

Political Selection and the Quality of Government: Evidence from South India*

Timothy Besley (LSE) Rohini Pande (Yale)
and Vijayendra Rao (World Bank)[†]

Abstract

This paper uses household data from India to examine the economic and social status of village politicians, and how individual and village characteristics affect politician behavior while in office. Education increases the chances of selection to public office and reduces the odds that a politician uses political power opportunistically. In contrast, land ownership and political connections enable selection but do not affect politician opportunism. At the village level, changes in the identity of the politically dominant group alters the group allocation of resources but not politician opportunism. Improved information flows in the village, however, reduce opportunism and improve resource allocation.

*We thank numerous seminar participants, and Joseph Altonji, Penny Goldberg, Asim Khwaja, Dominic Leggett, Barry Weingast and, especially, Chris Udry for comments. We also thank Lupin Rahman, Radu Ban, Sarah Goff, Siddharth Sharma and Jillian Waid for research assistance, and IMRB staff for conducting the survey. We thank World Bank's Research Committee and the South Asia Rural Development Unit for financial support. The opinions in the paper are those of the authors and do not necessarily reflect the points of view of the World Bank or its member countries.

[†]Email addresses: Besley <t.besley@lse.ac.uk>; Pande<rohini.pande@yale.edu>; Rao<vrao@worldbank.org>

“The nature of the workings of government depends ultimately on the men who run it. The men we elect to office and the circumstances we create that affect their work determine the nature of popular government. Let there be emphasis on those we elect to office.” V.O. Key (1956).

“A Hindu’s public is his caste.” B.R. Ambedkar (1937).

1 Introduction

Common sense discussions of political life often place the quality of *politicians* at center stage. For example, Thomas Jefferson believed that a key role of elections was to create a “natural aristocracy” of the talented and virtuous (Jefferson (1813)). Yet the modern political economy literature remains dominated by a paradigm in which good policy is achieved solely by getting incentives right rather than by improving the quality of the political class. While incentives are important, personal qualities of politicians such as honesty, integrity and competence are potentially important, especially in environments where politicians face limited formal sanctions. Equally, in environments where ethnicity is central to the economic organization of the society, a politician’s group identity is likely to matter.

This paper uses household data from Indian villages to examine how individuals’ economic and group characteristics affect political selection, and politician behavior in office. Further, we study how village characteristics which alter the political dominance of different population groups, and the extent of information flows in a village, affects these relationships.

Our analysis makes use of a remarkable political experiment in India. The 73rd amendment of the Indian constitution in 1993 created a new tier of local government which, by the year 2000, had led to the constitution of 227,698 new village governments, Gram Panchayats (GP), staffed by over two million elected representatives. In an effort to infuse fresh blood into the political class, the amendment

mandated that close to half of these elected positions be reserved for traditionally disadvantaged population groups (lower caste groups and women). These village governments enjoy wide-ranging responsibility for beneficiary selection for government welfare programs (Matthew and Buch 2000).

One of the most important GP responsibilities, and one we use to identify politician quality, is the targeting of ‘Below Poverty Line’ cards (BPL). Ownership of a BPL card provides a household with access to subsidized food via the Indian public distribution system. It is also typically an eligibility requirement for other government welfare schemes, e.g. housing schemes. The Indian Planning Commission estimates that there were 45 million BPL households in 2000-01, and that the effective annual income gain of owning a BPL card was Rs. 415 per household. Further, it estimates that the public distribution system only reaches fifty seven percent of BPL households and over twenty percent of BPL card holders are not poor, suggesting substantial mis-targeting by, among others, village politicians (Planning Commission, 2005).¹

We develop a simple model of political selection to understand how the political selection process in a village can affect the allocation of BPL cards. Politicians differ along two dimensions – the group interest they represent and their quality as policy makers. Higher quality politicians better target BPL cards. Voters favor higher quality politicians, but also have group preferences. Bad politicians are relatively more likely to enter when formal returns to politics are low and/or returns to political opportunism are high. They are more likely to be selected if information about politician quality is limited, and voters vote along group lines. At the village level, political reservation of the village chief’s position changes the identity of the polit-

¹The estimated income gain is based on an All India household survey, and worked out as follows: the differential between the average market and PDS price of the grains was multiplied with the average quantity given to a cardholder (done separately for rice and wheat and then added up). Their findings on targeting were based on a comparison of the number of households with BPL cards with independent estimates of the number of poor.

ically dominant group, and thereby the group targeting of BPL cards. If prior to political reservation no group of villagers were politically dominant, then reservation will also reduce coordination costs and thereby the likelihood of bad politicians. We also examine the role of aggregate information flows in the village, and find that they reduce the likelihood of bad politicians and improve the targeting of BPL cards.

We test the empirical relevance of these ideas using survey data from the four South Indian states. The survey, which was designed by the authors and conducted in 2002, surveys both politician and non-politician households.

The empirical analysis has two components. First, we estimate a “selection equation” for politicians and investigate how selection is affected by individual and village characteristics. Political selection in our sample is based on economic advantage and political connections – politicians are more likely to be educated, own land and have family political connections. Village characteristics that prevent the political dominance of the traditional village elite, in particular via political reservation for women and low castes, reduce the extent of such selection. In addition, villages with higher literacy rates select more educated politicians.

Second, we examine politician quality as measured by BPL card status. On average, politicians are opportunistic – relative to a non-politician household, a politician household is more likely to have a BPL card. Individual and village characteristics affect the extent to which this is true. Better educated politicians exhibit less political opportunism. This is not true for land ownership or political connections. Turning to village characteristics, political reservation of the village chief changes the identity of the politically dominant group and the group allocation of BPL cards. However, it does not reduce political opportunism. Finally, politicians in villages with a relatively higher literacy rate, or which hold village meetings, exhibit lower political opportunism.

The remainder of the paper is organized as follows. In the next section, we discuss related work. Section three develops a simple model to identify why political

selection may fail to produce good politicians. Section four introduces the data and develops the empirical tests. Results are in section five, and section six concludes.

2 Related Literature

The Downsian model of politics, which has dominated political economy for over a generation, has no role for political selection. The role of politics is to seek out the policy position of the median voter, and not to examine who implements that policy. Until recently, political selection was also absent from political agency models – the classic analyses being due to Barro (1973) and Ferejohn (1986). They focus exclusively on the problem of moral hazard in politics and the role of elections in restraining politicians.² The problem of incentives embodied in constitution design is also the main theme in the Public Choice literature pioneered by Buchanan.³

More recent work has emphasized the importance of politician characteristics in explaining political behavior. This puts greater weight on the political selection mechanism. The citizen-candidate approach of Besley and Coate (1997) and Osborne and Slivinski (1996) characterizes political competition as a three-stage game of entry, voting and policy making. The model explains endogenously who enters, and who succeeds, in politics. This approach can be used either to study selection

²Recent political agency models study the implications of good and bad politicians for policy outcomes where these types are unobserved. For example, Coate and Morris (1995) draw out implications for the quality of public decisions and Maskin and Tirole (2004) contrast appointing versus electing judges in this framework. Besley (2004) uses this framework to study equilibrium quality of the pool of politicians as a function of the rewards to politicians.

³The following quote from Buchanan captures this idea clearly:

“To improve politics, it is necessary to improve or reform rules, the framework within which the game of politics is played. There is no suggestion that improvement lies in the selection of morally superior agents who will use their powers in some ‘public interest’ ” (Buchanan (1989, page 18)).

on policy preferences (or “identity ”) or selection on valence characteristics such as talent or virtue.

The citizen-candidate approach has been applied to study the effect of political reservation by Pande (2003) and Chattopadhyay and Duflo (2004). Both argue that reservation matters by changing the identities of those elected to office. Lee, Moretti and Butler (2004) argue that this framework explains the U.S. data. The focus in all these cases is on how politics changes spatial policy preferences.

The quality dimension in political selection has been studied in this framework by Caselli and Morelli (2002), Poutvarra and Takalo (2003) and Besley and Coate (1997). Caselli and Morelli (2002) argue that the key issue is to understand factors which affect the supply of bad politicians, such as the rents that they can earn while in office. Imperfect information may also affect the incidence of bad politicians by making it difficult to spot candidate quality. Poutvarra and Takalo (2003) develop a model in which the value of holding office impinges on candidate quality via its effect on election campaigns. Besley and Coate (1997) consider the implications of coordination problems among voters. Gehlbach and Sonin (2004) apply a citizen candidate framework to ask when economic elites (such as businessmen) will run for political office. Running for office is in this world an alternative to lobbying for influence. They argue that business candidates lead to greater misuse of public office, and suggest that such use of office is more likely in developing countries.

Empirical work on the quality of government using cross-country data, such as La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999), is typically unable to decompose the quality of government into problems of selection or incentives. However, recent work by Jones and Olken (2005) uses death of national leaders in office as a source of exogenous variation to show that unexpected changes in national leadership affect economic growth. This effect is strongest in autocratic polities, suggesting that personal qualities of leaders matter. Moreover, the weaker effect in democracies suggests that political selection may have some virtuous properties

when conducted in the more open entry processes of a democracy.

Our paper also contributes to a growing empirical literature on decentralized government which finds that decentralization affects resource allocation in low income countries. Faguet (2004) finds that decentralization improved targeting in Bolivia. Bardhan and Mookherjee (2003) examine the role of elected village councils in affecting land reform in the Indian state of West Bengal. Chattopadhyay and Duflo (2004) show political reservation for women affected public good allocation in two Indian states. Finally, Foster and Rosenzweig (2001) show that decentralization interacted with land ownership patterns across Indian villages to affect public good outcomes. None of these papers, however, focus on how politicians' characteristics affect the workings of decentralized governments. But an important difference between politics at the local and national level could well be in terms of the kind of people who hold public office.

3 The Model

We use a simple citizen-candidate model of politics to identify possible reasons why low quality politicians can be elected to office. This will be useful in motivating the empirical analysis below.

3.1 The Environment

Consider a village populated by N individuals, each eligible to be elected as a politician. Politicians enjoy policy authority over the allocation of public resources, here BPL cards. For simplicity, we focus on election of a single politician.

Each citizen belongs to a group j . There are M such groups with a fraction π_j of citizens in group j . These groups can be thought of as representing policy interests of different groups, such as gender, caste or wealth. If elected, an individual's group identity will be important if she cannot commit to policy outcomes before

the election. Conflict of interest in policy priorities between groups creates spatial political competition to holding office. Each group member prefers a politician from her own group.

In addition to her group identity, a politician (once elected) can be good or bad. Relative to a bad politician, a good politician better targets BPL cards towards the deserving. We do not need to be specific about the exact interpretation of what makes for a good politician – honesty or competence. We assume politician quality is a valence issue, i.e. one on which all citizens (regardless of their group identity) have the same ranking. We denote this characteristic by $\tau \in \{g, b\}$ where g stands for ‘good’ and b for ‘bad’.

We do not model the policy process explicitly. Hence, preferences are in reduced form – preferences over *politicians* rather than policy. Let k denote a politician’s group identity. A type $\{k, \tau\}$ politician gives citizen i from group j a payoff of:

$$\lambda^j(k) - C(\tau, I, k)$$

Thus, preferences are separable with $\lambda^j(k)$ a group identity component and $C(\tau, I, k)$ a quality component. Bad politicians are costly as $C(g, I, k) = 0 < C(b, I, k) \forall k$. The variable I indexes the extent to which village characteristics prevent dishonest politicians from imposing a cost on the other citizens. “Good” characteristics reduce $C(b, I, k)$. We will return to this below.

Politicians are citizens, with similar preferences. The difference is that politicians may enjoy a private “benefit” from holding office. Thus a type (j, τ) politician receives utility

$$\lambda^j(j) + B(\tau, I)$$

from holding office. The term $B(\tau, I)$, which is also affected by characteristics I , is a group-independent benefit from holding public office. It would, for example, depend on politician wages and the returns to opportunism when in office. We concentrate on the case where $B(b, I) \geq B(g, I)$, which implies that bad politicians

have a higher demand for public office than good ones.⁴

3.2 The Political Process

We model the electoral process as a two-stage citizen-candidate game. At stage one candidates decide whether to enter, and at stage two voters cast their votes. We consider non-cooperative entry and voting decisions, and analyze the two stages of the political process in reverse order.

Voting The group characteristic k is observed by voters before they cast their vote. However, we allow for imperfect information with respect to candidate quality $-\tau$. For simplicity, assume that τ is revealed to *all* voters during the election campaign with probability $q (\in (0, 1))$ (Hence, voters are always symmetrically informed). Voting decisions form a Nash equilibrium from among the candidates who enter. Following Besley and Coate (1997), we refine the voting equilibrium by eliminating weakly dominated strategies. This implies that voting is sincere in two-candidate elections, but puts relatively little structure on multi-candidate voting. We assume that indifferent voters abstain and that in the event of a tie, the winning candidate is picked at random from among those who have the most votes.

Entry Each citizen faces a group-specific cost of running for office δ_j . Let $v^j(0)$ be the utility of a citizen of type j when nobody runs for public office. We assume everyone prefers to avoid a situation in which nobody runs for office, i.e. $v^j(0) < \lambda^j(k) \forall (j, k) = 1, \dots, M..$ Each citizen's pure strategy, denoted by $\sigma_i \in \{0, 1\}$, is whether to enter as a candidate. A collection of such decisions (one for each citizen) must form a Nash equilibrium in pure or mixed strategies.

⁴This inequality may be reversed in societies that have a strong ethic of public service so that good politicians earn relatively higher rents such that $B(g, I)$ is large.

3.3 Political Equilibrium

A *political equilibrium* is an equilibrium in the entry and voting stages of the game. Rather than providing an exhaustive description of equilibria, we use the model to examine various reasons why equilibria can result in bad politicians being elected.

We begin by studying an important case – when there is a *politically dominant group*. This occurs if a citizen from some group can defeat a citizen from *any* other group in a pairwise comparison. This includes the case where one group comprises more than half the population, but it can happen more generally if preferences are appropriately ordered.⁵ In our data, political reservation, by reserving some seats for citizens from particular groups, creates a politically dominant group. Let the dominant group be denoted by d , and assume at least one candidate from the dominant group is willing to run rather than having nobody in office, i.e.:

$$\lambda^d(d) - v^d(0) + B(\tau, I) > \delta_d \text{ for } \tau \in \{g, b\}.$$

The existence of a dominant group relaxes competition in the spatial dimension.⁶ This allows the selection process to focus on *within-group* competition between good and bad candidates. From a social point of view, a single good candidate from the dominant group standing for office is preferable.⁷ Thus, the main focus is on whether bad candidates enter, and have any chance of being elected.

We start with the entry process. As a first pass, consider the incentive for a bad candidate to run given that there are only good candidates in the race. Since $q < 1$, voters will not detect that he is bad some of the time. Thus, he faces a positive probability of being elected and capturing $B(b, I)$. Whether he does so depends on the probability of capturing $B(b, I)$ relative to the entry cost. Specifically:

⁵This is possible if there is a group k such that a “good” candidate drawn from group k is a Condorcet winner among the set of all types.

⁶However, for this to be true, it has to be the case that even a bad candidate from the dominant group will win against a candidate from any other group.

⁷The only reason for multiple good candidates to run is if $B(g, I)$ is high relative to δ_d .

Proposition 1 *With a politically dominant group d , if $B(b, I)$ is high enough, there is no pure strategy equilibrium in which only good candidates of type d enter.*

The intuition is straightforward – if bad candidates earn sufficiently high rents, then at the point that no more good candidates wish to enter, it is worthwhile for a bad candidate to enter if there is some chance that she will be elected. Thus, to sustain equilibria with only good candidates the rents must be sufficiently low for bad candidates. This is true if institutions restrain consumption or rents by bad candidates sufficiently. Further, the threshold ratio of rents for bad and good candidates is increasing in the information about candidates. Thus, better information makes it more likely that only good candidates enter.

We next ask whether an equilibrium with *only* bad candidates is possible. Suppose that a single bad candidate is running for office. Then, if a good candidate enters, he will win as long as he is identified as good, i.e. with probability q . Thus for only bad candidates to run, it must be that no good candidate wishes to enter. Here, the source of political dominance matters. For reserved jurisdictions we need only check that a good candidate from the reserved group would not enter. However, without reservation, we also need to consider entry by candidates who are not from the politically dominant group. We consider each case in turn.

Proposition 2 *Suppose the political position is reserved for group d . Then a pure strategy Nash equilibrium with only bad candidates of type d exists if entry costs are sufficiently large so that:*

$$\delta_d > \left(\frac{1+q}{2} \right) [B(g, I) + C(b, I, d)].$$

The required condition reflects the two motives for a good candidate to hold office – the personal benefit to running $[B(g, I)]$ and the gain from not having a bad candidate in office $[C(b, I, d)]$. If, relative to entry costs, these are sufficiently

weak (reflecting the fact that winning is only probabilistic), then good candidates will not enter.⁸

This kind of equilibrium is most likely when information is poor (q close to zero) and when $B(g, I) + C(b, I, d)$ is low relative to entry costs. Thus, high wages and good information (q close to one) improve the quality of politicians by destroying the equilibrium in which only bad candidates stand.

Extending this to politically dominant groups in general requires an additional condition:

Proposition 3 *Suppose that there is a politically dominant group d and*

$$\lambda^k(k) - \lambda^k(d) > C(b, I, k) \forall k \neq d.$$

Then a pure strategy Nash equilibrium exists with only bad candidates of type d if:

$$\delta_d > \left(\frac{1+q}{2}\right) [B(g, I) + C(b, I, d)]$$

The extra condition says that citizens prefer to vote on the basis of their group identity rather than candidate quality.⁹ If group attachment is weak, then it is not possible to construct an equilibrium where all candidates are bad, as voters will switch to good candidates even if they are not from their group.

Propositions 2 and 3 both rest on entry costs in politics being non-negligible relative to private benefits. More generally, they suggest two important issues in affecting candidate quality: (i) the relative returns to holding office among good and bad candidates and (ii) the probability of detecting bad candidates in electoral competition. These are the main forces at work with a politically dominant group.

⁸The proposition illustrates a somewhat extreme case – more generally there can be pure or mixed strategy equilibrium comprising good and bad candidates.

⁹It is feasible to work with weaker, but less straightforward to state, conditions. We require that when contrasting a type $k (\neq d)$ candidate with a type d candidate the set of types for which candidate quality is salient is a population minority.

If political reservation simply changes the type of political dominance, then the reservation status of a village need not affect the probability of selecting a bad politician. However, if politicians have group preferences that affect the policies they implement, then the group allocation of resources should change.

In the absence of political dominance, it is hard to say much concretely about the likelihood of bad politicians. However, one further important effect may arise in such cases. This is the possibility of a coordination failure among voters as illustrated by Besley and Coate (1997). They construct an equilibrium in which a two candidate equilibrium between sufficiently polarized candidates can be sustained by voters' beliefs that insufficiently many *other* voters will support a high quality candidate if he or she enters.¹⁰ This kind of example gives a further reason to believe that polarization can result in low quality candidates holding office, as voter coordination is not an issue when polarization is low.

We have assumed that bad politicians have no extra electoral power to influence elections. The likelihood of observing bad politicians would be strengthened if bad candidates can directly influence voting outcomes and prevent citizens voting for good candidates through bribery, intimidation or manipulation of information flows. This can be incorporated in our model as implying lower (net) benefits for good candidates from holding office. Although we do not have evidence of electoral intimidation, we find that candidates' economic and political power affect their likelihood of selection but not their performance. This is suggestive of extra electoral power or barriers to entry for the politically and economically disadvantaged.

Our analysis ignores the role of parties. In reality, parties may also influence outcomes. The coordination failure result of Besley and Coate (1997) cannot arise if parties coordinate political entry among groups 1 and 2. However, in situations where bad candidates can also corrupt parties, then we would not expect parties to resolve the issues raised above.

¹⁰This can be formalized in the framework described here in the case of two groups.

3.4 Empirical Implications

Our model of the political process identifies channels through which village characteristics that alter political dominance, politician rents ex post, and information flows in the village, should affect politician quality. Here, we briefly outline how we will test the empirical relevance of these channels.

The main vehicle for testing the model is through the allocation of BPL cards, one of the main ways of targeting transfers in our villages. While this is only one of the many policies that are dealt with by village politicians, BPL card allocation is a possible source of political rents. Moreover, having well-targeted transfer programs is likely to be of interest to a wide group of citizens within a village.

If we suppose that good politicians make a bona fide effort to reach the poorest groups, then the cost of a bad politician $C(b, I, k)$ is (partly) that an eligible individual from group k does not receive a BPL card. The private benefits of holding public office $B(b, I)$ could also be partly due to politicians targeting BPL cards to themselves when they are not eligible for one.

Our model predicts that political institutions and village characteristics which improve targeting and diminish the power of the politician (or make him more accountable) affect the extent of BPL card mis-targeting. If institutions of restraint through monitoring were perfect, then we would not expect the politician's type to affect the targeting rule.

In our empirical analysis we examine how individual, and village, characteristics that alter political dominance and information flows affect who is selected as a politician, and the selection of BPL card holders. If, as predicted by the model, differences in politician performance are systematically linked to politician quality, as measured by characteristics such as education, and group identity, then institutions which alter the extent of selection on these characteristics should have a predictable impact on policy outcomes. We look for such evidence.

4 Data and Empirical Analysis

We begin by describing the institutional context for our analysis. We then describe the survey data and our empirical specification.

4.1 Institutional Context

The 73rd constitutional amendment of India, passed in 1993, created a three-tier elected local government in every state. We focus on the lowest tier – a popularly elected village council called the Gram Panchayat (GP). GPs are demarcated on a state-specific population basis, and may consist of multiple villages. A GP is divided into wards, with elections held at the ward-level. The GP council consists of elected ward members, and is headed by an elected Pradhan.¹¹

The 73rd constitutional amendment mandated political reservation of a certain fraction of elected GP positions in favor of two groups – scheduled castes and tribes (hereafter, SC/ST) and women. Only individuals belonging to the group benefitting from reservation can stand for election in a reserved position. The constitutional amendment required that SC/ST reservation in a state be proportional to the group’s population share, while women’s reservation equal one-third of all positions. No position can be reserved for the same group for two consecutive elections.

A GP has responsibilities of civic administration with limited independent taxation powers. Here, we focus on the allocation of BPL cards by GP politicians. Since 1997 the Indian government has used a targeted public food distribution system which provides BPL card holders subsidized food while charging a near market

¹¹A state’s Panchayat Act mandates the population or geographic criteria for GP demarcation. This is the (revenue) village in Andhra Pradesh and Kerala, and a revenue village with 500 or more persons in Tamil Nadu. In Karnataka it is a group of villages with between 5,000 and 7,000 persons. The population per ward varies between 300 and 800 for these states. There is also variation in mode of Pradhan election. In Andhra Pradesh and Tamil Nadu the Pradhan is directly elected, while Karnataka and Kerala she is nominated from the pool of elected ward members.

price for the others. In 2000-01 the annual income gain per household from having a BPL card for our sample states was roughly 5% of an agricultural labor household's annual expenditure (using 1999 NSS figures).¹² In addition to subsidized food, most GP administered welfare schemes, e.g. employment and housing schemes, restrict eligibility to BPL households.

The central government uses the Planning Commission's poverty estimates (which are based on the National Sample Survey) to determine the number of BPL households per state, and accordingly releases foodgrain. The state government allocates district-wise "quota" of BPL cards. Similarly, within a district, a "quota" of BPL households is determined at the GP level with the GP bearing much of the responsibility for allocating these BPL cards.

States are required to conduct a household survey to identify eligible households. GP politicians bear substantial responsibility for conducting this survey. They choose the village surveyors, and tabulate the results bearing in mind the quota allocated to the GP. The result is a preliminary 'BPL' list of recipients. The list is supposed to be finalized at a village meeting comprising all citizens registered on the GP's electoral roles (called a Gram Sabha). This Gram Sabha meeting also arranges household names in the order of priority. The same procedure is supposed to be used when choosing households from among BPL households for other welfare schemes.

In reality GP officials enjoy substantial discretion in determining the final BPL list. In our data, for example, only 76% of villages had held a Gram Sabha in the past year and only 20% of households report ever having attended a Gram Sabha. Moreover, beneficiary selection was reported as discussed in only 22% of Gram Sabha

¹²Under the public food distribution system 20 kg of food grains per month is provided at 50% economic cost to BPL households. 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 describe how this income gain was calculated in footnote 1. (Planning Commission, 2005)

meetings (See Besley, Pande and Rao (2005)). Further, of the 540 politicians we surveyed, only 9% stated that the Gram Sabha decided final inclusions or exclusions from the BPL list; in contrast, 87% believed that this power lay with a Panchayat official.

4.2 Data

Our analysis uses household survey and village meeting data which we collected between September and November 2002. Our sample covered 259 villages in the four southern states of India – Andhra Pradesh, Karnataka, Kerala and Tamil Nadu.¹³

Our sample includes nine boundary districts in these states. Indian districts are divided into blocks. In each district we sampled 3 blocks, and six randomly sampled GPs within each block. In GPs with three or fewer villages, we sampled all villages; otherwise, we sampled the Pradhan’s village and two randomly selected villages.¹⁴ In each sample village we conducted twenty-one household surveys. Household selection was random, and we alternated between male and female respondents. In every village, we required that four of the sampled households be SC/ST households and one be an elected Panchayat official, preferably the Pradhan.¹⁵ Our final household sample size is 5180 non-politician and 265 politician households (100 politicians are from reserved jurisdictions).

Table 1 provides descriptive statistics. The average respondent has slightly over 4 years of education. Politicians are significantly more educated. Average land holdings are 2.4 acres; however, when we restrict the sample to politicians this figure rises to 5.7 acres. Roughly sixty percent of our respondents are either SC/ST or female, and therefore eligible for reservation. In terms of political experience, seven

¹³At the time of our survey at least one year had lapsed since the last GP election in every state.

¹⁴In Kerala to account for the higher GP population we sampled 3 GPs per block and 6 wards per GP – the Pradhan’s ward and five randomly selected wards.

¹⁵We always interviewed the Pradhan, and in non-Pradhan villages we interviewed a randomly selected ward member.

percent of our respondents have/had a family member with a political position. Finally, twenty-one percent of our households possess a BPL card.

Voter turnout in GP elections is high, with 85 percent of our respondents reporting having voted in the last GP election. Eight percent of our respondents stated that candidate group identity (defined along religion, caste, gender or regional lines) was the most important reason for their candidate choice in the GP election, while over thirty percent stated that the candidate's quality (in terms of reputation or policy promises) determined their vote. However, less than forty percent of the respondents believed that their Pradhan has either kept his/her election promises or looked after their needs.

Our model suggests that increases in formal returns to politics, improvements in information flows, and reductions in cost of entry should lower the incidence of bad politicians. Political reservation would reduce the incidence of bad politicians if it causes a previously undominated village to become politically dominated. Otherwise, its main effect should be to change the group allocation of resources.

Our choice of village characteristics is aimed at testing these mechanisms. We are unable to examine the formal returns to politics due to a lack of within-state variation. We proxy for information flows in the village by the 1991 village literacy rate, and whether the village had at least one Gram Sabha meeting in the last year. Both variables were positively correlated with household survey measures of individual information. By focussing on literacy rates from before the Panchayat system was introduced, we can avoid the concern of Panchayat activism causing educational change. However, we recognize that our information variables may be correlated with other unobserved village characteristics, and later we discuss the implications of this for our results.

For political reservation, we use data on the reservation status of our surveyed politicians, and on whether the position of the Pradhan is reserved. The Pradhan position is reserved for women and SC/STs in roughly 16% of our GPs each. Within

a block, reservation of the Pradhan position and of wards within a village, is determined by a rotational system and is exogenous to village characteristics.¹⁶ Finally, we define a village as having a dominant caste if the fraction of households belonging to the single largest non SC/ST caste exceeds the median caste dominance in our village sample (this stands at 40%). Unlike political reservation, having a dominant caste need not imply political dominance. However, a large anthropological literature suggests that barriers to entry for minority groups are often higher in such villages, and it is also more likely that the largest caste group is politically dominant (see, for instance, Wade 1988). Low migration rates across Indian villages imply that village caste structure is relatively stable.

4.3 Empirical Specification

In our household data we observe who is ultimately elected, but not who stands. Suppose that being elected depends upon some underlying candidate quality, e_{ij} , for politician i in village j . Further, suppose that candidate quality depends on a vector of candidate characteristics x_{ij} so that:

$$e_{ij} = \beta x_{ij} + \psi_{ij} \tag{1}$$

where ψ_{ij} is a component of candidate electability that may be observable to voters, but not to us. The parameters β can be thought of as true “production function” parameters for candidate quality.

We suppose that there is some unobserved threshold e_j^* in village j for i to be elected to office. This subsumes the quality of challengers for public office, and the distribution of different voting groups in village j . Then, we observe candidate i in village j if:

$$e_{ij} > e_j^*$$

¹⁶No political position can be reserved for the same group for two consecutive elections. In Besley, Pande, Rao and Rahman (2004) we show that public good provision in 1991 was statistically indistinguishable in GPs with and without a reserved Pradhan.

or

$$\beta x_{ij} + \psi_{ij} + \eta_{ij} > e_j^*$$

where η_{ij} is a shock which affects how the candidate is perceived by voters in village j . Treating e_j^* as an unobserved village effect, and assuming a linear probability model, this yields:

$$p_{ij} = \alpha_j + \rho x_{ij} + \varepsilon_{ij}. \quad (2)$$

where p_{ij} is a dummy variable for whether the respondent is a politician and α_j is a village fixed effect. The parameters ρ do not only reflect the production function if the variance of the shock η_{ij} depends on x_{ij} . The fact that the variance of ε_{ij} depends on village characteristics, I_j , may also justify interacting ρ with such characteristics in equation (2).

Estimating (2) allows us to examine political selection on observables, and how this varies with village characteristics. We consider village literacy rate in 1991, whether the Pradhan's position is reserved and whether the village has a dominant caste (the last may reflect barriers to entry rather than dominance *per se*).

To test whether politician quality and group identity matters for policy making, we examine household access to BPL cards. Let b_{ij} be the probability that household i in village j has a BPL card. We model this empirically as:

$$b_{ij} = \alpha_j + \lambda p_{ij} + \tau p_{ij} e_{ij} + \gamma x_{ij} + \eta_{ij} \quad (3)$$

where, as above, e_{ij} is politician "quality". If politicians are opportunistic we expect $\lambda > 0$, but if quality matters, then we expect $\tau < 0$.

The above selection model tells that we expect

$$e_{ij} = \theta x_{ij} + \phi I_j + \nu_{ij} \quad (4)$$

where θ is the "reduced form" effect of candidate characteristics on quality working both through the production function (1) and the probability that a candidate with

characteristics x_{ij} is selected. Substituting (??) into (3), we get the reduced form model:

$$b_{ij} = \alpha_j + \lambda p_{ij} + \chi_1 (x_{ij} * p_{ij}) + \chi_2 (p_{ij} * I_j) + \gamma x_{ij} + \mu_{ij}. \quad (5)$$

The coefficients $\chi_1 = \tau\theta$ and $\chi_2 = \tau\phi$. Hence, observing that characteristic x_{ij} enters negatively is indicative of $\tau < 0$ and $\theta > 0$, i.e. this is associated with being a good politician. The latter can also be related to (2) since we would expect that a good politician characteristic x_{ij} would have $\rho > 0$, if that characteristic is valued by voters. Similarly, I_j entering negatively is associated with being a good institution.

5 Results

The results are presented in three parts. We first examine the determinants of politician selection, and then those of beneficiary selection. Finally, we examine how voters perceive politicians in our sample.

5.1 Selection of Politicians

We start by asking whether individual characteristics affect the likelihood that a respondent is an elected politician. The results from estimating (2) are in Table 2. In column (1) the dependent variable is whether the respondent is an elected GP politician (i.e. a Pradhan or ward member). Eligibility for reservation is uncorrelated with being a politician. However, years of education and land ownership are positively correlated with being a politician. An additional year of education, and owning an additional acre of land, increase the likelihood of being a politician by roughly 0.7% each. A respondent belonging to a family with a history of political participation is 12% more likely to be a politician.¹⁷

¹⁷We have 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.

In columns (2) and (3) we restrict the sample to the groups eligible for political reservation, women and SC/ST respectively. For both groups we observe a positive selection on education, but not land ownership. Family political history and selection are positively correlated only for women. For SC/ST households the absence of selection on land and political history reflects their relative landlessness, and recent entry into politics on the back of reservation.¹⁸ In columns (4)-(6) 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. Overall, the data points to the political selection process favoring economically advantaged and politically connected individuals.

Table 3 explores political selection in village j as a function of village characteristics I_j . We estimate:

$$p_{ij} = \alpha_j + \beta x_{ij} + \gamma (x_{ij} * I_j) + \varepsilon_{ij}. \quad (6)$$

where x_{ij} are the individual characteristics considered in Table 2. For expositional ease we focus on the sample of all politicians.

In column (1) we observe the presence of a dominant caste increases elitism among politicians – caste dominance is correlated with elected politicians owning relatively more land and increased selection on family political history. Columns (2) and (3) examine how Pradhan reservation affects selection. We distinguish between reservation open to all women, and reservation for SC/STs. Unsurprisingly, eligibility for reservation is a near perfect predictor of selection on gender and caste. Relative to other politicians, reserved politicians are less educated, own less land and are less likely to have a family political history of participation. This reflects the historical legacy of the economic, social and political disadvantage faced by these groups. Column (4) considers the literacy rate as a proxy for information flows in

¹⁸In our sample mean landholding for SC/ST households is 1.14 acres and for non SC/ST households 2.79 acres.

a village. Relatively more educated respondents are selected as politicians in villages with higher literacy rates. Further, respondents belonging to groups eligible for reservation are more likely to enter politics in such villages.

Overall, the results suggest that village characteristics that reduce the dominance of major castes increase the presence of economically disadvantaged groups in politics, while those that improve information flows (as proxied for by literacy) enhance the selection of more educated politicians.

5.2 Selection of Beneficiaries

We now examine how political selection affects the targeting of BPL cards. In Table 4, we report results from estimating regressions of the form (5) where $p_{ij} = 1$ if the household has a BPL card.

In column (1) we observe that, as intended by the program, BPL cards *are* targeted towards economically disadvantaged households. An SC/ST household is 16% more likely to get a BPL card while a household with a more educated head and/or more land holdings is less likely to have a BPL card. A household's political history does not affect its propensity to have a BPL card. However, a politician household is 7% more likely to have a BPL card (column (2)). This is all the more striking in view of the results in Table 2 which demonstrated that politician households are more likely to be landed and educated.

In column (3) we examine whether reserved politicians behave differently, and find mixed evidence. The point estimate suggests no significant differences between reserved and unreserved politicians. However, we cannot reject the hypothesis that reserved politicians exhibit no political opportunism.¹⁹ Column (4) examines the

¹⁹As our regressions include village fixed effects we identify the effect of reservation off villages where reserved and unreserved politicians were interviewed. This is a relatively small sample, hence the noisiness of our estimates. If we run separate regressions for the sample of reserved and unreserved politicians, the BPL effect is limited to the unreserved politician sample.

role of politician characteristics. Politician opportunism is invariant to most politician characteristics, save education. Political opportunism is lower among more educated politicians. An extra year of education for a politician makes him or her 1.4% less likely to have a BPL card.²⁰

Table 5 examines the role of village characteristics in constraining political opportunism. These regressions include controls for household demographics. For expositional ease we replace the controls for landownership and education, by a disadvantage dummy which equals one if the household head is illiterate or the household is landless. In column (1) we observe that politicians are more likely to have a BPL card in a village with a dominant caste. Strikingly, this effect is limited to unreserved politicians. Having a dominant caste, however, does not alter the targeting of BPL cards among villagers.

Columns (2) and (3) in Table 5 consider Pradhan reservation (these regressions include GP fixed effects as reservation varies by GP). The likelihood that a politician has a BPL card is higher with a female Pradhan. This could reflect personal aggrandizement on part of the Pradhan or a more limited ability to monitor other politicians. Once again the targeting of BPL allocation among villagers is unaffected. In contrast, column (3) shows that SC/ST reservation makes it more likely that SC/ST households and reserved politicians have a BPL card. This points to SC/ST Pradhans having preferences that favor members of their own group.

Columns (4) and (5) of Table 5 consider the impact on targeting of village literacy and whether the village had a Gram Sabha meeting in the last year. Gram Sabha meetings are intended as a forum at which villagers can discuss their problems with the GP officials, and also monitor GP activities. Higher village literacy and holding a Gram Sabha meeting significantly reduces the likelihood that a politician has a

²⁰We have also examined party affiliation. Sharing the affiliation of the main party in the state does not matter. In contrast, a non-politician household with the same party affiliation as the Pradhan is 8% more likely to get a BPL card. This effect is absent among politicians.

BPL card and improves targeting.²¹

Taken together these results illustrate the importance of selection and incentives in affecting public resource allocation. Selection is manifested in more educated politicians being less opportunistic. Incentives are shaped by village meetings in which villagers ratify beneficiary lists chosen by politicians.

One key idea of the theory is that bad politicians impose a cost on other citizens. Table 6 looks at one aspect of this by seeing whether politicians with BPL cards target other groups differently. We do this by interacting the household characteristics which in Table 4 made it more likely that a household gets a BPL card with whether a politician has a BPL card and the politician’s years of education.

In column (1) we find that politicians with BPL cards, who tend to come from unreserved seats (and hence, are not SC/ST) target fewer resources to SC/ST households. The flip side of this evidence is presented in column (2) of Table 6 which shows that more educated politicians target more BPL cards towards SC/ST households. This suggests that the main cost of having a bad politician is borne by the historically disadvantaged population group of SC/ST citizens. Given this, it is worth noting that the main effect of political reservation for SC/ST seems to be to shift resource allocation in their favor.

5.3 Robustness and Validation

This section looks at whether political opportunism is apparent for other public transfer programs – government financed house improvements and participation in public works programs. We also examine whether opportunistic politicians are perceived as “bad” politicians. Finally, we examine whether citizens’ stated basis for voting correlates with politician opportunism.

²¹In Besley, Pande and Rao (2005) we show that villages with higher literacy are more likely to hold Gram Sabha meetings. Importantly, economically disadvantaged households are relatively more likely to attend these meetings.

Table 7 presents results on political opportunism for other public transfer programs. Columns (1) and (2) consider whether any household member worked on a public works project during the last year. A politician household is four percentage points more likely to have someone who does so. Once again, this effect is stronger among unreserved politicians. Family political history is also a positive predictor of participation in public works. Other politician characteristics do not, however, explain such participation.

Columns (3) and (4) in Table 7 consider whether since the last election, the household had any home improvements under a government scheme. These include house construction and repair, having a toilet constructed or drinking water or electricity provided. Roughly seven percent of our households had such an improvement. Once again, while economically disadvantaged households are targeted by this scheme, politicians behave opportunistically. However, in this case, political opportunism is limited to reserved politicians; see column (4). This is explained by the fact that many home improvement schemes restrict eligibility to SC/ST households. It also reflects the fact that unreserved politicians come from richer households which have such home improvements (such as toilets) already. These two observations also underlie the fact that politicians from politically connected families are less likely to enjoy these home improvements.

We now examine how voters *perceive* the performance of opportunistic Pradhans. If voters dislike opportunism, then politicians with BPL cards should be less popular. This issue is explored in Table 8 where we use data on villagers' perceptions of the quality of their Pradhan. The survey asked whether households thought that their Pradhan "looked after village needs" and whether they "kept their promises".

Columns (1) and (3) demonstrate that Pradhans who have a BPL card are perceived as worse on both indicators of Pradhan quality (the regressions include block fixed effects since variation in Pradhan data is at GP-level). This is consistent with our interpretation of politician participation in government transfer programs

as being a form of rent-seeking which is disapproved of by citizens. Columns (2) and (4) show that educated Pradhans are better regarded by villagers in their GP – again consistent with our earlier result on education. That said, female and SC/ST Pradhans are regarded as worse even though we did not find any evidence of greater opportunism among these groups of politicians. This may, therefore, be due to the fact that these groups have specific policy agendas. It could also be a reflection of respondents at large being biased against traditionally disadvantaged groups.²²

The second issue is motivated by an observation from the theory – that voting along group lines diminishes the extent to which politician quality is reflected in voting decisions. Hence, bad politicians are more likely when villagers vote along lines of group identity. To test this idea, we examine the relationship between citizens’ self-reported basis for voting and whether the Pradhan holds a BPL card and is educated. We restrict attention to Pradhan elections, as our survey asked only about voting in GP Pradhan elections.

We construct two measures of citizens’ voting preferences. First, we use respondents’ report of whether they voted for a candidate based on their caste, gender, religious or regional identity to identify the fraction of citizens who voted on the basis of group identity. Second, we use responses to a question asking whether respondents used the candidate’s qualifications/previous work in the village as their basis for voting. We conjecture that more group based voting measured this way should lead to lower quality Pradhans, and voting based on candidate quality as leading to higher quality Pradhans.

The results are in Table 9. We run our regressions at the GP level (that is, we construct and use GP level averages), and include district fixed effects. Greater group based voting is correlated with Pradhans who take BPL cards and have fewer years of education. There is, however, little evidence that reported voting on

²²Duflo and Topolova (2004) also find that, despite no observable differences in performance, women Pradhans are perceived as being of worse quality.

candidate quality makes a difference. While the evidence is only suggestive, it is consistent with the interpretation of the results in the previous two sections.

6 Concluding Comments

This paper has three key findings. First, the political class is selected on the basis of political connections and economic advantage. Second, in targeting public resources politicians exhibit group preferences and are opportunistic (in that they benefit disproportionately from public transfer programs). Third, individual and village characteristics mediate the extent of opportunism.

Among individual characteristics, we find that the education level of politicians has a consistently positive effect on selection and a negative effect on opportunism. This suggests that the more educated make better politicians and are recognized as such by voters. However, whether education matters directly or because it is correlated with other characteristics that make an individual fit for public office cannot be discerned from our results. Nonetheless, the results add to a growing appreciation among economists that education may be important because of its role in inculcating civic values (See, for example, Dee (2004) and Milligan et al (2004)). The unique observation about its role in politics given here also offers a fresh perspective on the value of human capital investments in low income countries.

For the most part, our findings for village characteristics are consistent with the theory laid out in section 3 and suggest an important interplay between village characteristics and the process of political selection and the targeting of public resources. Increased literacy at the village level reduces political opportunism while political reservation is correlated with targeting of resources. There is some suggestion of most villages being politically dominated, so that political reservation changes the type of political dominance rather than causing political dominance. We also find evidence suggestive of barriers to entry – while land ownership and

political connections predict selection they do not predict behavior when in office.

The results also cast light on the process of decentralization as it is occurring throughout the developing world. This has attracted a lot of weight in the virtues of local decision making processes in targeting beneficiaries. Our results show that targeting is heterogeneous and depends on those who are selected to run this process. It further emphasizes the need to have adequate models of the political economy of targeting to shed light on the merits of decentralization.

Our finding that educated politicians are better both in terms of both actual and perceived performance suggests, in line with the opening quote from V.O. Key, that it *is* important to focus on factors that select better politicians as a step towards improving the quality of government. Equally, as predicted by the father of the Indian constitution, B.R. Ambedkar, group identity remains a significant predictor of politician behavior in India. Overall, we see the results and analysis in the paper reinforcing the observation that formal institutions of democracy are no guarantee of effective government. It is essential that the preconditions exist for sorting in the right kinds of people – the talented, the virtuous and those who give political voice to the disadvantaged. This paper is a first effort to use household level data to study this issue empirically. But clearly there is much more to be done to gain a deeper understanding of political selection in democratic settings.

References

- [1] Ambedkar, B.R, [1937], “The Annihilation of Caste with a Reply to Mahatma Gandhi.”.
- [2] Bardhan, Pranab and Dilip Mookherjee, [2003], “Political Economy of Land Reforms in West Bengal 1978–98 ,” *mimeo Boston University*.
- [3] Barro, Robert, [1973], “The Control of Politicians: An Economic Model,” *Public Choice*, 14, 19-42.
- [4] Besley, Timothy, [2004], “Paying Politicians: Theory and Evidence”, Joseph Schumpeter Lecture 2004, *Journal of the European Economics Association*
- [5] Besley, Timothy and Stephen Coate, [1997], “An Economic Model of Representative Democracy,” *Quarterly Journal of Economics*, 112(1), 85-114.
- [6] Besley, Timothy, Rohini Pande and Vijayendra Rao, [2005], “Participatory Democracy in Action: Survey Evidence from India,” *Journal of the European Economics Association*, 3(2-3):648-657.
- [7] Buchanan, James M., [1989], “The Public-Choice Perspective,” in *Essays on the Political Economy*, Honolulu: University of Hawaii Press.
- [8] Caselli, Francesco and Massimo Morelli, [2004], “Bad Politicians,” *Journal of Public Economics*, 71(3), 829-53.
- [9] Chattopadhyay, Raghavendra and Esther Duflo, [2004a], “Women as Policy Makers: Evidence from a India-Wide Randomized Policy Experiment,” *Econometrica* , 72(5), 1409-1443.
- [10] Duflo, Esther and Petia Topolova[2004b], “Unappreciated Service: Performance, Perceptions and Women Leaders in India,” *mimeo MIT*.

- [11] Coate, Stephen and Stephen Morris, "On the form of transfers to special interests," *Journal of Political Economy*, 103, 1210-35.
- [12] Dee, Thomas S. [2004], "Are there civic returns to education?," *Journal of Public Economics*, Volume 88 (9-10) 1697-1720.
- [13] Faguet, Jean Paul, [2004], "Does Decentralization Increase Responsiveness to Local Needs? Evidence from Bolivia," *Journal of Public Economics*, 88, 867-894.
- [14] Ferejohn, John, [1986], "Incumbent Performance and Electoral Control," *Public Choice*, 50, 5-25.
- [15] Foster, Andrew and Mark Rosenzweig, [2001], "Democratization, Decentralization and the Distribution of Local Public Goods in a Poor Rural Economy," mimeo, Brown.
- [16] Gehlbach, Scott and Konstantin Sonin, [2004], Businessman Candidates: Special Interest Politics in Weakly Institutionalized Environments, unpublished typescript.
- [17] Jefferson, Thomas, [1813], "The Natural Aristocracy." Letter to John Adams. October 28.
- [18] Jones, Benjamin and Benjamin Olken, [2005], "Do Leaders Matter? National Leadership and Growth since World War II", *Quarterly Journal of Economics*, August.
- [19] Key, V.O., [1956], [1813], *American State Politics: An Introduction*, New York, NY: Alfred A. Knopf.
- [20] La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny, [1999], "The Quality of Government," *Journal of Law, Economics and Organization*, 15(1), 222-79.

- [21] Lee, David S., Enrico Moretti, and Matthew Butler, [2004], "Do Voters Affect or Elect Policies? Evidence from the U.S. House," *Quarterly Journal of Economics*, 119(3), 807-860.
- [22] Maskin, Eric and Jean Tirole, [2004], "The Politician and the Judge", *American Economic Review*,
- [23] Matthew, George and Nirmala Buch, [2000] Status of Panchayati Raj in the States and Union Territories of India, Institute for Social Studies, Delhi.
- [24] Milligan, Kevin, Enrico Moretti and Philip Oreopoulos, [2004], "Does education improve citizenship? Evidence from the United States and the United Kingdom," *Journal of Public Economics*, 88 (9-10), 1667-1695.
- [25] Osborne, Martin J. and Al Slivinski, [1996], "A Model of Political Competition with Citizen Candidates," *Quarterly Journal of Economics*, 111(1), 65-96.
- [26] Padro-i-Miquel, Gerard, [2005], "The Control of Politicians in Divided Societies: The Politics of Fear," *Mimeo, MIT*.
- [27] Planning Commission, [2005], "Performance Evaluation of Targeted Public Distribution System," Programme Evaluation Organisation, Planning Commission, Government of India, New Delhi.
- [28] Poutvaara, Panu and Tuomas Takalo, [2003], "Candidate Quality," unpublished typescript.
- [29] Pande, Rohini, [2003], "Can Mandated Political Representation Provide Disadvantaged Minorities Policy Influence? Theory and Evidence from India," *American Economic Review*; 93(4), 1132-1151.
- [30] Wade, Robert, [1988], "Village Republics: Economic Conditions for Collective Action in Southern India," ICS.

Appendix A: Theory

Proof of Proposition 1: Suppose not. Then the number of good candidates in the race is:

$$m_g = \text{int} \left(\frac{\delta_d}{B(g, I)} \right) \geq 1.$$

This uses the fact that all good candidates win with equal probability in any voting equilibrium. We require that no bad would wish to enter. This requires that:

$$\frac{1-q}{m_g+1} B(b, I) < \delta_d.$$

But clearly this cannot hold for large enough $B(b, I)$ – a contradiction. QED

Proof of Proposition 2: This is a special case of Proposition 3.

Proof of Proposition 3: We first show that a least one bad candidate of type d would wish to enter. This follows from the fact that:

$$\lambda^d(d) - \lambda^d(0) + B(b, I) > \delta_d.$$

We now show that there is a voting equilibrium in which no good candidate would wish to enter. Suppose that there is a single bad candidate in the race. If a good candidate of d chooses to enter and is identified as such, then he will win in any voting equilibrium which eliminates weakly dominated strategies. If he is not identified as good, he will win with probability one half. We now look at the incentives of such a candidate to enter. He will wish to enter if :

$$\lambda^d(d) + \left[q + \frac{1-q}{2} \right] B(g, I) - \frac{1-q}{2} C(b, I, d) - \delta_d > \lambda^d(d) - C(b, I, d).$$

which reduces to the condition in the Proposition. The condition holds a fortiori if there is more than one bad candidate in the race.

Suppose that a candidate who is not of type d enters and is identified as good. Then since:

$$\lambda^k(k) - \lambda^k(d) > C(b, I, k) \forall k \neq d,$$

we can construct a voting equilibrium in which the bad candidate from group d wins in any voting equilibrium which eliminates weakly dominated strategies. (This follows from the definition of political dominance.) Thus, no good candidate will choose to enter. QED.

Table 1: Descriptive Statistics

		Mean	s.d.
Respondent characteristics			
Years of Education	All	4.49	(4.54)
	Politicians	7.58	(4.51)
Land owned (in acres)	All	2.26	(4.77)
	Politicians	5.98	(8.87)
Eligible for reservation (%)	All	60.90	(48.81)
	Politicians	48.70	(50.07)
Family political history (%)	All	6.70	(25.04)
	Politicians	25.30	(43.54)
Beneficiary Status (% households)			
BPL card	All	21.70	(41.20)
	Politicians	24.20	(42.80)
Perceptions and Voting Behavior (% non-politicians)			
Pradhan looks after village needs		38.40	(48.63)
Pradhan keeps election promises		36.10	(48.03)
Vote for group identity		8.72	(28.22)
Vote for candidate quality		36.08	(48.02)
Institutions (% villages)			
Dominant caste		51.93	(50.05)
Pradhan reserved for Female		15.89	(36.63)
Pradhan reserved for SC/ST		16.66	(37.34)
Literacy rate		42.20	(18.35)
Gram Sabha		77.95	(41.53)

Notes:

1. Years of education refer to respondent's years of education. Land owned is amount of land, in acres, owned by respondent's household. A respondent is eligible for reservation if female or SC/ST. A respondent has a family political history if any member of his/her household holds or has held a political position. BPL card refers to whether the household has a BPL card.

2. Vote dummies refer to GP election. Vote for group identity=1 if respondent says she voted for the candidate with the same caste/religion/gender/place of residence. Vote for candidate quality=1 if respondent says she voted for candidate with good policy promises/candidate active in the village/good reputation.

3. A Village has a Dominant caste if over 40 percent of villagers belong to a single caste. Literacy rate is the 1991 census village literacy rate. Gram Sabha is a dummy for whether the village had a Gram Sabha meeting in the last year.

Table 2: Individual Characteristics and Politician Selection

Sample	Politician			Pradhan		
	All	Female	SC/ST	All	Female	SC/ST
	(1)	(2)	(3)	(4)	(5)	(6)
Eligible for reservation	0.008 (0.007)			0.002 (0.010)		
Education	0.008*** (0.001)	0.007*** (0.001)	0.012*** (0.002)	0.006*** (0.001)	0.005** (0.002)	0.007* (0.004)
Land owned	0.007*** (0.002)	0.003 (0.002)	0.002 (0.003)	0.008*** (0.002)	0.002 (0.002)	0.033** (0.014)
Family political history	0.119*** (0.020)	0.135*** (0.032)	0.062 (0.044)	0.095*** (0.029)	0.086** (0.039)	0.057 (0.090)
Fixed effects	Village	Village	GP	Village	Village	GP
R-squared	0.09	0.12	0.12	0.09	0.11	0.23
N	5397	2644	1245	2065	1011	436

Notes:

1. OLS regressions with standard errors, clustered by village, in parentheses. * significant at 10%; ** at 5%; *** at 1%.

2. The dependent variable is an indicator variable=1 if the respondent is a politician.

3. All regressions include control for respondent age and age squared. The Pradhan regressions restrict the sample to the Pradhan and non politician households in the Pradhan's village.

4. Eligible for reservation is an indicator variable which equals one if respondent is female or SC/ST. Land ownership is the land (in acres) owned by the respondent's household. Education refers to respondent's years of education. Family political history is an indicator variable which equals one if any family member of respondent has held/holds a political position.

Table 3: Village Characteristics and Politician Selection

Institution	Dominant Caste	Female Pradhan Reservation	SC/ST Pradhan Reservation	Literacy Rate
	(1)	(2)	(3)	(4)
Eligible for reservation	0.013 (0.009)	-0.013** (0.006)	-0.009 (0.006)	-0.012 (0.016)
Eligible for reservation* Village Characteristic	-0.007 (0.012)	1.032*** (0.006)	1.032*** (0.007)	0.05 (0.034)
Education	0.008*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.005** (0.002)
Education* Village Characteristic	-0.001 (0.002)	-0.006*** (0.001)	-0.003*** (0.001)	0.007* (0.004)
Land owned	0.005** (0.002)	0.006*** (0.002)	0.008*** (0.002)	0.002 (0.004)
Land owned* Village Characteristic	0.005* (0.003)	-0.006*** (0.001)	-0.007*** (0.002)	0.016 (0.011)
Family political history	0.112*** (0.030)	0.083*** (0.019)	0.111*** (0.020)	0.067 (0.051)
Family political history* Village Characteristic	0.013 (0.040)	-0.076*** (0.020)	-0.131*** (0.022)	0.104 (0.108)
Fixed effects	Village	Village	Village	Village
R-squared	0.09	0.25	0.26	0.09
N	5397	5397	5397	5187

Notes:

1. OLS regressions with standard errors, clustered by village, in parentheses. * significant at 10%; ** at 5%; *** at 1%.
2. The dependent variable is an indicator variable=1 if the respondent is a politician.
3. Regressions include respondent age and age-squared as a control variable. Explanatory variables are defined in notes to Tables 1 and 2.

Table 4: Politician Characteristics and BPL Beneficiary Selection

	(1)	(2)	(3)	(4)
SC/ST household	0.164*** (0.019)	0.162*** (0.019)	0.164*** (0.019)	0.166*** (0.019)
Household head's education	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)
Respondent's education	-0.003* (0.001)	-0.003** (0.001)	-0.003** (0.001)	-0.003* (0.002)
Land owned	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.003* (0.001)
Family political history	-0.012 (0.020)	-0.021 (0.020)	-0.02 (0.020)	-0.029 (0.019)
Politician		0.075** (0.033)	0.109*** (0.041)	0.199** (0.080)
Politician*Reserved			-0.087 (0.069)	-0.105 (0.071)
F-test			0.16 [0.685]	1.48 [0.22]
Politician*Education				-0.014** (0.007)
Politician*Land owned				0.001 (0.003)
Politician*Family political history				0.069 (0.083)
Fixed effects	Village	Village	Village	Village
R-squared	0.36	0.36	0.36	0.36
N	5366	5366	5366	5366

Notes:

1. OLS regressions with standard errors, clustered by village, in parentheses. * significant at 10%; ** at 5%; *** at 1%.
2. The dependent variable is an indicator variable which equals one if the respondent's household has a BPL card.
3. All regressions include as household controls: household size, head's age and age squared, fraction elderly and fraction children. Other variables are as defined in Table 2 notes.

Table 5: Village Characteristics and BPL Beneficiary Selection

Institution	Dominant caste	Female Pradhan reservation	SC/ST Pradhan reservation	Literacy rate	Gram Sabha
	(1)	(2)	(3)	(4)	(5)
Politician	-0.01 (0.053)	0.069* (0.039)	0.101** (0.040)	0.399*** (0.098)	0.282*** (0.095)
Politician*	0.185** (0.079)	0.498** (0.219)	-0.377* (0.209)	-0.746*** (0.188)	-0.242** (0.105)
Village Characteristic					
Reserved politician	0.035 (0.093)	-0.028 (0.077)	-0.098 (0.076)	-0.144 (0.176)	-0.343** (0.142)
Reserved politician*	-0.194 (0.135)	-0.547** (0.243)	0.409* (0.232)	0.21 (0.338)	0.359** (0.161)
Village Characteristic					
SC/ST household	0.180*** (0.025)	0.145*** (0.019)	0.119*** (0.026)	-0.044 (0.040)	0.108*** (0.039)
SC/ST household*	-0.021 (0.040)	0 (0.000)	0.112** (0.055)	0.512*** (0.093)	0.072 (0.045)
Village Characteristic					
Economic Disadvantage	0.011 (0.027)	0.092*** (0.015)	0.096*** (0.014)	-0.018 (0.031)	0.060*** (0.019)
Economic Disadvantage*	-0.001 (0.051)	-0.005 (0.020)	-0.065 (0.050)	0.271*** (0.076)	0.045* (0.025)
Village Characteristic					
Family political history	-0.051* (0.028)	-0.037* (0.022)	-0.022 (0.021)	0.022 (0.042)	0.016 (0.035)
Family political history*	0.048 (0.040)	0 (0.046)	-0.092 (0.065)	-0.103 (0.096)	-0.058 (0.042)
Village Characteristic					
Fixed effects	Village	GP	GP	Village	Village
R-squared	0.36	0.3	0.3	0.38	0.36
N	5369	5369	5369	5159	5287

Notes

1. OLS regressions with standard errors, clustered by village, in parentheses. * significant at 10%; ** at 5%; *** at 1%.
2. The dependent variable is an indicator variable which equals one if the respondent's household has a BPL card.
3. Regressions include the household controls defined in notes to Table 4. Economic disadvantage is a dummy which equals one if the household head is illiterate or landless. Other variable definitions are in notes to Tables 1 and 2.

Table 6: Politician Characteristics and BPL Beneficiary Selection

Politician Characteristic	Has BPL card	Years of education
	(1)	(2)
Politician	-0.147*** (0.023)	0.264*** (0.100)
Politician*	1.076*** (0.051)	-0.020** (0.009)
Politician Characteristic		
Reserved politician	-0.095** (0.042)	-0.115 (0.141)
Reserved politician*	0.118 (0.087)	0.002 (0.014)
Politician Characteristic		
SC/ST household	0.169*** (0.019)	0.110*** (0.035)
SC/ST household*	-0.295*** (0.083)	0.008** (0.004)
Politician Characteristic		
Economic Disadvantage	0.090*** (0.013)	0.055** (0.027)
Economic Disadvantage*	-0.064 (0.062)	0.006* (0.003)
Politician Characteristic		
Family political history	-0.044** (0.017)	0.063 (0.043)
Family political history*	0.062 (0.068)	-0.010** (0.004)
Politician Characteristic		
Fixed effects	Village	Village
R-squared	0.42	0.37
N	5369	5328

Notes

1. OLS regressions with standard errors, clustered by village, in parentheses. * significant at 10%; ** at 5%; *** at 1%.

2. The dependent variable is an indicator variable which equals one if the respondent's household has a BPL card.

3. Regressions include the household controls defined in notes to Table 4. Other variable definitions are in notes to Tables 1 and 2.

Table 7: Politicians and Beneficiary Selection: Other public transfers

	Public works		Home improvements	
	(1)	(2)	(3)	(4)
Politician	0.044** (0.022)	0.054 (0.045)	-0.004 (0.014)	-0.028 (0.033)
Politician*Reserved	0.026 (0.042)	0.033 (0.041)	0.065* (0.036)	0.084** (0.035)
F-test	3.65 (0.05)	2.13 (0.144)	3.22 (0.07)	0.58 (0.44)
SC/ST household	0.053*** (0.012)	0.053*** (0.012)	0.057*** (0.013)	0.057*** (0.013)
Household head's education	0 (0.001)	0 (0.001)	-0.002** (0.001)	-0.002** (0.001)
Respondent's education	-0.001 (0.001)	-0.001 (0.001)	0 (0.001)	0 (0.001)
Land owned	0 (0.001)	-0.001 (0.001)	-0.002*** (0.001)	-0.003*** (0.001)
Family political history	0.017 (0.013)	0.021* (0.013)	-0.011 (0.013)	0.002 (0.015)
Politician*Education		-0.004 (0.005)		0.001 (0.004)
Politician*Land owned		0.004 (0.003)		0.005* (0.003)
Politician*Family political history		-0.024 (0.040)		-0.084*** (0.030)
Fixed effects	Village	Village	Village	Village
R-squared	0.13	0.13	0.11	0.11
N	5335	5335	5366	5366

Notes:

1. OLS regressions with standard errors, clustered by village, in parentheses. * significant at 10%; ** at 5%; *** at 1%.
2. The dependent variables are dummies: Public works=1 if a member of the respondent's household worked on a public works project in the last 365 days. Home improvements=1 if respondent's house had a GP financed improvement since last election,
3. All regressions include the household controls defined in notes to table 4. Other variables are as defined in Table 2 notes.

Table 8: Pradhan Characteristics and Villager Perceptions

	Looks after village needs		Keeps election promises	
	(1)	(2)	(3)	(4)
Pradhan has BPL card	-0.079** (0.033)		-0.098*** (0.031)	
Pradhan eligible for reservation		-0.075** (0.029)		-0.068** (0.028)
Pradhan's education		0.005* (0.003)		0.004 (0.003)
Pradhan's land ownership		-0.001 (0.002)		-0.001 (0.002)
Pradhan's family political history		0.006 (0.040)		-0.01 (0.042)
Individual controls	Yes	Yes	Yes	Yes
Other controls	Yes	Yes	Yes	Yes
Fixed effect	Block	Block	Block	Block
R-squared	0.18	0.18	0.18	0.18
N	4854	4854	4854	4854

Notes:

1. OLS regressions with standard errors, clustered by GP, in parentheses. * significant at 10%; ** at 5%; *** at 1%.
2. The dependent variables are dummies: Looks after village needs=1 if respondent says Pradhan looks after village needs; Keeps election promises=1 if respondent believes Pradhan keeps his election promises.
3. Other controls includes number of villages in GP, village literacy rate, pradhan village dummy, GP headquarter dummy, total households in village and fraction SC/ST households.

Table 9: Pradhan Characteristics and Voting Patterns

	BPL card	Years of Education
	(1)	(2)
Group identity voting	1.265** (0.632)	-22.859*** (4.505)
Candidate quality voting	-0.206 (0.283)	3.416 (2.879)
GP literacy rate	-0.319 (0.330)	13.196*** (2.963)
Control	District	District
R-squared	0.09	0.3
N	90	90

Notes:

1. GP-level OLS regressions with standard errors, clustered by block, in parentheses. Regressions are weighted by fraction SC/ST households in GP (averaged across sample villages). *significant at 10%; ** at 5%; *** at 1%.
2. Dependent variables are a dummy for whether Pradhan has a BPL card and years of education of Pradhan. Group identity voting and Candidate characteristic voting are fraction of villagers in GP who report the most important reason for their vote as candidate's group identity and quality, respectively.