

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Election Outcomes and Food Security: Evidence from the Consumption of Scheduled Castes and Tribes in India

Sharad Tandon^{*}

May, 2012

Selected Paper prepared for presentation at the Agricultural & Applied Economics Association's 2012 Annual Meeting, Seattle, Washington, August 12-14, 2012.

ABSTRACT

This paper investigates whether parliamentary election outcomes affect consumption of households belonging to Scheduled Castes and Tribes (SC/ST's), the poorest Indian households that constitute a quarter of the total population. Using arguably exogenous variation in party affiliation introduced by close election outcomes, this paper finds that expenditure of SC/ST households was higher in regions where candidates more sympathetic to the groups were successful. These results demonstrate that SC/ST welfare respond to election outcomes in instances when successful politicians do not belong to SC/ST's, and these findings further demonstrate that the poorest Indian households are targeted during times of political competition.

Keywords: Voting, Nutrition, Elections, India

JEL classification: D12, D72, H24, H42, I38, O12

^{*}Economic Research Service, USDA. Contact: standon@ers.usda.gov, 202-694-5291 (Phone), 202-694-5793 (Fax). Address: 355 E St. SW, Washington, D.C. 20472. The views expressed here are those of the authors and may not be attributed to the Economic Research Service or the U.S. Department of Agriculture.

Introduction

A growing body of literature has begun to thoroughly document how elections and electoral motivations affect government policy choices. Citizen-candidate models generally posit that politicians have both a desire to be re-elected and policy preferences based on ideology, and therefore their identity might affect government policies through both motives (e.g., Dixit and Londregan 1998; Kartik and McAfee 2007). Consistent with this model, recent empirical studies have found evidence of political competition affecting policy choices (e.g., Cole 2009; Bardhan and Mookherjee 2010). Alternatively, studies have also demonstrated how the characteristics of winning politicians might affect policy choice, where both a politician's gender and social status affect the types of government spending in both developed and developing countries (e.g., Chattopadhyay and Duflo 2004; Rehavi 2008).

Attempting to better identify who might benefit from politically-motivated spending, this study focuses on whether election outcomes affect the consumption of the poorest segment of the Indian population-households belonging to Scheduled Castes and Tribes (SC/ST's). Nearly a quarter of the total population belongs to these groups, and they have a higher incidence of poverty and face worse health outcomes than the rest of the population (e.g., Deshpande 2000; Subramanian et al. 2006). Thus, shifts in economic outcomes for the group might have potentially large effects on household welfare.

The two most successful political parties of the past two decades, the Indian National Congress (INC) and the Bharatiya Janata Party (BJP), have had varying success in capturing support from voters belonging to these groups. The BJP rose to prominence in the late 1980's by denunciating what they perceived as 'minority appeasement' by the ruling INC government, which included opposing policies strongly supported by members of SC/ST's (Seshia 1998). Based on voter surveys, these differences in overt policy positions resulted in voters belonging to these groups disproportionately siding for candidates representing most other policical parties over those representing the BJP (e.g., Yadav 2004).

Given these differences in courting voters belonging to SC/ST's, this study presents a simple framework in which incumbent politicians target different levels of government spending at different groups of voters based on their ability to affect the voting decision of each group's members. Politicians are assumed to evenly distribute resources across all households within a group, and cannot only target impressionable households. A growing empirical literature has found that there is a significant electoral return to targeted government spending (e.g., Manacorda, Miguel, and Vigorito 2011). Similar to models of clientelism (e.g. Robinson and Verdier 2002), such a model might predict that successful BJP parliamentary candidates target more government resources at higher caste voters. Alternatively, successful non-BJP candidates might target more resources at households belonging to SC/ST's. There are two different avenues through which successful parliamentary candidates might affect consumption- directly through funds allocated by individual members of parliament in their own constituencies, or indirectly by lobbying other branches of government to either increase overall spending on SC/ST's or to increase the efficacy of existing programs targeting government resources at these groups.

However, it is difficult to disentangle the success of candidates belonging to particular political parties from unobservable events that cause changes to both the economic well-being of households belonging to SC/ST's and electoral outcomes. To overcome endogeneity concerns, this study utilizes close election outcomes involving a BJP candidate. These outcomes critically depend on shocks to voter turnout, which are arguably uncorrelated with other determinants of the economic well-being of the poorest households (e.g., Lee 2008). The identification assumption is that a win or loss for a candidate in a close election is as good as randomly assigned.

Consistent with this hypothesis, this study demonstrates that BJP candidates won approximately half of the close elections in which they were involved. Furthermore, the success of the party in close elections in a region is uncorrelated with a number of other observable regional characteristics that are likely correlated with consumption of households belonging to SC/ST's. Thus, this study compares expenditures of households belonging to SC/ST's in regions where BJP candidates were lucky and won close elections to regions where they were unlucky and lost close elections.

Using this approach, this study finds that BJP success was important and significantly influenced consumption of these households. Specifically, in regions where the BJP was more successful in close elections, SC/ST households had a lower level of overall expenditure. In regions where the BJP won all close elections- which increased the total share of seats won by the BJP by 31 percent on average-expenditure of households belonging to SC/ST's was 10.4 percent lower. Although not all SC/ST households are poor, BJP success reduced expenditure of both poor and well-off SC/ST households. Furthermore, these consumption changes were composed of differences in both food and non-food expenditures. In particular, SC/ST households had lower expenditures on food items that help to diversify the household diet away from consumption of cereals and other types of cheap calories, which is consistent with household coping strategies in response to negative income shocks in many

developing countries (e.g., Block et al. 2004; Brinkman et al. 2009).

These results survive important robustness checks. All measures of expenditure are uncorrelated with BJP success in future close elections. One would expect the lack of a correlation if close election outcomes were driven by shocks to voter turnout that were uncorrelated with other determinants of consumption of SC/ST households. However, there might have been a correlation if the outcomes of close elections were actually detecting an unobserved relationship with omitted variables, or trends in consumption.

This paper fits within the literature analyzing the effects of reserving electoral seats for SC/ST politicians on the welfare of SC/ST voters, and provides an arguably causal link between success of particular political parties and expenditure of households belonging to SC/ST's. A number of studies have analyzed how reservations of electoral seats for SC/ST politicians affect the welfare of members of those groups at both the state (e.g., Pande 2003; Chin and Prakash 2011) and the local level (e.g., Besley et al. 2004; Duflo, Fischer, and Chattopadhyay 2008; Bardhan, Mookherjee, and Torrado 2010; Munshi and Rosenzweig 2010). Many of these stuides find that particular group membership, whether SC or ST, had an effect on policy choices and which group benefited (e.g., Pande 2003; Bardhan, Mookherjee, and Torrado 2010; Chin and Prakash 2011). However, these results demonstrate that SC/ST households can benefit from political outcomes in instances where successful candidates are not group members themselves, which suggests that SC/ST voters are being more broadly targeted than the relatively small number of seats being reserved for SC/ST politicians. Furthermore, these results, along with Mitra (2011), focus on the effects parliamentary outcomes have on household welfare as opposed to state and local elections. Although state and local governments significantly affect household outcomes, these results suggest that Members of Parliament also significantly influence welfare of SC/ST households.

This paper also fits within the literature on electoral determinants of policy choices and economic outcomes (e.g. Cole 2009; Manacorda, Miguel, and Vigorito 2011; Bardhan and Mookherjee 2010). These results demonstrate that individual behavior and economic outcomes of a sizeable portion of the population can be significantly affected by election outcomes. Hsieh et al. (2011) is the most closely related, which finds that political dissenters in Venezuela - also a large share of the population - fared worse economically than the rest of the population. The results in this study generalize the relationship between political competition and economic outcomes to an arguably more democratic country, and further demonstrate that the poorest and worst-off segment of the population can be affected. This latter finding has potentially important implications for both poverty and household nutrition.

Although this indirect analysis has little to say about the exact mechanism by which politicians might affect consumption, other studies have similarly used indirect analysis in both the political economy literature (e.g., Hsieh et al. 2011), and the corruption literature (e.g., Hsieh and Moretti 2006; DellaVigna and La Ferrara 2010). Furthermore, this study is also related to the literature utilizing the arguably random variation introduced by close election outcomes to determine the effects of election outcomes on the electorate (e.g., Lee, Moretti, and Butler 2004; Lee 2008; Rehavi 2008; Eggers and Hainmueller 2009; Gerber and Hopkins 2010, Clots-Figueras 2012, etc.).

The rest of the paper is structured as follows: Section 1 provides a brief description of SC/ST's, as well as a brief summary of the Indian political system; Section 2 presents a simple model describing government spending; Section 3 presents the data and the empirical strategy; Section 4 presents the empirical results; and Section 5 concludes.

Section 1.1: Background of Scheduled Castes and Tribes

The term "Scheduled Castes" originates from the Government of India Act 1935, and refers to groups previously called Depressed Classes by the British authorities. The term was applied primarily to groups referred to as untouchables- those who performed what were perceived as unpleasant jobs (Revankar 1971). In 1950, the government provided a complete listing of castes that were designated as Scheduled Castes (The Constitution (Scheduled Castes) Order, 1950), and also designated a list of tribes of aboriginal peoples of India as Scheduled Tribes (The Constitution (Scheduled Tribes) Order, 1950).

These groups have historically been discriminated against through both economic and social means. The Constitution of India protects the interest of these groups through special laws outlawing the discrimination against an individual on the grounds of "untouchability" (The Untouchability Practices Act, 1955), as well as raising the penalties of crimes against individuals belonging to Scheduled Castes and Tribes (Prevention of Atrocities Act, 1989). Additionally, since members of these groups are on average significantly poorer than the rest of the population and lack many opportunities, a certain share of both public sector jobs and university admissions are reserved for members of these groups. Furthermore, in order to represent the groups' interests in politics, a number of electoral seats are reserved for members of SC/ST's.

Although a number of safeguards have been employed in the Constitution, SC/ST's still suffer

from significantly higher poverty rates than the rest of the population (e.g., Deshpande 2000). In both rural and urban areas, members of the groups are disproportionately employed in marginal occupations. In rural areas, members of the groups are primarily employed as agricultural laborers; in urban areas, a large number of people belonging to SC/ST's are employed as casual workers in the informal sector (Mehta and Shah 2003). These economic differences also translate into worse health outcomes, where mortality rates are significantly higher for members of these groups relative to the rest of the population (e.g., Subramanian et al. 2006).

Given the safeguards in the Constitution, legislation protecting these groups has long been an important political issue. The two most dominant political parties of the late 1990's and the 2000's, the Bharatiya Janata Party (BJP) and the Indian National Congress (INC), have had varying success in courting support from voters belonging to SC/ST's. The long dominant INC has a history of providing safeguards for the groups following the country's independence. This support continued through a commitment to a number of populist policies designed to support disadvantaged members of society (e.g., Chandra 2000).

On the other hand, the BJP historically has had little support from voters belonging to SC/ST's. The party was formed in 1980 from the reorganization of the Bharatiya Jana Sangh (BJS) after the fall of Janata Party government. However, the political base of its predecessor, the BJS, was primarily comprised of upper castes in the North Indian states (Seshia 1998). Furthermore, the party has espoused a Hindu-centric philosophy which is intertwined with the discrimination faced by group members (e.g., Kohli 1998). Additionally, the party continues to be perceived as placing less emphasis on the welfare of the poorer segments of society than most other political parties, where for example, the party focused on the country's high rate of growth in the 2004 campaign and was punished by the large segments of society that were not sharing in that growth (e.g., Sthanumoorthy and Eapen 2004).

The current and historical stances of the BJP on issues important to voters from SC/ST's have translated into less political support from these groups. Voters belonging to SC/ST's disproportionately vote more often for both INC candidates and for candidates from all other parties than they do for BJP candidates (e.g, Heath 1999). On the other hand, the BJP receives significantly more support from members of upper castes relative to other political parties (e.g., Yadav 2004).

Section 1.2: The Role of Members of Parliament

The Indian government is a parliamentary democracy composed of the central, state, and local governments. Both the central and state governments are responsible for legislation that significantly affect the day-to-day lives of voters, whereas, there is much less consensus regarding the powers of local governments (e.g., Vyasulu 2004). Among other things, the Seventh Schedule of the Constitution of India divides power between the central government, the states, and areas where the two share responsibility. All powers not mentioned are ascribed to the central government. Generally speaking, issues affecting all states are ascribed to the central government, such as macroeconomic stability, international trade, etc. This division leaves many vital areas to state governments, such as public order, agriculture, irrigation, and land rights.

Part V of the Constitution of India creates two major groups affecting the provision of national government resources: individual politicians elected to parliament (MP's) and the executive branch. MP's serve both a legislative capacity, and are integral in the choice of the Prime Minister, who leads the executive branch. In their legislative capacity, MP's can directly affect legislation important to individuals belonging to SC's and ST's and their well-being. However, MP's can also directly target government resources at one group relative to another, such as through the Members of Parliament Local Area Development Scheme (e.g., Keefer and Khemani 2009). Alternatively, MP's can also indirectly leverage both the central and state governments through their legislative capacity to benefit one group over another (Constitution of India).

Although the national leaders of the BJP have taken a number of high profile positions that suggest they might not be sensitive to the preferences of voters belonging to SC/ST's, there is no direct evidence of BJP MP's favoring upper castes over SC/ST's in their own constituency. Similarly, there is little direct evidence of candidates from other political parties favoring voters belonging to SC/ST's. However, both state and national politicians have repeatedly shown a willingness to target government resources at specific regions, groups, firms, and even individuals for political gain. Studies have found a number of instances of state governments targeting increased agricultural support to regions based on electoral motivations (e.g., Cole 2009; Bardhan and Mookherjee 2010); Sinha (2005) presents an account of the "License Raj," and the manipulation by the national government in granting licenses to businesses; studies have presented suggestive evidence that state governments have differentially priced electricity based on political concerns (e.g., Reddy and Sumithra 1997); and oftentimes politicians campaign on a wide array of targeted welfare programs (e.g., Suri 2004).

Section 2.1: A Simple Model of Policy Choice

In this section, I present a simple framework demonstrating how incumbents of different political parties might target social groups with different levels of government spending. It is assumed that voters belong to one of two groups: SC/ST's (group one) or all other groups (group two). Politicians choose some level of government spending π_1 and π_2 targeted at groups one and two respectively.

Some share of voters of each group - denoted by α_j - might change their vote based on receiving a share of a mobilization policy π_j . The remaining share of voters are unaffected by government spending. However, politicians cannot identify which individual households might belong to the impressionable share, and must distribute π_i across group i equally. The mobilization policies are not interpreted to be the responsibility of the government, but rather disbursement of discretionary resources that give private benefits to constituents.

It is assumed that Voter i, will vote for the incumbent if the following decision rule D_{ij} is positive:

(1)
$$D_{ij} = u(s_j \pi_j) + \theta_i$$

where j denotes the group to which individual i belongs, u(.) denotes a concave utility function, s_j denotes the share of the mobilization policy π_j evenly divided amongst the members of group j, and θ_i represents individual i's underlying political preference for the incumbent.¹ This preference is drawn from a common distribution function F_{θ} that is symmetric about zero, and is derived from the provision of public resources since the last election, likability relative to the challenger, etc. It is further assumed that becomes increasingly difficult to attract more polarized voters.² For simplicity, this framework assumes only one challenger in the upcoming election.³

Using the probability that the benefits from mobilization policies π_j overwhelm the political preferences of individuals who would have voted against the incumbent, one can solve for the expected vote change from implementing policies π_j as follows:

(2)
$$\Delta M = \sum_{j=1}^{2} \alpha_j * Total_j * \{F_{\theta}(0) - F_{\theta}[-u(s_j \pi_j)]\}$$

where $Total_j$ denotes the total number of voters in each group, and α_j denotes the share of voters in each group whose voting preference is affected by the mobilization policies. In this formulation, ΔM is increasing and concave in each mobilization policy π_j .⁴

The actual vote share for the politician in the next election and the expected margin of victory are respectively decomposed as:

(3)
$$V_t = V_{t-1} + \Delta M + \psi + \epsilon$$

(4)
$$Marg = E(V_t) - \frac{1}{2}\sum_{j=1}^{2}Total_j$$

where V_{t-1} represents the votes accumulated in the previous election, ΔM is the change in the votes arising from mobilization policies π_j , ψ are expected changes in votes unrelated to policies π_j , and ϵ denotes the unexpected change in votes arising from uncertainty in voter turnout. It is assumed that ϵ is governed by a distribution function G, which is symmetric about zero. It is also assumed that larger uncertain swings are less likely than smaller ones.⁵

Solving for the probability that the uncertain vote swing will overwhelm the expected margin of victory, the probability the incumbent will win the next election is given by:

(5)
$$\phi = 1 - G(-Marg)$$

This probability function is an increasing function in each mobilization policy π_j , and thus gives an electoral motive to increase government spending towards constituents.

Formalizing the motives of incumbent politicians, I assume risk neutral incumbents allocate mobilization policies across the different groups as follows:

$$\Pi^* = argmax_{\pi_1,\pi_2} \quad \phi(\pi_1,\pi_2)R - C(\pi_1,\pi_2)$$

where R represents the economic rent derived from holding office, and $C(\pi_1, \pi_2)$ is a function governing the cost of implementing policies π_j . Although citizen candidate models generally posit that politicians have both ideological and electoral costs in policy choices, (e.g., Kartik and McAfee 2007), for simplicity it is assumed that the costs here only represent the monetary expense to the government and that the marginal costs are constant (denoted by c_j).

The choice of government spending is determined by the following set of first order conditions:

(6)
$$\frac{\partial \phi}{\partial \Delta M} \frac{\partial \Delta M}{\partial \pi_j} R = c_j \qquad \text{for } j = 1,2$$

The LHS of (6) denotes the marginal benefit from implementing policies π_1 and π_2 , and the RHS the constant marginal cost of each policy. Based on this simple framework, it can be demonstrated that the π_1^* and π_2^* that satisfy the first order conditions are indeed optimal.⁶

Section 2.2: Variation in Spending Based on Influence Over Voters

Most importantly, this simple framework demonstrates that politicians will change their relative spending on each group based on their ability to attract voters with government spending. In particular, it can be demonstrated that increasing the share of a particular group that can be attracted by government spending will result in more government spending on that group (i.e., $\frac{\partial \pi_i^*}{\partial \alpha_i} > 0$), and decrease spending on the other group (i.e., $\frac{\partial \pi_j^*}{\partial \alpha_i} < 0$ for $i \neq j$).⁷ In the limiting case where a politician cannot influence a group at all with government spending (i.e., $\alpha_i = 0$), politicians chooses $\pi_i * = 0$ and focuses all spending on other groups.

In the context of this study, BJP candidates likely have different abilities to attract voters belonging to SC/ST's relative to candidates belonging to most other political parties. In particular, based on voter surveys discussed above and the relative positions the BJP has taken on national issues that are strongly supported by voters belonging to SC/ST's, it is likely that non-BJP incumbents would be able to affect a larger share of the SC/ST vote with government spending than BJP incumbents. Based on the simple framework above, one might expect incumbents from most other political parties to target a higher share of government resources at households belonging to SC/ST's than BJP incumbents. Furthermore, BJP Incumbents might transfer a higher share of government resources to households belonging to upper castes than other incumbents.

Section 3.1: Data

Based on the simple model above, this study estimates whether a loss by a BJP candidate resulted in a higher level of expenditure for households belonging to SC/ST's. The consumption data come from surveys conducted by the National Sample Survey Organization (NSSO), while detailed election data until the 2004 election are obtained from the Election Commission of India.⁸ This study matches election outcomes between 1998 and 2004, the time during which the BJP was most competitive in parliamentary elections, to consumer expenditure surveys conducted in the year after each election.⁹

Thus, this study matches election outcomes from 1998, 1999, and 2004 to the 54'th, 56'th, and 61'st rounds of the NSSO consumer expenditure surveys respectively.¹⁰ In each round, the NSSO collects detailed household expenditures on particular food and non-food items using either a 30 or 365-day recall period. The overall monthly household expenditure used in the baseline empirical specification consists of the sum of expenditure on items for which there is 30-day recall period reported

in all three expenditure surveys. In particular, this excludes expenditure on clothing, institutional medical expenses, education, and durable goods. The baseline analysis restricts expenditures on these items in order to match only post-election expenditures to election outcomes, as well as to make recall periods consistent across surveys.¹¹

However, this analysis needs to match election data, which is given by Parliamentary Constituency (PC), to the consumption data, which is given at the district level. Unfortunately there is not a direct mapping between the two - matching socio-economic data that is usually available at the district level to electoral markers available at the PC level has long been a challenge for scholars (e.g., Alam 2010). Thus, districts and PC's are aggregated in to larger regions until there are consistent boundaries between the electoral and administrative boundaries. The number of districts in a region varies between 1 and 19 with an average of 3.21, while the number of PCs in a region varies from 1 to 26 with an average of 4.4. In total, there are 124 regions covering all states and Union Territories.^{12,13}

Restricting the sample to households residing in regions where the BJP was involved in at least one close election, descriptive statistics of household expenditure are presented in Table 1. There is a large amount of variability in household expenditures, both within groups and across all 94,765 households. As expected, expenditure in households belonging to SC/ST's is lower than the average for other Indian households in all three surveys. Furthermore, it is important to note that not all households belonging to SC/ST's are poor, and some spend significantly more than households belonging to other groups.

Section 3.2: Empirical Strategy

One would ideally like to estimate the direct relationship between expenditure of households belonging to SC/ST's and the share of elections in a region won by parties other than the BJP. However, this sort of estimation is difficult to interpret due to omitted variables. For example, one would not know if some unobserved shock is causing both the success of particular political parties and changes to household expenditure.

Thus, this study attempts to estimate a slightly different specification exploiting the randomness introduced by close election outcomes. Contingent on being in a close election, the outcome has been shown to be quasi-random (e.g., Lee 2008). As mentioned in the introduction, the electoral support for a particular candidate is driven higher or lower based on shocks to voter turnout that might differentially affect supporters and non-supporters. These sorts of shocks are arguably uncorrelated with other determinants of consumption, and can be used to consistently estimate the relationship between the expenditure of households belonging to SC/ST's and election outcomes involving the BJP.¹⁴

Specifically, this study focuses on close elections in which a BJP candidate placed either first or second. This study restricts the sample to households residing in regions where the BJP was involved in a close election and calculates the share of close elections won by the BJP in each of those regions as follows:

$$BJPShare_Close_{rt} = \frac{CloseWon_{rt}}{CloseWon_{rt} + CloseLost_{rt}} \qquad \text{if } CloseWon_{rt} + CloseLost_{rt} > 0$$

where *CloseWon* denotes the number of close elections won by the BJP in district r at time t; *CloseLost* denotes the number of close elections lost by the BJP candidate. In the baseline specification, an election is identified as close if the margin of victory was less than 3 percent of the vote share.¹⁵ This measure identifies regions where the BJP was lucky and won a higher share of close seats, which is correlated with overall success of the BJP in a region by construction.¹⁶ Most importantly, if close election outcomes are as good as randomly determined, this measure of BJP success is arguably uncorrelated with household consumption decisions.

Given that household expenditure at the individual electoral boundaries is not available, it is important to note that this article cannot exploit a regression discontinuity design used in a number of other studies (e.g., Lee, Moretti, and Butler 2004; Lee 2008; Eggers and Hainmueller 2009; Gerber and Hopkins 2010, etc.). However, using slightly more aggregated regions, this article exploits the randomness introduced by close election outcomes and creates a measure of BJP success that is arguably uncorrelated with other determinants of the welfare of SC/ST households. This identification strategy is illustrated in Table 1, which presents summary statistics grouped by success of the BJP in close elections. In particular, the table demonstrates that SC/ST households residing in regions where the BJP performed better in close elections also had lower household expenditures.¹⁷ Despite differing from a simple regression discontinuity design, other political economy studies in India and elsewhere have relied on similar aggregated regions (e.g., Rehavi 2008; Clots-Figueras 2012, etc.).

In the baseline specification, household expenditure of all households residing in regions where the BJP was involved in a close election is regressed on an interaction between the share of close elections won by the BJP and an indicator for whether the household belonged to an SC/ST, and lower order terms. Although the variation in success of the BJP is at the region level, the baseline specification utilizes household consumption to better control for household-specific factors that are available in the NSSO data as follows:

(7)
$$log(Expenditure_{hr,t+1}) = \gamma BJPShare_Close_{rt} * SC/ST_{hrt} + \alpha X_{hrt} + \tau_r + \kappa_t + \epsilon_{rt}$$

where r refers to the regions discussed above, t refers to the election, and h refers to household. $Expenditure_{hr,t+1}$ denotes household expenditure in the year after the election in time period t; SC/ST_{hrt} denotes an indicator equaling one if the household belongs to an SC/ST; τ_r and κ_t denote regional and time fixed effects respectively; and X_{hrt} contains lower order terms and time-varying regional and household control variables.¹⁸ The coefficient of interest is γ - if a BJP win actually corresponds to lower levels of expenditure of households belonging to SC/ST's, one would expect $\gamma < 0$. Identification of γ relies on the assumption that $E(BJPShare_Close_{rt}\epsilon_{hrt}) = 0.^{19,20}$

There are a number of things to note about this estimation. First, there are instances where there are no close elections involving the BJP in a region. Although the outcome of close elections is arguably random, not being involved in a close election is possibly not random. Given this limitation, one will not be able to make strong inferences about elections that were clearly won or lost based on these results. These are limitations of all studies utilizing the randomness of close election outcomes (e.g., Lee 2008), and similar to many other studies utilizing instrumental variables (e.g., Angrist and Evans 1998). However, a number of models predict that political mobilization is strongest in close elections (e.g., Bardhan and Mookherjee 2010), which would suggest that government spending might be strongest in close elections. Thus, the case of close elections is likely a particularly interesting special case. Regardless, specifications are also estimated analyzing the relationship using all elections.

Second, the baseline specifications focus on SC/ST households and do not separately estimate the effect BJP success might have on Other Backward Classes (OBC), another group that also benefits from policies promoting their welfare. Unlike upper caste voters, OBC households also contribute a significant amount of political support to non-BJP parties (e.g., Heath 1999, Yadav 2004, etc.). However, the list of groups belonging to OBC's changes over time and is a sensitive political issue. In order to limit concern over interpreting changes in the relationship between OBC expenditures and BJPs success, the baseline specification and results focus on SC/ST households. However, specifications are also estimated analyzing how the expenditures of OBC households respond to BJP success.²¹

Third, the baseline empirical specification focuses only on the relationship between BJP success and expenditures of households belonging to SC/ST's. However, in places where the BJP lost an election, a candidate from any other political party might have been successful. This includes the INC, the Communist parties, and all other regional parties. These political parties differ in a number of ways, and in particular, only a subset of the regional parties have an overt focus on issues important to SC/ST households (e.g., the Bahujan Samaj Party). In order to make sure the results are driven by competing against a political party which is viewed favorably by SC/ST voters, specifications are estimated in which expenditure is regressed on success of the BJP in close elections involving the INC.²²

Fourth, this study estimates a number of alternative specifications to make sure the results do not depend on the definition of close elections, and the exclusion of subsets of expenditure that have longer recall periods. Thus, this study estimates specifications using margins of victory other than 3 percent to identify elections as close, and specifications are estimated using the NSSO calculation of total household expenditure as the dependent variable, which includes all types of expenditures regardless of recall periods. Additionally, some state governments held elections during the same year as the parliamentary elections, and it is possible that exogenous shocks to voter turnout that cause the BJP to be more successful in parliamentary elections might also have the same effect in state elections. Thus, in order to ensure the results are detecting the effects of parliamentary elections, specifications are estimated excluding households residing in regions which were holding state elections in the same year.

Fifth, although the data preclude a potential regression discontinuity design for the entire country, there are a number of regions that are composed of only one Parliamentary Constituency and one district. Thus, as a robustness check, specifications are estimated where the sample is restricted to the 39 districts which are composed of exactly one PC. Although the sample size and the geographic coverage of the specification is significantly reduced, the identification strategy collapses into a more traditional regression discontinuity design used in other studies, and expenditure of SC/ST households in PC's where the BJP narrowly lost are compared to expenditure of SC/ST households in regions where the BJP narrowly won (e.g., Lee, Moretti, and Butler 2004; Lee 2008; Eggers and Hainmueller 2009; Gerber and Hopkins 2010, etc.).

Lastly, timing is very important to the interpretation of the results. In particular, this study performs a falsification test and regresses expenditure on close election outcomes in the future. As discussed in the introduction, if close election outcomes are driven by shocks to voter turnout that are uncorrelated with other determinants of household expenditure, then there should be no correlation. However, if these specifications detect a relationship, the baseline estimates might be detecting a relationship between expenditure and omitted variables.

Section 3.3: Determinants of Close Election Outcomes

By construction, the share of close elections won by the BJP is correlated with the total share of elections won by the party. This portion of the variation in the total success of the party is utilized to identify the effect BJP success had on the expenditure of households belonging to SC/ST's. However, in order to obtain consistent estimates of γ in specification (7), it is necessary for BJP success in close elections to be uncorrelated with other determinants of household expenditure. Although this is not a directly testable assumption, Tables 2 and 3 provide evidence consistent with the assumption.

In particular, one would expect the BJP on average to win half of the close elections in a region in which there was at least one close election. Rows (1) through (3) of Table 2 demonstrate that the BJP wins between 54 and 57 percent of close elections. These rows further demonstrate that the confidence interval of this estimate contains 50 percent. Despite winning approximately half of the close elections, the estimated standard deviation shows there is a wide amount of variation in the success of the BJP in close elections. However, the success of the BJP in close elections is markedly different from the success that the BJP has in all elections in a region- row (4) demonstrates that the BJP wins approximately 36 percent of all elections in a region during this time period.

In addition to losing approximately half of all close elections, the success of the BJP in close elections is uncorrelated with other regional INC and BJP outcomes that are likely correlated with determinants of household expenditure. In particular, I construct the share of total seats won by both the BJP and INC in the last election, the share of seats clearly won (more than 20 percent of the vote share) by both the BJP and INC, and the total share of elections that are close in a region.²³ I then estimate the following specification:

$$(8) \begin{array}{c} BJPShare_Close_{rt} = \tau_r + \kappa_t + \beta_1 ShareClearlyWon_BJP_{r,t} + \beta_2 ShareClearlyWon_INC_{r,t} \\ + \beta_3 BJPShare_Total_{r,t-1} + \beta_4 INCShare_Total_{r,t-1} + \beta_5 ShareClose_{r,t} + \epsilon_{rt} \end{array}$$

where the independent variables are as described above, and the level of observation is the region.

The estimates of specification (8) are consistent with the identification strategy and are presented in Table 3. Columns (1) through (3) use the share of close elections won by the BJP as the dependent variable, but vary the margin of victory used to identify an election as close between 2 and 3 percent of the vote share. In these specifications, none of the coefficients are individually significant, and they are jointly insignificant (p-values vary from .3690 to .6964).

On the other hand, columns (4) and (5) demonstrate that the share of all seats won by the BJP in a region is significantly correlated with a number of the variables. Column (4) uses the entire sample of regions, while Column (5) restricts the sample to regions in which there was at least one close election involving the BJP. In either case, the p-value of a test of joint significance is essentially zero.²⁴

Section 4: SC/ST Expenditure and Election Outcomes

Table 4 estimates the relationship between expenditure of households belonging to SC/ST's and success of the BJP. Columns (1) and (2) estimate the baseline relationship between expenditure and success of the BJP in close elections, and the estimate of γ is presented in the top row. The estimates demonstrate that households belonging to SC/ST's had significantly higher expenditures in regions where non-BJP candidates were successful in close elections. Column (1) estimates a sparse specification including only the variable of interest and lower order terms; and column (2) estimates the baseline specification that includes regional fixed effects, time dummies, and control variables. Column (2) suggests that non-BJP candidates winning all close elections in a region- which is associated with a 31 percent increase in the overall share of elections won by the BJP in a region on average- resulted in approximately 10.4 percent lower expenditures for households belonging to SC/ST's.

Additionally, Table 4 reports the effects of BJP success on consumption of SC and ST households separately. Column (3) demonstrates that households belonging to SC's and those belonging to ST's both had lower expenditures in regions in which the BJP was more successful. However, there is a statistical difference between the estimates at the 5 percent significance level, where SC households were more negatively affected by BJP success. This is similar to other studies, which find differing effects of SC and ST political reservations on policy choices and poverty (e.g., Pande 2003; Bardhan, Mookherjee, and Torrado 2010; Chin and Prakash 2011). Additionally, column (4) also reports a specification estimating the effect BJP success had on households belonging to OBC's. Similar to both SC and ST's, households belonging to OBC's also had lower expenditures in regions where the BJP was more successful in close elections. Furthermore, the estimated coefficient on the share of close elections won by the BJP in column (4), which represents the increase in consumption for Forward Castes when the BJP wins all close elections in a region, suggests that the group had higher expenditures where the BJP was more successful. Although the estimate is not as precise as the other estimated coefficients, the results suggest that households belonging to Forward Castes had 6.5 percent higher expenditures in regions where the BJP won all close elections.

On the other hand, Columns (5) and (6) estimate specifications analyzing the relationship between expenditure and the BJP's success in all elections. Column (5) estimates the OLS relationship, while Column (6) estimates an IV specification using the share of close elections won by the BJP, as well as its interaction with an SC/ST indicator, as instruments for the total share of elections won by the BJP and its interaction with an SC/ST indicator. Although not statistically significant, the estimates in Column (5) suggest that households belonging to SC/ST's had lower expenditures in regions where the BJP won a higher share of the all elections (row 6). However, the estimate is difficult to interpret given the possibility of omitted variables.²⁵ On the other hand, the IV estimates in column (6) suggest that increasing the share of all elections won by the BJP by 10 percent leads to a decrease in SC/ST household expenditures of 2.9 percent.²⁶

Table 5 estimates a number of robustness checks discussed in Section 3.2. In all specifications, the baseline results are robust and households belonging to SC/ST's have higher expenditures in regions where non-BJP candidates were successful. In columns (1) and (2), the relationship remains the same when using alternate cut-off points for defining close elections, and column (3) demonstrates that the results are similar when the analysis is restricted only to close elections in which an INC and BJP candidate both finished first or second. Columns (4)-(6) further report the baseline estimates broken up by individual elections. Although the relationship is more precisely estimated in some years than in others, the estimate is consistently negative in all specifications. Alternatively, the results remain the same in column (7) when using the NSSO calculation of monthly per capita expenditure (MPCE), which accounts for spending on all types of goods; and column (8) demonstrates the results survive when excluding households residing in regions holding concurrent state elections. Lastly, column (9) of Table 5 restricts the sample to only households in regions where there is only one PC in a district. In this specification, the identification strategy collapses into a more traditional regression discontinuity design and reports the simple expenditure difference between narrowly lost PC's and narrowly won PC's. Although the sample size is significantly reduced and the estimated standard errors are larger, the results are similar.

Table 6 analyzes the composition of the expenditure differences, and decomposes expenditures

into food and non-food groups. The estimates in columns (1) and (2) demonstrate that households belonging to SC/ST's had higher food and non-food expenditures in regions where non-BJP candidates were successful. On the other hand, column (3) demonstrates that in regions where non-BJP candidates were more successful, households belonging to SC/ST's had higher expenditures on food groups that helped to diversify the diet away from cereals consumption. This finding likely diversifies an average diet that is heavily reliant on cereals (e.g., Tandon and Landes 2011), which can be important to long term health outcomes (e.g., Drescher, Thiele, and Mensink 2007). Furthermore, this consumption response is consistent with how households cope with negative income shocks in many developing countries (e.g., Block et al. 2004; Brinkman et al. 2009).

Additionally, Table 7 reports potential heterogeneity in the baseline estimates, and breaks up the effects of BJP success on SC/ST households by groups. The estimates find little difference in the response of these groups of SC/ST households to BJP success in close elections. Column (1) breaks up SC/ST households into those that have lower expenditures than the average of all SC/ST households, and those that have higher expenditures; column(2) estimates the effects separately for rural and urban households; column (3) breaks up SC/ST households based on whether they resided in a state controlled by the BJP or by another political party; and column (4) estimates the effect separately for households residing in regions with at least one PC reserved for an SC or ST politician, and those residing in regions with no reserved seats. In all instances, each subgroup of SC/ST households had lower expenditures in regions where the BJP was more successful. Additionally, we cannot reject the hypothesis at conventional significance levels that the SC/ST response to BJP success in close election outcomes was equal in each subgroup.

These results survive important falsification tests in Table 8. Columns (1) and (2) estimate how the baseline expenditure in 1998 and 1999 respond to elections one period in the future.²⁷ Furthermore, columns (3)-(6) estimate the same specification, but use all other measures and subsets of expenditure as the dependent variable. In all specifications, there is no correlation between BJP success in future elections and current expenditures. Both the share of close elections won in the future and the interaction term using the future share are statistically insignificant in all specifications. Additionally, the estimates of these coefficients are small in magnitude and change signs between specifications. On the other hand, all baseline results estimated in Tables 4 through 7 survive the inclusion of future election outcomes.

Section 5: Conclusion

This study presents a simple framework in which politicians target different levels of government spending at different groups of voters based on their ability to affect each group's voting decision. Using Indian parliamentary elections and the success of the BJP, this study finds an empirical pattern consistent with this framework. These findings are similar to previous findings suggesting that SC/ST's benefit from electoral seats reserved for politicians belonging to SC/ST's. However, these results demonstrate that SC/ST's can benefit from success of politicians that are not group members themselves. Furthermore, similar to Hsieh et al. (2011), this empirical pattern demonstrates that the economic outcomes of a large portion of the population can be affected by election outcomes. However, this study generalizes this pattern to an arguably more democratic country, and demonstrates the poorest and worst-off members of society can be affected.

Additionally, these results further demonstrate the importance of national elections to local outcomes in India. Both due to Constitutional constraints and the benefits of political decentralization (e.g., Bardhan and Mookherjee 2000), there are many reasons to believe that the central government has much less direct control over regional outcomes than state and local governments. Given this concern, many studies focus on state and local governments when discussing political mobilization and the relationship political parties have with minorities (e.g., Pande 2003; Besley et al. 2004; Chhibber and Nooruddin 2004; Duflo, Fischer, and Chattopadhyay 2008; Bardhan, Mookherjee, and Torrado 2010; Munshi and Rosenzweig 2010; Chin and Prakash 2011, etc.). However, along with Mitra (2011), these findings suggest that national elections can have significant regional impacts as well.

However, there are a variety of questions not answered by this analysis. First, the empirical analysis utilized close elections to identify the arguably causal effects of election outcomes on household expenditure. Thus, the analysis has little to say about the effect of elections that are not close. Simple estimations using all elections won by the BJP as the dependent variable in Section 4 were not robust to alternative specifications and are difficult to interpret. However, as discussed above, a number of models suggest the transfers should be largest in elections that are close (e.g., Bardhan and Mookherjee 2010) and that this analysis might represent a particularly interesting special case.

Furthermore, this analysis cannot distinguish the mechanism by which politicians target households belonging to SC/ST's. This subsequently raises questions regarding how households are targeted. One potential source of targeting might be through participation in the National Food for Work Programme, later subsumed in the National Rural Employment Guarantee Act (NREGA), which the 61'st round the NSSO consumer expenditure survey tracks. However, participation was tracked only for the single survey, and far too few households actually participated in the program in that survey to be included in the empirical analysis.

Additionally, it is important to note that this analysis does not imply that BJP politicians harm households belonging to SC/ST's, but rather that the groups perform better economically in regions where non-BJP candidates were more successful. Thus, one cannot infer whether the consumption changes are the result of direct spending on households, or whether politicians direct political machinery to help the groups, possibly by enforcing existing safeguards in the Constitution. Despite these ambiguities, the results still suggest that the poorest members of society are important to the political process and might be targeted during times of political competition.

Notes

¹For simplicity, it will later be assumed that politicians are risk-neutral, which is different from the concave utility function of voters. However, none of the results depend on this assumption.

²Specifically, the density f_{θ} is increasing over the interval $(-\infty, 0)$ and decreasing over the interval $(0, \infty)$.

³As demonstrated in previous studies, generalizing the number of candidates significantly complicates the analysis in how voters choose amongst candidates (e.g., Muller and Satterthwaite 1977; Myatt 2007). In particular, results depend upon whether voters cast their vote for their most preferred candidate (sincere voting) or for another candidate based on their preferences over the remaining candidates aside from the most preferred (strategic voting). However, the primary purpose of this simple analysis is to motivate empirical analysis in a more general and potentially theoretically indeterminate framework. Additionally, the present case is still interesting for a number of Parliamentary Constituencies (PC's) across India. Between 1998 and 2004, the third-closest candidate was not competitive in a large proportion of elections, which limits the potential conflict between sincere and strategic voting (e.g., Niemi, Whitten, and Franklin 1992, 1993; Evans and Heath 1993; Heath and Evans 1994; Myatt 2007, etc.). In particular, only two candidates garnered more than ten percent of the vote share in approximately half of all elections, and nearly one-third of all elections involved cases in which the third-closest candidate garnered less than three percent of the vote share.

⁴Simply differentiating, the curvature of ΔM follows directly from assumptions regarding the distribution of θ and concavity of each voters' utility.

⁵Specifically, it is assumed the distribution is symmetric about zero and the pdf g is increasing on the interval $(-\infty, 0)$ and decreasing on the interval $(0, \infty)$.

⁶See Appendix.

⁷See Appendix.

⁸The 2009 election results are not yet available.

⁹For simplicity, the comparative statics presented above avoided issues dealing with optimal timing of the government spending, and rather focused on motivations for different political parties focusing resources on particular groups throughout the term of office. It is certainly possible that the change immediately after a politician comes to office could be different from the change between the time the politician comes to office and the time immediately before the next election.

¹⁰The 54'th and 56'th rounds are significantly smaller than the 61'st round, and the sampling procedure is different as well. However, the estimates are also broken up into each individual year, and the results are similar in those cases to the specifications pooling all years together. Furthermore, the results are robust to excluding any individual year, including restricting the analysis to the 54'th and 56'th rounds.

¹¹Different recall periods might introduce biases into expenditure data (e.g., Deaton 2003). However, alternate specifications are estimated using total household expenditure regardless of recall period, and all results are robust to including the excluded categories of expenditure.

¹²Although there is no link between PC's and districts, there is a direct link PC's and Assembly Constituencies (AC's), which are smaller electoral units used in state elections. Similarly, there is a direct mapping between 1976 district boundaries and ACs. To match the two forms of data, districts are first aggregated up to 1976 boundaries. Second, both 1976 districts and PCs are aggregated until all the ACs contained in the districts exactly match PC boundaries as well.

¹³The average number of districts in each region are computed using 1976 boundaries. However, over time, some of the larger districts have been split up into multiple districts, and thus there are a larger average number of districts in each region using boundaries from later time periods. On the other hand, the boundaries of PC's during the time period under analysis did not change.

¹⁴Although the entry of more than two candidates in an election may affect the political support for the two most successful candidates, contingent on being involved in a close election, the randomness in the political party of the winning candidate should not be affected if the outcome is being driven by shocks to voter turnout.

¹⁵This assumption is relaxed and a variety of cut-off points are used in the estimations.

¹⁶The results survive using other measures of BJP success in close elections. In particular, the results survive using the following measure of the total number of extra seats won by the BJP through close elections: $\frac{CloseWon_{rt}-CloseLost_{rt}}{TotalSeats_r}$.

¹⁷This difference is more pronounced for households belonging to SC's than those belonging to ST's, and the difference is largest following the 1999 and 2004 elections.

¹⁸Controls include other household characteristics and regional election outcomes that are plausibly correlated with the expenditure of households belonging to SC/ST's. Controls include household size, an indicator if the household is in a rural area, an indicator equaling one if the household owned land, ten indicators equaling one if the head of the household was employed in the 1-digit NIC code, the share of seats clearly won by both the BJP and INC in the region, the share of total seats won by both the BJP and INC in the region in the previous election, and share of elections that are close.

¹⁹It is important to note that regions with at least one close election could potentially include households in PC's with no close elections given there are many regions with more than one PC. The expenditure of these households in constituencies without a close election is regressed on the share of close elections won by the BJP in the entire region, which is fully determined by other constituencies. However, as long as the identification strategy is valid, success in close elections in constituencies should be uncorrelated with other swings in household expenditure - including those that arise from other sorts of political targeting in non-close constituencies- and the resulting estimate of γ should be

consistent.

²⁰It is possible that prior to elections, politicians might improve access to public goods, which in turn would affect household expenditures on education, health, etc. following the election. However, the identification strategy relies on success of the BJP in close elections, and compares regions where the BJP was successful in close elections to regions it was unsuccessful in close elections. Thus, if the identification strategy is valid, estimates of γ should capture post-election targeting.

²¹Although the expenditures of OBC's might be trending for reasons related to their designation, the trends should arguably be uncorrelated with BJP success in close election outcomes if the identification strategy is valid. In results not shown, all baseline results, robustness checks, and falsification tests are identical when grouping OBC households with SC/ST's.

²²Other political parties more closely aligned with SC/ST issues, such as the Bahujan Samaj Party (BSP), are also of interest to this analysis. However, empirical concerns limit the ability of this study to address these issues. In particular, the identification strategy focuses on close election outcomes, and the BSP is not involved in enough close elections to utilize a similar identification strategy that is presented above.

²³Although the share of close elections won by the BJP is correlated with the current share of seats won by the BJP, it should be uncorrelated with success in the previous election.

²⁴The estimates in columns (4) and (5) should be interpreted with caution given omitted variable bias. However the positive correlation between the current electoral success of the BJP and the past electoral success of the INC is what one would expect based on the anti-incumbency effect estimated in India (e.g., Uppal 2009).

²⁵This is corroborated by the sensitivity of the results to the controls that are added. In some specifications not shown, the estimate is statistically significant and positive, and in others, is not statistically significant.

²⁶There are difficulties in interpreting this estimate as well. In particular, one would not be able to tell if success in non-close elections has a similar effect on expenditures as success in close elections. If politicians target households more in close elections, as is described in the model in Section 2.1, then this empirical strategy would result in an overestimate of the average relationship between BJP success in all elections and households belonging to SC/ST's.

²⁷The 2009 election is not yet available, and thus there is no future election outcomes for expenditure measures in the 61'st round of the NSSO consumer expenditure survey.

Appendix:

This section demonstrates two results from Section 2:

1. Claim 1: There exists a sufficiently large ψ (exogenous swings in voter support from the last election) and a sufficiently small α_i (share of group i that is influenced by government spending) such that the π_1^* and π_2^* that satisfy the first order conditions outlined by equation (6) result in a global maximum.

2. Claim 2: There exists a sufficiently large ψ and a sufficiently small α_i such that increasing the share of the other group that can be attracted by government spending will result in more government spending on that group (i.e., $\frac{\partial \pi_j^*}{\partial \alpha_j} > 0$), and decrease spending on group i (i.e., $\frac{\partial \pi_i^*}{\partial \alpha_j} < 0$).

To demonstrate the first claim, one can demonstrate that under the necessary conditions, the Hessian of the objective function is negative definite for all possible values of π_1 and π_2 . Thus any critical point is a global maximum.

Denoting the first order conditions outlined in equation (6) with respect to π_1 and π_2 as f^1 and f^2 respectively, the Hessian of the objective function is the following matrix:

$$A = \begin{pmatrix} f_{\pi_1}^1 & f_{\pi_2}^1 \\ f_{\pi_1}^2 & f_{\pi_2}^2 \end{pmatrix}$$

Calculating each derivative, it follows that:

$$\begin{split} f_{\pi_1}^1 &= R * \left[\frac{\partial^2 \phi}{\partial \Delta M^2} \frac{\partial \Delta M}{\partial \pi_1} + \frac{\partial \phi}{\partial \Delta M} \frac{\partial^2 \Delta M}{\partial \pi_1^2} \right] < 0 \\ f_{\pi_2}^1 &= R * \left[\frac{\partial^2 \phi}{\partial \Delta M^2} \frac{\partial \Delta M}{\partial \pi_1} \frac{\partial \Delta M}{\partial \pi_2} \right] < 0 \\ f_{\pi_1}^2 &= R * \left[\frac{\partial^2 \phi}{\partial \Delta M^2} \frac{\partial \Delta M}{\partial \pi_2} \frac{\partial \Delta M}{\partial \pi_1} \right] < 0 \\ f_{\pi_2}^2 &= R * \left[\frac{\partial^2 \phi}{\partial \Delta M^2} \frac{\partial \Delta M}{\partial \pi_2} + \frac{\partial \phi}{\partial \Delta M} \frac{\partial^2 \Delta M}{\partial \pi_2^2} \right] < 0 \end{split}$$

These inequalities follow from the assumptions outlined in Section 2. It can be shown by simply differentiating that, based on the assumptions in Section 2, $\frac{\partial^2 \Delta M}{\partial \pi_i^2} < 0$ for all values of π_1 and π_2 for both i=1 and 2. Furthermore, for politicians expecting to win the next election (i.e., a sufficiently large ψ such that Marg > 0), the assumptions of Section 2 guarantee that $\frac{\partial^2 \phi}{\partial \Delta M^2} < 0$ for all values of π_1 and π_2 .

Thus, the determinant of the first principal minor of A, $f_{\pi_1}^1$, is less than zero. Furthermore, the determinant of A can be decomposed as:

$$Det(A) = f_{\pi_1}^1 f_{\pi_2}^2 - f_{\pi_2}^1 f_{\pi_1}^2 = \left[\frac{\partial^2 \phi}{\partial \Delta M^2}\right]^2 \left[\frac{\partial \Delta M}{\partial \pi_1} \frac{\partial \Delta M}{\partial \pi_2}\right] \left[1 - \frac{\partial \Delta M}{\partial \pi_1} \frac{\partial \Delta M}{\partial \pi_2}\right] + \Omega$$

Where Ω is a collection of positive terms for all values of π_1 and π_2 . Given the assumptions outlined in Section 2 guarantee all terms above are bounded for all values of π_1 and π_2 , the above determinant would be positive if $\frac{\partial \Delta M}{\partial \pi_i}$ was sufficiently small for all values of π_1 and π_2 for either i=1 or 2.

Calculating the derivative, it follows that:

$$\frac{\partial \Delta M}{\partial \pi_i} = \alpha_i * Total_i * f_\theta[-u(s_i \pi_i)] * u'(s_i \pi_i) * s_i$$

Given a sufficiently small α_i , the term approaches zero while all other terms above are bounded.

Thus, there exists a sufficiently small α_i and a sufficiently large ψ such that A is negative definite for all possible values of π_1 and π_2 . Thus, the π_1^* and π_2^* that satisfy the first order conditions are a global maximum.

In calculating the comparative statics in the second claim, it is useful to define the following matrices:

$$B = \begin{pmatrix} f_{\alpha_1}^1 & f_{\pi_2}^1 \\ f_{\alpha_1}^2 & f_{\pi_2}^2 \end{pmatrix}$$
$$C = \begin{pmatrix} f_{\pi_1}^1 & f_{\alpha_1}^1 \\ f_{\pi_1}^2 & f_{\alpha_1}^2 \end{pmatrix}$$

Applying the Implicit Function Theorem, the following comparative statics follow:

$$\frac{\partial \pi_1^*}{\partial \alpha_1} = -\frac{\det(B)}{\det(A)}$$
$$\frac{\partial \pi_2^*}{\partial \alpha_1} = -\frac{\det(C)}{\det(A)}$$

The remaining derivatives are calculated as follows:

$$\begin{aligned} f_{\alpha_1}^1 &= R * \frac{\partial \phi}{\partial \Delta M} \frac{\partial^2 \Delta M}{\partial \pi_1 \partial \alpha_1} > 0 \\ f_{\alpha_1}^2 &= 0 \end{aligned}$$

The signs follow from differentiation and the assumptions of Section 2. Given these relationships, it follows that Det(B) < 0, Det(C) > 0 for all possible values of π_1 and π_2 . Given that there exist a sufficiently small α_i and a sufficiently large ψ such that Det(A) > 0, then under those conditions $\frac{\partial \pi_i^*}{\partial \alpha_j} > 0$ and $\frac{\partial \pi_i^*}{\partial \alpha_j} < 0$.

References

Alam, Mohd S. (2010). "On Matching Census Tracts and Electoral Boundaries: The Bottom-up Aggregation Approach." *Economic and Political Weekly* 45 (34), 64-72.

Angrist, Joshua D., and William N. Evans (1998). "Children and Their Parents' Labor Supply: Evidence from Exogenous Variation in Family Size." *The American Economic Review* 88 (3), 450-477.

Bardhan, Pranab, Dilip Mookherjee, and Monica P. Torrado (2010). "Impact of Political Reservations in West Bengal Local Governments on Anti-Poverty Targeting." *Journal of Globalization and Development* 1(1), 1-36.

Bardhan, Pranab, and Dilip Mookherjee (2010). "Determinants of Redistributive Politics: an Empirical Analysis of Land Reforms in West Bengal, India." *The American Economic Review* 100, 1572-1600.

Bardhan, Pranab, and Dilip Mookherjee (2000). "Capture and Governance at Local and National Levels." *The American Economic Review* 90 (2), 135-139.

Besley, Timothy, Rohini Pande, Lupin Rahman, and Vijayendra Rao (2004). "The Politics of Public Good Provision: Evidence from Indian Local Governments." *Journal of European Economic Association Papers and Proceedings* 2, 416-426.

Block, Steven A., Lynnda Kiess, Patrick Webb, S. Kosen, Regina Moench-Pfanner, Martin W. Bloem, C. Peter Timmer (2004). "Macro Shocks and Micro Outcomes: Child Nutrition During Indonesia's Crisis." *Economics and Human Biology* 2(1), 21-44.

Brinkman, Henk-Jan., Saskia de Pee, Issa Sanogo, Ludovic Subran, and Martin Bloem (2009). "High Food Prices and the Global Financial Crisis Have Reduced Access to Nutritious Food and Worsened Nutritional Status and Health." *Journal of Nutrition*, 140(1), 153-161.

Chandra, Kanchan. (2000). "The Transformation of Ethnic Politics in India: the Decline of Congress and the Rise of the Bahujan Samaj Party in Hoshiarpur." *The Journal of Asian Studies* 59 (1), 26-61.

Chattopadhyay Raghabendra, and Esther Duflo(2004). "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India," *Econometrica* 72, 1409-1443.

Chhibber, Pradeep, and Irfan Nooruddin (2004). "Do Party Systems Matter? The Number of Parties and Government Performance in Indian States." *Comparative Political Studies* 37, 152-187.

Chin, Aimee, and Nishith Prakash (2011). "The Redistributive Effects of Political Reservation for Minorities: Evidence from India." *Journal of Development Economics* 96, 265-277.

Clots-Figueras, Irma (2012). "Are Female Leaders Good For Education? Evidence from India." *American Economic Journal: Applied Economics* 4(1), 212-244.

Cole, Shawn (2009). "Fixing Market Failures or Fixing Elections? Elections, Banks, and Agricultural Lending in India." *American Economic Journals: Applied Economics* 1 (1), 219-250.

Deaton, Angus (2003). "Adjusted Indian Poverty Estimates for 1999-2000." *Economic and Political Weekly* 38 (4), 322-326.

DellaVigna, Stefano, and Eliana La Ferrara (2010). "Detecting Illegal Arms Trade." American Economic Journal: Economic Policy 2(4), 26-57.

Deshpande, Ashwini (2000). "Does Caste Still Define Disparity? A Look at Inequality in Kerala, India." *The American Economic Review* 90 (2), 322-325.

Dixit, Avinash, and John Londregan (1998). "Ideology, Tactics, and Efficiency in Redistributive Politics." *The Quarterly Journal of Economics* 113(2), 497-529.

Drescher, Larissa, Silke Thiele, and Gert B. M. Mensink (2007). "A New Index to Measure Healthy Food Diversity Better Reflects a Healthy Diet than Traditional Measures." *Journal of Nutrition* 137, 647-651.

Duflo, Esther, Greg Fischer, and Raghabendra Chattopadhyay (2008). "Efficiency and Rent Seeking in Local Government: Evidence from a Randomized Policy Experiments in India." Technical Report, MIT.

Eggers, Andrew, and Jens Hainmueller (2009). "MP's for sale? Returns to Postwar British Politics." *American Political Science Review* 103 (4), 513-533.

Evans, Geoffrey, and Anthony Heath (1993). "A Tactical Error in the Analysis of Tactical Voting: A Response to Niemi, Whitten, and Franklin." *British Journal of Political Science* 23, 131-137.

Heath, Anthony, and Geoffrey Evans (1994). "Tactical Voting: Concepts, Measurements and Findings." British Journal of Political Science 24, 557-561.

Gerber, Elisabeth R., and Daniel Hopkins (2010). "When Mayors Matter: Estimating the Impact of Mayoral Partianship on City Policy." *American Journal of Political Science* 55(2), 326-339.

Heath, Oliver (1999). "Anatomy of BJP's Rise to Power: Social, Regional and Political Expansion in 1990s." *Economic and Political Weekly* 34 (34), 2511-2517.

Hsieh, Chang-Tai, Edward Miguel, Daniel Ortega, and Francisco Rodriguez (2011). "The Price of Political Opposition: Evidence from Venezuela's Maisanta." *American Economic Journal: Applied Economics* 3, 196-214.

Hsieh, Chang-Tai, and Enrico Moretti (2006). "Did Iraq Cheat the United Nations? Underpricing, Bribes, and the Oil for Food Program." *The Quarterly Journal of Economics* 121 (4), 1211-1248.

Kartik, Navin, and R. Preston McAfee (2007). "Signaling Character in Electoral Competition." *The American Economic Review* 97(3), 852-870.

Keefer, Philip, and Stuti Khemani (2009). "When Do Legislators Pass on Pork? The Role of Political Parties in Determining Legislator Effort." *American Political Science Review* 103 (1), 99-112.

Kohli, Atul (1998). "Enduring Another Election." Journal of Democracy 9 (3), 7-20.

Lee, David (2008). "Randomized Experiments from Non-random Selection in U.S. House Elections." *Journal of Econometrics* 142, 675-697.

Lee, David, Enrico Moretti, and Matthew Butler (2004). "Do Voters Affect or Elect Policies? Evidence from the U.S. House." *The Quarterly Journal of Economics* 119 (3), 807-859.

Manacorda, Marco, Edward Miguel, and Andrea Vigorito (2011). "Government Transfers and Political Support." *American Economic Journal: Applied Economics* 3, 1-28.

Mehta, Aasha Kapur, and Amita Shah (2003). "Chronic Poverty in India: Incidence, Causes, and Policies." *World Development* 31 (3), 491-511.

Mitra, Anirban (2011). "Do the Poor Gain from Mandated Political Representation? Theory and Evidence from India." Technical Report, NYU.

Muller, Eitan, and Mark A. Satterthwaite (1977). "The Equivalence of Strong Positive Association and Strategy-Proofness." *Journal of Economic Theory* 14, 412-418.

Munshi, Kaivan, and Mark Rosenzweig (2010). "Networks, Commitment, and Competence: Caste in Indian Local Politics." Technical Report, Brown University.

Myatt, David (2007). "On the Theory of Strategic Voting." Review of Economic Studies 74, 255-281.

Niemi, Richard, Guy Whitten, and Mark Franklin (1992). "Constituency Characteristics, Individual Characteristics and Tactical Voting in the 1987 British General Election." *British Journal of Political Science* 22, 229-240.

Niemi, Richard, Guy Whitten, and Mark Franklin (1993). "People Who Live in Glass Houses: a Response to Evans and Heath's Critique of our Note on Tactical Voting." *British Journal of Political Science* 23, 549-563.

Pande, Rohini (2003). "Can Mandated Political Representation Increase Policy Influence for Disadvantaged Minorities? Theory and Evidence from India." *American Economic Review* 93(4), 1132-1151.

Reddy, Amulya K. N., and Gladys D. Sumithra (1997). "Karnataka's Power Sector- Some Revelations," *Economic and Political Weekly* 33, 1825-1834.

Rehavi, M. Marit (2008). "Sex and Politics: Do Female Legislators Affect State Spending? Technical Report, University of British Columbia.

Revankar, Ratna G. (1971). The Indian Constitution: A Case Study of Backward Classes. New Jersey: Associated University Presses.

Robinson, James, and Thierry Verdier (2002). "The Political Economy of Clientelism." Centre for Economic Policy Research (CEPR) Discussion Paper 3205.

Seshia, Shaila (1998). "Divide and Rule in Indian Party Politics: the Rise of the Bharatiya Janata Party," Asian Survey 38(11), 1036-1050.

Sinha, Aseema (2005). <u>The Regional Roots of Developmental Politics in India: A Divided Leviathan</u>. (Bloomington: Indiana University Press).

Sthanumoorthy, R., and Leena Mary Eapen (2004). "Economic Issues in Elections: Recent Trends." *Economic and Political Weekly* 39: 5404-5411.

Subramanian, S.V., Shailen Nandy, Michelle Irving, Dave Gordon, Helen Lambert, and George Davey Smith (2006). "The Mortality Divide in India: the Differential Contributions of Gender, Caste, and Standard of Living Across the Life Course." *American Journal of Public Health* 96 (5), 818-825.

Suri, K.C. (2004). "Telugu Desam Party: Rise and Prospects for the Future," *Economic and Political Weekly* 39(14), 1481-1490.

Tandon, Sharad, and Maurice Landes (2011). "The Sensitivity of Food Security in India to Alternate Estimation Strategies." *Economic and Political Weekly* 46 (22), 92-99.

Uppal, Yogesh (2009). "The Disadvantaged Incumbents: Estimating Incumbency Effects in Indian State Legislatures." *Public Choice* 138 (1), 9-27.

Vyasulu, Vinod (2004). "Transformation in Governance since the 1990's: Some Reflections," *Economic and Political Weekly* 39, 2377-2385.

Yadav, Yogendra (2004). "The Elusive Mandate of 2004," *Economic and Political Weekly* 39, 5383-5398.

	Monthly Household	l Expend	liture by Social Grou	p:					
	54'th Round NSSO Consumer Expenditure Survey								
	Scheduled Castes	Obs.	Scheduled Tribes	Obs.	Other Households	Obs.			
All Households	849.45 (49.6)	1121	846.9 (30.6)	2379	1094.7 (36.4)	8562			
Share of Close Elections Won by BJP=1	812.5 (97.1)	292	828.0 (23.0)	629	1049.5 (65.5)	6314			
Share of Close Elections Won by BJP<1	862.5 (56.0)	829	853.6 (41.1)	1750	(03.3) 1110.8 (42.9)	8562			
Difference	-49.9 (109.2)	-	-25.6 (46.6)	-	-61.3 (76.4)	-			
	Scheduled Castes	56'th Ro Obs.	ound NSSO Consume Scheduled Tribes	er Expend Obs.	liture Survey Other Households	Obs.			
All Households	1574.7	<u> </u>	1702.6	5893	2156.2	30,005			
Share of Close Elections Won by BJP=1	(97.4) 1387.8 (83.2)	966	(73.6) 1636.7 (23.0)	3325	(78.3) 2115.4 (100.6)	14,259			
Share of Close Elections Won by BJP<1	1814.5 (103.4)	753	(23.0) 1788.0 (41.1)	2568	2193.1 (115.4)	15,746			
Difference	-426.7 ^{***} (130.9)	-	-151.3 (150.1)	-	-77.7 (151.0)	-			
	Scheduled Castes	61'st Ro Obs.	ound NSSO Consume Scheduled Tribes	er Expend Obs.	liture Survey Other Households	Obs.			
All Households	 1868.9 (134.5)	4222	 2028.7 (80.9)	7899	 2497.8 (106.4)	32,965			
Share of Close Elections Won by BJP=1	1652.5 (113.0)	1722	2000.1 (142.4)	3734	2471.9 (219.7)	14,568			
Share of Close Elections Won by BJP<1	2017.9 (186.9)	2500	2054.3 (97.3)	4165	2518.5 (87.3)	18,377			
Difference	-365.5 [*] (214)	-	-54.2 (169.4)	-	-46.6 (232.4)	-			

Table 1: Monthly Household Expenditure by Social Group

Notes: This table presents summary statistics for household expenditure based on social group status, and further partitions households by the success of the BJP in close elections. In particular, households are partitioned into those residing in regions where the BJP wins all close elections, and regions where the BJP loses at least one close election. Standard errors clustered by region are reported in parentheses. All values are in rupees. The households residing in regions where the BJP is involved in a close election (elections determined by less than three percent of the vote share). These expenditure values include expenditure on all items that report a 30-day recall period on all 3 NSSO surveys-this excludes clothing, institutional medical expenses, education, and durable goods. All social groupings are those used by the NSSO, and are the official definitions used by the Indian government. These summary statistics are not weighted based on sampling design, which oversamples affluent rural and urban households. However, the consumption differences persist when summary statistics are properly weighted.

Variable	Sample Mean	Standard Dev	95 percent Confidence Interval for Sample Mean	Ave. Number of Close Elections	Max Number of Close Elections	Obs
	(1)	(2)	(3)	(4)	(5)	
Share of Close Elections Won by the BJP- 3 percent of Vote Share	.546 (.042)	.442	(.463,.629)	1.50	7	112
Share of Close Elections Won by the BJP- 2.5 percent of Vote Share	.547 (.044)	.455	(.459,.634)	1.38	7	106
Share of Close Elections Won by the BJP- 2 percent of Vote Share	.574 (.049)	.453	(.477,.670)	1.33	6	87
Total Share of Seats Won by the BJP	.359 (.021)	.403	(.318,.400)	-	-	372

Table 2: Close Election Outcomes

Notes:

This table reports the success of the BJP in both all election outcomes in each region, as well as the BJP's success in close elections in each region. Column (1) presents the sample mean of BJP success in either close or all elections, and column (2) reports the standard deviation. Column (3) presents the 95 percent confidence interval for the estimate of the sample mean, where standard errors have been clustered by region. Column (4) presents the average number of close elections for each region in which there was at least one close election. Column (5) presents the maximum number of close elections in any region. Each row uses a slightly different definition of a close election. The top row defines any election as close if it is determined by less than 3 percent of the vote share, and the rows below respectively use 2.5 percent and 2 percent.

2.

1.

	Dependent Variable:				
	Share o	of Close Elections Won by t	Share of All Elections Won by the BJP		
	Cut-off for Close Elections = 3 percent	Cut-off for Close Elections = 2.5 percent	Cut-off for Close Elections = 2 percent	Entire Sample	Regions in which the BJP was involved in a close election -3 percent cut-of
	(1)	(2)	(3)	(4)	(5)
Share of Seats Won by INC in Last Election	055 (.456)	.136 (.442)	.258 (.440)	.248 ^{***} (.068)	.279 (.189)
Share of Seats Won by BJP in Last Election	319 (.523)	192 (.329)	104 (.347)	.056 (.089)	045 (.186)
Share of Seats Clearly Won by INC (>20 percent of vote share)	-1.68 (1.62)	-1.47 (1.64)	821 (1.93)	261 ^{**} (.110)	-1.69 ^{**} (.658)
Share of Seats Clearly Won by BJP (>20 percent of vote share)	.675 (1.01)	.540 (.957)	.895 (1.32)	.360 ^{***} (.096)	1.30 ^{**} (.617)
Share of Seats that are Close	387 (.334)	233 (.383)	264 (.413)	064 (.056)	400 ^{**} (.180)
Observations	112	106	87	372	112
P-value of a test all coefficients jointly equal zero	.3690	.6905	.6964	.0000***	.0005***

Notes:

1.

2.

3.

4.

This table estimates the correlation between the share of close elections- those determined by less than 3 percent, 2.5 percent, and 2 percent of the vote share- won by the BJP in a region and other regional election outcomes. In columns (1) through (3), only regions in which there is a close election are included. Column (4) repeats the estimation for the success of the BJP in all elections, and includes all regions in each of the three elections. Column (5) estimates the same specification, but only includes the same specification, but only includes the same

observations used in column (1) - regions where there is at least one election involving the BJP determined by less than 3 percent of the vote share.

The regions used are an aggregation of districts and parliamentary constituencies until there is a direct link between the two boundaries. Elections between 1998 and 2004 are used in the estimation. All specifications include regional fixed effects and time dummies, and standard errors are clustered by region.

*** denotes statistical significance at the 1 percent level, ** denotes statistical significance at the 5 percent level, and * denotes statistical significance at the 10 percent level.

	Dependent Variable: log(Monthly Household Expenditure)						
	Baseline Specification		cation	Addition of an OBC indicator	SC/ST Exp	hip between benditure and BJP Success	
	(1)	(2)	(3)	(4)	(5)	(6)	
SC/ST Indicator * Share of Close Elections Won by the BJP	088 [*] (.049)	104 ^{***} (.029)	-	-	-	-	
SC Indicator * Share of Close Elections Won by the BJP	-	-	187 ^{***} (.060)	233 ^{***} (.069)	-	-	
ST Indicator * Share of Close Elections Won by the BJP	-	-	073 ^{***} (.019)	111 ^{****} (.028)	-	-	
OBC Indicator* Share of Close Elections Won by the BJP	-	-	-	082 ^{***} (.027)	-	-	
Share of Close Elections Won by the BJP	.094 (.139)	.029 (.036)	.030 (.019)	.065 [*] (.035)	-	-	
SC/ST Indicator * Share of Total Elections Won by the BJP	-	-	-	-	066 (.042)	292 ^{**} (.124)	
Share of Total Elections Won by the BJP	-	-	-	-	.043 (.072)	037 (.206)	
SC/ST Indicator	198 ^{***} (.041)	124 ^{***} (.024)	-	-	161 ^{***} (.027)	089 [*] (.046)	
P-value of a test of equality of coefficients on higher order terms	-	-	.029**	.007***	-	-	
P-value of a test of all higher order terms jointly equaling zero	-	-	.0009***	.002****	-	-	
Regional Fixed Effects, Time Dummies, and Controls	N	Y	Y	Y	Y	Y	
IV	N	N	N	N	N	Y	
Observations	94,765	94,765	94,765	94,765	94,765	94,765	

Table 4: The Relationship between BJP Success in Close Elections and Consumption ofHouseholds Belonging to Scheduled Castes and Tribes

- 1. This table estimates both the relationship between the success of the BJP in close elections and the consumption of households belonging to SC/ST's (columns 1-3), the relationship between consumption of households belonging to SC/ST/OBC's and the success of the BJP in close elections (column 4), and the relationship between the success of the BJP in all elections and the consumption of households belonging to SC/ST's (columns 5-6). The top row of the table gives an estimate of how BJP success in close elections affects consumption of households belonging to SC/ST's. Close elections are defined as all elections determined by less than 3 percent of the total vote share. Each household in regions involved in a close election constitutes an observation, and during the entire time period there are 94,765 such households.
- 2. Column (1) estimates a sparse baseline specification including only lower order terms. All other specifications include lower order terms, time dummies, and regional fixed effects and control variables- the share of seats won by the INC in the previous election, the share of seats won by the BJP in the previous election, the share of seats won clearly by the INC, the share of seats won clearly by the BJP, the share of total elections that are close, an indicator equaling one if a household resides in a rural area, the number of household members, an indicator equaling one if the household owns land, and ten dummies equal to one if the head of the household is employed in the 1-digit NIC industry.
- 3. In specifications where there is more than one higher order term, the table reports p-values of a hypothesis test that the higher order terms are equal, as well as p-values from a hypothesis test that all higher order terms are jointly equal to zero.
- 4. *** denotes statistical significance at the 1 percent level, ** denotes statistical significance at the 5 percent level, and * denotes statistical significance at the 10 percent level. Standard errors clustered by region are reported in parentheses.

Table 5: Robustness Checks

	Dependent Variable: log(Monthly Household Expenditure)								
		tive Cut- ints for lections	Restricts Success of BJP to Close Elections in which INC and BJP Finish Either First or Second	Sample Restricted to 1998 Election	Sample Restricted to 1999 Election	Sample Restricted to 2004 Election	Dependent Variable is the Monthly Per Capita Expenditure Calculated by NSSO	Excludes Regions with Concurrent State Elections	Restricts Sample to a Direct Match Between PC and District
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SC/ST Indicator * Share of Close Elections Won-2.5%	083 ^{***} (.025)	-	-	-	-	-	-	-	-
SC/ST Indicator * Share of Close Elections Won-2%	-	076 ^{**} (.034)	-	-	-	-	-	-	-
SC/ST Indicator * Share of Close Elections Won by the BJP involving the INC	-	-	088 ^{**} (.035)	-	-	-	-	-	-
SC/ST Indicator * Share of Close Elections Won-3%	-	-	-	032 (.053)	107 ^{**} (045)	104 ^{***} (.035)	117 ^{***} (.038)	106 ^{***} (.031)	109 [*] (.055)
Observations	61,514	47,497	59,498	12,062	37,617	45,086	94,765	67,966	1919

- 1. This table estimates a number of robustness checks of the baseline results analyzing the relationship between the success of the BJP in close elections and the consumption of households belonging to SC/ST's. Columns (1) and (2) use margins of victory of 2.5 and 2 percent of the vote share to identify election as close; column (3) restricts the analysis to BJP success in close elections in which either the BJP or INC finishes first or second, and includes only households in regions where the two parties were involved in a close election; columns (4)-(6) estimate the baseline specification for each time period separately; column (7) estimates a specification using the total household per capita expenditure as calculated by the NSSO as the dependent variable; column (8) excludes regions having concurrent state elections; and column (9) restricts the sample to households in regions in which there is only one Parliamentary Constituency in the district.
- 2. All specifications include regional fixed effects and time dummies. Additionally all specifications include lower order terms and control variables- the share of seats won by the INC in the previous election, the share of seats won by the BJP in the previous election, the share of seats won clearly by the INC, the share of seats won clearly by the BJP, the share of total elections that are close, an indicator equaling one if a household resides in a rural area, the number of household members, an indicator equaling one if the household owns land, and ten dummies equal to one if the head of the household is employed in the 1-digit NIC industry.
- 3. *** denotes statistical significance at the 1 percent level, ** denotes statistical significance at the 5 percent level, and * denotes statistical significance at the 10 percent level. Standard errors clustered by region are reported in parentheses.

Table 6: The Composition of Consumption Changes in Response to Election Outcomes

	Dependent Variable: log(Expenditure on Groups of Items)					
	Total Food Expenditure	Non-Food Expenditure	Expenditure on Animal Protein, Fruits, and Vegetables			
	(1)	(2)	(3)			
SC/ST Indicator * Share of Close Elections Won by the BJP	097 ^{***} (.029)	145 ^{***} (.036)	133 ^{**} (.061)			
Observations	94,765	94,765	94,765			

- This table estimates the relationship between the success of the BJP in close elections and the consumption of households belonging to SC/ST's. Columns (1)-(3) estimate the baseline specification, but break up expenditure by subsets of total expenditure. Column (1) uses total food expenditure; and column (2) uses all non-food expenditure; and column (3) uses expenditure on food items that help diversify household diets away from cereals.
- All households that did not spend money on particular subgroups have been assigned an expenditure of one rupee (i.e., log(expenditure)=0). Most groupings had a very small number of households spending zero on any subgroup. All results survive when estimating Poisson regressions.
- 3. All specifications include regional fixed effects and time dummies. Additionally all specifications include lower order terms and control variables- the share of seats won by the INC in the previous election, the share of seats won by the BJP in the previous election, the share of seats won clearly by the INC, the share of seats won clearly by the BJP, the share of total elections that are close, an indicator equaling one if a household resides in a rural area, the number of household members, an indicator equaling one if the household owns land, and ten dummies equal to one if the head of the household is employed in the 1-digit NIC industry.
- 4. *** denotes statistical significance at the 1 percent level, ** denotes statistical significance at the 5 percent level, and * denotes statistical significance at the 10 percent level. Standard errors clustered by region are reported in parentheses.

	Dependent Variable: log(Monthly Household Expenditure)			
	(1)	(2)	(3)	(4)
Poor SC/ST Indicator * Share of Close Elections Won by the BJP	044 ^{**} (.022)	-	-	-
Non-Poor SC/ST Indicator * Share of Close Elections Won by the BJP	089 ^{***} (.022)	-	-	-
Rural SC/ST Indicator * Share of Close Elections Won by the BJP	-	114 ^{***} (.035)	-	-
Urban SC/ST Indicator * Share of Close Elections Won by the BJP	-	095 ^{***} (.031)	-	-
SC/ST in Non-BJP Controlled State Indicator * Share of Close Elections Won by the BJP	-	-	104 ^{***} (.028)	-
SC/ST in BJP-controlled State Indicator * Share of Close Elections Won by the BJP	-	-	109 ^{**} (.044)	-
SC/ST in Regions with Seats Reserved for SC/ST Politicians Indicator * Share of Close Elections Won by the BJP	-	-	-	067 [*] (.034)
SC/ST in Regions with No Seats Reserved for SC/ST Politicians Indicator * Share of Close Elections Won by the BJP	-	-	-	109 ^{***} (.030)
P-value of a test of equality of coefficients on higher order terms	.165	.517	.904	.122
P-value of a test of all higher order terms jointly equaling zero	.0001***	.003***	.002***	.002***
Observations	94,765	94,765	94,765	94,765

Table 7: Variation in the Response of Consumption to Election Outcomes

Notes:

- This table analyzes heterogeneity in the baseline relationship between the success of the BJP in close elections and the consumption of households belonging to SC/ST's. Column (1) separates the effects by SC/ST households spending above the average SC/ST household expenditure, and households spending below the average; column (2) separates the effects by rural and urban SC/ST households; column (3) separates the effects by SC/ST households that reside in states controlled by the BJP and by those that reside in states controlled by other parties; and column (4) separates the effects into SC/ST households that reside in regions with at least one seat reserved for either an SC or ST politician and those that reside in regions with no seats reserved for an SC or ST politician. The table also reports p-values of a hypothesis test that the higher order terms are equal, as well as p-values from a hypothesis test that all higher order terms are jointly equal to zero.
- 2. All specifications include regional fixed effects and time dummies. Additionally all specifications include lower order terms and control variables- the share of seats won by the INC in the previous election, the share of seats won by the BJP in the previous election, the share of seats won clearly by the INC, the share of seats won clearly by the BJP, the share of total elections that are close, an indicator equaling one if a household resides in a rural area, the number of household members, an indicator equaling one if the household owns land, and ten dummies equal to one if the head of the household is employed in the 1-digit NIC industry.
- 3. *** denotes statistical significance at the 1 percent level, ** denotes statistical significance at the 5 percent level, and * denotes statistical significance at the 10 percent level. Standard errors clustered by region are reported in parentheses.

Table 8: The Relationship between Household Expenditure and Future Election Outcomes

	Dependent Variable:								
	log(Expenditure)		log(NSSO- Calculated log(Expenditure) Expenditure)		log(Non-food Expenditure)	log(Food Diversity Expenditure)			
	(1)	(2)	(3)	(4)	(5)	(6)			
SC Indicator * Share of Close Elections Won by the BJP	-	100 ^{***} (.031)	121 ^{***} (.034)	100 ^{***} (.032)	101 ^{**} (.039)	158 ^{**} (.061)			
SC Indicator * Future Share of Close Elections Won by the BJP	009 (.044)	.009 (.043)	025 (.042)	.016 (.044)	005 (.052)	.013 (.055)			
Future Share of Close Elections Won by the BJP	004 (.048)	.019 (.035)	.055 (.041)	.024 (.031)	.015 (.066)	011 (.046)			
Observations	49,679	49,679	49,679	49,679	49,679	49,679			

- This table estimates the relationship between BJP success in future elections and consumption of households belonging to SC/ST's. All elections are determined close if the election was determined by less than 3 percent of the vote share. If the identification strategy is valid and the outcomes of close elections are exogenous to consumption decisions, then we would expect no correlation between consumption and future election outcomes. The table also estimates specifications which include the BJP's success in current close election as well as the BJP's success in future close elections.
- 2. These specifications only include observations from 1998 and 1999; details of the 2009 election have not yet been made publicly available and thus there are no future election results for observations from 2004.
- 3. All specifications include regional fixed effects and time dummies. Additionally all specifications include lower order terms and control variables- the share of seats won by the INC in the previous election, the share of seats won by the BJP in the previous election, the share of seats won clearly by the INC, the share of seats won clearly by the BJP, the share of total elections that are close, an indicator equaling one if a household resides in a rural area, the number of household members, an indicator equaling one if the household owns land, and ten dummies equal to one if the head of the household is employed in the 1-digit NIC industry.
- 4. *** denotes statistical significance at the 1 percent level, ** denotes statistical significance at the 5 percent level, and * denotes statistical significance at the 10 percent level. Standard errors clustered by region are reported in parentheses.