

## **When are Legislators Partisan?**

### **Targeted Distribution and Constituency Service in India**

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**Abstract:** Substantial research highlights tactical targeting of club goods by politicians. Yet, legislators also provide substantial direct assistance to individual citizens, for example, in obtaining goods and services from the bureaucracy. What is the partisan or electoral logic of such individual assistance—and how does it compare to the better-studied provision of “pork”? I argue that when the costs of acquiring information on electoral behavior and of targeting benefits are high—as in the case of individual assistance by high-level politicians—elected officials maximize their overall support in the constituency by providing non-partisan “constituency service.” I test this argument using two unique sources of data: a comprehensive dataset on the deployment of constituency development funds by Indian state legislators, and a field experimental audit of politician responses to citizen requests for assistance. Thus, for the same set of politicians, I can compare the tactical allocation of club goods and individual services. I find robust evidence of partisan allocation of pork but no evidence that partisan considerations drive responses to the requests for individual assistance. Instead, politicians provide constituency service in an effort to boost their personal vote. My findings have important implications for the study of representation and responsiveness in a developing country democracy.

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## **I. Introduction**

How do politicians allocate resources to their constituents? A very substantial body of research suggests they use “pork,” or targetable club goods, to reward key groups of voters. Such allocations may follow a logic of rewarding loyal supporters, buying future turnout, or persuading swing voters. In each case, politicians use observable metrics of political support, such as past vote share or turnout in particular polling stations, to distribute valued benefits.<sup>1</sup>

Yet, this focus on the partisan targeting of club goods ignores other major categories of effort and activity through which politicians deliver valued benefits to their constituents. A particularly critical endeavor is the direct provision of assistance to individuals. Especially in developing democracies, where bureaucratic delays and corruption create substantial difficulties in obtaining services, citizens often appeal for help directly to high-level politicians, such as state or national legislators. Such politicians in “patronage democracies” often have substantial capacity to influence the provision of bureaucratic services. Direct appeals to state or national legislators also provide an alternative to demands citizens might make on local intermediaries, such as low-level elected officials or non-elected brokers; as I have shown in other work, local “blocking” of such demands can increase the volume of appeals to higher-level politicians.<sup>2</sup> In fact, the provision of individual assistance to citizens constitutes a major, often predominant allocation of time and effort by high-level politicians in developing democracies such as India.<sup>3</sup> Such assistance is a major channel for the delivery of welfare benefits and services—and thus a critical component of distributive politics.

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<sup>1</sup> I consider this literature in greater detail in the next section.

<sup>2</sup> Bussell 2017a; Bussell 2017b.

<sup>3</sup> Bussell 2017b.

What, then, is the partisan or electoral logic of such individual assistance—and how does it compare to the better-studied provision of club goods? With individual assistance, unlike for club goods, it is difficult to verify the past electoral behavior of voters; and it is equally difficult for high-level politicians to condition assistance on future electoral support. To be sure, in requesting assistance, individuals may allege that they have supported a politician or his party in the past, or promise their future support; yet such claims are difficult for high-level politicians to substantiate. This may heighten incentives for politicians to provide individual assistance in a largely non-contingent and non-partisan way, akin to the “constituency service” described in the literature on advanced democracies.<sup>4</sup> Politicians may take the opportunity provided by direct appeals to cultivate a reputation for personal responsiveness, but they may not condition the provision of benefits on partisan behaviors or indicators of political support.

If so, a major category of assistance to citizens, with important implications for distributive outcomes, is characterized by a very different logic than the one described for club goods—where patterns of past political support have a much clearer consequence for future benefits received. The implications for our understanding of representation, responsiveness, and accountability in developing democracies are significant.<sup>5</sup>

Yet, despite these seemingly oppositional propositions about the targeting of benefits by politicians—one alleging highly tactical allocation, the other a perhaps more optimistic vision of non-contingent distribution—we have little insight into whether both perspectives are correct and, if so, how politicians choose when and where to engage constituents in a non-partisan manner versus directing state resources to clear partisan ends. In this paper, I posit that elected officials can and often do provide access to state resources in ways that benefit both their

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<sup>4</sup> See, e.g., Fenno 1978; Cain, Ferejohn, and Fiorina 1987; Butler 2014.

<sup>5</sup> Bussell 2017b.

supporters and their broader constituent base. I offer an explanation for when politicians choose to use partisan versus non-partisan strategies for fostering electoral support. At its core, this argument emphasizes the costs to politicians of both acquiring information on electoral behavior and the targeting of benefits. Where these costs are sufficiently high, politicians will default to non-partisan assistance, so as to maximize their overall support in the constituency. In practice, this means that politicians are more likely to target co-partisans when the resources in question are requested by and likely to benefit a group, whereas individual-level benefits are more likely to be directed to all constituents.

Comprehensively evaluating such an argument is difficult, due to the significant data requirements for testing different tactics of allocating distinct types of benefits by the same politicians. The outcome variable we choose—or the particular realm of distribution we study—may give us different answers about the extent to which politicians target benefits along partisan lines (Kramon and Posner 2013). It is thus necessary to have a more comprehensive set of data on elected officials—including data that accounts for multiple potential forms of allocation—than is typically available from administrative sources. The evaluation of politician responsiveness to individual petitions for assistance is particularly tricky. Data on responses to direct requests are difficult to come by; and associations between the partisanship of petitioners and responsiveness cannot often be given a causal interpretation. The use of politician-level data must also acknowledge risks associated with potential Hawthorne effects if actors know they are being observed during data collection, such that they behave in a manner different from their normal actions.

I test the empirical implications of my argument using unique politician-level data from India. In order to counter persistent data limitations, I combine administrative data on the

spending of a constituency development fund (CDF) with that from a field experimental audit of politician responses to citizen requests. Evaluation of the CDF involves analysis of politician-level spending across a range of different development projects, as well as mapping of these projects to fine-grained data on voting behavior. In the experimental audit, I instead send individual appeals for assistance to a near-census of Indian state legislators, including a subset from the state on which I have CDF data, and I manipulate at random the partisanship of the petitioner and other information on electoral behavior. This set of data allows me to compare, for the same set of politicians, strategies for allocating group-oriented resources with the ways in which politicians respond to individual-level petitions. Variation in the type of good requested within the experiment also allows me further to test my argument.

My results provide empirical support for the argument that politicians engage in both partisan and non-partisan targeting and that the variation in their strategies is strongly associated with the character of goods in question. I find that politicians engage in clear co-partisan targeting when allocating club goods. Yet, when faced with requests from citizens for help with basic public benefits, these same politicians provide assistance in a largely non-partisan manner.

This paper makes multiple contributions to research on distributive politics. First, past work has often focused on constituency-level analyses, while evaluation of individual politician behavior requires a within-constituency design. My data allows for both within and across politician comparisons, thus improving leverage for making claims about political behavior. Second, existing research on patronage allocation typically focuses on only a single policy area, limiting our ability to make generalizable claims regarding the character of targeting. Here, instead, I evaluate the implementation of a policy that allows for distribution across a range of different development project types, as well as behavior across both individual- and group-

targeted benefits. Third, I offer new evidence relevant to debates over vote buying versus turnout buying, showing that both dynamics may be observed in politician allocation strategies.<sup>6</sup> Finally, I provide new insights into the ways in which politicians use resource allocations to build their individual reputation in the constituency—their personal vote—rather than relying on the strength of their party’s reputation.

In the next section, I consider the incentives for politicians to engage in partisan and non-partisan targeting, building on existing work on distributive politics. I then offer an alternative account that allows for both kinds of allocation, depending on variations in perceived costs. In the third section, I discuss the data sources used in the analysis, before moving to empirical tests in section four. I conclude with discussion of the relevance my findings hold for our broader understanding of distributive politics and political representation.

### **Electoral Incentives and the Allocation of State Resources**

A wealth of research on distributive politics suggests that politicians in developing countries target state resources tactically for electoral advantage.<sup>7</sup> For example, they may direct group-oriented club goods to particular geographic areas.<sup>8</sup> In some cases, analysts focus on the specific nature of partisan targeting.<sup>9</sup> Other work distinguishes this targeting from allocation via public goods and considers the ways in which politicians make strategic decisions over differing forms of allocation.<sup>10</sup> In either case, legislators frequently use their power to respond to the interests of

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<sup>6</sup> See Stokes 2005; Nichter 2008; Gans-Morse, Mazzuca, and Nichter 2014; Larreguy, Marshall, and Querubín 2016.

<sup>7</sup> Kramon and Posner 2013: 461, Golden and Min 2013.

<sup>8</sup> Wilkinson 2007.

<sup>9</sup> Porto and Sanguinetti 2001, Arulampalam, Dasgupta, Dhillon, and Dutta 2009.

<sup>10</sup> Chhibber and Nooruddin 2004, Remmer 2007.

specific groups within their constituencies—often taking into account electoral support and attempting to appeal to core supporters or persuadable swing voters.<sup>11</sup>

Implicitly, work on the targeting of club goods tends to take a party-oriented approach to electoral politics. Allocations are made on the basis of party performance or, in the case of hierarchical distribution, on the basis of alignment between parties in the periphery and those holding power in the center.<sup>12</sup> This suggests, in effect, that party leaders make decisions about the allocation of benefits on the basis of overall party strategy, rather than concerns about the electoral viability of any specific politician.

Yet, related work also suggests that distribution by individual politicians can exhibit a different logic, one that accounts both for performance of the party as well as that of the individual politician. In their analysis of constituency development spending by members of Parliament in India, Keefer and Khemani (2009) show that politicians are more likely to exert individual effort to allocate these funds when they cannot rely on the party's reputation in the constituency for their reelection. This suggests that allocation of club goods represents an opportunity for politicians to build their "personal" vote, or that part of their support base that votes for them on the basis of their individual reputation, rather than that of the party.<sup>13</sup> Thus, when individual elected officials have opportunities to direct resource allocation within their own constituencies, we should expect to see outcomes that take into account both their own electoral strength and that of their party.

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<sup>11</sup> Cox and McCubbins 1986, Lindbeck and Weibull 1987, Dixit and Londregan 1996, Kramon and Posner 2013

<sup>12</sup> Arulampalam et al. 2009

<sup>13</sup> Cain, Ferejohn, and Fiorina 1987

### *Incentives for Targeting Diverse Resources*

If individual politicians can influence distribution, then they may have incentives to do so in ways that go beyond the existing distinction between club and public goods. If this is the case, understanding distributive politics requires a more comprehensive analysis of what influences these decisions. In this sub-section, I consider what factors are most likely to influence elected officials' decisions about how to maximize the electoral rewards from intervention in the distribution of state resources. Rather than focusing on the distinction between allocation of club versus public goods, I instead focus on the incentives for politicians to provide targeted club goods versus intervening in the implementation of policies in non-partisan ways.

I first review two key strategies that politicians can typically use to allocate resources: distribution of politician-controlled resources and intervention in bureaucratic processes of policy implementation. Where elected officials have direct control over specific state resources, such as through a constituency development fund (CDF), they have the ability direct allocations, often contingent only on some basic requirements and limitations. An important characteristic of CDFs, in particular, is that these funds provide politicians unitary control over the type and recipients of allocation, making it a particularly powerful tool for targeting benefits to specific voters. For researchers, the existence of CDFs also helpfully reveals a quite “pure” measure of the tactical intent of individual legislators vis-à-vis voters—i.e., the spending of CDF funds is not an outcome diluted by factors such as strategic bargaining in legislatures. If a politician has the goal of targeting benefits directly to specific groups of core or swing voters, then these types of funds can be especially useful for achieving those ends. At the same time, because these funds typically are used for larger infrastructure-style investments, they are potentially less relevant for targeting benefits to specific, individual voters.

An alternate strategy for influencing resource allocation, however, is to intervene in bureaucratic processes of policy implementation. Most often, this involves responding to the individual requests of constituents, who are having difficulty navigating the state bureaucracy in order to acquire a particular good or service. Such intervention is a frequently noted activity of elected officials in Western democracies—the “casework” that makes up the bulk of constituency service. These kinds of activities have been given less attention in work on democracies in other parts of the world, though I show in related work that such individualized assistance can make up a significant portion of senior politicians’ daily activities.<sup>14</sup> Providing aid of this sort can offer electoral benefits by bolstering a politician’s reputation as a responsive representative. While an individual voter might not know a high-level politician personally when making a request, the act of requesting creates a more intimate linkage. In addition, assistance has the benefit of spillover effects, in that the people who are helped may be likely to return to their home community and discuss with their peers the positive experience they had with their representative. It is for this same reason that politicians have an incentive to attempt to help rather than to ignore the requests they receive. It is as easy for a petitioner to return to the village and complain about his experience as it is for him to praise his representative. Providing assistance, or at least appearing to do so, can then be directly linked to the quality of a politician’s reputation in the constituency and, arguably, her ability to be reelected.

In developing countries, these kinds of activities are often associated with clientelism and expected to exhibit characteristics of electoral *quid pro quos*.<sup>15</sup> This form of intermediation is typically understood to be dominated by local-level partisan brokers.<sup>16</sup> Yet, in this clientelist

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<sup>14</sup> Bussell 2017a

<sup>15</sup> Auyero 2000, Stokes 2005

<sup>16</sup> Stokes et al. 2013, Camp 2016

paradigm, the underlying logic for the use of local intermediaries is partisan resource allocation. “To distribute benefits in a highly targeted way, guided by political criteria, and to monitor the actions of voters, parties need fine-grained information about voters’ preferences and behaviors. To gather this information, they require brokers” (Stokes et al. 2013: 75). These local actors play the role of collecting evidence and monitoring behavior or, in the absence of strict *quid pro quos*, of leading—and encouraging—groups of individuals to vote for a particular party or politician (Baldwin 2013). In either case, local intermediaries are expected to play an important role in navigating the local context in a manner that is difficult, if not impossible, for politicians at higher levels of government.

Yet, even where clientelist brokers are active, they, by definition, are unlikely to help all those individuals who require specific benefits and services. As I show in related work, this results in spillovers of unassisted individuals at the local level, who subsequently demand for assistance from higher-level politicians.<sup>17</sup> These high-level elected officials, however, cannot easily confirm these individuals’ voting behavior. In these cases, politicians will have to determine, based on the other factors discussed below, whether it makes sense to provide such individuals with assistance in accessing the state.

### *Choosing Distribution Strategies*

With this range of potential allocation strategies available to politicians, how do officials make choices over which strategies to use and when? I posit that decisions over allocation strategies will depend primarily on three key factors: 1) the degree to which politicians can discern or infer electorally relevant characteristics of potential recipients of benefits, 2) the level of effort

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<sup>17</sup> Bussell 2017b

required to provide assistance, and 3) the degree to which the benefit in question is rival in nature. I discuss each of these conditions in turn.

Identifying electorally relevant characteristics of petitioners, such as partisanship, is key to the ability of politicians to target benefits in a partisan manner. My core argument here is that this is much easier for politicians to do with regard to groups or areas in their constituency than with regard to individual citizens. In particular, where politicians have large constituencies such that they are unable to know all of their constituents personally, it should be especially difficult to verify the electoral tendencies of a specific individual.

In contrast with the case of individual petitioners, politicians may well be able to discern the general voting behavior of groups of individuals based on publicly available information on electoral performance. While the secret ballot excludes knowledge about specific voters in many democratic contexts, aggregations of votes at reasonably low levels—such as the individual polling location—may be available. If a politician has access to such records, he may use this to discern, in general, whether a specific area of his constituency has supported him in the past. While this information is unlikely to be useful for adjudicating between the requests of individual citizens, it may be relevant for determining how to respond to group requests from specific areas of a constituency.

The second consideration is the effort required to provide assistance. The level of politician effort matters because high-level politicians are often limited in their available time and other resources. While legislators in many developed countries have official perks of office, such as resources for office infrastructure and staff, this is less common in developing countries. As a result, politicians are more likely to respond on their own to citizen requests (in contrast with U.S. legislators, for example, who often have staff allocated explicitly to constituent

relations), and thus be forced to trade off the total time they spend doing this against their other responsibilities.<sup>18</sup> Similarly, politicians with limited administrative resources will likely have to take on much of the effort required to allocate a project using their development funds, rather than delegate this to staff members.

The time politicians allocate to distribution thus places a drain on their limited resources. If a request can be managed simply through a short phone call to a responsible actor, it is easier to justify doing this for all petitioners—regardless of electoral affiliation—than if the allocation activity requires a politician to exert more time or effort, such as through a visit to a village, threatening to transfer an uncooperative bureaucrat, or use of constituency development funds.

Finally, the type of benefit or good for which assistance is requested may also affect a politician's incentives. This is important both in terms of the control—be it formal or informal—that a politician has over allocation of the resource and with regard to the rivalry associated with the benefit. Control matters, somewhat obviously, to the degree that a politician can actually affect the allocation of the benefit. In multi-level institutional systems, control over the allocation of state benefits is often divided across politicians and bureaucrats at different levels of government. As a result, any given politician may have direct authority over none or only a portion of the potentially available benefits and services. At the same time, informal mechanisms can exist to shape allocation, which also differ across various actors. As the literature on clientelism suggests, local intermediaries are often able to allocate benefits, even where they do not have official control over these resources (Calvo and Murillo 2012, Stokes et al. 2013).

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<sup>18</sup> Of course, politicians in all contexts are likely to tradeoff the allocation of their overall resources to constituency service versus other types of activities (Fenno 2003(1978), Griffin and Flavin 2011). The point here is that in a developing country, it is often the politician's own time and effort, rather than that of his staff, which is primarily being allocated to different activities.

Similarly, where politicians have informal power to influence (some) bureaucrats, they may be able to shape allocation of the benefits those bureaucrats oversee.

The rivalry of the benefit matters for different reasons. Here, the character of the good is related to the kinds of individuals that a politician is able to help. Rivalry concerns the degree to which access to a good by one individual limits the ability of others to attain the same good. For example, if there are a limited number of homes that can be allocated in a housing program, then provision of a home to one family limits the ability of others to acquire a home. The good in this case, the home, is rivalrous. In contrast, if there is a benefit for which all individuals are eligible and there are sufficient resources to provide this good to everyone, such as an identity card, then this good is considered non-rival—helping one person to gain access will not limit the ability of others to gain access.<sup>19</sup> Note that non-rivalry does not imply triviality of the benefit. Indeed, a substantial class of hugely important services for citizens—which should be obtained routinely but are usually not, especially in non-programmatic contexts of many democracies—are more readily obtained with intermediation from a politician.

With these considerations in mind, I expect politicians to be most likely to provide non-partisan assistance when they have little ability to identify or verify electorally relevant characteristics of the individual(s) making a request, minimal effort is required to provide assistance, and the benefit or good in question is non-rival in nature. An example of this type of situation is when an individual approaches a high-level politician requesting a signature on an

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<sup>19</sup> Excludability—which refers to whether it is reasonably easy to prevent someone from accessing a benefit unless they meet certain criteria—is also often considered in analyses of good types. Non-excludable goods are those to which anyone can gain access, regardless of their identity or resources. I focus in this discussion on rivalry, because non-excludable goods should never require assistance from an intermediary to gain access, by definition. Excludable goods, in contrast, both those that are rival—private goods—and non-rival—natural monopolies or club goods—may benefit from intermediation. Thus, among those benefits that are excludable, politicians may have differing incentives to provide assistance depending on the level of rivalry.

application for a benefit such as a pension. The good itself is non-rival—anyone who meets the criteria should be able to receive a pension—and the effort required—a simple signature—is minimal. The politician in this case has little reason not to help, as the potential downside from angering or disappointing the individual by not helping is clearly more substantial than the minimal costs of providing assistance.

In contrast, where a politician can feasibly identify the partisanship of individual(s) making a request, significant effort or resources are needed to fulfill the request, and the benefit is rival in nature, I expect to see politicians to provide assistance in a more targeted manner. For example, if a group of individuals comes to a politician from a village in his constituency and requests that a hand pump be installed in their neighborhood, this request has very different characteristics from a pension request. First, the politician will have more of an opportunity to conduct research on how this particular village voted in the previous election and also possibly the ethnic or partisan characteristics of the specific neighborhood in the village for which the pump has been requested; and since the benefit is targeted at the group level at which information on political support is likely to be available, the politician may take this into account to make partisan allocations. Second, the group is making a request for something that would require some time and effort. Acquiring the pump would most likely require the politician to place pressure on a bureaucrat in charge of pump distribution or to draw on his own limited funds for development within the constituency. Finally, this implies that the good is rival in character, since the pump could be allocated to a different area or constituency development funds could be used on other goods instead. The politician, then, has a greater incentive to determine the direct electoral benefit that will accrue to him from helping to provide the

requested pump (and relying, if he decides not to help, on the fact of limited resources to explain his “inability” to the petitioners).

One general observation, though this is by no means a rule, is that the types of goods for which politicians are likely to have incentives to provide non-partisan assistance are those more typically requested by individuals, rather than groups. Individuals, on one hand, are more liable to make requests for bureaucratic services needed by themselves or their immediate family, which are more likely to be individual, non-rival services. Groups, on the other hand, are more likely to make requests for benefits or goods relevant to a wider audience and, perhaps, those requiring a larger investment. It may, as noted above, also be easier to identify reliably the electoral leanings of a group over an individual. Even if individuals claim a particular partisanship or past electoral behavior, this is difficult for high-level politicians to verify. For these reasons, we might expect politicians to be more partisan in their targeting of benefits to groups, over individuals, but I expect this to be due largely to the logic outlined above, not to anything otherwise inherent to groups versus individuals.

A more specific implication of this argument, is that politicians should be likely to use different strategies of allocation depending on the type of good in question. The allocation of pork-barrel-style benefits via the implementation of large projects through politician-controlled funds is more likely to be associated with those goods that are rivalrous, require effort, and for which the electoral behaviors of beneficiaries are verifiable. This kind of allocation strategy typically involves significant research into the geographic areas that will receive projects, which both involves effort and also allows for collection of information on electoral histories in the proposed recipient area. In addition, these are often large and valuable initiatives, suggesting that

they are likely to be rivalrous in limited resource environments. For these reasons, I expect politicians to engage in more partisan tactics when allocating in this manner.

In contrast, allocation via intermediation with the bureaucracy seems much more likely to be associated with goods that require less effort and are non-rivalrous. As I document in related work, citizen petitions to politicians most frequently involve requests for assistance with basic individual-level goods from the state, such as welfare benefits, for which a politician will typically only need to do minimal work.<sup>20</sup> A politician may provide the individual with a signature or letter, or even make a phone call on their behalf, but none of this implies allocation of significant time or resources. In addition, those individuals making such requests, while from a politician's constituency, are unlikely to be known to him personally. As a result, it will be difficult for the politician to verify the individual's partisan tendencies, or for the politician to enforce any type of quid pro quo in return for providing assistance. Instead, the official is likely to have to determine whether or not to provide assistance on the basis of the request itself, not any direct expectations about electoral gains. For these reasons, I expect the use of intermediation to be largely non-partisan in nature.

This argument is an important corrective to existing accounts because the analysis concerns not only whether politicians will take advantage of available resources, but also who the beneficiaries of those benefits will be. Importantly, the range of potential benefit recipients goes well beyond the frequent distinction between core and swing voters. I suggest that politicians will choose different forms of allocation under differing circumstances, and that this has clear implications for whether or not said benefits are allocated in a largely partisan or non-partisan manner.

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<sup>20</sup> Bussell 2017a

## **Partisan Targeting of Club Goods in India**

Testing such an argument has been difficult, due to the demand for data that reflects multiple types of allocation strategies. In addition, appropriate data should also respond to the critique that often such analyses—particularly those of pork-barrel policies or politician-directed investments—focus only on the allocation of a single resource.

In order to account for these types of data limitations, I draw on two unique sources of data on politician behavior. In this section, I discuss and evaluate data on the spending of a constituency development fund. In the following section, I evaluate a field experimental audit of politician responses to individual requests for state resources. In both cases, the politicians in question are state legislators in India.

The first data source comes from spending of a state-level constituency development fund in the state of Karnataka. There are 224 seats in the Karnataka legislature, which operates on a parliamentary system. Legislators are elected from single member districts via first-past-the-post electoral rules. The legislators considered here came to office in 2013 for an expected five-year term. During the period in question, a single party, the Indian National Congress (INC), held a majority of seats in the legislature, with multiple other parties, including the Bharatiya Janata Party (BJP) and the Janata Dal (Secular) (JDS) sitting in opposition.

A constituency development fund policy has been in place for multiple years in Karnataka. This is in line with the increasing use of such funds across developing countries over the last few decades.<sup>21</sup> In recent years, greater analytic attention has been directed to the theoretical relevance and empirical benefits of constituency development funds (CDFs) for

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<sup>21</sup> Baskin and Mezey 2014

testing theories of distributive politics.<sup>22</sup> CDFs are financial resources that give individual members of legislatures a pool of funds on which to draw in a discretionary manner for projects in their constituencies. While these funds are similar to earmarks that legislators may attempt to acquire for their region, they are different on a few important dimensions. First, “unlike earmarks, CDFs generally become institutionalized in the government’s annual budget.”<sup>23</sup> Second, unlike pork spending that is usually acquired for a specific substantive spending area, these funds are typically unrestricted, within some minimal bounds, so that politicians can spend on whatever they perceive is needed in their area. “In this sense, a CDF is a politicized form of spending that can help fill in the important gaps in government services in constituencies that have not been addressed in the government’s larger, comprehensive policy programs” (Ibid.). This also means that in analyzing the allocation of CDF resources, one can evaluate the allocation of a wide variety of targeted good types within a single policy platform. This is important from the perspective of being able to respond to critiques of existing analyses that they evaluate the targeting of only a single type of good.<sup>24</sup>

Many Indian state legislatures have CDFs, typically referred to as a Member of the Legislative Assembly Local Area Development Scheme (MLALADS). In Karnataka, an MLALADS program was initiated in 2001-2 and has continued to the current period. As of 2013-14, the year for which I conduct analyses below, the annual allocation to each constituency was Rs. 20,000,000 (~US\$335,233). MLALADS has a companion program at the national level, the Member of Parliament Local Area Development Scheme (MPLADS), which has received

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<sup>22</sup> Keefer and Khemani 2009, Harris and Posner 2016, Chhibber and Jensenius 2016

<sup>23</sup> Baskin 2014: 1

<sup>24</sup> Kramon and Posner 2013

more attention in the existing literature, perhaps at least somewhat due to the fact that the data on spending is more widely available, through audits and an online platform.<sup>25</sup>

Data availability is an important issue for attempting to analyze MLALADS spending. In many states with MLALADS programs, spending data is aggregated at the administrative district level, if made available at all. Because more than one state legislator's constituency typically overlaps each administrative district in India, this makes it difficult to analyze spending at the legislator level, particularly when information is not made available on the location of individual projects. In Karnataka, however, the state government makes available politician-level spending records on an online platform.<sup>26</sup> I use data from one full year of spending—2013-2014—to evaluate how politicians are making use of their funds.<sup>27</sup>

### *Types of Benefits*

Prior to analyzing the character of allocation in detail, it is worth testing the assumption that constituency development funds represent a broader set of policy interests than most single-issue policies evaluated in the literature on distributive politics. I reviewed each project implemented in Karnataka during the period under consideration and coded the type of project, such as electricity infrastructure, school facilities, or transportation infrastructure. Table 2 provides summary statistics of the projects and spending using this coding. As the table highlights, CDF spending is distributed across multiple types of development projects. While transportation infrastructure—which includes road construction and bridges—is by far the most common kind of project, water infrastructure—such as drinking water purification plants—and

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<sup>25</sup> Keefer and Khemani 2009, Chhibber and Jensenius 2016

<sup>26</sup> [http://kllads.kar.nic.in/MLAWise\\_reports.aspx](http://kllads.kar.nic.in/MLAWise_reports.aspx)

<sup>27</sup> While the data for 2013-14 was available to scrape from the Karnataka MLALADS website, data for prior and subsequent years was not available at the time of this analysis.

public facilities—including community buildings—are also quite common investments. A variety of other investment types make up the remainder of spending, including outlays on educational infrastructure, sanitation, electricity, and health projects. This suggests that CDFs offer a better overall measure of politician allocation across a range of potential development areas than do single-issue policies.

**Table 2 – CDF Spending in Karnataka Reflects a Wide Variety of Project Types**

Type of Project	Total Projects Reported	Percent of Total Projects	Total Spending Reported (Rs. Million)	Percent of Total Spending
Electricity Infrastructure	24	1.5	5.9	1.1
Health Related	23	1.5	10.1	2.0
Private Facilities	11	0.7	5.5	1.1
Public Facilities	204	12.8	73.0	14.0
Public Infrastructure	24	1.5	7.6	1.5
Sanitation	124	7.8	38.2	7.3
School Facilities	74	4.7	27.3	5.3
Transportation Infrastructure	817	51.4	256.0	49.2
Water Infrastructure	262	16.5	88.5	17.0
Other/Unknown	25	1.6	7.8	1.5
<i>TOTAL</i>	<i>1,588</i>	<i>100.0</i>	<i>519.9</i>	<i>100.0</i>

### *Testing Resource Targeting*

The types of investments politicians make with their CDFs offer only limited insights into who might benefit from these goods. To evaluate the relationship between spending and past political performance, it is necessary to map information on projects and spending to electoral outcomes. The records in the MLALADS data are for specific projects in a given locality. In each case, I mapped the locality, using publicly available data sources on GIS locations of areas in India. Once I identified a GIS location for each record, I then mapped these locations to the nearest polling stations, using the locational data on polling stations made available by

Susewind.<sup>28</sup> With this information, I was able to identify which polling stations have an MLALADS project within their vicinity. I code all of the projects occurring within one kilometer of a polling station as within that polling station's vicinity.

The polling station is the lowest level of aggregation at which election returns are available in India. For each polling station, I collected detailed data on the performance of candidates for the state assembly in the 2013 election, just prior to the year for which I have data on spending of constituency development funds. The election data are publicly available on the website of the Karnataka State Election Commission, in the "Form 20" documents for each constituency. Using the individual-level returns, I calculated the vote margin of the winner in the constituency—i.e., the incumbent MLA—in each polling station. This number, which may be positive, negative, or zero, provides information on the degree to which the winning state legislator in the constituency also performed well in a specific polling station.

In order to evaluate the relevance of a given vote margin for each individual legislator, I compare the vote margins in those polling stations that have an MLALADS project in the vicinity (a 1 km radius) with those that do not. I also evaluate the total spending on all projects implemented within the vicinity of a polling station in the sample year. Villages may typically have one polling station, though larger, more spread out villages may exceptionally have two polling stations in different parts of the village. In general, then, my measure captures the relationship between village (or sub-village) level vote margins and the allocation of projects.

The independent variables for the analysis are a continuous measure of the vote margin and a categorical variable that indicates whether the vote margin in a polling station suggests that the area is core, swing, or opposition. Core areas are defined as those where the constituency

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<sup>28</sup> The details for how the polling stations were mapped, and a link to the raw data, are here: <https://www.raphael-susewind.de/blog/2014/mapping-indias-election>

winner has a margin of more than 5% in the polling station, Opposition are defined as those where the constituency winner has a margin of less than -5%, and Swing polling stations are those where the constituency winner's margin is between -5% and 5%. In a multivariate analysis, I also include politician-level independent variables, to account for existing arguments in the literature and potential confounding variables. This includes measures of the politician's overall vote margin in the constituency, which might affect overall spending as well as its allocation,<sup>29</sup> the politician's party affiliation, which could be related to both vote margins and spending but also allows us to examine differential patterns of allocation by party and the relevance of being in the ruling party; and the turnout percentage in the last election, which could also be related to vote margins and may create incentives for targeting particular polling stations with spending.

Before turning to the multivariate analysis, I first investigate graphically the relationship between polling station vote margin and my two primary dependent variables: 1) whether a polling station received a project in its vicinity and 2) the total MLALADS spending in the vicinity of a polling station over a year. Figure 1 shows the relationship between polling station-level performance and receipt of a project, with the polling station vote margins on the x-axis, grouped into buckets of 5% (e.g. a vote margin between .05 and .10). On the y-axis is the proportion of polling stations within each vote margin bucket that received a project. The size of the marker is proportional to the number of polling stations that fall into each vote margin bucket.

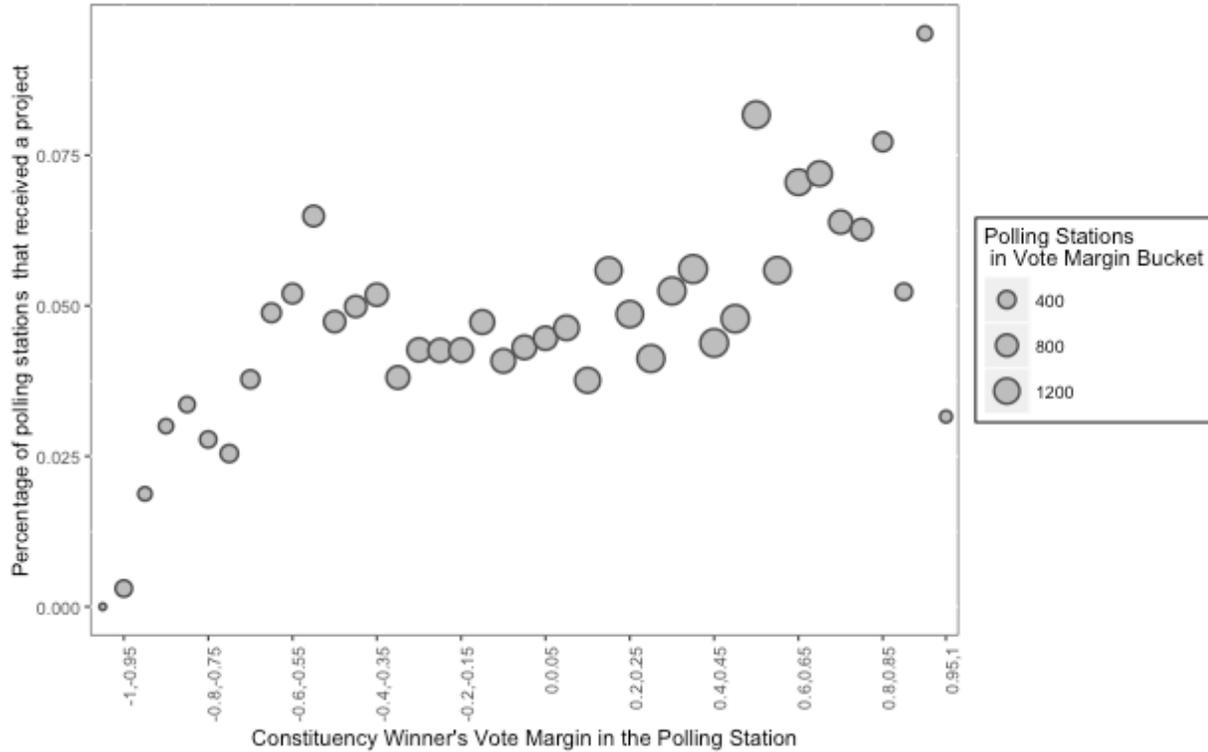
The figure provides striking evidence in favor of a partisan logic for the distribution of constituency development funds. The near linear and strongly positive relationship shows that—while polling stations that did not strongly support the politician may receive some projects—a

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<sup>29</sup> Keefer and Khemani 2009

polling station is substantially more likely to have a project near it, the greater its electoral support for the incumbent state legislator. Percentages of projects are up to three times greater where politicians received more than four-fifths of the vote than in places where they received a fifth of the vote—suggestive of a quite substantial partisan-targeting effect.

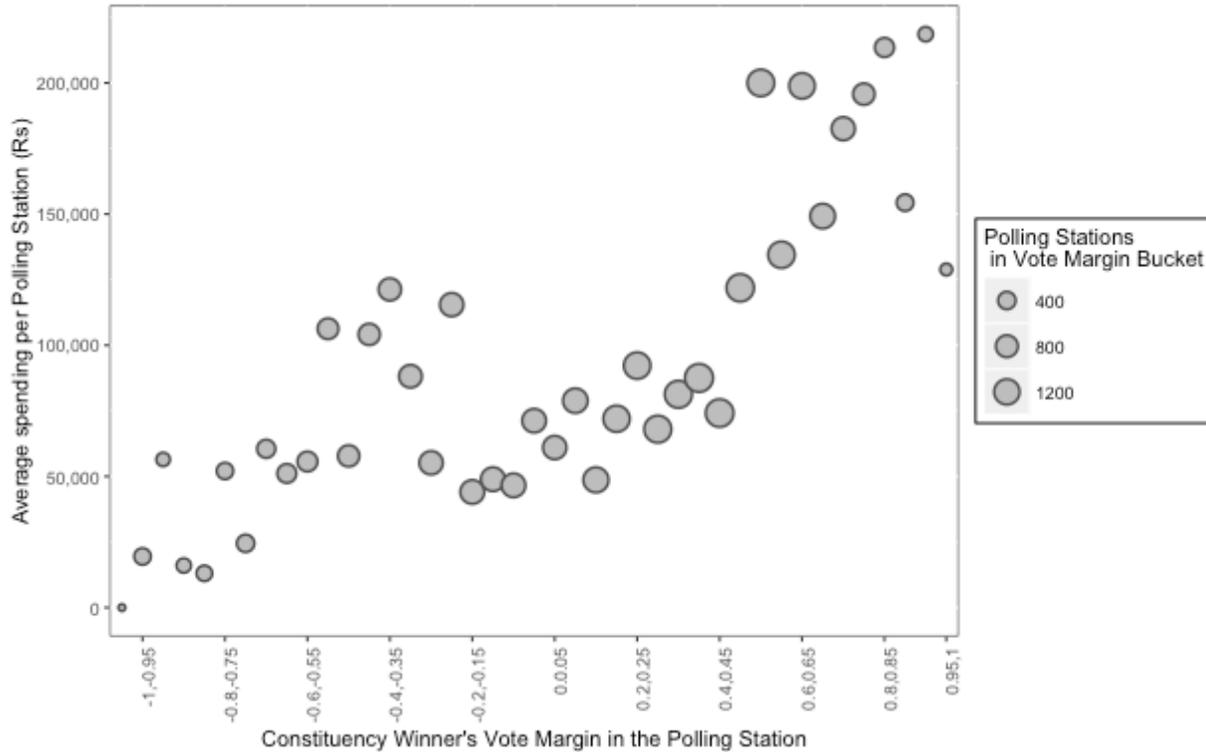
**Figure 1 – Politicians Allocate Projects Near Polling Stations that Voted for Them**



This finding is reinforced by the data shown in Figure 2, which displays the relationship between polling station-level returns and spending of the CDF in 2013-14 in the vicinity of those polling stations. Again, the x-axis shows 5% buckets of polling station voting margin, while the y-axis is average spending per polling station in the bucket, in Indian Rupees. This graph implies an even stronger relationship between the two variables, with polling stations in the top two vote margin buckets receiving more than Rs. 200,000 spending, on average, near them, versus between Rs. 0 and Rs. 50,000 near polling stations in the two lowest vote margin buckets. The

near-linear shape and the sharp upward slope indicate that state legislators spend the vast bulk of their discretionary funds near polling stations at which they received heavy support.

**Figure 2 – Politicians Spend More Near Polling Stations that Voted for Them**



These initial results suggest that there is a strong logic of partisan voter targeting in the spending of constituency development funds in Karnataka, particularly in terms of the total amount spent. Those polling stations where politicians clearly won were much more likely to get a project and to receive a substantially larger amount of total spending. While polling stations with a vote margin near zero—swing areas—were the recipients of projects and funds, these effects are by no means as predominant as those for core polling stations.

Multivariate quantitative analyses largely support these findings. In Table 2, I present the results of models regressing receipt of a project on the set of independent variables described above, using an ordinary least squares regression. Results using a logistic regression model offer similar results and are provided in the Appendix. I present the linear regression here for ease of

interpretation. Moving from the worst vote margin in a polling station to the best (polling station vote margin scaled 0-1) is associated with an increase in the likelihood of receiving an MLALADS project of between 2 and 4 %. Given that the baseline likelihood of receiving a project is approximately 16% (in the full model), this represents between a 12.5% and 25% increase in the likelihood of receiving a project.

<b>Table 2 – MLALADS Projects are More Likely Near Polling Stations that Strongly Voted for the Legislator</b>								
Independent Variables	1	2	3	4	5	6	7	8
<b>Vote Margin in Polling Station</b>	.04*** (.00)		.04 <sup>+</sup> (.02)		.03*** (.00)		.03* (.01)	
<b>Polling Station Competitiveness</b>		.00 (.00)		.00 (.01)		.00 (.00)		.00 (.01)
		<b>Core</b>	.01*** (.00)	.01 (.01)		.01*** (.00)		.01 (.01)
<b>Vote Margin in Constituency</b>					.03*** (.01)	.03*** (.01)	.02 (.04)	.03 (.04)
<b>Politician's Party</b>					.01 <sup>+</sup> (.00)	.01 <sup>+</sup> (.00)	.01 (.02)	.01 (.02)
					.00 (.00)	.00 (.00)	.00 (.02)	.00 (.02)
					.07*** (.01)	.07*** (.01)	.07 <sup>+</sup> (.04)	.07 <sup>+</sup> (.04)
					.00 (.01)	.00 (.01)	.00 (.02)	.00 (.02)
					-.02* (.01)	-.02* (.01)	-.02 (.04)	-.02 (.04)
					-.05*** (.01)	-.05*** (.01)	-.05* (.02)	-.05* (.02)
<b>Turnout in Constituency</b>					-.22*** (.00)	-.22*** (.00)	-.22*** (.06)	-.22*** (.06)
<b>Constant</b>	.03	.04	.03	.04	.16	.16	.16	.16
<b>Constituency Clustered SEs</b>			Yes	Yes			Yes	Yes
<b>N Constituencies</b>			153	153			153	153
<b>N</b>	34,450	34,450	34,450	34,450	34,450	34,450	34,450	34,450

Notes: OLS regression with coefficients shown and standard errors in parentheses. The coefficient and standard errors are thousands ('000). The excluded category for polling station competitiveness is opposition, and the excluded party for party affiliation is the Indian National Congress.

The importance of sub-constituency vote margin is even stronger for total amount spent near a polling station. As shown in Table 3, moving from the polling stations where legislators performed worst to those where they performed best is associated with an increase in spending of between Rs. 114,000 and 155,000 (~US\$1,900 to \$2,588). This increase represents just over one half of a percent of the total budget for a single constituency. In my sample, each assembly constituency has 155 polling stations, on average. This implies that, if a politician were simply to divide her funds equally across polling stations, each would be allocated approximately Rs. 129,032. Thus, the spending bonus accorded to a polling station for being a core voting area of a politician, versus being a strong opponent, is worth approximately the full amount that would be allocated to that polling station based on an equity rule.

**Table 3 – MLALADS Total Spending is Higher Near Polling Stations that Strongly Voted for the Legislator**

Independent Variables	1	2	3	4	5	6	7	8
<b>Vote Margin in Polling Station</b>	155.3*** (17.7)		155.3 <sup>+</sup> (81.7)		114.4*** (18.8)		114.4* (56.7)	
<b>Polling Station Competitiveness</b>								
<b>Swing</b>		-1.3 (18.2)		-1.3 (26.5)		12.7 (17.8)		12.7 (26.0)
<b>Core</b>		51.7*** (8.6)		51.7 (31.7)		36.7*** (8.8)		36.7 (24.7)
<b>Vote Margin in Constituency</b>					109.0*** (22.0)	131.3*** (21.4)	109.0 (145.1)	131.3 (146.5)
<b>Politician's Party</b>								
<b>BJP</b>					-38.6*** (10.8)	-38.7*** (10.8)	-38.6 (62.1)	-38.7 (62.2)
<b>JD(S)</b>					52.3*** (10.8)	51.8*** (10.9)	52.3 (75.2)	51.8 (75.4)
<b>KJP</b>					59.0 <sup>+</sup> (30.7)	58.3 <sup>+</sup> (30.7)	59.0 (42.3)	58.3 (43.1)
<b>BSRCP</b>					-29.3 (26.8)	-28.1 (26.8)	-29.3 (61.9)	-28.1 (61.7)
<b>Other Party Ind.</b>					-23.8 (34.6)	-22.8 (34.6)	-23.8 (109.3)	-22.8 (109.4)
<b>Turnout in Constituency</b>					-106.7*** (25.8)	-106.1*** (25.8)	-106.7 (75.6)	-106.1 (75.6)
					-631.1*** (18.7)	-630.5*** (18.7)	-631.1** (193.1)	-630.5** (193.3)
<b>Constant</b>	11.1	67.4	11.1	67.4	386.2	422.2	386.2	422.1
<b>Constituency Clustered SEs</b>			Yes	Yes			Yes	Yes
<b>N Constituencies</b>			153	153			153	153
<b>N</b>	34,450	34,450	34,450	34,450	34,450	34,450	34,450	34,450

Notes: OLS regression with coefficients shown and standard errors in parentheses. The coefficient and standard errors are measured in thousands ('000). The excluded category for polling station competitiveness is Opposition, and the excluded party for party affiliation is the Indian National Congress.

The strength of the project and spending bonuses for politicians' core voting areas contrasts strongly with the lack of benefits for swing areas. When I distinguish core and swing areas in both sets of models, we see no effect for being in a swing constituency. This is supported visually in Figure 2, where we can see that in many cases swing voting areas receive similar or lower amounts of spending compared to weak opposition areas.

We also observe clear differences in the behavior of politicians in different parties. Relative to politicians in ruling party, the Indian National Congress (INC), those in the Bharatiya Janata Party (BJP) and Karnataka Janata Paksha (KJP) were more likely to allocate projects in general; however, it was politicians in the Janata Dal (Secular) and, to a lesser extent, those in the KJP who spent more than those in the INC. Surprisingly, Independent politicians were the least likely to allocate projects and to spend. This contrasts with the personal vote logic that underlies incentives for constituency service that they would be the most likely to want to build a reputation as responsive representatives. Given that there are only eight independent legislators in the 224-member legislature, it may not make sense to make too much of this result.

It is also worth giving attention to the results for voter turnout in the constituency. In both models, there is a strong negative relationship between turnout and project allocation. Moving from the lowest turnout constituency (52.3%) to that with the maximum turnout (88.5%) is associated with a decrease in the likelihood of receiving a project of 22% and a reduction in the average amount spent of Rs. 631,000. This suggests that, apart from any targeting of goods to voters at the polling station level, politicians in constituencies where a large number of people vote are less likely to spend their CDFs. Thus, it may be relevant to think of pork barrel spending in this context as a strategy for encouraging future votes for politicians in areas where people tend to vote less, rather than as a tool for rewarding large numbers of voters who have already turned out. In this sense, it acts as a dual strategy for buying turnout—even in the year after an election—while at the same time targeting core voters.

## **Responsiveness in Requests for Goods and Services**

The second data source is an experimental audit conducted with state and national legislators across India. In this experiment, politicians were sent messages from fictitious constituents making requests for assistance with acquiring basic public benefits. The messages were sent via text message and the messaging service WhatsApp, and the content was varied randomly to test officials' reactions to differing information on petitioners' past political behavior. Here, I draw on the full sample data from across India and also evaluate the Karnataka legislator sub-sample, in the latter case to examine the behavior of the same politicians for whom I have CDF spending data.

Text messages and WhatsApp are now standard forms of communication between politicians and their constituents in India. While in-person visits are an extremely common mode of interaction, phone-based contacts are also quite commonplace.<sup>30</sup> At least two structural and institutional factors in India facilitate phone-based access to politicians. First, the penetration of mobile phones is remarkably high for a developing country, with an estimated 680 million mobile phone users among a population of 1.3 billion, or 52%. Given that a single household may share use of one phone, this suggests substantially higher rates of access among the population at large. Second, it is generally not difficult to get the phone number of an elected official. Many state governments post the contact information for their legislators online, and candidates for elected office are required to submit an affidavit prior to the election with their contact information including, since 2013, their mobile phone number. The non-profit organization Association for Democratic Reforms digitizes this data and makes it available at

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<sup>30</sup> Bussell 2017a, b.

[www.myneta.org](http://www.myneta.org). I was able to access this information to facilitate this audit, and individual citizens may also reasonably be able to obtain their representative's contact information.

In this audit, subjects were sent text or WhatsApp messages from fictitious constituents who request assistance with acquiring a basic form of local infrastructure—a street lamp—or an identity document—a ration card (Bussell 2016). Over the course of the study, each politician received six messages, during a span of two weeks. Message receipt timing was randomized across the two-week period, with the following constraints: subjects received a maximum of one message per day and no more than two messages two days in a row. I allowed fifteen days after each message for collection of responses. Rollout of the experiment was staggered across Indian states to allow for the same team at my partner survey organization to implement the protocol, boosting quality control.<sup>31</sup> This survey firm used state-specific mobile phone numbers to contact politicians.<sup>32</sup> The eligible study population was all incumbent members of the legislative assemblies and national parliament in India. The sample size was 4,156, which is the set of state and national legislators from the total population of 4,591 for whom I was able to collect mobile phone numbers.

For those politicians who use WhatsApp, I chose randomly whether to send each message as a text message or a WhatsApp message, with approximately 50% of messages using each mode.<sup>33</sup> This reduced the chances that politicians perceived that there was a study taking place and also took advantage of the differing technologies available for contacting subjects. In

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<sup>31</sup> The audit was implemented by CVoter, a survey and polling organization.

<sup>32</sup> Thus, the survey firm used SIM cards specific to each state or telecommunications circle in which a state sits.

<sup>33</sup> When a user downloads and opens the WhatsApp application, all of the individuals in the phone's contact list who have a WhatsApp account are shown in the application. In order to identify those politicians who use WhatsApp, we put all of the collected contact numbers into the phone contact lists of the phones that would be used to send messages. Once WhatsApp users were identified, we then incorporated that information into the randomization protocol.

practice, there was no statistically significant difference in the response rates for messages sent via text message versus those sent from WhatsApp. For those politicians who were not active on WhatsApp, all six messages were sent via text message.

In order to assess the reliability of contact information prior to the study, I conducted an initial audit of 3% of the phone numbers. Representatives from the firm that implemented the study called the numbers and told the person who answered that they were planning an event and wanted to confirm the politician's contact information. Through this method, I estimated that 8% of the phone numbers in the sample were clearly not the correct number for the subject politician. Of the remaining 92% of numbers, 44% were active and positively identified with the subject politician. For the remaining 48%, the team was unable to determine definitively whether or not the number was correct, most often because no one picked up the phone or it was turned off at the time of the pre-check. In the analyses below, I include data from all politicians, unless we confirmed the use of a wrong number.

The content of the messages sent to politicians was randomized along four primary dimensions: name of the petitioner, information on electoral preferences, past requests for assistance at the local level, and type of good requested. I did not randomize gender and used only male names in requests. With regard to the latter three categories, I utilized a fully factorial design. Each politician in a state had the same probability of assignment to each treatment condition shown in Table 1.

<b>Table 1 – Primary Treatments with Planned Allocation of Subjects/Total Texts (Total observations)</b>		
Electoral (1)	Local Appeals (2)	Type of Request (3)
a. No individual electoral information (6,234)	a. No local appeal information (8,310)	a. Ration card (12,468)
b. Voted for politician in last election (6,234)	b. Appealed to local politician, but he didn't help (8,310)	b. Street lamp (12,468)
c. Shares party with politician (6,234)	c. Appealed to local politician, who is not petitioner's party, but he didn't help (8,316)	
d. Shares party and voted for politician (6,234)		

The table lists the approximate numbers of messages in each treatment condition in my audit experiment, per my pre-registered protocol. Each individual politician received a total of six text or WhatsApp messages in the experiment. Within subjects, assignment to treatment condition is randomized, so politicians may receive up to six different combinations of treatments, with no restrictions on the randomization.

Columns 1 and 3 in Table 1 highlight the primary treatments evaluated in this paper.

With regard to the “electoral” treatment, the message either provided no information on past electoral behavior; stated that the person voted for the politician in the last election; stated that the person supports the politician’s party; or combined the latter two treatments. The goal of these treatments is to measure both whether having a partisan cue affects the likelihood of response and to compare this partisan effect with the personal vote effect related to those individuals who say they support the candidate personally, and to measure any interactive effect of these treatments. The “type of request” treatment is intended to evaluate differences in politician response across individual-level and club goods. A ration card can be used only by an individual or family member to acquired subsidized consumables. A street lamp, on the other hand, benefits a wider group of people in a specific area. Thus, this variation within the experiment allows me to test further the implications of my argument about the incentives for

politicians to allocate different types of goods using different strategies. In the analysis, as pre-specified, I evaluate the effects of the individual treatment categories by pooling across other treatment categories, including names and information about local appeals (column 2 of Table 1), to focus on the experiments reflected in columns 1 and 3 of Table 1.<sup>34 35</sup>

The full set of messages corresponding to each treatment condition in Table 1, along with the list of states and languages used, is provided in the Appendix. The messages were translated into eleven (11) national and local Indian languages and sent in the most commonly used major language in a given state. In those smaller states where none of the eleven major languages are used but where English is used, the message was sent in English, even if this is not the most commonly used language. This latter strategy was necessary for only a small number of states, mainly the lowest population states in India's Northeast region. A representative example of a message, combining treatments 1b, 2c, and 3a is:

Hello, I am [name] in your constituency and I voted for you. I am writing because I would like help getting a ration card. I contacted my local leader but he is not my party and he didn't help. I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of whom to contact?

The basic content of the message was determined based on related fieldwork and previous experimental work of a similar nature in India.<sup>36</sup> The intention was to make the message as short as possible, akin to what is typical of text messaging, while still allowing for sufficient information to implement the treatments. The translations also allowed for informal word and abbreviation usage, so as to mimic standard language use in the text message format.

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<sup>34</sup> Bussell 2016

<sup>35</sup> The names of petitioners were randomized at the state level. I examine hypotheses related to the naming treatment and other primary treatments in related work.

<sup>36</sup> Gaikwad and Nellis 2015.

This audit study was approved by my institutional review board.<sup>37</sup> In this case, given the nature of deception used in the study, it is worth discussing at greater length potential ethical concerns with the design. As with all audit studies, if the subjects know that they are being evaluated, then they are likely to behave in ways that are unlike how they might otherwise. While these Hawthorne effects are inevitable in some types of studies, it is possible to avoid them in an audit study through the use of deception. As previously noted, there is also a substantial and growing body of literature using this approach in studies of elected officials.<sup>38</sup>

In many cases, subjects of a study involving deception are informed about the study at its completion. Here, I chose not to debrief participants, as this had potentially harmful implications for the ways in which politicians engage in representation. As I discussed above and show in related work, politicians receive large volumes of requests from citizens, both in person and via text message. Indeed, politicians who responded to a related survey reported receiving, on average, 328 WhatsApp messages and 146 text messages per week.<sup>39</sup> Responses to these requests are an important element of political representation. However, if politicians were to understand that some small portion of these requests were due to a research study, they might become slightly less likely to respond. This would be a detrimental outcome for the broader population. Thus, given the likely small cost to politicians of being included in the study— involving six additional messages over a two-week period, which may not add appreciably to their burden given the volume of texts and WhatsApp messages many already receive—but the potentially larger cost to the broader population of informing politicians that they were included

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<sup>37</sup> This experimental audit was approved by the University of California, Berkeley Committee for the Protection of Human Subjects under protocol #2016-02-8365.

<sup>38</sup> Butler & Broockman 2011, Gaikwad & Nellis 2015, McClendon Forthcoming

<sup>39</sup> Bussell 2017b

in a study, as well as associated threats to the potential for related forms of research, I did not include a debriefing element in the research design.

The use of these two different data sources allows me to evaluate, in parallel, 1) politician's allocation of resources over which they have direct control and for which the benefits are largely group-oriented in nature, and 2) distribution of resources via allocation of effort in response to direct petitions from individual citizens. I first consider politician allocation of CDF funds and then evaluate responses to citizen requests in the audit.

### *Resource Targeting and Responses to Individual Requests*

The analysis of this field experiment considers the responses of politicians in the same context as those allocating the CDF to requests for assistance from individual citizens. Here, I test the claim that politicians will be more likely to allocate state resources in a non-partisan manner when they are dealing with requests for basic, non-rival benefits, versus for more difficult to allocate rival goods. I use the experimental audit to evaluate whether a politician is more likely to respond to a request when they are given information on a petitioner's partisan inclinations, in term of having previously voted for the politician, or being a supporter of the politician's political party. I then consider whether responsiveness differs depending on the type of good being requested.

I analyze data from the audit using difference-in-means tests and evaluate three different outcome measures, all indicators of responsiveness. The first measure of responsiveness is whether or not any reply was sent to the fictitious petitioner, in terms of a phone call, text

message, or WhatsApp message.<sup>40</sup> The second outcome is whether a politician responded and asked the petitioner to call back or come meet her at home. In general, a politician likely needs to meet an individual and see their documentation before helping them with a request for a ration card or a street lamp. Thus, I interpret this response as a more aggressive effort to help the individual over simply a return phone call. Finally, I also measure whether the politician asked for additional information about the request. This response could suggest that the politician is making a sincere effort to provide assistance, but it may also mean that she is trying to gain further information about the petitioner in order to decide whether it is worthwhile to help him.

I first evaluate whether there are any effects of the electoral treatments. In order to do so, I test whether politicians respond to information on electoral ties with petitioners, by comparing each of the electoral treatments to the control. In a final test, I pool all of the electoral treatments and compare the average response rate to that in the control group. Because the existing literature suggests that we should observe a positive bias for both the shared party treatment and the personal vote treatment, it is reasonable to implement this pooled test.

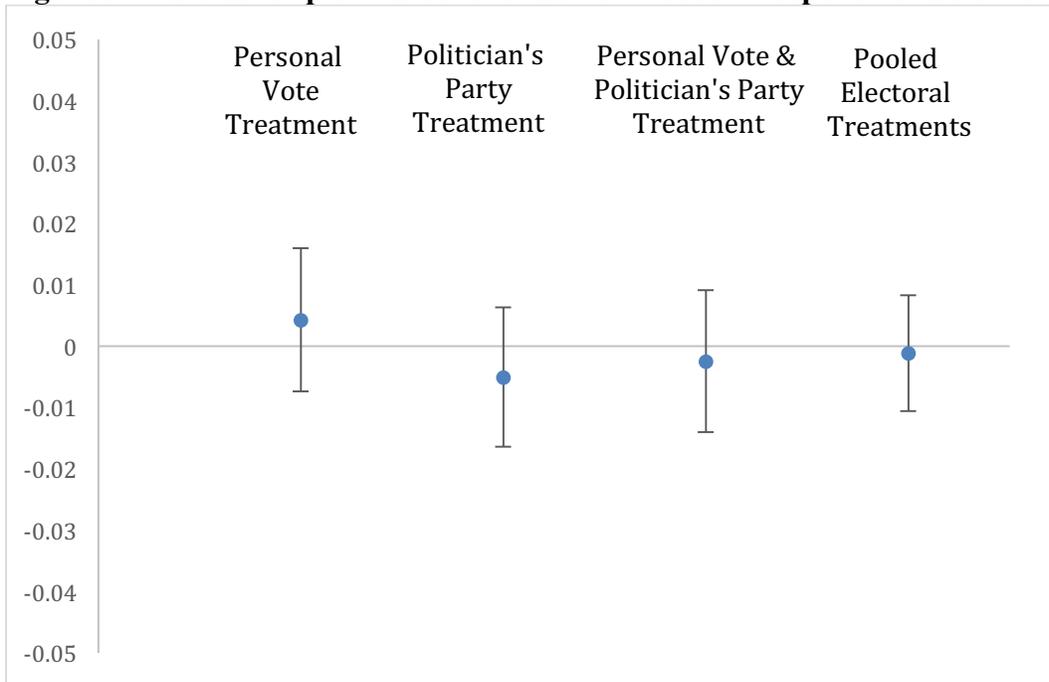
The results of these tests for the first response measure—whether or not any type of response was received—are shown in Figure 3, which reports the difference in means and 95% confidence interval for each test. These results are clearly inconsistent with information on electoral behavior affecting the likelihood that a politician will respond to requests for assistance. In all cases, variation in the response rate across the treatment and control groups is statistically indistinguishable from zero at standard levels. The presence of a null effect is also not likely to be due to issues of statistical power. As designed and implemented, I should have at least 80% power to detect an effect size of a 1 percent difference in response rate. The estimated effect

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<sup>40</sup> I refer here to responses from politicians, but, in line with existing literature, this includes any response from the politician or her staff.

sizes here are all less than 1% (between .3 and .5%), but this also implies minimal substantive relevance if the effect were to be statistically significant. The estimated effect size of .003 in the final pooled test represents an increase of only 3 percent on the baseline response rate of 9% (.003/.09).

**Figure 3 – Partisanship of Petitioners has No Effect on Responsiveness of Politicians**

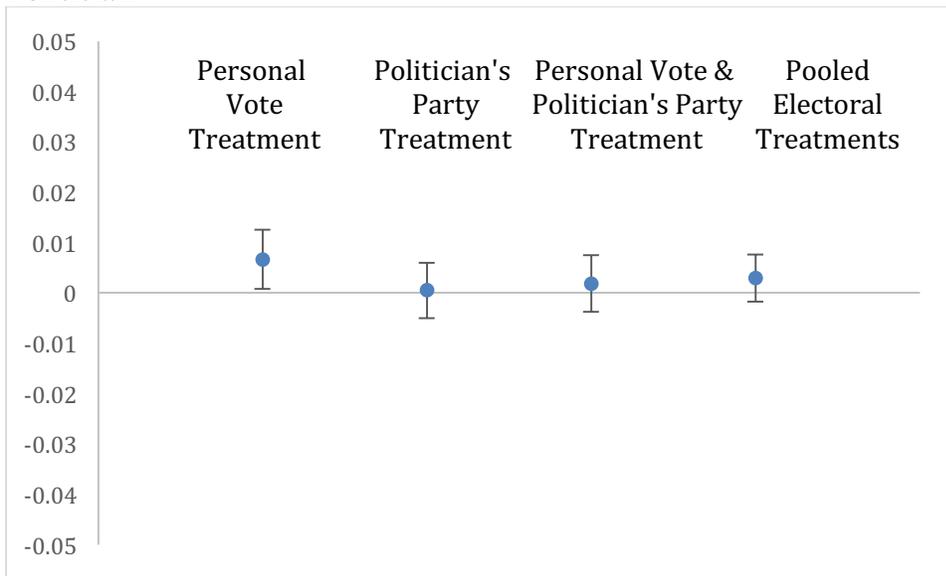


The figure reports differences in means and 95% confidence intervals from t-tests comparing the average response rate for politicians in each of the three main partisanship treatment conditions, as well as the pooled treatment conditions, to the control condition of no information on partisan behavior. The dependent variable is whether the politician replied to the experimental message. The total sample sizes are: 11,530 for the Personal Vote comparison, 11,793 for the Politician’s Party treatment, 11,474 for the Personal Vote and Politician’s Party treatment, and 23,251 for the pooled treatment test.

In a second set of tests (Figure 4), I compare the effects of the electoral treatments on the likelihood that a politician replied to the petitioner with a request to call back or come meet at the politician’s home or office. Here, the differences-in-means are aligned in a similar manner, but there is a positive and statistically significant effect for the personal vote treatment. This suggests that, in general, politicians may be more likely to respond in a substantive manner to requests

from individuals who express a preference for the politician herself, but not those who express a preference for her political party. This finding supports an argument that politicians may attempt to use individualized assistance to constituents to bolster their personal, rather than party, vote. The personal vote treatment effect is a 1% boost in responsiveness, which represents a 50% increase over responses to those receiving the control (.01/.02).

**Figure 4 – Requests to Call or Meet are Conditioned by Information on Past Vote for Politician**



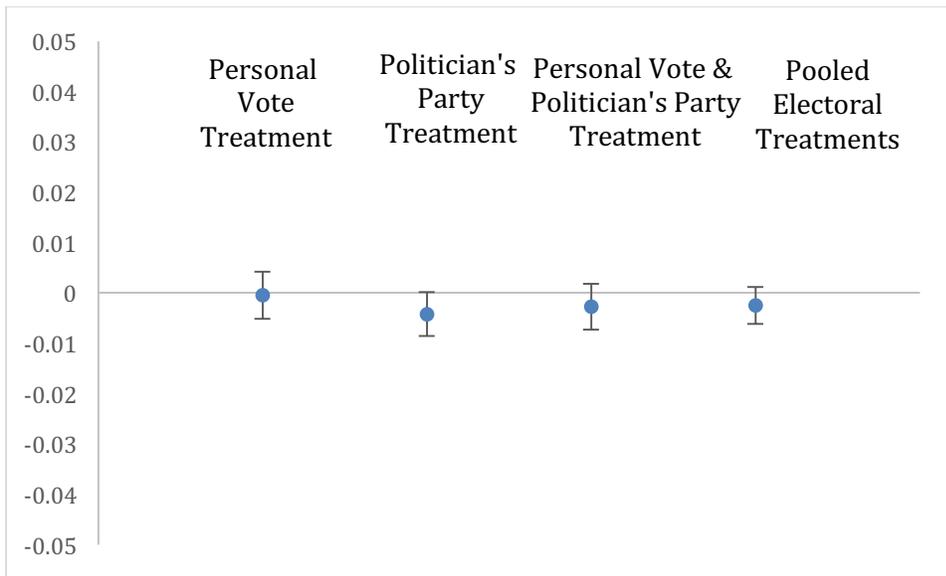
The figure reports differences in means from t-tests comparing the average response rate for politicians in each of the three main partisanship treatment conditions, as well as the pooled treatment conditions, to the control condition of no information on partisan behavior. The dependent variable is a measure of whether the politician requested that the petitioner call back or come to the politician’s home or office to meet. The total sample sizes are: 11,530 for the Personal Vote comparison, 11,793 for the Politician’s Party treatment, 11,474 for the Personal Vote and Politician’s Party treatment, and 23, 251 for the combined treatment.

In a third set of tests, I evaluate the likelihood that a politician asks for additional information from the individual making the request. This is most frequently a request for the individual’s name (if in the “no name” treatment) and address, or the name of their village or ward.<sup>41</sup> In the street lamp treatment, discussed more below, politicians frequently ask for the

<sup>41</sup> The effect of the “no name” treatment on requests for additional information is positive and statistically significant ( $t = 8.77$ ).

specific location at which the requested street lamp would be installed. Here, we see a slight negative and statistically significant effect of the shared party treatment. In other words, politicians are slightly less likely to ask for additional information if they are told the individual share's their party.

**Figure 5 – Requests for Additional Information are Weakly Conditioned by Shared Partisanship**

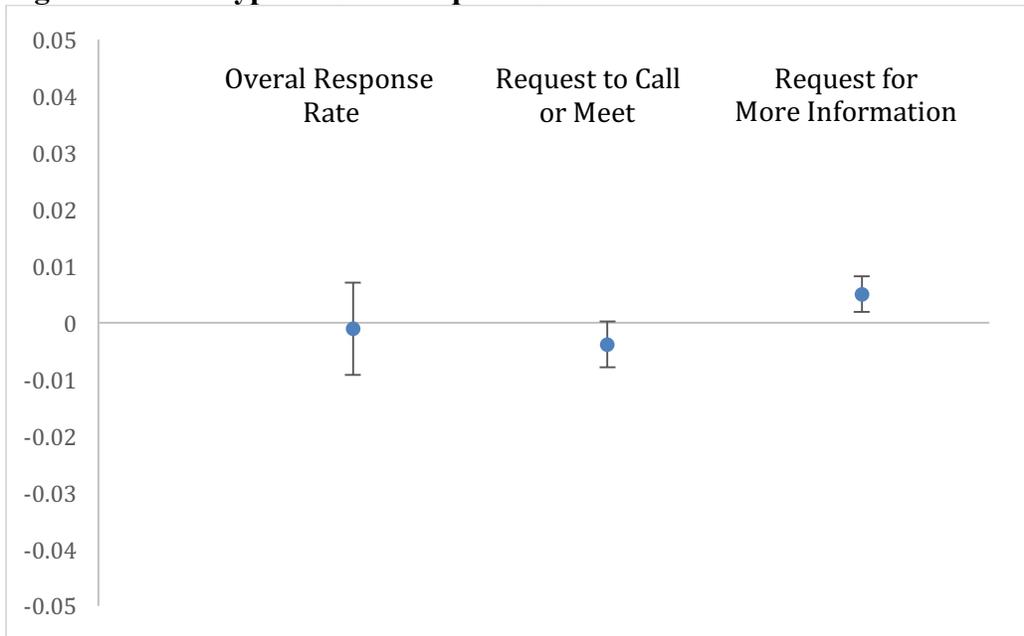


The figure reports differences in means from t-tests comparing the average response rate for politicians in each of the three main partisanship treatment conditions, as well as the pooled treatment conditions, to the control condition of no information on partisan behavior. The dependent variable is a measure of whether the politician requested additional information from the petitioner. The total sample sizes are: 11,530 for the Personal Vote comparison, 11,793 for the Politician's Party treatment, 11,474 for the Personal Vote and Politician's Party treatment, and 23,251 for the combined treatment.

Finally, I evaluate politicians' responses to information about the type of good for which assistance is requested. In each test, I am subtracting the average response rate for the ration card treatment from that for the street lamp treatment. I consider variations in these responses across each of the outcome variables just discussed with regard to electoral treatments. Figure 6 reports the results of these tests.

These comparisons suggest potentially important differences in the character of politicians' responses when the type of good in demand is varied. While there is no difference in the overall response rate related to the type of good, there are variations in the substance of the response. Politicians are more likely to ask an individual to come meet them when the request is for a ration card, whereas they are more likely to ask for more information when the good in question is a street lamp. In the former case, as noted above, I interpret this type of response to be an increased effort to provide actual assistance in acquiring the desired good. A request for more information, especially information on the location of the proposed street lamp, might be interpreted in a similar way—given that the politician could use this information as part of the process to acquire the street lamp. Alternatively, a politician could instead, or additionally, use that information to determine whether the street lamp in question would be put in an area that has supported the politician in the past. In either case, politicians seem more willing to meet with an individual without acquiring additional information first if that person requires a ration card, whereas they seem more likely to engage in additional information gathering prior to meeting if the petitioner requires a street lamp.

**Figure 6 – The Type of Good Requested Affects the Substance of Politicians’ Responses**



The figure reports differences in means from t-tests comparing the average response rate for politicians in the street lamp treatment to those in the ration card treatment. The dependent variables are the overall response rate, whether the politician requested that the individual call or come meet him, and whether the politician requested additional information from the petitioner. The total sample size is 23,137 for each of the tests.

## **Discussion and Conclusion**

The character of public resource allocation is a key focus of political science. Yet, we have little work that addresses whether or not, and when, politicians would choose to distribute resources in a non-partisan manner. In this paper, I have suggested that politicians may well do so, and that there is an electoral logic for this behavior. Where politicians see minimal electoral or monetary cost to allocating benefits to citizens without regard to partisanship, then they will provide assistance in this manner. This is most likely where politicians have limited ability to validate the partisanship of petitioners and where citizens require goods that are non-rival in nature and imply minimal effort on the part of politicians.

Using data from sub-national politicians in India, I have shown that these elected officials simultaneously engage in targeted partisan distribution and non-targeted, non-partisan allocation.

When allocating structural and infrastructural goods via a constituency development fund, politicians clearly engage in the targeting of benefits to those individuals in the constituency who have previously voted for them. In contrast, when responding to requests from individuals for assistance in accessing state benefits, politicians either discount information on shared partisanship or privilege those individuals who support the individual politician, rather than her party. I offer additional evidence that politicians attempt to gain more information on the requestor and his request when the good in question requires more effort and resources, as is the case for a street lamp.

How generalizable are these findings? With regard to the targeting of constituency development funds, at least two points are important for judging how widely we should expect these results to travel. First, the data used here covered the first year after an election, held in 2013. Thus, it is possible that politicians were attempting to reward immediately those voters who supported them in the election. If this is the case, we might expect to see somewhat different results, such as the targeting of swing areas, in the lead up to a subsequent election. Yet, recent work suggests that this sort of “business cycle” does not occur in CDF allocation.<sup>42</sup> Second, Karnataka is only one state among many that have CDFs and we might expect different results under different electoral conditions. Yet, evidence from spending of CDFs at the parliamentary level suggests that we see similar behavior elsewhere in India, as well as in other developing countries.<sup>43</sup> Whether the logic is strongly core or also includes the targeting of swing areas, the main point is that the evidence for partisan bias in group-based spending is very clear. Again, this is emphatically not constituency service.

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<sup>42</sup> Chhibber and Jensenius 2016

<sup>43</sup> Chhibber and Jensenius 2016, Harris and Posner 2016

In terms of the politician responsiveness audit, the data analyzed here covered all of India, with supporting evidence specifically from Karnataka. This suggests that these dynamics are largely consistent across the country. More generally, I expect that we should see similar behavior from higher-level politicians across a range of developing country democracies. Wherever politicians have the ability to assist individuals with basic administrative tasks, but where they are unlikely to be able to validate partisanship, they should have an incentive to provide this assistance and do so in a non-partisan manner.

Overall, this discussion and findings suggest that resource allocation in developing countries goes well beyond our established understanding of benefit targeting to preferred constituencies. While partisan distribution is clearly a key element of public resource allocation, this does not offer a complete view on distributive politics. Instead, it is necessary to examine the range of incentives a politician may have for allocating resources in diverse ways and the implications for the nature of targeting. More generally, these findings suggest a potentially more inclusive form of representation than has previously been documented, at least for those basic public benefits and services that are often of great importance to large swaths of the population in these contexts.

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## Appendix

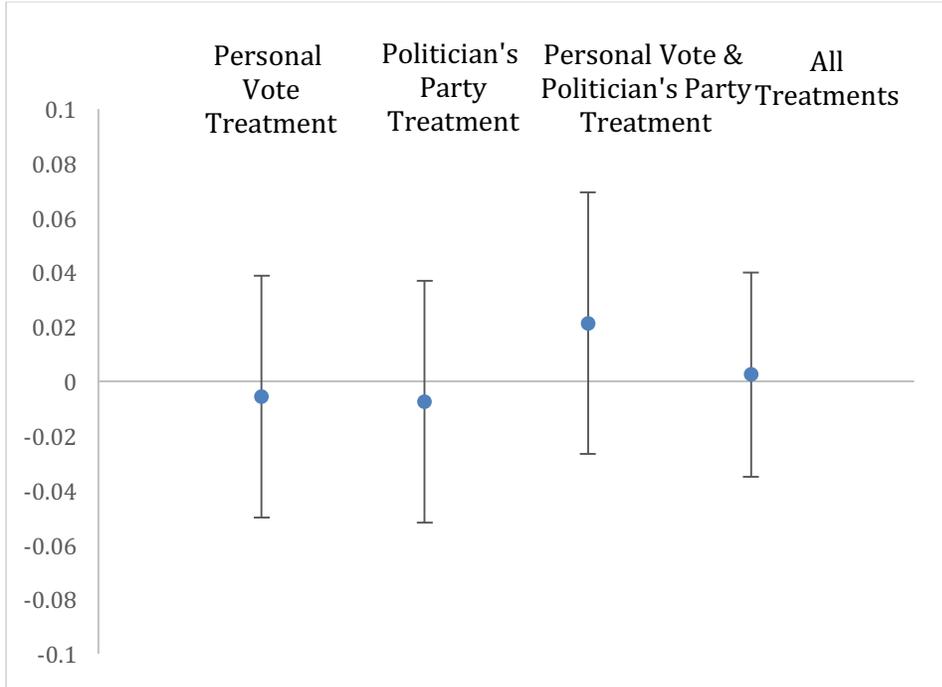
**Table A2 – Experimental Treatments**

Treatment Number	Message
1a/2a/3a or 3b (Control)	Hello, I am [name] in your constituency and I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1a/2b/3a or 3b	Hello, I am [name] in your constituency and I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1a/2c/3a or 3b	Hello, I am [name] in your constituency and I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he is not my party and he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1b/2a/3a or 3b	Hello, I am [name] in your constituency <b>and I voted for you.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1b/2b/3a or 3b	Hello, I am [name] in your constituency <b>and I voted for you.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1b/2c/3a or 3b	Hello, I am [name] in your constituency <b>and I voted for you.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he is not my party and he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1c/2a/3a or 3b	Hello, I am [name] in your constituency <b>and I am a supporter of XYZ party.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1c/2b/3a or 3b	Hello, I am [name] in your constituency <b>and I am a supporter of XYZ party.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1c/2c/3a or 3b	Hello, I am [name] in your constituency <b>and I am a supporter of XYZ party.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he is not my party and he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1d/2a/3a or 3b	Hello, I am [name] in your constituency <b>and I voted for you and am a supporter of XYZ party.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1d/2b/3a or 3b	Hello, I am [name] in your constituency <b>and I voted for you in the last election and am a supporter of XYZ party.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?
1d/2c/3a or 3b	Hello, I am [name] in your constituency <b>and I voted for you in the last election and am a supporter of XYZ party.</b> I am writing because I would like help <b>[getting a ration card/installing a street lamp]</b> . <b>I contacted my local leader but he is not my party and he didn't help.</b> I tried to call and come to see you, but you were busy. Are you in the constituency now? Please could you text back and help me or give me a number of who to contact?

**Table A3 – Message Language by State**

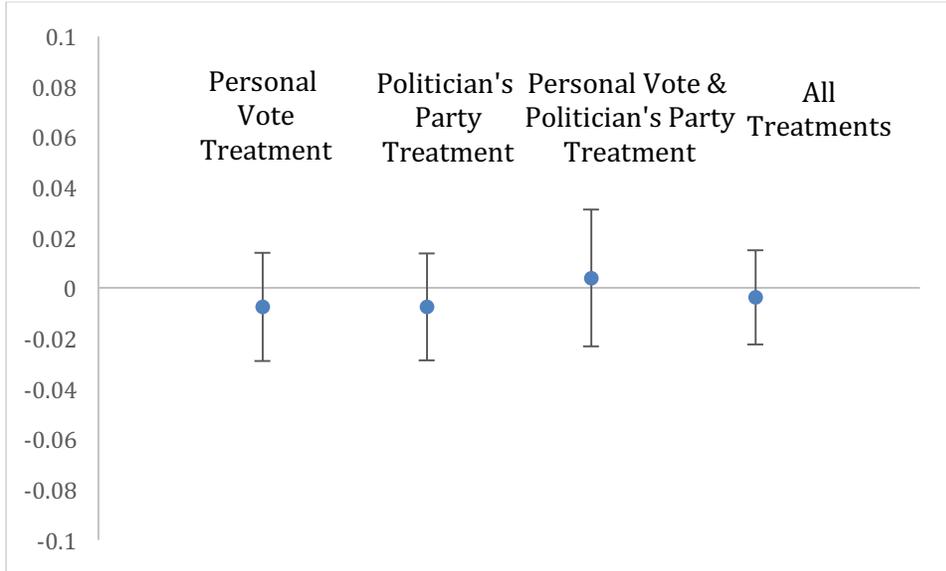
State	Language
Andhra Pradesh	Telegu
Arunachal Pradesh	English
Assam	Assamese
Bihar	Hindi
Chhattisgarh	Hindi
Delhi	Hindi
Goa	Marathi
Gujarat	Gujarati
Haryana	Hindi
Himachal Pradesh	Hindi
Jharkhand	Hindi
Karnataka	Kannada
Kerala	Malayalam
Madhya Pradesh	Hindi
Maharashtra	Marathi
Manipur	English
Meghalaya	English
Mizoram	English
Nagaland	English
Odisha	Odiya
Puducherry	Tamil
Punjab	Punjabi
Rajasthan	Hindi
Sikkim	English
Tamil Nadu	Tamil
Telangana	Telegu
Tripura	Bengali
Uttar Pradesh	Hindi
Uttarakhand	Hindi
West Bengal	Bengali

**Figure A1 – Partisanship of Petitioners has No Effect on Responsiveness of Politicians in Karnataka**



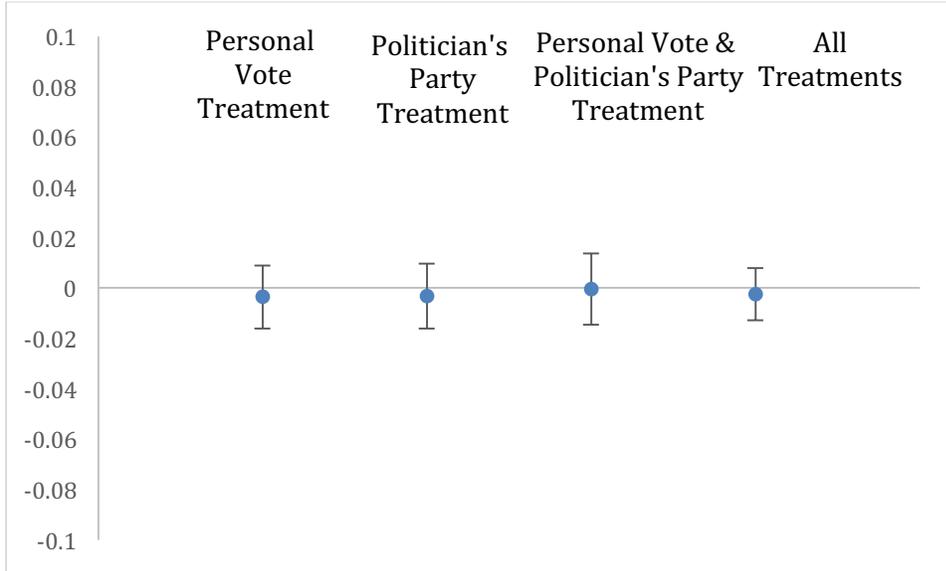
The figure reports differences in means from t-tests comparing the average response rate for politicians in each of the three main partisanship treatment conditions, as well as the pooled treatment conditions, to the control condition of no information on partisan behavior. The dependent variable is whether the politician replied to the experimental message. The total sample sizes are: 632 for the Personal Vote comparison, 627 for the Politician's Party treatment, 616 for the Personal Vote and Politician's Party treatment, and 1,263 for the pooled treatment test.

**Figure A2 – Partisanship of Petitioners has No Effect on Requests to Call or Meet in Karnataka**



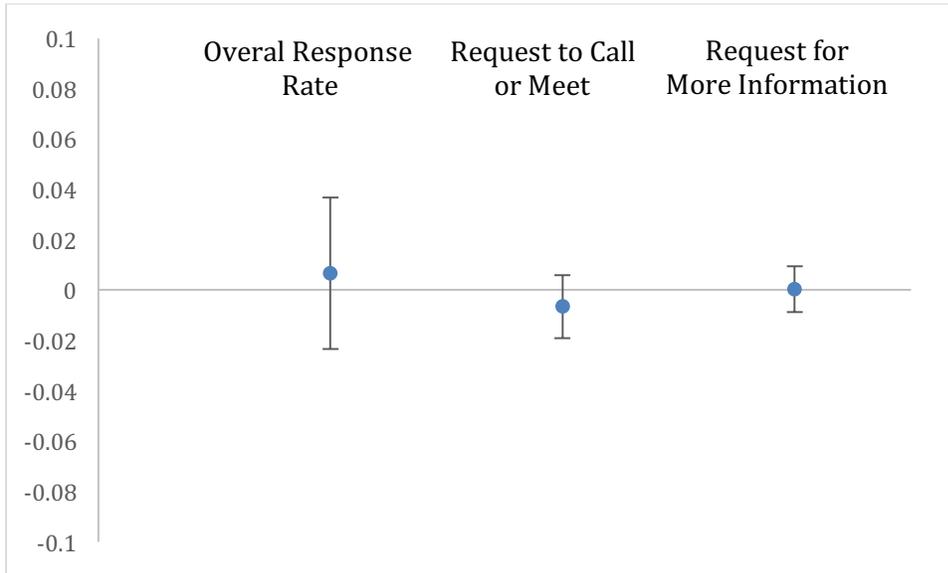
The figure reports differences in means from t-tests comparing the average response rate for politicians in each of the three main partisanship treatment conditions, as well as the pooled treatment conditions, to the control condition of no information on partisan behavior. The dependent variable is a measure of whether the politician requested that the petitioner call back or come to the politician's home or office to meet. Respondents are politicians in Karnataka. The total sample sizes are: 697 for the Personal Vote comparison, 679 for the Politician's Party treatment, 679 for the Personal Vote and Politician's Party treatment, and 1,389 for the combined treatment.

**Figure A3 – Partisanship of Petitioners has No Effect on Requests for More Information in Karnataka**



The figure reports differences in means from t-tests comparing the average response rate for politicians in each of the three main partisanship treatment conditions, as well as the pooled treatment conditions, to the control condition of no information on partisan behavior. The dependent variable is a measure of whether the politician requested additional information from the petitioner. Respondents are politicians in Karnataka. The total sample sizes are: 697 for the Personal Vote comparison, 679 for the Politician's Party treatment, 679 for the Personal Vote and Politician's Party treatment, and 1,389 for the combined treatment.

**Figure A4 – Type of Good has Minimal Effect on Responsiveness of Politicians in Karnataka**



The figure reports differences in means from t-tests comparing the average response rate for politicians in the street lamp treatment to those in the ration card treatment. The dependent variables are the overall response rate, whether the politician requested that the individual call or come meet him, and whether the politician requested additional information from the petitioner. Respondents are politicians in Karnataka. The total sample size is 1,360 for each of the tests.