House Versus Cooking Gas Cylinder: Assessing the Political Impact of Two Benefits

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Abstract

Governments distribute a variety of benefits to win votes. Why do some benefits have greater electoral impact than others? This paper provides descriptive evidence that a $10 cooking gas cylinder and $2000 house have comparable electoral impact in India. This motivates a typology in which distributive decisions can be organized on two dimensions: the cost of the benefit, and how it is distributed. Politicians face two key trade-offs: first, given a finite budget, politicians can distribute a cheap benefit to many voters or an expensive benefit to fewer voters; and second, they can either distribute the benefit through brokers or a government program. Clientelism skews distribution in favor of loyalists but provides effective credit claiming. Programmatic distribution provides better targeting but worse credit claiming. Using data from India's National Election Studies, I show that there is political targeting of the cooking gas cylinder but not the house. Cooking gas cylinder recipients are also more likely to be contacted by the ruling party broker but not house recipients. I conclude that party elites pursue a mixed strategy while distributing benefits, using brokers to deliver cheap benefits and government programs to deliver expensive benefits. Ironically, excluding brokers from the expensive benefit can have political costs because brokers make up for the value deficit in a benefit through effective canvassing.

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Introduction

Governments routinely distribute benefits that range from homes to home appliances (De La O 2013; Manacorda, Miguel, and Vigorito 2011; Nazareno, Stokes, and Brusco 2006; Goyal 2019; Kumar 2021*a*,*b*; Bueno, Nunes, and Zucco Jr. 2017; Barnhardt, Field, and Pande 2015; Pop-Eleches and Pop-Eleches 2009; Nair 2020). Some of these benefits win a lot of votes, others less so. Why is it that some benefits win more votes and move political preferences more than others? The distributive politics literature assumes, sometimes implicitly, that more expensive benefits have greater impact on preferences (Lindbeck and Weibull 1987; Dixit and Londregan 1996; Heath and Tillin 2018). Yet, as this paper shows, a cheap benefit can have as much political impact as an expensive benefit. What explains this variation?

To motivate this study, I compare the electoral impact of two, one-time benefits distributed by India's government: a $10 cooking gas cylinder, and $2000 assistance to build a house. India is an interesting case because it is a populous, developing democracy, with considerable welfare spending, political parties with clientelistic infrastructure, and state capacity to support programmatic distribution.

A regression analysis shows that receiving either of the benefits is associated with similar changes in support for the ruling party, after controlling for a variety of factors that affect selection into benefits and political preferences. Gas cylinder recipients, on average, are 5 percentage points more likely to vote for the ruling party in a parliamentary election, while home recipients are 4 percentage points more likely to vote for the ruling party. This empirical pattern is observed for a variety of measures: satisfaction with the government, performance evaluations, incumbent's re-election prospects, and voting for opposition parties. In other words, the partial correlation between receiving a benefit and supporting the ruling party does not depend on the monetary value of the benefit.

The distributive politics literature does not adequately address this empirical anomaly. First, voting models predict a positive relationship between benefit size and preference change (Lindbeck and Weibull 1987; Dixit and Londregan 1996; Heath and Tillin 2018). Second,

most studies fix the benefit and evaluate the distributive strategy (Kramon and Posner 2013), thereby side-stepping the question of what happens if we vary the benefit size. In practice, politicians simultaneously distribute many benefits, using different distributive strategies. What are the electoral consequences of these choices?

I propose a parsimonious framework to understand distributive decisions, and their electoral consequences. I argue that in developing democracies, politicians face two trade-offs while making such decisions. When it comes to the benefit, they have a finite budget which implies that they can give a cheap benefit to several voters, or an expensive benefit to fewer voters. When it comes to distributive strategies, politicians can either engage party brokers or apolitical bureaucrats.[1] Clientelism skews distribution in favor of party loyalists but provides effective credit claiming and monitoring of voters (Stokes et al. 2013; Muralidharan et al. 2021; Banerjee et al. 2020; Muralidharan, Niehaus, and Sukhtankar 2016). Programmatic distribution leads to potentially more efficient socio-economic targeting but weaker credit claiming and voter monitoring. Crucially, the loyalist-skew in clientelism tends to be more acute for an expensive benefit (which can only be given to a few people). In contrast, weak credit claiming and monitoring is a feature of all programmatic distribution, irrespective of benefit size.

These trade-offs explain why some material benefits have greater political impact than others. For example, a cheap benefit, distributed through brokers, can win more votes than an expensive programmatic benefit. There are two reasons for this: the cheaper benefit reaches a more persuadable or easily mobilizable audience, or it is reinforced with better credit claiming and voter monitoring.

I evaluate these explanations in the context of two benefits distributed by the Indian government. I show that the gas cylinder was distributed through brokers, while the house was not. Using a fixed effects model, I show that past vote, specifically support for the ruling party in the previous parliamentary election, strongly predicts getting the clientelistic

[1] I classify countries where the bureaucracy is packed with party brokers as a case of clientelism, not programmatic distribution.

benefit but not the programmatic benefit. I then employ a regression discontinuity design to understand the distributive consequences of a narrow election win for the ruling party, treating a coin-flip win as an exogenous shock to clientelistic resources. This analysis shows that the probability of receiving a cooking gas cylinder sharply increases in constituencies where the ruling party narrowly wins in the previous election, compared to where it narrowly loses. Furthermore, the probability that a party loyalist receives the cooking gas cylinder also increases significantly at the cut-point. This is evidence of political targeting and the loyalist skew expected under clientelism (Stokes et al. 2013). Neither of these patterns appear for the housing program. Finally, a regression analysis shows that cylinder recipients are more likely to be contacted by the ruling party's canvassers but this is not the case for house recipients.

Overall, the evidence points to the pivotal role of brokers. Distributing benefits can generate good will but brokers are needed to convert that latent good will into votes. This is why a cheap benefit, distributed through party brokers, can match the impact of an expensive benefit.

This paper makes at least two contributions to the literature. The main contribution is that it develops a theoretical framework to understand how politicians distribute benefits of varying value using different strategies. Most prior work focuses on one benefit, and evaluates how it is distributed or how some intervention can increase efficiency. This paper engages with the possibility that politicians simultaneously distribute several benefits of varying value, and use different distributive strategies. There is a mixing of distributive strategies in which brokers distribute some benefits and government programs are used to give out others. Clientelism and programmatic politics co-exist and compliment each other in several ways. This echoes Weghorst and Lindberg (2013)'s findings in Ghana where programmatic appeals do not weaken the efficacy of clientelism. My explanation for the persistence of clientelism also differs from Mares and Young (2019), who show that different types of clientelism is used for programmatic signaling (support for or opposition to workfare

programs) in Eastern Europe, and that voters are less likely to punish clientelistic practices when they perceive policy alignment. In contrast, I argue that clientelism persists because parties still rely on brokers to claim credit for welfare programs, disseminate their ideology, and diversify risk. My argument also has interesting implications for party brands, which may be diluted because of inconsistencies within a party platform and the convergence of platforms (Lupu 2016). On the empirical side, this is the first of its kind comparative evaluation of two, large-scale, new welfare programs in India using individual level data, and multiple empirical strategies.

The remainder of the paper is structured as follows: I motivate the study with an example from India where two benefits, unequal in monetary value, have an equal impact on political preferences; then survey the existing literature, describe my argument, and present three pieces of empirical evidence in support of that argument.

Puzzle

India's federal government distributes a variety of benefits, some cheap, others expensive. This paper focuses on two flagship welfare programs of the BJP government: *Ujjwala* and *Awas Yojana*. *Ujjwala* provided a free liquefied petroleum gas (LPG) cylinder worth $10 to nearly 72 million households.[2] The *Awas Yojana* provided $2000 to poor households in rural areas to build a *pucca* (cement) house. Between April 2015 and December 2019, 8.8 million houses were constructed under the program, with 10 states accounting for 93% of the houses and 91% of eligible beneficiaries.[3] According to contemporary media reports and research papers, these schemes, in particular the two benefits described above, won votes for the BJP in elections. For example, see Attri and Jain (2019); Mukherjee and Waghmare (2020); Deshpande, Tillin, and Kailash (2019).

[2]Data from the Ministry of Petroleum and Natural Gas, Government of India. Accessible here. Figure as of May 22, 2019. India's parliamentary elections were conducted between April 11 and May 19, 2019, and the votes were counted on May 23, 2019.

[3]Data from the Ministry of Rural Development, Government of India.

I probe this claim further by using data from the National Election Studies 2019 (details in the data section), and focusing on rural areas in 10 states where a large number of houses were built. I employ an ordinary least squares regression with the following specification in `lm_robust`:

$$\mathrm{Y}_{i,t} = \alpha_0 + \beta_1(\text{Got a house})_{i,t-1} + \beta_2(\text{Got a cylinder})_{i,t} + \rho\mathbf{X}_{i,t} + \sum_{j=1}^{J} \gamma_j \text{Booth}_j$$

where $Y_{i,t}$ captures electoral support for the BJP using a variety of survey measures[4], $\mathbf{X}$ is a vector of control variables like past vote choice, ethnicity, mean-centered age, gender (female or not), education, and monthly household expenditure (binned). The specification include polling booth fixed effects to adjust for any confounding due to time invariant factors at the precinct level. β_1 and β_2 are the parameters of interest. β_1 captures the partial correlation between getting a house and supporting the BJP. β_2 captures the same relationship for the cooking gas cylinder. Going into the analysis, I have two expectations: (i) receiving a benefit should increase support for the BJP ($\beta_1 > 0$ and $\beta_2 > 0$); and (ii) the expensive benefit should have greater impact than the cheaper benefit ($\beta_1 > \beta_2$).

Table 1 reports $\widehat{\beta_1}$ and $\widehat{\beta_2}$ from this analysis. The full results are reported in Appendix B, Table 9. Table 1 reports the coefficient estimates for a variety of measures: voting for the BJP in the parliamentary election, voting for the BJP-led National Democratic Alliance, voting for ethnic parties (most of which are in opposition to the BJP), pro-incumbency sentiment, satisfaction with the government, and evaluation of its performance. Home recipients are 3.5 percentage points more likely to vote for the BJP, 4 percentage points more likely to vote for the NDA, and 3.3 percentage points more likely to support re-electing the incumbent government. Cylinder recipients are 4.6 percentage points more likely to vote for the BJP,

[4]Appendix C explores the association between receiving a benefit and political ideology. I find little evidence that receiving a house or gas cylinder changes political ideology.

Table 1: Political Impact: House v. Gas Cylinder

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)
Got a house (β_1)	0.035^{**}	0.040^{**}	-0.016	0.033^{*}	0.043	0.016
	(0.012)	(0.013)	(0.010)	(0.014)	(0.042)	(0.011)
Got a cylinder (β_2)	0.046^{***}	0.037^{**}	-0.022^{*}	0.047^{***}	0.181^{***}	0.027^{**}
	(0.011)	(0.012)	(0.009)	(0.012)	(0.037)	(0.010)
Adj. R^2	0.567	0.523	0.548	0.461	0.363	0.333
Num. obs.	6019	6019	6019	5777	6507	6237
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

3.7 percentage points more likely to vote for the NDA, 2.2 percentage points less likely to vote for an ethnic opposition party, 0.18 scale units more satisfied with the government, and 2.7 percentage points more likely to think the BJP works for the poor.

In terms of our initial expectations: (i) $\widehat{\beta_1}$ is statistically distinguishable from 0 in three out of six cases, $\widehat{\beta_2}$ is distinguishable from 0 in all six cases; and (ii) $\widehat{\beta_1} < \widehat{\beta_2}$ in five out of six cases but we fail to reject the null hypothesis of $\beta_1 = \beta_2$ in every case. On balance, there is little evidence to suggest that the expensive benefit had greater "impact" than the cheaper benefit.

This finding is robust to alternative specifications. In Appendix B, I estimate ordinary least squares regressions separately for each benefit. The specification includes the same control variables and fixed effects. Table 12 reports the coefficients for the housing program. Table 13 for the cooking gas cylinder scheme.[5] Again, the partial correlations appear stronger

[5]For comparison, Table 14 reports the results from a model in which the explanatory variable is an index of whether the respondent has benefited from six flagship programs of the BJP government (0 = not benefited from any of the programs, 1 = benefited from all of them). Compared to a voter who does not benefit from any government program, a voter who benefits from six major programs is 15 percentage points more likely to vote for the BJP, 17 percentage points more likely to vote for NDA, 8 percentage points less likely to vote for an ethnic opposition party, 18 percentage points more likely to say the government should be re-elected, 0.6 scale units more satisfied with the government, and 12 percentage points more likely to think the BJP works for the poor.

for the cooking gas cylinder scheme. This continues to be the case if the model includes an interaction term between receiving a benefit and ethnic categories.[6] I get similar results if the analysis includes all rural respondents (Table 10), or all survey respondents with an additional control variable for ruralness (Table 11). In fact, the point estimate for β_2 is typically twice the size of the point estimate for β_1 in these specifications. In summary, there is pretty consistent evidence, at least observationally, that the expensive benefit does not have greater political "impact" than the cheap benefit. Why might this be the case?

Existing Literature

In this section, I review the distributive politics literature, and point out that it does not adequately address the empirical puzzle. I then turn to the clientelism literature for some insights that help understand the electoral implications of distributive decisions.

The distributive politics literature provides a framework to evaluate programs but it falls short in two respects. First, vote choice models imply that benefit size is positively associated with the magnitude of preference change (Heath and Tillin 2018). The larger the benefit, b_i, the more it can compensate for ideological or policy disutility for voter i. Second, most studies focus on a single benefit of standardized value, and often for simplicity, do not engage with the possibility that politicians *simultaneously* distribute many benefits of different value, using different distributive strategies (Kramon and Posner 2013). As Nath (2014) observes, "the composition of spending has not been studied much" (Nath 2014:3), nor have the "*portfolio* choices of politicians" (emphasis not added). By fixing the benefit in question, these studies end up evaluating a single distributive strategy, typically clientelism, and view other strategies from a linear, Progressive prism. That is to say, there is an implied hierarchy of distributive strategies, and a focus on the conditions leading to the transition from clientelism to programmatic politics. There has been less engagement with the idea that clientelism and programmatic distribution can co-exist, and politicians can employ mixed

[6] Specifically three interaction terms: (Benefited × Muslim), (Benefited × Dalit), and (Benefited × Tribal).

strategies.

Only three exceptions come to mind: Mares and Young (2019) examine why Eastern European politicians employ different types of clientelism, Magaloni, Diaz-Cayeros, and Estvez (2007) discuss "portfolio diversification" in the case of Mexico, and Levitsky (2007) in the case of Argentine Peronists. Mares and Young (2019) point out that politicians employ different types of clientelism to signal their support for or opposition to workfare programs. They rely on coercion or negative inducements in localities where social policy benefits are politicized to signal a "tough on welfare" position. They use positive inducements in localities where demand for social policy benefits is high and there are no distributive conflicts to signal "paternalism, benevolence, personal generosity" and support for welfare programs (Mares and Young 2019:7). Clientelism co-exists with programmatic distribution because voters are less likely to punish clientelistic practices that signal policy alignment. This paper offers a different explanation, namely that parties still need brokers to claim credit for welfare programs, convert latent good will from such programs into votes, and to disseminate their ideology and diversify distributive risks.

Magaloni, Diaz-Cayeros, and Estvez (2007) helpfully point out that electoral returns are uncertain when politicians distribute public goods, compared to when they distribute private goods. Formally, Magaloni, Diaz-Cayeros, and Estvez (2007) say that the distribution of public goods yields an electoral return $E[X]$ with variance σ^2 while the distribution of private goods yields a return Y without any uncertainty. Their model assumes that $E[X] > Y$. However, there are two limitations of this approach. The public-private goods comparison does not comprehensively capture the difference between programmatic distribution and clientelism. Private goods, like a house, can be delivered programmatically, namely in a rules-based, non-contingent way. Furthermore, Magaloni, Diaz-Cayeros, and Estvez (2007) do not engage as much with benefit size, and assume that a programmatic benefit (public good) reaches more people than a clientelistic benefit (private good). As I show, the opposite is possible when a cheap benefit is distributed through brokers, and an expensive benefit using

a government program.

Similarly, Levitsky (2007) helpfully points out that Argentine Peronists used clientelistic transfers to win over poor voters, while making programmatic appeals to middle class voters. Though Peronists use two distributive strategies simultaneously, they do so for different sections of the population. I show that there is an incentive to mix distributive strategies for the same section of the population, namely poor voters.

The starting point is the voter's utility function, which typically draws on Downs (1957)'s spatial competition model and Riker and Ordeshook (1986)'s "calculus of voting":

$$U_i(b_i, \sigma_i, \sigma_P) = -(\sigma_i - \sigma_P)^2 + b_i - c_i \tag{1}$$

Voter i's utility from voting for party P depends on three things: the squared distance between i's ideological or policy ideal point and party P's ideological or policy position, i.e. $(\sigma_i - \sigma_P)^2$; the expected benefit $b \in \{0, b\}$ if party P comes to power, and the costs of voting $c \in (0, 1)$. As Lindbeck and Weibull (1987) and Dixit and Londregan (1996) show, it is electorally optimal for parties to target benefits at swing voters to compensate them for some (or all) of the disutility arising from policy differences $(\sigma_i - \sigma_P)^2$. Note that in this formulation, the value of the benefit is fixed (b or 0), and material gain (b_i) can compensate for ideological or policy differences. This is what gives rise to the idea that the bigger the benefit, the better. A sufficiently large b_i can theoretically compensate for any disutility arising from ideological or policy differences.[7] And for the same voter, a larger benefit will increase their utility from voting for party P, resulting in a stronger preference for party P, keeping constant all other factors. Heath and Tillin (2018), for example, show that efficient public goods provisioning makes people less responsive to vote buying when it involves a cheap benefit like free vegetables. However, this "institution effect" goes away when politicians seek to buy votes using marginally more expensive benefits like paying for medical expenses, giving a free water pump, or getting a family member a job. In most

[7] This continues to be the case even if we stipulate diminishing returns to a benefit.

cases, however, the benefit value is capped at b.

On the empirical side, this manifests itself in the form of single program or benefit evaluations. For example, does a cash transfer (Imai, King, and Rivera 2020; Zucco Jr. 2013; De La O 2013; Manacorda, Miguel, and Vigorito 2011), unemployment benefit (Nazareno, Stokes, and Brusco 2006), road (Goyal 2019), house (Kumar 2021*a*,*b*; Bueno, Nunes, and Zucco Jr. 2017; Barnhardt, Field, and Pande 2015), infrastructural investment in basic services (Kadt and Lieberman 2017), or some other freebie (Pop-Eleches and Pop-Eleches 2009; Nair 2020) change political preferences? For a comprehensive list, see Table 1 in Kramon and Posner (2013).

Invariably, program evaluations lead to the question of distributive efficiency. The move then is to fix the benefit b, and evaluate a distributive strategy or interventions that reduce inefficiencies in that distributive strategy (Muralidharan et al. 2021; Banerjee et al. 2020; Muralidharan, Niehaus, and Sukhtankar 2016).

Formally, this leads to the inclusion of a "dead-weight loss" term, $\theta_{i,P} \in (0, 1)$, in models. Now, the optimal strategy for parties is to target benefits not just at swing voters but those to whom it can deliver it most efficiently, i.e. "core supporters" for whom $\theta_{i,P} \approx 0$ (Cox and McCubbins 1986). As Stokes et al. (2013) put it, the probability of receiving a benefit is now maximum when $(\sigma_i)^2 = 0$ (i.e. swing voters), or when $\theta_{i,P} = 0$ (core constituents).[8] Logically, what follows is a discussion of who is the the "core constituent"? In the clientelism literature, the argument made is that party brokers embedded in communities reduce inefficiencies because of their situated knowledge, ability to monitor voters and punish reneging (Stokes 2005). Accordingly, a party can efficiently deliver benefits to some voter i, irrespective of their ideological beliefs, if they are in community j which is part of the party broker's clientelistic network.

The debate then shifts to an empirical anomaly: Stokes et al. (2013) find that "too many loyal supporters receive benefits, too few swing or uncommitted voters [do]" (73-74). Note

[8] Formally, $p_i(b_{i,P} = b|\sigma_i, \theta_{i,P}) = \Phi[-\theta_{i,P} \times (\sigma_i)^2]$, where $\Phi[\cdot]$ is a distribution symmetric around 0.

that loyalists are "proximate to a party in ideological or partisan terms" (i.e. $(\sigma_i - \sigma_P)^2$ is small), as distinct from core supporters "who are network-proximate to a party" (Stokes et al. 2013:34). Their explanation for this reveals a principal-agent problem in clientelistic strategies. Party leaders lack information about the voter's type (loyalist, swing or opposition supporter), and imperfectly observe the broker's competence through network size. Brokers, on the other hand, know the voter's type and have an incentive to build the largest possible network with the fewest possible resources, siphoning-off the rest as rent. Owing to this information asymmetry, there is dealignment of incentives: the party wants to maximize electoral support, the broker wants to maximize rent. For any finite budget Ω, the broker wants to spend as little of it on securing support, keeping the rest for themselves. Of course, the broker must build a network larger than his competition's to retain the party's favor. From the broker's perspective then, the "cheapest" voters are loyalists. A smaller benefit (b) can buy their support, so the broker can maximize network size (or support) by channeling benefits to loyalists. In practice, there may not be enough loyalist votes to carry an election, so the broker's network has to be "ideologically heterogenous" (Stokes et al. 2013:95) but with a preponderance of loyalists. There is robust evidence that clientelism produces political targeting of benefits (Bardhan et al. 2020; Shenoy and Zimmermann 2021; Marcesse 2018; Azulai 2017).

Despite mistargeting or a loyalist skew in distribution, brokers are indispensable. They are needed by the government as local partners to implement schemes (Krishna 2007; Mookherjee and Nath 2021)[9] and provide public goods (Baldwin 2019, 2013), by citizens to make claims on the state (Kruks-Wisner 2018), and by parties to mobilize or persuade voters because they have credibility and influence in the neighborhood which they use to shape political preferences (Harding and Michelitch 2019; Auerbach 2016; Baldwin 2013). Hidalgo and Nichter (2016) shows that benefits distributed through brokers can also be used to "import outsiders" into the electorate. Critically, when brokers are excluded from the distributive

[9] Mookherjee and Nath (2021) find that brokers are better able to identify deserving households relative to programmatic distribution which relies on low quality information available to higher levels of government.

process, there may be less mistargeting but also weaker credit claiming and monitoring of voters.

How does the size of the benefit affect this distributive trade-off? Should politicians rely on brokers to distribute some benefits but not others? What are the electoral implications of different distributive choices? I propose a parsimonious framework to evaluate these choices in the next section.

Argument

The distributive decisions that politicians make can be organized on two dimensions: benefit size or value (how cheap or expensive is the benefit)[10], and distributive strategy (how it is being given out). The electoral implications of these choices stem from a third factor: who gets the benefit. To start with, I present a set of stylized facts about each of these variables:

1. **Benefit value:** As the benefit, b_i, becomes more valuable, we should expect the voter to get greater utility from supporting the party that gives that benefit. The utility gains could be subject to the law of diminishing returns (i.e. $u_i'(b) > 0$ and $u_i''(b) < 0$). That is to say, beyond a point, a unit increase in the value of a material benefit may not translate into any additional utility for the voter. This mutes the theoretical possibility that a substantially large benefit can compensate for *any* ideological or policy disutility.

2. **Distributive strategies:** As the literature in the prior section suggests, clientelism produces mistargeting but provides robust credit claiming and voter monitoring. In contrast, programmatic distribution offers better targeting but poorer credit claiming and voter monitoring. Presented with a clear cut choice, politicians have to pick between distributing a benefit disproportionately to loyalists but ensuring *all* bene-

[10] I *assume* that the monetary value of a benefit is positively correlated with its use value (or utility) to the voter. Another way of saying this is that I treat the monetary value of a benefit as a good empirical measure of its use value. While noting that these are theoretically distinct concepts, I use them interchangeably in the remainder of the paper.

ficiaries know the benefit was given by them and encouraged to turn out and vote, or distributing benefits to voters who need that benefit the most but potentially not claiming as much credit for that benefit and monitoring their election time behavior.

3. **Beneficiary characteristics:** Assume voters exist on a single ideological dimension ranging from loyalists ($\sigma_i = k$) to opposition supporters ($\sigma_i = -k$), with swing voters in the middle ($\sigma_i = 0$). As ideological distance $(\sigma_i - \sigma_P)^2$ increases, the voter's disutility from voting for party P increases. Since the marginal utility from benefits also diminishes, there are two types of beneficiaries: (i) those who switch to party P because their ideological disutility can be compensated through benefits ($\sigma_i \geq k_0$ where $k_0 \in (0, -k)$); and (ii) those whose get greater utility from potentially voting for party P but their vote choice does not flip. For voters with $\sigma_i > 0$, their preference for party P becomes stronger, and for those with $\sigma_i < k_0$, their preference for the opposition party becomes weaker.

Against this backdrop, politicians decide what benefits to distribute, and how to distribute them. I assume politicians are office-seeking, and distribute benefits to win votes and elections. They face two trade-offs when making distributive decisions:

Trade-off 1: Given a finite budget Ω, a cheap (low value) benefit can be given to more voters or an expensive (high value) benefit to fewer voters. I *assume* that how much a benefit costs is positively correlated with its use value.

Trade-off 2: When deciding how to distribute a benefit, clientelism skews distribution in favor of loyalists but provides more effective credit claiming and monitoring of voters; programmatic distribution provides better targeting but weaker credit claiming and monitoring. Critically, the loyalist skew in clientelism is more acute when there are fewer benefits to distribute, notably when an expensive or high value benefit. The problem with credit claiming and voter monitoring in programmatic distribution is universal (i.e. irrespective of benefit size).

Putting this information together, I propose a two-by-two that captures the distributive choices and their implications (see Table 2):

Table 2: What to distribute, and how to distribute it?

	Cost of the benefit	
Distributive Strategy	Cheap	Expensive
Clientelism	Benefit can saturate broker's heterogeneous network of loyalists and swing voters. E.g.: BJP's free cooking gas cylinder scheme or zero balance bank accounts	Benefit cannot be given to everyone in the broker's network. Loyalists entirely or disproportionately benefit. E.g.: Congress' housing scheme (Indira Awas Yojana)
Programmatic	Benefit is distributed to a large, ideologically heterogeneous population, including those inside the party broker's network and those outside that network supporting the opposition party. E.g.: Farm loan waivers	Benefit can be distributed to fewer people, typically inside and outside the party broker's network. E.g.: BJP's housing scheme (PM Awas Yojana)

Focusing on cheap benefits, Table 2 suggests that if the party adopts clientelism, it can distribute benefits to a large portion of the broker's network, including swing voters and weakly opposed voters. At the time of elections, it would also benefit from the broker's local embeddedness and monitoring of voters. In contrast, if the party decides to go down the programmatic route, it can reach a slightly larger set of voters, including those outside its clientelistic network. However, credit-claiming and monitoring will be weaker because the party by-passes the broker. These differences must also be seen in another light — a small benefit does not generate an overwhelming amount of utility for the voter, so the need for credit claiming and monitoring is greater. From an electoral perspective, it makes more sense to distribute the cheaper benefit through brokers.

Now consider expensive or high value benefits. Table 2 suggests that if the party adopts clientelism, it will end up distributing benefits in an electorally inefficient manner, primarily

to loyalists. On the up side, brokers will mobilize these voters at the time of elections.[11] In contrast, if the party adopts a programmatic approach, the benefit reaches more than just its loyalist base but this happens at the expense of credit claiming and voter monitoring. Furthermore, an expensive or high value benefit gives the voter a lot of utility, potentially enough to compensate for weak credit claiming and election time monitoring. As a result, I think the party is more likely to distribute expensive benefits programmatically.

There are a few other reasons why a party would distribute small benefits through brokers, and large benefits programmatically. For party elites, there is an incentive to diversify their distributive strategy so that they are not overly reliant on brokers or bureaucrats. In so doing, party elites balance competing considerations: they want to efficiently deliver benefits to pivotal voters (explained earlier), and keep brokers engaged and happy. This means involving brokers in *some* distributive processes that generate rents for them. The best mixed strategy here is to distribute cheap benefits through brokers and expensive benefits through programs. Such a strategy minimizes the electoral impact of mistargeting (or suboptimal targeting), creates work for brokers, and permits just-enough leakage through small rents to keep the party machine well-oiled.

Taking a step back, Table 2 provides a framework to compare different strategies as well. For example, why might a cheap benefit distributed through brokers have as much (or greater) political impact as a program that delivers an expensive benefit? This can happen when brokers make up for the value deficit through credit claiming and voter monitoring. Some of this effect will also be on account of the fact that the broker delivered benefit reaches a more persuadable audience (namely, within-network or ideologically more proximate voters). In evaluating the pivotal role of brokers, it would be important to control for this selection bias. Conversely, when an expensive benefit is politically more impactful we can conclude that value compensated for a credit claiming deficit. This suggests that material utility or value, at some level, can compensate for local embeddedness or a weak ground

[11] Nichter (2008) explains how parties can target benefits at loyalists to ensure they turnout to vote.

game.

Turning to the two benefits that motivate this study, Table 2 offers clear predictions or explanations. These are:

1. The BJP should distribute the cheap benefit using brokers, and the expensive benefit through a government program. As evidence of this mixed strategy, there should be political targeting of the cheap benefit but not the expensive benefit. This should be the case both geographically, and in terms of who gets the benefit (loyalist skew in distribution).

2. For the cheaper benefit to have greater impact (after adjusting for differential selection into benefits), there must be asymmetric contact before elections. Cylinder recipients should be more likely to be contacted by BJP canvassers, compared to non-recipients, controlling for other attributes that determine vote choice and who gets the benefit (e.g. past vote choice and ethnicity). House recipients should *not* be more likely to be contacted by BJP canvassers, compared to non-recipients. In effect, there is some evidence of a credit claiming and voter monitoring gap.

Empirical Strategy

The empirics in this paper map onto the two observable implications: establishing that the housing program did not engage in political targeting but the cooking gas cylinder scheme did; and as a consequence of this, BJP canvassers were more likely to contact cylinder recipients before an election but not house recipients. In support of the first claim I report qualitative evidence, correlational evidence (conditioning on observables) and results from a better identified close elections regression discontinuity design. In support of the second claim I present correlational evidence using survey data and a fixed effects model. In the remainder of this section I describe the data sources, measures, and estimation strategy.

Data

The attitudinal measures for this paper come from the National Election Studies (NES). These face-to-face surveys have been conducted since 1996 by the Center for the Study of Developing Societies (CSDS), a reputed research institute. There is a pre-election and post-election survey, both a random sample drawn from the voters' list. They are nationally representative on demographic, geographic, and political parameters. Here, I use data from the post-election survey in 2019, focussing on rural areas in 10 Indian states that account for 93% of the houses built under the *Awas Yojana*, and 91% of eligible beneficiaries ($n = 9745$).[12] These ten states have similar levels of housing deprivation (which serves as a proxy for socioeconomic development in rural areas), and broadly comparable political competition (insofar as the BJP contests many seats and has an organizational presence). These states are Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jharkhand, Chhattisgarh, Odisha, West Bengal, Assam, and Maharashtra.

The NES measures exposure to government schemes, vote choice in the 2019 national elections, past vote choice, and political attitudes. For the RD analysis, I supplement survey data with publicly available administrative data to construct the forcing variable: BJP's margin of victory in the (previous) 2014 parliamentary election. India's election commission puts out election results at the parliamentary constituency level. It also disaggregates this information at the state constituency level. State constituencies are perfectly nested within parliamentary constituencies. At the state level, chief election officers disaggregate the results further at the polling booth level (popularly called "Form 20 data"). However, this information is reported in different formats, often without party names and different spellings of candidate names, sometimes even in local languages. This makes it exceedingly laborious to scrape and systematize the data, something reputed data repositories have also not finished doing for the 2014 parliamentary election. For this reason, I use results at the

[12] More details on survey's methodology are available here: https://www.lokniti.org/media/PDF-upload/1565073104_34386100_method_pdf_file.pdf

parliamentary and state constituency level for my analysis.

Measures

Appendix A describes the measures used in various analyses, including survey questions, (re-) coding decisions, and aggregation of measures into an index.

Estimation

To show that there is political targeting of the cheap benefit but not the expensive benefit, I use a fixed-effects model with the following specification in `lm_robust`:

$$\text{Benefited}_{i,t} = \alpha_0 + \beta_1 \text{Past Vote}_{i,t-5} + \beta_2 \text{Muslim}_{i,t} + \beta_3 \text{Dalit}_{i,t} + \beta_4 \text{Tribal}_{i,t} + \rho \mathbf{X}_{i,t} + \sum_{j=1}^{J} \gamma_j \text{Booth}_j$$

where `Benefited` is a dummy variable that takes a value of 1 if the respondent says they received a benefit, otherwise 0. `Past Vote` is a dummy variable that takes a value of 1 if the respondent says they voted for the BJP in the 2014 parliamentary election, else 0. I control for ethnicity through three indicator variables: one for lower caste Hindus (`Dalits`), one for `Tribals`, and a third one for `Muslims`. $\mathbf{X}$ is a vector of demographic controls, namely mean-centered age, gender (female or not), education, and monthly household expenditure (binned). I specify fixed effects at the polling booth level to account for any confounding due to time invariant local factors.

To assess whether narrowily winning (or losing) in the previous parliamentary election affects getting a benefit, I use a close-elections regression discontinuity design. The forcing variable is operationalized as BJP's margin of victory or defeat (-100 to $+100$) in the prior parliamentary election. I use `rdrobust` in `R` to estimate the difference at the cut-point. I specify the following:

$$\text{rdrobust}(y = \text{benefited}, x = \text{bjp_margin_pct}, p = 1, \text{kernel} = \text{“triangular”},$$
$$\text{bwselect} = \text{“mserd”}, \text{cluster} = \text{constituencyID}, \text{all} = T)$$

where `bjp_margin_pct` is BJP's margin of victory or defeat in a parliamentary or state constituency in the 2014 election. All standard errors are heteroskedasticity-robust (HC2), and clustered at the parliamentary or state constituency level.

When it comes to contact at the time of elections, I again use an ordinary least squares regression with fixed effects. This takes the specification:

$$\text{Y}_{i,t} = \alpha_0 + \beta_1(\text{Got a house})_{i,t-1} + \beta_2(\text{Got a cylinder})_{i,t} + \rho\mathbf{X}_{i,t} + \sum_{j=1}^{J} \gamma_j \text{Booth}_j$$

where $Y_{i,t}$ is an indicator variable that equals 1 if the respondent is contacted by the BJP before an election, otherwise 0. $\mathbf{X}$ is a vector of control variables like past vote choice, ethnicity, mean-centered age, gender (female or not), education, and monthly household expenditure (binned).

Results

Before focusing on *Ujjwala* and the *Awas Yojana*, I present some descriptive statistics on government programs. Table 3 reports the percentage of an ethnic group that receives a benefit (columns 2 to 7), the percentage of the total survey sample that receives that benefit (column 8), and the percentage of beneficiaries that credit the Modi government for that benefit. The first three programs predate the current government, and have survived in

some shape and form over decades. For example, the subsidized food program reaches an estimated 45% of the population, particularly benefiting the lower castes (SCs) and tribals (STs). Pension and employment guarantees benefit nearly a quarter of the population, though Muslims benefit at lower rates despite being socioeconomically backward. Lower caste Hindus and tribals, who are also socioeconomically vulnerable, benefit at slightly higher rates than the population average.

Table 3: Descriptive Statistics

	Hindus				Minority		
Scheme	GEN	OBC	SC	ST	Muslim	Entire Sample	Credit Center
Food (PDS)	39.1	49.0	50.9	51.5	43.3	44.9	29.1
Pension	24.0	29.5	25.2	27.1	22.7	25.8	32.9
Employment/MNREGA	17.1	22.5	28.1	31.7	17.8	23.4	57.4
Free gas cylinder	26.4	34.4	35.8	46.8	29.6	31.9	76.6
Housing scheme	11.3	19.9	23.7	31.5	17.4	19.0	53.6
Zero balance bank acc	19.2	22.0	23.5	24.3	15.7	19.6	79.9
Health insurance	15.2	17.8	20.5	25.0	14.6	17.2	57.4
Farmer income support	12.0	15.0	10.9	12.6	9.9	11.9	48.0
Farm loan waiver	10.1	13.3	10.3	14.0	8.0	10.7	37.9

Note:
Columns 2-6 report the percentage of an ethnic group that receives a benefit. Column 7 reports the percentage of the entire sample that receives a benefit. Column 8 reports the percentage of beneficiaries that credit the Modi government for that benefit Data: National Election Studies 2019

Of particular interest to us are programs started by the current government (reported in rows 4-9). As table 2 predicts, the government is able to distribute a cheap benefit (like a gas cylinder) to many people (nearly a third of the sample), but more expensive benefits like a house or health insurance to fewer people (approximately 17-19% of the sample). An anomaly here is the zero-balance bank account — a relatively costless benefit that is cheaply deliverable but only reaches 20% of the sample.

Focusing on distributive strategies, I do observe a loyalist skew in the distribution of

cooking gas cylinders but not houses. To see this, consider ethnicity as an imperfect proxy for political ideology: upper caste Hindus ("General" voters) strongly support the BJP's economic and social policies ($\sigma = k$), intermediate and backward castes (OBCs) are less supportive, tribals and lower castes are weakly opposed or swing voters (depending on the constituency's demographics), and Muslims are strongly opposed ($\sigma = -k$). This ordering of social groups is also negatively correlated with status and material affluence. 26% of "general" voters get a free cooking gas cylinder, despite being the most socioeconomically affluent group. In contrast, only 11% of them get a house, which was specifically targeted at poor households using census data.

When it comes to credit for programs, a few things stand out. As one would expect, the current government gets relatively less credit for long running programs and more credit for its own flagship programs. The most striking difference is between the broker delivered cooking gas cylinder and the programmatically distributed house or farm loan waiver. Nearly 77% of survey respondents who get a cooking gas cylinder credit the BJP government for it. In contrast, only 54% of those that get a house credit the BJP government for it. Similarly, only 38% of those whose agricultural loan was waived by the government actually credit the BJP government for this benefit. The zero balance bank account is an interesting case: a programmatic good on first appearance that is overwhelmingly credited to the central government. Nearly 80% of those that got such a bank account credit the BJP government for it. It turns out that like the cooking gas cylinder, these accounts were opened with the help of party brokers. In interviews with bureaucrats involved with the program I confirm the role of party mobilization: brokers identified voters without a bank account, took them to the bank branch, and got their account opened. It is worth noting that this benefit was not easily available directly at the bank because banks had a strong incentive to not open zero balance accounts, which are commercially unviable. In summary, there is robust descriptive evidence that credit claiming is stronger for clientelistic goods, and weaker for programmatic ones. Credit claiming is complicated by the fact that some states have BJP governments, while

others have opposition parties in power. This can lead to "credit hijacking", particularly when benefits cannot be distributed through non-state organizations in opposition governed areas (Bueno 2018). This is less of a concern when the same party controls both tiers of government.

Finally, these descriptive findings need to be appropriately caveated. For one, there is a lot of political and socioeconomic variation *within* ethnic groups, making ethnicity a less than perfect predictor of either political ideology or deservingness. Moreover, most government programs have both programmatic and clientelistic features, making it hard to draw black-and-white contrasts. It is precisely for this reason that I focus on two government programs that sharply capture some of these contrasts. The cooking gas cylinder, valued at $10, is predominantly delivered through party brokers. Money to build a house, valued at $2000, is one of the best specimens of programmatic distribution in the Indian system. Beneficiaries were identified using socioeconomic indicators from the 2011 census, assigned a household deprivation score, rank ordered from most to least deprived, and given the benefit in that order with the village ranking made public before disbursement started. Since this housing program has an urban and rural component, with considerably stronger programmatic features in the rural component, my analysis focuses on rural areas. Since 93% of houses and 91% of beneficiaries are located in 10 Indian states, my analysis focuses on rural areas in these provinces. For a more empirically robust examination, I now turn to regression analysis, using a direct measure of partisanship, adjusting for a range of observable characteristics that affect selection into benefits, and restricting comparisons to within-precinct.

Political Targeting: Evidence from a Fixed Effects Model

Table 4 reports the results from a fixed-effects model in which the outcome is receiving a benefit (house or cooking gas cylinder), and the predictors of interest are the respondent's vote choice in the prior parliamentary election, and their ethnicity. As described earlier, the model includes a variety of demographic control variables, and restricts comparisons

Table 4: Political Targeting of Benefits? Partisanship and Ethnicity

	DV: Benefited from		
	Housing Program	Cooking gas cylinder	All BJP schemes
Voted BJP in 2014	0.018	0.048^{***}	0.030^{***}
	(0.012)	(0.013)	(0.006)
Muslim	−0.021	-0.072^{**}	-0.042^{***}
	(0.022)	(0.025)	(0.011)
Dalit	0.062^{***}	0.050^{**}	0.012
	(0.016)	(0.017)	(0.007)
Tribal	0.116^{***}	0.077^{**}	0.028^{**}
	(0.022)	(0.024)	(0.010)
Adj. R^2	0.261	0.320	0.495
Num. obs.	6638	6638	6638
Dem. Controls	Yes	Yes	Yes
Booth FE	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

to within-precinct (or polling booth) to account for any confounding due to time invariant factors at the local level.

Table 4 confirms the loyalist skew in clientelistic distribution: respondents that voted for the BJP in 2014 are 5 percentage points more likely to receive a cooking gas cylinder, 3 percentage points more likely to benefit from *six flagship* BJP schemes, but not more likely to receive a house ($\widehat{\beta} = 0.018$, $s.e. = 0.012$). Another way to look at this is to focus on ideologically opposed voters, Muslims in this case. Table 4 reports that Muslims are 7 percentage points less likely than upper and backward caste voters to get a cooking gas cylinder, and 4 percentage points less likely to benefit from the six flagship programs of the BJP government. Crucially, Muslims are *not* less likely to get a house ($\widehat{\beta} = -0.021$, $s.e. = 0.022$). I catch some evidence of swing voter targeting, as well, with lower caste Hindus (Dalits) and tribals more likely to get a house ($\widehat{\beta} = 0.062$, $s.e. = 0.016$ for Dalits, $\widehat{\beta} = 0.116$, $s.e. = 0.022$ for tribals) and gas cylinder ($\widehat{\beta} = 0.05$, $s.e. = 0.017$ for Dalits, $\widehat{\beta} = 0.077$, $s.e. = 0.024$ for tribals).

Evidence from a RD analysis

For a design-based test of political targeting, I turn to regression discontinuity analysis using survey responses from rural areas in ten Indian states. I use election results at the parliamentary constituency and state assembly constituency level from 2014 to construct the running variable `bjp_margin_pct` for each respondent, based on their geographic location. The dependent variable in this analysis is whether the respondent claims to have got a benefit. In the first specification, the outcome captures whether or not the respondent got a house. In the second specification whether or not they got a cooking gas cylinder. And in the third specification, whether they benefited from six flagship programs of the BJP government (0 to 1 index).

The idea behind the design is to estimate the difference in the probability of receiving a benefit at the cut-point, i.e. districts where the BJP narrowly wins the 2014 parliamentary election. The claim is that in districts where the party wins in a "coin-flip" election, there is an exogenous stimulus to clientelistic resources compared to districts where the party narrowly loses. When a benefit is delivered through brokers, there should be an increase in the probability of receiving that benefit when the BJP narrowly wins, compared to constituencies where it narrowly loses. Following Cattaneo, Idrobo, and Titiunik (2019), I validate the design by reporting the McCrary density test, frequency distribution of the forcing variable, and covariate balance for both specifications in Appendix D and E.

Table 5 finds this is indeed the case for the cooking gas cylinder scheme, but not for the housing program.[13] There is a 24 percentage point increase in the probability of receiving a cooking gas cylinder when the BJP narrowly wins ($\tau = 0.24$, $se = 0.11$, $p = 0.029$). There is no such increase in the probability of receiving a house ($\tau = -0.038$, $se = 0.112$, $p = 0.734$). The results are similar if the RD bandwidth is manually set to 5% or 3%.

As further evidence, I perform the same analysis but at a higher level of aggregation. Now, the forcing variable is operationalized as the BJP's margin of victory or defeat at the

[13]The RD plots are reported in Appendix F.

Table 5: Benefit Targeting (Assembly Constituency Level)

Benefited from	RD (MSE optimal BW)				
DV	Coef	SE	p	n	BW
Housing Scheme	-0.038	0.112	0.734	3655	12.121
Free gas cylinder	0.240	0.110	0.029	3769	12.771
All BJP schemes	-0.038	0.079	0.632	4572	16.211

Note:
The difference at the cut-point was estimated using rdrobust in R, specifying a first-order polynomial (p=1), triangular kernel weights, and an MSE-optimal bandwidth. We report the robust, bias-corrected estimate and standard error (clustered at the assembly constituency level). Data from National Election Studies 2019, Election Commission of India 2014

parliamentary constituency level. These results are reported in . The RD plots are reported in Appendix F. Once again, I find an increase in the probability of receiving a cooking gas cylinder ($\tau = 0.437$, $se = 0.145$, $p = 0.003$). There is no statistically significant increase in the probability of getting a house ($\tau = 0.129$, $se = 0.114$, $p = 0.25$). These results are less robust to manually set bandwidth specifications. The probability of receiving a cooking gas cylinder increases at the cut-point ($\tau = 0.26$, $se = 0.12$, $p = 0.035$) when the bandwidth is manually set to 5% ($n = 1255$). However, I fail to detect any change in the probability of receiving a cooking gas cylinder when the bandwidth is set to 3% ($\tau = 0.035$, $se = 0.089$, $p = 0.7$, $n = 558$). In both specifications, the probability of receiving a house goes down at the cut-point.[14]

So far, I have shown that clientelism, though not programmatic distribution, can lead to electorally efficient targeting. I now turn to who gets the benefit, and whether clientelism produces a loyalist skew in distribution. To probe this point further, I look at the probability of being a BJP loyalist *and* receiving a benefit when the BJP narrowly wins or loses a parliamentary election. This RD analysis is at the state assembly constituency level. The

[14]When the bandwidth is 5%: $\tau = -0.28$, $se = 0.07$, $p < 0.001$; and when the bandwidth is set to 3%: $\tau = -0.31$, $se = 0.11$, $p = 0.005$.

Table 6: Benefit Targeting (Parliamentary Constituency Level)

Benefited from	RD (MSE optimal BW)				
DV	Coef	SE	p	n	BW
Housing Scheme	0.129	0.114	0.254	2441	9.675
Free gas cylinder	0.437	0.145	0.003	1833	7.229
All BJP schemes	0.071	0.057	0.209	2169	8.612

Note:
The difference at the cut-point was estimated using rdrobust in R, specifying a first-order polynomial (p=1), triangular kernel weights, and an MSE-optimal bandwidth. We report the robust, bias-corrected estimate and standard error (clustered at the parliamentary constituency level). Data from National Election Studies 2019, Election Commission of India 2014

outcome is coded as 1 if a survey respondent receives a benefit *and* reports voting for the BJP in 2014, otherwise 0.[15] Table 7 reports the difference at the cut-point for this outcome. Strikingly, the probability of a BJP "loyalist" benefiting from the housing scheme does not change when the BJP narrowly wins an election ($\tau = -0.03$, $se = 0.08$, $p = 0.71$) but the probability of a BJP loyalist getting a cooking gas cylinder increases by 13 percentage points ($\tau = 0.132$, $se = 0.07$, $p = 0.06$).

In summary, the evidence from the fixed effects model and the RD design largely point in the same direction. Prior support to the BJP improves ones chances of getting a cooking gas cylinder but not a house. Qualitative information about these schemes explain why this is the case: party brokers distribute the cooking gas cylinder but the housing program by-passes these intermediaries.

[15]Three types of respondents are coded 0: loyalists who do not receive the benefit, voters that support some other party and receive the benefit, and voters that support some other party and do not receive the benefit.

Table 7: Loyalists Benefit?

Loyalist and benefited from	RD (MSE optimal BW)				
DV	Coef	SE	p	n	BW
Housing Scheme	-0.030	0.08	0.705	2781	12.738
Free gas cylinder	0.132	0.07	0.060	2117	9.305

Note:
The difference at the cut-point was estimated using rdrobust in R, specifying a first-order polynomial (p=1), triangular kernel weights, and an MSE-optimal bandwidth. We report the robust, bias-corrected estimate and standard error (clustered at the assembly constituency level). Data from National Election Studies 2019, Election Commission of India 2014

Contact By Brokers Before Elections

Does dependence on the broker to distribute a benefit affect credit claiming? To evaluate this, I look at voter contact by parties during the parliamentary election. Table 8 reports the results from an ordinary least squares regression in which the dependent variable is contact by a party, and the explanatory variables are receiving a house or cooking gas cylinder. As before, the specification includes control variables (ethnicity, past vote choice, age, gender, education, and income), and precinct fixed effects.

Column 2 confirms the central prediction of my theoretical framework: people who get a house are not more likely to be contacted by BJP canvassers ($\widehat{\beta_1} = 0.012$, $s.e. = 0.011$) but cooking gas cylinder recipients are 4 percentage points more likely to be contacted by BJP canvassers ($\widehat{\beta_2} = 0.039$, $s.e. = 0.01$). The full results are reported in Appendix B, Table 9. I get the same result when the analysis is conducted on all rural respondents (Table 10), and the full survey sample with an additional control variable for ruralness (Table 11). In each of those cases, cooking gas cylinder recipients are 3 to 4 percentage points more likely to be contacted by BJP canvassers but there is no statistically significant association between receiving a house and being contacted by the BJP. These results are also robust to alternative specifications (see Tables 12 and 13).

Table 8: Contact by Brokers

	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Got a house (β_1)	0.012	−0.002	0.018
	(0.011)	(0.010)	(0.009)
Got a cylinder (β_2)	0.039***	0.017	0.023**
	(0.010)	(0.009)	(0.007)
Adj. R^2	0.397	0.409	0.416
Num. obs.	6398	6345	6399
Controls	Yes	Yes	Yes
Both FE	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Turning to Columns 3 and 4 in Table 8, we see that receiving a house is not associated with greater by opposition parties, whether that be the Congress or other regional parties. Cooking gas cylinder recipients are more likely to be contacted by regional parties ($\widehat{\beta}_2 = 0.023$, $s.e. = 0.007$) but not the Congress party. They are more likely to be contacted by both if we look at all rural respondents (Table 10), or all survey respondents (Table 11). In other words, parties compete for the votes of cooking gas cylinder recipients, with both BJP and opposition party canvassers making pre-election contact. I observe no such association for house recipients.

Conclusion

This paper opens with an empirical puzzle: the change in political preferences associated with receiving a $10 cooking gas cylinder is comparable to that associated with receiving a $2000 house. This is the case after accounting (or controlling) for beneficiary characteristics like past vote choice, ethnicity, age, gender, and income. This puzzle motivates a typology of distributive decisions that takes into account the monetary value of the benefit, and how that benefit is distributed. A key conclusion is that programmatic politics does not displace

clientelism. Both distributive strategies co-exist, and compliment each other. Politicians have an incentive to use brokers to distribute cheap benefits, and government programs to distribute expensive benefits. I apply this logic to the $10 cooking gas cylinder scheme and $2000 housing program, and find that:

1. The cooking gas cylinder is politically targeted but the house is not. Where the BJP narrowly won in the previous parliamentary election, the probability of receiving a cooking gas cylinder significantly increases, compared to where it BJP narrowly lost. Similarly, the probability that a loyalist receives a cooking gas cylinder jumps at the cut point. There is no change at the cut point in the probability of receiving a house, or the probability that a loyalist gets a house.

2. Cooking gas cylinder recipients are more likely to be contacted by BJP canvassers in the run up to an election. This is not the case for people who get a house.

These findings are consistent with the prediction that clientelism leads to mistargeting but effective canvassing or credit claiming, while programmatic distribution produces better targeting but weaker canvassing. The findings also point to the pivotal role of brokers, who can make up for the value deficit through credit claiming. I contend this is why the cheap benefit has as much political impact as the expensive benefit.

These findings have several implications for distributive politics. Firstly, programmatic competition does not *have to* displace clientelism. Future work must entertain the possibility that these distributive strategies co-exist, and do a better job of explaining politicians' decisions and their electoral consequences. Secondly, scholars should study the relative impact of material benefits, and not just whether a benefit has an impact. As the observational analysis in this paper shows, comparing a $10 cooking gas cylinder and a $2000 house can spur theory building and direct the researcher's focus to understudied elements of distributive politics. Thirdly, this paper points to an interesting prospect: politicians sub-optimally allocate resources by focusing on government programs that distribute expensive benefits.

As I show, expensive benefits do not win more votes, particularly when they are distributed sans brokers. Could politicians in other countries be getting it wrong? This is a question worth probing. Finally, this paper highlights an important limitation of programmatic distribution, namely weaker credit claiming and election canvassing. In polities where distributive intermediaries double-up as canvassers, politicians have to think twice about marginalizing the broker, especially when the broker's embeddedness can bridge large differences in benefit value. This further complicates the possibility that programmatic competition displaces clientelism.

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Appendix to

House Versus Cooking Gas Cylinder: Assessing the Political Impact of Two Benefits

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November 29, 2021

Contents

A Study Measures **37**
A.1 Outcomes and Explanatory Variables 37
A.2 Control Variables 40

B Electoral Impact **41**
B.1 Regression Analysis 41
B.2 Alternative Specification 45

C Ideological Impact **49**

D Design Tests (State Assembly Constituency Level) **51**
D.1 McCrary Density Test 51
D.2 Frequency Distribution 51
D.3 Covariate Balance 51

E Design Tests (Parliamentary Constituency Level) **53**
E.1 McCrary Density Test 53
E.2 Frequency Distributions 53
E.3 Covariate Balance 55

F RD Plots **56**

A Study Measures

A.1 Outcomes and Explanatory Variables

Variable(s)	Source, Original Measure	Recoding
Voted BJP, Voted NDA, Voted for an ethnic party	(Survey) Who did you vote for? I am giving you this slip which has names and election symbols of the candidates and parties that you saw on the voting machine. On this slip please put a mark in front of the same symbol against which you pressed the button	Three dummy variables that take a value of 1 if the respondent voted for BJP, otherwise 0. Another one if they voted for BJP or any of its allies, otherwise 0. A third dummy variable that equaled 1 if the respondent voted for any ethnic party, otherwise 0.
Re-elect incumbent	(Survey) Should the BJP-led NDA government at the Centre get another chance after the coming Lok Sabha election?	Yes = 1, No = 0
Satisfaction with govt.	(Survey) Are you satisfied or dissatisfied with the performance of the BJP-led NDA government at the Centre over the last five years?	Fully satisfied = 2, Somewhat satisfied = 1, Somewhat dissatisfied = -1, Fully dissatisfied = -2
BJP works for poor	(Survey) People have different opinions about the development that has taken place in the country in the last 5 years. Some believe it has only been for the rich, others say it has been for all people, and some others say that there has been no development at all. What?s your opinion?	No development at all = 0, Only for rich = 0.5, For all people = 1

Variable(s)	Source, Original Measure	Recoding
Election involvement	(Survey) Did you do the following? (1) Attend election meetings/ rallies? (2) Participate in processions/nukad natak etc.? (3) Participate in door to door canvassing? (4) Contribute or collect money? (5) Distribute election leaflets or put up posters?	Yes = 1, No = 0, Index is an average of the dummy variables, excluding missing data.
Contacted by BJP, Congress, regional parties	(Survey) Did a candidate/party worker of the following parties come to your house to ask for your vote in the last one month? And, Were you or any of your family members contacted by the following parties through a phone call or recorded voice or SMS or WhatsApp in the last one month?	For each party, two dummy variables created that took a value of 1 if the respondent was contacted by that party (or those parties), else 0. One variable captured physical canvassing, the other digital contact. Then an average of those two variables was taken for each party.
Majoritarianism	(Survey) Please tell me whether you agree or disagree with each [statement]? (1) Even if it is not liked by the majority, the government must protect the interests of the minorities. (2) The Muslim community in India has been victimized under Narendra Modi?s government. (3) Minorities should adopt the customs of the majority community. (4) Only my religion is correct, not of anyone elses.	Each item/statement is coded from -2 to $+2$, with higher values indicating greater support for majoritarian ideas. The index is computed by averaging the items, excluding any missing data.

Variable(s)	Source, Original Measure	Recoding
Hindu nation	(Survey) I will read out two statements. Please tell me which one do you agree with? (1) India primarily belongs to only Hindus; (2) India belongs to citizens of all religions equally, not just Hindus.	Dummy variable that equals 1 if the respondent selected statement 1, else 0
Muslim patriotism	(Survey) According to you how nationalist are the following religious communities - highly nationalist, somewhat nationalist, not much nationalist or not at all nationalist?	Coded from -2 (not at all nationalist) to $+2$ (highly nationalist).
Benefited from housing scheme, cooking gas cylinder scheme, all BJP schemes (Outcome and explanatory variable)	(Survey) Please tell me in the last five years, have you or someone from your family benefited from these government schemes? (1) Housing scheme/ Awas Yojana, (2) Rozgar guarantee scheme (MNREGA), (3) Scheme to provide free hospital treatment up to 5 lakh rupees per family, (4) Pension money (old age, widow, disabilities etc.), (5) PDS, (6) Income support scheme for farmers, (7) An agricultural loan waiver scheme, (8) Ujjwala Yojana, (9) Jan Dhan Yojana.	For each item, we create a dummy variable that equals 1 if the respondent claims to have benefited, otherwise 0. For the index on BJP schemes, we average the responses for the following schemes: (1), (3), (6), (7), (8), and (9). The index takes values between 0 and 1, where 1 = they have benefited from all the schemes they know about, 0 = they have benefited from none of the schemes they know about.

A.2 Control Variables

Variable(s)	Source, Original Measure	Recoding
Past vote for BJP	(Survey) Can you tell me which party did you vote for in the 2014 Lok Sabha election held five years ago?	If the respondent says BJP we code them 1, any other party 0. No response/ did not vote = NA.
Ethnicity variables: Muslim, Dalit, Tribal	(Survey) What is your religion? And, What caste group do you belong to?	Muslim takes a value of 1 if the respondent's religion is "Muslim", otherwise 0. Dalit takes a value of 1 if the respondent's caste category is "SC", otherwise 0. Tribal takes a value of 1 if the respondent's caste category is "ST", else 0. It is possible that some Muslims are Dalits ($n = 131$), and tribals ($n = 81$).
Mean-centered age	(Survey) What is your age? (in completed years)	We apply the following transformation: age_centered $= age_i - \overline{age}$ where $\overline{age}$ is the average age in the sample.
Female	(Survey) Gender: Male, Female, Other	Dummy variable that equals 1 if the respondent answers female.
Education	(Survey) Up to what level have you studied?	9 point scale where 0 is non-literate and 8 is professional degree or higher research (higher values indicate more education)
Rural	(Survey) Locality (Rural / Urban)	Dummy variable that equals 1 if the locality is reported as rural
Monthly expenditure (numeric)	(Survey) In normal circumstances, what is your monthly household expenditure? (10 categories or bins starting with "up to 1,000" and ending with "over 50,000")	. We take the mid-point value for each bin. For the last bin ("over 50,000"), we use the previous bin width ("30,001 to 50,000") and add half that to the lower value, $50000 + \frac{20000}{2} = 60000$.

B Electoral Impact

B.1 Regression Analysis

In puzzle section, I specify the following regression:

$$\mathrm{Y}_{i,t} = \alpha_0 + \beta_1(\text{Got a house})_{i,t-1} + \beta_2(\text{Got a cylinder})_{i,t} + \rho\mathbf{X}_{i,t} + \sum_{j=1}^{J} \gamma_j \text{Booth}_j$$

where $Y_{i,t}$ captures electoral support for the BJP using a variety of survey measures, $\mathbf{X}$ is a vector of control variables like past vote choice, ethnicity, mean-centered age, gender (female or not), education, and monthly household expenditure (binned). The specification include polling booth fixed effects to adjust for any confounding due to time invariant factors at the precinct level.

Here, I report the full results (see Table 9); the results when the sample includes all rural respondents (Table 10); and the results with the full sample and an additional control variable for ruralness (Table 11).

Table 9: Electoral Impact: House v. Gas Cylinder (Full Results)

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)	Election involvement (Index)	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Got a house (β_1)	0.035^{**}	0.040^{**}	-0.016	0.033^{*}	0.043	0.016	0.002	0.012	-0.002	0.018
	(0.012)	(0.013)	(0.010)	(0.014)	(0.042)	(0.011)	(0.007)	(0.011)	(0.010)	(0.009)
Got a cylinder (β_2)	0.046^{***}	0.037^{**}	-0.022^{*}	0.047^{***}	0.181^{***}	0.027^{**}	0.026^{***}	0.039^{***}	0.017	0.023^{**}
	(0.011)	(0.012)	(0.009)	(0.012)	(0.037)	(0.010)	(0.006)	(0.010)	(0.009)	(0.007)
Muslim	-0.194^{***}	-0.212^{***}	0.149^{***}	-0.324^{***}	-0.856^{***}	-0.182^{***}	-0.004	-0.127^{***}	0.035^{*}	0.010
	(0.023)	(0.023)	(0.022)	(0.025)	(0.081)	(0.020)	(0.012)	(0.018)	(0.017)	(0.016)
Dalit	-0.094^{***}	-0.088^{***}	0.104^{***}	-0.039^{*}	-0.148^{**}	-0.045^{***}	-0.015	-0.023	0.005	0.009
	(0.016)	(0.016)	(0.013)	(0.017)	(0.050)	(0.013)	(0.008)	(0.012)	(0.011)	(0.010)
Tribal	-0.050^{*}	-0.059^{**}	0.034^{*}	-0.092^{***}	-0.139^{*}	-0.035	0.018	0.007	0.015	-0.001
	(0.021)	(0.022)	(0.014)	(0.023)	(0.067)	(0.018)	(0.011)	(0.017)	(0.017)	(0.014)
Adj. R^2	0.567	0.523	0.548	0.461	0.363	0.333	0.285	0.397	0.409	0.416
Num. obs.	6019	6019	6019	5777	6507	6237	6542	6398	6345	6399
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 10: Electoral Impact: House v. Gas Cylinder (Full Rural Sample)

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)	Election involvement (Index)	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Got a house (β_1)	0.015	0.019	−0.009	0.014	0.060	0.023*	0.015*	0.002	−0.007	0.011
	(0.009)	(0.010)	(0.007)	(0.012)	(0.034)	(0.009)	(0.006)	(0.009)	(0.008)	(0.007)
Got a cylinder (β_2)	0.038***	0.029**	−0.014*	0.049***	0.163***	0.020*	0.028***	0.041***	0.016*	0.020***
	(0.009)	(0.010)	(0.006)	(0.010)	(0.030)	(0.008)	(0.005)	(0.008)	(0.007)	(0.006)
Muslim	−0.163***	−0.189***	0.121***	−0.237***	−0.648***	−0.116***	−0.004	−0.099***	0.015	0.018
	(0.016)	(0.018)	(0.015)	(0.020)	(0.061)	(0.016)	(0.011)	(0.014)	(0.013)	(0.011)
Dalit	−0.068***	−0.064***	0.068***	−0.026*	−0.076*	−0.026*	−0.010	−0.012	−0.000	0.002
	(0.011)	(0.012)	(0.008)	(0.013)	(0.038)	(0.010)	(0.007)	(0.009)	(0.009)	(0.007)
Tribal	−0.029	−0.027	0.024*	−0.048*	−0.062	−0.024	0.004	0.007	0.026	0.006
	(0.017)	(0.018)	(0.010)	(0.020)	(0.055)	(0.015)	(0.010)	(0.015)	(0.014)	(0.011)
Adj. R^2	0.611	0.551	0.550	0.460	0.423	0.360	0.284	0.411	0.454	0.530
Num. obs.	10157	10157	10157	9658	11164	10548	11361	10933	10657	11140
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 11: Electoral Impact: House v. Gas Cylinder (Full Sample With Ruralness Control)

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)	Election involvement (Index)	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Got a house (β_1)	0.020^{*}	0.020^{*}	-0.008	0.008	0.062^{*}	0.021^{**}	0.028^{***}	0.004	-0.011	0.002
	(0.008)	(0.009)	(0.006)	(0.010)	(0.030)	(0.008)	(0.006)	(0.008)	(0.007)	(0.006)
Got a cylinder (β_2)	0.044^{***}	0.038^{***}	-0.016^{**}	0.051^{***}	0.176^{***}	0.036^{***}	0.023^{***}	0.034^{***}	0.021^{**}	0.017^{**}
	(0.008)	(0.009)	(0.005)	(0.009)	(0.027)	(0.007)	(0.005)	(0.007)	(0.007)	(0.005)
Muslim	-0.151^{***}	-0.183^{***}	0.104^{***}	-0.223^{***}	-0.638^{***}	-0.119^{***}	-0.012	-0.082^{***}	0.007	0.017
	(0.014)	(0.015)	(0.012)	(0.017)	(0.050)	(0.013)	(0.009)	(0.012)	(0.011)	(0.009)
Dalit	-0.065^{***}	-0.068^{***}	0.057^{***}	-0.023^{*}	-0.116^{***}	-0.028^{**}	-0.012^{*}	-0.006	-0.001	0.007
	(0.010)	(0.011)	(0.007)	(0.011)	(0.033)	(0.009)	(0.006)	(0.008)	(0.008)	(0.006)
Tribal	-0.024	-0.014	0.023^{**}	-0.025	-0.082	-0.025	-0.001	-0.006	0.017	0.010
	(0.015)	(0.016)	(0.009)	(0.018)	(0.049)	(0.014)	(0.009)	(0.013)	(0.012)	(0.010)
Adj. R^2	0.610	0.543	0.533	0.459	0.432	0.356	0.278	0.401	0.456	0.530
Num. obs.	13471	13471	13471	13048	14962	14164	15198	14724	14384	14949
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

B.2 Alternative Specification

I run regressions separately for each benefit (house and cooking gas cylinder) with the following specification:

$$\begin{aligned}\mathrm{Y}_{i,t} = \alpha_0 + \beta_1 \mathrm{Benefited}_{i,t-1} + \beta_2 \mathrm{Muslim}_{i,t} + \beta_3 \mathrm{Dalit}_{i,t} + \beta_4 \mathrm{Tribal}_{i,t} \\ + \rho \mathbf{X}_{i,t} + \sum_{j=1}^{J} \gamma_j \mathrm{Booth}_j\end{aligned}$$

Where $Y_{i,t}$ captures electoral support for the BJP, $\mathbf{X}$ is a vector of control variables like mean-centered age, gender (female or not), education, monthly household expenditure (binned), and past vote choice. The models also include polling booth fixed effects to adjust for any confounding due to time invariant factors at the precinct level.

Table 12 reports the results for the housing program, Table 13 for the cooking gas scheme, and Table 14 for an index of six flagship programs of the BJP government.

Table 12: Housing Scheme and Electoral Preferences (Full Results)

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)	Election involvement (Index)	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Benefited	0.042^{***}	0.045^{***}	-0.020^{*}	0.041^{**}	0.073	0.020	0.006	0.018	0.000	0.021^{*}
	(0.012)	(0.013)	(0.009)	(0.014)	(0.041)	(0.011)	(0.007)	(0.011)	(0.010)	(0.009)
Muslim	-0.198^{***}	-0.215^{***}	0.151^{***}	-0.327^{***}	-0.868^{***}	-0.184^{***}	-0.006	-0.130^{***}	0.034	0.008
	(0.023)	(0.023)	(0.022)	(0.025)	(0.081)	(0.020)	(0.012)	(0.018)	(0.017)	(0.016)
Dalit	-0.092^{***}	-0.086^{***}	0.103^{***}	-0.037^{*}	-0.140^{**}	-0.044^{***}	-0.014	-0.021	0.006	0.010
	(0.016)	(0.016)	(0.013)	(0.017)	(0.050)	(0.013)	(0.008)	(0.012)	(0.011)	(0.010)
Tribal	-0.048^{*}	-0.057^{*}	0.032^{*}	-0.090^{***}	-0.128	-0.033	0.020	0.009	0.016	0.001
	(0.021)	(0.022)	(0.014)	(0.023)	(0.067)	(0.018)	(0.011)	(0.017)	(0.017)	(0.014)
Adj. R^2	0.565	0.522	0.547	0.459	0.360	0.332	0.283	0.396	0.409	0.415
Num. obs.	6019	6019	6019	5777	6507	6237	6542	6398	6345	6399
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 13: Free Gas Cylinder Scheme and Electoral Preferences (Full Results)

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)	Election involvement (Index)	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Benefited	0.051^{***}	0.042^{***}	-0.024^{**}	0.052^{***}	0.187^{***}	0.029^{**}	0.027^{***}	0.040^{***}	0.017	0.026^{***}
	(0.011)	(0.012)	(0.009)	(0.012)	(0.036)	(0.010)	(0.006)	(0.009)	(0.009)	(0.007)
Muslim	-0.195^{***}	-0.213^{***}	0.150^{***}	-0.325^{***}	-0.856^{***}	-0.183^{***}	-0.004	-0.127^{***}	0.035^{*}	0.009
	(0.023)	(0.023)	(0.022)	(0.025)	(0.081)	(0.020)	(0.012)	(0.018)	(0.017)	(0.016)
Dalit	-0.093^{***}	-0.085^{***}	0.103^{***}	-0.037^{*}	-0.146^{**}	-0.044^{***}	-0.015	-0.022	0.005	0.010
	(0.016)	(0.016)	(0.013)	(0.017)	(0.050)	(0.013)	(0.008)	(0.012)	(0.011)	(0.010)
Tribal	-0.046^{*}	-0.054^{*}	0.032^{*}	-0.088^{***}	-0.134^{*}	-0.033	0.019	0.008	0.015	0.001
	(0.021)	(0.022)	(0.014)	(0.023)	(0.067)	(0.018)	(0.011)	(0.017)	(0.017)	(0.014)
Adj. R^2	0.566	0.522	0.547	0.460	0.363	0.333	0.285	0.397	0.409	0.416
Num. obs.	6019	6019	6019	5777	6507	6237	6542	6398	6345	6399
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 14: BJP Schemes (Index) and Electoral Preferences (Full Results)

	Voted BJP (0/1)	Voted NDA (0/1)	Voted Ethnic Party (0/1)	Re-elect Incumbent (0/1)	Govt Satisfication (-2 to +2)	BJP works for poor (0,0.5,1)	Election involvement (Index)	Contacted by BJP (0/1)	Contacted by Cong (0/1)	Contacted by Reg Parties (0/1)
Benefited	0.147^{***}	0.170^{***}	-0.078^{***}	0.181^{***}	0.595^{***}	0.115^{***}	0.078^{***}	0.130^{***}	0.044^{*}	0.099^{***}
	(0.025)	(0.026)	(0.021)	(0.027)	(0.087)	(0.023)	(0.016)	(0.024)	(0.022)	(0.019)
Muslim	-0.192^{***}	-0.208^{***}	0.148^{***}	-0.320^{***}	-0.846^{***}	-0.180^{***}	-0.003	-0.125^{***}	0.036^{*}	0.012
	(0.023)	(0.023)	(0.022)	(0.025)	(0.081)	(0.020)	(0.012)	(0.018)	(0.017)	(0.016)
Dalit	-0.091^{***}	-0.085^{***}	0.103^{***}	-0.037^{*}	-0.143^{**}	-0.044^{***}	-0.014	-0.022	0.005	0.010
	(0.016)	(0.016)	(0.013)	(0.017)	(0.050)	(0.013)	(0.008)	(0.012)	(0.011)	(0.010)
Tribal	-0.047^{*}	-0.056^{*}	0.032^{*}	-0.090^{***}	-0.137^{*}	-0.034	0.019	0.008	0.015	0.000
	(0.021)	(0.022)	(0.014)	(0.023)	(0.067)	(0.018)	(0.011)	(0.017)	(0.017)	(0.014)
Adj. R^2	0.567	0.525	0.548	0.463	0.365	0.335	0.286	0.399	0.409	0.418
Num. obs.	6019	6019	6019	5777	6507	6237	6542	6398	6345	6399
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Both FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

C Ideological Impact

Is receiving a material benefit associated with shifts in ideological beliefs? In classical voting models, the benefit b_i can compensate for ideological disutility, $(\sigma_i - \sigma_P)^2$, but it does not fundamentally change ideological positions. Formally speaking, we do not think that $\sigma_i = f(b_{i,t-1})$ (current ideology is a function of past benefits received).

In this appendix, I present correlational evidence from a fixed effects model with the specification:

$$\mathrm{Y}_{i,t} = \alpha_0 + \beta_1(\text{Got a house})_{i,t-1} + \beta_2(\text{Got a cylinder})_{i,t} + \rho\mathbf{X}_{i,t} + \sum_{j=1}^{J} \gamma_j \text{Booth}_j$$

Where $Y_{i,t}$ is a measure of political ideology, $\mathbf{X}$ is a vector of control variables like ethnicity, mean-centered age, gender (female or not), education, monthly household expenditure (binned), and past vote choice. The models also include polling booth fixed effects to adjust for any confounding due to time invariant factors at the precinct level.

The dependent variable captures ideological beliefs using three measures: (1) does the respondent think India is a Hindu nation; (2) how patriotic or unpatriotic are Muslims?; and (3) agreement with majoritarian statements (for instance: only my religion is correct, not of anyone else's; minorities should adopt the customs of the majority community; even if it is not liked by the majority, the government must protect the interests of the minorities (reverse coded); the Muslim community in India has been victimized under Narendra Modi's government (reverse coded).

Overall, receiving a benefit, big or small, is not associated with holding more majoritarian beliefs, or thinking that India is a Hindu nation. Cylinder recipients, if anything, are *less* likely to say India is a Hindu nation ($\widehat{\beta}_2 = -0.041$, s.e.=0.015). Cylinder recipients are also not more prejudiced towards Muslim. Home recipients, on the other hand, think think Muslims are less patriotic ($\widehat{\beta}_1 = -0.194$, s.e.=0.064). Muslims, unsurprisingly, are less likely to hold majoritarian beliefs and think India is a Hindu nation, and more likely to say their ethnic group is patriotic. In sum, material benefits may compensate for ideological disutility but they do not seem to shape ideological beliefs as such.

Table 15: Material Benefits and Political Ideology

	Majoritarian Beliefs (Index, -2 to +2)	India is a Hindu Nation (0/1)	How patriotic are Muslims? (-2 to +2)
Got a house (β_1)	0.007	0.026	-0.194^{**}
	(0.037)	(0.018)	(0.064)
Got a cylinder (β_2)	0.010	-0.041^{**}	-0.020
	(0.034)	(0.015)	(0.058)
Muslim	-0.214^{***}	-0.153^{***}	1.249^{***}
	(0.065)	(0.030)	(0.125)
Dalit	0.017	0.017	0.083
	(0.042)	(0.019)	(0.074)
Tribal	-0.026	-0.050	0.199
	(0.055)	(0.028)	(0.104)
Age (Mean Centered)	-0.000	0.000	-0.002
	(0.001)	(0.000)	(0.002)
Female	0.002	0.012	-0.109^{*}
	(0.029)	(0.013)	(0.048)
Education	0.001	0.002	-0.020
	(0.009)	(0.004)	(0.015)
Monthly Expend.	-0.000	0.000	0.000^{*}
	(0.000)	(0.000)	(0.000)
Past Vote=BJP	0.078^{*}	0.011	-0.171^{**}
	(0.032)	(0.015)	(0.058)
Adj. R^2	0.353	0.357	0.527
Num. obs.	2928	3378	2612
Booth FE	Yes	Yes	Yes

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

D Design Tests (State Assembly Constituency Level)

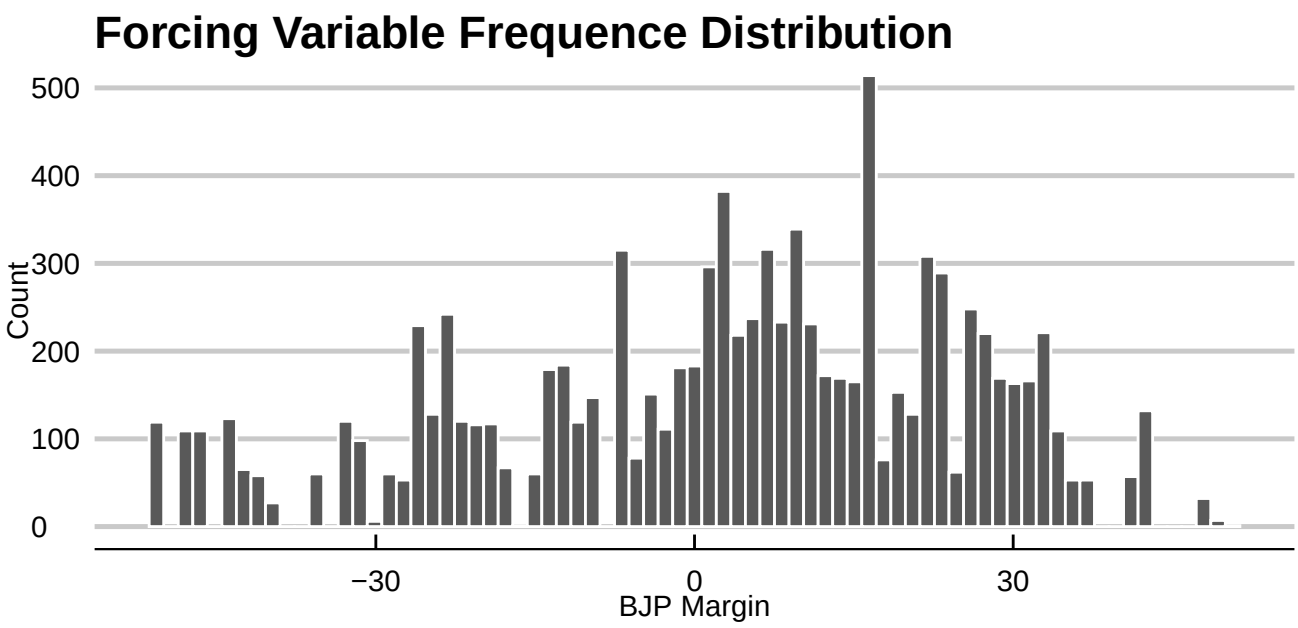
D.1 McCrary Density Test

The McCrary density test is performed using `rddensity` package in `R`, using the default specifications: a local quadratic approximation (p=2), triangular kernel, and MSE optimal bandwidth.

Table 16: McCrary Density Test

Diff. in Densities	t statistic	p
0.002	0.648	0.517

D.2 Frequency Distribution



D.3 Covariate Balance

The table below checks for any discontinuous change in covariates at the cut-point, using exactly the same specification as the primary outcome analysis.

Table 17: Covariate Balance (AC Level RD)

Covariate	RD (MSE optimal BW)				
DV	Coef	SE	p	n	BW
Hindu	0.074	0.165	0.651	3358	10.646
Muslim	-0.152	0.165	0.356	3187	10.244
Low Status Group	-0.065	0.055	0.241	2518	7.772
Age (Mean Centered)	-0.435	1.680	0.796	3994	13.490
Female	0.061	0.050	0.225	3893	12.913
Education	-0.452	0.375	0.228	4327	15.063
Monthly Expenditure	191.965	1110.087	0.863	3296	10.953
Monthly Income	404.875	1655.364	0.807	3789	13.390
Past Vote = BJP	0.008	0.126	0.948	2425	10.511
Landless	0.035	0.131	0.788	2948	9.524
Ineligible for Housing Scheme	0.013	0.098	0.897	4271	16.195

Note:
The difference at the cut-point was estimated using rdrobust in R, specifying a first-order polynomial (p=1), triangular kernel weights, and an MSE-optimal bandwidth. We report the robust, bias-corrected estimate and standard error (clustered at the assembly constituency level). This is identical to the primary outcome specification in the paper. Data from National Election Studies 2019, Election Commission of India 2014

E Design Tests (Parliamentary Constituency Level)

E.1 McCrary Density Test

The McCrary density test is performed using `rddensity` package in `R`, using the default specifications: a local quadratic approximation (p=2), triangular kernel, and MSE optimal bandwidth.

Table 18: McCrary Density Test

Diff. in Densities	t statistic	p
-0.034	-9.69	0

Note: The McCrary test suggests there is a discontinuous change in the density of the forcing variable at the cut-point ($x = 0$). This can happen because of two reasons: (1) close elections were manipulated in favor of (or against) the BJP; or (2) the survey company sampled more respondents on one side of the cut-point than the other. The first situation poses a problem for identification because it falsifies the "as-if randomness" or "coin-flip" logic of close elections. The second situation can arise with random sampling of constituencies and respondents, or even when there is asymmetric non-contact of respondents. This poses a problem for identification if respondent characteristics, or other predictors of the outcome, also discontinuously change at the cut-point.

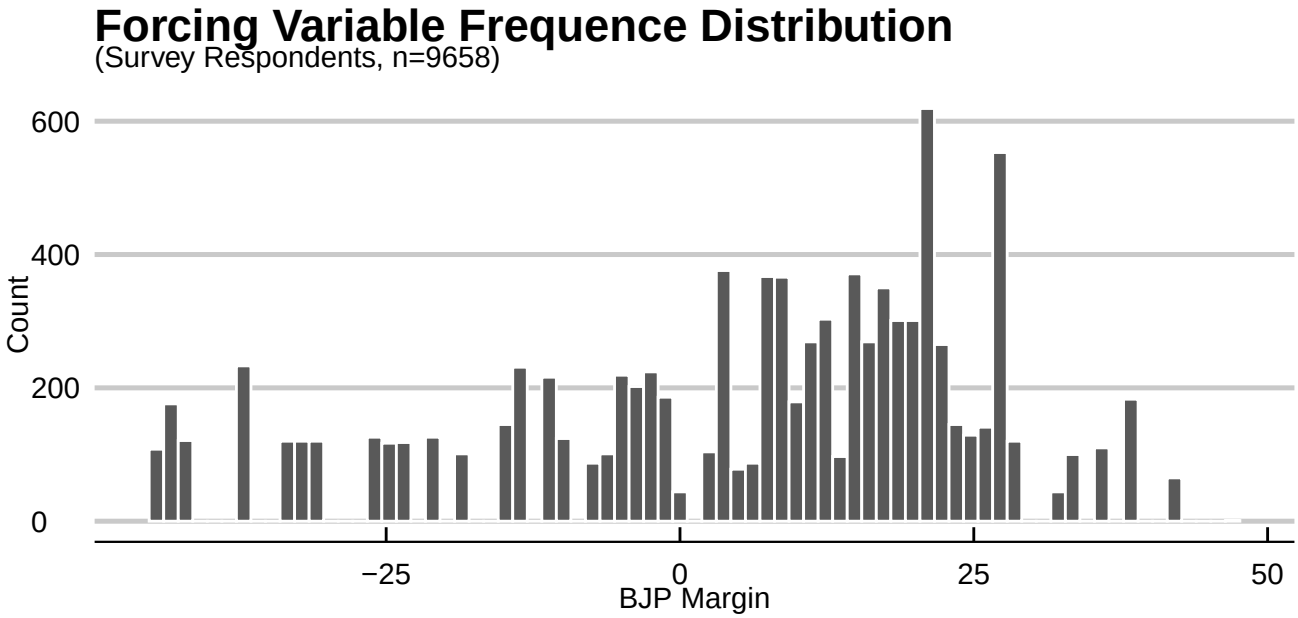
To rule out these possibilities, I perform the McCrary density test on the official election results ($n = 537$ parliamentary constituencies where the BJP or its ally fielded candidates). Table 19 reports the summary statistics from this test. We fail to reject the null hypothesis of no difference in densities at the cut-point. This can be seen visually in the section below, where I report the frequency distribution (see figure E.2). Finally, I check for covariate balance within the survey sample, and do not find any discontinuous changes.

Table 19: McCrary Density Test (All Parliamentary Constituencies)

Diff. in Densities	t statistic	p
-0.002	-0.284	0.776

E.2 Frequency Distributions

The top figure reports the frequency distribution of the forcing variable for survey respondents. The bottom figure reports the same for all parliamentary constituencies in which the BJP, or its allies, fielded candidates.


Forcing Variable Frequence Distribution
(Survey Respondents, n=9658)
Count
600
400
200
0
−25
0
25
50
BJP Margin

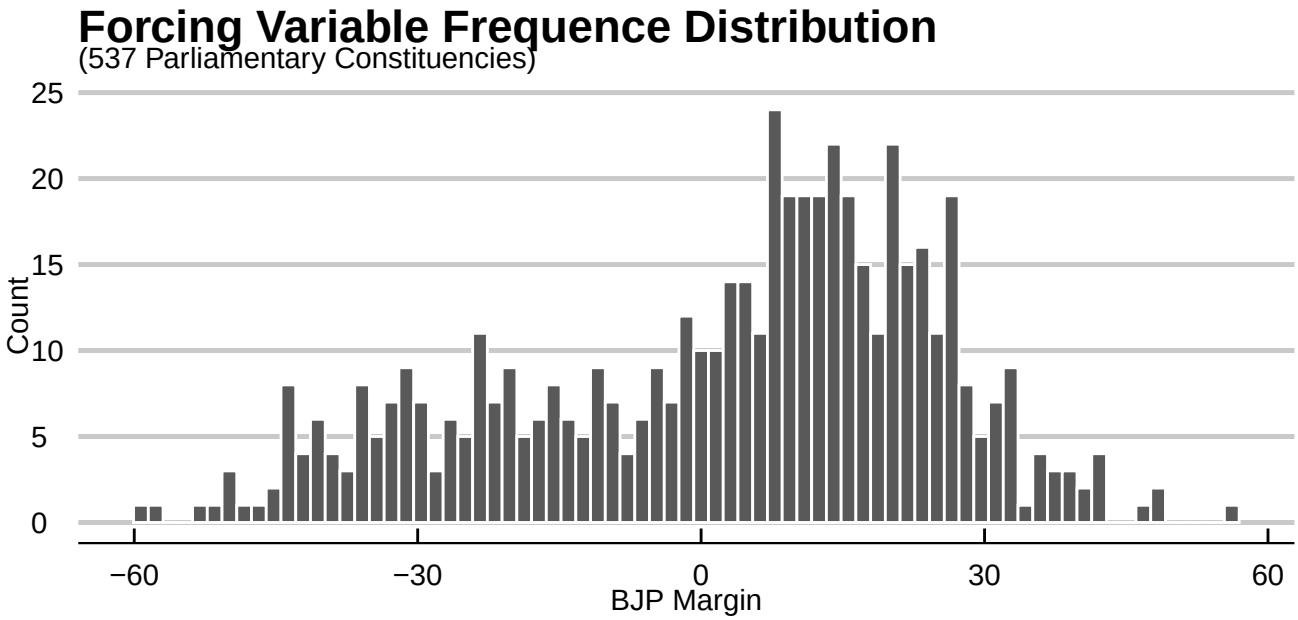

Forcing Variable Frequence Distribution
(537 Parliamentary Constituencies)
Count
25
20
15
10
5
0
−60
−30
0
30
60
BJP Margin

Table 20: Covariate Balance (PC Level RD)

Covariate	RD (MSE optimal BW)				
DV	Coef	SE	p	n	BW
Hindu	-0.059	0.138	0.671	2620	10.303
Muslim	-0.065	0.087	0.456	1833	7.375
Low Status Group	0.021	0.161	0.898	2742	10.616
Age (Mean Centered)	-2.464	2.683	0.358	2744	10.808
Female	0.138	0.071	0.051	1895	7.839
Education	0.150	0.447	0.737	3401	12.774
Monthly Expenditure	-426.269	1217.347	0.726	2349	9.263
Monthly Income	-1725.593	1965.691	0.380	2036	8.737
Past Vote = BJP	0.028	0.229	0.901	2392	12.425
Landless	0.030	0.137	0.829	2168	8.299
Ineligible for Housing Scheme	0.260	0.183	0.155	2579	10.400

Note:
The difference at the cut-point was estimated using rdrobust in R, specifying a first-order polynomial (p=1), triangular kernel weights, and an MSE-optimal bandwidth. We report the robust, bias-corrected estimate and standard error (clustered at the parliamentary constituency level). This is identical to the primary outcome specification in the paper. Data from National Election Studies 2019, Election Commission of India 2014

E.3 Covariate Balance

The table below checks for any discontinuous change in covariates at the cut-point, using exactly the same specification as the primary outcome analysis.

F RD Plots

Figure 1: Assembly Constituency Level Analysis of Survey Respondents

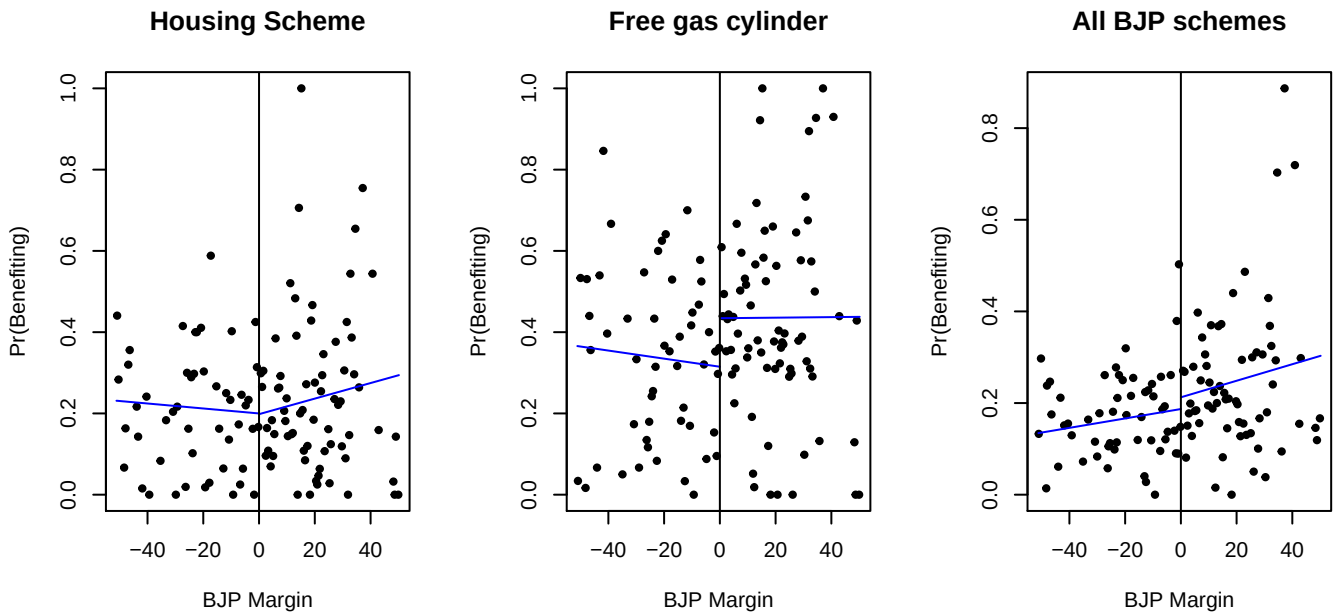
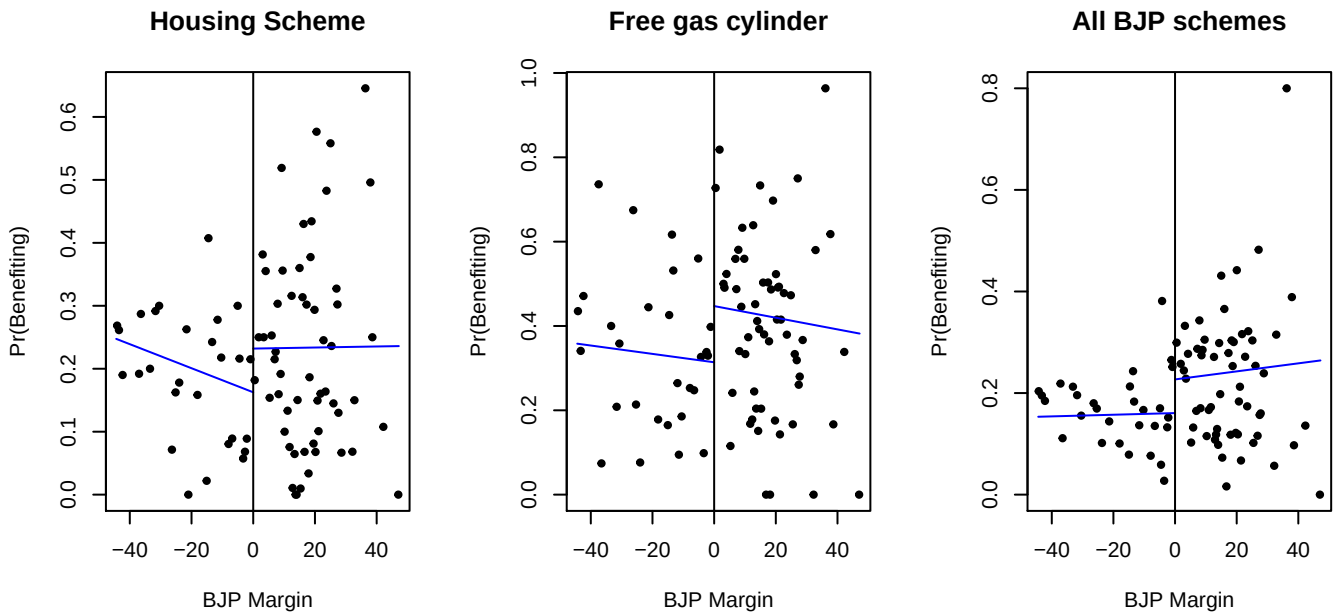



Figure 2: Parliamentary Constituency Level Analysis of Survey Respondents