Coethnic Rivalry and Solidarity: The Political Economy of Politician-Bureaucrat Cooperation in India*

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Abstract

When do bureaucrats help politicians achieve their goals? We argue that shared identity can produce solidarity or rivalry. Under conditions of scarcity, solidarity is more likely within categories with shared histories of successful political mobilization, whereas rivalry is more likely within categories with histories of unsuccessful mobilization. We test these claims by examining the effect of caste on the approval times of pork barrel projects in India. Consistent with our theory, politicians see projects approved more quickly by bureaucrats from the same caste category in Southern India, where lower castes successfully mobilized for affirmative action in the past. In Northern India, where such mobilization efforts were less successful, project approvals are slower. These results suggest that shared identity can supplement formal institutional controls in bureaucracies and that whether identity congruence has positive or negative effects depends on contingent historical factors.

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Politicians make promises to voters but are incapable of fulfilling these promises personally. For a politician's policies to be implemented, they must collaborate effectively with bureaucrats. Whatever the formal rules, this is often easier said than done. Given limited time and insufficient incentives, bureaucrats may not implement politicians' priorities in a timely fashion. Bureaucrats may attempt to "subvert" politicians' goals because they disagree with them or because they believe that implementing them would involve costly effort on their part (Gailmard, 2002; Pepinsky, Pierskalla and Sacks, 2017). Bureaucrats can also delay policy implementation, do just what they are specifically ordered to, or even "forget" rules or policies they dislike. An extensive literature has focused on the ways institutions are structured to minimize agency losses of this nature (Kaufman, 1967; Weingast, 1984), while another set of scholars has examined the effects of improved bureaucratic monitoring and sanctioning on service provision (Dasgupta and Kapur, 2020; Gulzar and Pasquale, 2017; Butler, 2010; Brierley, 2020).

The discussion of the institutional predictors of bureaucrat-politician cooperation has abstracted away from the more personal elements of these interactions. While we know that many individual factors influence cooperation, one dyadic trait stands out: the role of shared identity. Ascriptive identities—ethnicity, religion, gender, caste etc.—play an important role in shaping the preferences of politicians (Kramon and Posner, 2016; Chattopadhyay and Duflo, 2004; Gulzar, Haas and Pasquale, 2020) and bureaucrats (Bhavnani and Lee, 2018, 2021; Dee, 2005; Meier and Dhillon, 2022; Purohit, 2022). Similarly, we know that such identities can shape the ability of individuals to cooperate in lab (Habyarimana et al., 2007; Fehr, Hoff and Kshetramade, 2008), economic (Hjort, 2014) and political (Kalin and Sambanis, 2018) settings at both the individual and community levels (Alesina, Baqir and Easterly, 1999; Singh, 2015; Lee, 2018). Purohit (2022), for example, shows that gender incongruence in politician-bureaucrat pairs is associated with less cooperation, while Chakrabarti (2021) demonstrates higher redistribution when marginalized caste groups are present both in politics and the bureaucracy.

But intragroup cooperation is not inevitable. We theorize and show that identity can have two contradictory roles in shaping politician-bureaucrat interactions depending on political mobilization histories. Intuitively, shared identity can lead to intragroup solidarity, where

common identity enables individuals to more effectively cooperate (Habyarimana et al., 2007; Singh, 2015; Hassan, 2020; Posner, 2004). More subtly, shared identity can also lead to intra-group rivalry, as members of the same group compete with each other, often for a fixed pool of group-specific benefits (Dunning and Nilekani, 2013). These dynamics are particularly acute for identities that contain subgroups. Which of these mechanisms dominates depends on historical and political factors. We argue that where there is a history of successful group political mobilization, group members will, at present, be more willing to cooperate with one another. By contrast, where there is no history of group-based political mobilization or such mobilization was unsuccessful, group members in later periods will be more inclined towards competition, particularly when those groups have historically had internal conflict over common pool resources. We argue that both dynamics can be transmitted over time through socialized attitudes, inculcated preferences, developed technologies, and institutionalized norms of behavior (Habyarimana et al., 2007).

To study the role of identity in shaping politician-bureaucrat interactions, we consider bureaucratic delays in the delivery of pork barrel projects in contemporary India. India presents an interesting case both because of the salience of social identities in politics and everyday interactions and because the composition of the political class (Jaffrelot, 2003) and bureaucracy (Bhavnani and Lee, 2021) have changed greatly over the past half-century in response to coordinated movements of caste mobilization and affirmative action.

Caste (*jati*) is a basic form of social organization across India, but *caste categories* (groupings of similar castes including Other Backward Classes (OBCs), Scheduled Castes (SCs), and Scheduled Tribes (STs)) are both a potetnially important important political identity and form the official basis for affirmative action. In Southern India, horizontal movements of socially similar jatis successfully organized to demand policies of affirmative action for caste categories in the early 20th century. In Northern India, such movements were late to form and fiercely opposed, and affirmative action policies were only instituted via top-down mandate by the national government. We expect that these regional histories, which have been extensively discussed in qualitative research (Srinivas, 1960; Rudolph, 1984), will lead to intra-category solidarity in the South and intra-category rivalry in the North.

To measure the quality of bureaucratic cooperation, we focus on a program of great per-

sonal interest to politicians, the Members of Parliament Local Area Development Scheme (MPLADS). Like similar programs in other democracies , this program gives every Member of Parliament (MP) a budget (of approximately 680,000 US dollars each year) for small public works within their constituency. After they identify a project, MPs submit the project to district officers (DOs), who are legally required to approve and pass it along to their subordinates within the district bureaucracy for further processing. While virtually no projects are rejected, there is considerable variation in the time to approval, with many being delayed by months or even years. Since approval is not discretionary, but much of the amount of time wasted is within the bureaucrat's control, we believe that these delays are a good measure of bureaucrat-politician cooperation, more specifically, the subversive use of "red tape." Revealingly, approval times are not correlated with project characteristics but are correlated with whether the MP is associated with the party of the state's Chief Minister.

Caste plays a significant role in shaping bureaucrat-politician interactions. When bureaucrats and politicians are from the same caste category in Southern states, the probability of projects being approved within the official time limit increases by six percentage points relative to different category pairs in the same states. The opposite is true in the North, where bureaucrat-politician caste category congruence leads to a decrease in the probability of on-time project approvals by ten percentage points relative to different category pairs. We show these results are robust to subsetting to early career bureaucrats, whose placement has been shown to be arbitrary, and to states in which the assignment of bureaucrats to posts is random, suggesting these dynamics are not the result of intentional selection decisions by politicians (Bhavnani and Lee, 2018).

Drawing on qualitative and quantitative evidence, we then show that different regional histories of political mobilization and patterns of within-category economic inequalities coincide with our observed differences in politician-bureaucrat behavior. Rivalry operates in states with limited histories of bottom-up, caste-based political mobilization and greater intra-category inequality. We also provide support for regions being substantively meaningful categorizations related to these dynamics. Finally, we suggest that these dynamics may persist because of institutionalized norms of behavior, as opposed to socialization, shared preferences, or shared technologies.

A core contribution of our paper is documenting how the same supraordinate identity can be salient in opposing ways in different geographies. The results indicate that identity is a major factor in shaping bureaucrat-politician cooperation, with bureaucrats limiting the red tape load on coethnic politicians in areas where coethnics have histories of solidarity. In weakly institutionalized settings where the possibilities for delay and subversion are large, shared identity may be a reliable technique for ensuring bureaucratic compliance. Our results also contribute to the literature on why specific identities become socially and politically salient in some contexts but not in others (Miguel, 2004; Posner, 2004; Chandra, 2007). In addition to state propaganda and electoral coalition building, identity salience is shaped by shared histories of political struggle and shared competition for state resources. The political role of caste, like other forms of identity, is contingent and historically constructed.

1 Theory

1.1 The Problem of Bureaucratic Non-Compliance

In standard theoretical accounts of the state, politicians or principals delegate authority to bureaucrats or agents to implement projects (Gailmard and Patty, 2012; Miller, 2005). However, delegation to bureaucratic agents can cause politician principals to fail to receive their favored outcomes. The root causes of such agency problems are conflicting interests of principals and agents and imperfect information and monitoring capacity. If politicians and bureaucrats had identical interests or if politicians could perfectly monitor bureaucratic performance, there would be no agency losses.

Bureaucrats usually do not have the formal power to veto policy decisions made by politicians or to formally refuse to implement them. Instead, bureaucrats may fatally cripple policy by not exerting effort to implement it or insisting on the full satisfaction of complex or burdensome rules—red tape (Bozeman, 2000). The passive ability of bureaucrats to stymie policy is well-known, with the abilities of the U.S. Department of Defense to outlast its political masters being particularly well-studied (Perry, 2017). The Indian bureaucracy was similarly sluggish about implementing land reform laws in the 20th century, a failure with

important long-term consequences (Banerjee et al., 2000).

Given misaligned interests, the usual solution to bureaucratic shirking in well-institutionalized systems is improved monitoring and incentives, which enable the punishment of bureaucrats for shirking or reward for good performance (Banerjee et al., 2020). However, formal monitoring mechanisms may fail to capture more nuanced forms of shirking, such as red tape and slacking, as they are difficult to define and observe consistently. Alternatively, even with weak incentives and monitoring agency losses can be minimized when bureaucrats share the policy preferences of politicians, internalize the benefits from politicians' success, or gain intrinsic benefits from service.

Our simplified setting for bureaucrat-politician interactions thus involves a politician delegating authority to a bureaucrat, who may or may not exert effort to serve the politician's goals. For many reasons, politicians' and bureaucrats' incentives may be misaligned, which leads to agency losses. These agency losses can be mitigated through improved monitoring or selection.

1.2 How Identity Influences Bureaucratic Compliance

Many principal-agent models do not recognize that people—both principals and agents—have identities that have behavioral consequences. Indeed, a vast literature across the social sciences shows that people from all walks of life, including politicians and bureaucrats, are frequently motivated to act in particular ways due to their identities. We define identity as referring to social categories defined by membership rules and characteristics, including ascriptive traits (Fearon, 1999). Each individual holds many social identities of varying salience. Some of these identities are nested, meaning that subordinate identities are embedded in larger supraordinate identities. For example, both Cuban Americans and Mexican Americans are considered as members of a supraordinate "Hispanic" identity. We theorize principal-agent dynamics of nested identities, particularly ethnicity, where principals and agents must work together on a joint task. That said, we expect our arguments to also apply to non-nested identities, such as gender.

How does taking identity into account alter the principal-agent relationship? We argue that identity can shape the likelihood of shared interests between politicians and bureaucrats

and the costs of monitoring. As such, it is a "deep" determinant of behavior, permeating all aspects of the principal-agent relationship.

Identity can affect principal-agent cooperation by shaping preferences. It is often assumed that shared identity is likely to yield common preferences (Chen and Li, 2009). This can be because shared experiences yield similar preferences or because group members have other-regarding preferences for group members (Habyarimana et al., 2007; Singh, 2015).[1] Shared and other-regarding preferences should cause principals and agents to have more closely aligned incentives. For instance, politicians and bureaucrats might have shared preferences over which policies should be enacted, and these preferences would reduce the possibility that either would choose not to cooperate with the other. Similarly, when politicians or bureaucrats have an affective preference for members of their identity group to succeed, they may use their discretion to help the other.

Coethnicity can also affect cooperation by enabling easier coordination. For example, ethnic group cooperation has been conceived of as equilibrium selection in a repeated coordination game, where coethnics are better able to select cooperative equilibria (see Habyarimana et al. 2007 and Fearon and Laitin 1996). Ethnic groups can, therefore, establish norms of intragroup cooperation transmitted through informal, institutional rules or through socialization. Additionally, shared identity often comes with shared technologies, such as tighter networks or shared language, that support coordination. Even more than ordinary citizens, politicians and bureaucrats must cooperate for mutual success: a politician without bureaucratic allies will have great difficulty seeing their projects implemented, and a bureaucrat without political patrons will have trouble advancing in their career. To the extent that coethnicity makes cooperation easier, even pragmatic politicians and bureaucrats may prefer to favor "their own," which in turn encourages those excluded to do the same within their group. This logic is similar to that advanced by Chandra (2007): politicians want to build an electorally viable constituency through clientelistic distribution, voters want private goods,

[1]Shared preferences can also emerge out of the geographic concentration of groups (as with many ethnic groups), shared experiences in the economic division of labor (as with gender), and historic group-based inequalities.

and coethnicity becomes a focal point for constituency formation because it is visible to all.

While it is likely that some shared identities will reduce agency losses, it is not a given that all identities will do so. Shared identity can also foster intragroup competition if group members see each other as rivals. For instance, in organizations that have strong sexist cultures and limited hiring of women, the women who do succeed are sometimes found to be hostile to promoting other women (Derks et al., 2011). Similarly, Latinx people and Blacks in the United States share the problem of competition for resources and status in a white-dominated society, and this has often led to hostility rather than cooperation (Telles, Sawyer and Rivera-Salgado, 2011). Under such conditions, shared identity can enable competition in much the same way as it enables cooperation: inculcating opposing preferences and increasing the likelihood of choosing noncooperative equilibria (Habyarimana et al., 2007). Similar to coordination, ethnic groups can internalize highly differentiated preferences or affective preferences for members of their identity group to fail, can institutionalize intragroup norms of competition, and can deploy shared technologies to undermine cooperation. In a bureaucratic setting, such competition would generate higher monitoring costs and higher agency losses.

Thus, two competing logics emerge, which we will refer to as *solidarity* and *rivalry*. Under conditions of solidarity, we would expect that principals and agents with shared identities will cooperate with improved outcomes. Under conditions of rivalry, instead, we would expect that principals and agents with shared identities will compete and undermine each other, producing greater agency losses or red tape.

1.3 Solidarity and Rivalry

When are we likely to observe solidarity versus rivalry? While bureaucrat-politician interactions occur at the individual level, they occur within institutions and environments shaped by social and historical dynamics. The salience of various identities at present is often influenced by the behavior of political elites in the past. A core aim of political mobilization is the creation of coalitions of subordinate identity groups to serve political goals, and histories of political mobilization can set the conditions of identity-based interactions today. Most commonly, research has highlighted how the mobilization of supraordinate groups yields co-

operation and coordination - solidarity - among subordinate groups as they organize around common political goals (Posner, 2004; Chandra, 2007; Pérez, 2021). In some instances, however, supraordinate group mobilization can yield competition - rivalry - among subordinate groups, particularly when groups have historically faced conditions of scarcity, such as in the presence of common pool resources. This latter dynamic is particularly likely when supraordinate group identity is imposed from the top down as opposed to demanded from the bottom up. This suggests that histories of group-based mobilization and competition over scarce resources can explain when identity is expected to generate in-group solidarity versus in-group rivalry.

Supraordinate identity creation, which for many identity groups occurred in the past, bears both benefits and costs. Supraordinate groups, by nature of their larger size, are more electorally viable and more likely to achieve political representation (Posner, 2004). As a result, such identities can better press the state to deliver targeted resources and benefits to group members - common pool resources shared among the group. Such common pool resources can include positions of power reserved for the identity group (Dunning and Nilekani, 2013), affirmative action benefits specific to the identity group, or social and political dominance within a specific region that they inhabit. There are also costs to supraordinate identity creation, since elites from each subgroup may be relatively less prominant in the group as a whole

Solidarity among subordinate groups is most likely when supraordinate groups emerge out of successful subordinate group-based mobilization. In some instances, political entrepreneurs agglomerated subordinate identity groups to create an electorally viable group and raise the salience of supraordinate identities (Posner, 2004; Miguel, 2004). In other instances, identity groups horizontally mobilized to demand the political representation of a larger supraordinate identity (Pérez, 2021). In all cases, because common pool resources resulted from long periods of social and political struggle, the *successful* mobilization by subordinate groups is more likely to create a sense of shared fate, inculcate norms of trust and cooperation, and generate shared preferences (Posner, 2004).

Rivalry, instead, is more likely to emerge when subordinate identity groups were unsuccessful in mobilizing in support of supraordinate identity creation and instead had such

identities exogenously constructed by external elites. In such instances, common pool resources did not emerge as the outcome of a solidaristic campaign by subordinate identity groups but by imposition. Absent a history of joint mobilization, subordinate groups are unlikely to have developed norms of cooperation and trust nor shared preferences (Kramon and Posner, 2016; Lee, 2018). Instead, in the presence of common pool resources, rivalrous relationships between politicians from different subordinate identities will emerge as they vied for power within the same supraordinate identity.

Over time, these attitudes and behaviors towards supraordinate group members are likely to become institutionalized, and will shape interactions even for individuals at present who have no exposure to either political mobilization or direct competition for common pool resources (Posner, 2004; Acharya, Blackwell and Sen, 2016). In our context, the average politician is very unlikely to have ever competed directly with the average bureaucrat and is still less likely to have participated in a social movement with them. However, as identity is a "deep" determinant of behavior, we expect both politicians and bureaucrats (and citizens) to behave in accordance with prevailing patterns of group cooperation or competition. While it is challenging to define the exact mechanism through which such patterns of behavior transmit across time, we suggest it is likely similar to those studied in other instances of identity-based interactions (as discussed above): through socialization and internalization of group priorities, the inculcation of preferences, the development of technologies that affect monitoring capacity, and through the establishment of normative institutions that govern the likelihood of various strategies emerging (i.e., different equilibria) (Habyarimana et al., 2007). As a result, depending on whether areas face conditions of solidarity or rivalry, we might expect internalized attitudes of trust or distrust, aligned or opposing preferences, more or less technology development, and/or norms of cooperation or of competition.

In sum, we argue that the politician-bureaucrat interactions that we study are affected by two sets of causes separated by time. In the present period, bureaucrats and politicians interact with one another. While these interactions are shaped by external monitoring and sanctioning, we argue that they are also—in some senses more deeply—shaped by their identities. The way that these identities shape behavior today depends on how identities have been mobilized in the past. We argue that groups with histories of successful mobilization

around larger identities under conditions of scarcity will continue to work well together. Alternatively, groups with histories of imposed identities will fail to cooperate and are even expected to compete when faced with histories of scarcity and competition. This yields a clear implication: In areas where subordinate identities have historically come together to mobilize in support of common pool resources for a supraordinate identity, solidarity among subordinate identities is expected. In areas where subordinate identities had a supraordinate identity that coincided with common pool resources imposed on them, rivalry among subordinate identities is expected.

Our argument is consistent with theoretical accounts of the roots of solidarity and rivalry as suggested in the psychology literature (Deutsch, 1985). In particular, the literature argues that cooperation and competition (the behavioral consequences of solidarity and rivalry) can be shaped by inequality (Gallego, 2016) and that these patterns can be self-reinforcing (Arthur, 1994; Denzau, North et al., 1994). Related works in international relations examine variation in whether groups cooperate or fight with one another (Bakke, Cunningham and Seymour, 2012), tracing—much like our argument—conflict in the present to histories of conflict (Collier and Sambanis, 2002) and high inter-group inequalities (Cederman, Gleditsch and Buhaug, 2013). Ultimately, our theory suggests that, under conditions of scarcity, shared histories of successful political mobilization generate present-day cooperation among group members, and histories of unsuccessful mobilization yield present-day competition.

2 The Indian Bureaucracy

2.1 Politicians and Bureaucrats in India

The problems of politician-bureaucrat coordination are particularly marked in India, a country with strong traditions of both an autonomous and meritocratic bureaucracy and powerful, democratically elected politicians. The most powerful element of the Indian bureaucracy is the Indian Administrative Service (IAS), which is a national service recruited based on a written examination and interview. The exam is extremely competitive, where, in recent years, only 180 of more than one million applicants have been selected.

After a period of training, IAS officers are assigned to states where they serve for the bulk of their careers. The allocation formula ensures that one-third of the IAS officers in each state come from the state itself, while the other two-thirds are "outsiders." Each state possesses a number of "subordinate" bureaucratic services, but all the most senior posts are held by IAS officers.

Within each state, the basic administrative unit is the district, of which there were 593 in 2001 and 741 in 2021. Each district is headed by a bureaucrat who we will refer to as the district officer (DO). The majority of DOs are young IAS officers, though sometimes senior officers from the subordinate services fill in. The DO has very broad responsibilities, with some suggesting that they have too many responsibilities to perform any of them adequately (Arora and Goyal, 1995; Dasgupta and Kapur, 2020). DOs supervise and coordinate every aspect of district administration, including local government, law and order, tax collection, and a large variety of anti-poverty programs. Delegation is discouraged both by formal rules and the gap in status between the DO and most of their immediate subordinates.

The DO reports to the IAS bureaucrats in the state secretariat, who, in turn, report to the state chief minister (CM) and his cabinet, who are selected from the majority party or coalition in the state legislature. Both members of the state legislative assemblies (MLAs) and members of parliament (MPs) are elected from single-member districts using a plurality system for five-year terms. Each administrative district has several MLAs, but MPs represent larger constituencies that may combine parts of several districts.

Indian legislators face important practical and procedural obstacles in influencing legislation or major policies, which are tightly controlled by centralized parties, on whom members are also dependent for renomination (Lee, 2020). However, both MLAs and MPs are closely involved in distributional politics in their constituencies, where they are the most important elected officials (Bussell, 2019). For this purpose, they have access to dedicated sources of funds (discussed below) and seek to influence the distribution of jobs, the implementation of welfare schemes, and the construction of local public goods. Maximizing the amount of state spending in their constituency and ensuring that it reaches their supporters is a primary goal of legislators.

Since the district bureaucracy controls these core sources of patronage and pork, a good

relationship with the district officer is essential. Even if the district officer receives specific orders from legislators to pursue a particular objective, they can often frustrate them by failing to allocate the energy to navigate a particular initiative through the morass of the district bureaucracy, pleading the mass of other equally urgent competing priorities. The problem of initiatives being delayed or implemented poorly due to bureaucratic overload and the extraordinary growth of procedural requirements is a well-known problem in India (Dasgupta and Kapur, 2020). As Bhavnani and Lee (2018, 2021) have shown, the discretion of IAS officers is substantial enough that the personal characteristics of officers are associated with district-level outcomes.

IAS officers are promoted based on seniority and can only be fired for cause. However, the state government has absolute control over transfers of officers and uses this power to ensure that legislators, or at least legislators of the governing party, have sympathetic DOs. Opposition members may be punished by the posting of unsympathetic officers to their districts (Iyer and Mani, 2012), or simply by seeing their projects delayed (Rivera, 2020).

In summary, members of parliament and district officers, while formally quite independent of each other, each have important powers relative to the other. DOs have the power of non-compliance. MPs need to be able to execute projects and get favors granted by the local administration to gain a reputation as effective constituency servants, and DOs have some discretion over how much of their oversubscribed time and energy will be spent on helping the MP. The MP, on the other hand, can appeal to the state government to have the DO transferred, an effective sanction that is frequently used after elections by MPs closely allied with elected state governments (Iyer and Mani, 2012).

2.2 Ascriptive Identities in Indian Politics

In our context, the three most important identities are region, religion, and caste. While nearly all politicians are residents of the state from which they are elected, a majority of DOs are not. These officers frequently do not know the language of the state in which they are posted until they arrive and are generally unfamiliar with its politics and customs. "Local" officers might possibly find cooperation with politicians easier based on their shared language

and cultural background.[2] Religion, while highly salient both socially and politically, is of limited importance in conditioning politician-bureaucrat interactions since over 90% of both politicians and bureaucrats are Hindu.

This leaves caste. India contains several thousand castes or *jatis*, endogamous groups that generally share a common origin story and often a traditional occupation and formal or informal caste institutions. Jatis were traditionally ranked relative to each other, with higher ranked jatis being considered ritually "cleaner" than others and having a higher socio-economic status, often reinforced by political and social discrimination and religious belief. While jati-based discrimination is now formally illegal in India, it remains common, and jati often structures social interactions and is correlated with wealth and education. Jati is also predictive of vote choice (Huber and Suryanarayan, 2016), and shared jati has been found to be predictive of individual cooperation in experimental studies (Fehr, Hoff and Kshetramade, 2008). Inter-jati "rivalries" often have very long histories and influence both political and interpersonal relations (Srinivas, 1957).

While the problem of relative caste status is complex and contested, the Indian state has institutionalized four caste categories into which jatis are sorted. The formerly untouchable Scheduled Castes (SCs) are at the bottom of the caste hierarchy, while the Other Backward Classes (OBCs) occupy the rung above them, and the Scheduled Tribes (STs) are poor indigenous groups only imperfectly incorporated into the traditional Hindu caste structure. The "general" category includes all other Indians.[3]

India has an extensive system of caste quotas, centered around caste category, in both politics and bureaucratic hiring. In politics, SCs and STs have electoral districts or constituencies reserved for them where only members of those categories can run for office. An extensive literature has debated the effects of these reservations (Bhavnani, 2017; Bhavnani and Lee, 2018).[4] A proportionate share of IAS positions is also reserved for SCs and STs

[2]Local officers are never posted in their districts of origin.

[3]Most Indians would use the term "upper castes" more narrowly to describe a set of groups traditionally associated with literacy or political power.

[4]The literature on local government quotas is even more extensive (e.g., Gulzar, Haas and Pasquale (2020) and Dunning and Nilekani (2013)).

and, since 1994, for OBCs. Bureaucrats from these groups have been found to perform better in the implementation of anti-poverty programs (Bhavnani and Lee, 2021). Importantly, all quotas are allocated to caste categories, not jatis. While the quota systems have meant that the Indian bureaucracy is roughly descriptive of the population in *caste category* terms, relatively educated jatis tend to be overrepresented. Similarly, in politics, relatively large and educated jatis tend to be overrepresented among legislators from all caste categories. We focus on caste category for two reasons: shared jati is exceedingly rare (only 1.5% of all MP-DO dyads share jati) and, more importantly, our theory centers on supraordinate identities, of which caste category is most appropriate.

Note that for our theory to hold, it is necessary that identities be observable. In India, this is a very reasonable assumption. The caste category of all IAS officers recruited since 2005 is posted on the internet[5] as is the caste category of MPs who run in reserved constituencies. Even when this information is not publicly available, it is widely known to knowledgeable observers of the politics. For example, Witsoe (2013, 85) was able to collect information on the jati of 74% of Bihari IAS officers and the caste category of 92%. CSDS was able to collect information on the jati of 72% of North Indian MPs and the caste category of 92% (2004).

Scholars have noted the importance of caste in politician-bureaucrat interactions. For instance, movements for lower caste self-assertion have been proposed to lead to a decline in cooperation between bureaucrats and politicians, with lower caste politicians being subverted by upper caste officials and responding by seeking to humiliate or marginalize them (Witsoe, 2013). Similarly, movements for lower caste self-assertion have seen the uncooperative nature of the bureaucracy as a major obstacle to their efforts and sought to pack the bureaucracy with coethnics (Suryanarayan, 2019; Witsoe, 2013). Note that studies of identity politics in India have often argued that there is enormous regional variation (Singh, 2015; Lee, 2019), particularly between a set of Northern states (conventionally defined as "BIMARU" states) and the rest of the country. This leads to an expectation of regional differences, which we return to in greater depth below.

[5] `https://cseplus.nic.in/Home/CadreAllocation`

3 Data and Empirical Strategy

3.1 Measuring Bureaucratic Delay: MPLADS

Cooperation between politicians and bureaucrats manifests across a variety of issue areas and may even include cooperation in illegal activities (Brierley, 2020). We focus on a single program that has the advantage of being both fairly transparent and of high salience to politicians: the Members of Parliament Local Area Development Scheme (MPLADS). Each member of parliament receives an annual budget of 50 million rupees ($680,000) to fund small-scale public works within their constituency.[6] MPs can use their allocation on a wide variety of projects, including the construction of roads, streetlights, social halls, and water pumps. Usefully, MPLADS projects, unlike most development programs in India, do not pass through multiple layers of bureaucracy, involving only MPs and district bureaucrats in project sanctioning. This allows for a clean evaluation of principal-agent cooperation.[7]

MPLADS projects, each one of which is labeled with a plaque bearing the MP's name, serve as a highly visible pork, for which beneficiaries might reward politicians (Stokes et al., 2013). Politicians use their funds strategically, spending more when their own districts are competitive (Keefer and Khemani, 2009) and when state legislators are copartisan (Bohlken, 2018). When reelection is unlikely, they also spend more on the rich and divert funds to themselves or their associates (Nath, 2014). Bureaucratic requirements for audits (by the

[6]Before 2011-12, the allocation was 20 million rupees. From 2005 to 2023, the MPLADS scheme required that 15% and 7.5% of an MP's proposed projects target SC and ST-dominated localities, respectively. Our results are robust to subsetting to projects proposed prior to the imposition of this requirement in 2005 (see Appendix Table A3.4).

[7]We view our study as getting at the "basic science" of politician-bureaucrat interactions. Whereas most outcomes (for example, literacy) jointly produced by politicians and bureaucrats involve vast bureaucracies, the outcome we study is almost entirely shaped by the interactions of the DOs and MPs. So, even if the outcome that we study is not as important as literacy, studying it allows us to isolate an important dynamic that undergirds many other basic interactions.

central government), physical inspections (by the state government), and restrictions on grants to NGOs are thought to limit, but not eliminate, this behavior.

MPs are reliant on the district bureaucracy to implement their projects. The bureaucracy plans projects and tenders and monitors contracts. The DO is almost always the designated "district authority" for MPLADS purposes.[8] Each MP must select a district within their constituency as the nodal district, which serves as the primary recipient and manager of all MPLADS projects (the majority of parliamentary constituencies span multiple districts). Based on data for the most recent MPLADS projects, between 85 and 91% of projects are implemented in the nodal district.[9]

On receiving the recommendation from the MP, the DO is responsible for sanctioning the project. The permissible reasons for not sanctioning projects are few and narrow. Rejection is thus rare: over 99% of all projects are sanctioned. To ensure that the district administration does not delay projects indefinitely, the law imposes a set of deadlines on the district officer. Program rules state that proposed projects must be vetted within 45 days and sanctioned within 75 days. However, there is no internal mechanism in the program to ensure bureaucratic compliance and 32% of sanctioned projects take longer than 75 days to approve (see Appendix Figure A3.2). On the other hand, many projects are approved quickly: 15% are sanctioned in a week or less.

We use the time until project sanctioning as our main measure of politician-bureaucrat cooperation. We primarily operationalize this using a binary measure of whether a project was sanctioned within 75 days and a measure of the natural log of the number of days to sanction in supplemental tests (see Appendix Table A2.1 for summary statistics). We

[8]For a detailed account of MPLADS requirements and procedures see https://www.mplads.gov.in/MPLADS/UploadedFiles/MPLADSGuidelines2016English$_6$38.*pdf*, *accessed*8/

[9]If an MP proposes a project in a district that is not the nodal district, the nodal district is still the prime recipient of funds and oversight of the project. As a result, nodal District Officers retain substantial discretion over project implementation even when the project is in a different district. Existing research on MPLADS, such as Bohlken (2018) and Rivera (2020), only consider the nodal district when evaluating MP-MLA cooperation.

believe that our measure of whether a project was approved in 75 days is an excellent test of cooperation, particularly relative to common outcomes in the literature (such as those in experimental games or project outcomes), for three reasons. First, the bureaucrat is explicitly the agent of a specific politician, without any formal intermediation from other levels of the bureaucracy or political system. Second, quick project approval is a formal responsibility of the bureaucrat, and there are relatively few legal or technocratic reasons for delay. Finally, unlike project completion, which can easily be delayed by material factors outside the bureaucrat's control, approval times can be traced to the individual officer since it is a matter of the shuffling of paperwork – a relatively pure measure of red tape.

Data on MPLADS projects are supposed to be publicly available on the program website, however, the MPLADS system revamped its interface in recent years, and validation exercises suggest that the data on the current website are not comprehensive or reliable. This precludes us from including data from the most recent legislative session. Given these concerns, we use data collected by Rivera (2020) using the previous online portal (covering 2004-14, legislative sessions 14 and 15). We supplement these data with additional data provided by Bohlken (2018), which covers only Northern India from 1999 to 2004 for the 13th legislative session. Our results are robust to only analyzing the 14th and 15th legislative sessions, which include data for the entire country (see Appendix Table A3.12). The project-level variables vary slightly by source, but for all, we have the date of proposal, date of sanctioning, and project cost.[10]

3.2 Measuring Politician and Bureaucrat Identity

To measure politician-bureaucrat caste category congruence, we use two data sources. First, for the caste category of MPs, we use data collected by the Trivedi Centre for Political Data. In our period, this data identifies the caste category of 99.9% of MPs. Second, for the caste

[10]A small number of projects are received by one DO and then granted by another after the first DO's transfer. We attribute these projects to the DO who approved them, with the time to approval being the time between their taking office and approval, but control for the number of days the project had been under consideration by the previous DO.

category of DOs, we use the dataset collected by Bhavnani and Lee (2021), which scrapes the caste category reported by each officer from official rankings at the time of selection. These data only include caste category for arbitrary years and is imputed based on exam ranks for missing recruitment years. Our results are robust to the exclusion of officers for whom caste category was imputed (see Appendix Table A3.2). We also control for MP and DO jati, and the more elaborate process that we use to identify jati is detailed in the Appendix.

Politicians and bureaucrats are matched into dyads using constituency and district names; we match MPs to the DOs that serve in their chosen nodal districts. We use the executive record sheet for every IAS officer, which we scraped from the Ministry of Personnel website on July 17, 2020, to identify DO postings. The ER sheet has the exact dates for each posting in an officer's career, as well as their state of origin, gender, and education. Through a careful process of manual matching, we were able to associate all projects with the residing district officer at the time of project submission.[11] In total, we observe data for 1,297 unique MP-DO dyads across three legislative sessions, 529 parliamentary constituencies, and 331 districts.

3.3 Empirical Specifications

To estimate the effect of caste category congruence on project approval times, we employ four identification strategies and take greater confidence in our results given robustness to these four approaches.

Our main specification uses OLS models with district, fiscal year, and session fixed effects. District fixed effects capture the unit of bureaucratic assignment, and session fixed effects capture the politician's term. Fiscal year fixed effects account for other potential time-varying confounders. Note that multiple bureaucrats can serve within a district during each Parliamentary session, and district officers can serve more than one MP at a time (in our data, 20% of district officers serve more than one MP). We are thus leveraging variation

[11]The manual match entailed confirming that district names and constituency-to-district matching were constant across data sets. In some instances, two DOs reported holding the same position for a short period of time. We validated these data by visiting district websites and determining the correct district officer in charge.

across bureaucrats in the same district for each politician and variation across politicians whose constituency overlaps a district to estimate the effect of dyad-level covariates such as caste category congruence conditional on temporal and regional characteristics that might affect sanctioning time.

We start by estimating the following two models:

$$P(Approval)_{ijp} = \alpha + \beta C_{ij} + \gamma J_{ij} + \delta \mathbf{X_{ijp}} + \theta_d + \eta_t + \zeta_s + \epsilon_{ijtdp} \quad (1)$$

$$P(Approval)_{ijp} = \alpha + \beta C_{ij} + \zeta (C_{ij} \times \alpha_r) + \alpha_r + \gamma J_{ij} + \delta \mathbf{X_{ijp}} + \theta_d + \eta_t + \zeta_s + \epsilon_{ijtdp} \quad (2)$$

where the outcome – a dummy for whether a project (p) in a district (d) proposed by an MP (i) during parliamentary session (s) at time (t) is approved by the DO (j) within the rule-mandated 75 days (Y)—is modeled as a function of C and J, which are set to one when the caste category and jati of the MP and DO match, respectively.[12] To explore regional variation in the effects of caste, we interact the caste category congruence variable with regional dummies (α_r), dividing our sample into three conventional regions: Northern BIMARU states, Southern states, and all other states (see Table 2 for a listing of which states fall into each region). We omit Southern states allowing us to compare the effects of caste category congruence on project approvals in BIMARU and Southern states. We do not interact the jati congruence variable J with regional dummies given the sparseness of the data, however, results are robust to this inclusion (see Appendix Table A3.12).

As noted, the equations control for district, year, and session fixed effects (θ_d, η_t, and ζ_s). A vector of other controls ($\mathbf{X}$) includes measures of project complexity (the project cost), bureaucratic load (the log number of pending projects on a DO's desk), and, if applicable, the log number of days that the project sat on the previous DO's desk. It also includes indicators for MP and DO caste, jati, and gender, and an indicator for whether MPs are politically aligned with the state's Chief Minister. The latter control is important given the importance of Chief Ministers in the promotion and transfer of DOs. Standard errors are clustered at the MP-DO dyad level, since this is the unit of our claims, however, our

[12]Since jati is missing for either the MP or DO in 4.6% of dyads, we include an indicator for missing jati so that the omitted category is non-congruent jati dyads.

results are robust to clustering the standard errors at the state-year level and the dyad and state-year level (see Appendix Tables A3.7 and A3.8).

We demonstrate the robustness of our findings to three additional approaches that more precisely address the assumptions of causal inference. Identifying the causal effects of politician-bureaucrat identity congruence would require the two to be randomly paired. Our main specifications approximate this by controlling for a rich set of fixed effects and other politician and bureaucrat attributes. Still, endogeneity remains a theoretical possibility. We, therefore, leverage quasi-random variation in the assignment of bureaucrats to posts.

First, following the identification strategy in Bhavnani and Lee (2018) and Bhavnani and Lee (2021), we narrow the sample to four states (Andhra Pradesh, Karnataka, Rajasthan, and Uttar Pradesh) with 34% of the country's population with documented quasi-random assignment of IAS officers to districts. For example, "IAS officers from the 2013 Andhra Pradesh cadre were assigned in alphabetical order of their names to districts that were ordered based on their serial number" (Bhavnani and Lee, 2018, 78). Reflecting these rules, the leftmost panel of Figure 1 suggests that caste category congruence is orthogonal to a range of MP and district characteristics.

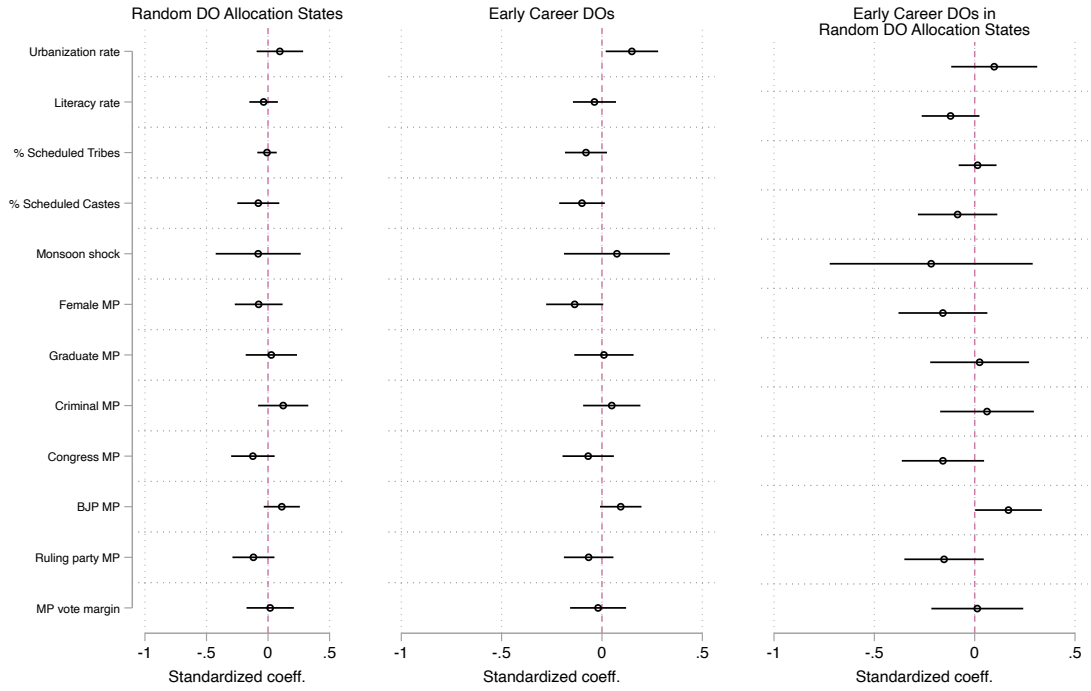
Second, we subset our analysis to early-career officers (those within the first five years of service) across all states since such officers are likely unknown to politicians and less likely to be purposefully selected by MPs. Although we are unable to document the (random or other) assignment of officers across all states, the balance tests in the second panel of Figure 1 suggest that the observable characteristics of early-career officers are largely orthogonal to MP and district characteristics.

Our last strategy is to combine these approaches by focusing on early-career officers in Andhra Pradesh, Karnataka, Rajasthan, and Uttar Pradesh. Again, and as the rightmost panel of Figure 1 suggests, caste congruence is orthogonal to MP and district-level confounds in this sample.[13]

As further evidence in support of a causal interpretation of our results, we examine three possible downstream consequences of our findings that might undermine our identification

[13]We are also able to reject the tests for the joint significance for the variables in the three samples.

Figure 1: Balance tests for caste category congruence against district and MP characteristics



Note: All models include dyad clustered standard errors and session, fiscal year, and district fixed effects. Models also include an indicator for jati congruence and whether Jati is missing. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing. Appendix Table A2.2 reports the coefficients, including for control variables.

strategy in Appendix Table A5.1. First, if caste-congruent DO-MP pairs work better together in the South than in BIMARU states, we might expect caste congruence to be positively correlated with the chances that a DO will be chosen by an MP in the South and negatively correlated with such selection in the North. To examine this, we collapse the data to the MP-DO dyad level and then set a dummy for DO selection to 1 for DOs that an MP could have selected (that is, those that they did not inherit but were assigned after the MP took office). The first two columns of Appendix Table A5.1 fail to detect any such pattern in the data in BIMARU or Southern states. Second, we show that the length of a DO's term in office is not correlated with congruence in any region (columns 3 and 4), even when subsetting to DOs that are inherited by MP (columns 5 and 6). Consistent with our identification strategy, this suggests that MPs do not alter the length of DO terms based on caste category congruence. We additionally find that the impact of caste category congruence is not moderated by national or state election timings, particularly in the North (see Appendix Tables A4.5 and A4.6). These results align with our theory that caste category congruence generates subtle relationships and is not necessarily top of mind in decision-making. They are also consistent with the fact that DOs serve multiple principals (including multiple MPs and state legislators), and so MPs do not have perfect discretion in DO transfers.

4 The Effect of Shared Caste on Performance

Panel A of Table 1 examines the overall relationship between the probability that a project is sanctioned within the 75-day statutory limit and caste category and jati congruence. The first column controls for session and fiscal year fixed effects, the second for district fixed effects, and the third for all three. The fourth column subsets to data from the four states in which we are able to document that officers are quasi-randomly assigned to districts, the fifth focuses on early-career officers, and the last focuses on early-career officers from the four states with documented quasi-random district assignments. Across these specifications, the average effect of caste category congruence is small and statistically indistinguishable from zero.

Panel B of Table 1 compares the effects of caste category congruence across BIMARU

Table 1: Caste Congruence and Bureaucratic Performance

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.036	-0.005	-0.006	0.017
	(0.022)	(0.020)	(0.019)*	(0.024)	(0.021)	(0.028)
Jati Congruence	0.005	0.168	0.135	0.208	0.146	0.315
	(0.106)	(0.075)**	(0.069)**	(0.172)	(0.077)*	(0.201)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
Caste Category Congruence	0.024	0.044	0.056	0.088	0.082	0.122
	(0.044)	(0.031)	(0.031)*	(0.036)**	(0.037)**	(0.045)***
Caste Category Congruence X BIMARU	-0.112	-0.141	-0.160	-0.135	-0.137	-0.164
	(0.052)**	(0.035)***	(0.036)***	(0.043)***	(0.042)***	(0.052)***
Jati Congruence	0.009	0.170	0.139	0.220	0.142	0.299
	(0.101)	(0.074)**	(0.069)**	(0.169)	(0.079)*	(0.201)
ME of Caste Congruence in BIMARU	-0.088	-0.098	-0.104	-0.047	-0.055	-0.042
	(0.029)***	(0.027)***	(0.027)***	(0.028)*	(0.027)**	(0.032)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.186	0.318	0.324	0.301	0.327	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

and Southern states, which we examine based on past scholarship highlighting differences in the histories of identity in these regions.[14] Our preferred specification is the saturated model in column 3, with session, year, and district fixed effects. This suggests that caste category congruence is associated with more on-time project approvals by a statistically and substantively significant 5.6 percentage points or 8.2% in the South. In BIMARU states, on the other hand, caste congruence is associated with a lower probability of on-time sanctioning by 10.4 percentage points, or 15.2%, as shown in the reported marginal effect at the bottom of the table. The difference in the marginal effects of caste category congruence across these regions is statistically significant: caste category is associated with a roughly 16 percentage point difference in the probability of on-time sanctioning between Southern and BIMARU states.

These effects are consistent with our theoretical priors. In Southern states, caste categories have been the basis of successful, historic collective action. In the North, caste category-based political mobilization has been fraught and riven by factionalism. In the next section, we detail these histories more extensively and provide evidence to support the argument that these differential results by region align with differing histories of political mobilization and present-day experiences of inequality, as has long been highlighted in qualitative accounts. However, Appendix Figure A4.2 further demonstrates that our results are unlikely to be the result of random state agglomeration into regions: out of 1,000 simulations where states were randomly allocated to regions of the same size as those in our analysis, the differential effect of caste congruence in the placebo BIMARU and Southern regions attained a value as large as what we observe in only 3.6% of simulations. Given that our coding of regions is considered standard in the literature (see, for example, Bohlken 2018), we believe this strongly suggests that it would be difficult to manipulate states and generate estimates similar to those reported in Table 1.

Our results are also robust to using the (log) number of days to project approval as the outcome (see Appendix Table A3.1), estimating these effects with a Cox proportional hazard (see Appendix Table A3.3), removing states one-by-one to show no single state is driving

[14]We also include and interact a dummy for states in other regions but report results only in the online appendix as we have no theoretical prior over this heterogeneous region.

the main results (see Appendix Figure A3.1), subsetting to Parliamentary constituencies with only one district (see Appendix Table A3.13), including MP fixed effects (Appendix Table A3.14) and DO fixed effects (Appendix Table A3.15), and collapsing to the dyad level to ensure equal weighting across dyads (Appendix Table A3.16). They are also robust to restricting the data to the four states where we have confirmed that early-career DOs are quasi-randomly assigned to districts (column 4), to restricting the data to early-career officers (column 5). The difference between BIMARU and Southern states is significant in all specifications. Additionally, Appendix Table A4.1 documents that these effects are not driven by any one specific caste category but hold for all category groups.[15]

Additionally, Jati congruence is associated with a 14 percentage point greater probability of project approval (in the third, saturated model in both panels), and this effect holds in magnitude when subsetting to quasi-randomly assigned DOs, though the results are noisier. That said, results on jati congruence should be interpreted with caution as only 1% or 1,558 projects were proposed by 1.4% or 18 MP-DO dyads that share jati.[16] Consistent with this, we are unable to compare the effects of jati congruence in BIMARU and Southern states as there are no jati congruent dyads in the South (see Appendix Tables A3.5 and A3.6 for a comparison of BIMARU and Other states).

[15]In this table, the difference between the coefficients for GEN and OBC congruence (the categories comprising the majority of congruent dyads) are not statistically significantly different from one another.

[16]The rarity of jati congruence is to be expected given the extraordinary number of jatis in India. Using self-reported jati from the 2016 NFHS, India has a jati fractionalization of .997, which means that there is a less than 1% chance that randomly paired Indians will share a jati.

5 Mechanisms: The Roots of Coethnic Rivalry and Solidarity

Why does caste category congruence between politicians and bureaucrats improve performance in the South but worsen performance in the North? We rely on rich qualitative accounts to argue that historical differences in political mobilization across these two regions likely underlie the observed differences in identity-based behavior. We then leverage these historical accounts to quantitatively demonstrate that our results are consistent with differential histories of caste-based political mobilization and inequality. We then rule out alternative explanations for regional differences. Finally, we explore possible mechanisms explaining identity-based behavior and provide suggestive evidence for the importance of institutionalized norms of interaction.

The history of caste representation in Indian political life differs from region to region. In Southern and Western India, Brahmins (upper castes) were historically a small portion of the population, and missionary education, among other factors, created an educated elite within subaltern groups. Beginning in the colonial period, these elites mobilized to gain social recognition and state resources for their jati (Lee, 2019). Given the small size of jatis, broader coalitions of low-status groups quickly organized themselves: "Non-Brahmin" movements proliferated throughout the South and West, with Maharashtra, Tamil Nadu, and Karnataka having particularly notable organizations that successfully contested elections. Meanwhile, a variety of organizations and parties were formed in this period to represent Scheduled Castes, with B. R. Ambedkar's Maharashtra-based Scheduled Castes Federation being the best known. Other movements sought to broaden jati identities and merge several groups of similar status, a process especially marked in Southern India, where Dalits began to define themselves as the original inhabitants of the state (i.e., "Adi-Andhras") rather than using their former jati names.

These subaltern movements are widely thought to have been stronger in Southern India than in the North. These differences are reflected in the fragmentary statistics available on the growth of caste organizations in the colonial period. Using data from Ahuja (2019), we find that among colonial-era Dalit organizations, the ratio of narrow jati associations to

organizations focusing on Dalits as a whole was 0/5 in Tamil Nadu and 2/30 in Maharashtra, but 2/1 and 2/2 in the northern states of Uttar Pradesh and Bihar. Lee (2019), examining petitions by Dalits to the colonial census authorities for reclassification of their caste at the 1931 census, found that the ratio of petitions demanding a common name for all Dalits to those demanding a new name only for their jati was 7/0 and 4/2 in the southern provinces of Hyderabad and Madras and 0/1 in both Uttar Pradesh and Bihar. In both instances, the pattern is clear: whereas lower castes mobilized as jatis in the North, they tended to mobilize as broader caste groups in the South.

These largely Southern movements were successful in achieving caste category representation and concessions. While job and educational quotas (reservations) for OBCs were not implemented nationally until 1994, in the states where broad lower caste movements were strongest, OBCs were guaranteed a portion of government hiring and education significantly earlier. All states of the old Bombay and Madras Presidencies had OBC reservations by the 1970s, but only two northern states had OBC reservations at that time (Lee, 2019).[17] These reservations were buttressed by a strong presence of politicians from subaltern groups within the political system, including all the major parties (Jaffrelot, 2003).

Table 2 shows the strong association between the early implementation of reservation and a relatively small presence of upper caste politicians in politics in the 1960s, with both of these traits being higher outside the Northern BIMARU states.[18] We focus on OBC reservations since states had the freedom to institute these, whereas reservations for SCs and STs have been nationally mandated since 1949.

[17]Bihar and Punjab. Uttar Pradesh's 1970s reservation system was overturned in the courts.

[18]There are outliers within regions. Kerala, for example, is a Southern state that had high upper-caste representation in 1967 despite early reservations. Our main results remain robust to removing states one by one.

Table 2: Caste Category Mobilization in India by State

State	Year Reservation Began	Post 1994 OBC Reservation	Within Category Between Jati Inequality	% Upper Caste MLAs in 1967	OBC Subquota Year	% of 2019 Vote for Encompassing Ethnic Parties	% of 2019 Vote for Narrow Ethnic Parties	% Reporting Caste Category when asked Jati
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
BIMARU/Northern states								
Bihar	1978	0	7.9	44.8	1978	0.0	37.2	0.7
Chhattisgarh	1994	1	33.0	See MP		0.0	2.3	0.6
Jharkhand	1978	0	37.5	See Bihar		0.0	0.0	2.5
Madhya Pradesh	1994	1	33.5	44.9		0.0	2.4	5.2
Rajasthan	1994	1	30.4	46.8		0.0	0.0	1.2
Uttarakhand	1994	1	24.9	See UP		0.0	4.5	3.5
Uttar Pradesh	1994	1	37.5	43.3		0.0	37.5	1.3
Southern states								
Andhra Pradesh	1947	0	20.7	5.9	1970	39.6	0.4	0.2
Karnataka	1977	0	24.0	8.8	1977	0.0	9.7	14.1
Kerala	1964	0	17.2	40.0		0.0	0.0	0.3
Tamil Nadu	1947	0	27.6	3.0	1989	51.2	0.5	11.2
Other states								
Assam	1994	1	27.9	27.0		8.2	0.0	4.1
Gujarat	1978	0	30.3	40.0		6.5	0.0	1.8
Haryana	1991	0	22.3		1995	0.0	5.6	2.1
Himachal Pradesh	1994	1	13.3			0.0	0.0	14.8
Maharashtra	1947	0	33.0	5.9	1964	0.0	23.5	2.0
Orissa	1994	1	31.5	35.0		0.0	0.0	9.9
Punjab	1964	0	17.6			27.8	3.5	9.6
West Bengal	1994	1	34.7	40.0		0.0	0.0	1.4

Notes: Small states and union territories are not included for reasons of space. Figures for Orissa in column 2 are for 1974. The data for columns 1 and 5 are from Lee (2021), and for column 4 are from Jaffrelot and Kumar (2012). The numbers in columns 6 and 7 were calculated using data from the Election Commission of India and Thachil and Teitelbaum (2015). The numbers in columns 3 and 8 are based on the 2015/16 National Family Health Survey. The survey data uses the Hindu population over 18.

In the North of India, fewer low-caste groups had an educated elite, and the presence of the upper castes was larger. The growth of lower caste organizations was slow and fiercely contested (Lee, 2019). While SC and OBC groups have risen in political prominence over the past half-century, creating a "silent revolution" in descriptive political representation (Jaffrelot, 2003), upper castes have remained more politically powerful and stymied OBC reservations in education and the bureaucracy until the national government mandate in 1994.

This north-south difference in the political salience of caste category has been widely noted. Rudolph (1984, 79) noted that Northern regions with more upper castes "seem to be less susceptible to horizontal mobilizations from below of ritually deprived classes" and there exists less "of a sense of community and common interest" among the lower castes. This differentiation between horizontal solidarities between castes of similar status and vertical links between lower caste jatis was originally developed by Srinivas (1960), though he did not directly discuss regional differences. Many authors, most prominently Christophe Jaffrelot (2003), have also described regional differences in the salience of the OBC category, with the south being precocious in this regard relative to the north.

Like their southern counterparts, Northern politicians often appeal to caste categories, and commentators often speak of "OBC politics." In practice, however, the lower caste politicians that did rise to power in the North often focused on a single jati rather than the whole category. The Bahujan Samaj Party, for instance, claimed to represent all SCs but was only successful in areas with large populations of the Chamar caste (Chandra, 2007). This fragmentation fomented the deep-seated rivalries among subaltern politicians over leadership positions and among ordinary caste members over "hogging" of the benefits of reservation. In Bihar, Yadav and Kurmi politicians are rivals for leadership of the OBC category, while in Uttar Pradesh, Yadavs and Lodhs are rivals.

The same dynamics of intra-category rivalry appear in the South. In Andhra Pradesh, for instance, "Madigas, the most numerous Dalit caste, feel that the benefits of reservation have been cornered by the more advanced Mala caste, another prominent Dalit community" (Pathak, 2013). However, the long history of joint political action against the upper castes has made such divisions less common and less politically salient. The Malas and

Madigas, for instance, have tended to vote relatively similarly, while in the Hindi belt, intra-category splits in partisanship are often wide (Mishra, Attri and Mehta, 2014). One of the best-known intra-category conflicts in the south is the struggle between the general category Kammas and Reddys. Srinivas (1957)'s (1957: 538) explanation for the Kamma-Reddy rivalry, that "the two castes fell apart after pushing the Brahman[s] out," is a succinct statement of the logic of our theory – a common political project and ethnic other can unite disparate groups, but rivalries can also drive them apart.

One indicator of these types of rivalries is the presence of parties based on jati. Thachil and Teitelbaum (2015) code the degree to which 13 ethnic political parties rely on the vote of a few jatis. This enables the authors to classify ethnic parties whose support is heavily concentrated within few jatis as "narrow," and those whose support draws on broader caste category, regional or linguistic identities as "encompassing." As Table 2 shows, narrow ethnic parties are most successful in the Northern BIMARU states (especially Bihar and Uttar Pradesh) while encompassing ethnic parties are more successful in other states (especially Tamil Nadu).

Yet another indicator of these dynamics is the proportion of people citing category when asked for their "caste" identity. We coded the self-chosen answers to the "what is your caste or tribe" question on the 2015/16 National Family Health Survey to identify those who gave their caste category as the answer. Given that the wording of the question was clearly intended to elicit jati, the base level of category identification is low. However, it is four times more likely outside the northern BIMARU states: 0.56% vs. 0.15% in the BIMARU states.[19]

The historical record demonstrates that caste category is a more common source of popular identification in the South than in the North. While there have been attempts at caste category mobilization in both the South and the North, these efforts have been more successful in the South. To explore whether these histories of caste category-based political mobilization underlie our results on MP-DO cooperation, we replace BIMARU, a geographical construct, with a more specific measure of successful caste category-based mobilization. We characterize states based on whether they adopted reservations for OBCs in state and

[19]The difference is even higher when we focus on OBCs, or if Scheduled Tribes are excluded.

central hiring and university admissions before or after the 1994 national government mandate. Reservation policies implemented prior to this mandate resulted from autonomous movements and popular demand, whereas states that had not instituted these reservations prior to 1994 had the reservation policy imposed by the national mandate. Panel A of Table 3 presents the results using this state-wise characterization.

Table 3: Congruence and Bureaucratic Performance by State History and Inequality

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	0.017	0.001	0.001	0.088	0.025	0.122
	(0.030)	(0.027)	(0.026)	(0.036)**	(0.028)	(0.045)***
Caste Category Congruence X Post-1993 Reservation	-0.067	-0.064	-0.071	-0.135	-0.067	-0.164
	(0.039)*	(0.033)*	(0.032)**	(0.043)***	(0.036)*	(0.052)***
Jati Congruence	0.013	0.184	0.153	0.220	0.151	0.299
	(0.102)	(0.075)**	(0.069)**	(0.169)	(0.077)*	(0.201)
ME of Caste Congruence in Post-1993 Reservation States	-0.050	-0.062	-0.070	-0.047	-0.042	-0.042
	(0.029)*	(0.024)***	(0.023)***	(0.028)*	(0.026)	(0.032)
N	148339	148337	148337	54721	113296	42276
R-Squared	0.190	0.318	0.324	0.301	0.327	0.318
Caste Category Congruence	0.121	0.044	0.068	0.265	0.040	0.368
	(0.010)***	(0.013)***	(0.013)***	(0.025)***	(0.018)**	(0.031)***
Caste Category Congruence X Intra-category Inequality	-0.480	-0.280	-0.374	-0.865	-0.178	-1.146
	(0.035)***	(0.043)***	(0.043)***	(0.077)***	(0.059)***	(0.097)***
Jati Congruence	0.010	0.181	0.150	0.211	0.149	0.279
	(0.013)	(0.016)***	(0.016)***	(0.032)***	(0.020)***	(0.043)***
ME of Caste Congruence in States with Max Inequality	-0.059	-0.061	-0.073	-0.059	-0.027	-0.062
	(0.005)***	(0.006)***	(0.006)***	(0.008)***	(0.007)***	(0.011)***
N	148315	148313	148313	54721	113272	42276
R-Squared	0.187	0.318	0.324	0.301	0.326	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. Standard errors clustered at the dyad-level in Panel A and not clustered in Panel B. All models include fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

In states that implemented the OBC reservation only after the national mandate, caste category congruence worsens bureaucratic performance: congruent DOs were seven percentage points or 10% less likely to sanction MPLADS projects within the 75-day period (see the marginal effect column 3).On the other hand, in states that implemented the OBC reservation ahead of the national mandate, caste category congruence either does not significantly affect bureaucratic performance (column 3) or improves bureaucratic performance (columns 4 and 6) when comparing across the four states with random DO allocation. These results provide suggestive evidence for a link between histories of identity-based mobilization and present-day identity-based relationships.

An additional implication of our theory is that supraordinate groups with greater intragroup inequality are more likely to have norms of competition, especially when such inequality falls along subordinate group lines. This could be because inequality is the result of histories of intragroup competition or because supraordinate groups were comprised of dissimilar subordinate groups, and inequalities have been sustained despite the new group identity. More equal supraordinate groups, on the other hand, may be more likely to develop norms of solidarity (or even to collectively mobilize). To explore this, we calculate a state-level measure of within-category, between-jati income inequality using data from the 2016 National Family Health Survey.[20] We assume that where within-category, between-jati income inequality is high, within-category rivalry is more likely, and where within-category inequality is low, within-category solidarity is more likely. Panel B of Table 3 presents the results using this variable instead of region dummies.

Intra-category, inter-jati income inequality robustly and significantly negatively moderates the relationship between caste-category congruence and the speed of bureaucratic sanctioning of MPLADS projects. In states with the lowest levels of intra-category, inter-jati inequality, caste category congruence significantly speeds up bureaucratic sanctioning by 7% (Panel B, column 3). In states with the highest levels of intra-category, inter-jati inequality, caste category congruence significantly slows down bureaucratic sanctioning by 10% points (Panel B, column 3, marginal effect at bottom). As further evidence that these

[20]Few surveys and data sources include data on jati limiting our ability to get time-varying or more disaggregated measures of inequality.

results may coincide with our observed regional differences, there is a strong and negative correlation between intra-category, inter-jati inequality and the state-level effects of caste congruence (see Figure A4.1), suggesting that our main findings are not likely to be driven by a possibly arbitrary division of states into regions.

While neither of these tests provides definitive causal evidence of the roots of rivalry and solidarity, as both historical mobilization and inequality are non-random, a clear pattern emerges alongside the regional evidence provided in Table 1. Additionally, in the appendix, we show the limited explanatory power of several alternative explanations for why observed effects may differ across regions, including that our results on caste category congruence are driven by the political alignment between the MP and Chief Minister (Appendix Table A4.2), by underlying differences in project sanctioning by differently ranked actors (Appendix Table A4.3), by differential distributions of caste groups (Appendix Figure A4.3), by the timing of national and state elections (Appendix Tables A4.5 and A4.6), or by regional histories of service delivery (Table A4.4) . Alongside the large qualitative and historical record, we take this evidence as strongly suggestive of the role of historic patterns of political (and economic) organization in shaping variation in patterns of identity-based interactions among politicians and bureaucrats.

How, then, do histories of rivalry or solidarity produce the observed patterns of politician-bureaucrat behavior? We argued that such histories could shape present-day behavior through socialization, the inculcation of preferences, the development of technologies, and the establishment of norms of behavior. While we are unable to definitively determine which of these mechanisms defines the way that shared caste category translates into cooperation or competition among bureaucrats and politicians, we provide evidence in the Appendix that suggests that politicians and bureaucrats in the North and South operate in different normative environments with different rules of optimal strategy selection. First, Appendix Table A5.2 shows that our results are not driven by bureaucrats' region of origin - DOs originally from BIMARU [Southern] states in caste congruent dyads do not sanction projects more slowly [quickly] - providing limited support for the idea that shared histories transmit through socialization. This is also true when looking at whether DOs are originally from states that had the 1994 OBC reservations foisted on them. Second, looking only at data for

BIMARU states provided by Bohlken (2018), Appendix Table A5.3 shows that caste category congruent DOs, by and large, receive projects of similar types to non-congruent DOs. If politicians and bureaucrats from the same caste category shared preferences to a greater degree than other dyads, we would expect proposed projects to differ. Finally, Appendix Table A5.4 shows that neither shared language nor shared state of birth (both indicators of shared technologies) explains our observed effects. While we are unable to directly test for differences in normative rules of operation, we take this evidence as most likely supporting an argument that cooperation and competition emerge because the rules of the identity game differ in the North and the South.

6 Conclusions

In much of the world, bureaucrats are formally the servants of politicians, and bureaucracies are designed to make this control real. However, even where bureaucrats have no formal autonomy, their willingness to overcome red tape may vary considerably. In the context of the constituency development funds provided to India's MPs, shared identity plays an important role in shaping bureaucratic behavior, with shared caste category, a supraordinate, and historically constructed identity, having variable effects. The results complement existing work on the institutional predictors of bureaucratic subversion by defining the role of identity. The results have implications for the study of the effect of ethnic diversity on institutional quality.

The second implication of our findings is that shared identity does not always improve outcomes, and the balance between solidarity and rivalry can be influenced by political action. We find that politicians and bureaucrats are more likely to cooperate in hastening bureaucratic outcomes in states with successful histories of caste category mobilization. However, in states with less successful histories of caste category mobilization, rivalry dominates, and congruent bureaucrats clear red tape more slowly. We show that these behaviors coincide with differential histories of political mobilization in pursuit of common pool resources. The result echoes existing findings that broad identities can be made more or less salient relative to narrow ones through political effort and that these changes can persist. It extends this

literature by showing that shared identity can have negative effects on performance due to rivalry and that the effects of this identity mobilization can extend to the bureaucracy.

The paper also contributes to the literature on South Asia in two respects. First, it provides the first systematic evidence that bureaucratic behavior in India is shaped by caste. Expanding on accounts predicting bureaucratic performance as a result of "quality" and incentives, it hints at the role of personal factors such as identity in the networks of influence that link politicians and bureaucrats and run through the Indian state. Second, it provides evidence for how caste politics operate differently in different parts of the country and why caste-based self-assertion may have a different influence on state performance in different parts of the country.

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Online Appendix

Coethnic Rivalry and Solidarity: The Political Economy of Politician-Bureaucrat Cooperation in India

A1 Coding Jati Congruence

To code jati congruence, we proceed as follows. First, for the jati of Indian MPs, we use the data collected by the Trivedi Centre for Political Data, which identifies the jati of 89% of MPs.

To code officer jati, we triangulated two approaches. First, we worked with a local data collection firm to contact journalists and others with regional expertise to provide a jati for each IAS officer. This yielded a coded jati for 67% of the IAS officers in our database. Second, using our own knowledge and several publicly available datasets of the caste and surname of Indian elites, we coded jati for roughly 32% of the IAS officers in our database, 30% of whom had . We followed the same coding rule used by the Center for the Study of Developing Societies for their studies of MP and MLA caste (Jaffrelot, 2003), starting by coding a list of surnames that are notoriously associated with a particular jati or identical to a jati name, supplementing our personal knowledge with the CSDS MP dataset, where we focused on surnames shared by more that three MPs since 1967, all of whom were of the same jati. The two coding strategies overlapped for 30% of DOs and agreed in 73% of these cases. We combined these two coding approaches for a more complete IAS officer jati coding, taking as the base the external jati coding (67% of DOs) and filling in our own coding for an additional 18 officers (2% of DOs). Combined, we have data on officer jati for 69% of officers. Religious minorities (who are rare in the IAS) are counted as jatis for the purpose of this coding. Our results are robust to using only the local informant-based approach to jati coding (see Appendix Table A3.9).

To code jati congruence in places where jati itself remains uncoded, we abide by two simple rules. First, given that jati is defined very locally, we assume that an IAS officer cannot share the same jati as the MP under which they serve unless the two originate from

the same state. Our results are robust to loosening this definition of jati congruence to MPs and DOs from the same region or without regional constraint (see Tables A3.10 and A3.11). Second, we assume that IAS officers can only share the same jati as their MP if they also share the same caste category. Given these two additional rules alongside the jati coding we described above, we are able to determine jati congruence for 95% of IAS officers. So as not to exclude the remaining 3.3% of officers, we additionally include an indicator for whether jati congruence missing.

A2 Results with Covariate Coefficients

Table A2.1: Summary Statistics

	Mean	Std. Dev.	Min.	Max.
Project Sanctioned Within 75 days	0.68	0.46	0.00	1.00
Days to Project Sanction	64.48	72.42	0.00	365.00
Log Days to Project Sanction	3.47	1.40	0.00	5.90
MP-DO Caste Category Congruence	0.43	0.49	0.00	1.00
MP-DO Jati Congruence	0.01	0.10	0.00	1.00
MP-DO Speak the Same Language	0.57	0.50	0.00	1.00
MP-DO Are From the Same State	0.24	0.43	0.00	1.00
MP is General	0.55	0.50	0.00	1.00
MP is Other Backward Class	0.18	0.39	0.00	1.00
MP is Scheduled Caste	0.17	0.38	0.00	1.00
MP is Scheduled Tribe	0.10	0.29	0.00	1.00
MP is Female	0.11	0.31	0.00	1.00
DO is General	0.55	0.50	0.00	1.00
DO is Other Backward Class	0.25	0.43	0.00	1.00
DO is Scheduled Caste	0.12	0.33	0.00	1.00
DO is Scheduled Tribe	0.08	0.28	0.00	1.00
DO is Female	0.12	0.33	0.00	1.00
MP is from the Same Party as Chief Minister	0.53	0.50	0.00	1.00
Log Number of Pending Projects	3.73	1.47	-9.21	6.54
Log Project Cost/100,000 (Rupees)	0.29	1.15	-9.21	4.61
Log Days Under Previous District Officer	0.00	0.14	0.00	5.20
BIMARU States	0.34	0.47	0.00	1.00
Southern States	0.24	0.43	0.00	1.00
States Where OBC Reservations Implemented After 1993	0.50	0.50	0.00	1.00

Table A2.2: Balance Tests for Caste Category Congruence against District and MP Characteristics

	Urbanization rate	Literacy rate	% Scheduled Tribes	% Scheduled Castes	Monsoon shock	Female MP	Graduate MP	Criminal MP	Congress MP	BJP MP	Ruling party MP	MP vote margin
Panel A: Random DO Allocation States												
Caste Category Congruence	0.096	-0.036	-0.008	-0.079	-0.080	-0.076	0.027	0.123	-0.123	0.112	-0.119	0.017
	(0.096)	(0.059)	(0.040)	(0.087)	(0.174)	(0.099)	(0.106)	(0.104)	(0.090)	(0.075)	(0.087)	(0.098)
Jati Congruence	-0.822	-0.302	0.279	0.318	-1.627	0.724	-0.065	0.774	-0.026	-0.061	-0.025	-0.345
	(0.396)**	(0.243)	(0.165)*	(0.358)	(0.649)**	(0.410)*	(0.431)	(0.422)*	(0.373)	(0.309)	(0.360)	(0.405)
Jati Missing	-0.610	-0.369	0.151	0.463	0.576	0.216	0.265	-0.234	0.151	-0.244	0.146	-0.234
	(0.222)***	(0.136)***	(0.092)	(0.200)**	(0.393)	(0.229)	(0.247)	(0.242)	(0.209)	(0.173)	(0.201)	(0.227)
N	446	446	446	446	127	450	429	429	450	450	450	450
R-Squared	0.067	0.461	0.615	0.356	0.174	0.035	0.034	0.065	0.320	0.441	0.320	0.016
Panel B: Early Career DOs												
Caste Category Congruence	0.149	-0.037	-0.080	-0.099	0.074	-0.136	0.010	0.049	-0.069	0.094	-0.066	-0.019
	(0.066)**	(0.055)	(0.053)	(0.058)*	(0.134)	(0.072)*	(0.075)	(0.073)	(0.065)	(0.053)*	(0.063)	(0.071)
Jati Congruence	-0.086	0.401	-0.293	-0.058	-1.210	-0.035	-0.024	0.573	-0.158	-0.235	-0.153	-0.131
	(0.245)	(0.202)**	(0.197)	(0.214)	(0.508)**	(0.270)	(0.274)	(0.265)**	(0.243)	(0.196)	(0.234)	(0.265)
Jati Missing	-0.132	-0.168	0.103	0.124	0.500	0.434	0.176	-0.274	0.064	-0.214	0.062	-0.090
	(0.162)	(0.133)	(0.130)	(0.141)	(0.423)	(0.178)**	(0.185)	(0.178)	(0.160)	(0.129)*	(0.155)	(0.175)
N	829	829	829	829	243	849	807	807	849	849	849	849
R-Squared	0.209	0.512	0.539	0.467	0.204	0.077	0.054	0.099	0.294	0.508	0.294	0.133
Panel C: Early Career DOs in Random DO Allocation States												
Caste Category Congruence	0.097	-0.120	0.015	-0.085	-0.217	-0.158	0.025	0.062	-0.158	0.168	-0.153	0.013
	(0.109)	(0.073)	(0.048)	(0.101)	(0.253)	(0.113)	(0.125)	(0.119)	(0.104)	(0.084)**	(0.101)	(0.116)
Jati Congruence	-0.983	-0.233	0.204	0.056	-1.417	0.301	-0.211	0.983	0.125	-0.225	0.120	-0.462
	(0.424)**	(0.285)	(0.187)	(0.392)	(0.703)**	(0.442)	(0.480)	(0.455)**	(0.409)	(0.331)	(0.394)	(0.456)
Jati Missing	-0.640	-0.334	0.181	0.498	0.761	0.327	0.293	-0.273	0.225	-0.429	0.217	-0.263
	(0.235)***	(0.158)**	(0.103)*	(0.217)**	(0.447)*	(0.244)	(0.273)	(0.258)	(0.226)	(0.183)**	(0.218)	(0.252)
N	332	332	332	332	80	335	318	318	335	335	335	335
R-Squared	0.107	0.443	0.618	0.420	0.240	0.039	0.033	0.090	0.353	0.491	0.353	0.023

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fiscal year and state fixed effects. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A2.3: Caste Congruence and Bureaucratic Performance

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.036	-0.005	-0.006	0.017
	(0.022)	(0.020)	(0.019)*	(0.024)	(0.021)	(0.028)
Jati Congruence	0.005	0.168	0.135	0.208	0.146	0.315
	(0.106)	(0.075)**	(0.069)**	(0.172)	(0.077)*	(0.201)
Jati Missing	0.069	0.033	0.032	-0.056	-0.069	-0.139
	(0.052)	(0.048)	(0.046)	(0.050)	(0.057)	(0.060)**
MP is OBC	-0.070	-0.010	-0.005	0.092	-0.048	0.118
	(0.054)	(0.058)	(0.055)	(0.076)	(0.071)	(0.100)
MP is SC	-0.032	0.051	0.050	0.032	0.032	0.066
	(0.042)	(0.036)	(0.035)	(0.028)	(0.041)	(0.047)
MP is ST	-0.053	0.096	0.101	0.200	0.086	0.261
	(0.052)	(0.042)**	(0.042)**	(0.035)***	(0.059)	(0.060)***
DO is OBC	-0.006	-0.017	-0.028	0.055	-0.014	0.005
	(0.026)	(0.022)	(0.022)	(0.032)*	(0.024)	(0.037)
DO is SC	0.011	-0.056	-0.058	-0.019	-0.038	0.029
	(0.032)	(0.024)**	(0.024)**	(0.031)	(0.029)	(0.045)
DO is ST	0.079	0.021	0.021	-0.010	-0.011	-0.031
	(0.059)	(0.035)	(0.035)	(0.056)	(0.032)	(0.080)
MP is Female	0.039	0.027	0.032	0.048	0.037	0.067
	(0.029)	(0.027)	(0.027)	(0.034)	(0.030)	(0.037)*
DO is Female	-0.084	-0.026	-0.023	0.003	-0.034	0.008
	(0.034)**	(0.026)	(0.026)	(0.033)	(0.029)	(0.033)
MLA-MP same party	0.042	0.030	0.033	0.007	0.031	0.024
	(0.020)**	(0.017)*	(0.017)**	(0.021)	(0.018)*	(0.022)
Log number of pending projects	-0.028	-0.003	-0.002	0.002	0.002	0.004
	(0.004)***	(0.002)	(0.002)	(0.004)	(0.002)	(0.004)
Log amount sanctioned for project	-0.020	-0.002	-0.002	-0.004	-0.004	-0.005
	(0.004)***	(0.003)	(0.003)	(0.004)	(0.003)	(0.005)
Log number of days project sat on desk of previous DO	-0.027	-0.052	-0.053		-0.055	
	(0.017)	(0.026)*	(0.027)**		(0.028)**	
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
Caste Category Congruence	0.024	0.044	0.056	0.088	0.082	0.122
	(0.044)	(0.031)	(0.031)*	(0.036)**	(0.037)**	(0.045)***
Caste Category Congruence X BIMARU	-0.112	-0.141	-0.160	-0.135	-0.137	-0.164
	(0.052)**	(0.035)***	(0.036)***	(0.043)***	(0.042)***	(0.052)***
Caste Category Congruence X Other states	0.019	-0.032	-0.053		-0.092	
	(0.055)	(0.042)	(0.042)		(0.055)*	
Jati Congruence	0.009	0.170	0.139	0.220	0.142	0.299
	(0.101)	(0.074)**	(0.069)**	(0.169)	(0.079)*	(0.201)
Jati Missing	0.071	0.021	0.019	-0.080	-0.096	-0.144
	(0.050)	(0.048)	(0.047)	(0.045)*	(0.060)	(0.059)**
MP is OBC	-0.086	-0.015	-0.014	0.091	-0.061	0.114
	(0.055)	(0.059)	(0.056)	(0.075)	(0.072)	(0.101)
MP is SC	-0.028	0.062	0.059	0.037	0.031	0.065
	(0.045)	(0.039)	(0.037)	(0.029)	(0.042)	(0.050)
MP is ST	-0.062	0.097	0.101	0.194	0.069	0.211
	(0.054)	(0.043)**	(0.043)**	(0.036)***	(0.061)	(0.067)***
DO is OBC	0.004	-0.003	-0.015	0.059	-0.012	0.004
	(0.026)	(0.022)	(0.022)	(0.031)*	(0.025)	(0.037)
DO is SC	0.000	-0.059	-0.061	-0.023	-0.036	0.037
	(0.032)	(0.025)**	(0.025)**	(0.030)	(0.029)	(0.043)
DO is ST	0.088	0.036	0.036	-0.003	0.004	-0.044
	(0.058)	(0.034)	(0.034)	(0.055)	(0.031)	(0.079)
MP is Female	0.042	0.026	0.029	0.037	0.030	0.028
	(0.029)	(0.028)	(0.027)	(0.034)	(0.030)	(0.038)
DO is Female	-0.082	-0.029	-0.027	-0.005	-0.041	-0.001
	(0.034)**	(0.026)	(0.026)	(0.033)	(0.029)	(0.033)
MLA-MP same party	0.040	0.031	0.035	0.013	0.033	0.025
	(0.019)**	(0.017)*	(0.017)**	(0.020)	(0.018)*	(0.022)
Log number of pending projects	-0.028	-0.003	-0.002	0.002	0.002	0.004
	(0.004)***	(0.002)	(0.002)	(0.004)	(0.002)	(0.004)
Log amount sanctioned for project	-0.020	-0.002	-0.002	-0.004	-0.004	-0.005
	(0.004)***	(0.003)	(0.003)	(0.004)	(0.003)	(0.005)
Log number of days project sat on desk of previous DO	-0.030	-0.043	-0.043		-0.049	
	(0.016)*	(0.029)	(0.029)		(0.029)*	
N	149156	149153	149153	54721	113889	42276
R-Squared	0.186	0.318	0.324	0.301	0.327	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the

Table A2.4: Caste Category Congruence Not a Proxy for Language or State Identity

	Sanctioned in 75 Days					
Caste Category Congruence	0.056	0.059	0.062	0.122	0.126	0.127
	(0.031)*	(0.031)*	(0.031)**	(0.045)***	(0.046)***	(0.046)***
Caste Category Congruence X BIMARU	-0.160	-0.162	-0.163	-0.164	-0.167	-0.168
	(0.036)***	(0.036)***	(0.036)***	(0.052)***	(0.052)***	(0.053)***
Caste Category Congruence X Other states	-0.053	-0.057	-0.059			
	(0.042)	(0.042)	(0.041)			
Jati Congruence	0.139	0.146	0.127	0.299	0.298	0.325
	(0.069)**	(0.070)**	(0.070)*	(0.201)	(0.201)	(0.203)
Speaks Same Language		-0.081	-0.079		-0.035	-0.044
		(0.029)***	(0.028)***		(0.040)	(0.040)
Speaks Same Language X BIMARU		0.123	0.109		0.060	0.077
		(0.044)***	(0.047)**		(0.063)	(0.064)
Speaks Same Language X Other states		0.076	0.039			
		(0.044)*	(0.054)			
From Same State			0.001			0.060
			(0.043)			(0.098)
From Same State X BIMARU			0.034			-0.082
			(0.051)			(0.105)
From Same State X Other states			0.069			
			(0.062)			
MP is OBC	-0.014	-0.011	-0.007	0.114	0.110	0.113
	(0.056)	(0.056)	(0.056)	(0.101)	(0.101)	(0.102)
MP is SC	0.059	0.060	0.057	0.065	0.064	0.062
	(0.037)	(0.037)	(0.037)	(0.050)	(0.050)	(0.051)
MP is ST	0.101	0.102	0.096	0.211	0.208	0.199
	(0.043)**	(0.043)**	(0.043)**	(0.067)***	(0.064)***	(0.066)***
DO is OBC	-0.015	-0.015	-0.016	0.004	0.009	0.010
	(0.022)	(0.022)	(0.022)	(0.037)	(0.038)	(0.038)
DO is SC	-0.061	-0.066	-0.072	0.037	0.031	0.026
	(0.025)**	(0.025)***	(0.026)***	(0.043)	(0.043)	(0.044)
DO is ST	0.036	0.035	0.032	-0.044	-0.048	-0.039
	(0.034)	(0.035)	(0.037)	(0.079)	(0.079)	(0.082)
MP is Female	0.029	0.033	0.029	0.028	0.032	0.026
	(0.027)	(0.027)	(0.027)	(0.038)	(0.037)	(0.037)
DO is Female	-0.027	-0.029	-0.030	-0.001	-0.004	-0.007
	(0.026)	(0.026)	(0.026)	(0.033)	(0.034)	(0.034)
Jati Missing	0.019	0.027	0.002	-0.144	-0.154	-0.149
	(0.047)	(0.049)	(0.051)	(0.059)**	(0.064)**	(0.067)**
MLA-MP same party	0.035	0.033	0.032	0.025	0.025	0.023
	(0.017)**	(0.016)**	(0.017)*	(0.022)	(0.021)	(0.022)
Log number of pending projects	-0.002	-0.002	-0.002	0.004	0.004	0.004
	(0.002)	(0.002)	(0.002)	(0.004)	(0.004)	(0.004)
Log amount sanctioned for project	-0.002	-0.002	-0.002	-0.005	-0.005	-0.005
	(0.003)	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)
Log number of days project sat on desk of previous DO	-0.043	-0.045	-0.046			
	(0.029)	(0.029)	(0.028)			
N	149153	149153	149153	42276	42276	42276
R-Squared	0.324	0.325	0.325	0.318	0.318	0.318
States	All	All	All	Random DO Allocation		
DOs	All	All	All	Early Career		
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A2.5: Congruence and Bureaucratic Performance by State History and Inequality

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	0.017	0.001	0.001	0.088	0.025	0.122
	(0.030)	(0.027)	(0.026)	(0.036)**	(0.028)	(0.045)***
Caste Category Congruence X Post-1993 Reservation	-0.067	-0.064	-0.071	-0.135	-0.067	-0.164
	(0.039)*	(0.033)*	(0.032)**	(0.043)***	(0.036)*	(0.052)***
Jati Congruence	0.013	0.184	0.153	0.220	0.151	0.299
	(0.102)	(0.075)**	(0.069)**	(0.169)	(0.077)*	(0.201)
Jati Missing	0.083	0.034	0.033	-0.080	-0.066	-0.144
	(0.050)*	(0.048)	(0.046)	(0.045)*	(0.058)	(0.059)**
MP is OBC	-0.093	-0.023	-0.019	0.091	-0.058	0.114
	(0.052)*	(0.060)	(0.057)	(0.075)	(0.073)	(0.101)
MP is SC	-0.040	0.041	0.040	0.037	0.023	0.065
	(0.043)	(0.037)	(0.036)	(0.029)	(0.042)	(0.050)
MP is ST	-0.066	0.095	0.101	0.194	0.077	0.211
	(0.052)	(0.042)**	(0.042)**	(0.036)***	(0.060)	(0.067)***
DO is OBC	-0.006	-0.014	-0.024	0.059	-0.014	0.004
	(0.026)	(0.021)	(0.022)	(0.031)*	(0.024)	(0.037)
DO is SC	0.006	-0.048	-0.050	-0.023	-0.025	0.037
	(0.031)	(0.023)**	(0.024)**	(0.030)	(0.028)	(0.043)
DO is ST	0.063	0.010	0.009	-0.003	-0.019	-0.044
	(0.053)	(0.035)	(0.034)	(0.055)	(0.031)	(0.079)
MP is Female	0.048	0.025	0.031	0.037	0.034	0.028
	(0.029)	(0.027)	(0.027)	(0.034)	(0.031)	(0.038)
DO is Female	-0.067	-0.016	-0.014	-0.005	-0.021	-0.001
	(0.032)**	(0.026)	(0.025)	(0.033)	(0.028)	(0.033)
MLA-MP same party	0.044	0.038	0.041	0.013	0.037	0.025
	(0.019)**	(0.016)**	(0.016)**	(0.020)	(0.018)**	(0.022)
Log number of pending projects	-0.027	-0.003	-0.002	0.002	0.002	0.004
	(0.004)***	(0.002)	(0.002)	(0.004)	(0.002)	(0.004)
Log amount sanctioned for project	-0.021	-0.003	-0.002	-0.004	-0.004	-0.005
	(0.004)***	(0.003)	(0.003)	(0.004)	(0.003)	(0.005)
Log number of days project sat on desk of previous DO	-0.032	-0.045	-0.046		-0.049	
	(0.015)**	(0.028)	(0.029)		(0.029)*	
ME of Caste Congruence in Post-1993 Reservation States	-0.050	-0.062	-0.070	-0.047	-0.042	-0.042
	(0.029)*	(0.024)***	(0.023)***	(0.028)*	(0.026)	(0.032)
N	148339	148337	148337	54721	113296	42276
R-Squared	0.190	0.318	0.324	0.301	0.327	0.318
Panel B:						
Caste Category Congruence	0.121	0.044	0.068	0.265	0.040	0.368
	(0.010)***	(0.013)***	(0.013)***	(0.025)***	(0.018)**	(0.031)***
Caste Category Congruence X Intra-category Inequality	-0.480	-0.280	-0.374	-0.865	-0.178	-1.146
	(0.035)***	(0.043)***	(0.043)***	(0.077)***	(0.059)***	(0.097)***
Jati Congruence	0.010	0.181	0.150	0.211	0.149	0.279
	(0.013)	(0.016)***	(0.016)***	(0.032)***	(0.020)***	(0.043)***
MP is OBC	-0.080	-0.019	-0.015	0.093	-0.052	0.103
	(0.008)***	(0.014)	(0.014)	(0.023)***	(0.019)***	(0.031)***
MP is SC	-0.036	0.043	0.042	0.035	0.026	0.059
	(0.005)***	(0.007)***	(0.007)***	(0.011)***	(0.010)**	(0.016)***
MP is ST	-0.062	0.098	0.104	0.200	0.079	0.217
	(0.007)***	(0.011)***	(0.011)***	(0.014)***	(0.015)***	(0.021)***
DO is OBC	-0.003	-0.014	-0.024	0.064	-0.012	0.014
	(0.004)	(0.005)***	(0.005)***	(0.008)***	(0.006)*	(0.011)
DO is SC	0.019	-0.047	-0.049	-0.019	-0.023	0.039
	(0.005)***	(0.006)***	(0.006)***	(0.009)**	(0.008)***	(0.012)***
DO is ST	0.078	0.026	0.029	-0.003	-0.006	-0.054
	(0.007)***	(0.009)***	(0.009)***	(0.019)	(0.012)	(0.028)*
MP is Female	0.041	0.024	0.030	0.034	0.033	0.025
	(0.004)***	(0.007)***	(0.007)***	(0.011)***	(0.008)***	(0.014)*
DO is Female	-0.064	-0.014	-0.012	-0.003	-0.019	0.000
	(0.004)***	(0.005)***	(0.005)**	(0.010)	(0.006)***	(0.012)
MLA-MP same party	0.048	0.034	0.036	0.011	0.035	0.023
	(0.003)***	(0.004)***	(0.004)***	(0.005)**	(0.005)***	(0.007)***
Log number of pending projects	-0.027	-0.003	-0.002	0.002	0.002	0.004
	(0.001)***	(0.001)***	(0.001)**	(0.001)*	(0.001)**	(0.001)***
Log amount sanctioned for project	-0.020	-0.003	-0.002	-0.004	-0.005	-0.005
	(0.001)***	(0.001)**	(0.001)**	(0.002)***	(0.001)***	(0.002)***
Log number of days project sat on desk of previous DO	-0.027	-0.047	-0.049		-0.052	
	(0.008)***	(0.012)***	(0.012)***		(0.012)***	
ME of Caste Congruence in States with Max Inequality						
N	148315	148313	148313	54721	113272	42276
R-Squared	0.187	0.318	0.324	0.301	0.326	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

A3 Robustness Specifications

Table A3.1: Caste Congruence and Bureaucratic Performance (Days to Sanction)

	Log days to sanction					
Caste Category Congruence	0.009	0.085	0.077	-0.062	-0.004	-0.127
	(0.084)	(0.071)	(0.071)	(0.077)	(0.071)	(0.083)
Jati Congruence	-0.008	0.013	0.070	-0.098	0.030	-0.691
	(0.247)	(0.193)	(0.175)	(0.277)	(0.226)	(0.329)**
N	144656	144651	144651	53484	110351	41212
R-Squared	0.259	0.458	0.462	0.440	0.473	0.442
Caste Category Congruence	0.062	-0.052	-0.074	-0.260	-0.219	-0.353
	(0.148)	(0.124)	(0.121)	(0.129)**	(0.114)*	(0.139)**
Caste Category Congruence X BIMARU	0.134	0.289	0.315	0.287	0.382	0.353
	(0.170)	(0.132)**	(0.132)**	(0.147)*	(0.147)***	(0.171)**
Jati Congruence	-0.008	0.017	0.076	-0.121	0.053	-0.653
	(0.234)	(0.193)	(0.176)	(0.274)	(0.229)	(0.334)*
N	144656	144651	144651	53484	110351	41212
R-Squared	0.262	0.458	0.463	0.441	0.474	0.443
ME of Caste Congruence in BIMARU	0.195	0.237	0.240	0.027	0.164	0.000
	(0.107)*	(0.091)**	(0.092)***	(0.087)	(0.101)	(0.100)
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing. Projects with approval times of more than 365 days dropped, however, results robust to their inclusion (available on request).

Table A3.2: Caste Congruence and Bureaucratic Performance: Excluding Imputed Category

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.007	-0.019	-0.021	-0.030	0.013	-0.013
	(0.029)	(0.028)	(0.028)	(0.035)	(0.029)	(0.045)
Jati Congruence	0.267	0.183	0.134	-0.167	0.134	-0.310
	(0.114)**	(0.129)	(0.121)	(0.137)	(0.107)	(0.165)*
N	83116	83110	83110	30032	65236	23451
R-Squared	0.196	0.315	0.321	0.294	0.330	0.294
Panel B:						
Caste Category Congruence	0.038	0.030	0.047	0.067	0.022	0.088
	(0.055)	(0.033)	(0.033)	(0.040)*	(0.042)	(0.059)
Caste Category Congruence X BIMARU	-0.142	-0.151	-0.176	-0.147	-0.102	-0.141
	(0.064)**	(0.053)***	(0.054)***	(0.052)***	(0.063)	(0.070)**
Jati Congruence	0.246	0.146	0.102	-0.211	0.099	-0.375
	(0.110)**	(0.125)	(0.118)	(0.133)	(0.103)	(0.156)**
N	83116	83110	83110	30032	65236	23451
R-Squared	0.202	0.317	0.323	0.295	0.331	0.295
ME of Caste Congruence in BIMARU	-0.104	-0.121	-0.129	-0.080	-0.080	-0.053
	(0.040)***	(0.047)***	(0.047)***	(0.044)*	(0.051)	(0.053)
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. Only district officers with official caste category data included.

Table A3.3: Caste Congruence and Bureaucratic Performance: Cox Hazard Model

	Sanction date					
Caste Category Congruence	-0.026	-0.067	-0.081	-0.034	-0.056	-0.009
	(0.054)	(0.060)	(0.060)	(0.085)	(0.082)	(0.099)
Jati Congruence	-0.068	0.486	0.401	0.151	0.672	0.386
	(0.193)	(0.188)***	(0.151)***	(0.278)	(0.141)***	(0.352)
N	136228	136228	136228	50936	105174	39875
Caste Category Congruence	0.095	0.177	0.195	0.215	0.126	0.230
	(0.121)	(0.108)	(0.112)*	(0.163)	(0.117)	(0.166)
Caste Category Congruence X BIMARU	-0.270	-0.438	-0.482	-0.352	-0.389	-0.361
	(0.135)**	(0.135)***	(0.139)***	(0.176)**	(0.177)**	(0.190)*
Jati Congruence	-0.046	0.492	0.409	0.167	0.646	0.362
	(0.185)	(0.180)***	(0.145)***	(0.276)	(0.147)***	(0.359)
N	136228	136228	136228	50936	105174	39875
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

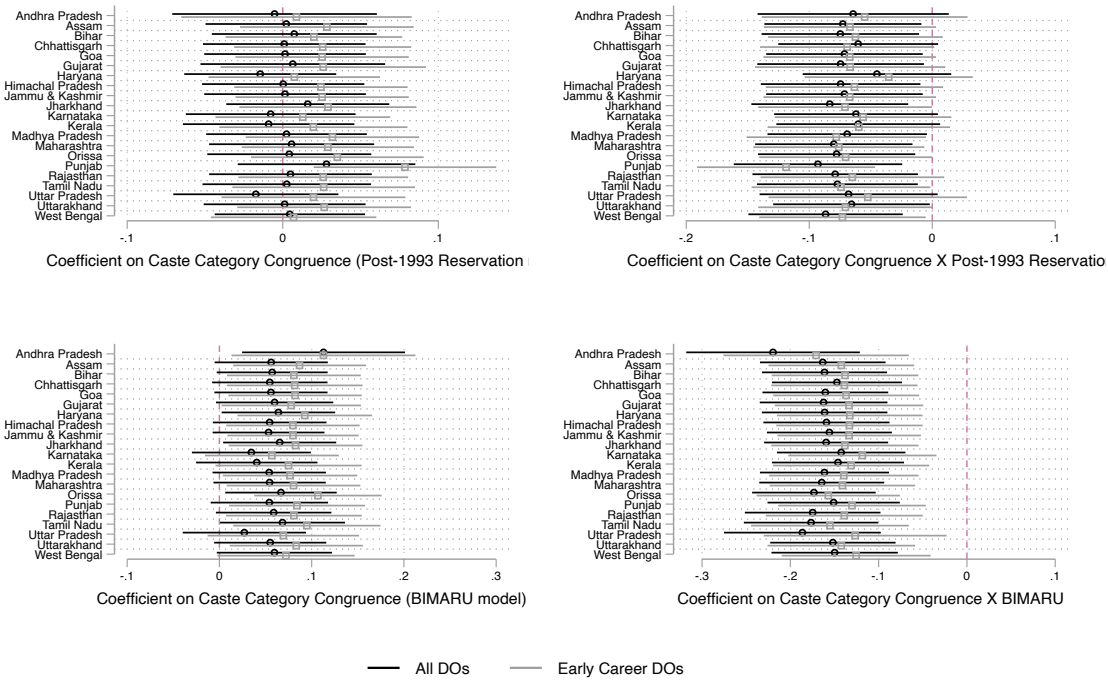
Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. Cox proportional hazard model estimates reported. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing. Projects with approval times of more than 365 days dropped, however, results robust to their inclusion (available on request).

Table A3.4: Caste Congruence and Bureaucratic Performance prior to 2005

	Sanctioned in 75 Days		
Panel A:			
Caste Category Congruence	-0.079	-0.123	-0.110
	(0.048)	(0.046)***	(0.047)**
N	21619	21617	21617
R-Squared	0.194	0.341	0.342
Panel B:			
Caste Category Congruence	0.237	0.028	0.004
	(0.098)**	(0.209)	(0.215)
Caste Category Congruence X BIMARU	-0.362	-0.158	-0.114
	(0.101)***	(0.228)	(0.233)
ME of Caste Congruence in BIMARU	-0.125	-0.130	-0.111
	(0.050)**	(0.053)**	(0.056)**
N	21619	21617	21617
R-Squared	0.212	0.341	0.342
States	All	All	All
DOs	All	All	All
Session Fixed Effects	✓		✓
Fiscal Year Fixed Effects	✓		✓
District Fixed Effects		✓	✓
Controls	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data for projects that were received prior to 2005. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing. Jati congruence is omitted because of minimal instances in the data but is included as a control.

Figure A3.1: Coefficient Estimates Removing States One-by-One



Note: Each coefficient represents the estimates from equation 2 for the sample with all DOs and early career DOs with session, fiscal year, and district fixed effects when running the equation removing data from the state on the y-axis.

Table A3.5: Caste Congruence and Bureaucratic Performance

	Sanctioned in 75 Days					
Panel A: BIMARU						
Caste Category Congruence	-0.094	-0.087	-0.097	-0.062	-0.044	-0.085
	(0.030)***	(0.029)***	(0.029)***	(0.030)**	(0.028)	(0.035)**
Jati Congruence	-0.055	0.074	0.086	0.188	0.092	0.307
	(0.098)	(0.138)	(0.133)	(0.167)	(0.117)	(0.220)
N	50219	50219	50219	27994	34243	19445
R-Squared	0.142	0.239	0.249	0.216	0.277	0.243
Panel B: Southern						
Caste Category Congruence	0.031	0.051	0.055	0.034	0.088	0.071
	(0.041)	(0.036)	(0.037)	(0.047)	(0.048)*	(0.064)
Jati Congruence						
N	35951	35951	35951	26727	31081	22831
R-Squared	0.309	0.428	0.436	0.417	0.422	0.407
Panel C: Other						
Caste Category Congruence	0.007	-0.022	-0.023		-0.036	
	(0.040)	(0.041)	(0.041)		(0.049)	
Jati Congruence	0.019	0.188	0.123		0.166	
	(0.194)	(0.099)*	(0.080)		(0.074)**	
N	62986	62983	62983		48565	
R-Squared	0.255	0.347	0.357		0.344	
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

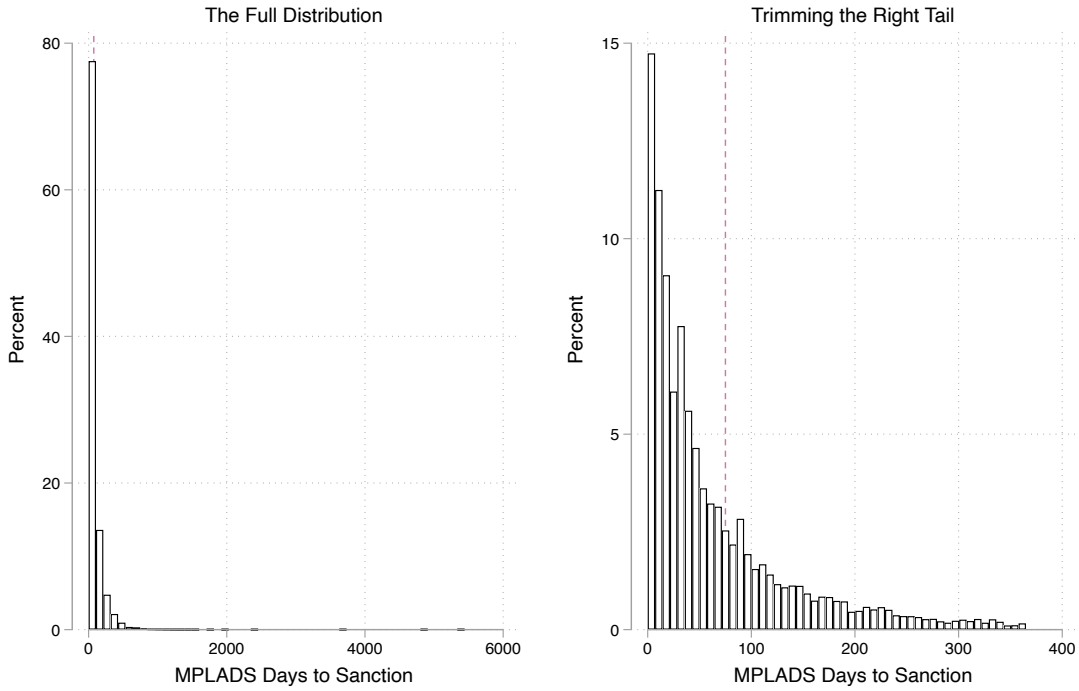
Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.6: Caste Congruence and Bureaucratic Performance

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.036	-0.005	-0.006	0.017
	(0.022)	(0.020)	(0.019)*	(0.024)	(0.021)	(0.028)
Jati Congruence	0.005	0.168	0.135	0.208	0.146	0.315
	(0.106)	(0.075)**	(0.069)**	(0.172)	(0.077)*	(0.201)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
Caste Category Congruence	0.026	0.082	0.098	0.077	0.103	0.129
	(0.046)	(0.031)***	(0.032)***	(0.039)*	(0.037)***	(0.051)**
Caste Category Congruence X BIMARU	-0.109	-0.184	-0.207	-0.120	-0.156	-0.171
	(0.054)**	(0.038)***	(0.039)***	(0.047)**	(0.043)***	(0.056)***
Jati Congruence	0.060	0.205	0.152	0.216	0.125	0.300
	(0.173)	(0.091)**	(0.082)*	(0.169)	(0.115)	(0.201)
Jati Congruence X BIMARU	-0.098	-0.076	-0.020		0.024	
	(0.206)	(0.155)	(0.144)		(0.153)	
ME of Caste Congruence in BIMARU	-0.083	-0.102	-0.110	-0.044	-0.053	-0.043
	(0.029)***	(0.027)***	(0.027)***	(0.028)	(0.027)**	(0.031)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.187	0.319	0.325	0.301	0.328	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Figure A3.2: Histogram of Days to Sanction



Note: Histogram on left shows full distribution of days to sanction and on the right shows the distribution conditioning on projects sanctioned within one year.

Table A3.7: Caste Congruence and Bureaucratic Performance - Standard Errors Clustered at State-Year

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.036	-0.005	-0.006	0.017
	(0.019)	(0.021)	(0.021)*	(0.029)	(0.020)	(0.024)
Jati Congruence	0.005	0.168	0.135	0.208	0.146	0.315
	(0.099)	(0.068)**	(0.056)**	(0.151)	(0.072)**	(0.169)*
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
Caste Category Congruence	0.024	0.044	0.056	0.088	0.082	0.122
	(0.027)	(0.036)	(0.036)	(0.039)**	(0.040)**	(0.045)***
Caste Category Congruence X BIMARU	-0.112	-0.141	-0.160	-0.135	-0.137	-0.164
	(0.040)***	(0.043)***	(0.044)***	(0.048)***	(0.045)***	(0.054)***
Jati Congruence	0.009	0.170	0.139	0.220	0.142	0.299
	(0.094)	(0.066)**	(0.056)**	(0.147)	(0.075)*	(0.171)*
ME of Caste Congruence in BIMARU	-0.088	-0.098	-0.104	-0.047	-0.055	-0.042
	(0.031)***	(0.033)***	(0.033)***	(0.035)	(0.025)**	(0.029)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.186	0.318	0.324	0.301	0.327	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include state-year clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.8: Caste Congruence and Bureaucratic Performance - Standard Errors Clustered at Dyad and State-Year

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.036	-0.005	-0.006	0.017
	(0.022)	(0.022)	(0.021)*	(0.029)	(0.020)	(0.024)
Jati Congruence	0.005	0.168	0.135	0.208	0.146	0.315
	(0.102)	(0.070)**	(0.059)**	(0.176)	(0.075)*	(0.194)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
Caste Category Congruence	0.024	0.044	0.056	0.088	0.082	0.122
	(0.036)	(0.033)	(0.033)*	(0.037)**	(0.037)**	(0.043)***
Caste Category Congruence X BIMARU	-0.112	-0.141	-0.160	-0.135	-0.137	-0.164
	(0.048)**	(0.040)***	(0.041)***	(0.047)***	(0.043)***	(0.054)***
Jati Congruence	0.009	0.170	0.139	0.220	0.142	0.299
	(0.097)	(0.069)**	(0.060)**	(0.172)	(0.078)*	(0.195)
ME of Caste Congruence in BIMARU	-0.088	-0.098	-0.104	-0.047	-0.055	-0.042
	(0.034)***	(0.032)***	(0.033)***	(0.036)	(0.025)**	(0.030)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.186	0.318	0.324	0.301	0.327	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad and state-year clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.9: Caste Congruence and Bureaucratic Performance - Jati determined only by local informant

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.010	-0.032	-0.035	-0.009	-0.004	0.018
	(0.022)	(0.019)*	(0.019)*	(0.024)	(0.021)	(0.028)
Jati Congruence	0.007	0.173	0.140	0.207	0.153	0.303
	(0.105)	(0.075)**	(0.069)**	(0.171)	(0.076)**	(0.201)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.327	0.316
Panel B:						
Caste Category Congruence	0.031	0.041	0.055	0.080	0.084	0.123
	(0.043)	(0.031)	(0.031)*	(0.036)**	(0.037)**	(0.045)***
Caste Category Congruence X BIMARU	-0.121	-0.140	-0.160	-0.131	-0.137	-0.164
	(0.052)**	(0.036)***	(0.037)***	(0.043)***	(0.042)***	(0.053)***
Jati Congruence	0.011	0.176	0.144	0.220	0.149	0.294
	(0.101)	(0.074)**	(0.069)**	(0.169)	(0.078)*	(0.201)
ME of Caste Congruence in BIMARU	-0.090	-0.099	-0.105	-0.051	-0.053	-0.041
	(0.029)***	(0.026)***	(0.026)***	(0.028)*	(0.027)**	(0.032)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.187	0.318	0.325	0.301	0.327	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Jati here uses data only provided through local informants and does not include our own additioinal coding of 18 DO jatis. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.10: Caste Congruence and Bureaucratic Performance - Jati Congruence Across State within Region

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	0.002	-0.007	-0.013	-0.001	0.017	0.025
	(0.023)	(0.023)	(0.022)	(0.026)	(0.022)	(0.027)
Jati Congruence (Cross-State, Within Region)	0.030	0.052	0.040	0.182	0.077	0.309
	(0.055)	(0.048)	(0.044)	(0.119)	(0.049)	(0.137)**
N	149156	149153	149153	54721	113889	42276
R-Squared	0.183	0.317	0.323	0.299	0.327	0.316
Panel B:						
Caste Category Congruence	0.042	0.069	0.079	0.084	0.099	0.122
	(0.044)	(0.030)**	(0.030)***	(0.037)**	(0.035)***	(0.045)***
Caste Category Congruence X BIMARU	-0.118	-0.145	-0.163	-0.125	-0.134	-0.153
	(0.052)**	(0.034)***	(0.035)***	(0.042)***	(0.040)***	(0.052)***
Jati Congruence (Cross-State, Within Region)	0.036	0.055	0.043	0.182	0.076	0.282
	(0.055)	(0.047)	(0.044)	(0.117)	(0.049)	(0.135)**
ME of Caste Congruence in BIMARU	-0.076	-0.076	-0.085	-0.041	-0.035	-0.032
	(0.031)**	(0.028)***	(0.028)***	(0.029)	(0.027)	(0.031)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.186	0.318	0.324	0.301	0.328	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Jati congruence is coded as one for MP-DO pairs that share the same jati and originate from the same region. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.11: Caste Congruence and Bureaucratic Performance - Jati Congruence Across State

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.001	0.003	-0.005	0.008	0.017	0.008
	(0.026)	(0.026)	(0.025)	(0.031)	(0.026)	(0.034)
Jati Congruence (Cross-State)	0.017	0.043	0.030	0.071	0.072	0.149
	(0.050)	(0.045)	(0.043)	(0.094)	(0.047)	(0.098)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.183	0.317	0.323	0.299	0.326	0.314
Caste Category Congruence	0.036	0.082	0.091	0.105	0.109	0.131
	(0.048)	(0.034)**	(0.034)***	(0.045)**	(0.039)***	(0.057)**
Caste Category Congruence X BIMARU	-0.116	-0.147	-0.165	-0.129	-0.137	-0.165
	(0.052)**	(0.034)***	(0.035)***	(0.044)***	(0.041)***	(0.057)***
Jati Congruence (Cross-State)	0.019	0.043	0.030	0.058	0.068	0.108
	(0.050)	(0.044)	(0.042)	(0.093)	(0.047)	(0.098)
ME of Caste Congruence in BIMARU	-0.080	-0.064	-0.074	-0.024	-0.028	-0.034
	(0.034)**	(0.031)**	(0.031)**	(0.032)	(0.030)	(0.036)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.186	0.318	0.324	0.300	0.327	0.316
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Jati congruence is coded as one for MP-DO pairs that share the same jati from any state. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.12: Caste Congruence and Bureaucratic Performance (Excluding 13th Session)

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	0.002	-0.019	-0.023	0.022	0.017	0.059
	(0.023)	(0.021)	(0.021)	(0.025)	(0.024)	(0.037)
Jati Congruence	0.080	0.211	0.177	0.305	0.163	0.317
	(0.114)	(0.072)***	(0.066)***	(0.149)**	(0.075)**	(0.200)
N	136008	136005	136005	45883	103799	35387
R-Squared	0.196	0.332	0.339	0.331	0.341	0.352
Panel B:						
Caste Category Congruence	0.033	0.045	0.056	0.075	0.077	0.107
	(0.044)	(0.032)	(0.033)*	(0.036)**	(0.039)**	(0.046)**
Caste Category Congruence X BIMARU	-0.117	-0.138	-0.156	-0.089	-0.091	-0.094
	(0.055)**	(0.039)***	(0.040)***	(0.043)**	(0.044)**	(0.047)**
Jati Congruence	0.082	0.219	0.186	0.319	0.163	0.312
	(0.111)	(0.072)***	(0.067)***	(0.148)**	(0.077)**	(0.201)
ME of Caste Congruence in BIMARU	-0.084	-0.092	-0.101	-0.014	-0.014	0.012
	(0.034)**	(0.032)***	(0.032)***	(0.031)	(0.031)	(0.041)
N	136008	136005	136005	45883	103799	35387
R-Squared	0.199	0.334	0.340	0.332	0.342	0.353
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 14th, and 15th sessions. Data from the 13th session dropped. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.13: Caste Congruence and Bureaucratic Performance by Single District Constituencies

	Sanctioned in 75 Days	
Caste Category Congruence	-0.036	0.053
	(0.019)*	(0.031)*
Caste Category Congruence X BIMARU		-0.161
		(0.036)***
Caste Category Congruence X PC has One District	-0.002	0.029
	(0.094)	(0.048)
BIMARU X PC has One District		0.172
		(0.093)*
Caste Category Congruence X BIMARU X PC has One District		0.075
		(0.081)
Parliamentary Constituency has Only One District	0.272	-0.164
	(0.184)	(0.049)***
Jati Congruence	0.134	0.140
	(0.069)*	(0.069)**
N	149153	149153
R-Squared	0.323	0.325
States	All	All
DOs	All	All
Session Fixed Effects	✓	✓
Fiscal Year Fixed Effects	✓	✓
District Fixed Effects	✓	✓
Controls	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.14: Caste Congruence and Bureaucratic Performance with MP Fixed Effects

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.015	-0.012	0.020	0.019
	(0.022)	(0.020)	(0.023)	(0.027)	(0.023)	(0.032)
Jati Congruence	0.005	0.168	0.136	0.383	0.064	0.499
	(0.106)	(0.075)**	(0.070)*	(0.186)**	(0.088)	(0.323)
N	149156	149153	149142	54718	113876	42271
R-Squared	0.184	0.317	0.361	0.336	0.352	0.351
Panel B:						
Caste Category Congruence	0.024	0.044	0.058	0.051	0.065	0.068
	(0.044)	(0.031)	(0.033)*	(0.043)	(0.040)	(0.054)
Caste Category Congruence X BIMARU	-0.112	-0.141	-0.149	-0.088	-0.108	-0.075
	(0.052)**	(0.035)***	(0.042)***	(0.050)*	(0.049)**	(0.060)
Jati Congruence	0.009	0.170	0.130	0.395	0.048	0.497
	(0.101)	(0.074)**	(0.072)*	(0.185)**	(0.088)	(0.331)
ME of Caste Congruence in BIMARU	-0.088	-0.098	-0.091	-0.036	-0.043	-0.008
	(0.029)***	(0.027)***	(0.033)***	(0.031)	(0.035)	(0.037)
N	149156	149153	149142	54718	113876	42271
R-Squared	0.186	0.318	0.362	0.337	0.353	0.352
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
MP Fixed Effects			✓	✓	✓	✓
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DP jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A3.15: Caste Congruence and Bureaucratic Performance with DO Fixed Effects

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.009	-0.031	-0.111	-0.078	0.020	-0.109
	(0.022)	(0.020)	(0.029)***	(0.027)***	(0.023)	(0.031)***
Jati Congruence	0.005	0.168	0.390	-0.327	0.064	-0.149
	(0.106)	(0.075)**	(0.062)***	(0.083)***	(0.088)	(0.100)
N	149156	149153	148407	54699	113876	42258
R-Squared	0.184	0.317	0.384	0.357	0.352	0.366
Panel B:						
Caste Category Congruence	0.024	0.044	-0.069	-0.065	-0.072	0.068
	(0.044)	(0.031)	(0.038)*	(0.033)**	(0.034)**	(0.054)
Caste Category Congruence X BIMARU	-0.112	-0.141	-0.057	-0.023	-0.008	-0.075
	(0.052)**	(0.035)***	(0.052)	(0.050)	(0.063)	(0.060)
Jati Congruence	0.009	0.170	0.389	-0.332	0.367	0.497
	(0.101)	(0.074)**	(0.062)***	(0.085)***	(0.049)***	(0.331)
ME of Caste Congruence in BIMARU	-0.088	-0.098	-0.125	-0.088	-0.080	-0.008
	(0.029)***	(0.027)***	(0.043)***	(0.039)**	(0.056)	(0.037)
N	149156	149153	148407	54699	113149	42271
R-Squared	0.186	0.318	0.384	0.357	0.373	0.352
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
DO Fixed Effects			Yes	Yes	Yes	Yes
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DP jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

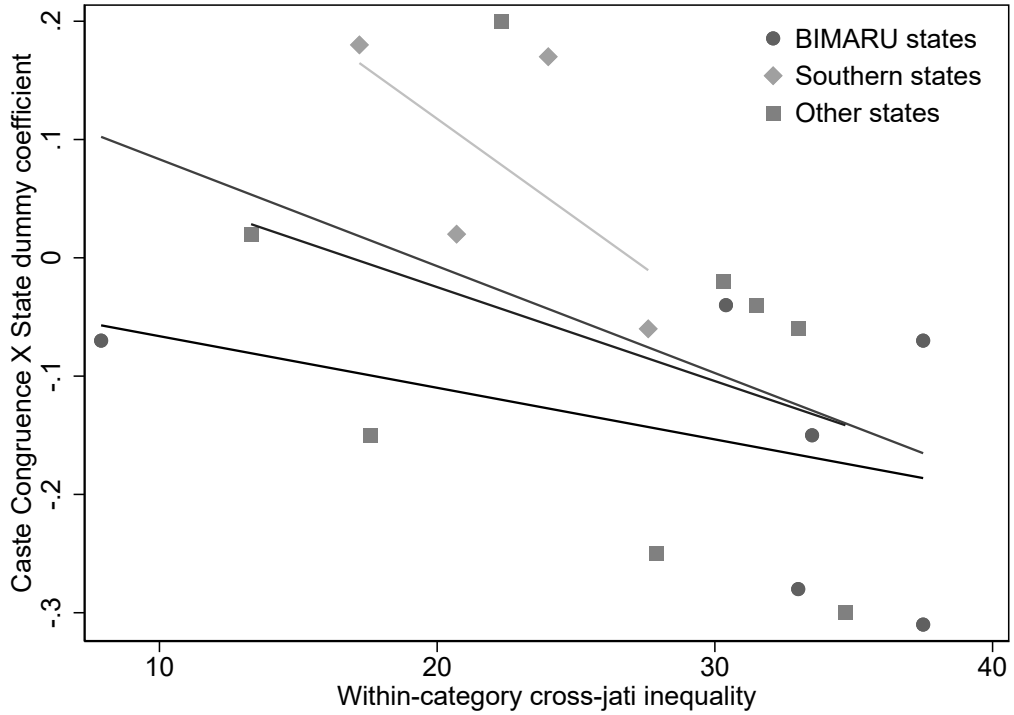
Table A3.16: Caste Congruence and Bureaucratic Performance Collapsed to Dyad-Level

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.024	-0.007	-0.008	-0.002	0.012	-0.002
	(0.022)	(0.021)	(0.021)	(0.029)	(0.024)	(0.033)
Jati Congruence	0.110	0.155	0.137	0.092	0.178	0.125
	(0.076)	(0.086)*	(0.084)	(0.133)	(0.083)**	(0.169)
N	2436	2414	2414	988	1813	747
R-Squared	0.266	0.523	0.538	0.515	0.597	0.562
Panel B:						
Caste Category Congruence	-0.006	0.052	0.064	0.090	0.091	0.109
	(0.037)	(0.032)	(0.032)**	(0.045)**	(0.038)**	(0.054)**
Caste Category Congruence X BIMARU	-0.036	-0.090	-0.105	-0.123	-0.116	-0.159
	(0.045)	(0.039)**	(0.039)***	(0.051)**	(0.046)**	(0.062)**
Jati Congruence	0.106	0.159	0.143	0.097	0.172	0.104
	(0.075)	(0.086)*	(0.084)*	(0.131)	(0.084)**	(0.174)
ME of Caste Congruence in BIMARU	-0.042	-0.038	-0.040	-0.033	-0.024	-0.051
	(0.029)	(0.028)	(0.028)	(0.033)	(0.032)	(0.038)
N	2436	2414	2414	988	1813	747
R-Squared	0.268	0.524	0.540	0.518	0.599	0.567
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DP jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

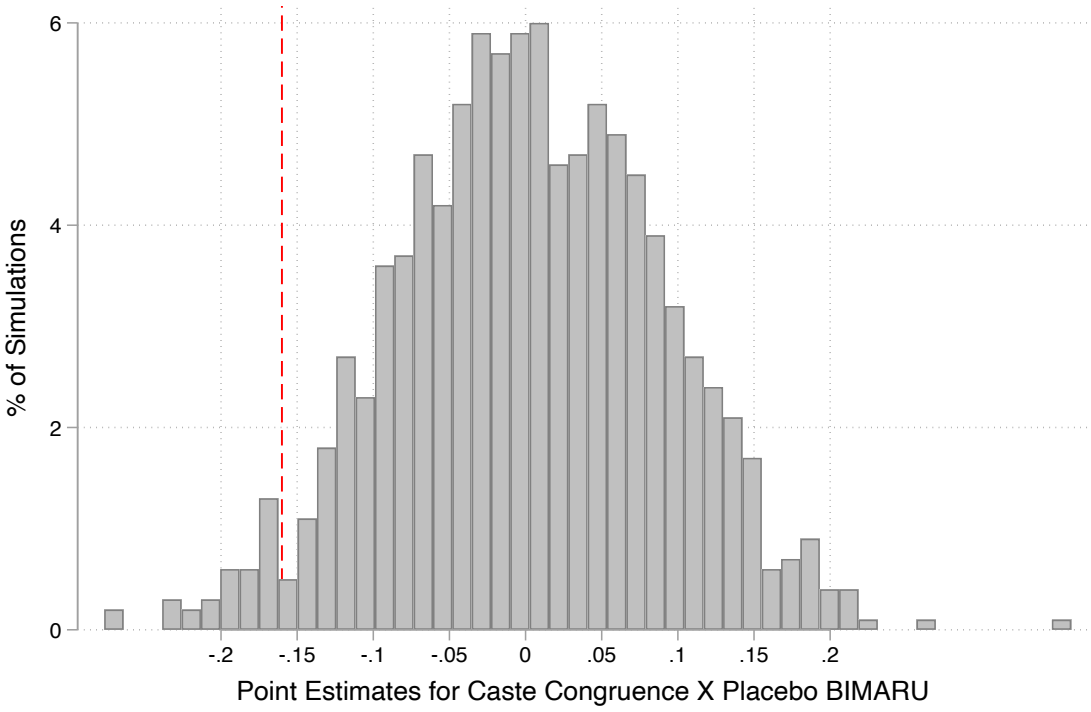
A4 Testing Alternative Hypotheses

Figure A4.1: Estimated Effects of Caste Congruence by State versus Within-Category Cross-Jati Inequality



Note: Each coefficient represents the estimates from equation 2 with the caste congruence dummy interacted with state dummies. Measures of within-category cross-jati inequality are from Table 3

Figure A4.2: Distribution of Estimated Coefficients of Caste Congruence X BIMARU for 1000 simulated placebo BIMARU regions



Note: Histogram generated from 1000 simulations where, in each simulation, states were randomly allocated to "regions" of the same size as the actual regions. This generates a placebo BIMARU categorization for each simulation. The figure plots the estimated coefficients on the interaction between caste congruence and the placebo BIMARU region using the fully specified fixed effects specification on the entire sample. The line at -0.16 represents the estimated coefficient from the actually observed regions. Only 3.6% of simulated samples attain a coefficient as large or larger as our estimated coefficient.

Table A4.1: Caste Congruence and Bureaucratic Performance

	Sanctioned in 75 Days					
Panel A:						
GEN Category Congruence	-0.016	0.002	-0.006	0.005	-0.017	-0.016
	(0.044)	(0.032)	(0.031)	(0.042)	(0.037)	(0.055)
OBC Category Congruence	0.007	-0.078	-0.075	-0.049	0.012	0.038
	(0.065)	(0.052)	(0.051)	(0.063)	(0.058)	(0.065)
SC/ST Category Congruence	-0.014	-0.058	-0.063	0.022	0.000	0.074
	(0.053)	(0.042)	(0.041)	(0.058)	(0.050)	(0.079)
Jati Congruence	0.005	0.166	0.134	0.219	0.147	0.322
	(0.106)	(0.075)**	(0.069)*	(0.174)	(0.077)*	(0.195)*
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
GEN Category Congruence	-0.005	0.063	0.073	0.098	0.076	0.119
	(0.061)	(0.039)	(0.039)*	(0.054)*	(0.048)	(0.068)*
OBC Category Congruence	0.147	0.065	0.081	-0.055	0.125	-0.139
	(0.103)	(0.087)	(0.090)	(0.066)	(0.089)	(0.113)
SC/ST Category Congruence	0.036	-0.017	-0.009	0.090	0.082	0.097
	(0.075)	(0.104)	(0.102)	(0.102)	(0.101)	(0.123)
Jati Congruence	0.005	0.158	0.125	0.220	0.111	0.270
	(0.100)	(0.074)**	(0.069)*	(0.168)	(0.079)	(0.187)
GEN Category Congruence X BIMARU	-0.105	-0.165	-0.192	-0.153	-0.172	-0.227
	(0.060)*	(0.042)***	(0.043)***	(0.058)***	(0.049)***	(0.069)***
OBC Category Congruence X BIMARU	-0.188	-0.141	-0.148	0.008	-0.081	0.202
	(0.113)*	(0.098)	(0.100)	(0.082)	(0.093)	(0.121)*
SC/ST Category Congruence X BIMARU	-0.073	0.015	0.013	-0.101	-0.032	-0.078
	(0.084)	(0.124)	(0.120)	(0.118)	(0.130)	(0.140)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.188	0.319	0.325	0.301	0.328	0.319
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A4.2: Caste Congruence and Bureaucratic Performance Conditional on MP-Chief Minister Alignment

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.018	-0.065	-0.071	-0.053	-0.052	-0.033
	(0.030)	(0.025)**	(0.025)***	(0.030)*	(0.028)*	(0.035)
MP-MLA Aligned	0.034	0.004	0.007	-0.035	-0.008	-0.028
	(0.025)	(0.020)	(0.020)	(0.023)	(0.024)	(0.029)
Caste Category Congruence X MP-Chief Minister Aligned	0.016	0.060	0.061	0.105	0.082	0.115
	(0.038)	(0.028)**	(0.028)**	(0.035)***	(0.031)***	(0.040)***
Jati Congruence	0.005	0.162	0.130	0.198	0.136	0.272
	(0.106)	(0.073)**	(0.067)*	(0.167)	(0.073)*	(0.200)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.301	0.327	0.317
Panel B:						
Caste Category Congruence	-0.051	-0.010	-0.002	-0.022	0.006	-0.013
	(0.057)	(0.036)	(0.035)	(0.044)	(0.042)	(0.059)
Caste Category Congruence X BIMARU	-0.034	-0.108	-0.126	-0.033	-0.046	-0.027
	(0.072)	(0.047)**	(0.046)***	(0.056)	(0.052)	(0.069)
Caste Category Congruence X MP-Chief Minister Aligned	0.136	0.085	0.091	0.181	0.137	0.217
	(0.073)*	(0.042)**	(0.041)**	(0.048)***	(0.050)***	(0.059)***
BIMARU X MP-Chief Minister Aligned	0.129	0.049	0.055	0.109	0.076	0.163
	(0.065)**	(0.040)	(0.040)	(0.045)**	(0.048)	(0.061)***
Caste Category Congruence X BIMARU X MP-Chief Minister Aligned	-0.134	-0.036	-0.038	-0.149	-0.176	-0.202
	(0.091)	(0.066)	(0.066)	(0.068)**	(0.069)**	(0.083)**
MP-Chief Minister Aligned	-0.055	-0.035	-0.035	-0.098	-0.044	-0.128
	(0.054)	(0.030)	(0.030)	(0.037)***	(0.039)	(0.051)**
Jati Congruence	0.008	0.167	0.137	0.209	0.130	0.274
	(0.101)	(0.073)**	(0.068)**	(0.164)	(0.077)*	(0.198)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.188	0.319	0.325	0.303	0.328	0.320
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A4.3: Caste Congruence and Bureaucratic Performance with DO Dominance

	Sanctioned in 75 Days					
Panel A:						
MP if Higher Caste Category than DO	0.006	0.008	0.003	0.002	-0.033	-0.074
	(0.043)	(0.030)	(0.030)	(0.035)	(0.035)	(0.056)
DO is Higher Caste Category than MP	0.012	0.053	0.068	0.008	0.045	0.032
	(0.044)	(0.033)	(0.032)**	(0.038)	(0.038)	(0.050)
Jati Congruence	0.005	0.168	0.135	0.208	0.140	0.294
	(0.106)	(0.075)**	(0.068)**	(0.172)	(0.077)*	(0.204)
P-Value MP Dominance = DO Dominance	0.941	0.360	0.182	0.921	0.187	0.239
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.317	0.323	0.299	0.326	0.316
Panel B:						
MP is Higher Caste Category than DO	-0.008	-0.034	-0.050	-0.042	-0.065	-0.108
	(0.070)	(0.045)	(0.047)	(0.049)	(0.057)	(0.082)
DO is Higher Caste Category than MP	-0.033	-0.032	-0.036	-0.104	-0.068	-0.109
	(0.062)	(0.042)	(0.041)	(0.048)**	(0.048)	(0.070)
MP is Higher Caste Category X BIMARU	0.107	0.084	0.092	0.060	0.034	0.084
	(0.073)	(0.053)	(0.054)*	(0.065)	(0.065)	(0.084)
DO is Higher Caste Category X BIMARU	0.104	0.171	0.197	0.177	0.190	0.201
	(0.060)*	(0.040)***	(0.041)***	(0.056)***	(0.048)***	(0.069)***
Jati Congruence	0.010	0.168	0.137	0.214	0.129	0.269
	(0.104)	(0.074)**	(0.069)**	(0.169)	(0.081)	(0.206)
P-Value MP Dominance = DO Dominance in South	0.801	0.968	0.818	0.348	0.969	0.999
P-Value MP Dominance = DO Dominance in BIMARU	0.975	0.148	0.087	0.176	0.035	0.306
N	149156	149153	149153	54721	113889	42276
R-Squared	0.187	0.318	0.325	0.301	0.328	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

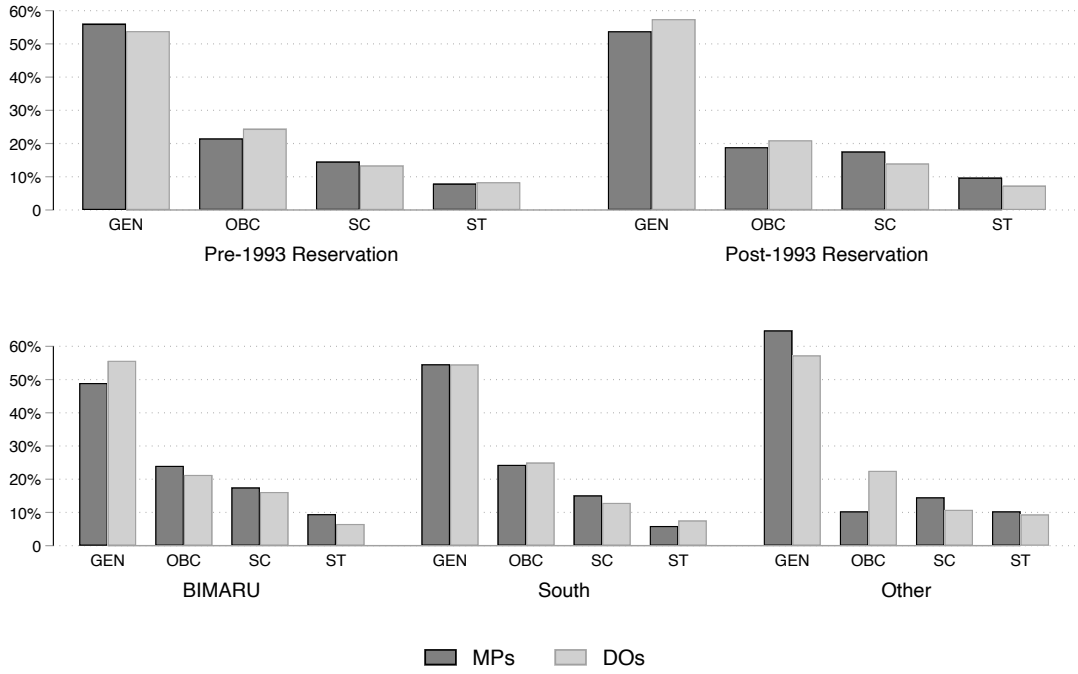
Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A4.4: Caste Congruence and Bureaucratic Performance Conditional on 1991 District Characteristics

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	0.236	0.096	0.158	0.331	0.428	0.506
	(0.340)	(0.272)	(0.272)	(0.301)	(0.290)	(0.355)
Caste Category Congruence X Literacy rate	0.342	0.438	0.440	-0.225	0.514	0.248
	(0.221)	(0.183)**	(0.179)**	(0.442)	(0.200)**	(0.471)
Caste Category Congruence X Cultivator rate	0.695	0.197	0.153	0.681	0.135	0.582
	(0.656)	(0.522)	(0.518)	(0.678)	(0.559)	(0.736)
Caste Category Congruence X Manufacturing Worker rate	-0.903	1.431	0.679	7.465	2.012	5.508
	(3.127)	(2.908)	(2.821)	(3.825)*	(2.649)	(4.508)
Caste Category Congruence X Trade/Commerce Worker rate	-1.333	-3.535	-3.417	4.272	-6.199	0.860
	(2.771)	(2.377)	(2.317)	(2.738)	(2.691)**	(3.521)
Caste Category Congruence X Marginal Worker rate	-1.311	-0.868	-0.922	-1.102	-1.889	-1.467
	(0.928)	(0.813)	(0.804)	(1.044)	(0.822)**	(1.294)
Caste Category Congruence X Non-working rate	-0.652	-0.375	-0.463	-0.741	-0.749	-1.081
	(0.363)*	(0.307)	(0.309)	(0.320)**	(0.312)**	(0.381)***
Jati Congruence	0.015	0.176	0.145	0.231	0.143	0.313
	(0.105)	(0.074)**	(0.070)**	(0.175)	(0.078)*	(0.203)
N	148306	148304	148304	54721	113263	42276
R-Squared	0.194	0.318	0.324	0.302	0.327	0.318
Panel B:						
Caste Category Congruence	-0.812	-0.612	-0.677	-0.257	-0.696	-0.044
	(0.624)	(0.445)	(0.448)	(0.562)	(0.471)	(0.737)
Caste Category Congruence X BIMARU	-0.241	-0.920	-0.999	-0.091	1.073	-0.516
	(1.093)	(0.911)	(0.906)	(1.089)	(0.791)	(1.375)
Caste Category Congruence X Literacy rate	-0.546	-0.261	-0.317	-1.113	-0.530	-1.537
	(0.469)	(0.323)	(0.317)	(1.305)	(0.417)	(1.526)
Caste Category Congruence X BIMARU X Literacy rate	0.700	0.122	0.358	0.833	1.016	2.121
	(0.693)	(0.545)	(0.538)	(1.379)	(0.596)*	(1.623)
Caste Category Congruence X Cultivator rate	1.892	0.423	0.506	-1.969	0.458	-1.881
	(1.505)	(0.926)	(0.893)	(1.369)	(1.325)	(1.795)
Caste Category Congruence X BIMARU X Cultivator rate	-0.628	1.804	1.786	3.712	-0.149	3.858
	(1.861)	(1.280)	(1.247)	(1.706)**	(1.538)	(2.225)*
Caste Category Congruence X Manufacturing Worker rate	-9.621	-5.481	-6.105	15.406	-0.520	3.918
	(6.780)	(6.837)	(6.848)	(10.745)	(6.925)	(13.325)
Caste Category Congruence X BIMARU X Manufacturing Worker rate	10.054	8.445	8.496	-10.338	-1.189	1.652
	(7.283)	(8.066)	(8.055)	(11.982)	(8.055)	(14.940)
Caste Category Congruence X Trade/Commerce Worker rate	6.606	-2.193	-2.573	0.878	0.643	0.628
	(6.270)	(4.076)	(3.910)	(8.445)	(4.117)	(10.413)
Caste Category Congruence X BIMARU X Trade/Commerce Worker rate	-6.930	3.775	3.888	4.703	-7.976	-2.398
	(7.703)	(5.974)	(5.760)	(9.311)	(5.416)	(11.388)
Caste Category Congruence X Marginal Worker rate	4.130	1.928	1.228	5.688	2.136	2.799
	(4.102)	(3.429)	(3.505)	(5.634)	(4.567)	(6.071)
Caste Category Congruence X BIMARU X Marginal Worker rate	-3.338	-0.509	0.553	-6.308	-3.322	-3.050
	(4.285)	(3.798)	(3.856)	(5.818)	(4.747)	(6.340)
Caste Category Congruence X Non-working rate	1.123	1.404	1.629	1.246	1.600	1.535
	(1.008)	(0.753)*	(0.762)**	(0.969)	(0.907)*	(1.398)
Caste Category Congruence X BIMARU X Non-working rate	-0.082	0.191	0.059	-1.238	-2.285	-1.506
	(1.364)	(1.146)	(1.152)	(1.422)	(1.127)**	(1.820)
Jati Congruence	-0.016	0.138	0.109	0.222	0.115	0.289
	(0.097)	(0.075)*	(0.072)	(0.171)	(0.082)	(0.202)
N	148306	148304	148304	54721	113263	42276
R-Squared	0.223	0.320	0.327	0.303	0.329	0.320
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

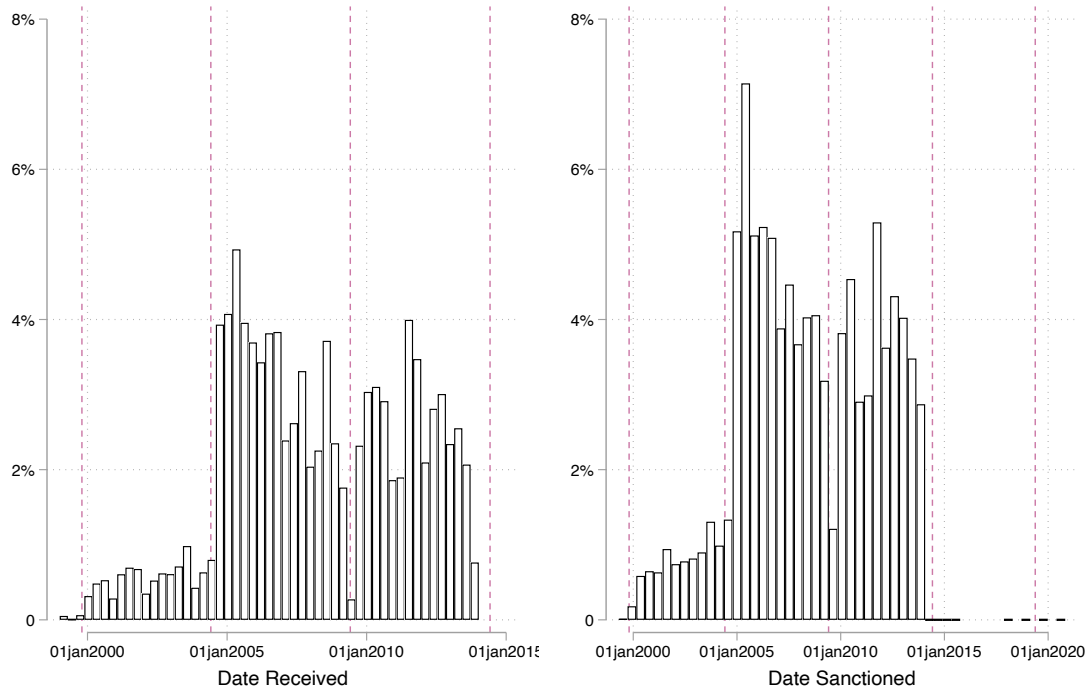
Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU

Figure A4.3: Distribution of DOs and MPs by Caste Category and Region



Note: Figure plots the share of MPs and DOs by caste category and region. Distributions of caste category across region are largely similar.

Figure A4.4: Distribution of Received and Sanctioned Projects across National Election Cycles



Note: Histogram plots the distribution of MPLADS projects across time based on when they are received and sanctioned. Vertical red lines indicate national election dates.

Table A4.5: Caste Congruence and Bureaucratic Performance by National election timing of project receipt

	Sanctioned in 75 Days					
Panel A:						
Project Received in Year before Nat'l Election	0.100	0.107	0.080	0.038	0.041	0.040
	(0.033)***	(0.025)***	(0.031)***	(0.043)	(0.034)	(0.049)
Caste Category Congruence	-0.005	-0.027	-0.032	-0.005	-0.006	0.023
	(0.023)	(0.020)	(0.020)	(0.026)	(0.022)	(0.029)
Caste Congruence X Before Election	-0.033	-0.031	-0.028	0.002	-0.002	-0.039
	(0.043)	(0.038)	(0.038)	(0.048)	(0.043)	(0.058)
Jati Congruence	-0.018	0.132	0.118	0.192	0.143	0.316
	(0.115)	(0.086)	(0.084)	(0.183)	(0.081)*	(0.201)
Jati Congruence X Before Election	0.071	0.063	0.054	0.314	-0.003	
	(0.123)	(0.125)	(0.115)	(0.220)	(0.085)	
N	149156	149153	149153	54721	113889	42276
R-Squared	0.185	0.320	0.323	0.300	0.326	0.316
Panel B:						
Project Received in Year before Nat'l Election	0.039	0.057	0.029	0.024	0.059	-0.004
	(0.071)	(0.038)	(0.044)	(0.062)	(0.049)	(0.064)
Caste Category Congruence	0.021	0.044	0.052	0.088	0.089	0.124
	(0.047)	(0.032)	(0.033)	(0.039)**	(0.039)**	(0.048)***
Caste Congruence X Before Election	-0.005	0.026	-0.001	-0.012	-0.024	-0.035
	(0.105)	(0.081)	(0.085)	(0.106)	(0.086)	(0.107)
Caste Congruence X Before Election X BIMARU	0.013	-0.034	-0.002	0.025	0.021	-0.025
	(0.117)	(0.093)	(0.096)	(0.114)	(0.100)	(0.123)
Caste Category Congruence X BIMARU	-0.110	-0.144	-0.156	-0.137	-0.141	-0.154
	(0.056)*	(0.037)***	(0.038)***	(0.046)***	(0.044)***	(0.055)***
Jati Congruence	-0.011	0.139	0.130	0.207	0.139	0.314
	(0.111)	(0.085)	(0.083)	(0.180)	(0.081)*	(0.202)
Jati Congruence X Before Election	0.072	0.060	0.059	0.304	0.034	
	(0.121)	(0.121)	(0.109)	(0.221)	(0.091)	
N	149156	149153	149153	54721	113889	42276
R-Squared	0.188	0.322	0.325	0.302	0.328	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DP jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A4.6: Caste Congruence and Bureaucratic Performance by State election timing of project receipt

	Sanctioned in 75 Days					
Panel A:						
Project Received in Year before State Election	0.031	0.032	0.032	0.059	0.033	0.024
	(0.022)	(0.020)*	(0.020)	(0.032)*	(0.024)	(0.045)
Caste Category Congruence	-0.001	-0.023	-0.026	0.014	0.002	0.032
	(0.024)	(0.020)	(0.020)	(0.025)	(0.023)	(0.030)
Caste Congruence X Before Election	-0.043	-0.039	-0.048	-0.126	-0.042	-0.095
	(0.039)	(0.036)	(0.035)	(0.054)**	(0.042)	(0.066)
Jati Congruence	0.039	0.216	0.182	0.330	0.164	0.275
	(0.110)	(0.075)***	(0.069)***	(0.153)**	(0.078)**	(0.198)
Jati Congruence X Before Election	-0.117	-0.202	-0.192	-0.337	-0.102	0.113
	(0.142)	(0.104)*	(0.081)**	(0.127)***	(0.057)*	(0.117)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.185	0.318	0.324	0.303	0.327	0.317
Panel B:						
Project Received in Year before State Election	0.048	0.109	0.081	0.104	0.123	0.068
	(0.042)	(0.028)***	(0.029)***	(0.056)*	(0.034)***	(0.071)
Caste Category Congruence	0.055	0.074	0.087	0.113	0.115	0.154
	(0.049)	(0.032)**	(0.033)***	(0.037)***	(0.038)***	(0.047)***
Caste Congruence X Before Election	-0.157	-0.150	-0.173	-0.210	-0.200	-0.205
	(0.073)**	(0.059)**	(0.059)***	(0.090)**	(0.064)***	(0.099)**
Caste Congruence X Before Election X BIMARU	0.127	0.079	0.097	0.142	0.244	0.203
	(0.094)	(0.078)	(0.077)	(0.104)	(0.084)***	(0.115)*
Caste Category Congruence X BIMARU	-0.137	-0.156	-0.176	-0.150	-0.178	-0.196
	(0.058)**	(0.038)***	(0.038)***	(0.044)***	(0.044)***	(0.055)***
Jati Congruence	0.043	0.219	0.185	0.350	0.163	0.273
	(0.108)	(0.074)***	(0.069)***	(0.151)**	(0.079)**	(0.202)
Jati Congruence X Before Election	-0.128	-0.205	-0.204	-0.364	-0.112	0.077
	(0.132)	(0.096)**	(0.073)***	(0.129)***	(0.065)*	(0.102)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.188	0.320	0.326	0.305	0.329	0.320
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DP jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

A5 Probing Mechanisms

Table A5.1: Caste Congruence and Bureaucratic Selection

	DO was Selected			DO Duration		
Caste Category Congruence	-0.080	-0.031	-18.466	-4.188	10.061	1.997
	(0.033)**	(0.061)	(25.758)	(50.229)	(57.343)	(114.391)
Caste Category Congruence X BIMARU		-0.060		-18.124		-43.239
		(0.067)		(58.036)		(123.224)
Jati Congruence	0.103	0.110	135.631	111.222	-154.917	-130.275
	(0.088)	(0.091)	(133.295)	(127.869)	(178.485)	(192.438)
N	1304	1304	1303	1303	233	233
R-Squared	0.158	0.159	0.244	0.266	0.382	0.401
ME of Caste Congruence in BIMARU		-0.090		-22.312		-41.242
		(0.041)**		(31.618)		(59.349)
States	All	All	All	All	All	All
DOs	All	All	All	All	Inherited	Inherited
Session Fixed Effects	✓	✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include MP clustered standard errors and session year fixed effects. Models also control for MP and DP jati fixed effects, MP and DO caste category, and MP and DO gender. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A5.2: Caste Congruence and Bureaucratic Performance by DO Domicile

	Sanctioned in 75 Days					
Panel A:						
Caste Category Congruence	-0.046	-0.090	-0.086	-0.015	-0.066	-0.007
	(0.044)	(0.037)**	(0.035)**	(0.039)	(0.043)	(0.047)
Caste Category Congruence X DO From BIMARU	0.043	0.050	0.045	0.010	0.081	0.030
	(0.053)	(0.042)	(0.041)	(0.045)	(0.045)*	(0.050)
Jati Congruence	0.002	0.159	0.128	0.192	0.145	0.288
	(0.106)	(0.074)**	(0.068)*	(0.170)	(0.076)*	(0.190)
N	149156	149153	149153	54721	113889	42276
R-Squared	0.184	0.318	0.323	0.300	0.327	0.318
Panel B:						
Caste Category Congruence	0.008	-0.017	-0.025	0.007	-0.033	0.003
	(0.029)	(0.026)	(0.025)	(0.031)	(0.027)	(0.034)
Caste Category Congruence X DO From State with Post-1993 Reservation	-0.054	-0.053	-0.042	-0.048	0.035	0.020
	(0.041)	(0.032)	(0.032)	(0.037)	(0.035)	(0.041)
Jati Congruence	0.006	0.176	0.142	0.224	0.155	0.340
	(0.103)	(0.077)**	(0.071)**	(0.177)	(0.078)**	(0.220)
N	135793	135792	135792	50791	104414	39465
R-Squared	0.196	0.331	0.337	0.310	0.336	0.329
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All	All	Early Career	Early Career
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A5.3: Caste Congruence and Types of Projects Proposed in BIMARU States

	Roads	Water	Education	Recreation	Sewer	Electricity	Walls	Funerals
Panel A: All								
Caste Category Congruence	0.003	0.018	0.016	-0.003	0.001	-0.010	-0.004	0.010
	(0.020)	(0.014)	(0.009)*	(0.006)	(0.006)	(0.006)*	(0.005)	(0.004)**
N	16836	16836	16836	16836	16836	16836	16836	16836
R-Squared	0.132	0.287	0.095	0.107	0.077	0.253	0.095	0.089
Panel B: Early Career District Officers								
Caste Category Congruence	0.013	0.023	0.004	0.004	0.003	-0.011	-0.003	0.010
	(0.027)	(0.022)	(0.010)	(0.006)	(0.008)	(0.006)*	(0.006)	(0.006)
N	12359	12359	12359	12359	12359	12359	12359	12359
R-Squared	0.139	0.274	0.120	0.109	0.097	0.382	0.091	0.104
States	BIMARU	BIMARU	BIMARU	BIMARU	BIMARU	BIMARU	BIMARU	BIMARU
Session Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓
Fiscal Year Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓
District Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO caste category, MP and DO gender, and Chief Minister-MP party alignment. Data are from Thomas (2018) and include only BIMARU states. Models include data from the 13th, 14th, and 15th sessions. District officers with official caste category data included and caste category imputed for years when missing.

Table A5.4: Caste Category Congruence Not a Proxy for Language or State Identity

	Sanctioned in 75 Days					
Caste Category Congruence	0.056	0.059	0.062	0.122	0.126	0.127
	(0.031)*	(0.031)*	(0.031)**	(0.045)***	(0.046)***	(0.046)***
Caste Category Congruence X BIMARU	-0.160	-0.162	-0.163	-0.164	-0.167	-0.168
	(0.036)***	(0.036)***	(0.036)***	(0.052)***	(0.052)***	(0.053)***
Jati Congruence	0.139	0.146	0.127	0.299	0.298	0.325
	(0.069)**	(0.070)**	(0.070)*	(0.201)	(0.201)	(0.203)
Speaks Same Language		-0.081	-0.079		-0.035	-0.044
		(0.029)***	(0.028)***		(0.040)	(0.040)
Speaks Same Language X BIMARU		0.123	0.109		0.060	0.077
		(0.044)***	(0.047)**		(0.063)	(0.064)
From Same State			0.001			0.060
			(0.043)			(0.098)
From Same State X BIMARU			0.034			-0.082
			(0.051)			(0.105)
N	149153	149153	149153	42276	42276	42276
R-Squared	0.324	0.325	0.325	0.318	0.318	0.318
States	All	All	All	Random DO Allocation	All	Random DO Allocation
DOs	All	All	All		Early Career	
Session Fixed Effects	✓		✓	✓	✓	✓
Fiscal Year Fixed Effects	✓		✓	✓	✓	✓
District Fixed Effects		✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO jati fixed effects, MP and DO caste category, MP and DO gender, Chief Minister-MP party alignment, log number of pending projects, log amount sanctioned for project, and log number of days project sat on desk of prevoius DO. Models also include an indicator for whether Jati is missing and an indicator for non-BIMARU/non-SOUTH states. Models include data from the 13th, 14th, and 15th sessions. Data from the 13th session include only BIMARU states. District officers with official caste category data included and caste category imputed for years when missing.

Table A5.5: Caste Congruence and Bureaucratic Performance in BIMARU States by GP Population Composition

	Sanctioned in 75 Days			
Caste Category Congruence	-0.079	-0.072	-0.086	-0.075
	(0.039)**	(0.029)**	(0.030)***	(0.036)**
GP SC/ST Population > Median	-0.029	0.001	-0.005	-0.024
	(0.035)	(0.023)	(0.022)	(0.023)
Caste Category Congruence X GP SC/ST Population > Median	0.045	0.015	0.022	0.018
	(0.035)	(0.024)	(0.022)	(0.023)
MP is OBC	-0.088	0.034	0.031	0.186
	(0.045)*	(0.060)	(0.059)	(0.076)**
MP is SC	-0.034	-0.020	-0.011	0.053
	(0.046)	(0.061)	(0.055)	(0.078)
MP is ST	0.017	-0.044	-0.014	0.115
	(0.083)	(0.092)	(0.082)	(0.087)
MP is OBC X GP SC/ST Population > Median	0.085	0.028	0.029	0.027
	(0.039)**	(0.024)	(0.024)	(0.028)
MP is SC X GP SC/ST Population > Median	0.029	-0.039	-0.038	-0.010
	(0.041)	(0.025)	(0.023)*	(0.025)
MP is ST X GP SC/ST Population > Median	0.073	0.080	0.078	0.066
	(0.073)	(0.041)*	(0.038)**	(0.035)*
DO is OBC	-0.020	0.010	0.023	-0.034
	(0.048)	(0.036)	(0.036)	(0.039)
DO is SC	0.013	0.012	0.011	0.011
	(0.046)	(0.031)	(0.030)	(0.046)
DO is ST	-0.017	0.107	0.080	0.104
	(0.056)	(0.066)	(0.059)	(0.096)
DO is OBC X GP SC/ST Population > Median	-0.064	-0.050	-0.045	-0.004
	(0.044)	(0.032)	(0.029)	(0.032)
DO is SC X GP SC/ST Population > Median	0.005	-0.023	-0.027	0.012
	(0.045)	(0.026)	(0.027)	(0.030)
DO is ST X GP SC/ST Population > Median	-0.073	-0.136	-0.104	-0.046
	(0.075)	(0.071)*	(0.068)	(0.050)
N	16796	16791	16791	12328
R-Squared	0.075	0.203	0.229	0.229
States	BIMARU	BIMARU	BIMARU	BIMARU
DOs	All	All	All	Early Career
Session Fixed Effects	✓		✓	✓
Fiscal Year Fixed Effects	✓		✓	✓
District Fixed Effects		✓	✓	✓
Controls	✓	✓	✓	✓

Note: ***, **, * indicates significance at the 1%, 5%, and 10% level respectively. All models include dyad clustered standard errors and fixed effects as specified. When specified, models also control for MP and DO caste category, MP and DO gender, and Chief Minister-MP party alignment. Data are from Thomas (2018) and include only BIMARU states. Models include data from the 13th, 14th, and 15th sessions. District officers with official caste category data included and caste category imputed for years when missing. Data on population compositions merged from the SHRUG database and represent SC/ST population shares according to the 2011 Census of India. These village-level data were linked to the GP-level MPLADS data by first matching to the local government database's village to GP mapping and then fuzzy matching on GP name to Thomas's (2018) MPLADS data.