

Social Proximity and Bureaucrat Performance: Evidence from India*

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Abstract

Using exogenous variation in social proximity generated by an allocation rule, we find that bureaucrats assigned to their home states are perceived to be more corrupt and less able to withstand illegitimate political pressure. Despite this, we observe that home officers are more likely to be promoted earlier in the senior stages of their careers. To understand this dissonance between performance and promotion we show that incoming Chief Ministers preferentially promote home officers that come from the same home district. Taken together, our results suggest that social proximity can hamper bureaucrat performance by facilitating political capture and corruption.

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1 Introduction

The rise of nation states necessitated the formation of centralized bureaucracies to implement policies, coordinate economic activities and drive the development process (Evans 1995, Amsden 1989, Evans and Rauch 2000, Wade 1990). This required bureaucrats to put the national interest above private and local interests and much emphasis was placed on inculcating this mission of nation building (Weber 1978). Professional bureaucrats were expected to serve the state, not particular individuals, to separate their private business from the business of the state, to abide by clearly defined sets of rules and codes, and to spend their entire careers in the service of the nation. Across history, there has been a shift from local rulers executing key functions through kin, personal trustees and court-servants to permanent, professional bureaucracies running nation states. A central objective of such bureaucracies was to devise systems and rules that reduced the patronage and corruption that had plagued earlier systems of government (Northcote and Trevelyan 1854, Xu 2018).

Bureaucrats, however, originate from particular localities which they will have a particular knowledge of and affinity with. One question that all centralized bureaucracies face therefore concerns whether bureaucrats should be allowed to serve in the areas they originate from. This is the question we take up in this paper. We study whether and how social proximity between bureaucrats and where they work affects their performance. Given that bureaucrats constitute a key element of state capacity (Besley and Persson 2009, Finan et al. 2015), how they are allocated within a nation could have ramifications for the patterns of growth and development (Evans and Rauch 2000, Dal Bo et al. 2013).

The central tension in this context lies between delegation and control. The administration of any large organization requires striking a balance between the lack of local knowledge and the ability to control subordinates (Aghion and Tirole 1997, Alesina and Tabellini 2007, Alesina and Reich 2015, Dessein 2002, Moe 2012). On the one hand, assigning bureaucrats to socially proximate environments might enable them to leverage their informational advantage to improve performance. On the other hand, this same advantage might be exploited for private gain or to put local interests above the national interest.

This tension between exploiting local knowledge and avoiding local capture has been present throughout history. Roman rulers, for example, appointed local councils but frequently assigned an outside governor to oversee functions like tax collection (Woolf 2012). The royal officers who forged France into an early nation state were barred from holding office in their place of birth using the argument that “a paid official sent out by the government, who had no power network in the area to which he had been assigned, and, in the way of a true bureaucrat, owed his income and social status wholly to the central administration that he represented” was “fanatically loyal to the king” (Cantor 1993, p. 411-412). In Imperial China a similar “rule of avoidance” prevented district magistrates to serve in their home districts (Ebrey and Smith, 2016). Similarly, the British Colonial Office considered candidates for senior civil service positions with “local connexion with the colony by birth, family ties, or otherwise” as ineligible.¹ These rules foreshadowed similar restrictions in

¹Colonial Rules & Regulations 1881, Chapter IV, §1, 75.

modern bureaucracies. However, running against this centralizing tide has been a recent shift back towards localization of public service delivery (World Bank 2004, Bardhan and Mookherjee 2006, Mansuri and Rao 2013, Mookherjee 2015, Casey 2018, Bandiera et al. 2018). This literature argues that agents recruited from the communities they serve are higher performing due to the informational advantages they possess. It therefore remains an open question whether allocating bureaucrats back to the localities from which they originate will enhance or hamper their performance.

To look at this issue we exploit variation in social proximity using plausibly exogenous variation in the assignment of Indian Administrative Service (IAS) officers to their home states in India. Social proximity, as captured by geographical distance and shared language, captures key aspects of local information (Fisman et al. 2018, Huang et al. 2017). Assigning bureaucrats to an area with shared language, culture or values, for example, may increase performance by allowing them to harness private information and social incentives (Besley and Ghatak 2018). Social proximity however may also decrease performance as bureaucrats abuse local networks, engage in corrupt behavior or are captured by local politicians and vested interests (Ashraf and Bandiera 2017).

Studying this issue for the IAS, known as the “steel frame” of India, is particularly important. Its close to 4,000 centrally recruited officers effectively run India, heading up all government departments at both the central and state levels. At the beginning of their careers, IAS officers are allocated to a state for life. Given their importance, the manner in which they are allocated across the country and whether or not officers are able to return to their home state could impact the implementation of policies (Bertrand et al. 2019).

Our empirical strategy leverages detailed institutional knowledge of the home state assignment rule to isolate a source of variation that (i) predicts the allocation to home state and (ii) is uncorrelated with observable individual background characteristics of the officers. In balancing the aims of equalizing the quality of administrators across the states of India whilst affording officers the chance of serving in their home state, the IAS uses a rule-based mechanism to deploy newly recruited officers to states. While higher ranked officers are more likely to be assigned to their home state, we exploit the fact that officers are grouped according to their caste \times home state bracket when being ranked in the allocation process. This implies that officers who are the only candidate in their bracket in a given year of intake are allocated to their home state with near certainty. Variation in the bracket size, however, depends on whether officers from the same caste and state passed the competitive entry exam in the same year. We argue and provide evidence that officers are, conditional on the selection bracket, as good as randomly assigned to their home state.

A key challenge in studying bureaucrats is the lack of reliable individual performance measures. Bureaucrats frequently work in teams and across a variety of departments and functions, making it difficult to map individuals to outcomes. To make progress, we leverage a large-scale survey (Bertrand et al. 2019), where we elicit perceptions of civil servants from key stakeholders such as civil servants, politicians, representatives of business associations, civil society, local TV and media. For each IAS officer they know, we ask stakeholders to

grade them on a 1 (low) to 5 (high) scale for: effectiveness, probity, the ability to withstand illegitimate political pressures, pro-poor orientation and overall rating. We validate these survey-based measures and link them to the personnel records of the IAS.

Our main finding is that home state allocated officers perform worse than comparable officers who are allocated to non-home states. Instrumental variable estimates suggest that officers allocated to their home states are deemed to be more corrupt and less able to withstand illegitimate political pressure. This effect is primarily driven by the home states that rank higher on measures of corruption. Consistent with this subjective evidence we find that, in the more corrupt Indian states, home-allocated officers are more likely to be suspended. We show that the performance gap between home- and non-home state officers is particularly pronounced in the later career stages where, we argue, there is more room for patronage and capture of the bureaucracy by the local political elite.

We provide corroborating evidence that home officers, especially more senior ones, are more susceptible to influence by the political elite. We investigate differential patterns of political interference in the careers of IAS officers based on their proximity to Chief Ministers, the political heads of Indian states. While career progression in the IAS is seniority-based – requiring officers to have served a minimum number of years to qualify for progression to the next payscale (Appendix Table B1) – there remains scope for discretion over the order of promotion among officers of the same years of seniority.² The amount of discretion increases for senior positions as promotion delays become more frequent (Figure A1). In a high frequency monthly-level event study, we find that among officers of the *same seniority*, home officers are on average reshuffled more frequently, and more likely to be promoted in the immediate months following the appointment of a new Chief Minister. Furthermore, this surge in transfers and promotions is magnified for those home officers who originate from the same home district in the state as the incoming Chief Minister. The combined results are consistent with social proximity adversely impacting bureaucrat performance through greater political interference.

These findings are important as the question of how to allocate talent is central in organizations. The IAS shares classic features of modern professional bureaucracies (Bertrand et al. 2019) and this gives our findings a wider resonance. Focusing on the one-off and life-long deployment of officers to states allows us to isolate worker-workplace match effects, thus providing novel evidence in a setting that hitherto primarily focused on the incentivizing role of frequent transfers (Jia 2015, Khan et al. 2015, Iyer and Mani 2012, Xu 2018, Khan et al. 2018), or its disruptive impact on service delivery (Akthari et al. 2018). The closest evidence to ours is Ichino and Maggi (2000) and Persson and Zhuravskaya (2016). Ichino and Maggi (2000) document how patterns of absenteeism and misconduct in a large Italian bank are characterized by regional differentials, exhibiting a positive correlation between a mover’s shirking level and the average shirking level of the co-workers in the destination branch. Persson and Zhuravskaya (2016) show different province-level spending patterns for

²Conditional on seniority (i.e. the number of years served), internal rankings (“inter-se-seniority”) and performance evaluations (e.g. the “annual confidential reports”) are key inputs for promotion committees (see Promotion Guidelines, No. 20011/4/92-AIS-II, Annexure II, Section 1, 2, 4, 6-7).

local Chinese party secretaries, arguing for home bias due to greater connections to the elite. Exploiting exogenous variation in how officers are assigned across states allows us to make progress by providing causal evidence that socially proximate work-place environments can impede bureaucrat performance on the individual-level. By focusing on how to allocate *already selected* talent, we complement the literature on the negative selection effects of discretionary hiring (Brollo et al. 2017, Hoffman et al. 2018, Colonelli et al. 2018, Weaver 2018). Finally, our results also resonate with the historical literature which highlights the tension between the need for local knowledge and the challenge of capture and clientelism in settings ranging from the administration of Empire to the allocation of modern day civil servants and ambassadors (Kirk-Greene 2000, Newbury 2003, Greif 2007).

The rest of the paper is organized as follows. In Section 2, we present data sources and institutional background, focusing on the allocation rule we exploit as a source of exogenous variation. Section 3 describes our empirical strategy. Section 4 reports the main findings on the relationship between bureaucrat performance and home allocation, as well as heterogeneity in this relationship across Indian states and career stages. Section 5 provides evidence on the differential patterns of political interference in the transfers and promotions of home vs. non-home state IAS officers. We conclude in Section 6.

2 Background and data

The Indian Administrative Service (IAS), the successor of the Indian Civil Service (ICS), is the elite administrative civil service of the Government of India. In 2014 the IAS had an overall strength of around 3,600 centrally recruited officers. These officers are civil service leaders, occupying key positions critical for policy implementation. The most senior civil service positions - the Cabinet Secretary of India, the Chief Secretary of States, heads of all state and federal government departments - are occupied by IAS officers.

The recruitment of officers is based on the performance in the Civil Service Exam, which is annually organized by the Union Public Service Commission (UPSC). Entry into the IAS is extremely competitive, with several hundred thousand applicants competing for a small number of spots. In 2015, for example, 465,882 UPSC exam takers faced only 120 IAS slots. Those who do not qualify for the IAS may obtain positions in less competitive civil service streams such as the Indian Police Service (IPS), the Indian Forest Service (IFS), the Indian Revenue Service (IRS) or the state civil services. The highest performing exam takers are typically offered slots in the IAS. There are quotas for the reserved castes, namely the Other Backward Castes (OBC), Scheduled Castes (SC) and Scheduled Tribes (ST). Once selected, IAS officers are allocated to a state cadre. The assignment to a state is fixed for life,³ and officers are attached to their state cadre even when serving at the central government or abroad. After selection and allocation to a state cadre, IAS officers undergo training at the Lal Bahadur Shastri National Academy of Administration (LBSNAA) and in the states. The two-year training consists of one year academic training at the LBSNAA (“course work”)

³The only exception for transfers across states is in the case of marriage to another IAS officer. These cases, however, have to be approved on a case-by-case basis and are rare.

and one year practical training (“district training”). After training, recruits are initially placed in the district administration (e.g. as district collectors), and are subsequently promoted to higher level positions. Finally, retirement occurs at 60 years of age.

2.1 Data

We leverage several datasets for our study. The main dataset on performance indicators and background characteristics builds on a data collection effort linking administrative records to a large-scale performance survey we conducted (Bertrand et al. 2019). We add to this core dataset newly collected data on the spells and background characteristics of Chief Ministers between 1980-2012. In the following section, we describe the key data used in our analysis. Detailed information about the data collection and the methodology of the performance survey can be found in Bertrand et al. (2019).

Subjective performance ratings. Bertrand et al. (2019) introduce a new survey instrument to measure the performance of civil servants based on subjective performance ratings. Performance scores were collected for a cross-section of centrally recruited IAS officers in 2012-13. Due to budgetary reasons, the sample was restricted to officers with at least 8 years of tenure and working in the 14 larger states of India.⁴ These 14 states comprise 84% of India’s population (Census 2011). The scores were provided by a wide range of stakeholders in each state, ranging from IAS officers, state civil servants, and politicians (MLA) to representatives of media, business and NGOs. Each officer was scored on a scale of 1 (low) to 5 (high), covering five dimensions of performance: effectiveness, probity, the ability to withstand illegitimate political pressure, pro-poor orientedness and overall performance. Overall, the survey covered 1,472 bureaucrats who were serving in 2012-13 and with at least 8 years of tenure. This corresponds to a coverage rate of 71%.

Administrative data. We link the survey data on performance with administrative data from the descriptive rolls, the inter-se-seniority lists and the executive sheets. The descriptive rolls contain a rich set of individual background characteristics for 5,635 officers who entered between 1975-2005. Characteristics range from year of birth, their home state, caste, family background, educational degrees and work experience. The dataset also contains information about the permanent address of the officers at time of application, allowing us to identify the home districts of the IAS officers.

The inter-se-seniority lists cover 4,107 officers from 1972-2009. This dataset provides information about the allocation of officers to states as well as their scores on the entry exam, training course and overall rank. Finally, the executive record sheets cover the postings of 10,817 IAS officers who entered between 1949-2014. These records contain detailed information about postings and payscales, allowing us to track the progression of IAS officers over time. We restrict the sample to centrally recruited officers. The final dataset covers 1,888 IAS officers who entered between 1975-2005.

Chief Minister data. We obtain information on the Chief Minister terms for all states

⁴These are: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

in the period between 1980-2010. For each of the 132 Chief Ministers, we collect information about their birth location, district and, if available, caste. To collect this information, we consulted printed biographies and searched through newspaper articles. Given the seniority of these politicians, the information is readily available.

Table 1 reports the mean and standard deviation of the performance scores. The sample sizes range from $N = 15,153$ for the probity measure to $N = 17,753$ for the effectiveness measure. The number of complete assessments across all dimensions is $N = 14,037$. We were able to elicit scores for about 71% of all IAS officers in our sample. All dimensions are correlated, with the highest correlation being between pro-poor orientation and the ability to withstand illegitimate political pressure.

[Table 1 here]

Table 2 compares the average individual characteristics of officers who are allocated to their home state vs. those who are not. The sample comprises all IAS officers who entered between 1975-2005. The table compares both the raw average (Column 3) and the average difference within each year of intake (Column 4). In accordance with the merit-based home state allocation (see next section for a detailed description), home state-allocated officers tend to rank, on average, higher. Within a given intake, officers who receive their home state rank on average 15 positions higher than those who do not. The non-random allocation for home state-officers also translates into significant differences on other margins: home state-allocated officers are, on average, less likely to be from the Other Backward Castes and more likely from Scheduled Castes. More generally, a joint hypothesis test rejects the null that home state-allocated officers are, on average, comparable to non-home state officers.

[Table 2 here]

2.2 Allocation rule

We describe the rule governing the allocation of IAS officers to state cadres in detail as this will generate the critical source of variation for our analysis.⁵ We focus on the allocation rule that has been in place throughout the cohorts 1984-2005.⁶ The allocation follows a strict rule-based procedure. After entering the IAS following the nation-wide entry exams administered by the Union Public Service Commission (UPSC), the centrally recruited officers are allocated to 24 cadres. These cadres typically map directly into the Indian states.⁷ The allocation process can be divided into three steps. In the first step, IAS

⁵The exact documentation can be found in the IAS guidelines. Refer to the original official notifications: 13013/2/2010-AIS-I, 29062/1/2011-AIS-I and 13011/22/2005-AIS-I published in the Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions, Government of India. We describe the dominant allocation rule in our study period 1976-2005. The rule was reformed in 2008.

⁶Between 1978-1984, officers were allowed to also declare preferred “zones” (i.e. groups of states) for the outsider allocation (the “Limited Zonal Preference System”). After 2008 (and thus beyond our study period), officers were allowed to declare their preferences beyond a home state allocation by ranking the states in their preferred order (the “Merit-cum-preference system”).

⁷Smaller states, however, are grouped into three joint cadres, which are Assam-Meghalaya, Manipur-Tripura and AGMUT (Arunachal Pradesh, Goa, Mizoram and Union Territories (which includes Delhi)). We did not survey states with pooled cadres due to logistical constraints.

applicants are asked to declare their preference to remain in their home state (referred to as insider preference). In the second step, the overall number of vacancies and the corresponding quotas for castes and insiders are determined. In the final step, vacancies and officers are matched in the actual allocation process.

Step 1. IAS officers declare their preference to remain in their home state.⁸ Since the allocation to a cadre is life-long and the home preference the only margin of cadre choice, nearly all IAS officers exercise the option to remain in their home state. Not declaring home preferences is riskier as it opens the possibility to be allocated to *any* other state (See Step 3). For the 2006 intake, for example, 87 out of the 89 recruited officers declared a home state preference. The declared preference however does not guarantee the actual allocation as the assignment depends on the availability of vacancies.

Step 2. The total number of vacancies is determined by the state government in conjunction with the Department of Personnel and Training (DoPT). Typically, the overall number of vacancies in a given year depend on the shortfall from the total number of IAS officers designated to a state - the cadre strength. This cadre strength is defined by the “cadre strength fixation rules”, which reserves more IAS officers for the larger states. These rules are seldom revised so the designated state cadre strength is fixed over longer periods. The vacancies are then broken down by quotas on two dimensions: caste and home preference. There are three categories for castes: General (unreserved) caste, Scheduled Caste/Tribes (SC/ST) and Other Backward Castes (OBC). The designation of vacancies to these caste categories are made based on predefined national quotas. The actual assignment of each vacancy to a caste is randomized using a rotating roster. In terms of preferences, vacancies are broken down into “insider” and “outsider” vacancies. Insider vacancies are to be filled by IAS officers from the same state who declared their home state preference at time of application. The ratio of insider to outsider vacancies is 1:2, with the assignment of vacancies to “insider” or “outsider” category following the repeating sequence O-I-O. The determination of vacancies is shown in Appendix Figure A2. The result of this procedure is a list denoting the number of vacancies for each state and the corresponding quotas by caste (GEN/SC/ST/OBC) and home state (Appendix Figure A3).

Step 3. The final allocation process is based on merit as determined by the ranking in the UPSC entry exam, the vacancies available and the home preference declared. Before the officers are allocated, the candidates are ranked and assigned a serial number in the order of merit, as determined by the UPSC entry exam. Appendix Figure A4 shows this ranking along with the officers’ caste and home preference. The highest scoring candidate for the 2006 intake, for example, belongs to the OBC category and indicated a preference to be assigned to the home state of Andhra Pradesh.

Home state assignment. The insider vacancies are allocated as far as exact matches along caste and home state preference (the allocation “bracket”) permit. If the number of

⁸It is unlikely that officers are strategically misreporting their home state. The home state determination is based on the parental permanent address, as well as the state of birth and education - all of which need to be documented at time of application. For 97% (92%) of officers in our sample, the declared home state matches the permanent address (current address) at time of application.

matches exceed the vacancies, the higher ranking IAS officer is given preference. Since the exact match along caste and home state is required for slotting, however, many insider vacancies typically remain unfilled. In this case, the caste requirement is successively relaxed, eventually opening to outsiders (See Appendix B.2 for details).

Non-home state assignment. The allocation of the “outsiders” and those who failed to be allocated to their preferred home state (and are consequently converted to outsiders) is done according to a rotating roster system. In a nutshell, the rotating roster is designed to ensure that each state receives, on average, candidates of similar quality across years.⁹

The critical feature for our empirical strategy is that home state officers are grouped and ranked within caste \times home state brackets in each year of intake. The size of the bracket will vary across years depending on how many candidates from the same home state and caste pass the entry exam. This is the identifying source of variation we exploit. While the allocation rule for outsiders saw minor adjustments over time, this feature of the home state allocation has remained constant throughout the cohorts we study.

3 Empirical strategy

The empirical challenge to estimating the causal effect of home state allocations is that the assignment of candidates to home cadres is non-random. Under the allocation rule, higher ranked officers are given priority in their declared preference to be allocated to their home state (Bhavnani and Lee 2018). An OLS comparison between home state vs. non-home state officers will thus be confounded by differences between high vs. low achieving officers, likely yielding upward biased estimates of the effects on bureaucratic performance. We thus need an instrument that predicts the likelihood of an officer to receive a home state allocation, but that is otherwise not correlated with the outcomes of interest.

3.1 Instrument and validity

Our empirical strategy exploits detailed knowledge of the home state allocation rule: we argue and provide evidence that home state allocation is, *conditional on the allocation rule*, as good as randomly assigned. Specifically, we predict home state allocation using the fact that the ranking of officers for home state allocation occurs within pre-defined “brackets”. Instead of giving officers priority in their home state preference in descending order of their *overall* rank, officers are ranked *within “brackets”* based on their year of intake, home state and caste (e.g. 2015-Gujarat-OBC). Depending on corresponding vacancies, officers are then slotted in descending order of rank within their bracket.

A key implication of this rule is that there will be variation in the number of officers who are competing for home state allocations in the same bracket over time. To illustrate this, Figure 1 plots the number of home state allocations and the number of candidates for the Uttar Pradesh-Scheduled Caste & Tribe bracket for different years of intake. As the figure first shows, of course, home state allocations never occur in years when there is no

⁹The exact details are not directly relevant for our identification strategy and we refer to Appendix B.3.

selected Scheduled Caste & Tribe candidate from Uttar Pradesh. More importantly, it is apparent from the figure that whether or not an officer is assigned to his or her home state is (mechanically) negatively correlated to the total number of officers in the same bracket.

[Figure 1 here]

To show this more generally, Figure 2 plots the probability of a home state allocation for a given officer as a function of the number of candidates in the same bracket relative to being a single candidate. Compared to a single candidate, having another candidate in the same bracket decreases the probability of a home state allocation by 16% points. The probability is 54% points lower when facing more than 8 other candidates. As the histogram shows, most of the variation in the number of candidates occurs between a single and two candidates. 42% of the allocation brackets comprise only a single candidate, and 21% contain two candidates. Only 9.6% of the brackets contain more than 8 candidates.¹⁰

[Figure 2 here]

In light of this, we propose to predict home state allocation using a dummy that equals 1 if the officer is the only candidate in his or her year of intake \times home state \times caste bracket, and 0 otherwise.¹¹ This captures not only the most relevant margin of variation but is also the simplest case: provided a vacancy is available, a single candidate officer who indicated a home preference will surely be allocated to the home state. The main results, however, also hold up using the total number of candidates in the bracket as an instrument.

It is important to stress that whether or not a given officer is the single candidate in their bracket is exogenous: it depends solely on whether another applicant from the same caste and home state qualified for the IAS in the very same year. This itself depends on the results of the Civil Service Exam and the number of vacancies. Variation in these vacancies across years depend primarily on retirements. We find no evidence for strategic sorting in anticipation to variation in the number of vacancies (Appendix Table B3).

To provide systematic evidence for the validity of the instrumental variables strategy, Table 3 compares individual characteristics of officers who are single candidates vs. those who face multiple candidates for the intake years 1975-2005. While there remain average differences in the raw comparison (Column 3), these differences vanish once we compare within the year of intake and within the same home state \times caste bracket (Column 4). Once we control for the allocation rule using the fixed effects, officers who are single candidate vs. multiple candidates are comparable on observables. The only statistically significant difference is on the likelihood of being female. Overall, however, we cannot reject the joint equality of means along the rich set of individual characteristics.¹²

¹⁰These brackets are located in large states such as Uttar Pradesh. The overall share of only candidates does not vary significantly across state population, development or corruption levels (Appendix Table B2).

¹¹The construction of the instrument itself does not hinge on (potentially endogenous) home state preferences. For the instrument to have a first stage, however, we require a sufficiently large number of officers to choose their home state. Given that nearly all officers declare their home state preference, it is not surprising that the first stage shown in Figure 2 and Table 4 is strong.

¹²Our results also hold when confining the sample to only male officers (which comprise 86% of the officers in our sample). The female sample size is too small to be estimated separately.

[Table 3 here]

3.2 First stage and effects on social proximity

We implement the first stage that predicts the home allocation for individual i as follows:

$$home_i = \beta \times only_{K(i)T(i)} + \delta'x_i + \nu_{K(i)} + \delta_{T(i)} + \varepsilon_i \quad (1)$$

where $home_i = 1$ if the officer i is allocated to the home state. The dummy $only_{K(i)T(i)} = 1$ if the officer was the only candidate in the home state \times caste cell $k = K(i)$ of the intake year $t = T(i)$. $\nu_{K(i)}$ are fixed effects for the allocation "bracket" (GEN, OBC, SC/ST caste \times home state) and $\delta_{T(i)}$ are intake year fixed effects. x_i are controls for individual characteristics: they include fixed effects for the UPSC entry exam rank, a female dummy, entry age as well as controls for the educational and career backgrounds. These controls comprise dummies for having studied a STEM or Economics degree, for having received an academic distinction, as well as dummies for the previous types of jobs the officer held before entering the IAS (education/research, finance/banking, private/SOE, public, public AIS). The errors ε_i are clustered at the home state \times caste \times intake level. This corresponds to the level at which the identifying variation of the instrument varies.

Table 4 reports the estimates for equation (1). Controlling for intake year fixed effects and home state \times caste fixed effects, officers who entered the service as the single candidate in their bracket are 22.8% points more likely to be allocated to the home state (Column 1). Given the exogenous nature of the variation in being the single candidate, the coefficient remains stable when holding constant the overall rank of the candidate (Column 2) and controlling for a rich set of individual characteristics (Column 3). The first stage is strong: compared to the mean of the dependent variable (0.277), being an only candidate increases the probability of a home state allocation by 90%. Finally, Column 4 conducts a placebo exercise by using variation in the officer's corresponding home state \times caste bracket size in the two previous and future intake years. As Column 4 shows, it is only the contemporaneous bracket size that determines the propensity of a home state allocation. The estimates for the leads and lags are close to zero and statistically insignificant. Overall, the results in Tables 3 and 4 lend support to the validity of the instrument, providing evidence for a first-stage and balance across a rich set of individual characteristics.

[Table 4]

Having established the first-stage, Table 5 shows that home state assignments indeed increase social proximity. As expected, home state allocated officers are more likely to serve closer to their home district, as measured by the distance (in miles) between the allocated state's administrative capital and the officer's home district capital.¹³ The instrumental variable estimate, for example, suggests that the home district of officers allocated to their home states lie, on average, 495 miles closer to the state's administrative capital (Column

¹³We use the *vincenty distance* to compute the distance between the state's administrative capital and the officer's home district capital.

1, Panel B). This is an important metric as officers serve a majority of their later career assignments in the state capital. Geographic proximity is also highly correlated with social proximity (Huang et al. 2017). Boasting 23 official languages, there is substantial variation in the first languages spoken across India. Linguistic proximity is thus another important measure of social proximity. Indeed, as shown in Table 5, Panel B, Column 2, officers allocated to their home states are also 83% points more likely to speak the allocated state’s first language as their native language. Finally, Column 3 computes the distance between the home district of officers and serving Chief Ministers in 2012. Since nearly all Chief Ministers originate from the state they serve, home state allocated officers are also significantly more likely to be closer to the Chief Ministers’ home district. The results thus consistently confirm the role of home allocations in increasing social proximity.

[Table 5 here]

4 Home state allocation and performance

4.1 Main results

We estimate the effect of home state allocation by comparing officers who enter the IAS as the single candidate in their home state \times caste bracket to officers who enter with multiple peers. Since the same officer i can be rated by multiple respondents, we augment equation (1) using subscript j ,

$$y_{ij} = \beta \times \widehat{home}_i(only_{K(i)T(i)}) + \delta'x_i + \theta_j + \nu_{K(i)} + \delta_{T(i)} + \varepsilon_{ij} \quad (2)$$

where y_{ij} is the performance score of the officer i given by survey respondent j in 2012-13. We instrument home state allocation using a dummy that is 1 if the IAS officer is the only candidate in the home state \times caste bracket in that intake year, and 0 otherwise. As before, $\nu_{K(i)}$ is the fixed effect for the allocation “bracket” (caste \times home state) and $\delta_{T(i)}$ are intake year fixed effects. The vector x_i contains the rich set of individual-level controls discussed in Section 3. In addition, x_i contains state-specific tenure FEs to restrict the comparison to officers of the same seniority allocated to the same state.¹⁴ In the most stringent specification, we also employ respondent fixed effects θ_j to address cross-respondent biases in the subjective survey measures. Finally, ε_{ij} is the error term which we cluster at the intake year \times home state \times caste level (the level at which the instrument varies) and the individual-level i (as a single officer is rated by several respondents).

The key parameter of interest is β , which captures the performance difference between a home state vs. non-home state officer. Equation (2) makes precise where the identifying variation is coming from. Intuitively, we compare the perceived performance of officers who are single candidates in their allocation bracket to those who are not, conditional on the selection rule, as implemented using the $\nu_{K(i)}$ fixed effects. Holding the home state \times caste

¹⁴In the cross-section, these fixed effects nest the intake year fixed effects but the panel data in Section 4.2 will allow us to separately identify tenure and cohort effects.

bracket constant, the identifying assumption is that variation in being a single candidate (or not) in the allocation bracket at entry into the IAS across different years of intake does not directly affect performance other than through the home state allocation rule.

Table 6 relates the subjective performance measures to home state allocation. Panel A reports the OLS estimates while Panels B and C report the IV estimates.¹⁵ All columns use the same specification, except that we vary the dependent variable to span the five dimensions of bureaucrat performance collected in our subjective performance survey. While OLS estimates suggest that home state-allocated officers perform equally well compared to non-home state officers (Panel A), the IV estimates yield significantly negative effects (Panel B). This pattern is consistent with the hypothesized upward-bias of the OLS estimates. Since the allocation rule gives higher ranked officers preference (Table 2), an OLS comparison between home and non-home officers will be confounded by any differences correlated with high and low entry exam scores, such as ability differences. Once removing this source of bias by only exploiting chance variation in the propensity to be allocated to the home state, we find that home state allocated officers are perceived to perform worse on all margins.

[Table 6 here]

A concern with subjective measures is that perceptions may not reflect objective performance (Olken 2009). Respondents may be systematically biased in their assessments. To ensure that our results are not driven by cross-respondent differences in ratings correlated with being an only candidate, Panel C augments the IV estimates with a stringent set of respondent fixed effects. These fixed effects ensure that comparisons are only made among officers rated by the *same* respondent. Despite these substantially more stringent fixed effects, the results remain comparable – albeit less precisely estimated. Importantly, however, home state-allocated officers are still perceived to be significantly less able to withstand illegitimate political pressure and more likely to be corrupt. The magnitudes are large. For the inability to withstand illegitimate political pressure, the effect represents an 11% decline when evaluated against the mean of the dependent variable.

Robustness checks. The results are robust to changes in specification and subsamples. Given the positive correlation across the different performance dimensions, we address concerns of multiple hypothesis testing in two ways. First, we report the false discovery rate (FDR) adjusted q -values (Anderson 2008) and find that most results remain statistically significant (Panels B and C). Second, we average across all five standardized dimensions to create an index (Column 6).¹⁶ The results remain statistically significant. To ensure that the results are not only driven by the local variation in moving from single to multiple candidate brackets, we also confirm the robustness of the results when using the total number of candidates in a selection bracket to instrument for the likelihood of a home state allocation (Appendix Table B6). The results are also robust when dropping the pre-1984 intakes, where the allocation rule for “outsiders” differed slightly from the 1984-2008 rule.

¹⁵Appendix Table B4 and Appendix Table B5 report the first stage and reduced forms.

¹⁶Using alternative aggregation methods such as principal component analysis does not change the results.

While the respondent fixed effects purge all respondent-specific biases in the subjective ratings, a remaining concern is that the same respondent may have a higher “bar” for rating the performance of home vs. non-home officers. If home state officers face a higher “bar” in their evaluations, we expect the negative effect to be stronger among stakeholders who hail from the same state. As Appendix Table B7 shows, however, the negative performance gap is comparable across IAS respondents – who, given the quota, comprise of only 1/3 home state officers – and state civil servants – who exclusively hail from the same state.¹⁷

Another concern is that the negative perceptions are driven by home state officers being allocated harder tasks or less popular positions. To assess this possibility, we conducted a robustness test where we include job title and pay level fixed effects (Appendix Table B8). If anything, the results become stronger, suggesting that home state officers are more likely to be allocated positions with better perceptions.¹⁸ Finally, performance scores are only available for known officers. This could introduce selection bias if officers are more visible in their home states. We find little evidence that home state officers are, on average, more likely to be known than non-home state officers (Appendix Table B9). While home state officers are marginally more likely to be known through friends and social networks, the home state effect does not vary by source of information and is thus unlikely to be driven by this difference in composition (Appendix Table B10). We also find no evidence that the perceptions of home state officers are less noisy, as measured by the standard deviation of the performance scores provided for a given officer across different respondents (Appendix Table B11).¹⁹

4.2 State-level heterogeneity and suspensions

Our results so far suggest that officers allocated to their home states are deemed to be more corrupt and less able to withstand illegitimate political pressure than officers who are allocated to other states. As we discussed earlier, there are competing views about the possible effects of social proximity on bureaucratic performance. On the one hand, with greater social proximity bureaucrats could have more information about the local context, and find it easier to communicate with the citizens they are serving. Better information and lower communication costs may thus improve bureaucratic performance. Moreover, local bureaucrats may simply care more about helping the communities they are representing due to the personal ties they have to these communities. On the other hand, local officers may be more susceptible to capture by the political elite. Their deeper personal networks in the community they serve may also provide more opportunities for bribe taking as well as a more efficient technology for bribe extraction. We therefore explore several sources of heterogeneity to shed more light on the mechanisms underlying the effects.

¹⁷We find notable differences across stakeholder groups: while IAS officers and their colleagues in the state civil service perceive home state officers to be unable to withstand illegitimate political pressure, politicians (MLA) themselves disagree, reporting a higher score on the ability to withstand pressure.

¹⁸Since the assignment to a position is an outcome, this robustness check conditions on an endogenous variable.

¹⁹The sample size declines as we require the same respondent to be rated by two different respondents in order to compute the standard deviation.

If a home state allocation increases bureaucratic corruption and reduces the ability of bureaucrats to withstand illegitimate political pressure, we may expect these effects to be larger in states with weaker institutions, i.e. states where bureaucrats and politicians may have more discretion to bend the rules for their private benefits.

Indeed, the effect of home state allocations exhibits substantial state-level heterogeneity. Figure 3 breaks down the effect for the average performance index – computed by averaging across all five standardized dimensions of subjective performance – by state to study the heterogeneity across India.²⁰ We focus on reduced forms as the corresponding first-stages are weaker due to the finer bins arising from having to estimate state-specific home state effects.²¹ As in previous subsection, we use the most conservative specification with the full set of respondent fixed effects. The figure shows the effect sizes ranked in ascending order. We observe substantial heterogeneity across states: the negative home state effect is largest in Karnataka, Bihar, and Rajasthan. In contrast, this negative effect is close to zero or even reverted in Tamil Nadu, Uttar Pradesh and Kerala.

To understand whether the observed state-level heterogeneity is systematically related to measures of corruption and development, Table 7 allows the impact to vary by the average state-level corruption, as measured by the Transparency International Index used in Fisman et al. (2014), and the Human Development Index in 2007. The negative effect on average performance is driven by the states that score higher on the TI corruption index (Columns 1-2). We also include the interaction with the human development index to assess whether the corruption measure is picking up cross-state differences in economic development. While we cannot rule out unobservable correlates, the role of corruption in magnifying the negative impact of home state allocations is strikingly persistent even after holding constant differences in development (Column 3). These results are consistent across all performance dimensions (Appendix Table B12).

[Table 7 and Figure 3 here]

Finally, we revisit the concern that subjective performance measures may not adequately capture actual performance. For example, respondents in corrupt states may be biased towards expecting home officers to be more corrupt. To ensure that the results reflect tangible performance differences, we turn our attention to direct evidence. In the remaining Columns 4-5 of Table 7, we use the executive record sheets to extend the cross-section into an individual-year panel 1980-2011. We focus on suspensions as a measure of corrupt behavior. Suspensions are rare and extreme outcomes, with an unconditional suspension rate of only 0.8%. Most suspensions involve corruption scandals, with court cases pending against the officers. As Appendix Table B13 also shows, both contemporaneous and past suspensions are negatively correlated with our subjective measures of performance.

²⁰The analysis is restricted to the 14 larger states for which we collected subjective performance data. For completeness, Appendix Figure A6 shows the results separately for each dimension of performance.

²¹In order to estimate the IV specification, we would need one instrument for each state, instrumenting the endogenous variables $home_i \times$ State FEs with the instrument interacted by each state dummy $only_{K(i)T(i)} \times$ State FEs. This creates a weak instrument (Bound et al. 1995) and we thus resort to reduced forms.

Although objective in measurement and available for all officers, suspensions also have limitations. Suspensions, in particular, may be politically motivated. Home officers, for example, are more likely to have local political affiliations, and could thus be more frequently targeted for political retribution irrespective of their actual performance. As we discuss in Bertrand et al. (2019), it is our lack of confidence in such measures that originally motivated the plan to introduce the subjective measurement framework. While home state officers are not differentially likely to be suspended on average (the TI corruption index is centered around the sample mean), their suspension probability increases significantly in states that score higher on the corruption index. An increase in the state-level corruption index by 1 SD increases the differential suspension rate for home state officers by 0.4% points (Column 4). Finally, Column 5 interacts the instrument with the state-level HDI. The results remain robust using suspensions as a direct measure of performance, alleviating concerns that the main results are driven by subjective biases.

To provide a measure of private returns, we also collected data on assets following Fisman et al. (2014). Each year, IAS officers are required to submit an “immovable properties returns” (IPR) sheet by the 31st of January (Rule 16(2) AIS, 1968).²² Officers are required to list the land and properties inherited, owned, and acquired either in their own name or the name of a close family member. This includes information about the location, the size and the value of the property. Failure to submit the returns can, in theory, result in sanctions such as the withholding of appointments. In reality, however, asset returns are frequently submitted late or not at all. When matching the personnel records with the asset returns in 2012 – the year of the performance survey – we obtain a match rate of 62%. Consistent with previous cuts, we find that – among officers we were able to match – home state officers tend to report higher asset values (Appendix Table B14). As before, this is driven by senior officers in states that score higher on the corruption index. In contrast to higher quality data on politicians (Fisman et al. 2014), the asset returns for officers are often incomplete or only list approximate values of the properties. We thus interpret the results as suggestive, but complementary evidence.

4.3 Individual-level heterogeneity and career dynamics

We are interested in how the career dynamics between home vs. non-home officers unfold. As Figure A1 shows, during the first part of the career (up to 16 years), promotions (and hence payscales) in the IAS are primarily mechanically determined by the years of service. In the later part of their careers, however, delays in promotions are more frequent, with senior positions becoming increasingly thinner. At the same time, a merit based component is introduced through review committees. The combination of promotion delays and subjectivity in assessment thus opens room for greater discretion in the selection process. In local environments with weaker governance, this discretion could give rise to patronage.

To study individual-level heterogeneity across different career stages, we flexibly estimate the reduced form home state effect (comparing only vs. multiple candidate bracket officers)

²²The IPR sheets can be accessed via <http://ipr.ias.nic.in/StartIPR.htm>

by seniority. We do so by binning the years of tenure into the seniority groups associated with each of the seven payscales. Specifically, we split the overall tenure period into seven bins that mirror the time-based payscale progression: 1-3 years (Payscale 1), 4-8 years (Payscale 2), 9-12 years (Payscale 3), 13-15 years (Payscale 4), 16-24 years (Payscale 5), 25-29 years (Payscale 6), and more than 30 years (Payscale 7). Motivated by the state-level heterogeneity, we further divide the sample into states that score above median on the corruption index (high), and states that score below median (low).

The resulting estimates are shown in Figure 4, Panel A. The panel shows the cross-sectional relationship between the average performance index and the years into the IAS, estimated separately for high vs. low corruption states. The estimates are derived from an augmented specification of (2) where we allow the reduced form effect of home state allocations to vary by the payscale bins.²³ As shown in Table 7, the negative home state performance effect is driven by the states with higher levels of corruption, as measured by the TI corruption index. Interestingly, this negative performance difference between home-allocated officers vs. non-home officers increases with seniority. The performance difference increases markedly for senior payscales and the negative effect is largest towards the end of the career, where IAS officers compete over promotions to the highest payscale.

[Figure 4 here]

Of course, a limitation in this cross-sectional setting is that we cannot separately identify seniority from cohort effects. We can, however, address such concerns by leveraging panel data from the personnel records which allows us to disentangle cohort and seniority effects. These results are shown in the remaining panels of Figure 4, Panels B-D. These results are estimated by regressing the measure of career outcome on individual fixed effects, tenure fixed effects and the interaction of the only candidate instrument by payscale.²⁴ Figure 4, Panel B shows the differential suspension probability between home vs. non-home officers (in reduced form) by seniority, broken down by high vs. low corruption states. Despite the small number of suspension events, the observed pattern is consistent with the cross-sectional result: while there is almost no difference in suspension rates for the bulk of the career, home officers in high corruption states are substantially more likely to be suspended than non-home officers in the highest payscale (after more than 30 years of tenure). In contrast, home officers are - if anything - less likely to be suspended in the states that score lower on the state-level corruption index. Given the low number of overall suspensions, however, these estimates are relatively noisy.

We complement our subjective performance and suspension measures with another widely used measure of career performance: serving at the central government. Officers can be “empaneled” to serve the central government at the additional secretary, joint secretary and secretary-level. Allowing officers to serve the central government is meant to

²³These results are also reported in Appendix Table B16, Columns 1-2 in regression form. Appendix Figure A7 shows the results by seniority for all subjective performance measures. Since the performance scores are only collected for those who have served for more than 8 years, the second payscale (9-12 of tenure) forms the omitted reference category.

²⁴These results are also reported in Appendix Table B16, Columns 3-8 in regression form.

create national cohesion and maintain the connection between the federal and state-level administration. Since the assignment of officers to states is life-long, serving the central government in Delhi is one of the few channels through which officers can leave their assigned state.²⁵ Central government postings require a performance review, are prestigious and therefore viewed as gauges of how well an officer is doing within the service (Iyer and Mani 2012, Ferguson and Hasan 2013). Since all officers go through the review process but officers can choose to take up a central government posting if selected, it is a combined measure of performance and attachment to the allocated state.²⁶ As Figure 4, Panel C shows, home state officers are only less likely to serve the central government in states that score high on the corruption index. As for the case of performance in the prior two panels, the gap opens up over time and is largest in the highest payscale.

Finally, in Panel D of Figure 4, we plot the gap in the payscales of home vs. non-home officers throughout their career. While promotion in the IAS is primarily seniority-based, there remains scope for discretion among the promotion of officers with the same years of tenure. Despite their lower performance, as measured by the performance scores, the higher suspension rate and the lower likelihood of empanelment to the central government, home state officers tend to be promoted earlier than non-home officers with the *same level of seniority*. This, however, only holds in states that score high on the corruption index. The gap opens up as the time-based promotion becomes less binding due to the delays at higher levels, and is largest for those who served more than 30 years.²⁷ The promotion gap between home vs. non-home officers is highest in career stages where the negative performance difference is largest. The correlation between the average promotion and performance gap, for example, is -0.67; the correlation between promotions and suspensions is 0.87.²⁸

The sharp contrast between Panels A, B, C and Panel D of Figure 4 is remarkable. In states with higher levels of corruption, home officers perform worse on the subjective and objective performance measures but are promoted earlier once the time-based promotion rule is no longer binding. These home officers are also more likely to remain in their home state rather than move to the central government, either because of lower performance or due to the greater private benefits to remaining in their home state. Most importantly, it is striking that these gaps between home and non-home officers are particularly large in those later career stages where one expects the role of discretion in the promotion of officers to be more pronounced. This added discretion in the later career stages may open room for patronage and capture by the local political elite. Interestingly, these negative home state effects are absent in states with lower levels of corruption. The combined patterns in Figure 4 could thus be viewed as consistent with home officers being more susceptible to

²⁵IAS officers can also request to serve on temporary deputations in other states. Permanent moves are only possible for marriages to another IAS officer. These cases are rare and approved on a case-by-case basis.

²⁶For the subsample for which we have data on empanelment outcomes, the results also suggest that home officers are less likely to be empaneled (Appendix Table B15). In line with Iyer and Mani (2012), this further corroborates the interpretation of central government service as a measure of performance.

²⁷We also find that the promotion gap is larger in states which experience more frequent delays.

²⁸The promotion gap is not driven by the differential propensity of home officers to serve at the central government. The results remain comparable when the sample is restricted to only officers serving in their allocated state.

capture in environments that are more conducive to corruption. We conclude the paper by providing corroborating evidence that supports this interpretation. In particular, we focus on the interaction between IAS officers and Chief Ministers around political transitions to investigate differential patterns of political interference.

5 Home state allocation and political turnover

At independence, India adopted the Whitehall model of bureaucracy, which emphasizes the need for the separation between the polity and the bureaucracy, particularly as regards to non-interference of politicians in the postings of bureaucrats. In this model, “civil servants would not be moved or replaced after a change of government, and new ministers would nearly always be expected to work with the officials inherited from their predecessor - even if he or she was from a different political party. Politicians would be allowed almost no appointments or patronage,” with “decisions on professional advancement being made by other civil servants, not by politicians” (Wilson and Barker 1995, p. 131). However, as Iyer and Mani (2012) already demonstrated, there is evidence of *de facto* political interference in the Indian bureaucracy, with political turnover in a state coinciding with increased re-allocation of officers across job postings.

We extend these earlier results and assess if these patterns of political interference are more pronounced for home vs. non-home officers, and if within-home state proximity between an incoming or outgoing Chief Minister (the elected head of the state government) and an IAS officer - as measured by both individuals coming from the same home district - affects the probability of officers being promoted. Progression in the IAS follows a strict time-based rule, where officers are only eligible for promotion after having served a minimum amount of years (Bertrand et al. 2019; Appendix Table B1). Cases of “out of order” promotions, where the seniority rule is violated, are rare and the result of exceptional political interference. Gupta (2019), for example, describes an extreme case where an IAS officer was promoted to Chief Secretary bypassing 17 senior officers of four batches (p. 173).²⁹ Despite the strict time-based progression, there exists substantial scope for discretion in the order of promotion among officers of the *same tenure*, especially at the senior-levels where delays in promotions are more frequent (Figure A1). Screening committees – headed by the Chief Secretary, the senior-most civil servant working directly under the Chief Minister – rely not only on the internal rankings³⁰ but also on “soft” performance measures (e.g. the annual confidential reports) to make promotion recommendations. The promotion guidelines, for example, explicitly stress that “each Committee should decide its own method and procedure for objective assessment,” and that “advancement in an officer’s career [...]

²⁹Other, less extreme cases can be frequently found in the media, e.g. the case of out-of-turn promotions in Rajasthan (“2 IAS officers seek 1 year relaxation in promotion,” Times of India, 20.04.2017), promotion irregularities exposed by a Bihar cadre IAS officer (“I’m being fixed, says CK Anil,” The Telegraph, 2017), or the bypassing of seniority norms in Jammu & Kashmir (“J&K Chief Secretary quits amid ‘differences’ with the government,” The Citizen, 2015).

³⁰These internal rankings are referred to as the inter-se-seniority, which is computed based on the combined performance on the UPSC entry exam and during the training period.

should be earned by dint of hard work, good conduct and result oriented performance as reflected in the annual confidential report and based on strict and rigorous selection process.”³¹ Furthermore, committee recommendations for promotions require approval by the state government, thus allowing state governments to influence promotion decisions. As the guidelines state, “the state government shall take a decision either to accept or to vary the recommendations of the Committee, by giving reasons to be recorded in writing, and such a decision is final.”³²

To study the extent of such *de facto* political interference, we exploit the frequent turnovers of Chief Ministers following state elections, which are asynchronous and occur in five-year intervals in India. We move beyond the yearly panel used in Section 4.2 to construct a high frequency monthly balanced panel of officers whom we observe for a six-month window around the month of a Chief Minister appointment. The resulting dataset contains 192 turnovers for 1,785 officers between 1980-2011. These correspond to 11,410 IAS officer-turnover events.

5.1 Chief Minister turnover, transfers and promotions by seniority

We use a difference-in-differences design to study how promotions change differentially for home vs. non-home officers in the months around the Chief Minister transition. We estimate for the IAS officer i , the Chief Minister turnover j and the month around the turnover t ,

$$y_{ijt} = \beta \times New_CM_{jt} \times only_{K(i)T(i)} + \delta' x_{it} + \theta_i + \nu_j + \tau_t + \varepsilon_{ijt} \quad (3)$$

where y_{ijt} is a dummy that is 1 if the officer was promoted in a given year of a turnover. $t = 0$ denotes the month of the Chief Minister transition and $t = \{-6, -5, \dots, 5, 6\}$ denotes the months around the turnover event. Since six-month windows might overlap when a state experiences several Chief Minister turnovers in short succession, we create balanced individual-month panels for each Chief Minister transition by “stacking” the individual-turnover events. New_CM_{jt} is a dummy that is 1 if a new Chief Minister was appointed in the given month and the month thereafter.³³ As before, $only_{K(i)T(i)}$ is the instrument for home state allocation, a dummy for whether an officer entered as the only candidate in the home state \times caste \times intake year. β is the key parameter of interest, capturing the (reduced form) differential promotion prospects of a home officer vs. non-home officer following the arrival of a new Chief Minister. θ_i are individual fixed effects, ν_j the turnover fixed effect, and τ_t are time fixed effects. As before, we include in x_{it} tenure FEs to restrict the comparison to same state officers with the same level of seniority.

The results are reported in Table 8. To report the level effect for home officers, Column 1 first shows the results conditional on the selection bracket without individual fixed effects.

³¹See No. 20011/4/92-AIS-II, Annexure II, Section 6. In addition, “the committee should not be merely guided by the overall grading that may be recorded in the annual confidential reports, but should make its own assessment on the basis of the overall entries.” (Section 7).

³²See No. 20011/4/92-AIS-II, Annexure II, Section 14.1 and Section 14.2.

³³This choice is informed by the empirical pattern whereby most reshuffling occurs in the first two months of a new Chief Minister’s arrival (See Appendix Figure A8).

In the first two months of a Chief Minister appointment, the promotion probability is 0.5% points higher than in other months (Column 1). Relative to the unconditional promotion rate of 2.3%, this corresponds to an increase of 21%. On average, home state officers are not promoted at a differential rate when a new Chief Minister arrives (Column 2). This average, however, masks heterogeneity. In Column 3, we add a triple interaction and allow the effects to differ by seniority. As before, senior is a dummy that is 1 if the officer has served for at least 16 years. Officers who have served for at least 16 years belong to the “supertime scale” and occupy executive positions at the top of the bureaucracy; this experience threshold also coincides with the median years of experience among active officers. These senior levels correspond to the career stages where promotions become less time-based (Figure A1) and delays in promotions become more prevalent. As Column 3 shows, senior home state officers are more likely to be promoted in the immediate months of a Chief Minister appointment. This result remains robust when we add individual fixed effects (Column 4). Finally, we again make use of the state-level heterogeneity by splitting the sample into high vs. low corruption states. Mirroring previous results, we find that the promotion “premium” for senior home state officers is concentrated in states with higher levels of corruption, where the estimated coefficient is larger in magnitude and statistically significant.³⁴

[Table 8 here]

5.2 Within-home state analysis: home district proximity and promotions

Our analysis so far has been confined to the comparison between home state and non-home state officers. Since most Chief Ministers hail from the state they serve, the implicit premise of the event study has been that home state-allocated officers are more likely to be connected to the Chief Minister than non-home officers. Given the sheer size of many Indian states, however, such a broad measure of social proximity might mask substantial heterogeneity.

We thus conclude our analysis by exploiting *within-home state* variation in social proximity. Indeed, existing work has demonstrated that home district favoritism is an important determinant for resource allocation (Do et al. 2017, Fisman et al. 2017). We leverage our descriptive rolls, which allow us to identify the home districts of all officers. We also read through biographies and public records to identify the home districts of all 132 Chief Ministers in our study period 1980-2011. Combining both data sources allows us to derive a measure of home district proximity between the bureaucrat and the politician that varies both among bureaucrats from the home state and across time depending on which Chief Minister is in power. The key identifying variation stems from the fact that the same home state-allocated officer will face different Chief Ministers throughout his or her career: some Chief Ministers will originate from the same home district within the state while others will come from further away home districts. Since geographical distance is correlated with a host of socioeconomic distances, we use the physical distance between the home district

³⁴These results are not mechanically related to the higher odds for home state officers to still be in the state (rather than at the central government - see Panel C of Figure 4) in those later career stages. The results remain comparable when excluding those who serve in the central government.

of the Chief Minister and the home district of the home state-allocated IAS officer as a within state measure of social proximity.³⁵ Intuitively, we ask whether promotion patterns differ among home officers who originate from the same home district as the incoming Chief Minister vs. home officers who do not gain a home district tie with the incoming Chief Minister. We implement this test by augmenting the event study (3), allowing the main effects to vary by an IAS officer and Chief Minister turnover-specific measure of social proximity, *same_home_{ij}*. Conditional on the sample of home state officers, we estimate:

$$y_{ijt} = \beta \times New_CM_{jt} \times same_home_{ij} + \delta' x_{it} + \theta_i + \nu_j + \tau_t + \varepsilon_{ijt} \quad (4)$$

where the specification follows (3) except that we are now interested in how the impact of a new Chief Minister appointment varies by whether the home state officer i becomes home connected in the turnover event j . Specifically, *same_home_{ij}* is a dummy that is 1 if the officer i did not share the same home district with the outgoing Chief Minister but subsequently became home connected with the incoming Chief Minister. The dummy is 0 if the officer did not experience a switching in connection. x_{it} comprises tenure FEs to restrict the comparison to same state officers with the same level of seniority.

We use a conservative cut-off and define a Chief Minister and bureaucrat to originate from the same home district if their home districts are less than 25 miles apart.³⁶ In the context of India with its sizeable states and districts and sprawling agglomerations of connected towns this definition is close enough to capture actual social proximity as regional elites are well connected at this level of geographical proximity. With the 25 miles cut-off, 127 of the 507 home officers ever become home district connected to a Chief Minister throughout their career. With officers often experiencing multiple switches throughout their life-long service, we obtain 212 officer-turnover specific switches. As the Appendix Table B17 shows, our results do not critically hinge on the 25 miles cut-off but are robust to both more restrictive and more generous definitions of home connectedness, such as using 15 miles, 50 miles, 75 miles or 100 miles cut-offs.

Table 9 reports the results and confirms that home connections are key for promotions. Consistent with Chief Ministers exercising favoritism, promotions following a Chief Minister turnover are disproportionately concentrated among those officers who hail from the same home district (Column 1). While the promotion probability increases by 0.7% points for those who do not experience a switch in their home ties, that probability increases by an additional 3.2% points for those who gain a home tie to their Chief Minister. This

³⁵We geocode district locations using the Google Maps API based on each district's headquarter. Of course, home state officers are mechanically more likely to originate from closer to the Chief Minister's home district throughout their career than non-home officers. On average, the distance between a Chief Minister's home district and the home district of a home-allocated IAS officer is 390 miles lower than vis-a-vis a non-home state officer (Table 5, Column 3).

³⁶Since the identification relies on switches in home connectedness, there is an empirical trade-off when deciding how to define home district connectedness. If the cut-off distance for home district connectedness is too close, there will be too few cases where Chief Ministers and officers actually become home connected. The chances of coming from the exact same narrowly defined home district and experiencing a switch is low. In contrast, if the cut-off distance is too far, we may not be capturing any relevant effects as the physical measure of proximity no longer approximates social proximity.

preferential promotion pattern is robust to the inclusion of individual fixed effects (Columns 2).³⁷ Mirroring previous analysis, Column 3 adds a triple interaction by allowing the effect of gaining home ties to vary by seniority, as measured by having served for more than 16 years. While the point estimate for the effect of gaining a home tie on the arrival of a new Chief Minister remains comparable (albeit insignificant due to the noisier estimates), the home tie “premium” does not vary significantly by seniority. Column 4 includes an additional dummy that is 1 if the home state officer was home district-connected to the outgoing Chief Minister but lost the home tie as a new Chief Minister turned in. If the effect of home ties were symmetric, losing the home tie would lead to a lower subsequent promotion rate. Switching out, on average, has no impact on promotion rates (Column 3). Finally, we cut the data by state-level corruption. Consistent with the previous evidence, home district favoritism is only statistically significant in states with high levels of corruption. This asymmetry - where gaining connections increases the promotion prospects, whereas losing connections does not have the opposite impact - provides a channel via which cumulative preferment by Chief Ministers from the same home district can lead to the observed divergence in the promotion paths between home and non-home state officers (Figure 4). It also helps to explain the dissonance between performance and promotion observed for home officers. Despite being perceived as being both more corrupt and less able to withstand illegitimate political pressure, home officers are nonetheless being favored in promotion decisions by incoming politicians. Favoritism in promotion decisions as revealed by the monthly Chief Minister turnover event study thus goes hand in hand with the lower performance measures of the IAS officer survey.

[Table 9 here]

6 Conclusion

Bureaucrats are an important determinant of state capacity. The question of how to recruit and motivate them has thus sparked a vibrant literature on the selection and incentives of public servants (Ashraf and Bandiera 2017, Dal Bo et al. 2013, Dal Bo et al. 2017, Khan et al. 2015). Yet, how to allocate *already selected* talent has remained an understudied margin for improving public sector performance. In this paper, we ask if allocating bureaucrats to the places they originate from would enhance or depress their performance. All centralized bureaucracies face the question of whether to allow officers to serve their home localities.

We make progress by combining detailed institutional knowledge with unique data to study the Indian Administrative Service - the senior-most civil service and “steel frame” of India. We isolate a rare, rule-based source of variation that governs the assignment of officers across India. Linking this variation in home assignment to a large survey on the performance of IAS officers, as well as to rich administrative data from their training academy, allows us to study the performance effects on the allocation margin.

³⁷As before, the promotion gap for home district connected officers is not driven by the differential propensity to serve in the home state vs. the central government. The results hold when excluding officers who serve in the central government.

We exploit two layers of social proximity to answer the question of whether or not home allocations affect performance. Our first layer of evidence reveals that home-allocated officers are perceived to be more corrupt and less able to withstand illegitimate political pressure. This average effect masks substantial heterogeneity: when we study state-level heterogeneity in the home allocation effects, we find that the negative effects are primarily driven by the more corrupt states. In these states the pressure for native officers to bend to the politicians may be greater, as might be the opportunities for private gain. Furthermore, we find that the negative effects are most pronounced in the later career stages, the same career stages where we also show that home officers enjoy greater promotion prospects.

The second layer of evidence exploits the Chief Minister turnover to help understand a mechanism through which home state officers might be influenced by local politicians. We find that officers that share the same home district as the incoming Chief Minister receive a preferential treatment in promotions on the margin. This deeper layer of social proximity is predictive of being favored by the incoming politician *even within the set of home-allocated officers*. Taken together, our results from these two layers of analysis suggest that social proximity hampers bureaucrat performance through political interference.

These findings complement the growing literature that studies how social proximity affects the performance of individuals in private organizations (Fisman et al. 2017, Fisman et al. 2018, Bandiera et al. 2009). By combining variation in the life-long deployment of officers to states with the exposure to different politicians over time, we bridge the literature on the determinants of bureaucrat performance (Bertrand et al. 2019, Rasul and Rogger 2017) with the literature exploiting political turnover to identify favoritism and patronage (Xu 2018, Jia 2017, Brollo et al. 2017, Colonelli et al. 2018, Akthari et al. 2018).

The results also have resonance for a whole host of less developed countries that are in the process of building state capacity (Besley and Persson 2009). In these contexts, assigning officers back to environments which they are most socially proximate with may actually limit their ability to effectively serve the nation. This is an interesting result, as we know that such home avoidance rules run counter to the preferences of the officers themselves. While related research has suggested that rewarding performance with individually preferred postings may be an effective incentive mechanism (Khan et al. 2018), our results suggest that a principal may nonetheless seek to deliberately mismatch officers' preferences and location assignments if their private gains are misaligned with public gains - in this case due to greater likelihood of local capture. The paper opens up a new direction of research on how to allocate already-recruited talent across a national geography which is separate from the literature on selection and incentives that has dominated the modern literature on bureaucracy. What is exciting about this research is that it suggests that considerable gains in bureaucrat performance (and hence economic performance) may be had from avoiding home allocations without the need for any additional fiscal cost. History tells us that countries bereft of a coherent and motivated set of bureaucrats who can implement national policies in a coordinated fashion are unlikely to make the transition to industrialized states. More research will be required to identify different pathways to developing effective national

bureaucracies - but what is incontrovertible is that there are few issues in the study of state capacity that are more important.

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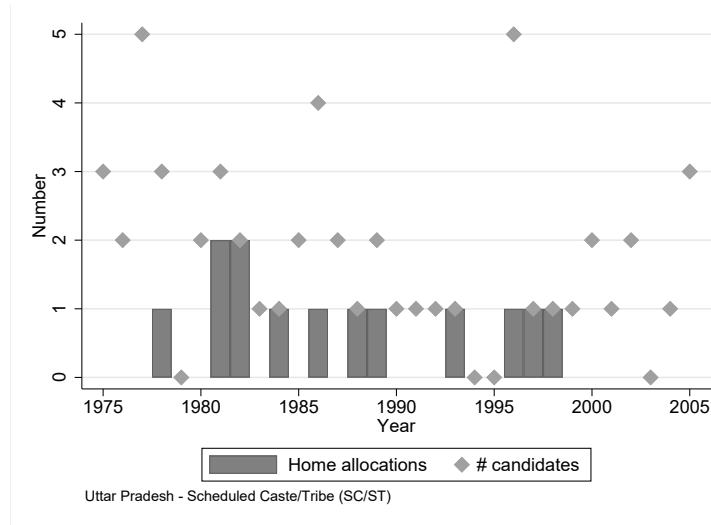
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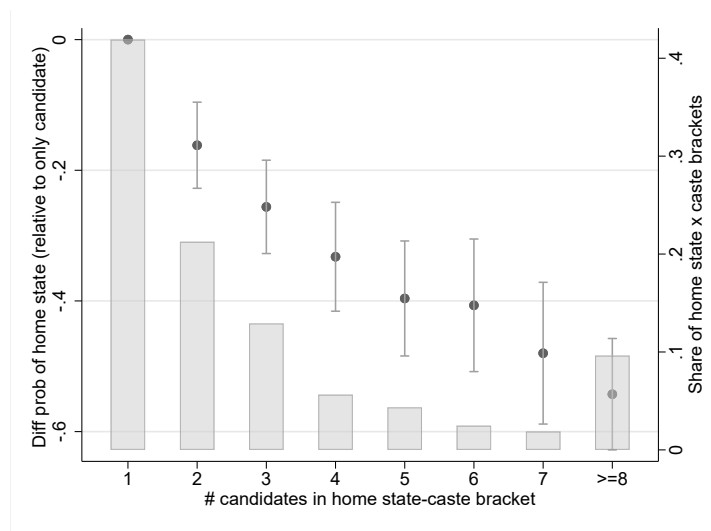
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Figure 1: Home state allocation and allocation bracket size



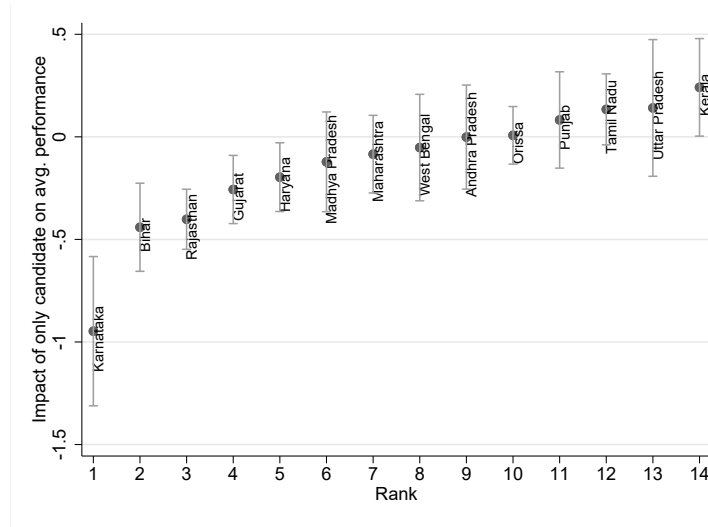
Notes: Bar chart shows the number of home state allocations among Scheduled Castes/Tribes in Uttar Pradesh 1975-2015. Scatter plot shows the number of potential candidates in the home state allocation bracket Uttar Pradesh-Scheduled Castes/Tribes (SC/ST) in a given year of intake.

Figure 2: Predicting home state allocation using allocation bracket size



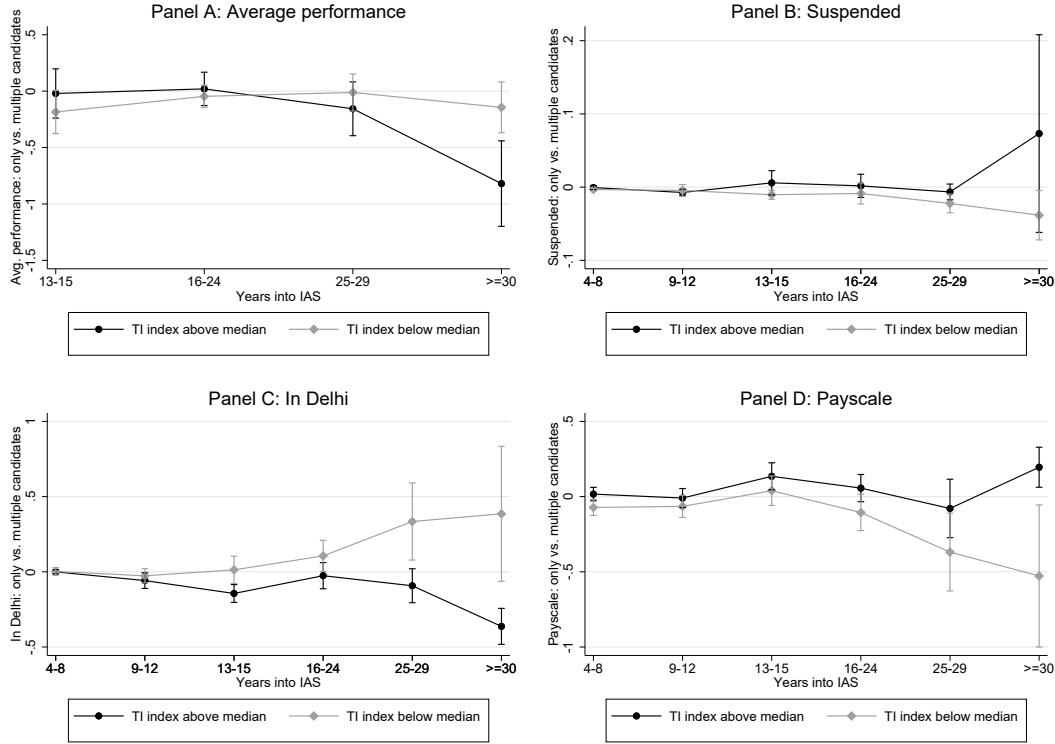
Notes: Relating home state allocation to the number of candidates in the same home state \times caste \times intake year bracket. Estimates are based on regressing home state allocation on dummies for the number of candidates in the same home state \times caste \times intake year bracket, intake year FEs and home state \times caste FEs. Estimates show differences relative to being the only candidate. 90% confidence intervals, with standard errors clustered at the home state \times caste \times intake year level.

Figure 3: Average performance and only candidate effect by allocated state



Notes: Reduced form effect of only candidate (instrument for home allocations) on the performance index (average across all five standardized scores), estimated for each major state of India by interacting only candidate \times state dummies. *Only candidate* is a dummy that is 1 if the officer is the only candidate in the same home state \times caste \times intake year bracket. 90% confidence intervals based on standard errors clustered at the home state \times caste \times intake year and the officer-level.

Figure 4: Performance and career progression



Notes: Differences in performance-related measures (**Panels A-C**) and career progression (**Panel D**) between only candidates vs. multiple candidates (reduced form for home vs. non-home officers) over the career, broken down by officers allocated to above/below median corruption states (as measured by the above/below median state-level TI index). The dependent variables for each panel are as follows: In **Panel A**, the dependent variable is the cross-sectional performance index computed by averaging across all five standardized dimensions. The coefficients are estimated using a flexible version of Table 6, Panel B, Column 6, where we allow the coefficient of interest to vary by seniority. **Panels B-D** show career events from an individual-year panel. The coefficients are estimated using individual, year and tenure fixed effects. In **Panel B**, the dependent variable is a dummy that is 1 if the officer was suspended in a given year. In **Panel C**, the dependent variable is 1 if the officer was serving at the central government. In **Panel D**, the dependent variable shows the payscale of an officer, where the payscales range from 1 (lowest) to 7 (highest). The years in IAS are binned to reflect the progression by payscales. See Appendix Table B9 for the regression tables corresponding to the figures. 90% confidence intervals based on standard errors clustered at the home state \times caste \times intake year and the officer-level.

Tables

Table 1: Descriptive statistics for the performance scores

	(1)	(2)	(3)	(4)	(5)
	Mean	SD	Ratings	Officers	Coverage
Withstanding illegitimate pressure	3.523	1.094	16,728	1,471	71.96%
Probity of IAS officer	3.670	1.105	15,153	1,451	70.98%
Effectiveness on the job	3.730	1.077	17,753	1,472	72.01%
Sensitive towards poorer	3.527	1.141	17,047	1,471	71.96%
Overall rating	3.646	1.057	17,698	1,472	72.01%

Notes: Performance scores for the cross-section of rated officers in 2012-13. Reporting the descriptive statistics (mean and standard deviation) for the measures, where the scores range from 1 (lowest) to 5 (highest). Column 3 and 4 report the total number of ratings and the total number of rated officers. Column 5 reports the coverage rate for the sample population of all active, centrally recruited officers with at least 8 years of tenure in 2012/13.

Table 2: Officer characteristics by home state allocation

Means	(1) Allocation		(3)	(4)
	Home	Non-Home	Diff Home-Non-home Raw	Within intake
Entry (UPSC) exam rank	44.483	56.091	-11.607*** (1.732)	-14.959*** (1.791)
Female	0.107	0.134	-0.027 (0.017)	-0.020 (0.017)
Urban background	0.728	0.722	0.006 (0.022)	-0.002 (0.023)
Age at entry	25.443	25.704	0.261** (0.112)	-0.022 (0.108)
Distinction	0.326	0.322	0.004 (0.024)	0.006 (0.024)
STEM or Economics	0.590	0.616	-0.025 (0.025)	-0.004 (0.025)
Other Backward Caste (OBC)	0.059	0.119	-0.059*** (0.015)	-0.024* (0.012)
Scheduled Caste (SC)	0.168	0.116	0.052*** (0.017)	0.061*** (0.019)
Scheduled Tribe (ST)	0.078	0.059	0.019 (0.012)	0.022 (0.014)
Previous job: Education/Research	0.173	0.147	0.026 (0.018)	-0.007 (0.019)
Previous job: Finance/Banking	0.055	0.049	0.006 (0.011)	-0.002 (0.012)
Previous job: None	0.294	0.299	0.005 (0.023)	0.010 (0.023)
Previous job: Private/SOE	0.114	0.118	-0.003 (0.016)	0.008 (0.017)
Previous job: Public	0.326	0.345	-0.018 (0.024)	0.003 (0.025)
Previous job: Public - AIS	0.034	0.039	-0.005 (0.009)	-0.012 (0.009)
Cohort size	7.685	6.306	1.379*** (0.200)	1.003*** (0.388)
Caste fractionalization	0.326	0.344	-0.017 (0.011)	0.025** (0.011)
Intake year FEs	-	-	-	Y
Diff jointly zero: p -value			0.000***	0.000***
Observations	542	1,326	1,888	1,888

Notes: Unit of observation is the officer. Columns 1-2 show the mean characteristics for those who received the home allocation and those who did not. Column 3 is the raw difference in means between home and non-home allocated officers. Column 4 shows the mean difference among officers of the same intake year. *UPSC Rank* is the Union Public Civil Service entry exam rank in the intake year. *Female* is a dummy that is 1 if the officer is female. *Urban background* is a dummy that is 1 if the officer is from an urban background. *Age at entry* is the entry age of the officer. *Distinction* is a dummy that is 1 if the officer received an academic distinction. *STEM* is a dummy that is 1 if the officer studied a STEM or Economics degree. *Previous job:* are categories for the previous positions the officer held before entering the service. *Cohort size* is the total number of officers allocated to same state in same year. *Caste fractionalization* is the fractionalization index for the cohort based on the caste categories. Robust standard errors. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Officer characteristics by allocation bracket size (one vs. many candidates)

Means	Candidates in bracket		Diff Only-Many	
	(1) Only (1)	(2) Many (>1)	(3) Raw	(4) Within bracket
Entry (UPSC) exam rank	61.39	51.82	9.569*** (2.584)	-1.741 (1.990)
Female	0.178	0.121	0.056** (0.024)	0.067* (0.035)
Urban background	0.695	0.727	0.032 (0.032)	0.007 (0.039)
Age at entry	26.507	25.524	0.982*** (0.159)	0.061 (0.205)
Distinction	0.352	0.320	-0.032 (0.034)	0.044 (0.043)
STEM or Economics	0.594	0.610	-0.016 (0.035)	0.006 (0.045)
Previous job: Education/Research	0.111	0.160	-0.049* (0.026)	0.013 (0.028)
Previous job: Finance/Banking	0.043	0.051	-0.008 (0.016)	-0.005 (0.020)
Previous job: None	0.294	0.298	-0.003 (0.039)	-0.016 (0.041)
Previous job: Private/SOE	0.111	0.118	0.007 (0.023)	0.004 (0.032)
Previous job: Public	0.415	0.330	0.084** (0.034)	-0.011 (0.046)
Previous job: Public - AIS	0.024	0.039	-0.015 (0.014)	0.014 (0.015)
Cohort size	5.115	7.093	-1.977*** (0.293)	0.149 (0.264)
Caste fractionalization	0.425	0.330	0.094*** (0.015)	0.004 (0.017)
Intake year FEs	-	-	-	Y
Home state-Caste FEs	-	-	-	Y
Diff jointly zero: p -value			0.000***	0.831
Observations	207	1,681	1,888	1,882

Notes: Unit of observation is the officer. Columns 1-2 show the mean characteristics for those who are the only candidate in the intake year \times home state \times caste bracket. Column 3 is the raw difference in means between those who are only candidates and those with many candidates in the intake year \times home state \times caste bracket. Column 4 shows the mean difference among officers of the same intake year and within the same home state \times caste bracket. *UPSC Rank* is the Union Public Civil Service entry exam rank in the intake year. *Female* is a dummy that is 1 if the officer is female. *Urban background* is a dummy that is 1 if the officer is from an urban background. *Age at entry* is the entry age of the officer. *Distinction* is a dummy that is 1 if the officer received an academic distinction. *STEM* is a dummy that is 1 if the officer studied a STEM or Economics degree. *Previous job:* are categories for the previous positions the officer held before entering the service. *Cohort size* is the total number of officers allocated to same state in same year. *Caste fractionalization* is the fractionalization index for the cohort based on the caste categories. Standard errors clustered at the home state \times caste \times intake year level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Predicting home state assignment with the allocation rule

	(1)	(2)	(3)	(4)
		Allocated to home state		
Mean of dep. var	0.277	0.277	0.277	0.285
Only candidate $t + 2$				0.033 (0.041)
Only candidate $t + 1$				-0.036 (0.039)
Only candidate	0.228*** (0.042)	0.241*** (0.046)	0.250*** (0.046)	0.285*** (0.050)
Only candidate $t - 1$				0.017 (0.047)
Only candidate $t - 2$				-0.054 (0.046)
Intake year FEs	Y	Y	Y	Y
Home state \times Caste FEs	Y	Y	Y	Y
Rank FEs	-	Y	Y	Y
Individual controls	-	-	Y	Y
Observations	1,880	1,868	1,868	1,700

Notes: Unit of observation is the officer. Relating home state allocation to the instrument. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state \times caste \times intake year bracket. Column 4 also includes the two year leads and lags of the variable. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Social proximity and home state allocation

	(1)	(2)	(3)
	Distance home district	Same language	Dist. home CM 2012
Mean of dep. var	455.5	0.388	494.4
Panel A: OLS			
Home state	-482.150*** (16.116)	0.692*** (0.022)	-438.06*** (18.549)
Panel B: IV			
Home state	-495.720*** (87.548)	0.829*** (0.130)	-389.27*** (105.60)
Kleibergen-Paap F -statistic	34.000	29.836	27.854
Intake year FEs	Y	Y	Y
Home state \times Caste FEs	Y	Y	Y
Rank FEs	Y	Y	Y
Individual controls	Y	Y	Y
Observations	1,625	1,868	1,497

Notes: Unit of observation is the officer. Relating measures of social proximity to home state allocation. *Home state* is a dummy that is 1 if the officer was allocated to his or her state of permanent domicile. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state \times caste \times intake year bracket. **Panel A** presents the OLS estimates. **Panel B** presents the IV results. The dependent variable distance to home district is the distance (in miles) between the allocated state's state capital and the officer's home district. Same language is a dummy that is 1 if the officer's mother tongue is the first official language in the state. Distance between the officer's home district and the home district of Chief Ministers serving in 2012 is measured by the distance (in miles) between the district headquarters. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Performance ratings and home state allocation

	(1)	(2)	(3)	(4)	(5)	(6)
	Subjective performance ratings					Perf.
	Pressure	Probity	Effective	Pro-poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Panel A: OLS						
Home state	-0.011 (0.029) [0.984]	-0.012 (0.032) [0.984]	-0.002 (0.031) [0.984]	-0.039 (0.031) [0.984]	0.022 (0.033) [0.984]	0.001 (0.027)
Panel B: IV						
Home state	-0.509*** (0.141) [0.001]	-0.234* (0.130) [0.072]	-0.253* (0.132) [0.071]	-0.317** (0.135) [0.048]	-0.291* (0.153) [0.072]	-0.258** (0.109)
Kleibergen-Paap F -stat	47.632	55.706	47.125	46.934	46.654	55.167
Panel C: IV Respondent FEs						
Home state	-0.381*** (0.121) [0.010]	-0.202* (0.119) [0.228]	-0.034 (0.107) [0.753]	-0.112 (0.113) [0.523]	-0.103 (0.127) [0.523]	-0.166* (0.088)
Kleibergen-Paap F -stat	46.495	56.885	46.470	45.626	46.168	55.972
Home state \times Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,712	15,128	17,744	17,037	17,689	14,003

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of perceived performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) and the average index (averaged across all five standardized dimensions) to home state allocation. *Home state* is a dummy that is 1 if the officer is allocated to his or her state of origin. *Only candidate* is a dummy that is 1 if the officer is the only candidate in the home state \times caste \times intake year bracket. **Panel A** presents the OLS estimates. **Panel B** presents the IV results without respondent fixed effects. **Panel C** presents the IV results with respondent fixed effects. Respondent fixed effects are dummies for each respondent scoring officers. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. False discovery rate (FDR) adjusted q -values are reported in brackets.

Table 7: Performance ratings, suspensions and state-level corruption

	(1)	(2)	(3)	(4)	(5)
	Performance index			Suspended	
Mean of dep. var	0.000	0.000	0.000	0.833	0.833
Only candidate	-0.064** (0.032)	-0.062* (0.035)	-0.062* (0.035)	-0.263 (0.286)	-0.250 (0.285)
× TI corruption index		-0.099*** (0.034)	-0.107** (0.050)	0.405** (0.185)	0.681** (0.280)
× Human Development Index			-0.011 (0.044)		0.385 (0.279)
Home state × Caste FEs	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y
State × Tenure FEs	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y		
Year FEs				Y	Y
Sample	Cross-section			Panel	
Observations	14,003	12,959	12,959	31,712	31,712

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure (Columns 1-3) and the officer-year for the time period 1980-2011 (Columns 4-5). Relating the performance index (computed by averaging across all five standardized dimensions, see Table 6) and suspensions to home state allocation. The dependent variable suspended is a dummy that is 1 (scaled by 100) if the officer was suspended in a given year. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. *TI corruption index* is the state-level Transparency International corruption index from 2005 as used by Fisman et al. (2014). The *Human Development Index* is the state-level Human Development Index in 2007. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state × caste × intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: Promotions and Chief Minister turnover by home state allocation

	(1)	(2)	(3)	(4)	(5)	(6)
			IAS officer is promoted			
Mean of dep. var	0.0231	0.0231	0.0231	0.0231	0.0239	0.0222
New Chief Minister (CM)	0.005***	0.005***	0.008***	0.007***	0.007***	0.006**
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Only candidate	-0.004	-0.004	-0.003			
	(0.005)	(0.005)	(0.005)			
New CM × Only candidate		0.001	-0.004	-0.004	-0.007	-0.001
		(0.003)	(0.004)	(0.004)	(0.005)	(0.006)
New CM × Senior			-0.009***	-0.008***	-0.010***	-0.007**
			(0.002)	(0.002)	(0.004)	(0.004)
New CM × Senior × Only candidate			0.017*	0.016*	0.021*	0.011
			(0.009)	(0.009)	(0.012)	(0.016)
Year × Month FEs	Y	Y	Y	Y	Y	Y
Tenure FEs	Y	Y	Y	Y	Y	Y
Turnover FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y			
Home state × Caste FEs	Y	Y	Y			
Year of intake FEs	Y	Y	Y			
Senior × Only candidate			Y	Y	Y	Y
Individual FEs				Y	Y	Y
Sample		Full sample			Corruption level	
					High	Low
Observations	148,330	148,330	148,330	148,330	78,754	69,576

Notes: Unit of observation is the Officer × Turnover × Year × Month. Relating promotions to the appointment of a new Chief Minister and home state allocation. Balanced sample of officers around 6 month windows of Chief Minister appointments. In Column 5 (Column 6), the sample is restricted to states that score above (below) median on the Transparency International corruption index (Fisman et al. 2014). The dependent variable is a dummy that denotes an increase in the payscale. *New Chief Minister* is a dummy that is 1 in the month the Chief Minister is appointed and the month thereafter. *Senior* is a dummy that is 1 if the IAS officer is at least 16 years in service. *Only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. Controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

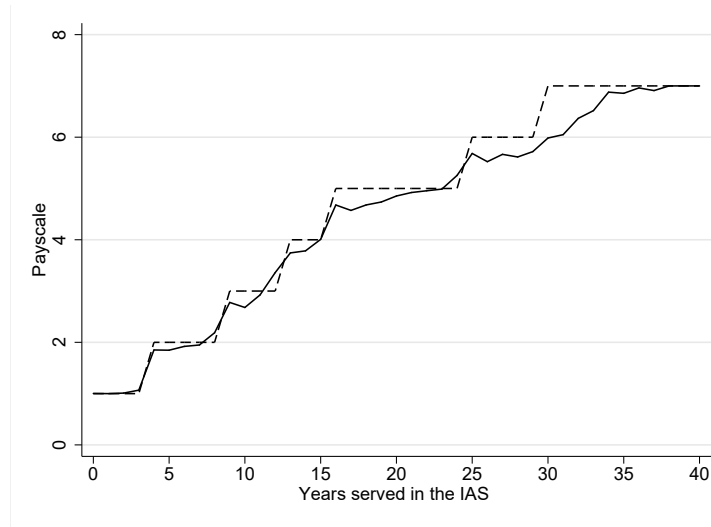
Table 9: Within-home officer analysis: Home district connectedness to the Chief Minister

	(1)	(2)	(3)	(4)	(5)	(6)
			IAS officer is promoted			
Mean of dep. var	0.0234	0.0234	0.0234	0.0234	0.0244	0.0237
New Chief Minister (CM)	0.007***	0.007***	0.010***	0.010***	0.010**	0.008*
	(0.002)	(0.002)	(0.003)	(0.003)	(0.005)	(0.004)
Home connected: Switch in	-0.004					
	(0.007)					
New CM × Home connected: Switch in	0.032**	0.029**	0.028	0.028	0.057*	0.026
	(0.012)	(0.013)	(0.017)	(0.017)	(0.033)	(0.027)
New CM × Senior			-0.011**	-0.010**	-0.015*	-0.011*
			(0.004)	(0.004)	(0.008)	(0.006)
New CM × Senior × Home connected: Switch in			-0.004	-0.005	-0.015	-0.017
			(0.024)	(0.024)	(0.042)	(0.041)
New CM × Home connected: Switch out				0.006	-0.019	0.020
				(0.014)	(0.028)	(0.023)
New CM × Home connected: Switch out × Senior				-0.018	-0.013	-0.038
				(0.020)	(0.036)	(0.025)
Year × Month FEs	Y	Y	Y	Y	Y	Y
Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y					
Home state × Caste FEs	Y					
Year of intake FEs	Y					
Turnover FEs	Y	Y	Y	Y	Y	Y
Individual FEs		Y	Y	Y	Y	Y
Senior × Home connected: Switch in			Y	Y	Y	Y
Senior × Home connected: Switch out				Y	Y	Y
Sample		Home state officers only			Corruption level	
					High	Low
Observations	46,947	46,947	46,947	46,947	18,755	25,583

Notes: Unit of observation is the Officer × Turnover × Year × Month. Relating promotions to home ties to the incoming Chief Minister. Balanced sample of officers around 6 month windows of Chief Minister appointments. The sample is restricted to home state officers only. In Column 5 (Column 6), the sample is restricted to states that score above (below) median on the Transparency International corruption index (Fisman et al. 2014). The dependent variable is a dummy that denotes an increase in the payscale. *New Chief Minister* is a dummy that is 1 in the month the Chief Minister is appointed and the month thereafter. *Senior* is a dummy that is 1 if the IAS officer is at least 16 years in service. An officer and Chief Minister are defined as home connected if their home districts are less than 25 miles apart. *Home connected: Switch in* is a dummy that is 1 if the officer moved from not being home connected to home connected in a given turnover. *Home connected: Switch out* is a dummy that is 1 if the officer moved from home connected to not being home connected in a given turnover. Controls are: Home state × Caste FEs, year of intake FEs, the entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, and dummies for previous job type. Standard errors clustered at the officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

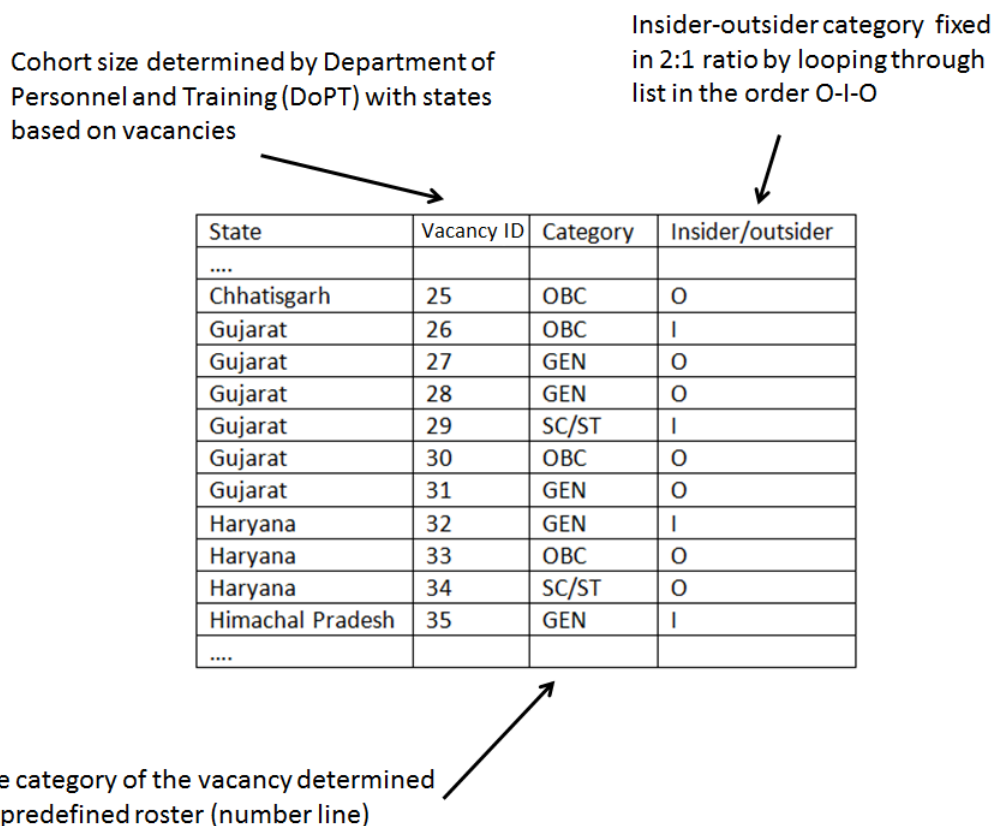
A Appendix - For Online Publication

Figure A1: Seniority based promotion: Average payscale and years of tenure



Notes: Average payscale of IAS officers as a function of the years served in the IAS (solid line) for the cross-section of all centrally recruited IAS officers active in 2012. The dashed line marks the payscale as predicted using the IAS promotion guidelines.

Figure A2: Determination of vacancies: Example 2006



Illustrating the assignment of categories (caste and home preference) to vacancies through the roster randomization for the year 2006. Vacancies are earmarked by caste status (O.B.C. denotes other backward castes, S.C./S.T. scheduled castes/tribes and unreserved the general castes) and home state (“I” denotes insider vacancies reserved for applicants from the same state; “O” denotes outsider vacancies reserved for applicants from other states). The assignment occurs through a number line.

Figure A3: Assignment of categories (caste and home preference) to vacancies through roster randomization

Cadre Allocation - 2006

Distribution of vacancies to be filled in various cadres/joint cadres of Indian Administrative Service (IAS) on the basis of Civil Services Examination 2006, among Insider and Outsider Vacancies and between categories.

Sl. No.	Name of the State Cadre / Joint Cadre	Unreserved Insider	Unreserved Outsider	OBC Insider	OBC Outsider	SC/ST Insider	SC/ST Outsider	Total
1	A G M U T	1	2	1	0	0	1	5
2	Andhra Pradesh	1	1	0	0	0	0	2
3	Assam Meghalaya	1	2	0	1	1	0	5
4	Bihar	2	1	0	2	1	1	7
5	Chhatisgarh	0	3	1	1	1	0	6
6	Gujarat	0	3	1	1	1	0	6
7	Haryana	1	0	0	1	0	1	3
8	Himachal Pradesh	1	0	0	0	0	0	1
9	Jammu & Kashmir	0	1	0	0	0	0	1
10	Jharkhand	0	1	0	0	0	0	1
11	Karnataka	0	1	1	0	0	1	3
12	Kerala	1	0	0	1	0	0	2
13	Madhya Pradesh	2	1	0	1	0	1	5
14	Maharashtra	1	2	0	1	1	0	5
15	Manipur Tripura	0	3	0	1	1	0	5
16	Nagaland	0	1	0	1	1	0	3
17	Orissa	1	1	0	1	0	1	4
18	Punjab	0	1	1	0	0	1	3
19	Rajasthan	0	1	1	0	0	1	3
20	Sikkim	0	0	1	0	0	1	2
21	Tamil Nadu	0	1	1	0	0	0	2
22	Uttar Pradesh	1	2	0	2	1	1	7
23	Uttaranchal	1	0	0	1	0	1	3
24	West Bengal	0	3	1	0	0	1	5
		14	31	9	15	8	12	89

The final distribution of vacancies by state and caste/home quota for the year 2006. Vacancies are earmarked by caste status (O.B.C. denotes other backward castes, S.C./S.T. scheduled castes/tribes and unreserved the general castes) and home state (insider vacancies are reserved for applicants from the same state; outsider vacancies are reserved for applicants from other states).

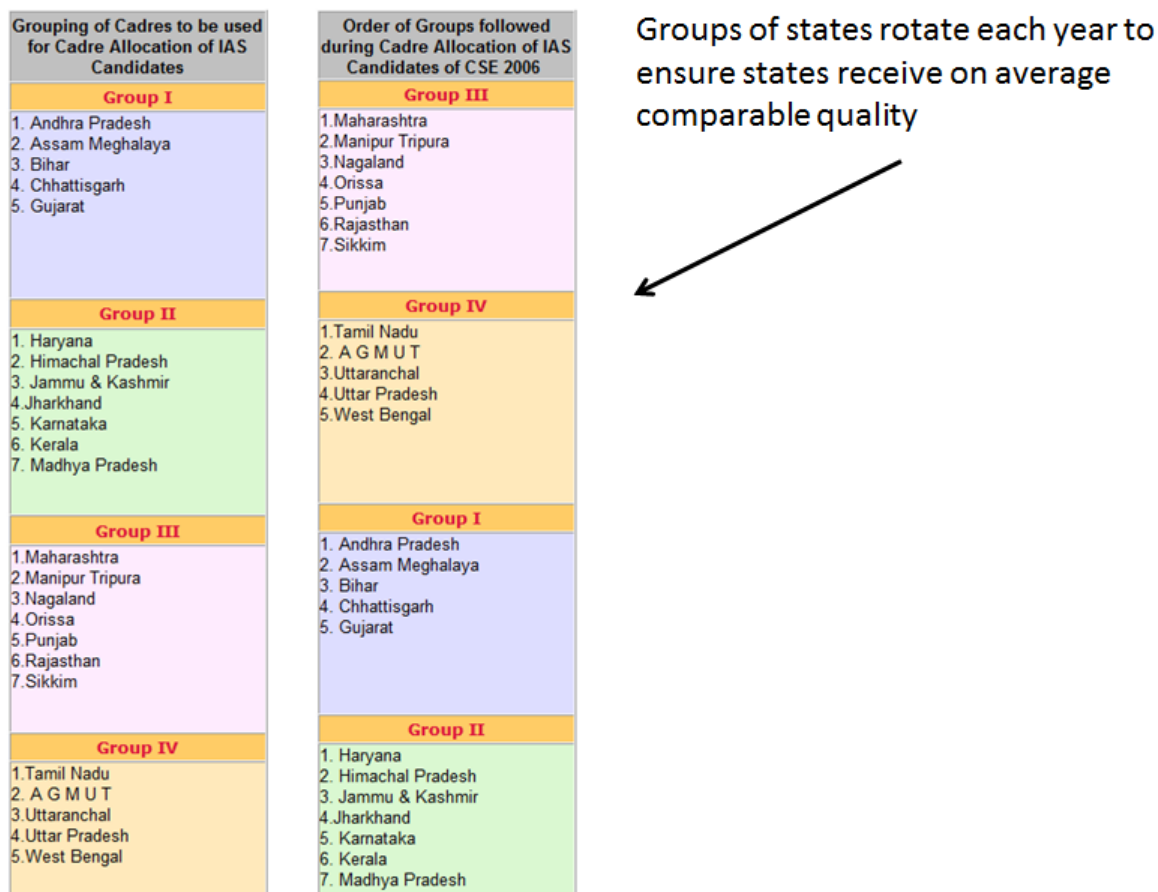
Figure A4: Merit-based (UPSC rank) allocation based on caste and home preference match

**Master Statement in respect of candidates allotted to
Indian Administrative Service on the basis of
Civil Services (Main) Examination, 2006 for purpose of their Cadre Allocation**

Sl. No.	Rank	Name of the Candidate	Home State	Category	Whether Home State Opted?
1	1		Andhra Pradesh	O.B.C.*	Yes
2	2		Punjab	General	Yes
3	3		Uttar Pradesh	General	Yes
4	4		Kerala	General	Yes
5	5		Uttar Pradesh	General	Yes
6	6		Kerala	General	No
7	8		Chhatisgarh	General	No
8	9		Orissa	General	Yes
9	10		Chandigarh	General	Yes
10	11		Orissa	S.C.	Yes
11	12		Uttaranchal	General	Yes
12	13		Kerala	General	Yes
13	14		Uttar Pradesh	General	Yes
14	15		West Bengal	General	Yes
15	16		Uttar Pradesh	General	Yes
16	17		Kerala	General	Yes
17	18		Madhya Pradesh	General	Yes
18	19		Uttar Pradesh	S.C.*	Yes
19	20		Kerala	O.B.C.*	Yes
20	21		Rajasthan	General	Yes
21	22		Haryana	General	Yes
22	23		Uttar Pradesh	General	Yes
23	24		Uttar Pradesh	General	Yes
24	25		Uttar Pradesh	General	Yes
25	26		Uttar Pradesh	O.B.C	Yes

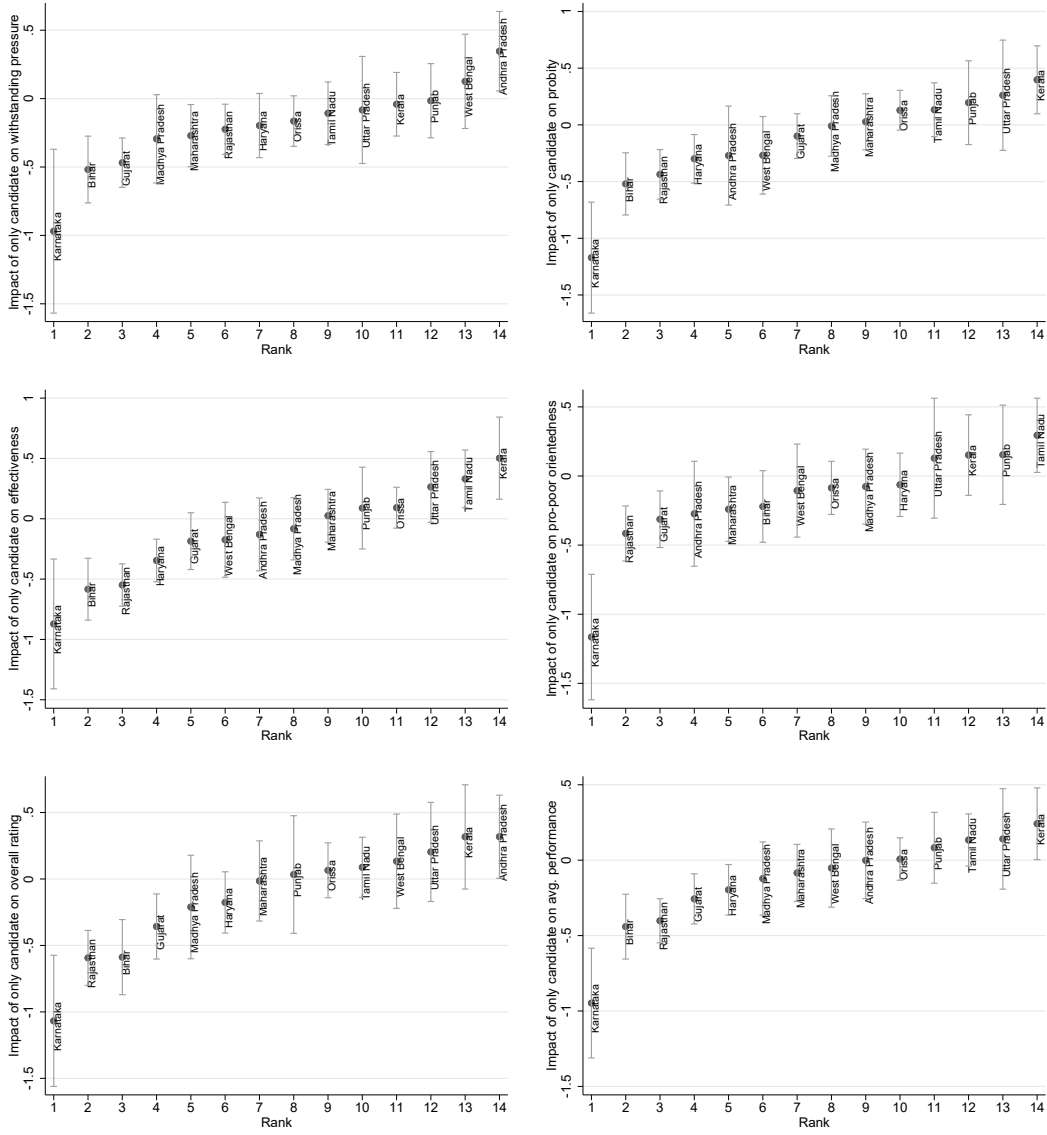
Illustrating the ranking of candidates using the intake year of 2006. The names have been removed in this figure but the full list is publicly available through the Union Public Service Commission. The successful applicants in a given year of intake are ranked in descending order based on the UPSC entry exam score. Home state denotes the state from which the candidate applied from. Category denotes the caste of the candidate, where O.B.C. denotes other backward castes, S.C. scheduled castes, S.T. scheduled tribes and General the unreserved castes. Whether home state opted denotes if the applicant indicated a preference to be allocated to the home state.

Figure A5: Rotation of state groups over years



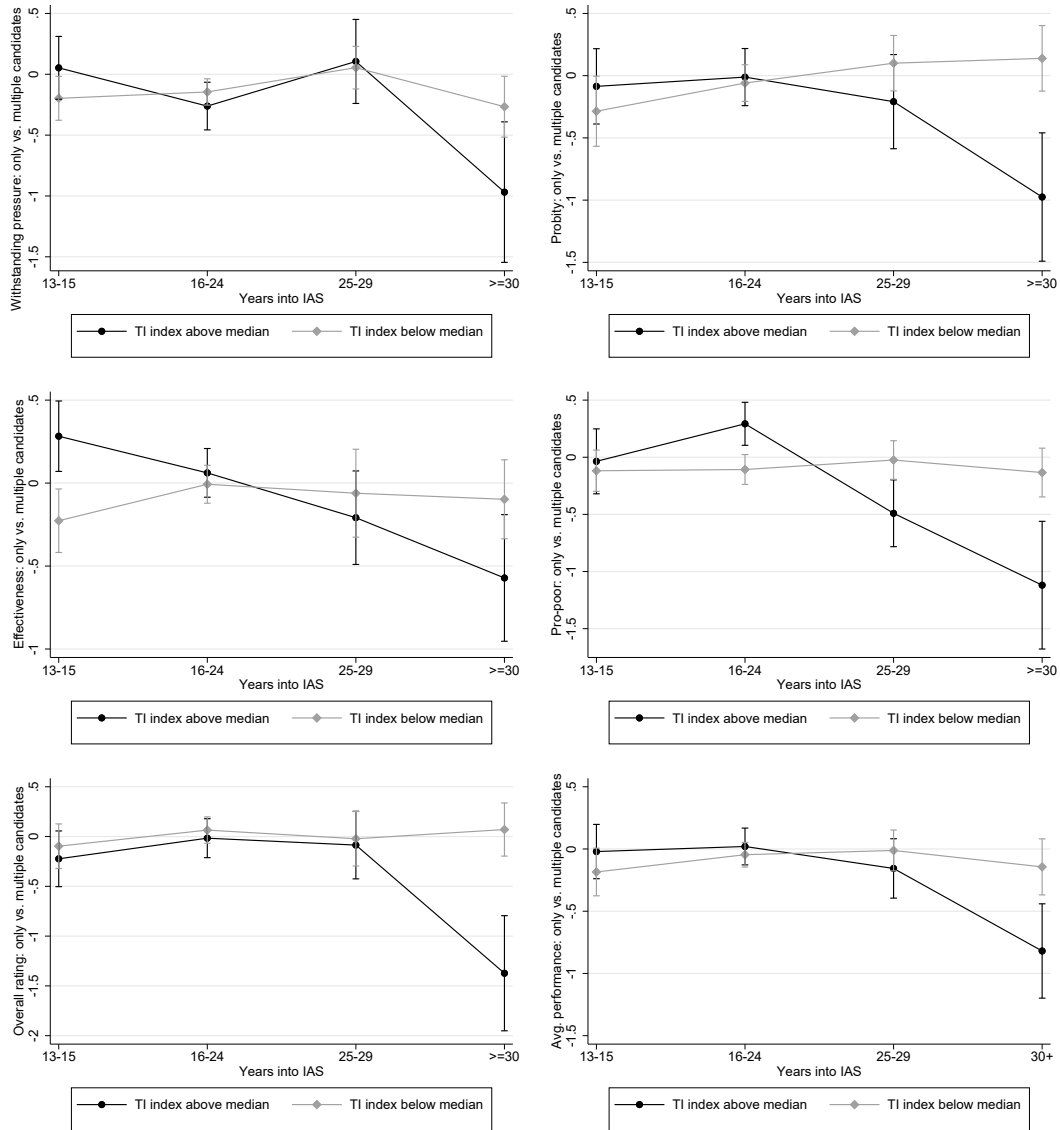
Division of state cadres into four groups and the rotation of groups in the order of IAS officer allocation over time, as illustrated by the group order in 2006. The groups of states rotate each year. In 2007, for example, the order changes to Group II, Group III, Group IV, Group I.

Figure A6: Performance measures and being the only candidate by state



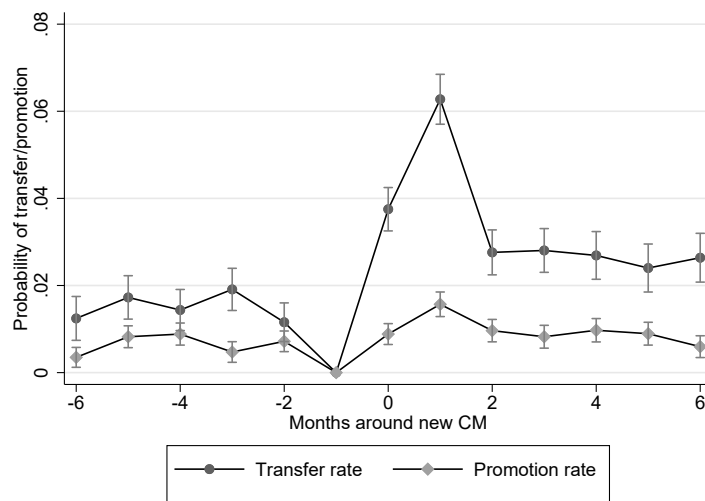
Notes: Relating the performance scores to being the only candidate in the same home state \times caste \times intake year bracket by allocated state. The estimates are based on the reduced form version of Table 6, where the instrument is interacted with state dummies. Showing 90% confidence intervals based on standard errors clustered at the home state \times caste \times intake year and officer-level.

Figure A7: Performance measures over the career, by state-level corruption



Notes: Difference in the performance scores between only candidates vs. multiple candidates (the reduced form for home vs. non-home candidates) by seniority, conditional on individual, year and tenure FEs. The years in IAS are binned to reflect the progression by payscales. 90% confidence intervals based on standard errors clustered at the home state \times caste \times intake year and officer-level.

Figure A8: Transfers of officers around Chief Minister appointments



Notes: Transfers and promotions in the months around the appointment of a Chief Minister (centered at 0). Balanced sample of IAS officer-Chief Minister transitions around 6 month windows. All estimates are relative to the month before the Chief Minister transition (-1). 90% confidence intervals on standard errors clustered at the officer-level.

Table B1: IAS Promotion Guidelines

Level	Years	Description	Grade	Basic pay (Rs.)	Grade pay (Rs.)
Junior time scale	0	Entry level	Jr. Time Scale	15,600-39,100	5,400
Senior time scale	4	Committee of Chief Secretary and two supertime scale officers to evaluate and decide suitability of promotion - subject to vacancies	Sr. Time Scale	15,600-39,100	6,600
Jr. Admin. Grade	9	Non-functional, admissible without any screening except when disciplinary proceedings are pending against the officer	Under Secy, Dy Secy Level/JAG, Dy Secy Equiv, Dy Secy, Under Secy Equiv, Under Secy Level	15,600-39,100	7,600
Selection Grade	13	Committee of Chief Secretary and two supertime scale officers (or above) to screen - subject to vacancies	Dir Level/SLJAG, Directory Equiv, Director	37,400-67,000	8,700
Supertime scale	16	Committee of Chief Secretary and two principal secretaries (if unavailable, seniormost supertime scale officer) to screen - subject to vacancies	JS Level/Level-I, Joint Secy, Joint Secy (Ex-Off), Joint Secy Equiv, Addl Secy Level, Addl Secy, Addl Secy (Ex-Off)	37,400-67,000	10,000
Principal secretary	25	Committee of Chief Secretary and one senior most officer on the Chief Secretary level to screen. Subject to vacancies.	Secretary, Secy (Ex-Off), Secy Equiv	37,400-67,000	12,000
Chief Secretary	30	Committee of Chief Secretary, one officer in same grade within state, one officer serving at Centre	Above Secy Level, Cab Secy	80,000	0

IAS Promotion Guidelines (2000): No. 20011/4/92/AIS-II. IAS payscale in 2012 according to the 6th Pay Commission (See also document No 14021/1/2008-AIS-II). The salary is adjusted for a dearness allowance (DA) which accounts for inflation. At time of survey (January 2013) this was 80% of the combined basic pay and grade pay.

Table B2: State-level correlates of the share of single bracket entrants

	(1)	(2)	(3)	(4)
	Share of only candidates 1975-2005			
Mean of dep. var	0.214	0.214	0.214	0.214
log(State level population)	-0.159 (0.137)			-0.188 (0.136)
TI corruption index		-0.034 (0.042)		-0.089 (0.081)
Human Development Index			-0.380 (0.591)	-1.204 (1.047)
Observations	14	14	14	14

Notes: Unit of observation is the state. Sample comprises the 14 main states of India for which we have collected performance scores. Relating the overall share of single bracket entrants (only candidates) to state-level characteristics. Population count is from the 2011 Census, the TI corruption index is the state-level Transparency International corruption index from 2005 as used by Fisman et al. (2014), and the Human Development Index is from 2007. Robust standard errors. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B3: Testing for selective sorting

	(1)	(2)	(3)	(4)
	Number of recruited officers			Top 10
Mean of dep. var	2.005	2.005	2.005	0.128
Total number of vacancies	-0.049 (0.072)	0.044 (0.046)		
Vacancies reserved for home officers (insider)			-0.025 (0.091)	-0.001 (0.023)
Vacancies reserved for outsiders			0.089 (0.105)	0.013 (0.014)
Intake year FEs	Y	Y	Y	Y
Home state FEs	Y	-	-	-
Caste FEs	Y	-	-	-
Home state \times Caste FEs	-	Y	Y	Y
Observations	873	873	873	873

Notes: Unit of observation is the home state \times caste bracket \times intake year. Relating the number of recruited officer and their rank by selection bracket. In Columns 1-3, the dependent variable is the total number of recruited officer from a given home state \times caste \times intake year bracket. In Column 4, the dependent variable is the number of recruited officers from a given selection bracket who rank within the top 10. The sample covers all IAS entrants between 2005-2016. Total number of vacancies denotes the total number of slots approved in a given intake year for a state and reserved for a caste bracket (General, OBC, SC/ST). Caste FEs are dummies for OBC, SC, ST. Standard errors clustered at the intake year level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B4: Performance ratings and home state allocation - First stage

	(1)	(2)	(3)	(4)	(5)	(6)
		Allocated to home state				
Mean of dep. var	0.359	0.365	0.363	0.359	0.362	0.360
Panel A: No respondent FEs						
Only candidate	0.362*** (0.052) [0.001]	0.385*** (0.052) [0.001]	0.361*** (0.053) [0.001]	0.359*** (0.052) [0.001]	0.361*** (0.053) [0.001]	0.385*** (0.052)
Panel B: Respondent FEs						
Only candidate	0.358*** (0.052) [0.001]	0.386*** (0.051) [0.001]	0.359*** (0.053) [0.001]	0.354*** (0.052) [0.001]	0.359*** (0.053) [0.001]	0.383*** (0.051)
Home state \times Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,712	15,128	17,744	17,037	17,689	14,003

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Reporting the first stage regression that relates five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) to home state allocation (Table 6). The dependent variable *Home state* is a dummy that is 1 if the officer is allocated to his or her state of origin. *Only candidate* is a dummy that is 1 if the IAS officer is the only candidate in the home state \times caste \times intake year bracket. **Panel A** presents the first stage without respondent fixed effects. **Panel B** presents the first stage with respondent fixed effects. Respondent fixed effects are dummies for each respondent scoring officers. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. False discovery rate (FDR) adjusted q -values are reported in brackets.

Table B5: Performance ratings and home state allocation - Reduced form

	(1)	(2)	(3)	(4)	(5)	(6)
	Performance ratings					
	Pressure	Probity	Effective	Pro-poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Panel A: IV						
Only candidate	-0.184***	-0.090*	-0.092**	-0.114**	-0.105**	-0.099**
	(0.044)	(0.049)	(0.046)	(0.047)	(0.053)	(0.040)
	[0.001]	[0.064]	[0.06]	[0.04]	[0.06]	
Panel B: IV Respondent FEs						
Only candidate	-0.136***	-0.078*	-0.012	-0.040	-0.037	-0.064**
	(0.038)	(0.044)	(0.038)	(0.040)	(0.045)	(0.032)
	[0.001]	[0.198]	[0.753]	[0.512]	[0.512]	
Home state \times Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,712	15,128	17,744	17,037	17,689	14,003

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) and the average index (averaged across all five standardized dimensions) to being the only candidate. *Only candidate* is a dummy that is 1 if the officer is the only candidate in the home state \times caste \times intake year bracket. **Panel A** presents the reduced form effects without respondent fixed effects. **Panel B** presents the reduced form effects with respondent fixed effects. Respondent fixed effects are dummies for each respondent scoring IAS officers. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. False discovery rate (FDR) adjusted q -values are reported in brackets.

Table B6: Subjective performance and home state allocation - linear IV

	(1)	(2)	(3)	(4)	(5)	(6)
			Allocated to home state			
Mean of dep. var	0.359	0.365	0.353	0.359	0.362	0.360
Panel A: First-stage						
Number of candidates	-0.021*** (0.004)	-0.020*** (0.004)	-0.021*** (0.004)	-0.021*** (0.004)	-0.021*** (0.004)	-0.020*** (0.004)
Panel B: IV						
	Pressure	Probity	Effective	Pro-poor	Overall	Index.
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	3.620
Home state	-0.285** (0.134) [0.083]	-0.366** (0.155) [0.083]	0.026 (0.117) [0.824]	-0.157 (0.132) [0.395]	-0.058 (0.132) [0.823]	-0.145 (0.119)
Kleibergen-Paap F -statistic	33.430	29.771	32.896	33.076	32.709	30.163
Home state \times Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,712	15,128	17,744	17,037	17,689	14,003

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) to home state allocation. *Home state* is a dummy that is 1 if the IAS officer is allocated to his or her state of origin. The instrument is the total number of candidates in a given home state \times caste \times intake year bracket. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. False discovery rate (FDR) adjusted q -values are reported in brackets.

Table B7: Subjective performance and home state allocation by stakeholder

	(1)	(2)	(3)	(4)	(5)	(6)
	Pressure	Probity	Effective	Pro-poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Only candidate						
× IAS	-0.207*** (0.056)	-0.098 (0.067)	-0.118* (0.066)	-0.056 (0.064)	-0.172*** (0.066)	-0.135*** (0.051)
× Large firms	-0.143** (0.062)	-0.043 (0.073)	0.050 (0.064)	0.007 (0.067)	0.048 (0.068)	-0.029 (0.053)
× Media	-0.178** (0.076)	-0.061 (0.083)	0.041 (0.056)	-0.010 (0.078)	-0.005 (0.072)	-0.035 (0.050)
× Politicians (MLA)	0.038 (0.062)	-0.132 (0.091)	0.044 (0.069)	0.004 (0.094)	-0.000 (0.077)	0.009 (0.066)
× NGO	-0.117 (0.092)	-0.055 (0.101)	-0.010 (0.069)	-0.030 (0.095)	0.048 (0.085)	-0.066 (0.067)
× State civil service	-0.138* (0.074)	-0.065 (0.069)	-0.020 (0.064)	-0.154** (0.069)	-0.037 (0.086)	-0.083 (0.060)
All coeff. zero: p -value	0.000***	0.605	0.383	0.431	0.061*	0.116
All coeff. equal: p -value	0.011**	0.918	0.273	0.477	0.041**	0.252
Home state × Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y	Y	Y
State × Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,712	15,128	17,744	17,037	17,689	14,003

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) and the average index (averaged across all five standardized dimensions) to home state allocation. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state × caste × intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B8: Performance ratings and home state allocation - Job FEs

	(1)	(2)	(3)	(4)	(5)	(6)
	Subjective performance ratings					Perf.
	Pressure	Probity	Effective	Pro-poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Panel A: OLS						
Home state	-0.004 (0.031) [0.904]	-0.031 (0.035) [0.904]	-0.009 (0.034) [0.904]	-0.070** (0.033) [0.160]	0.004 (0.035) [0.904]	-0.011 (0.029)
Panel B: IV						
Home state	-0.573*** (0.190) [0.008]	-0.504** (0.198) [0.019]	-0.320* (0.182) [0.080]	-0.605*** (0.199) [0.008]	-0.493** (0.203) [0.020]	-0.426*** (0.157)
Kleibergen-Paap F -stat	27.020	28.553	27.089	27.342	26.856	28.471
Panel C: IV Respondent FEs						
Home state	-0.549*** (0.180) [0.010]	-0.560*** (0.198) [0.013]	-0.161 (0.152) [0.289]	-0.472*** (0.177) [0.014]	-0.420** (0.191) [0.035]	-0.415*** (0.146)
Kleibergen-Paap F -stat	27.152	29.670	27.009	27.392	27.095	29.894
Job title \times Pay level FEs	Y	Y	Y	Y	Y	Y
Home state \times Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,704	15,118	17,735	17,030	17,679	13,995

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) and the average index (averaged across all five standardized dimensions) to home state allocation. *Home state* is a dummy that is 1 if the officer is allocated to his or her state of origin. *Only candidate* is a dummy that is 1 if the officer is the only candidate in the home state \times caste \times intake year bracket. **Panel A** presents the OLS estimates. **Panel B** presents the IV results without respondent fixed effects. **Panel C** presents the IV results with respondent fixed effects. Respondent fixed effects are dummies for each respondent scoring officers. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. False discovery rate (FDR) adjusted q -values are reported in brackets.

Table B9: Visibility of officers and source of information

	(1)	(2)	(3)	(4)
	Officer known	Source of information		
		Networks	Media	Personal
Mean of dep. var	0.206	0.0380	0.0579	0.110
Only candidate	0.001 (0.013)	0.006* (0.003)	0.001 (0.005)	-0.005 (0.008)
Home state \times Caste FEs	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y
Observations	89,723	89,723	89,723	89,723

Notes: Unit of observation is the respondent-officer pair for IAS officers in 2012-13 with at least 8 years of tenure. Relating whether officers are known to home state allocation. In Column 1, the dependent variable is a dummy that is 1 if the officer is known by the respondent. In Columns 2-4, the dependent variables are dummies for each source of information, indicating whether officer is known through friends or social networks, media, or personal interaction. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state \times caste \times intake year bracket. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B10: Performance and home state allocation by source of information

	(1)	(2)	(3)	(4)	(5)	(6)
	Pressure	Probity	Effective	Pro-poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Only candidate						
× Network	-0.171** (0.072)	-0.068 (0.076)	0.015 (0.053)	-0.043 (0.073)	-0.027 (0.066)	-0.048 (0.053)
× Media	-0.129** (0.053)	-0.115* (0.067)	-0.040 (0.059)	-0.056 (0.072)	-0.073 (0.063)	-0.106** (0.049)
× Personal	-0.133*** (0.045)	-0.066 (0.055)	-0.010 (0.047)	-0.034 (0.045)	-0.029 (0.051)	-0.052 (0.039)
All coeff. zero: p -value	0.004***	0.286	0.827	0.776	0.714	0.138
All coeff. equal: p -value	0.854	0.797	0.684	0.964	0.751	0.581
Home state × Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y	Y	Y
State × Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	16,712	15,128	17,744	17,037	17,689	14,003

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) and the average index (averaged across all five standardized dimensions) to home state allocation. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. Personal is a dummy that is 1 if the respondent has personally interacted with the given officer. Network (Media) is a dummy that is 1 if the respondent knows the given officer through his/her social network (media). Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state × caste × intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B11: Standard deviation of performance ratings and home state allocation

	(1)	(2)	(3)	(4)	(5)	(6)
	Standard deviation in residual scores					
	Pressure	Probity	Effective	Pro-poor	Overall	Index
Mean of dep. var	0.685	0.833	0.764	0.782	0.806	0.532
Only candidate	-0.048 (0.045)	-0.014 (0.058)	-0.037 (0.052)	-0.050 (0.057)	0.010 (0.053)	-0.051 (0.042)
Home state × Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
State × Tenure FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Observations	1,165	1,116	1,161	1,164	1,169	1,100

Notes: Unit of observation is the standard deviation (SD) for scores given to an IAS officer in 2012-13 with at least 8 years of tenure. Relating the SD of all five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) and the average index (averaged across all five standardized dimensions) to home state allocation. The standard deviation is calculated based on the performance scores after partialing out respondent fixed effects. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. Network (Media) is a dummy that is 1 if the respondent knows the given officer through his/her social network (media). Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state × caste × intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B12: Performance and home state allocation by state-level corruption

	(1)	(2)	(3)	(4)	(5)
	Effective	Probity	Pressure	Pro-poor	Overall
Mean of dep. var	3.703	3.658	3.497	3.506	3.618
Only candidate	-0.054 (0.039)	-0.146*** (0.047)	-0.157*** (0.041)	-0.094** (0.042)	-0.094* (0.048)
× TI corruption index	-0.129** (0.055)	-0.134** (0.063)	-0.107** (0.049)	0.011 (0.059)	-0.169*** (0.058)
× HDI	0.006 (0.048)	-0.021 (0.057)	-0.020 (0.047)	0.084 (0.056)	-0.031 (0.052)
Home state × Caste FEs	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y	Y
State × Tenure FEs	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y
Observations	16,676	14,083	15,644	15,969	16,621

Notes: Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. Relating five measures of performance (ability to withstand illegitimate political pressure, probity, effectiveness, pro-poor orientedness and overall rating) to home state allocation. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. TI corruption index is the state-level Transparency International corruption index from 2005 as used by Fisman et al. (2014). The Human Development Index is the state-level Human Development Index in 2007. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state × caste × intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B13: Performance measures and present/past suspensions

	(1)	(2)	(3)	(4)	(5)	(6)
	Pressure	Probity	Effective	Pro-Poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Panel A: Current suspension						
Suspended	-0.558*** (0.156)	-0.506*** (0.183)	-0.388** (0.152)	-0.386** (0.159)	-0.571*** (0.185)	-0.497*** (0.159)
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Respondent FEs	Y	Y	Y	Y	Y	Y
Observations	16,717	15,133	17,749	17,042	17,694	14,008
	(1)	(2)	(3)	(4)	(5)	
	Pressure	Probity	Effective	Pro-Poor	Overall	Index
Mean of dep. var	3.524	3.671	3.730	3.528	3.647	0.000
Panel B: Past suspensions						
Mean past suspensions	-0.849*** (0.326)	-1.195** (0.589)	-0.842** (0.418)	-0.213 (0.337)	-0.768* (0.413)	-0.769** (0.370)
Respondent FEs	Y	Y	Y	Y	Y	Y
State \times Tenure FEs	Y	Y	Y	Y	Y	Y
Observations	16,717	15,133	17,749	17,042	17,694	14,008

Unit of observation is the score for a given officer in 2012-13 with at least 8 years of tenure. *Suspended* is a dummy that is 1 if the IAS officer is suspended in 2012-13. *Mean past suspension* is the cumulative number of suspensions up to the year before the survey (2011) divided by the total years in service. Respondent FEs are fixed effects for each survey respondent. State \times Tenure FEs are dummies for the state-specific years of tenure. Standard errors in parentheses, clustered at the officer and the respondent-level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table B14: Asset declarations and home state allocation

	(1)	(2)	(3)	(4)	(5)	(6)
	Log(Declared asset value 2012)					
Mean of dep. var	3.825	3.815	3.815	3.958	3.951	3.951
Only candidate	0.841** (0.368)	0.928** (0.393)	0.928** (0.395)	1.206** (0.555)	1.876*** (0.622)	1.849*** (0.628)
× TI corruption index		0.155 (0.329)	0.251 (0.467)		0.989* (0.552)	1.203* (0.652)
× HDI			0.150 (0.456)			0.437 (0.658)
Home state × Caste FEs	Y	Y	Y	Y	Y	Y
Intake year FEs	Y	Y	Y	Y	Y	Y
State × Tenure FEs	Y	Y	Y	Y	Y	Y
Rank FEs	Y	Y	Y	Y	Y	Y
Individual controls	Y	Y	Y	Y	Y	Y
Sample		Full sample			Senior officers	
Observations	536	497	497	395	366	366

Notes: Unit of observation is the officer. Relating the declared value of immovable properties (land and properties) to home state status. Sample comprises all officers that could be matched to the immovable properties return sheets in 2012 (the year of the performance survey). The dependent variable is the (log) total asset values declared in 2012. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. TI corruption index is the state-level Transparency International corruption index from 2005 as used by Fisman et al. (2014). The Human Development Index is the state-level Human Development Index in 2007. Estimates are relative to assessments provided by officers. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, x fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state × caste × intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B15: Empanelment and home state allocation

	(1)	(2)	(3)	(4)	(5)	(6)
		Ever Empaneled			Empaneled	
Mean of dep. var	0.643	0.643	0.643	0.643	0.010	0.010
Only candidate	-0.171 (0.107)	-0.163 (0.111)			-0.041** (0.017)	
Home state			-0.039 (0.050)	-0.481 (0.381)		-0.114** (0.057)
Intake year FEs	Y	Y	Y	Y	Y	Y
Home state \times Caste FEs	Y	Y	Y	Y	Y	Y
Individual controls		Y	Y	Y	Y	Y
Year FEs					Y	Y
Specification	Reduced form		OLS	IV	Reduced	IV
Sample	Cross-section Iyer and Mani 2012				Panel	
Observations	661	661	661	661	8,604	8,604

Notes: Relating empanelment (i.e. nomination to serve at the Central government) to home state status. Unit of observation in Columns 1-4 is the officer. The data on the empanelment outcome is derived from Iyer and Mani (2012), and *Ever empaneled* is a dummy that is 1 if the officer was ever empaneled in 2008. The cross-sectional sample covers the cohorts 1979-1987 – these are the cohorts that qualify for joint secretary-level empanelments (requiring 20 year’s of service). In Columns 5-6, the unit of observation is the officer-year. The data on the empanelment outcome is derived from online records on “Orders related to empanelments” (<http://dopt.gov.in/orders-related-empanelments-0>, accessed July 2019). The dependent variable is 1 if the officer is empaneled in a given year. The panel covers the cohorts 1978-1990 who qualify for joint secretary-level empanelments (requiring 20 year’s of service). Home state is a dummy that is 1 if the officer is allocated to his or her state of origin. The instrument is the total number of candidates in a given home state \times caste \times intake year bracket. Caste FEs are dummies for OBC, SC, ST. Individual controls are: entry exam score, entry exam rank fixed effects for each rank in the entry exam, age at entry, female dummy, a dummy for coming from an urban background, having received an academic distinction, a STEM or Economics degree, dummies for previous job type. Standard errors clustered at the home state \times caste \times intake year and officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B16: Performance over the career, by state-level corruption

By tenure	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Avg. perf.		Suspended		Centre		Payscale	
Mean of dep. var	-0.0178	-0.0323	0.739	0.918	0.153	0.165	3.325	3.257
× 4-8 years			-0.041 (0.177)	-0.331*** (0.124)	0.001 (0.009)	0.001 (0.015)	0.009 (0.029)	-0.091*** (0.034)
× 9-12 years			-0.713*** (0.267)	-0.445 (0.490)	-0.056* (0.032)	-0.026 (0.028)	-0.017 (0.040)	-0.085* (0.046)
× 13-15 years	-0.021 (0.132)	-0.185 (0.116)	0.612 (1.003)	-1.014*** (0.388)	-0.140*** (0.036)	0.015 (0.055)	0.123** (0.055)	0.014 (0.061)
× 16-24 years	0.020 (0.090)	-0.046 (0.060)	0.221 (0.961)	-0.812 (0.872)	-0.018 (0.053)	0.115* (0.063)	0.052 (0.056)	-0.127* (0.073)
× 25-29 years	-0.156 (0.145)	-0.012 (0.099)	-0.629 (0.646)	-2.159*** (0.764)	-0.089 (0.069)	0.334** (0.160)	-0.081 (0.118)	-0.379** (0.165)
× ≥ 30 years	-0.820*** (0.230)	-0.144 (0.137)	7.343 (8.343)	-2.156* (1.152)	-0.325*** (0.075)	0.315 (0.271)	0.214** (0.091)	-0.618** (0.283)
Tenure FEs	Y	Y	Y	Y	Y	Y	Y	Y
Individual FEs			Y	Y	Y	Y	Y	Y
Year FEs			Y	Y	Y	Y	Y	Y
Sample	Cross-section				Officer-year panel			
Corruption level	High	Low	High	Low	High	Low	High	Low
Observations	4,802	8,155	15,161	16,552	15,161	16,552	15,161	16,552

Notes: Relating career outcomes to home state allocation, broken down by tenure and state-level corruption (above/below median by the Transparency International corruption Index). In Columns 1-2, the dependent variable is the cross-sectional average performance score (averaged across all five standardized dimensions). In Columns 3-4, suspended is a dummy that is 1 if the officer is suspended (scaled × 100). In Columns 5-6, Centre is a dummy that is 1 if the officer is serving in the Central Government. In Columns 7-8, Payscale denotes the payscale of the IAS officer (1 lowest, 7 highest) in a given year. The instrument *only candidate* is a dummy that is 1 if the officer is the only candidate in the home state × caste × intake year bracket. Standard errors clustered at the home state × caste × intake year (Columns 1-2) and officer-level (Columns 3-8). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B17: Home district connectedness with different cut-offs

	(1)	(2)	(3)	(4)	(5)
		IAS officer is promoted			
Mean of dep. var	0.0235	0.0235	0.0235	0.0235	0.0236
New Chief Minister (CM)					
× Home connected: Switch in	0.026* (0.015)	0.026* (0.014)	0.017 (0.010)	0.020** (0.009)	0.010 (0.009)
× Home connected: Switch out	0.003 (0.013)	0.001 (0.011)	0.007 (0.009)	0.012 (0.008)	0.004 (0.007)
State × Tenure FEs	Y	Y	Y	Y	Y
Turnover × Year × Month FEs	Y	Y	Y	Y	Y
Individual FEs	Y	Y	Y	Y	Y
Sample		Home state officers			
Cut-off for home connectedness	15 miles	25 miles	50 miles	75 miles	100 miles
Number of switching in	167	206	357	566	727
Number of switching out	169	202	377	499	665
Observations	46,904	46,904	46,904	46,904	46,904

Notes: Unit of observation is the officer-month. Balanced sample of officer-Chief Minister transitions around 6 month windows of Chief Minister appointments. Relating promotions to home ties to the incoming Chief Minister. *New Chief Minister* is a dummy that is 1 in the month the Chief Minister is appointed and the month thereafter. An officer and Chief Minister are defined as home connected if their home districts are less than 15, 25, 50, 75 and 100 miles apart. *Home connected: Switch in* is a dummy that is 1 if the officer moved from not being home connected to home connected. *Home connected: Switch out* is a dummy that is 1 if the officer moved from home connected to not being home connected. The sample is restricted to home state officers only. Standard errors clustered at the officer-level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

B Appendix Documentation

B.1 Data description: Performance survey

We collected cross-sectional data on the subjective assessments of IAS officers in the 14 main states of India³⁸ for 2012-13. IAS officers were assessed on five dimensions: (i) effectiveness on the job, (ii) probity³⁹ (iii) ability to withstand illegitimate political pressure, (iv) pro-poor orientation, and (v) overall rating.⁴⁰ All dimensions are scored on a 5 point integer scale, where 1 is the lowest and 5 the highest performance.

To obtain assessments from a wide range of stakeholders, we elicited these subjective assessments from respondents of six societal groups in each state: (i) a random sample of IAS officers, (ii) a random sample of state civil servants, (iii) politicians, drawn from a random sample of members of the legislative assembly (MLA), (iv) industry, business and professional associations, comprised of the highest representatives for the major associations,⁴¹ (v) print and TV media, comprised of key journalists covering politics for the largest newspapers and TV stations by circulation and viewership respectively, and finally (vi) civil society, comprised of the highest representatives of major NGOs, trade unions⁴² and think-tanks. For each state, we sampled about 10 respondents from each of the groups.⁴³

We compiled a list of all centrally recruited IAS officers for each state. In each state, interviewers then systematically worked through the list, asking respondents to provide assessments for each known candidate. We excluded junior officers with less than 8 years' tenure as they are often in district postings and less visible. Finally, we recorded the source of information to account for reporting biases, differentiating between information obtained through personal exposure, friends or social networks, or the media.

Table 1 provides summary statistics of the 360 degrees⁴⁴ measures. The sample sizes range from $N = 15$, 153 for the probity measure to $N = 17$, 753 for the effectiveness measure. The number of complete assessments across all dimensions is $N = 14$, 037. We were able to elicit scores for about 70% of all IAS officers in our sample. All dimensions are correlated, with the highest correlation being between pro-poor orientation and the ability to withstand illegitimate political pressure.

³⁸These states are: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal. We excluded joint cadres (Union Territories, Assam - Meghalaya, Manipur - Tripura), as well as the smaller states (Jammu & Kashmir, Nagaland) and the new cadres resulting from state splits in 2000 (Jharkhand, Uttarakhand, Chhattisgarh) from the sample.

³⁹Note that a higher value on the scale corresponds to less corruption.

⁴⁰The exact questions are: (i) "How would you rate his/her effectiveness in his/her assignment?" (ii) "How much do you feel this officer uses his/her official position for making money?" (iii) "How much do you feel this officer can withstand illegitimate political pressure?" (iv) "How sensitive is this officer to the needs of the poor and weaker sections in society?" (v) "What is your overall rating of this officer?"

⁴¹Confederation of Indian Industry (CII), the Federation of Indian Chambers of Commerce and Industry (FICCI), the Associated Chambers of Commerce and Industry of India (ACCI).

⁴²All India Trade Union, Secretariat Employees Union.

⁴³For logistical reasons, we were unable to survey state civil servants in Gujarat and IAS officers in Punjab.

⁴⁴The term "360 degree" feedback refers to multi-source feedback used by organizations to elicit information about employees' work-related performance.

B.2 Converting unmatched insider allocations

In presence of open unreserved insider vacancies, the unreserved insider vacancy can be allocated to insider IAS officers from SC/ST and OBC (following the exact order) if there is an SC/ST (or OBC) outsider vacancy to allow for the exchange: For example, if Gujarat has received two unreserved insider vacancies but only one Gujarati general caste to fill the first slot, the second slot is opened to Gujarati SC/ST insiders, and if those are not available, to OBC insiders. The reallocation, however, is only permitted when there is a corresponding outsider vacancy that can be converted to an unreserved outsider vacancy to maintain the quota among the caste vacancies. A Gujarati insider SC/ST then can only fill the unreserved insider vacancy if a SC/ST outsider vacancy is available for exchange. Similar rules apply for unfilled SC/ST or OBC insider vacancies. Open SC/ST insider vacancies that could not be filled are first relaxed to allow for OBC insider candidates and then to general candidates. Open OBC vacancies, similarly, can first be filled by SC/ST insider candidates and then by general candidates (in both cases provided there is a corresponding outsider slot for exchange). Any remaining open insider vacancies that could not be filled despite the relaxation of the quotas are converted to outsider vacancies to ensure all vacancies are filled.

B.3 Outsider allocation

The allocation of the outsiders and those who failed to be allocated to their preferred home state (and are consequently converted to outsiders) is done according to a rotating roster system. The roster is created by arranging all 24 cadres in alphabetical order and dividing them into four groups. These groups are devised on the basis of an average intake by each group, which over a period of time is roughly equal:

1. Group I: Andhra Pradesh, Assam-Meghalaya, Bihar, Chhattisgarh and Gujarat
2. Group II: Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala and Madhya Pradesh
3. Group III: Maharashtra, Manipur-Tripura, Nagaland, Orissa, Punjab, Rajasthan and Sikkim
4. Group IV: Tamil Nadu, AGMUT (UT Cadre), Uttaranchal, Uttar Pradesh and West Bengal

The outsider candidates are allocated in the order of merit across the four groups for the outsider available vacancies (including those that have been converted from insider vacancies). In the first cycle, all candidates are allocated to their matching caste vacancy in the four states of Group I, starting with Andhra Pradesh. In the second cycle, the remaining candidates are allocated to their matching caste vacancies in Group II and so on. Since states who receive officers earlier in the allocation process will receive higher ranked recruits, the order of the groups shuffles each year to ensure that all states receive officers

of comparable quality. In Appendix Figure A5, for example, Group III is the first group in 2006, followed by Group IV, Group I and Group II. In the subsequent year, the groups will rotate and the allocation of outsiders will commence with Group II first, followed by Group III, Group IV and Group I.