)	(0.087)	(0.102)	(0.103)	(0.093)	(0.108)	(0.087)	(0.084)	(0.066)
Number of wards			0.025	0.038	0.057	0.024	0.019	0.052	-0.027	0.007	0.032
in village			(0.019)	(0.029)	(0.037)	(0.029)	(0.036)	(0.045)	(0.020)	(0.031)	(0.020)
GP Headquarter			0.078	0.251	0.184	0.007	0.270	0.002	-0.018	0.074	-0.150
			(0.064)	(0.154)	(0.141)	(0.153)	(0.131)	(0.149)	(0.140)	(0.136)	(0.114)
Power			0.0035	-0.200	-0.076	-0.147	0.072	0.115	-0.088	0.213	0.139
			(0.101)	(0.194)	(0.255)	(0.228)	(0.173)	(0.250)	(0.195)	(0.182)	(0.153)
Fixed effect	Block	GP	Block	Block	Block	Block	Block	Block	Block	Block	Block
N	521	521	496	496	496	496	496	496	496	496	496

Notes: 1. Overall provision is the equally weighted average of the eight public good outcomes reported in columns (4)-(11). The covariance is estimated within a SUR framework. The standard errors are clustered by GP.

^{2.} Village population is entered in logs.

^{3.} Source: Authors' analysis based on survey data described in the text.

Pradhan's village. We obtain a very similar estimate when we control for GP rather than block fixed effect (column 2). The remainder of Table 4 reports alternative specifications to see whether the Pradhan village effect is robust to the inclusion of village characteristics which influence a village's probability of securing the Pradhan's position as observed in Table 2. In column (3) we include other determinants of Pradhan village location within the GP. Supporting the idea that we are picking up the effect of political control, the Pradhan village effect remains positive and significant. It is striking that, although the power variable strongly predicts which village will be the Pradhan's village, it does not appear to influence policy outcomes.

Columns (4)-(11) of Table 4 report results for different categories of public good provision. The Pradhan village effect is mainly being driven by provision of roads and water—two important areas of investment by GPs. In no case does the power variable predict public good provision (nor does being the GP headquarters). However, for roads we observe an effect of village size over and above the Pradhan village effect. Overall, the results in Table 4 is consistent with the Pradhan's village enjoying a policy advantage in the GPs that we are studying.

Since we only have cross-sectional data, we cannot directly compare public good provision in 2002 with that before the Panchayat system was instituted. However, as a baseline, in Appendix Table 1 we consider a set of 1961 and 1991 village public goods as measured in the censuses taken in these years. For consistency, we construct standardized z-scores for each subcategory following the procedure outlined above and estimate the regressions in a SUR framework. In no case do we find that the Pradhan village is doing better. Instead, the main positive predictor of public good provision appears to be village population. This further supports the notion that the Pradhan village effect is picking up something about the contemporary level of government provision.

We have also checked whether the Pradhan village effect is influenced by either Pradhan or village characteristics. We find no evidence that Pradhan characteristics—as measured by whether he/she has a BPL card, years of education or reservation status—influence public good allocation. Taken together, these results further underpin the proposition that purely agenda-setting power matters for policy.

Table 5 looks at the issue from a different angle and examines whether being the Pradhan's village is correlated with greater political activism and that this, rather than political control, underlies the results. Our survey asked various questions about villagers' political involvement. If political control is what underlies public good provision, then we would not expect to see higher involvement by residents in the Pradhan's village. In fact, none of newspaper readership (column 1), party affiliation (column 2), voting in the GP election (column 3) or attending village meetings (column 4) is higher in the Pradhan's village. Thus political activism appears similar across the Pradhan's and other villages in a GP. Column (5) confirms that political knowledge is also similar across villages with the probability of being able to name one's legislator being no higher in the Pradhan's village than other villages. But when it comes to

	Reads newspaper (1)	Affiliated with Party (2)	Voted in Last GP Election (3)	Attends Gram Sabha (4)	Knows name of Legislator (5)	Knows name of Pradhan (6)	Seen Pradhan (7)
Pradhan's	0.014	0.007	0.017	0.007	0.023	0.238	0.240
village	(0.012)	(0.013)	(0.013)	(0.013)	(0.017)	(0.023)	(0.020)
N	5133	5133	5133	5133	5133	5133	5115
Mean for	0.325	0.277	0.866	0.239	0.420	0.430	0.506
non-Pradhan villages	(0.466)	(0.448)	(0.340)	(0.427)	(0.493)	(0.495)	(0.500)

TABLE 5. Villager Political Involvement and Pradhan's Village

Notes: 1. OLS regressions reported with robust standard errors clustered by GP in parentheses. All regressions include block fixed effects.

knowing who the Pradhan is, and having seen him/her, the results are quite different (columns 6 and 7). Members of the Pradhan's village are significantly more likely to be able to name the Pradhan and to have encountered him/her.

Taken together, the results in Table 5 provide evidence against the view that the Pradhan village effect proxies for an omitted village-level political activism variable. Rather, it appears that the agenda-setting power conferred on the Pradhan provides an important source of policy advantage to the village in which he or she lives.

Within-Village Allocation of BPL cards

The basic intent of the BPL card program is to help poor households. The fact that politician households are wealthier than nonpolitician households (Tables 1 and 2) ought, therefore, to imply that politician households are less likely to have a BPL card.

To investigate this empirically, we estimate a linear probability model:

$$b_{iv} = \alpha_v + \gamma_1 x_{iv} + \gamma_2 p_{iv} + \eta_{iv}. \tag{3}$$

 $b_{i\nu}$ is an indicator variable for whether household i in village v has a BPL card. $x_{i\nu}$ is a vector of household characteristics that are relevant to whether the household is needy. It also includes a dummy for whether any household member currently or previously held a political position. $p_{i\nu}$ is an indicator variable for whether the individual is a politician. The influence of village-level characteristics are subsumed in a village fixed effect α_v . The regression, therefore, only exploits within-village variation in individual and household characteristics to explain the allocation of BPL cards. Standard errors are clustered at the village level.

The results are in column (1) of Table 6. BPL cards are, on average, targeted towards disadvantaged groups. A SC/ST household is 15 percent more likely to

^{2.} The sample consists of all respondents but excludes politicians. All regressions include as additional covariates: female, household size, age and age squared and the controls listed in column (1) of Table 6.

^{3.} Source: Authors' analysis based on survey data described in the text.

TABLE 6. Targeting of BPL Cards

	Dependent variable: Household has BPL card						
	(1)	(2)	(3)	(4)	(5)		
SC/ST	0.152	0.148	0.149	0.150	0.123		
	(0.019)	(0.019)	(0.020)	(0.019)	(0.020)		
Landless	0.063	0.065	0.065	0.064	0.062		
	(0.015)	(0.015)	(0.015)	(0.015)	(0.016)		
Landownership	-0.001	-0.002	-0.002	-0.001	-0.002		
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
Education	-0.004	-0.005	-0.005	-0.004	-0.004		
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
No assets	0.066	0.073	0.074	0.076	0.068		
	(0.014)	(0.014)	(0.014)	(0.013)	(0.013)		
Family political	-0.004	-0.014	-0.017	-0.013	-0.017		
history	(0.020)	(0.020)	(0.020)	(0.019)	(0.020)		
Politician		0.095	0.184	0.089	0.091		
		(0.033)	(0.047)	(0.083)	(0.033)		
Reserved politician			-0.199		-0.101		
-			(0.067)		(0.071)		
Reserved politician is SC/ST			0.050		0.032		
-			(0.099)		(0.112)		
Politician*years of education			,	-0.010	, ,		
•				(0.007)			
Politician* No assets				-0.044			
				(0.085)			
Politician*Pradhan decides BPL				0.268			
				(0.076)			
Pradhan's village				, -,	-0.019		
<u> </u>					(0.018)		
N	5397	5397	5397	5397	5397		

Notes: 1. OLS regressions with standard errors clustered by village in parenthesis. All regressions also include controls for household size, respondent age and age squared. Regressions in columns (1)-(4) include village fixed effects, and regression in column (5) block fixed effects.

get a BPL card and a landless household 7 percent more likely. Households with a more educated respondent are less likely to get a BPL card. In addition, asset-based eligibility matters. A household which reports none of the assets that make it BPL-ineligible is 6 percent more likely to get a BPL card. Finally, we observe no impact of family political history. Controlling for current economic status, households in which at least one member holds, or has previously held, political office are no more likely to have a BPL card.

Next, we ask whether current political control matters. In column (2), we include as a regressor whether a household member is a currently elected GP politician. Consistent with the view that holding public office reduces the cost

^{2.} The dependent variable is a dummy variable = 1 if the household has a BPL card. The explanatory variables are as defined in Notes to Table 1. Pradhan decides BPL = 1 if the politician states that the final powers for selecting BPL household lies with Pradhan.

^{3.} Source: Authors' analysis based on survey data described in the text.

of access to such cards for politicians, we find that politician households are roughly 9.5 percent more likely to have a BPL card.

In column (3), we ask whether politicians elected from unreserved and reserved positions differ in their propensity to hold BPL cards. We include two additional indicator variables as explanatory variables. First, a dummy for whether the politician is elected from a reserved seat, and second, whether the politician is elected from a seat reserved for SC/ST. We find that the benefits of being a politician (in terms of accessing a BPL card) are limited to unreserved politicians. This effect does not vary significantly across SC/ST-reserved politicians and female-reserved politicians. It is, however, also the case that our limited sample of reserved politicians implies we lack power to disentangle these effects. An F-test shows that we cannot reject the hypothesis that a reserved and unreserved politician are equally likely to have access to a BPL card. The reason is demographic (specifically, being SC/ST is a strong predictor of BPL card ownership).

This suggests two explanations for the apparently limited political opportunism among reserved politicians. First, that reserved politicians are more likely to be eligible for BPL cards and this is captured by the demographic controls (the SC/ST dummy). Reserved politicians, therefore, do not need to exert further political influence to get BPL cards (since they are already eligible). Second, it may be that they are less experienced and therefore unable to work the system to their advantage. While we cannot rule out this explanation, the fact that family political history does not influence BPL card allocation is suggestive that the main reason may be differential eligibility of reserved and unreserved politicians (and therefore differential use of political power).

In column (4) we examine whether other politician characteristics influence their propensity to get a BPL card. More educated politicians are weakly less likely to have BPL cards. However, a politician's eligibility for a BPL card (as proxied by asset ownership) does not influence his/her likelihood of having a BPL card. In contrast, the greater access of politicians to BPL cards is concentrated in GPs where the politician reports that the Pradhan (rather than villagers at the village meeting) decides the final BPL card allocation. Finally, in column (5) we show that belonging to the Pradhan's village does not influence a villager's likelihood of getting a private transfer. This suggests that there is no interaction between the two different aspects of resource allocation that we have been studying—between-village allocation and within-village allocation.

The evidence in Table 6 suggests that while the BPL program does succeed in targeting the relatively disadvantaged households in a village (as measured by SC/ST and landless status), politician households also benefit from this program.

We discussed above how BPL targeting might depend on politicians' characteristics either due to a politician's electoral strategy or to his/her underlying sympathy with particular groups. In Table 7 we investigate this by looking at how village and politician characteristics influence targeting to disadvantaged

^{13.} Estimating this specification as a probit leaves the results unchanged.

	Charac	teristics	Opportunism				
	Education (1)	Reserved (2)	BPL card (3)	Pradhan decides BPL card allocation (4)	Pradhans village (5)		
SC/ST	0.077	0.115	0.152	0.168	0.162		
	(0.049)	(0.028)	(0.029)	(0.035)	(0.026)		
SC/ST*Characteristic	0.010	0.082	0.024	-0.035	-0.007		
	(0.005)	(0.039)	(0.064)	(0.051)	(0.040)		
Landless	-0.008	0.077	0.063	0.084	0.076		
	(0.040)	(0.020)	(0.017)	(0.019)	(0.021)		
Landless*Characteristic	0.008	-0.033	-0.046	-0.089	-0.040		
	(0.004)	(0.030)	(0.045)	(0.033)	(0.029)		
N	4854	5133	5104	4854	5133		

TABLE 7. The Determinants of Targeting

Notes: 1. OLS regressions reported with robust standard errors clustered by GP in parentheses. All regressions include village fixed effect.

households. We do so by interacting Pradhan and village characteristics with being either an SC/ST or a landless household in the targeting equation.¹⁴

Column (1) of Table 7 considers Pradhan's education. Both landless and SC/ST households benefit from having a more educated Pradhan. In contrast, having a Pradhan elected from a reserved position benefits SC/STs but not landless households. This is consistent with the idea that individuals benefit when there are politicians in office whose characteristics are more similar to their own. As a significant fraction of caste-reserved positions for Pradhan are also reserved for women, we do not have the ability to statistically distinguish the effects of gender and caste reservation.

In columns (3) and (4) we consider two alternative measures of politician opportunism. The first is whether the Pradhan has a BPL card and the second is whether the Pradhan states that s/he has final discretion on BPL card allocation. Both sets of regressions suggest that landless households are less likely to get a BPL card in these circumstances. The effect is strongly significant when we define opportunism in terms of Pradhan having control over BPL card allocation (column 4).

Finally, in column (5) we examine Pradhan village effects. Living in the Pradhan's village leaves a household's propensity to receive a BPL card

^{2.} Regressions include the individual controls included in regression in column (1), Table 4. All regressions exclude politicians.

^{3.} Source: Authors' analysis based on survey data described in the text.

^{14.} It is unclear whether villages face a binding budget constraint for BPL cards. To the extent that there is flexibility in the number of BPL cards that can be allocated at the village level, these results can be interpreted as the consequences of selecting politicians of different quality who care more or less about the poor. The theory could be extended to accommodate this using a political agency model with adverse selection where there is some probability of a politician in group *R* being a good type who cares about targeting the poor or a self-interested type who does not.

		e e	~	
Years of educa (1)	tion Reserved (2)	Pradhan decides BPL card allocation (3)	BPL card (4)	Pradhan's village (5)
Dep. Variable: P	radhan looks a	fter village needs		
0.008	-0.085	0.046	-0.080	0.125
(0.002)	(0.020)	(0.025)	(0.028)	(0.021)
Dep. Variable: P	radhan keeps el	lection promises		
0.006	-0.072	0.032	-0.098	0.119
(0.002)	(0.018)	(0.026)	(0.023)	(0.020)
Dep. Variable: V	illage facilities	better than neighboring village		
0.002	-0.001	-0.018	-0.002	0.044
(0.002)	(0.017)	(0.019)	(0.017)	(0.014)

TABLE 8. Pradhan and Village Characteristics and Villager Satisfaction

Notes: 1. OLS regressions reported with robust standard errors clustered by GP in parentheses. All regressions include block fixed effects.

3. Source: Authors' analysis based on survey data described in the text.

unaffected—again confirming the idea that the Pradhan village effect ought not to be important for this level of targeting.

Evidence from Attitudes

Finally, we consider whether household attitudes towards policy directly mirror the findings based on studying resource allocation.

Table 8 documents perceptions of village residents on whether the Pradhan looks after village needs and keeps his/her election promises. We also look at villagers' evaluation of facilities in their own village relative to those in neighboring villages. In order to study the impact of village-level characteristics, our regressions include block fixed effects.

Formally, let $q_{i\nu gb}$ be the probability that villager i in village ν is satisfied with his GP g's performance. We model this with the following linear probability model:

$$q_{ivgb} = \alpha_b + \gamma x_{ivgb} + \delta Z_{gb} + \eta_{ivgb}$$
 (4)

where α_b are block fixed effects, x_{ivgb} are individual and household characteristics, and Z_{gb} are GP characteristics. Standard errors are clustered by GP.

Each cell in Table 8 reports the δ coefficient from a separate regression. In all cases except for column (1), the point estimate can be read as the percent change in attitudes when the Pradhan has the specific characteristic. In column (1) the point estimate is the impact of one additional year of Pradhan's education on attitudes. In line with our results above, respondents think well of educated Pradhans. For instance, one additional year of education makes it 0.8 percent more likely that the respondent believes that the Pradhan looks after village needs. In contrast,

^{2.} Each cell reports the coefficient from a separate regression where the dependent variable is listed in the row above and the explanatory variable in the column. The sample in all regressions is the set of household respondents but excludes politician households. Regressions include as controls the set of explanatory variables listed in column (1), Table 4, and controls for being female, household size, age and age squared.

column (2) shows that reserved politicians are perceived as worse than unreserved politicians in terms of looking after needs and keeping election promises. Given that such politicians seemed less opportunistic than their unreserved counterparts and were equally good (as Pradhans) as policy-makers, this finding is surprising. It could be that this finding reflects more general negative attitudes towards reservation that transcend performance while in office (on this, see also Beaman and others (2009)). In line with this, we also observe no correlation between views about the quality of village public services and having a reserved Pradhan.

Columns (3) and (4) consider measures of Pradhan control over BPL card and ownership of a BPL card. With regards to ownership of a BPL card we see that villagers are more dissatisfied with the performance of the Pradhan if he has a BPL card. However, BPL card ownership has no bearing on whether survey respondents believed that village facilities were better than neighboring villages.

Regarding being in the Pradhan's village, a consistent pattern emerges across all three attitudinal measures with the Pradhan's village having a more positive attitude towards the Pradhan and their perception of village facilities. These results support the idea that the agenda-setting effect underlies greater provision in the Pradhan's village.

Taken together, our perception-based results reinforce the findings on policy outcomes. Opportunistic politicians are perceived as worse, a finding which goes against the hypothesis that self-dealing politicians are also better at serving their constituents.

V. CONCLUDING COMMENTS

India has far to go in improving the quality of its infrastructure and public service delivery, especially in rural areas (see, for example, Pritchett and others (2006)). The high incidence of poverty in rural India also places a premium on effective targeting of household transfers. In view of this, the 1993 amendment that strengthened local democracy in India promised to deal with both of these issues. Thus it is important to deepen our understanding of how local governments allocate resources in practice.

In this paper, we have examined how political influence is used to allocate public resources in a sample of south Indian villages. The analysis has investigated resource allocation both between and within villages. The patterns that we have found are robust and transparent—political influence is used exactly as one might expect if politicians enjoy considerable discretionary authority and use it to further their broad self interest. Politicians prove opportunistic in receiving household transfers, and use their agenda-setting power to allocate more resources to their own village.

However, we caution against translating these findings about the importance of self-interest in resource allocation into unremitting cynicism about the Indian experiment with greater powers for local government. Without a counterfactual, we have no way of evaluating the current system relative to alternatives. Moreover, the analysis does suggest that political institutions have the

potential to affect the extent and type of politician opportunism. Greater use of monitoring of politicians' use of BPL cards is one possibility. ¹⁵ But there is also a case for making sure that institutions are designed to rotate the Pradhan's village so that the advantage evens out over time.

More generally, the paper serves as a reminder that, before grander questions about the merits of decentralization can be sorted out, it is necessary to understand the small-scale details of the resource allocation process in local government. Our findings suggest that institutional design influences the form of political incentives, and a promising research avenue is to understand how local institutions can be restructured in small, focused, and specific ways to make incentives work.

APPENDIX: SAMPLING

Besley and others (2004b) provides a full description of our sampling strategy. Below we describe the main elements of the sampling procedure relevant to our analysis.

For each state pair, two districts (one per state) which shared a common state boundary were selected. Within each pair, the three most linguistically similar block pairs (defined in terms of households' mother tongue using 1991 census block level language data) were selected.

We purposely sampled 3 blocks per district, and randomly sampled six GPs per block, except in Kerala, where we sampled three GPs per block. Our sample consists of 201 GPs across 37 blocks. We sampled all villages in GPs with three or fewer villages, otherwise we sampled the Pradhan's village and two other randomly selected villages. We excluded villages with less than 200 persons from our sampling frame and considered hamlets with population over 200 as independent villages.

In every sampled village we conducted a detailed village meeting and a household survey with one elected Panchayat official. If the Pradhan lived in the village, then he/she was interviewed, otherwise a randomly selected village councillor was interviewed. In a random subsample of 3 GPs per block, we conducted household interviews in all sample villages (259 villages). In Kerala we randomly selected 2 GPs in one block and one GP in the other block (the selection of which block to sample how many GPs from was also random), and within sampled GPs we conducted household interviews in all sampled wards. Twenty households were sampled per village, of which four were SC/ST.

- 15. Besley, Pande and Rao (2005) showed that there is better targeting in villages that hold gram sabhas, but as the paper notes holding characteristics (which predict greater local control) may be correlated with holding a Gram Sabha.
- 16. The survey team leader walked the entire village to map it and identify total number of households. This determined what fraction of households in the village were to be surveyed. The start point of the survey was randomly chosen, and after that every Xth household was surveyed such that the entire village was covered (going around the village in a clockwise fashion).

APPENDIX TABLE 1. Public Good Provision in 1961 and 1991

-	1961 public good provision				1991 public good provision					
	Overall provision (1)	Primary school present (2)	Medical facility present (3)	Access road present (4)	Village has electricity (5)	Overall provision (6)	Primary school present (7)	Primary health center/ dispensary present (8)	Metalled access road (9)	Village has power (10)
Pradhan's village	-0.007	0.028	-0.029	-0.015	-0.012	0.029	0.058	-0.064	0.126	-0.002
	(0.012)	(0.039)	(0.026)	(0.012)	(0.025)	(0.036)	(0.076)	(0.070)	(0.080)	(0.034)
Village population	0.072	0.040	0.130	0.030	0.088	0.167	0.221	0.260	0.157	0.032
	(0.020)	(0.065)	(0.052)	(0.019)	(0.044)	(0.106)	(0.200)	(0.057)	(0.098)	(0.183)
Number of wards	0.009	-0.003	0.035	-0.002	0.005	-0.004	-0.034	0.061	0.023	-0.068
in village	(0.005)	(0.015)	(0.011)	(0.002)	(0.013)	(0.029)	(0.049)	(0.024)	(0.021)	(0.052)
GP Headquarter	-0.013	-0.054	-0.012	0.027	-0.014	-0.004	-0.154	0.111	0.009	0.018
•	(0.019)	(0.061)	(0.047)	(0.025)	(0.043)	(0.080)	(0.157)	(0.105)	(0.113)	(0.113)
Power	-0.032	-0.016	-0.106	-0.055	0.049	0.147	0.195	0.160	0.130	0.101
	(0.029)	(0.099)	(0.082)	(0.030)	(0.055)	(0.141)	(0.285)	(0.134)	(0.210)	(0.248)
N	446	446	446	446	446	496	496	496	496	496

Notes: All regressions include block fixed effects and standard errors clustered by GP are in parentheses. The Overall provision variable is the equally weighted average of the four public good outcomes. The covariance matrix is estimated within a SUR framework.

Source: Authors' analysis based on survey data described in the text.

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