

Economic Policies vs. Identity Politics: The Rise of a Right- wing Nationalist Party in India

Pushkar Maitra, Sandip Mitra,
Dilip Mookherjee and Sujata Visaria

HKUST CEP Working Paper No. 2023-01

May, 2023

HKUST CEP working papers are distributed for discussion and comment purposes. The views expressed in these papers are those of the authors and do not necessarily represent the views of HKUST CEP.

More HKUST CEP working papers are available at:
<http://cep.hkust.edu.hk/WP>

Economic Policies vs. Identity Politics: The Rise of a Right-wing Nationalist Party in India

Pushkar Maitra, Sandip Mitra, Dilip Mookherjee and Sujata Visaria

HKUST CEP Working Paper No. 2023-01

May, 2023

Abstract

As in many other parts of the world, India has witnessed a surge in the popularity of the Bharatiya Janata Party (BJP), a right wing nationalist party. This paper examines the respective roles of economic policy and “identity politics” for the sharp rise in support for BJP in a region where it had a negligible vote share until 2014. Using household level panel data from 3500 rural households in West Bengal, we examine the effect of different welfare benefits delivered by state and national governments, on support for the regional incumbent (Trinamool Congress (TMC)) and the BJP after 2014. We find that receipt of these benefits was associated with increased support for the respective party controlling either level of government. However, changes in scale, effectiveness, composition or targeting of these benefits cannot account for the large observed increase in the relative popularity of the BJP. We also find no evidence of any association with post-2014 economic distress of the household, or political violence attributed to TMC party activists in the 2018 local government elections. On the other hand, religion, tribal and immigrant status of households are strong and robust predictors of changes in political support, irrespective of controls for welfare benefits and household incomes. Hence the results indicate that the BJP’s rise in West Bengal reflected the growing importance of identity politics per se, rather than economic policies.

Authors' contact information

Pushkar Maitra

Department of Economics, Monash University, Clayton Campus, VIC 3800, Australia

Email: pushkar.maitra@monash.edu.au

Sandip Mitra

Sampling and Official Statistics Unit, Indian Statistical Institute, 203 B.T. Road, Kolkata 700108, India

Email: Sandip@isical.ac.in

Dilip Mookherjee

Department of Economics, Boston University, Boston, MA 02215, USA

Email: dilipm@bu.edu

Sujata Visaria

Department of Economics, Lee Shau Kee Business Building, Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong

Email: svisaria@ust.hk

Economic Policies vs. Identity Politics: The Rise of a Right-wing Nationalist Party in India *

Pushkar Maitra[†] Sandip Mitra[‡]
Dilip Mookherjee[§] Sujata Visaria[¶]

MAY 2023

Abstract

As in many other parts of the world, India has witnessed a surge in the popularity of the Bharatiya Janata Party (BJP), a right wing nationalist party. This paper examines the respective roles of economic policy and “identity politics” for the sharp rise in support for BJP in a region where it had a negligible vote share until 2014. Using household level panel data from 3500 rural households in West Bengal, we examine the effect of different welfare benefits delivered by state and national governments, on support for the regional incumbent (Trinamool Congress (TMC)) and the BJP after 2014. We find that receipt of these benefits was associated with increased support for the respective party controlling either level of government. However, changes in scale, effectiveness, composition or targeting of these benefits cannot account for the large observed increase in the relative popularity of the BJP. We also find no evidence of any association with post-2014 economic distress of the household, or political violence attributed to TMC party activists in the 2018 local government elections. On the other hand, religion, tribal and immigrant status of households are strong and robust predictors of changes in political support, irrespective of controls for welfare benefits and household incomes. Hence the results indicate that the BJP’s rise in West Bengal reflected the growing importance of identity politics *per se*, rather than economic policies.

Keywords: clientelism, identity politics, rightwing nationalism, West Bengal, federalism

JEL Classification Numbers: H31, H42, H75, P16.

*We thank Pranab Bardhan, Sascha Becker, Paul Raschky and seminar participants at Delhi School of Economics/IEG, Monash University, the Applied Microeconomics Workshop hosted at the University of Hong Kong, and participants at the workshop on Some Imperative Issues of Contemporary Indian Economy at Rishi Bankim Chandra College, West Bengal for comments and suggestions.

[†]Pushkar Maitra. Department of Economics, Monash University, Clayton Campus, VIC 3800. Australia. Pushkar.Maitra@monash.edu

[‡]Sandip Mitra. Sampling and Official Statistics Unit, Indian Statistical Institute, Kolkata, 700108, India. Sandip@isical.ac.in

[§]Dilip Mookherjee. Department of Economics, Boston University, Boston, MA 02215, USA. dilipm@bu.edu

[¶]Department of Economics, Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong. svisaria@ust.hk

1 Introduction

Across the world, right wing nationalism is on the rise. It has spread rapidly across high and middle income countries across the globe, including Austria, Brazil, France, Germany, Hungary, Italy, Netherlands, Russia, Turkey, UK and US where right-wing or extreme-right wing parties characterized by populist, nationalist platforms have gained the votes of large sections of poorer and less educated citizens. Both demand and supply side factors are argued to be relevant. Demand-side factors appear to have been driven by a combination of economic and cultural grievances (Golder, 2016, Muis and Immerzeel, 2017, Guriev and Papaioannou, 2022, Bardhan, 2022). Economic grievances include rising unemployment among the unskilled in an era of rising globalization and immigration. Cultural grievances arise from transition to a postmodern and increasingly multi-cultural society that threaten traditional values, combined with “social identity” concerns that generate homophobic, racist and anti-immigrant attitudes. Considerable empirical evidence is becoming available both of the role of economic (Alabrese et al., 2019, Autor et al., 2020, Oliveira, 2022) and cultural grievances conditioned by racial and historical factors (Kaplan and Mukand, 2014, Ochsner and Roesel, 2017, Enos, 2016). Political scientists and sociologists have also pointed to the role of supply-side factors such as electoral systems, ideological positions, organizational strengths, and the media (Golder (2016), Muis and Immerzeel (2017)). However, despite widespread speculation concerning the *relative* importance of economic issues vis-a-vis the conjunction of cultural grievances, social identity and supply side factors,¹ we are not aware of any empirical analyses of this question.

In the last decade right-wing nationalist parties have also become significantly more popular in India, giving rise to debates concerning the respective importance of economic policies and shifting identity politics centered around religion, caste and nationhood. In 2014, the nationalist Bharatiya Janata Party (BJP), under the leadership of Narendra Modi, attained an absolute majority in the lower house (Lok Sabha) of the Parliament of India for the first time in its 34-year old history.² In the 2019 parliamentary elections, the BJP’s vote share increased further, with large gains in states that had been previously dominated by regional parties. Some scholars of Indian politics argue that it is difficult to explain this as a rejection of regional incumbents by voters owing to economic distress. This is because since the BJP acquired control of the national government in 2014 it introduced policies that disproportionately hurt the poor and underprivileged.³ Despite

¹For instance an opinion article on the recent Turkish election by Bret Stephens in the New York Times (May 31, 2023) states: “...the importance of Erdogan’s Islamism as the secret of his success. It’s a rebuke to James Carville’s parochially American slogan, ‘It’s the economy, stupid’. Actually, no: It’s also God, tradition, values, identity, culture and the resentments that go with each. Only a denuded secular imagination fails to notice that there are things people care about more than their paychecks.”

²BJP was the leading member of the coalition that was in power during the period 1999–2004 (the Vajpayee government), but they won only 182 of the 543 seats in the Lok Sabha.

³These policy changes included reduced outlays for the national rural employment guarantee (NREGS) workfare program, demonetization and the implementation of the new value-added tax (Goods and Services Tax, or GST).

this, BJP’s vote share among these sections of the population actually grew. Accordingly, [Jaffrelot \(2019\)](#) and [Chhibber and Verma \(2019\)](#) emphasize the growing role of identity politics and supply-side factors, e.g. the BJP’s nationalist ethno-majoritarian ideology, strong political organization, Modi’s personal popularity and the party’s choice to field SC/ST candidates in order to appeal to them as a voting bloc.

An alternative viewpoint emphasizes the role of changes in welfare programs since 2014 ([Deshpande et al., 2019](#), [Wilkinson, 2020](#), [Joshi et al., 2022](#)). These authors argue that clientelistic welfare programs such as NREGS, the rural employment program administered by state and local governments’ shrank, and became less effective in generating votes for regional incumbents. At the same time, the new benefit programs that the BJP-led national government introduced relied less on local intermediaries for distribution, thereby reducing the scope for distortions in delivery and corruption as well as the capacity of local incumbents to claim credit. These programs include the new “zero-balance” bank accounts (*Jan Dhan Yojana*), construction of in-house toilets (*Swachhh Bharat Yojana*) and new methods of disbursing cooking gas or LPG subsidies (*Ujjwala Yojana*).⁴ These authors provide evidence that households receiving these benefits were more likely to switch their vote to the BJP. This effect could have been compounded further if some voters selectively blamed their state governments for economic distress caused, for example, by inflows of low-skilled immigrants, or insufficient government aid after adverse weather shocks.

These contrasting viewpoints gives rise to the question of the relative importance of economic policies and identity politics in accounting for the rise of the BJP. This constitutes the motivation of this paper. We rely on a longitudinal survey of 3500 household heads on political attitudes, welfare benefits received and economic well-being conducted in two districts (Hugli and West Medinipur) in West Bengal, a state in eastern India. Such a dataset enables us to disentangle the role of changes in different kinds of benefits received by the household and its economic circumstances, and markers of identity (religion, caste, tribal and immigrant status), while controlling for a large range of household characteristics (including assets owned, education and occupation).

West Bengal is a particularly interesting case study because of the dramatic shift from support for left-wing to right-wing parties that has taken place over a relatively short period. From 1977 until 2009, the state was dominated by an alliance of left-wing parties (Left Front), and the competition in each election cycle was mainly between the centrist Indian National Congress and its allies, and the Left Front. Through the 2000s, the state experienced increasing political competition between the Left Front and the All India Trinamool (Grass roots) Congress, TMC, a breakaway faction of the Indian National Congress. In the 2009 Lok Sabha elections the TMC won the majority of seats in the state; TMC then won the majority of seats in the state assembly elections in 2011 and 2016. Until the 2019 Lok Sabha elections, in West Bengal the BJP was considered

⁴See Table 2 for a list of the programs included in the set of central benefits.

to be a non-contender. The 2019 elections changed all that: in 2019, across the state the vote share of the BJP increased by 23% over its 2014 vote share.⁵ The Left-center parties that have dominated West Bengal politics since 1977 have systematically engaged in clientelistic distribution of *state benefits*.⁶ See, for example, Bardhan et al. (2015, 2021), Dey and Sen (2020), Shenoy and Zimmerman (2020), Mahadevan and Shenoy (2023). It is also a state bordering Bangladesh, with a significant proportion of Muslim households and immigrants. TMC, the principal regional incumbent party, has often been blamed for engaging in ‘appeasement’ of these groups, which may have generated a backlash among native Hindus.

The household surveys were conducted in the districts of Hugli and West Medinipur in which changes in vote share for different parties mirrored outcomes in the rest of the state. The first round was conducted over several months in 2013-14, shortly before the 2014 national parliamentary elections. The second round was analogously conducted over 2018-19, a few months before the 2019 national elections. In each round we asked questions about the household’s demographic characteristics, socio-economic status, landholding, cultivation of potatoes (the major cash crop in this area) and the benefits they had received from various government programs. In addition, we conducted a “straw poll”, where the respondent simulated casting a secret ballot for their preferred political party. This allows us to examine if households change the political party they support, and how the changes vary with the benefits received, their economic circumstances, and markers of social identity such as religion, caste, and immigrant status. To identify the causal role of benefits received, we address concerns of endogeneity of benefit receipt with the help of a “leave-out” shift-share instrument, where a household’s benefits are instrumented by time-invariant household characteristics interacted with per-household benefits received in other local government (*gram panchayat*) jurisdictions in the same district (Levitt and Snyder Jr, 1997, Bardhan et al., 2021).⁷

We use a probabilistic voting framework in which citizens’ support for a political party depends on both ideological (such as the party’s ideological platform, combined with organizational strength, advertising and media outreach), and utilitarian considerations (such as welfare benefits and perceptions of how their economic well-being are affected by policy choices). With retrospective voting, households’ future expectations of respective policies of competing parties is based on their recent observations and experiences. The role of changes in identity politics and supply-side factors is inferred from the effects of household characteristics such as religion, caste and immigrant status,

⁵In our surveys we find a 18% increase in the BJP vote share. See Figure 4.

⁶These include the National Rural Employment Guarantee Scheme (or NREGS), Below Poverty Line (or BPL card), Panchayat Toilet Building Programs, and Kanyashree a cash transfer program to households with teenage girls conditional on not dropping out of school and not getting married. See Table 2 for the list of programs. However, it should be noted that *state benefits* does not necessarily mean that the state government funded these programs; rather they were in charge of distributing the benefits, including identifying households that were to receive these benefits.

⁷These two papers show that the IV estimate is less biased compared to the OLS estimates, and that the former bias is negligible if the number of villages in each district is sufficiently large.

after controlling for benefits, changes in household income, household demographics, occupation, education and landownership.

Our main findings are as follows. First, we find no evidence of a reduction in the aggregate scale of state benefits during 2014–2018 compared to the 2010–2013 period. While certain programs such as NREGS shrank (as found by [Deshpande et al. \(2019\)](#) at the all-India level), there were other state benefit programs that expanded in West Bengal, ensuring that the proportion of households that received at least one state benefit did not fall. Second, we do not find evidence that state benefits (aggregating across different programs) became less effective in generating votes for the TMC. If anything, receipt of state benefits was associated with a statistically significant net 1–14 percent *increase* in the likelihood that the household head voted for the TMC. Analogous to [Deshpande et al. \(2019\)](#) the effectiveness of NREGS benefits alone as a generator of votes for the TMC declined after 2014, but this was accompanied by rising effectiveness of other state benefit programs. Third, we also find some evidence that households that received the new benefits introduced by the BJP-led central government switched to voting for the BJP in 2019. But this effect is only marginally statistically significant. It is quantitatively negligible, accounting for less than 2 percent of the increase in the BJP’s vote share observed for sample households. Moreover, the estimated effect is not robust to alternative specifications. Fourth, the combined effect of changes in scale of state and central benefits and their respective effectiveness in generating votes for either party, predicts a net *decline* in the BJP vote share between 2014 and 2019, and a rise in the TMC vote share. Hence the evidence does not support the claim that the rising vote share of the BJP can be explained by the changing structure or effectiveness of benefit programs.

These results turn out to be robust when we additionally incorporate changes in the composition of state and central benefits, by examining the different impacts of the three most important programs of either kind. They are also robust if we incorporate respective targeting patterns of state and central benefits. In particular, we find that the state programs were better targeted to the poor than the central benefits, and that the pro-poor targeting of state benefits became significantly more pronounced after 2014. Hence the evidence runs counter to claims that the central benefits were better targeted to poorer households than state benefits. Moreover, we find no evidence that clientelistic benefits were preferentially delivered to recent non-Hindu immigrants and disadvantaged socio-economic groups (Scheduled Castes (SC) or Scheduled Tribes (ST)). On the contrary, these groups were significantly less likely to receive state benefits, and this pattern became more even more pronounced after 2014. Hence the increased tendency for households belonging to the dominant group of native Hindu non-SC-STs to vote for the BJP cannot be rationalized by resentment generated by increased “appeasement” of minorities by the TMC.

We subsequently investigate whether voters experiencing rising economic distress in the form of declining household incomes since 2014 were more likely to switch to supporting the BJP. Our data includes household income from employment and from the cultivation of potatoes, the major cash

crop in the area. Controlling for the receipt of welfare benefits and household characteristics, we find that post-2014 changes in these income sources had no effect on the likelihood that a household voted for the BJP. We also find no evidence for the role of violence perpetrated by TMC party activists during the recently concluded 2018 village council (*panchayat*) elections. Since the violence intimidated opposition candidates from withdrawing from the *panchayat* elections, we examine whether the vote share of the BJP was higher in constituencies where the TMC candidate ran unopposed in the 2018 election. We find no such patterns in the data.

Turning finally to the role of changing identity politics, we examine how shifts in support for the BJP varied across household demographics and socio-economic status. The raw data shows the rise in BJP vote share was remarkably uniform (around 20%) across landowning status, SCs and Hindu upper or other backward castes (with a slightly lower increase among the landless (14%) and STs (18%)). It was substantially lower among non-Hindus (7%), and especially among recent non-Hindu immigrants (where the BJP vote share fell). The same patterns emerge when we control for other household characteristics, welfare benefits received and changes in household economic circumstances. It is striking to observe that despite experiencing greater discrimination in the distribution of state benefits since 2014 (compared either to central benefits or pre-2014 levels), minority groups such as non-Hindus and ST groups were significantly *less* likely to switch their votes from the TMC to the BJP.

In summary, the evidence indicates that the BJP's rise in West Bengal reflected the growing importance of identity politics *per se*, rather than voter responses to changes in income or receipt of government welfare benefits.⁸ Of course, data limitations prevent us from investigating all possible hypotheses for why voters may have reduced their support for the TMC. Claims we cannot investigate include perceptions of local corruption, or dissatisfaction with governance that is not reflected in the quality of government services or benefit distribution.

Also, since our empirical exercise uses data from only two districts of the state, our findings may not apply to other districts or Indian states. There are many distinctive aspects of West Bengal's politics and economy compared to other Indian states. Nevertheless our analysis is of interest for a number of different reasons. West Bengal is a state with a population of 90 million, comparable to many countries in the world such as the UK or France. So understanding factors underlying the rise of the BJP in this state is of interest for its own sake. Moreover, it may be premature to declare that our results would not extend to other Indian states. For instance, our analysis for West Bengal replicated the main results of [Deshpande et al. \(2019\)](#) at the all-India level: the scale and effectiveness of the NREGS program in generating votes for the regional incumbent declined, while new central benefits introduced after 2014 helped raise the BJP vote share. The main

⁸These results are consistent with the claims of [Choudhary et al. \(2020\)](#), who, use national level survey data to argue that in 2019 demographics and identity (caste and religion) were the key determinants of voting for BJP, in contrast to 2014 when it was able to strike the "issue-based electoral chord".

reason for the discrepancy between our respective interpretations of these findings is twofold: (a) our analysis included the scale and effectiveness of all other state programs which expanded and became more effective after 2014, in contrast to the NREGS program; and (b) we estimated the *combined* impact of all state and central benefits on the TMC and BJP vote share and found that the relative quantitative magnitudes of predicted changes in these vote shares were the opposite of what was actually observed. Hence whether or not our results would extend to the all-India level must await an extension of our research methodology, once suitable data for such an exercise becomes available.

The paper is organized as follows. Section 2 of the paper describes the institutional context, details of the data, and a range of descriptive facts relating to changes in voting patterns. Section 3 contains the main empirical results, while Section 4 concludes.

2 Context and Data

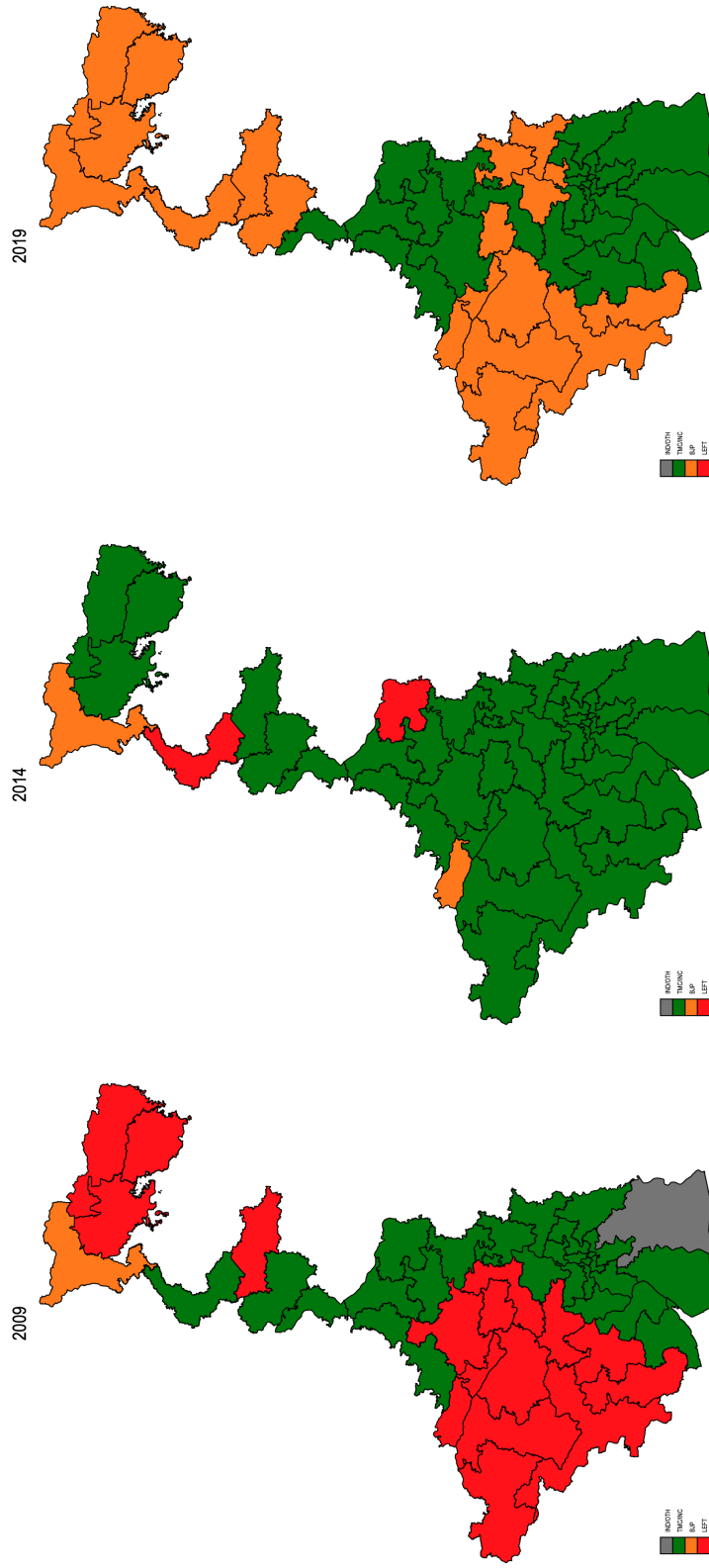
2.1 Background: West Bengal

During the period 1977–2011, West Bengal’s state legislature was dominated by the Left Front, a coalition of left leaning parties led by the Communist Party of India (Marxist), or the CPI(M). The Left Front secured an absolute majority in each successive election during this period, both for the state legislative assembly seats, and for the national parliamentary seats. After Mamata Banerjee, a veteran member of the major opposition party, the Indian National Congress, defected in 1997 to form the *Trinamool* (grass roots) Congress (TMC) party, the TMC became the primary opposition party in the state. It often fought elections in alliance with the Indian National Congress. The Bharatiya Janata Party (BJP) was a minor player throughout this 35-year period. During the 2009 national elections, it received only 6% of the vote share and won one of the 42 parliamentary seats in West Bengal. This increased to 17% vote share and two seats in 2014, and then a spectacular increase to over 40% vote share and 18 seats in the 2019 national elections, so that it became the second-most important political party in West Bengal. Although the TMC won the majority of the parliamentary seats in 2019, its vote share did not change much from 2014. On aggregate, it would appear that the BJP’s vote share increased at the expense of the Left Front, whose vote share sank from 30% in 2014 to below 10% in 2019.

In Figure 1, we can look across the different parliamentary constituencies in West Bengal, and see how the vote share of the three main electoral factions changed over the period 2009 to 2019. Comparing the maps for 2009 and 2019, it appears as if areas the Left Front was dominant in 2009 have now switched over to support the BJP.⁹ However, as will become evident when we use

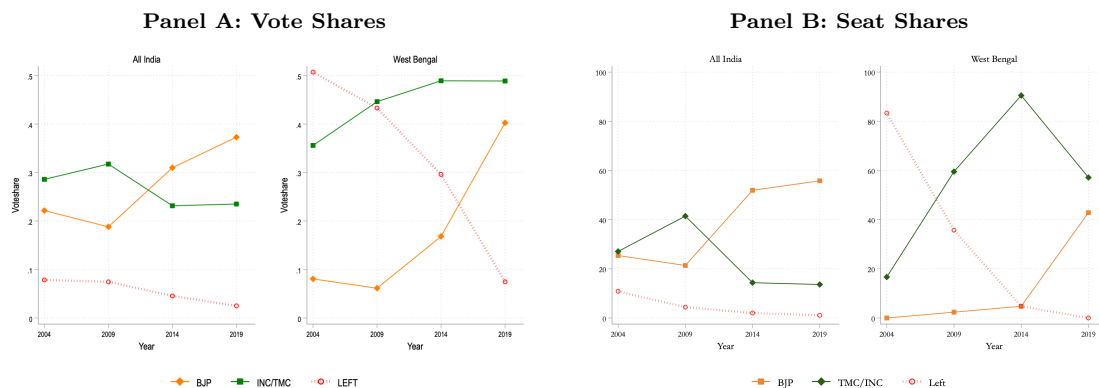
⁹A commonly heard term describing this change in the voting pattern in West Bengal is *Baam theke Ram* (from

Figure 1: West Bengal National Parliamentary Election Results: 2009–2019



Notes: Party winning each seat in Parliamentary elections in 2009, 2014 and 2019 presented.

Figure 2: Vote Shares and Seat Shares of Different Parties in Parliamentary Elections. All India and West Bengal. 2004–2019



Notes: Vote share of a particular party defined as a number of votes received by all candidates of the party in a particular election as a proportion of total number valid votes cast in the particular election. Seat share of a particular party is defined as the number of seats won by the party as a proportion of the total number of seats (543 for All India and 42 for West Bengal).

our longitudinal household data to examine vote-switching patterns, the reality is more nuanced.

Figure 2 shows that in 2019 the BJP registered an uptick in vote share across India as a whole, but that the increase was more dramatic in West Bengal. Until 2009 the BJP’s vote share in West Bengal was below 10%, whereas it was around 20% in the country as a whole. Between 2009 and 2014 it increased by about 10% both in West Bengal and overall, and then between 2014 and 2019 it increased by 23% in West and by 7% overall. The corresponding contrast between West Bengal and the country as a whole in the evolution of seat shares was even more drastic.

2.2 Data and Descriptive Statistics

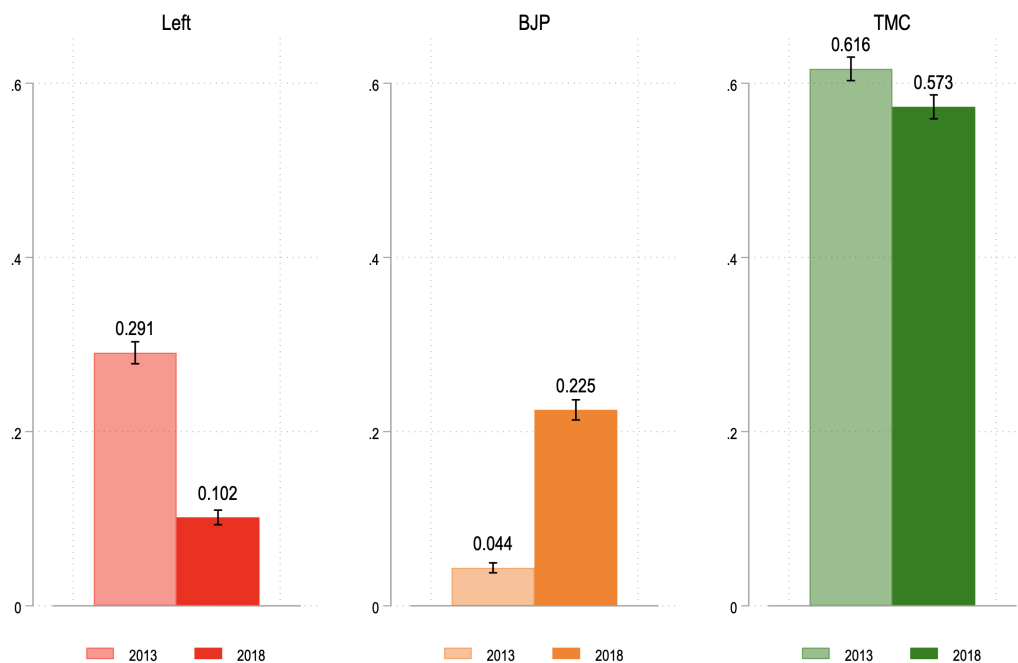
We use longitudinal survey data from a sample of 3500 households residing in 72 randomly selected villages in the potato-growing *talukas* (subdivisions) of the Hugli and West Medinpur districts of West Bengal.¹⁰ Panel A of Figure A1 shows the location of the two districts within the state and Panel B marks the locations of the villages.

We analyse data from two survey rounds, conducted in 2013 and 2018. We collected extensive data on the households’ demographic and socio-economic characteristics, transfers they received from the government and their engagement in civil society and political activities such as attending the

the Left to Ram, the Hindu God).

¹⁰Villages were required to be at a minimum of 8 kilometers apart from each other. The surveys were conducted for other unrelated projects: see Maitra et al. (2017), Mitra et al. (2018), Maitra et al. (2022b,a).

Figure 3: Vote Shares. Survey Data



Notes: Proportion of Households voting for Left, BJP and TMC in strawpoll conducted in 2013 and 2018 and 90% confidence interval presented.

village *gram sabha*, and political rallies. We also conducted a straw poll where respondents cast a simulated “secret ballot” for the political party they supported.¹¹ Note we had no attrition in our sample across the two rounds. Our analysis for this paper uses a longitudinal household-level dataset of 3507 households, with data from 2013 and 2018.

2.2.1 Vote shares

Figure 3 presents the vote shares of the Left Front, BJP and TMC elicited in our 2013 and 2018 surveys. The Left Front’s vote share in our sample dropped from 29% to 10%. This is matched by a large increase in the BJP’s vote share, from 4.4% to 22.5%, and a slight drop in the vote share

¹¹The households were given a paper ballot and assured that their votes would remain confidential. Above 97% of households consented to participate. They received the ballot paper and a locked box, privately selected their preferred political party and folded and placed the ballot in the locked box. They then returned the box to the interviewer. This approach has been widely used in this literature. Casey (2015), in Sierra Leone and Bardhan et al. (2021) in West Bengal, India used a similar process to elicit political preferences and the elicited vote share in their studies were significantly correlated with actual vote shares at the electoral constituency level in the subsequent election (0.73 and 0.57 respectively). The National Election Surveys that have been widely used to measure political preferences in India also use the same process.

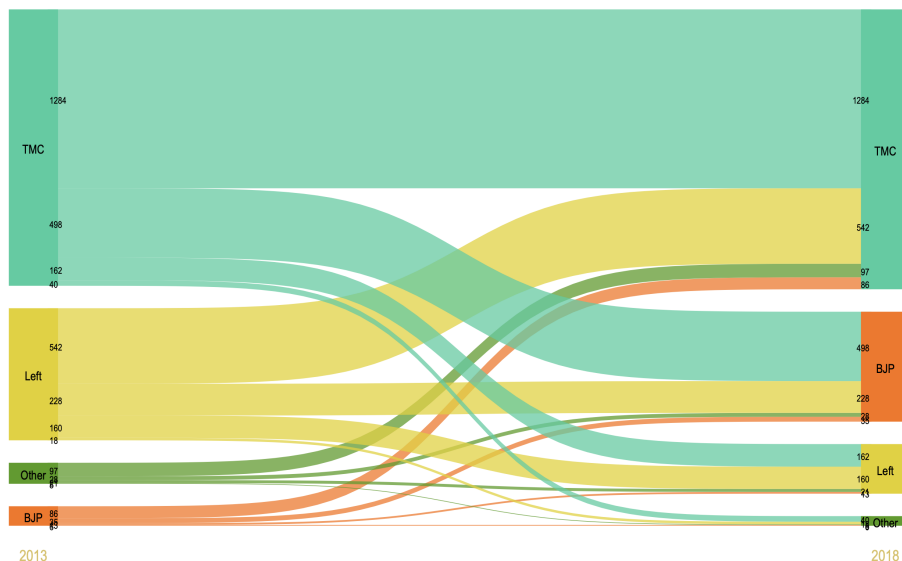
Figure 4: Vote Shares Changes at Different Levels



Notes: Polling booth data obtained from the published Form 20 data made available by the Election Commission of India.

of the TMC from 61.6% to 57.3%. Figure 4 compares these vote shares calculated from elicited survey data in the bottom-right panel, with changes in the actual vote shares in the electoral constituencies that span the sample villages (bottom left panel). These are aggregated for the two districts in the top-right panel, and for the entire state in the top-left panel. Although the patterns are very similar on the whole, our survey underestimates the changes relative to the actual changes that finally occurred. In our sample the BJP’s vote share rose by 18% points, while they increased by 23% in West Bengal in the actual 2019 election. Similarly in our surveys the Left Front’s share fell by 19% points whereas in the elections it decreased by 22% points across West Bengal. TMC’s share fell by 4% points in our sample, in contrast to a 4% point increase in its vote share across the state.

The Sankey diagram in Figure 5 allows us to portray how individual voters switched their support across political parties, or remained loyal to the same party, between 2013 and 2018. It is evident that the major flow is not just the result of Left Front supporters switching to the BJP. In fact, a

Figure 5: Vote Switching Patterns. Survey Data

Notes: Vote switching patterns of household heads between the two rounds presented.

large number of households that voted for the TMC in 2013 switched to the BJP in 2018. At the same time, a larger number of 2013 Left Front voters switched in favour of the TMC in 2018.¹² Therefore, in what follows we analyze factors that could explain four key variables: the switch in households' political support toward the TMC, away from the TMC, away from the Left Front, and toward the BJP. However Figure 5 corroborates the patterns observed in Figure 3: there was a large increase in votes for BJP, a large drop in votes for the Left, while votes for TMC remained roughly unchanged across the two polls.

2.2.2 Household Characteristics

Table 1 provides details of household characteristics in the sample. Only 10% of the households had female heads.¹³ Fifteen percent of household respondents report their religion as non-Hindu; the majority of these are Muslim. Six percent of households report they belong to the scheduled castes, and 10 percent report they belong to the scheduled tribes; the remaining 70% are general caste Hindus. On average 1.4% of respondents report their household relocated to the village after

¹²One could argue that this figure does not strictly correspond the patterns suggested in footnote # 9. As Figure 1 suggests, it is likely that many of the erstwhile Left voters had moved to the TMC as an intermediate step. So some 2013 TMC voters that vote for BJP in 2018 were erstwhile left voters. If we assume that all of these voters were traditionally Left voters, the number of Left voters that voted for BJP in 2018 was 726. The number of Left voters in 2013 that voted for TMC in 2018 was 542.

¹³These are mainly widowed women.

2003, however there is considerable variation in proportion across villages (SD 12%). The median household head had not completed primary school. Fifty four percent of households report that the head's main occupation is cultivation, and 21% of households report casual labour. Close to one-fifth of households do not own any agricultural land, and 60 percent own less than one acre. Close to 60% live in a non-permanent (or *kuchcha* dwellings, built with materials such as mud or tin). Thus the majority of households in our sample are of low socio-economic status.

Table 1: Selected Descriptive Statistics. Household Characteristics

	Survey		NSS	
	Mean (1)	SD (2)	Mean (3)	SD (4)
Male Headed Household	0.9090	0.2876	0.9022	0.2969
Non Hindu Household	0.1543	0.3613	0.1589	0.3656
SC Household	0.0576	0.2330	0.1985	0.3889
ST Household	0.0955	0.2940	0.1146	0.3185
General Caste/OBC Household	0.6926	0.4615	0.6869	0.4638
Recent Immigrant Household	0.0143	0.1186		
Household Size	5.6179	2.5734	4.6276	2.0605
Head Married	0.8891	0.3141	0.8988	0.3018
Head more than Primary Schooling	0.4916	0.5000	0.4404	0.4964
Head Occupation: Cultivator	0.5421	0.4983	0.1807	0.3848
Head Occupation: Labour	0.2133	0.4097	0.3862	0.4869
Landless	0.1950	0.3963	0.1638	0.3701
Landholding 0-0.5 acres	0.3992	0.4898	0.4922	0.4999
Landholding 0.5-1 acres	0.2295	0.4206	0.1166	0.3210
Landholding 1-1.5 acres	0.1762	0.3811	0.0679	0.2516
Landholding 1.5+ acres	0.0927	0.2900	0.1594	0.3660
Kuchha House	0.5697	0.4952		
Change in Employment Income	-0.2278	1.3857		
Proportion experiencing decline in Employment Income	0.6875	0.4636		
Change in potato value-added	0.2530	0.4582		
Proportion experiencing decline in Potato value-added	0.0858	0.2802		

Notes: Employment income and Potato Value added in real terms (using the All India Price Index Number for Agricultural Labourer, General Index, 1986–87 = 100). Employment Income and Potato value added in Rs. ('0000). Change in employment income = Employment income (2018) – Employment income (2010–2013). Change in potato value-added = Potato value-added (2018) – Potato value-added (2010–2013). Decline in Employment income = Change in Employment income < 0. Decline in Potato value-added = Change in Potato value-added < 0. For NSS, pooled data from the rural sample of the 66th and 68th rounds used.

The bottom panel of Table 1 provide statistics about the households' income from employment and from the cultivation of potatoes, the leading cash crop in this region.¹⁴ More than 70% of the households reported that they cultivated potatoes, and the majority of them cultivated both in 2013 and 2018. On average, employment income decreased over the period (69% of households

¹⁴Employment income and Potato Value added in real terms (using the All India Price Index Number for Agricultural Labourer, General Index, 1986 – 87 = 100).

experienced a drop in employment income), though average value added in potato increased over the period (only 8.5% of households experienced a fall in potato value added).

We also categorize households into different income quantiles as follows. We regress average total household income during the period 2010–2013 on dummy variables indicating that the household does not own cultivable land, that it lives in a *kuchcha* house; that the household head is female, has less than primary schooling, and reports agricultural labour as the primary occupation. Table A1 in the Appendix presents the results from this regression (we report separately results that include and exclude village fixed effects). Unsurprisingly, landless households, those living in a *kuchcha* house, with less-educated household heads and those whose primary occupation is labour are predicted to have lower household income. We then classify households into four different quantiles on the basis of their predicted household income: Q_1 (below 25%), Q_2 (25–50%), Q_3 (50–75%) and Q_4 (more than 75%).

2.2.3 State and Central Benefits Received

As discussed, it has been argued that the BJP’s vote share increased over 2014–19 partly because of new benefit programs that they introduced after they came to power at the centre in 2014. In particular, we focus on four programs that were aggressively marketed and prominently featured Mr Modi’s image in advertisements on billboards, television and social media. These include grants to construct in-house toilets (*Swachchh Bharat Yojana*), free “zero-balance” bank accounts (*Jandhan Yojana*), direct transfers of subsidies for cooking gas into beneficiaries’ bank accounts (*Ujjwala Yojana*) and credit cards for farmers (*Kisan Credit Card*.) While the last-mile implementation of these schemes required the involvement of the state and local governments, it has been argued that beneficiary eligibility for these schemes was determined through objective criteria, and hence the delivery of benefits was less vulnerable to distortion by local intermediaries or officials. They were also advertised as more universal, better targeted and more efficiently administered than pre-existing welfare benefit programs. We refer to the services delivered through these four schemes as “central” benefits, and to all other welfare benefit schemes as “state” benefits. Households are coded as having received the state benefits if they report accessing work through the NREGS workfare program, having a below-poverty-line (BPL) card, having a toilet constructed with funds from the *gram panchayat*, access to piped drinking water provided by the *gram panchayat*, medical help accessed with the help of the *gram panchayat*, housing construction funded through the state government’s scheme (*Aawaas Yojana*), flood relief and the conditional cash transfer for girls who delay marriage until the age of 18 (*Kanyashree*), also financed by the state government. Note that by construction, central benefits did not exist prior to 2014, while state benefits could have been distributed either before or after 2014.

In Panel A of Table 2 we present the proportion of households that reported receiving state benefits

Table 2: Fraction of households who received central and state benefits in 2010–2013 and 2014–2018

	2010–2013 (1)	2014–2018 (2)
<i>Panel A: State Benefits</i>		
Workfare scheme (NREGS)	0.523 (0.500)	0.455 (0.498)
Below poverty line card	0.036 (0.187)	0.374 (0.484)
Toilet (<i>Gram Panchayat</i>)	0.060 (0.237)	0.206 (0.404)
Drinking Water (<i>Gram Panchayat</i>)	0.303 (0.460)	0.259 (0.438)
Housing / House Construction	0.039 (0.194)	0.091 (0.287)
Flood Relief	0.125 (0.331)	0.143 (0.350)
Self-help group	0.047 (0.212)	0.142 (0.349)
Medical Help (<i>Gram Panchayat</i>)		0.090 (0.286)
CCT for delayed marriage (<i>Kanyashree</i>)		0.035 (0.185)
Any State Benefit	0.749 (0.434)	0.762 (0.426)
<i>Panel B: Central Benefits</i>		
In-house Toilets		0.155 (0.362)
Bank accounts (<i>Jandhan</i>)		0.187 (0.390)
Cooking gas subsidy (<i>Ujjwala</i>)		0.161 (0.367)
Kisan Credit Card		0.033 (0.180)
Any Central Benefit		0.427 (0.495)

Notes: As explained in the text, central benefits were not defined prior to 2014. For each benefit we report the average number of households that report receiving at the benefit at least once in the periods 2010–2013 (column 1) and 2014–2018 (column 2). “Any State Benefit” and “Any Central Benefit” denote the proportion of households that received at least one state (Panel A) or central (Panel B) benefit. Figures in parentheses denote standard deviations.

at least once during the four-year periods 2010–2013 (column 1) and 2014–2018 (column 2). Panel B presents the proportion of households that reported receiving central benefits at least once during 2014–2018. Between the two periods, the proportion of beneficiaries who reported they had received workfare through the NREGS decreased by 7 percentage points, and the proportion who reported receiving drinking water through the *gram panchayat* (GP) decreased by 5%. These results resemble findings of [Deshpande et al. \(2019\)](#) at the all-India level. However, for all other schemes, there was an increase in the fraction of households who reported receiving the benefit. The increase is particularly striking for the below-poverty line cards that grant households an expanded volume of food and other household necessities through the public distribution system: in the 2013 survey only 4% of households reported they had a BPL card, but in 2018, 37% of households had it. Similarly, before 2013 only 6% of households reported their neighbourhood had new toilets but in 2018 this was a substantially higher 21%. The proportion reporting they had received the housing benefit increased 4 to 9%, and those participating in women’s self-help groups increased from 4 to 14%. Overall, however, the proportion of households who received at least one state benefit remained unchanged, around 75%, indicating that the proportion of households receiving state benefits had not changed.¹⁵

On the other hand, 43% of households reported receiving at least one new central benefit: between 15 and 19% reported receiving either in-house toilets, bank accounts or the cooking gas subsidy (*Ujjwala*). If we count the number of benefits a household received, we see that the average household in our sample received 1.2 benefits during 2010–13, but this increased to 1.8 in 2014–2018. Thus there is no evidence that households became less likely to receive state benefits overall, although clearly the reach of some benefits such as NREGS and drinking water shrank while others expanded. There is also no evidence that the new central benefits had a larger coverage rate than state benefits: in 2018 the proportion of households who reported receiving at least one central benefit was smaller than the proportion who reported receiving work through the NREGS alone.

3 Voting Patterns

3.1 Underlying Voting Model and Regression Specification

We adapt a standard probabilistic voting model ([Grossman and Helpman, 1996](#), [Dixit and Londregan, 1996](#)) where voting decisions are based on a comparative evaluation of competing parties on a combination of utilitarian and ideological dimensions. The utilitarian dimension incorporates the voter’s perception, or expectation, of how their own material well-being is, or will be, affected by policies of the different political parties. The ideological dimension incorporates an intrinsic

¹⁵Of course it could well be that the remaining 25% were better-off households who did not rightfully qualify for the benefits.

preference for political parties based on ideological or identity affinity, loyalty, the personal characteristics of the candidates running for election on the party's platform, or the voter's exposure to the party's electoral campaign. Applied to the context in hand, material well-being depends on the value the household attaches to the welfare benefits they receive from the government. While utility-based considerations are commonly assumed to apply differentially to voters of different economic classes, the ideological component varies with indicators of social identity such as religion, gender, caste or tribe, as well as idiosyncratic personal preferences.

Suppose there are two competing parties $p = k, l$ in an election held in year t . Voter i receives the benefit bundle \mathbf{B}_{ipt} at some point between election year t and the previous election year $t - 1$, and this gives her material utility $\beta_p \mathbf{B}_{ipt}$, where β_p is the marginal utility vector of the benefit bundle from party p . Voter i 's ideological preference for party p equals $\Gamma_{s(i)pt} \delta_{s(i)} + \epsilon_{ipt}$, where $s(i)$ denotes a vector of social identity characteristics of voter i , $\Gamma_{s(i)pt}$ is the common systematic component of ideological preference of voters with social identity s for party p at date t , δ_s is a dummy for group s , and ϵ_{ipt} is an idiosyncratic ideological preference of i for party p which is identically and independently distributed across the population.

Let M_p denote the number of benefits that party p distributes, so $\mathbf{B}_{ipt} \equiv \{B_{imt}\}_{m=1, \dots, M_p}$, $\beta_p \equiv \{\beta_{pm}\}_{m=1, \dots, M_p}$. Then voter i who belongs to social groups $s(i)$ votes for party k instead of $l \neq k$ if

$$\sum_{m=1}^{M_k} \beta_{km} B_{imt} + \Gamma_{s(i)kt} \delta_{s(i)} + \epsilon_{ikt} > \sum_{m'=1}^{M_l} \beta_{lm'} B_{im't} + \Gamma_{s(i)lt} \delta_{s(i)} + \epsilon_{ilt} \quad (1)$$

Use $\gamma_{s(i),t}$ to denote $(\Gamma_{s(i)kt} - \Gamma_{s(i)lt})$, the relative ideological affinity of voters in social group $s(i)$ with party k compared with party l at date t . Then Condition (1) implies that i votes for party k in election year t if

$$\left[\sum_{m=1}^{M_k} \beta_m B_{imt} - \sum_{m'=1}^{M_l} \beta_{m'} B_{im't} \right] + \gamma_{s(i),t} \delta_{s(i)} > \epsilon_{ilt} - \epsilon_{ikt} \quad (2)$$

and the probability of this event is increasing in

$$\left[\sum_{m=1}^{M_k} \beta_m B_{imt} - \sum_{m'=1}^{M_l} \beta_{m'} B_{im't} \right] + \gamma_{s(i),t} \delta_{s(i)} \quad (3)$$

where the first expression represents the utility-based component and the second term the ideological component.

Condition (3) leads us to the regression specification

$$\text{Vote Party}_{ipt} = \beta_0 + \beta_1 \text{State Benefits}_{it} + \beta_2 \text{Central Benefits}_{it} + \gamma_t \mathbf{X}_i + \varepsilon_{Ipt} \quad (4)$$

where Vote Party_{ipt} denotes a binary variable, which takes the value 1 if household i votes for party p in election year t and 0 otherwise; \mathbf{X}_i is a vector of household socio-economic characteristics for household i . $\text{State Benefits}_{it}$ and $\text{Central Benefits}_{it}$ denote the total number of state and central benefits that household i received between years $t-1$ and t . For the 2013 round, central benefits are set equal to zero. The time-varying coefficient γ_t on household characteristics provides an estimate of how identity politics *per se* are changing over time owing to changes in party ideology, campaign mobilization efforts and intervening events affecting voters' sensitivity to identity issues. The effect of benefits on votes (β_1 and β_2) is assumed to not vary over time in the specification given by equation (4); we shall relax this assumption in the analysis below to examine the hypothesis of declining effectiveness of clientelistic benefits.

The corresponding regression for the change in the likelihood that i votes for party p is given by

$$\Delta \text{Vote Party}_{ip} = \beta_1 \Delta \text{State Benefits}_i + \beta_2 \Delta \text{Central Benefits}_i + \Delta \gamma \mathbf{X}_i + \Delta \varepsilon_{ipt} \quad (5)$$

where Δ denotes the difference if the value of the variable between the two rounds. Thus, the likelihood that voter i switches allegiance from one party to another can be decomposed into the part caused by a change in the flow of state and central benefits, and the change in ideological or identity-based affinity with the party between the two rounds. This specification addresses selection concerns because unlike (4), in equation (5), household fixed effects wash out time-invariant drivers of political support for a particular party. On the other hand however, specification (5) does not allow for any changes in the effectiveness of state benefits at generating votes.

3.2 Role of Welfare Benefits

In this section we focus on the role of state and central benefits in explaining changes in voting patterns of household heads. We start with estimates of the benefit regression coefficients from equation (4), estimated separately for the two different rounds, to allow for changes in the vote-generating effectiveness of state benefits across the two elections that have been argued by previous authors (Deshpande et al., 2019).

An obvious concern with the specification in equation (4) is possible endogeneity of distribution of benefits which makes it difficult to give a causal interpretation to the OLS estimates. Higher level officials at the block or district level that control the allocation of these benefit programs across different GPs might strategically target them to GPs depending on anticipated voting propensities of their residents in the next election.¹⁶ Targeting to "loyal" areas would give rise to a positive bias,

¹⁶For example, Mahadevan and Shenoy (2023) show that in West Bengal the ruling party channels disproportionate funds to politically-aligned jurisdictions in water-stressed areas and consequently gains votes in subsequent elections.

and to “swing” areas would generate a bias depending on how successful the benefit distribution might be in inducing voters to switch their allegiance. Moreover, the incentives of the incumbent party to deliver benefits might vary with their perceptions of its competitive standing in the next election. Less secure incumbents would be inclined to deliver more benefits to swing areas, giving rise to a negative bias. To reduce these biases, we use a supply-side or “leave out” instrument for the scale of programs at the GP level: the average number of benefits of either kind distributed in *other* GPs in the same district, as in [Levitt and Snyder Jr \(1997\)](#). These are interacted with fixed household characteristics such as caste, landownership, education, and religion (significant determinants of within-GP targeting) to predict the delivery of benefits to individual households. These characteristics are retained as controls in the regression, to incorporate their direct effect on voting propensities. We also include district fixed effects in the regression, to remove biases owing to possible unobserved heterogeneity across districts. The *leave out* instrument reflects factors that are less likely to be correlated with GP-specific unobserved political attributes. As [Levitt and Snyder Jr \(1997\)](#) and [Bardhan et al. \(2021\)](#) show, under plausible assumption, the resulting IV estimate is less likely to be biased and this bias converges to zero as the number of GPs in the district increases.¹⁷ As it turns out, the instrument turns out to have significant predictive power, with large values of the first stage F-statistic for the first-stage regressions (which are presented in [Tables A2—A3](#)). Nevertheless we evaluate the significance of the regression using a weak-instrument-robust Anderson-Rubin χ^2 test.

Panels A and B of [Table 3](#) show the OLS and IV regression results for voting patterns in 2018 and 2013 respectively. These regressions control for a range of household demographic and socio-economic characteristics. In any given round, the IV benefit coefficients are larger in magnitude compared to the OLS results, suggesting the OLS estimates are biased downwards (possibly reflecting the stronger motivation of insecure incumbents to provide more benefits and target areas with swing voters). In 2018, the OLS estimate indicates receipt of a state benefit raised the likelihood of the recipient to vote for the TMC by 5.9%, while the corresponding IV estimate of this effect is 9.3%. This increase came largely at the expense of the BJP (compare columns 2 and 4). The corresponding OLS and IV estimates of the effect of receiving a central benefit on the likelihood of voting for BJP were 2.7% and 6.3% respectively (see columns 3 and 4), though the latter is imprecisely estimated and is not statistically significant at the 10% level. Hence the vote-generating effectiveness of state benefits for the TMC was stronger compared to that of central benefits in favor of the BJP.

¹⁷Recently this approach has been adopted widely in developing country contexts: see for example [Lamichhane and Mangyo \(2011\)](#), [Bai et al. \(2019\)](#), [Dang and La \(2019\)](#), [Sedai et al. \(2020\)](#), [Bardhan et al. \(2021\)](#), [Maitra et al. \(2023\)](#). The arguments of [Levitt and Snyder Jr \(1997\)](#) and [Bardhan et al. \(2021\)](#) imply that the recent criticism of this approach in settings with peer effects ([Betz et al., 2018](#), [McKenzie, 2021](#)) does not apply to our setting. However, in the presence of heterogeneous treatment effects, the IV estimate should be interpreted as a local average treatment effect on the sub-population that is ‘treated at the margin’ as a consequence of variation in the instrument, in contrast to the OLS estimate which is a biased estimate of the average treatment effect applying to the entire population.

Table 3: Voting Patterns in 2018 and 2013, using Aggregate State and Central Benefits

	OLS (1)	IV (2)	OLS (3)	IV (4)	OLS (5)	IV (6)	OLS (7)	IV (8)
Panel A: Voting for Party in 2018								
	TMC		BJP		Left			
Central Benefits 2014–2018	0.007 (0.019)	-0.035 (0.050)	0.027* (0.016)	0.063 (0.046)	-0.004 (0.009)	-0.014 (0.031)		
State Benefits 2014–2018	0.059*** (0.009)	0.093*** (0.021)	-0.046*** (0.009)	-0.090*** (0.018)	-0.008* (0.005)	-0.009 (0.010)		
Constant	0.508*** (0.059)	0.458*** (0.066)	0.328*** (0.056)	0.394*** (0.062)	0.069** (0.029)	0.072** (0.034)		
Number of Observations	3,507	3,507	3,507	3,507	3,507	3,507		
R-squared	0.052	0.044	0.067	0.049	0.025	0.024		
<i>First Stage F</i>								
Central Benefits			146.32 [0.000]					
State Benefits			165.50 [0.000]					
Anderson-Rubin $\chi^2(32)$	151.54 [0.000]		141.04 [0.000]		90.81 [0.000]			
Panel B: Voting for Party in 2013								
	TMC		BJP		Left			
State Benefits 2010–2013	0.018* (0.010)	0.055** (0.026)	0.003 (0.003)	0.018* (0.010)	-0.031*** (0.010)	-0.088*** (0.025)		
Constant	0.474*** (0.049)	0.433*** (0.057)	0.039* (0.021)	0.023 (0.025)	0.463*** (0.047)	0.526*** (0.053)		
Number of Observations	3,507	3,507	3,507	3,507	3,507	3,507		
R-squared	0.366	0.361	0.060	0.055	0.268	0.254		
<i>First Stage F</i>								
State Benefits			257.64 [0.00]					
Anderson-Rubin $\chi^2(32)$	81.07 [0.00]		77.11 [0.00]		47.42 [0.00]			
Panel C: Switch in Voting Patterns								
	Against TMC		To TMC		To BJP		Against Left	
Difference in Central Benefits	-0.016 (0.013)	0.012 (0.039)	0.005 (0.011)	-0.005 (0.035)	0.016 (0.015)	0.050 (0.047)	0.018 (0.012)	0.014 (0.040)
Difference in State Benefits	-0.019*** (0.006)	-0.043*** (0.013)	0.018** (0.007)	0.014 (0.014)	-0.027*** (0.007)	-0.059*** (0.014)	0.011 (0.008)	0.011 (0.016)
Constant	0.227*** (0.044)	0.236*** (0.046)	0.307*** (0.039)	0.310*** (0.039)	0.260*** (0.053)	0.274*** (0.055)	0.391*** (0.041)	0.391*** (0.040)
Number of Observations	3,507	3,507	3,507	3,507	3,507	3,507	3,507	3,507
R-squared	0.091	0.083	0.159	0.159	0.060	0.045	0.212	0.212
<i>First Stage F</i>								
Difference in Central Benefits				114.69 [0.000]				
Difference in State Benefits				279.90 [0.000]				
Anderson-Rubin $\chi^2(17)$	33.21 [0.011]		30.77 [0.021]		90.62 [0.000]		22.87 [0.154]	

Notes: In Panel A the dependent variables are support for TMC (Columns 1 and 2), BJP (Columns 3 and 4) and Left Front (Columns 5 and 6) as elicited in the 2018 survey, and in Panel B they are as elicited in the 2013 survey. In Panel C the dependent variables indicate a switch in political support toward and against a particular party from 2013 to 2018. In columns 2, 4, 6 and 8, the benefits variables are instrumented by the “leave-out” instrument described in the text. Regressions also control for religion, caste and the migration status of household, gender, marital status, education and occupation of the household head, household size and indicator for residence in Hugli district. Standard errors in parentheses are clustered at the village level. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. The full set of regression results corresponding to Panel A are presented in Table ??.

Did state benefits become less effective at generating votes for the TMC between 2013 and 2018? Alternatively, did voters in 2018 give the BJP (rather than the TMC) credit when they received state benefits? Our data suggest that the answer to both questions is no. The IV estimates presented in Table 3 show that in 2013 each additional state benefit that an average household received increased the likelihood that they voted for the TMC by 5.5 percentage points, decreased the likelihood that they voted for the Left Front by 8.8% (recall that the Left Front rather than the BJP was the main competition for the incumbent TMC in 2013) and increased the likelihood that the household voted for the BJP by 1.8%. Rather than having a smaller effect, in 2018 the state benefits were even more effective at influencing how households voted: each additional state benefit increased the likelihood that the household voted for TMC by 9.3% and decreased the likelihood that they voted for BJP by 9%.

The use of the leave-one-out instrument above addresses the concern that other unobserved characteristics of the local village councils may influence which village councils deliver more versus less government benefits. One may also worry that within village councils, benefits may be strategically delivered to households with particular characteristics that the researcher cannot observe. For example, council officials may favor either loyal voters who can be depended on to vote for the incumbent party, or to swing voters who may change how they vote if they receive the benefit. As explained in Section 3.1, one way of dealing with this concern is to use the specification with household fixed effects (given by equation (5)), which washes out time-invariant characteristics that could influence which households received benefits. The specification allows us to examine whether and in which direction the household head switched party allegiance between 2013 and 2018, and how this switch was affected by changes in their receipt of benefits. In Table 3 Panel C, we present results from regressions for the probability that voters switched their support to the TMC (Column 1), and for the probability that they switched against the TMC (Column 2). This is followed by the likelihood that they switched towards the BJP (Column 3), and away from the Left Front (Column 4).¹⁸ We present both the OLS and the IV estimates of these switching likelihood regressions, where the instrument for changes in state benefits is the change in the leave-out instrument for per capita benefits in a given GP, interacted with the same household characteristics. The instruments are strong predictors of the change in state benefit flows (see the first stage estimates presented in Table A4).

The IV results in Panel C show that an additional state benefit received reduced the likelihood of switching against TMC by 4.3 percentage points (column 2) and reduced the likelihood of switching to the BJP (by 5.9 percentage points, column 7). An additional state benefit received also increased the likelihood of switching to TMC, but this effect is small (1.4%) and not statistically significant. On the other hand, an increase in central benefit had no effect on switching to or against TMC. It induced a 5% increase in the likelihood of switching to the BJP, but the IV

¹⁸Since at baseline very few voters supported the BJP and over time very few voters switched toward the Left Front, we do not run regressions for switching against BJP and towards the Left Front.

Table 4: Predicted Effect of Aggregate State and Central Benefits on Votes

	State Benefits		Central Benefits	Estimated/ Actual Effect
	2010–2013	2014 – 2018	2014 – 2018	
	(1)	(2)	(3)	(4)
Average Per Household (Q)	1.16	1.79	0.54	
Unit Effect on TMC Vote Share ($\hat{\beta}_{TMC}$)	0.055	0.093	-0.035	
Unit Effect on BJP Vote Share ($\hat{\beta}_{BJP}$)	0.018	-0.09	0.063	
Total Predicted Effect on TMC Vote Share ($\hat{\beta}_{TMC} \times Q$)	0.064	0.166	-0.019	
Total Predicted Effect on BJP Vote Share ($\hat{\beta}_{BJP} \times Q$)	0.016	-0.161	0.034	
<i>Predicted Effect on Change in TMC Vote Share[†]</i>				
State Benefits				0.103
Central Benefits				-0.019
Total Predicted Effect of Benefits (Central + State)				0.084
Actual Change in TMC Vote Share				-0.05
<i>Predicted Effect on Change in BJP Vote Share[‡]</i>				
State Benefits				-0.177
Central Benefits				0.034
Total Predicted Effect of Benefits (Central + State)				-0.143
Actual Change in BJP Vote Share				0.18

Notes: Actual Change in TMC and BJP vote shares from the strawpoll, reported in Figure 3. Q^{2013} and Q^{2018} denote the average number of benefits received during the period 2010–2013 and 2014–2018 respectively. [†]: $\hat{\beta}_{TMC}^{2018} \times Q^{2018} - \hat{\beta}_{TMC}^{2013} \times Q^{2013}$; [‡]: $\hat{\beta}_{BJP}^{2018} \times Q^{2018} - \hat{\beta}_{BJP}^{2013} \times Q^{2013}$. No Central Benefits in 2013.

estimate is not statistically significant (column 7). In summary, even in 2018, clientelistic state benefits continued to help local incumbents. While central benefits helped the BJP, the effect is not precisely estimated.

The results in Table 3 provide estimates of effectiveness of state and central benefit flows on voting propensities. These need to be combined with data on the actual flows to generate corresponding predicted effects on changes in vote shares. Table 4 carries out this calculation. The rise in state benefit flows in conjunction with rising effectiveness of these benefits in generating votes for the TMC yields an estimated rise of TMC vote share of 10.3% (which drops slightly to 8.4%, when we include the central benefits). Clearly the 5% reduction in this vote share cannot be explained by the hypothesis that clientelism was becoming less effective at generating votes. Conversely, the new central benefits predict a rise in BJP vote share by 3.4%. When we also include the effect of the state benefits we predict a net 14.3% decline in the BJP’s vote share. Since in fact the BJP’s vote share increased by 18%, it seems clear that their success is not driven by changes in welfare benefit flows.

3.2.1 Robustness Check: Disaggregated Welfare Benefits

In the preceding section, we aggregated the different kinds of state/central benefits that a household received to generate a single state/central benefit count variable. This implicitly weighted different kinds of state/central benefits equally, but of course different benefits may of different value. In fact, as we saw above, over the period 2013–2018 there were important changes in the composition of state benefits: households became less likely to receive NREGS workfare benefits, but they became more likely to hold BPL cards, have toilets in the neighbourhood, have subsidised housing or participate in microfinance (“self-help”) groups. If NREGS benefits are more influential than other programs in determining which party households vote for, then our results above may have overestimated the effectiveness of benefits in determining the TMC’s vote share.

In Table 5, we estimate the regressions separately for NREGS, BPL cards, drinking water access, in-house toilets, bank accounts (*Jandhan*) and cooking gas subsidies (*Ujjwala*). The IV estimates use “leave-one-out” instruments constructed separately for each benefit program. The first stage regressions have high F-statistics for each program and round. As we see in the table, the coefficients vary considerably across programs: NREGS has a much larger coefficient than the other two state benefits, and is the only state benefit with a statistically significant IV effect of 0.19 for the 2018 round (significant at 5%). Among the central benefits, only the *Jandhan* program has a significant effect: it increases the likelihood that a household voted for the BJP by 0.14 (significant at 10%). The NREGS was more effective at boosting the TMC vote share in 2013 (coefficient 0.22, also significant at 5%), but it also had a strong negative (-0.13) impact on the BJP’s vote share in 2018. Interestingly, while [Deshpande et al. \(2019\)](#) argue that in 2019, voters were more likely to credit the BJP for the NREGS despite it being a legacy of the previous UPA government, the NREGS beneficiaries are less likely to vote for the BJP. The vote of the NREGS beneficiaries is dispersed among regional parties despite the observed centralization of attribution of credit in the 2019 elections. Consistent with this argument, our results show that the voters clearly credit the regional incumbent party (TMC) for this program.¹⁹

In Table 6 we compute the implied combined effect on predicted vote shares. If we focus on the NREGS and *Jandhan* programs alone (the only benefits that have statistically significant impacts on votes), then the changes in the receipt of benefits predict that the BJP’s vote share would fall by 5.4%. This is the net effect of an increase of 2.7% points caused by the flow of *Jandhan* benefits, and a decrease of 8.1% (5.9 + 2.2) due to the decrease in NREGS benefits. At the same time, the TMC’s vote share is predicted to fall by 4.9% (a decrease of 3.2% = 11.8 – 8.6) due to reduced NREGS benefits and an additional decrease of 1.7% due to *Jandhan* benefits. If we aggregate the impacts of all six programs, then the benefit flows predict that the TMC’s vote share would increase by 1.1%, while the BJP’s vote share would decrease by 4.3%. These

¹⁹We have categorized NREGS as a state benefit, but the results do not depend on this categorization.

Table 5: Effect of Major State and Central Benefits on Voting

	Vote TMC		Vote BJP		First Stage F (5)
	OLS (1)	IV (2)	OLS (3)	IV (4)	
Voting in 2018					
Central Benefits 2014 – 2018					
In House Toilet	0.035 (0.032)	0.094 (0.104)	0.040 (0.033)	0.013 (0.102)	343.27
Jandhan	-0.001 (0.031)	-0.093 (0.080)	0.025 (0.022)	0.142* (0.076)	647.30
Ujjwala	0.038 (0.033)	-0.010 (0.110)	-0.025 (0.028)	-0.041 (0.103)	197.41
State Benefits 2014 – 2018					
NREGS	0.102*** (0.029)	0.188** (0.080)	-0.045* (0.024)	-0.130* (0.076)	240.15
BPL Card	0.023 (0.025)	0.099 (0.087)	-0.019 (0.024)	-0.128 (0.084)	150.41
Drinking Water (Panchayat)	0.076* (0.040)	0.092 (0.077)	-0.089** (0.037)	-0.095 (0.080)	856.96
Number of Observations	3,507	3,507	3,507	3,507	
R-squared	0.044	0.025	0.059	0.024	
Voting in 2013					
State Benefits 2010–2013					
NREGS	0.119*** (0.020)	0.225*** (0.047)	0.010 (0.008)	0.042* (0.022)	761.81
BPL Card	-0.025 (0.047)	0.011 (0.160)	0.036 (0.032)	-0.093 (0.080)	175.64
Drinking Water (Panchayat)	-0.012 (0.031)	-0.021 (0.052)	-0.002 (0.008)	-0.002 (0.015)	436.60
Number of Observations	3,507	3,507	3,507	3,507	
R-squared	0.379	0.368	0.061	0.044	

Notes: Dependent variable voting for TMC (Columns 1 and 2) and BJP (Columns 3 and 4). IV regressions use the *Leave-out* instrument. Regressions also control for religion, caste and migration status of household, gender, marital status, education and occupation of household head, household size, change in employment income and farm value added over the period, whether the household is a swing voter and whether household resides in Hugli. Standard errors, clustered at the Village level in parentheses. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6: Predicted Effect of Major Central and State Benefits on Voting

	Mean (Q) (1)	Unit Effect on Vote Share		Total Effect on Vote Share	
		TMC (β_{TMC}^b) (2)	BJP (β_{BJP}^b) (3)	TMC ($Q \times \beta_{TMC}^{t,b}$) (4)	BJP ($Q \times \beta_{BJP}^{t,b}$) (5)
Central Benefits 2014–2018					
In House Toilets	0.155	0.094	0.013	0.015	0.002
Jandhan	0.187	-0.093	0.142	-0.017	0.027
Ujjwala	0.161	-0.010	-0.041	-0.002	-0.007
State Benefits 2014–2018					
NREGS	0.455	0.188	-0.13	0.086	-0.059
BPL Card	0.374	0.099	-0.128	0.037	-0.048
Drinking Water (Panchayat)	0.259	0.092	-0.095	0.024	-0.025
State Benefits 2010–2013					
NREGS	0.523	0.225	0.042	0.118	0.022
BPL Card	0.036	0.011	-0.093	0.000	-0.003
Drinking Water (Panchayat)	0.303	-0.021	-0.002	-0.006	-0.001
Predicted Effect					
Central Benefits				-0.001	0.007
State Benefits				0.012	-0.050
Total Predicted Effect of Benefits (Central + State)				0.011	-0.043
Actual Change				-0.05	0.18

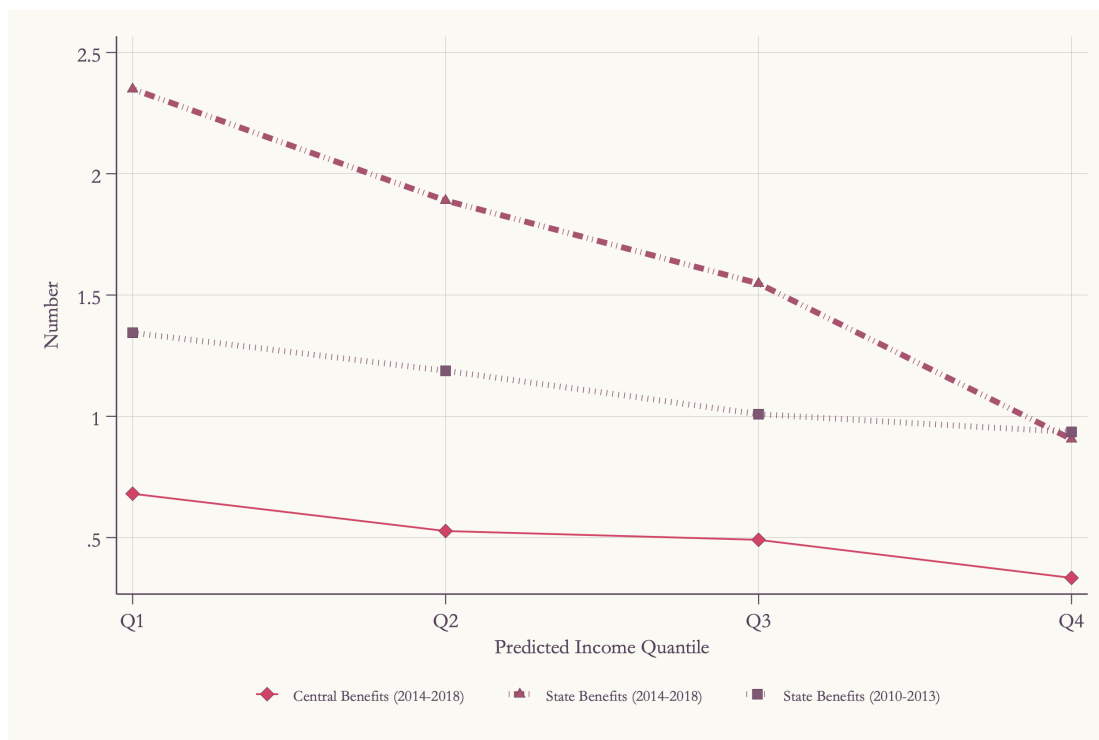
Notes: Predicted Change in vote share for party p (Π^p) is given by $\sum_b (Q^b \beta_p^{2018,b} - Q^b \beta_p^{2013,b})$ aggregated over state or central benefits. No central benefits in 2013.

are conservative estimates, since we do not consider the role of new benefits or the increased delivery of benefits from other smaller state schemes such as the conditional cash transfer to young girls for delaying marriage (*Kanyashree*), self-help groups and medical help provided by the local government. Including them would predict that the TMC’s vote share would increase even further, and the BJP’s vote share would decrease even further. Clearly, incorporating the composition of the benefit programs does not change our inference that benefits alone cannot explain the substantial increase in the BJP’s vote share over the period 2014 to 2019.

3.2.2 Robustness Check: Targeting Patterns and Heterogenous Voting Impacts

The preceding analysis ignored the fact that households of different economic status may respond differently to the benefits. For instance, if poorer households are more likely to change whom they vote for in response to benefits, then delivering benefits to the poor would be more effective at raising the vote share of the incumbent party. If central benefits were better targeted to the poor than state benefits, then predictions based on aggregate benefit flows would underestimate

Figure 6: Progressivity of Benefits: Number of Central and State Benefits Received by Predicted Income Quantiles



Notes: Predicted Income Quantiles computed using the predicted value of income from regression results presented in Table A1.

the predicted impacts on the BJP vote share. Alternatively, if state benefit schemes became less well-targeted to the poor after 2013, then even if on average the benefit flows increased, the poor would not receive the same increases in benefit as the non-poor, and the aggregate analysis predict a larger impact on the TMC's share than we actually observe.

Figure 6 shows the targeting patterns of state and central benefits across four income quartile groups. Note first that the distribution of state benefits became markedly progressive after 2013 relative to the 2010–13 and after 2013, state benefits were also more progressively distributed than central benefits. Hence we do not see evidence that central benefits were better targeted to the poor than state benefits, either before or after 2013.

Table 7 shows OLS estimates of voting impacts of state and central benefits from regressions separately for the four different income quartiles using the same specification as in equation (4). Only voters in the second quartile responded significantly to receiving central benefits, by switching their vote to the BJP. However, all four quartiles responded to state benefits after 2013

Table 7: Impact of Benefits on Votes for Different Income Quartiles

	Predicted Income Quantile	Voting 2018			Voting 2013		
		TMC	BJP	Left	TMC	BJP	Left
		(1)	(2)	(3)	(4)	(5)	(6)
Central Benefits 2014–2018	1	0.007 (0.022)	0.011 (0.019)	-0.003 (0.013)			
	2	-0.029 (0.030)	0.057** (0.025)	-0.006 (0.013)			
	3	0.006 (0.046)	0.037 (0.033)	0.015 (0.027)			
	4	0.077** (0.030)	-0.005 (0.020)	-0.013 (0.015)			
State Benefits 2014–2018	1	0.057*** (0.013)	-0.049*** (0.011)	-0.007 (0.007)			
	2	0.064*** (0.015)	-0.058*** (0.014)	-0.003 (0.006)			
	3	0.039* (0.023)	-0.014 (0.018)	-0.035** (0.014)			
	4	0.081*** (0.020)	-0.047*** (0.017)	-0.009 (0.008)			
State Benefits 2010–2013	1				0.012 (0.014)	0.002 (0.006)	-0.028* (0.014)
	2				0.028** (0.014)	0.011** (0.005)	-0.045*** (0.014)
	3				0.018 (0.026)	0.004 (0.012)	-0.017 (0.030)
	4				0.025 (0.018)	-0.005 (0.009)	-0.033** (0.016)

Notes: In columns 7–10, dependent variable is switching to or against a particular party in 2018 (relative to 2013). OLS regressions presented. Regressions also control for religion, caste and migration status of household, gender, marital status, education and occupation of household head, household size, whether the household is a swing voter and whether household resides in Hugli. Predicted Income Quartiles computed using the predicted value of income from regression results presented in Table A1. Standard errors, clustered at the Village level in parentheses. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 8: Targeting of Benefits and Predicted Impact on Votes

	Predicted Income Quartile	Mean (Q) (1)	Unit Effect on Vote Share		Total Effect on Vote Share	
			TMC $\beta_{TMC,j}^t$ (2)	BJP $\beta_{BJP,j}^{t,b}$ (3)	TMC ($Q \times \beta_{TMC,j}^{t,b}$) (4)	BJP ($Q \times \beta_{BJP,j}^{t,b}$) (5)
Central Benefits 2014–2018	1	0.681	0.00674	0.0109	0.0046	0.0074
	2	0.527	-0.0292	0.0573	-0.0154	0.0302
	3	0.491	0.00561	0.0372	0.0028	0.0183
	4	0.334	0.0766	-0.00513	0.0256	-0.0017
State Benefits 2014–2018	1	2.349	0.0575	-0.0491	0.1351	-0.1153
	2	1.890	0.0643	-0.0575	0.1215	-0.1087
	3	1.548	0.0391	-0.0144	0.0605	-0.0223
	4	0.906	0.0807	-0.0475	0.0731	-0.0430
State Benefits 2010–2013	1	1.345	0.0122	0.00174	0.0164	0.0023
	2	1.188	0.0281	0.0114	0.0334	0.0135
	3	1.009	0.0176	0.00410	0.0178	0.0041
	4	0.936	0.0251	-0.00475	0.0235	-0.0044
<i>Predicted Effect on Change in Vote Shares</i>						
Central Benefits ($\frac{1}{n} \sum_j (Q \times \beta_{p,j}^{b2018})$)					0.0044	0.0135
State Benefits ($\frac{1}{n} \sum_j Q \times \beta_{p,j}^{b2018} - \frac{1}{n} \sum_j Q \times \beta_{p,j}^{b2013}$)					0.0748	-0.0762
Total Predicted effect of Benefits (Central + State)					0.0792	-0.0627
Actual Change					-0.05	0.18

Notes: j denotes predicted income quartile (computed using the predicted value of income from regression results presented in Table A1); b denotes the benefit type (state/central); t denotes year (2013, 2018).

by roughly the same extent.²⁰ Consistent with the earlier aggregate results, voters in all groups were markedly more responsive to state benefits after 2013. Once again, we find that state benefits were more effective at generating votes for the TMC after 2013.

Table 8 shows the implication of these estimates for the vote shares of the two parties. The TMC’s vote share is predicted to increase by 7.9%, while the BJP’s vote share is predicted to fall by 6.2%. The central benefits alone predict a rise in the BJP vote share by 1.35%, which is only 7.5% of the total increase in the vote share of the BJP.

Over and above responding to whether they themselves receive a government benefit, voters may also be influenced by perceptions about the fairness of benefit distribution. For example, a household that believes it deserved to receive a benefit but in fact did not receive it, may respond differently if it believed that others who did not deserve it *had* received it. Critics of the TMC sometimes argue that it “appeases” minorities such as Muslims and immigrants (who are argued to be non-deserving of these benefits) in order to obtain their votes. To the extent that Hindu natives perceive this to be the case, when benefits are distributed to these groups it may cause native Hindus to switch their votes to the BJP. To examine this, in Table 9 we show how state benefits were distributed across different socio-economic groups. Each column

²⁰The exception is the second quartile, where the point estimate was lower but still remained within the confidence interval for other groups.

shows OLS regression coefficients of the likelihood that a specific household received state or central benefits, from a regression on household characteristics in different time periods, with and without village fixed effects. The coefficients on dwelling type and landowning category show the same progressive pattern in the distribution of state benefits that we saw earlier in Figure 6: the state benefit distribution became more progressive after 2013, and was more progressive than the distribution of central benefits after 2013. Controlling for these markers of economic status, we see that non-Hindus were less rather than more likely than Hindus to receive state benefits, that this disproportionate receipt of benefits by Hindus intensified markedly after 2013, and that non-Hindus were also less likely than Hindus to receive central benefits, but this skewness was less pronounced among central benefits than post-2013 state benefits. We also see a similar pattern in that scheduled tribe households were less likely to receive state benefits. Thus we fail to find any evidence of that the TMC administration selectively distributed benefits to minorities; instead, we find that minorities were less likely to receive state benefits.

3.3 The Role of Economic Distress

As we have argued in the introduction, there is a large and growing literature from both developed and developing countries on economic insecurity and distress (arising from globalization, trade-shocks or immigration) leading to increased vote-shares of populist and right-wing nationalist parties (see, for example, Colantone and Stanig, 2018, 2019, Autor et al., 2020, Oliveira, 2022). In view of this literature, we examine whether households may have changed whom they voted for in response to their economic situation. For example, if households experienced economic distress after 2013 and held the TMC's policies responsible for this distress or the lack of government aid in response to the distress, they may have switched their political support from the TMC to the BJP. To measure households' economic situation, we use two measures: their employment income, and their value-added from the cultivation of potatoes. Recall from Table 1, real employment income fell during the period for 68.75% of households while real potato value-added fell for 8.5% of households. Table 10 shows OLS regression coefficients on the change in potato value added and employment income (Panel A) and whether or not the household experienced a decline in potato value-added and employment income (Panel B) on the likelihood that the household switched its vote away or towards the TMC, and towards BJP, after controlling for benefits received and fixed household characteristics. The regression coefficients are quantitatively negligible and statistically insignificant. Hence we fail to find any evidence that the switch to the BJP was the result of economic distress under the TMC regime.

Table 9: Targeting of State and Central Benefits

	State Benefits				Central Benefits	
	2010–2013		2014–2018		2014–2018	
	OLS (1)	VFE (2)	OLS (3)	VFE (4)	OLS (5)	VFE (6)
Male Headed Household	-0.137 (0.104)	-0.203** (0.095)	-0.131 (0.120)	-0.296** (0.133)	-0.010 (0.066)	0.030 (0.065)
Non Hindu Household	-0.120 (0.121)	-0.077 (0.120)	-0.721*** (0.177)	-0.398*** (0.127)	-0.094 (0.074)	-0.150* (0.080)
Recent Immigrant Household	-0.183 (0.148)	-0.111 (0.126)	0.043 (0.207)	0.090 (0.261)	0.086 (0.117)	0.063 (0.088)
Non Hindu × Recent Migrant	-0.315 (0.204)	-0.176 (0.172)	-0.035 (0.455)	-0.721 (0.456)	-0.010 (0.248)	-0.132 (0.249)
SC Household	0.072 (0.165)	0.215 (0.131)	-0.025 (0.267)	0.229 (0.144)	0.062 (0.104)	0.036 (0.082)
ST Household	0.005 (0.080)	0.006 (0.055)	-0.343** (0.141)	-0.173 (0.132)	-0.046 (0.062)	-0.036 (0.057)
Kuchha House	0.111* (0.058)	0.091** (0.037)	0.402*** (0.082)	0.284*** (0.050)	0.179*** (0.035)	0.152*** (0.031)
Landless	0.331*** (0.071)	0.320*** (0.055)	0.695*** (0.115)	0.855*** (0.085)	0.224*** (0.049)	0.230*** (0.047)
Land holding 0 – 0.5 acres	0.208*** (0.059)	0.257*** (0.041)	0.645*** (0.106)	0.673*** (0.067)	0.200*** (0.040)	0.215*** (0.035)
Land holding 0.5 – 1 acres	0.069 (0.045)	0.084** (0.041)	0.211** (0.080)	0.267*** (0.061)	0.096*** (0.031)	0.090*** (0.032)
Constant	1.038*** (0.119)	0.896*** (0.084)	1.576*** (0.186)	1.153*** (0.094)	0.109* (0.065)	0.246*** (0.058)
Number of Observations	3,507	3,507	3,507	3,507	3,507	3,507
R-squared	0.078	0.309	0.244	0.503	0.079	0.226

Notes: OLS regression results presented. Columns marked VFE include village fixed effects. Regressions also control for household size and characteristics of the household head (marital status, educational attainment and occupation, swing voter, Hugli residence). Recent migrant denotes households where the head was not born in the village but migrated less than 10 years previously. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

3.4 Identity Politics: Variation of Switching Likelihoods across Household Characteristics

Having failed to find any evidence of the role of welfare benefits or economic distress in explaining the rise in the BJP vote share, we now consider how this rise varied across different socio-economic groups, with or without controls for benefits or economic distress. Figure 7 shows changes in vote shares across different population sub-groups in the raw data. The top left-hand panel shows that the rise in the BJP vote share was nearly uniform across different landowning categories, rising from 4–6% in 2013 to between 20–24% in 2018. A similar pattern emerges across different income quartiles in the bottom right panel. The top-right panel shows the shift was markedly smaller among non-Hindus (a rise of 6–7%), compared to a rise of 20% among Hindus and 16% among

Table 10: Post-2013 Economic Distress and Vote-Switching Likelihood

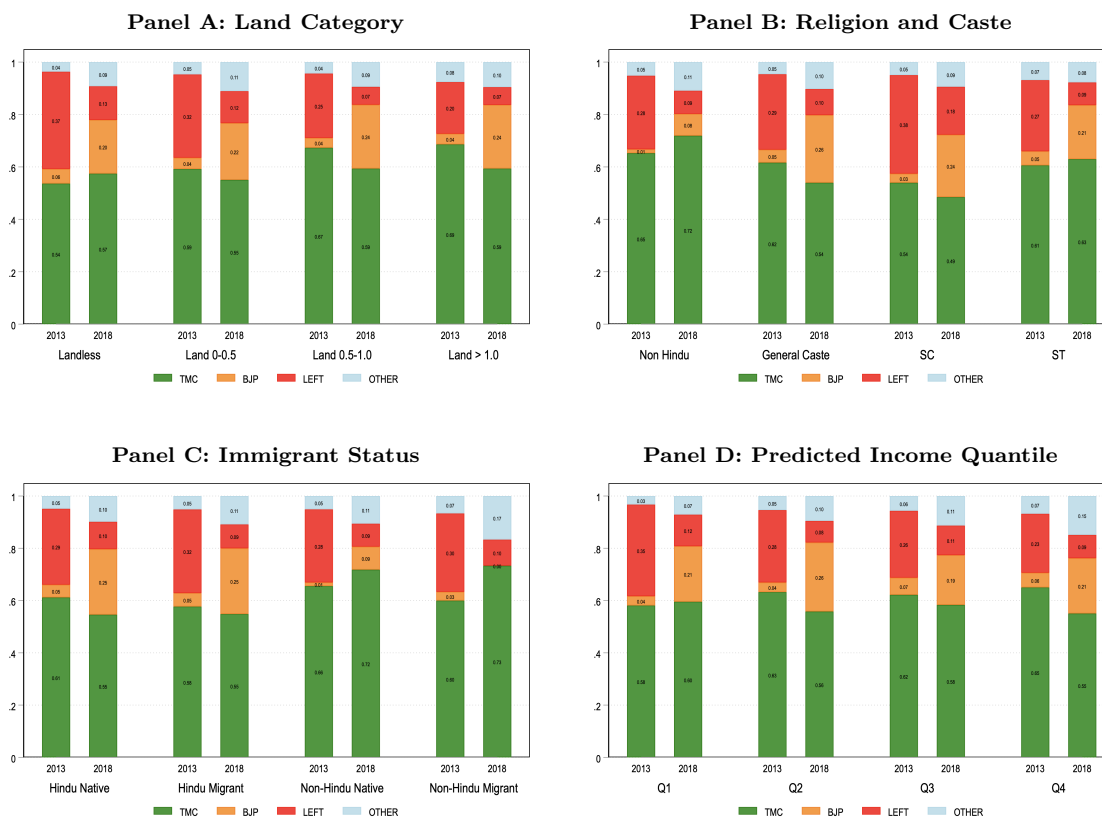
	Against TMC (1)	To TMC (2)	To BJP (3)
Panel A:			
Change in Potato value-added	-0.004 (0.028)	0.004 (0.018)	-0.001 (0.030)
Change in Employment Income	-0.001 (0.004)	-0.002 (0.003)	0.004 (0.004)
Number of Observations	3,502	3,502	3,502
R-squared	0.090	0.159	0.060
Panel B:			
Decline in Potato value-added	0.027 (0.027)	0.021 (0.024)	- 0.005 (0.024)
Decline in Employment Income	0.008 (0.016)	-0.021 (0.014)	0.003 (0.019)
Number of Observations	3,505	3,505	3,505
R-squared	0.091	0.160	0.060

Notes: OLS regression results presented. Regressions also control for characteristics of the household head (gender, education, age, occupation), household size, landholding, identity of household (gender of head, caste, religion, migrant status) change in state benefits received (2014–2018 — 2010–2013), central benefits received (2014–2018) and Hugli resident. Employment income and Potato Value added in real terms (using the All India Price Index Number for Agricultural Labourer, General Index, 1986 – 87 = 100). Employment Income and Potato value added in Rs. ('0000). Change in employment income = Employment income (2018) – Employment income (2010–2013). Change in potato value-added = Potato value-added (2018) – Potato value-added (2010–2013). Decline in Employment income = Change in Employment income < 0. Decline in Potato value-added = Change in Potato value-added < 0.

STs. The bottom-left panel compares shifts across groups defined by religion and immigration status of the household. We see that among Hindus the rise in BJP vote share did not vary with migrant status: both increased by 20%. However among non-Hindus, it was markedly lower for recent immigrants compared with natives. Hence non-Hindus, and in particular non-Hindu recent immigrants exhibited a much smaller likelihood of switching to the BJP. Strikingly, this is despite the greater discrimination they faced relative to Hindu households in the distribution of state benefits. This indicates there must have been ‘other’ factors that made them reluctant to switch to the BJP — in line with the hypothesis of rising importance of identity politics based on religion and immigration.

These results suggest that similar results will obtain after controlling for benefits received: non-Hindus would be even more inclined to vote for the TMC if they were to receive the same

Figure 7: Vote shares by Household Characteristics. Survey Data



Notes: Percentage of Households voting for Left, BJP and TMC in strawpoll conducted in 2013 and 2018 by household characteristics presented. Percentage of households that belong to each land category: 20, 40, 23, 18 (Panel A). Percentage of households that belong to each religion and caste category: 15, 69, 6, 10 (Panel B) Percent of households that belong to each migrant category: 80; 5; 15; 1 (Panel C). Predicted Income Quantiles (Panel D) computed using the predicted value of income from regression results presented in Table A1.

state benefits as Hindus. This is verified in Table 11 shows the same results hold for the vote-switching likelihood when we control for other household characteristics, changes in state benefits (post-pre2013 difference) and post-2013 central benefits. Holding these controls fixed, non-Hindu households were 12% less likely to switch away from the TMC, 4.6% more likely to switch towards the TMC, and 16.5% less likely to switch to the BJP (this is heightened further among non-Hindu immigrants). ST households, the other minority that was discriminated against in the distribution of state benefits, exhibited qualitatively similar patterns: 6% less likely to switch against TMC or towards BJP.

Table 11: Identity and Voting Patterns: Regression of Vote-Switching Likelihood on Household Characteristics

	Against TMC (1)	To TMC (2)	To BJP (3)
Male Headed Household	0.031 (0.040)	-0.055 (0.041)	0.042 (0.039)
SC Household	0.038 (0.046)	-0.055 (0.046)	-0.008 (0.058)
ST Household	-0.061* (0.036)	0.060* (0.032)	-0.066 (0.046)
Non Hindu Household	-0.119*** (0.024)	0.046* (0.026)	-0.165*** (0.027)
Recent Immigrant Household	0.081 (0.095)	-0.007 (0.077)	0.086 (0.086)
Non Hindu \times Recent Immigrant	-0.046 (0.192)	-0.175 (0.146)	-0.197** (0.092)
Constant	0.215*** (0.047)	0.309*** (0.040)	0.272*** (0.054)

Notes: OLS regression results presented. Regressions also control for characteristics of the household head (gender, education, age, occupation), household size, landholding, change in state benefits received (2014–2018 — 2010–2013), central benefits received (2014–2018) and Hugli resident. Recent immigrant denotes households where the head was not born in the village but migrated less than 10 years previously.

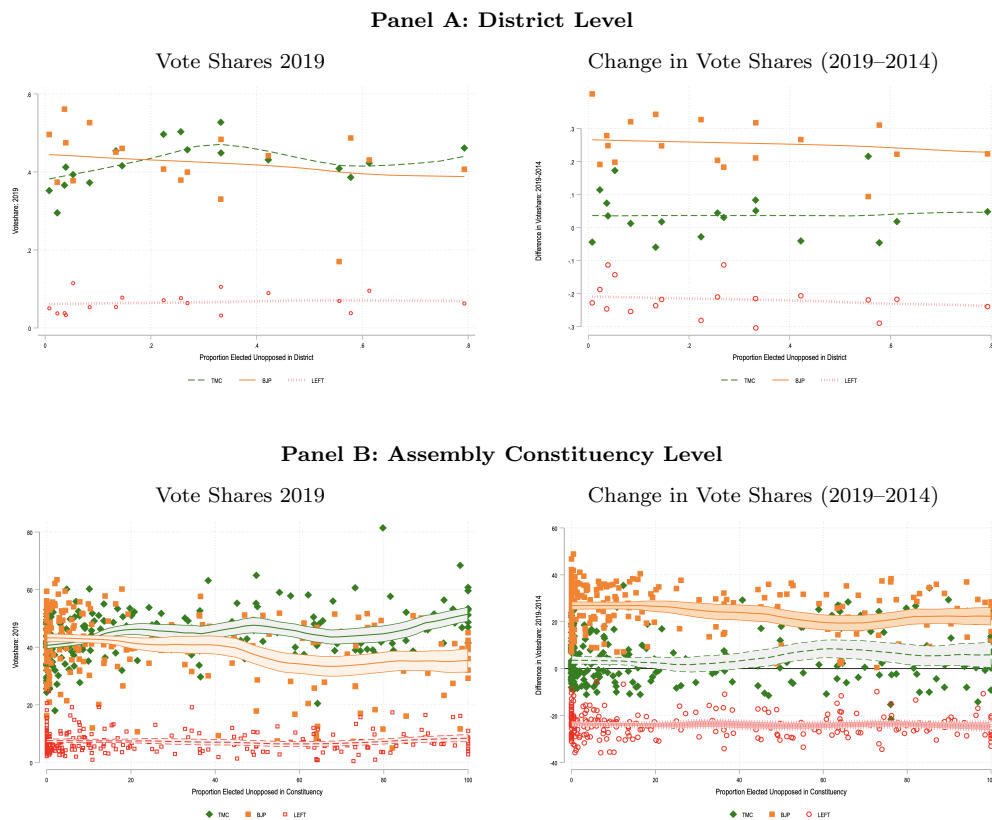
3.5 2018 Panchayat Election Violence

During the 2018 village council elections in West Bengal, the media reported a number of violent incidents around the state. Observers suggested that the violence was initiated or perpetrated by supporters of the Trinamool Congress, with the aim of intimidating their political opponents into withdrawing their candidacy. In the subsequent 2019 national elections, some suggested that voters had switched their votes away from the Trinamool Congress in order to punish them for this violence. If this is the case, then we should see that the BJP received more votes in polling booths that fall within the village councils where TMC candidates ran unopposed in the 2018 village council elections. However, as we see in Figure 8, across the 42 parliamentary constituencies in the state, there is no systematic pattern suggesting this was the case.

4 Discussion and Conclusion

Various explanations have been provided for the sharp rise in BJP support during the period 2014–2019. Jaffreot (2019), Chhibber and Verma (2019) and Choudhary et al. (2020) all emphasize the role of identity politics and that in 2019, caste and religion were the key determinants of voting

Figure 8: Unopposed Seats in 2018 Village Council Elections and 2019 Vote shares



Notes: Local weighted polynomial regressions and 90% confidence interval presented. Data includes all parliamentary election constituencies in West Bengal.

for BJP. This is in contrast to the “issue-based electoral chord” that BJP was able to strike with the voters in 2014. In contrast [Deshpande et al. \(2019\)](#) argue that the rise in BJP support was driven partly by changes in scale of benefits both old and new, and of the effectiveness of the former in raising votes of regional incumbents owing to a greater willingness of voters to shift credit to the BJP government. Accordingly they emphasize that the role of identity politics in explaining BJP’s rising popularity has been exaggerated. Using rich household level survey data from West Bengal, we examine the relative importance of economic factors and identity politics for the increased voter support for BJP between 2014 and 2019. The context is interesting because until the 2019, BJP was not viewed as a major electoral contender in the state and the rise in their vote share was drastic and sudden.

We summarize our main findings as follows. First, the sharp increase in the vote share of the BJP cannot be explained by changing structure of state and central government welfare benefits, declining effectiveness of state benefits in generating votes for the TMC, or superior targeting

of central benefits. Our results for West Bengal agree with the specific findings of [Deshpande et al. \(2019\)](#) at the all-India level regarding declining scale and effectiveness of NREGS benefits in generating higher votes for regional incumbents after 2014, and the positive impact of the new central benefits in raising the BJP vote share. But our overall conclusion differs markedly, because we additionally incorporate the role of other state programs whose scale and effectiveness in generating TMC votes grew markedly after 2014. Moreover the quantitative magnitude of the positive impact of central benefits on the BJP share was weak in comparison. Hence when assessing the combined impact of changes in different state and central programs, the net changes in vote share were opposite in nature to what was actually observed. We also failed to find any evidence of the role of economic distress or rising anti-TMC incumbency related to violence in the 2018 local government elections.

In contrast to the role of welfare benefits or economic distress, we find evidence consistent with the role of shifting identity politics as an important driver of increased support for BJP. Voters belonging to different social identity groups were differentially likely to switch their votes in favor of the BJP, with non-Hindus and recent immigrants significantly less likely to switch their support to the BJP in 2019. Our results are consistent with a number of other recent articles on West Bengal politics that draw attention to political strategies of the TMC. [Dey and Sen \(2020\)](#), [Shenoy and Zimmerman \(2020\)](#), [Mahadevan and Shenoy \(2023\)](#) provide detailed empirical evidence of political clientelism in West Bengal during the post-2011 period after TMC acquired majority control of state and local governments. [Bhattacharya and Dasgupta \(2023\)](#) suggest that the structural characteristics of the rural labour market in West Bengal, and the low labour market participation rates of women in the state create conditions for the continuing prevalence of a system where the electorate is dependent on transfers from the state government that stabilize household incomes in an environment of fluctuating and uncertain earnings. [Nath \(2022\)](#) provides data and ethnographic evidence that since 2011 the TMC has increasingly encouraged religious and cultural festivals and the use of traditional community-based mechanisms of dispute settlement, which encouraged minorities to vote for the TMC.

Data limitations prevented us from examining other possible sources of anti-TMC-incumbency arising from citizens assigning TMC leaders and party workers for corruption or governance failures on other dimensions such as security or dispute settlement. They also prevented us from including other districts or states in the analysis. This indicates the need to collect or utilize more data to extend our approach to incorporate other locations and dimensions of governance.

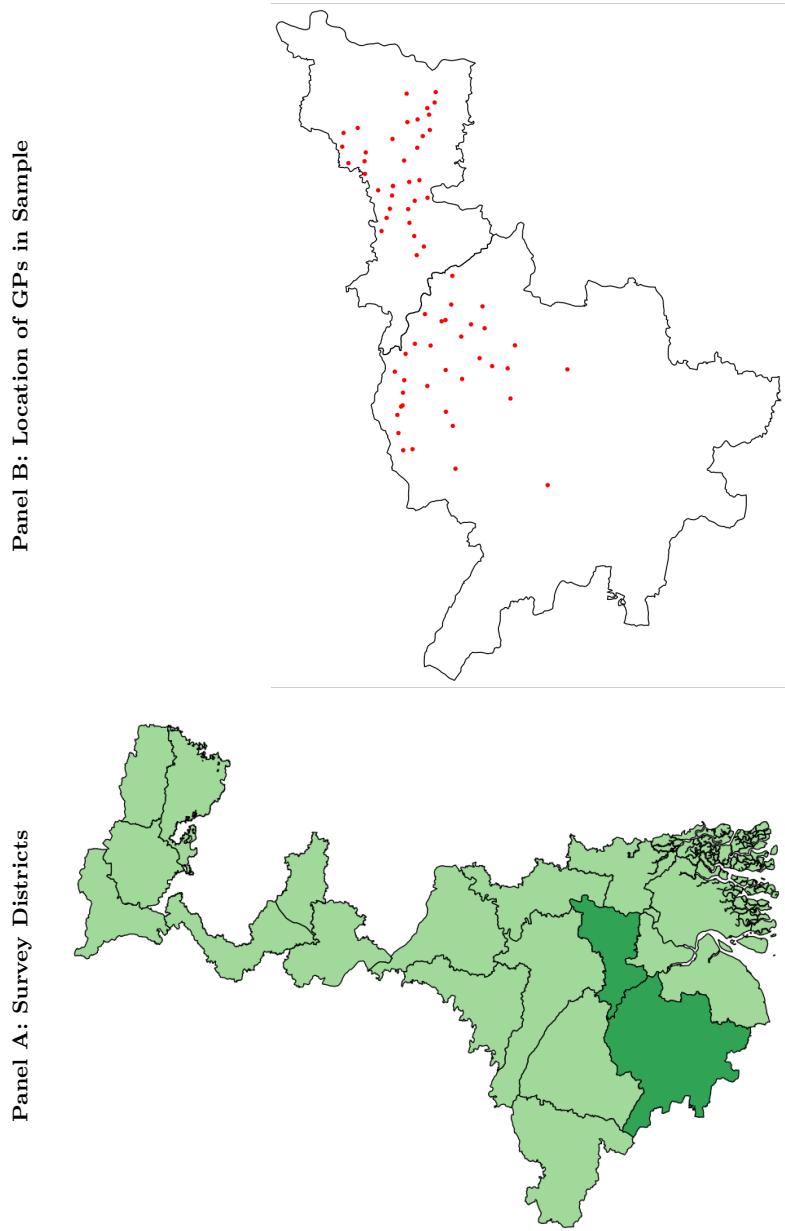
References

- Alabrese, E., Becker, S. O., Fetzer, T., and Novy, D. (2019). Who voted for Brexit? Individual and regional data combined. *European Journal of Political Economy*, 56:132–150.
- Autor, D., Dorn, D., Hanson, G., and Majlesi, K. (2020). Importing political polarization? the electoral conse-

- quences of rising trade exposure. *American Economic Review*, 110(10):3139–3183.
- Bai, J., Jayachandran, S., Malesky, E. J., and Olken, B. A. (2019). Firm growth and corruption: Empirical evidence from Vietnam. *Economic Journal*, 129(618):651 – 677.
- Bardhan, P. (2022). *A world of Insecurity: Democratic Disenchantment in Rich and Poor Countries*. Harvard University Press.
- Bardhan, P., Mitra, S., Mookherjee, D., and Nath, A. (2021). How do voters respond to welfare Programs vis-a-vis Infrastructure Programs? Evidence for Clientelism in West Bengal. Technical report, Institute for Economic Development, Boston University.
- Bardhan, P., Mitra, S., Mookherjee, D., and Sarkar, A. (2015). Political Participation, Clientelism, and Targeting of Local Government Programs: Results from a Rural Household Survey in West Bengal, India. In Faguet, J.-P. and Poschl, C., editors, *Is Decentralization Good For Development? Perspectives from Academics and Policy Makers*. Oxford: Oxford University Press.
- Betz, T., Cook, S. J., and Hollenbach, F. M. (2018). On the use and abuse of spatial instruments. *Political Analysis*, 26(4):474–479.
- Bhattacharya, S. and Dasgupta, I. (2023). Economics and Politics of Some Emerging Fault Lines in Rural West Bengal. *Economic and Political Weekly*, LVIII(16):25 – 28.
- Casey, K. (2015). Crossing party lines: The effects of information on redistributive politics. *American Economic Review*, 105(8):2410–2448.
- Chhibber, P. and Verma, R. (2019). The Rise of the Second Dominant Party System in India: BJP’s New Social Coalition in 2019. *Studies in Indian Politics*, 7(2):131 – 148.
- Choudhary, P. K., Syal, R., and Arora, T. (2020). Do issues matter in Indian elections. *IPP Indian Politics & Policy*, 3(1):31–48.
- Colantone, I. and Stanig, P. (2018). The trade origins of economic nationalism: import competition and voting behavior in western europe. *American Journal of Political Science*, 62(4):936–953.
- Colantone, I. and Stanig, P. (2019). The surge of economic nationalism in western europe. *Journal of Economic Perspectives*, 33(4):128–151.
- Dang, D. A. and La, H. A. (2019). Does electricity reliability matter? Evidence from rural Vietnam. *Energy Policy*, 131:399 – 409.
- Deshpande, R., Tillin, L., and Kailash, K. K. (2019). The BJP’s Welfare Schemes: Did They Make a Difference in the 2019 Elections? *Studies in Indian Politics*, 7(2):219 – 233.
- Dey, S. and Sen, K. (2020). Do Political Parties Practise Partisan Alignment in Social Welfare Spending? Evidence from Village Council Election in India. Technical report, University of Warwick.
- Dixit, A. K. and Londregan, J. (1996). The Determinants of Success of Special Interests in Redistributive Politics. *The Journal of Politics*, 58:1132 – 1155.
- Enos, R. D. (2016). What the Demolition of Public Housing Teaches us about the Impact of Racial Threat on Political Behavior. *American Journal of Political Science*, 60(1):123–142.
- Golder, M. (2016). Far Right Parties in Europe. *Annual Review of Political Science*, 19:477 – 497.
- Grossman, G. M. and Helpman, E. (1996). Electoral Competition and Special Interest Politics. *The Review of Economic Studies*, 63(2):265–286.
- Guriev, S. and Papaioannou, E. (2022). The Political Economy of Populism. *Journal of Economic Literature*, 60(3):753–832.
- Jaffrelot, C. (2019). Class and Caste in the 2019 Indian Election—Why Have So Many Poor Started Voting for Modi? *Studies in Indian Politics*, 7(2):149 – 160.

- Joshi, B., Ranjan, A., and Sircar, N. (2022). A Fundamental Shift in Electoral Behaviour. Technical report, Hindustan Times. March 10.
- Kaplan, E. and Mukand, S. (2014). The Persistence of Political Partisanship: Evidence from 9/11. Technical report, IIES Stockholm University and University of Warwick.
- Lamichhane, D. K. and Mangyo, E. (2011). Water accessibility and child health: Use of the leave-out strategy of instruments. , 30(5):1000-1010. *Journal of Health Economics*, 30(5):1000 – 1010.
- Levitt, S. D. and Snyder Jr, J. M. (1997). The Impact of Federal Spending on House Election Outcomes. *Journal of Political Economy*, 105(1):30 – 53.
- Mahadevan, M. and Shenoy, A. (2023). The Political Consequences of Resource Scarcity: Targeted Spending in a Water-Stressed Democracy. *Journal of Public Economics*, 220:104842.
- Maitra, P., Miller, R., and Sedai, A. (2023). Household Welfare Effects of ROSCAs. *World Development*, Forthcoming.
- Maitra, P., Mitra, S., Mookherjee, D., Motta, A., and Visaria, S. (2017). Financing Smallholder Agriculture: An Experiment with Agent-Intermediated Microloans in India. *Journal of Development Economics*, 127:306 – 337.
- Maitra, P., Mitra, S., Mookherjee, D., Motta, A., and Visaria, S. (2022a). Decentralized Targeting of Agricultural-Credit Programs: Private versus Political Intermediaries. Technical report, Mimeo, Monash University.
- Maitra, P., Mitra, S., Mookherjee, D., and Visaria, S. (2022b). Evaluating the Distributive Effects of a Micro-credit Intervention. *Journal of Development Economics*, 158(102896).
- McKenzie, D. (2021). I’m not a fan of leave-one-out/spatial instruments. Technical report, Development Impact. World Bank. <https://blogs.worldbank.org/impactevaluations/im-not-fan-leave-one-outspatial-instruments>.
- Mitra, S., Mookherjee, D., Torero, M., and Visaria, S. (2018). Asymmetric Information and Middleman Margins: An Experiment with West Bengal Potato Farmers. *Review of Economics and Statistics*, C(1):1 – 13.
- Muis, J. and Immerzeel, T. (2017). Causes and Consequences of the Rise of Populist Radical Right Parties and Movements in Europe. *Current Sociology Review*, 65(6):909–930.
- Nath, S. (2022). Politics of Cultural Misrecognitions and the Rise of Identity Consolidations in Post-left West Bengal. *Economic and Political Weekly*, LVII(40):58–66.
- Ochsner, C. and Roesel, F. (2017). Activated History - The Case of the Turkish Sieges of Vienna. Technical report, CESifo Working Paper Series.
- Oliveira, W. F. (2022). Unpacking the effect of immigration on elections. Technical report, Pontifical Catholic University of Rio de Janeiro (CPI/PUC-Rio).
- Sedai, A. K., Nepal, R., and Jamasb, T. (2020). Flickering lifelines: Electrification and household welfare in India. *Energy Economics*, 104975.
- Shenoy, A. and Zimmerman, L. (2020). Political Organizations and Persistent Policy Distortions. Technical report, Department of Economics, University of California, Santa Cruz.
- Wilkinson, S. (2020). The impact of Technology on Patterns of Clientelist Politics in South Asia. Technical report, Yale University.

Figure A1: Survey Districts and Sample Villages



Notes: Our sample villages are from Hugli and Pashchim Medinipur, the districts in darker shade (in Panel A). In Panel B the red dots denote the location of our sample villages.

Table A1: Predicting Poverty Index

	(1)	(2)
Landless Household	-9,977.626*** (2,101.873)	-8,940.466*** (2,692.083)
Household Head less than primary school	-10,067.128*** (2,664.820)	-9,231.994*** (2,839.659)
Female headed Household	-3,492.958 (4,027.951)	-5,769.348 (3,960.015)
Occupation of Household Head: Labour	-3,898.998* (1,973.744)	-5,972.235*** (2,041.127)
Kuchha House	-10,940.973*** (2,628.487)	-13,836.728*** (2,761.813)
Constant	66,435.195*** (2,822.976)	68,107.339*** (2,033.919)
Sample Size	3,507	3,507
R-squared	0.025	0.056

Notes: Dependent variable: Average total household income during the period 2010–2013. Regression in column 2 includes village fixed effects. Standard errors, clustered at the village level in parentheses. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A2: First Stage Regression Results. State and Central Benefits Received 2014–2018

	State Benefits 2014–2018 (1)	Central Benefits 2014–2018 (2)
Male headed household	-8.888 (11.157)	1.402 (6.021)
SC household	12.073 (7.363)	7.879* (4.111)
ST household	-2.040 (7.517)	2.134 (3.808)
Non Hindu household	0.731 (9.483)	-0.221 (4.976)
Recent Migrant household	-23.610 (15.053)	3.005 (4.599)
Non Hindu × Recent Migrant	-21.511 (22.248)	-11.111 (10.383)
Household size	0.190 (0.601)	-0.223 (0.327)
Head married	1.338 (10.080)	1.585 (4.607)
Head more than primary schooling	0.708 (3.702)	-2.013 (1.743)
Head occupation: cultivation	13.178** (5.240)	3.075 (2.923)
Head occupation: labour	13.719** (6.843)	3.863 (3.767)
Landless	7.105 (6.244)	11.509*** (3.239)
Landholding 0—0.5 acres	6.256 (4.637)	11.185*** (2.840)
Landholding 0.5—1.0 acres	-0.713 (4.757)	6.001** (2.612)
Swing voter household	-1.339 (3.520)	-0.636 (1.761)
Hugli Resident	-25.077*** (1.067)	6.304*** (0.320)
\bar{C}_{-j}	11.241 (10.091)	-22.465*** (4.939)
$\bar{C}_{-j} \times$ Male headed household	10.149 (12.110)	-1.232 (6.585)
$\bar{C}_{-j} \times$ SC household	-12.032 (8.181)	-7.655* (4.581)
$\bar{C}_{-j} \times$ ST household	1.765 (8.219)	-2.750 (4.155)
$\bar{C}_{-j} \times$ Non Hindu household	-0.838 (10.768)	0.149 (5.610)
$\bar{C}_{-j} \times$ Recent Migrant household	27.796 (16.787)	-3.291 (5.068)
$\bar{C}_{-j} \times$ Non Hindu × Recent Migrant	18.916 (24.928)	11.431 (11.527)
$\bar{C}_{-j} \times$ Household size	-0.212 (0.669)	0.261 (0.362)
$\bar{C}_{-j} \times$ Head married	-1.835 (11.048)	-1.920 (5.009)
$\bar{C}_{-j} \times$ Head more than primary schooling	-1.037 (4.012)	2.145 (1.911)

Continued ...

First Stage Regression Results State and Central Benefits Received 2014–2018 (Continued)

	State Benefits 2014–2018 (1)	Central Benefits 2014–2018 (2)
$\bar{C}_{-j} \times$ Head occupation: cultivation	-14.097** (5.806)	-3.089 (3.179)
$\bar{C}_{-j} \times$ Head occupation: labour	-14.835* (7.485)	-3.901 (4.099)
$\bar{C}_{-j} \times$ Landless	-6.641 (6.828)	-12.409*** (3.516)
$\bar{C}_{-j} \times$ Landholding 0–0.5 acres	-6.946 (5.110)	-12.359*** (3.102)
$\bar{C}_{-j} \times$ Landholding 0.5–1.0 acres	0.473 (5.219)	-6.515** (2.888)
$\bar{C}_{-j} \times$ Swing voter household	1.341 (3.812)	0.466 (1.922)
\bar{S}_{-j}	-32.519*** (2.457)	3.874*** (1.102)
$\bar{S}_{-j} \times$ Male headed household	1.891 (2.782)	-0.415 (1.478)
$\bar{S}_{-j} \times$ SC household	-3.209* (1.837)	-2.200** (1.002)
$\bar{S}_{-j} \times$ ST household	0.556 (1.851)	-0.419 (0.934)
$\bar{S}_{-j} \times$ Non Hindu household	-0.285 (2.197)	0.042 (1.161)
$\bar{S}_{-j} \times$ Recent Migrant household	5.361 (3.623)	-0.709 (1.127)
$\bar{S}_{-j} \times$ Non Hindu \times Recent Migrant	6.309 (5.372)	2.917 (2.605)
$\bar{S}_{-j} \times$ Household size	-0.051 (0.144)	0.050 (0.079)
$\bar{S}_{-j} \times$ Head married	-0.080 (2.488)	-0.320 (1.146)
$\bar{S}_{-j} \times$ Head more than primary schooling	-0.307 (0.928)	0.464 (0.429)
$\bar{S}_{-j} \times$ Head occupation: cultivation	-3.141 (1.269)	-0.812 (0.722)
$\bar{S}_{-j} \times$ Head occupation: labour	-3.101* (1.690)	-0.984 (0.929)
$\bar{S}_{-j} \times$	-1.664 (1.541)	-2.774*** (0.799)
$\bar{S}_{-j} \times$ Landholding 0–0.5 acres	-1.158 (1.138)	-2.603*** (0.696)
$\bar{S}_{-j} \times$ Landholding 0.5–1.0 acres	0.414 (1.174)	-1.437** (0.632)
$\bar{S}_{-j} \times$ Swing voter household	0.392 (0.876)	0.222 (0.435)
Constant	63.870*** (9.184)	2.241 (4.420)
First Stage F	165.50 [0.000]	146.32 [0.000]

Continued ...

First Stage Regression Results State and Central Benefits Received 2014–2018 (Continued)

State Benefits 2014–2018 (1)	Central Benefits 2014–2018 (2)
------------------------------------	--------------------------------------

Notes: First stage regression results for central and state benefits received by households during the period 2014–2018 presented. \bar{C}_{-j} and \bar{S}_{-j} denote the average number of central and state benefits received by households (during the period 2014–2018), excluding households in the same village. p-values associated with the F-statistics presented in square brackets. Standard errors, clustered at the village level in parentheses. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A3: First Stage Regression Results. State Benefits Received 2010–2013

	State Benefits 2010–2013 (1)
Male headed Household	0.749 (0.625)
SC Household	1.548* (0.806)
ST Household	-0.498 (0.309)
Non Hindu Household	-0.064 (0.364)
Recent Migrant Household	-0.359 (1.178)
Non Hindu \times Recent Migrant	2.127 (1.944)
Household Size	0.006 (0.038)
Head married	-0.284 (0.504)
Head more than primary schooling	0.117 (0.244)
Head occupation: cultivation	0.078 (0.254)
Head occupation: labour	-0.196 (0.409)
Landless	1.075*** (0.343)
Landholding 0 – 0.5 acres	0.841*** (0.251)
Landholding 0.5 – 1 acres	0.602** (0.280)
Swing voter household	-0.112 (0.292)
Hugli resident	-11.522*** (0.200)
\bar{S}_{-j}	-0.670*** (0.016)
$\bar{S}_{-j} \times$ Male headed Household	-0.017 (0.011)
$\bar{S}_{-j} \times$ SC Household	-0.024* (0.013)
$\bar{S}_{-j} \times$ ST Household	0.009 (0.005)
$\bar{S}_{-j} \times$ Non Hindu Household	0.001 (0.006)
$\bar{S}_{-j} \times$ Recent Migrant Household	0.003 (0.019)
$\bar{S}_{-j} \times$ Non Hindu \times Recent Migrant	-0.037 (0.031)
$\bar{S}_{-j} \times$ Household Size	0.000 (0.001)
$\bar{S}_{-j} \times$ Head married	0.006 (0.009)
$\bar{S}_{-j} \times$ Head more than primary schooling	-0.004 (0.004)
$\bar{S}_{-j} \times$ Head occupation: cultivation	0.001

Continued ...

First Stage Regression Results State Benefits Received 2010–2013 (Continued)

	State Benefits 2010–2013 (1)
	(0.005)
$\bar{S}_{-j} \times$ Head occupation: labour	0.008 (0.007)
$\bar{S}_{-j} \times$ Landless	-0.013** (0.006)
$\bar{S}_{-j} \times$ Landholding 0 – 0.5 acres	-0.010** (0.004)
$\bar{S}_{-j} \times$ Landholding 0.5 – 1 acres	-0.009* (0.005)
$\bar{S}_{-j} \times$ Swing voter household	0.004 (0.006)
Constant	44.558** (0.964)
First Stage F	257.648 [0.00]

Notes: First stage regression results for State Benefits Received 2010–2013 presented. \bar{S}_{-j} denote the average number of central and state benefits received by households (during the period 2010–2013), excluding households in the same village. p-values associated with the F-statistics presented in square brackets. Standard errors, clustered at the village level in parentheses. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A4: First Stage Regression Results. Change in State and Central Benefits Received 2014–2018 — 2010–2013

	Change in State Benefits 2014–2018 — 2010–2013 (1)	Change in Central Benefits 2014–2018 — 2010–2013 (2)
Male headed household	-7.826 (5.939)	0.391 (3.561)
SC household	6.571* (3.339)	2.056 (2.123)
ST household	-7.279 (4.745)	1.019 (2.249)
Non Hindu household	-4.350 (5.637)	-0.614 (2.810)
Recent Migrant household	-18.694** (8.970)	1.194 (3.543)
Non Hindu × Recent Migrant	-5.217 (12.612)	-4.916 (5.566)
Household size	0.228 (0.374)	-0.220 (0.202)
Head married	3.403 (6.241)	-0.158 (2.973)
Head more than primary schooling	0.854 (2.469)	-0.956 (0.864)
Head occupation: cultivation	6.630** (2.933)	2.392 (1.641)
Head occupation: labour	8.812** (3.839)	1.541 (2.066)
Landless	2.052 (4.896)	5.655*** (1.766)
Landholding 0—0.5 acres	4.593 (3.010)	6.358*** (1.736)
Landholding 0.5—1.0 acres	-1.454 (3.764)	2.694 (1.660)
Swing voter household	-6.045* (3.559)	-0.475 (1.074)
Hugli Resident	-14.360*** (0.556)	5.804*** (0.230)
$\Delta \bar{C}_{-j}$	3.079 (7.493)	-30.019*** (3.510)
$\Delta \bar{C}_{-j} \times$ Male headed household	10.108 (7.894)	-0.277 (4.641)
$\Delta \bar{C}_{-j} \times$ SC household	-8.582** (4.274)	-1.936 (2.808)
$\Delta \bar{C}_{-j} \times$ ST household	9.381 (6.180)	-1.649 (2.918)
$\Delta \bar{C}_{-j} \times$ Non Hindu household	5.566 (7.649)	0.644 (3.754)
$\Delta \bar{C}_{-j} \times$ Recent Migrant	26.157** (11.809)	-1.527 (4.635)
$\Delta \bar{C}_{-j} \times$ Non Hindu × Recent Migrant	2.514 (16.934)	6.056 (7.458)
$\Delta \bar{C}_{-j} \times$ Household size	-0.325 (0.497)	0.296 (0.266)
$\Delta \bar{C}_{-j} \times$ Head married	-4.562 (8.271)	0.074 (3.824)
$\Delta \bar{C}_{-j} \times$ Head more than primary schooling	-1.537 (3.237)	1.130 (1.153)

Continued ...

First Stage Regression Results. Change in State and Central Benefits Received 2014–2018 — 2010–2013 (Continued)

	Change in State Benefits 2014–2018 — 2010–2013 (1)	Change in Central Benefits 2014–2018 — 2010–2013 (2)
$\Delta\bar{C}_{-j} \times$ Head occupation: cultivation	-8.317** (3.825)	-2.877 (2.124)
$\Delta\bar{C}_{-j} \times$ Head occupation: labour	-11.051** (5.000)	-1.700 (2.669)
$\Delta\bar{C}_{-j} \times$ Landless	-2.222 (6.369)	-7.034*** (2.274)
$\Delta\bar{C}_{-j} \times$ Landholding 0—0.5 acres	-6.363 (3.943)	-8.188*** (2.244)
$\Delta\bar{C}_{-j} \times$ Landholding 0.5—1.0 acres	1.391 (4.906)	-3.362 (2.168)
$\Delta\bar{C}_{-j} \times$ Swing voter household	7.766* (4.644)	0.412 (1.388)
$\Delta\bar{S}_{-j}$	-35.862*** (3.001)	2.720** (1.362)
$\Delta\bar{S}_{-j} \times$ Male headed household	4.049 (3.071)	-0.355 (1.875)
$\Delta\bar{S}_{-j} \times$ SC household	-3.380* (1.926)	-1.600 (1.130)
$\Delta\bar{S}_{-j} \times$ ST household	3.687 (2.507)	-0.302 (1.183)
$\Delta\bar{S}_{-j} \times$ Non Hindu household	2.114 (2.686)	0.354 (1.370)
$\Delta\bar{S}_{-j} \times$ Recent Migrant household	8.973* (4.661)	-0.594 (1.878)
$\Delta\bar{S}_{-j} \times$ Non Hindu \times Recent Migrant	5.403 (6.560)	2.768 (3.053)
$\Delta\bar{S}_{-j} \times$ Household size	-0.121 (0.191)	0.109 (0.104)
$\Delta\bar{S}_{-j} \times$ Head married	-1.429 (3.190)	0.231 (1.618)
$\Delta\bar{S}_{-j} \times$ Head more than primary schooling	-0.515 (1.307)	0.444 (0.442)
$\Delta\bar{S}_{-j} \times$ Head occupation: cultivation	-3.441** (1.557)	-1.369 (0.871)
$\Delta\bar{S}_{-j} \times$ Head occupation: labour	-4.480** (2.078)	-0.867 (1.099)
$\Delta\bar{S}_{-j} \times$ Landless	-0.696 (2.593)	-2.901*** (0.946)
$\Delta\bar{S}_{-j} \times$ Landholding 0—0.5 acres	-1.483 (1.596)	-3.071*** (0.916)
$\Delta\bar{S}_{-j} \times$ Landholding 0.5—1.0 acres	1.475 (1.991)	-1.364 (0.865)
$\Delta\bar{S}_{-j} \times$ Swing voter household	3.197* (1.840)	0.416 (0.577)
Constant	27.312*** (5.619)	11.590*** (2.612)
First Stage F	278.90 [0.000]	114.69 [0.000]

Continued ...

**First Stage Regression Results. Change in State and Central Benefits Received
2014–2018 — 2010–2013 (Continued)**

Change in State Benefits 2014–2018 — 2010–2013 (1)	Change in Central Benefits 2014–2018 — 2010–2013 (2)
--	--

Notes: First stage regression results for change in central and state benefits received by households between period 2014–2018 and 2010–2013 presented. $\Delta\bar{C}_{-j}$ and $\Delta\bar{S}_{-j}$ denote the change in the average number of central and state benefits received by households (during the period 2014–2018), excluding households in the same village. p-values associated with the F-statistics presented in square brackets. Standard errors, clustered at the village level in parentheses. Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.