Varieties of connections, varieties of corruption: Evidence from bureaucrats in five countries

Adam S. Harris¹ | Jan-Hinrik Meyer-Sahling² | Kim Sass Mikkelsen³ | Christian Schuster¹ | Brigitte Seim⁴ | Rachel Sigman⁵

Abstract
Why do some bureaucrats engage in corruption for personal gain, yet others for political gain? We show that these forms of corruption frequently do not coincide and offer an explanation: bureaucrats hired based on political and personal connections have different identities and incentives which compel them to engage in corruption for political and personal gain respectively. List experiments with a unique sample of 6400 bureaucrats in five countries in Africa and Asia support our argument. As theoretically expected, effects are strongest for bureaucrats whose political patrons remain in power (for corruption for political gain) and who do not need corruption gains to sustain their households (for corruption for personal gain). We also find that personal connections matter more than political connections for bureaucratic recruitment across surveyed countries. Our findings underscore the importance of studying varieties of bureaucratic corruption and of supplementing the politicization literature with studies of personal connections in bureaucracy.
Numerous studies underscore that institutions shape corruption—the abuse of public office for private gain (see, among many, Rose-Ackerman & Palifka, 2016). One such institution—bureaucracy—is central in empirical works, with a recent literature review counting 260 studies assessing the determinants of bureaucratic corruption (Gans-Morse et al., 2018). The rationale is intuitive: studying bureaucrats and their organizations means studying the individuals and institutions who are primary participants in many corruption exchanges (Meyer-Sahling et al., 2018).

However, studies of corruption in bureaucracies have paid insufficient attention to varieties of bureaucratic corruption in government. Yet, different forms of corruption may be expected to have different consequences and different determinants—and thus also different remedies (Bauhr et al., 2019; Bussell, 2012, 2015; Gans-Morse et al., 2014). We take this insight to the study of bureaucrats to address a so-far overlooked puzzle: why do some bureaucrats engage in corruption for personal gain, others do so for political gain, and still others not at all?

This puzzle emphasizes an underutilized distinction between corruption types demarcated by who benefits rather than who is directly involved, which more closely aligns corruption types and underlying motives. Drawing on this central distinction, we argue that hiring into bureaucracies based on political (personal) connections leads to bureaucratic identities and incentives which favor corruption for political (personal) gain. This argument builds on—but goes beyond—insights from studies of Weberian bureaucracy (Weber, 1978) and political clientelism (e.g., Oliveros, 2021; Stokes, 2007). Weber (1978) had argued that bureaucrats hired based on merit and paid sufficiently for a secure existence develop a superordinate identification with the public; they become public servants who eschew corruption which would harm the public. By contrast, bureaucrats hired through connections or not paid enough for a secure existence identify with private interests and are more likely to engage in corruption.

Different connections may be expected to lead to differential bureaucratic identities and incentives, however—and thus different forms of corruption. We argue that bureaucrats hired through political connections—with support from politicians and/or political parties—are more likely to engage in corruption for political, but not personal, gain. Bureaucrats hired through political connections identify more strongly with—and feel a greater sense of reciprocal obligation toward—their patrons and face incentives to engage in corruption for them, provided the patrons who hired them remain in office.

By contrast, bureaucrats hired through personal connections—with support from friends and family in government—are more likely to engage in greater corruption for personal, but not political, gain. They identify more strongly with their friends and family (i.e., personal) networks, rather than the public or political principals, and face fewer disincentives to engage in corruption, as they are less likely to see sanctions when counting on friends in high places in government. Following Weber (1978), we expect this to hold in particular for bureaucrats who are paid enough for a secure existence. In the absence of economic security, bureaucrats may need to engage in corruption for personal gain irrespective of how they were hired.

We provide evidence for these arguments through survey data and list experiments from 6400 bureaucrats in five countries in Africa and Asia. To our knowledge, we draw on the largest dedicated, cross-regional survey of bureaucrats in the developing world to-date.

Consistent with our argument, we find evidence, if somewhat suggestive statistically, that bureaucrats hired through political connections are more likely to engage in corruption for political—and not personal—gain, albeit only where their political patrons remain in office. By contrast, we find that bureaucrats hired through personal connections are more likely to engage
in corruption for personal—and not political—gain, albeit only where they are, as Weber (1978) had argued, paid enough for a secure existence.

Our findings have important implications for the study of bureaucracy and corruption. First, they underscore the importance of studying varieties of bureaucratic corruption: bureaucratic corruption for personal and political gain have differential determinants and, consequently, different remedies. Studying only the extent—rather than varieties—of bureaucratic corruption thus risks misdiagnosing corruption causes and remedies.

Second, our findings underscore the importance of supplementing research on political clientelism and bureaucratic politicization with a targeted and systematic research agenda on nepotism in bureaucracy. In our surveys, a larger share of bureaucrats obtained their jobs through personal than through political connections (see also Oliveros, 2021). Moreover, qualitative studies are replete with references to nepotist hiring into developing country governments (e.g., Fukuyama, 2014; Ledeneva, 2013; Robertson-Snape, 1999). Yet, a dedicated agenda studying the effect of nepotism in developing country governments is still lacking, particularly vis-à-vis quantitative studies.

We, further, nuance the literature on politicization by providing evidence that political appointees change behavior once their appointing patrons leave office. Previous work underscores that bureaucrats hired through political connections often remain in office after government turnover (see, e.g., Schuster, 2016). Our data suggest that such bureaucrats may refrain from corruption for political gain once their political patrons have departed.

2 | CONNECTIONS IN BUREAUCRATIC RECRUITMENT AND VARIETIES OF CORRUPTION

Corruption is usually understood as the misuse of public office for private gain, where private gain can accrue to either an individual official or the groups (such as political parties) the official belongs to (e.g., Treisman, 2007). Numerous studies have looked to connection-based hiring into bureaucracy as a determinant of the extent of bureaucratic corruption (Bersch et al., 2017; Charron et al., 2017; Dahlström, Lapuente, and Teorell, 2012; Kopecký et al., 2016; Meyer-Sahling et al., 2016; Neshkova & Kostadinova, 2012; Oliveros & Schuster, 2018; Rauch & Evans, 2000). They have not, however, explained varieties of bureaucratic corruption.

Bureaucrats may be involved in corruption either for their own personal gain or for the benefit of politicians or political parties. In corruption for personal gain, bureaucrats engage in corrupt behavior to acquire private benefits, by, for instance, accepting bribes, extorting citizens or businesses, or funneling public funds to themselves. Yet, bureaucrats at all levels of the hierarchy may also abuse their position to benefit political patrons (Oliveros, 2021). In corruption for political gain, the forms of corruption available to bureaucrats—such as bribery, extortion or embezzlement—can be similar, but the corrupt resources are obtained by bureaucrats in order to channel them to political actors, be those political parties or individual politicians, who in turn use these resources for their own enrichment or to further political goals—for instance by paying for brokers or votes in clientelist networks (Figueroa, 2021; Gingerich, 2014).

In distinguishing corruption varieties according to beneficiary, we depart from a long-standing tradition in corruption research distinguishing between grand and petty corruption according to who or how much money is involved (Rose-Ackerman and Paflinka, 2016). We make no assumption, for instance, that bureaucrats engaging in corruption for political gain serve in high-ranking
positions or channel grand sums to politicians. For understanding the determinants of corruption, we argue, the distinction along who benefits provides more leverage.

To theoretically link connections to varieties of corruption, we begin with Max Weber. Weber (1978, p. 958) first prominently linked connection-based hiring to corruption. He argued that public service is not merely an occupation, but a “vocation.” Hired through merit examinations and employed with salaries which grant them a “secure existence,” bureaucrats are socialized into a duty and “esprit de corps” around impartial public service, and thus “greater adherence to norms of behavior” of integrity and a prioritization of public over private interest (Rauch & Evans, 2000; Weber, 1978, p. 959, p. 52). Bureaucrats thus develop a superordinate identification with the public interest, rather than more narrow groups such as their kin or political parties (cf. Wenzel, 2007). In light of their superordinate identification, engaging in corruption, which imposes harm on the public, causes bureaucrats disutility - for instance through feelings of shame, guilt, or group disapproval (cf. Barr & Serra, 2010). By contrast, bureaucrats hired through connections are argued to not develop this superordinate identification with public service and are more likely to engage in corruption.

A range of studies have empirically assessed the effects of merit recruitment, typically juxtaposing it to political connection-based hiring. These studies suggest that politicization of civil service recruitment is relatively widespread, particularly in developing countries, and that politicization (merit) is associated with greater (lower) corruption (Bersch et al., 2017; Charron et al., 2017; Dahlström, Lapuente, and Teorell, 2012; Meyer-Sahling et al., 2016; Neshkova & Kostadinova, 2012; Oliveros & Schuster, 2018; Rauch & Evans, 2000).

However, existing studies do not explain varieties of bureaucratic corruption in government. To do so, we depart from a simple observation: the underlying politicization-merit dichotomy of existing studies of connection-based hiring disregards that nepotist hiring of friends and family members through personal, not political, connections is qualitatively found to be widespread in developing countries (e.g., Fukuyama, 2014; Ledeneva, 2013). Different types of connections (personal and political), we argue, can be expected to lead to differential identities and incentives of bureaucrats.

Before developing this argument, one conceptual clarification is due. Hiring based on political and personal connections are not necessarily mutually exclusive. Political connection-based hiring can involve personal links, just as personal connections can be politicians. Indeed, political patron-client relations are usually conceptualized as personal linkages in studies of political clientelism (cf. Stokes, 2007).

The aim of these linkages is typically political, however. Jobs are exchanged for political services and political control of state institutions (Kopecký et al., 2016). By contrast, nepotist hiring need not have political aims, but can simply be motivated by providing a benefit (employment) to friends and family. It is these different aims for the use of connections that, we argue, motivate different forms of corrupt behavior.

Studies of clientelism, patronage, and bureaucratic politicization underscore that politicians distribute public sector jobs as a reward for political service and as a tool to control bureaucracy through loyal bureaucratic agents (Kopecký et al., 2016). Politically appointed bureaucrats help political patrons by, for instance, turning public services into clientelistic exchanges and engaging in corruption to fill party coffers (Geddes, 1996; Gingerich, 2014; Grindle, 2012; Oliveros, 2016; Oliveros & Schuster, 2018).

Both political incentives and identities may provide motive for bureaucratic corruption for political gain. Bureaucrats hired through political connections face greater incentives to divert public resources for politicians, since political principals may both shield them from sanctions
and pressure them into political corruption because bureaucrats owe their appointment and, at times, career continuation to political principals (Gingerich, 2014; Neshkova & Kostadinova, 2012; Oliveros, 2016).

Politically appointed bureaucrats may also be expected to identify more strongly with their political patrons (e.g., Lawson & Greene, 2014). Their initial recruitment into government reflects the strength of their prior political ties and identification with political groups. In line with classic works on political clientelism (e.g., Lemarchand, 1972; Scott, 1969, 1972), receiving a job through political connections may further reinforce these political identities through gratitude and affective commitment for having received a job (see also Enemark et al., 2016). Political identification shifts the superordinate identity of bureaucrats from the public to a political group. As a result, bureaucrats are more likely to prioritize the interests of their political group over the public interest. They become political servants rather than public servants and engage in corruption for political gain.

These effects of recruitment through political connections may persist over time. Recruitment based on connections can lead to a different career path through the bureaucracy than a merit-based appointment. Because recruits are selected not primarily for their skills but for their loyalty, they may be expected to utilize—and depend on—connections with political patrons not just for recruitment but for continuing employment and subsequent organizational rewards, including promotions and pay raises (Meyer-Sahling, Schuster and Mikkelsen, 2018; Oliveros, 2021), and may reciprocate with corruption for political patron gain. Similarly, the identity as a political servant is likely sticky not simply because self-conceptions can be slow to change but also because other bureaucrats might conceive of political servants differently, as an outgroup differentiated from those serving public aims (cf. McDonnell, 2020).

Both from an incentive and an identity perspective, it thus seems plausible to hypothesize:

**Hypothesis 1 (H1): Bureaucrats hired through political connections are more likely to engage in corruption for political gain.**

Yet we would not expect political connection-based hiring to increase corruption for personal gain. Corruption for personal gain does not benefit the political patron. Indeed, it is potentially detrimental to political patrons, for instance by enhancing the risk of corruption scandals and depleting public resources otherwise available to patrons. Bureaucrats hired through political connections thus do not face greater incentives to engage in corruption for personal gain, nor would their identities as political servants propel them to do so.

By contrast, hiring based on personal connections may tilt bureaucratic incentives and identities toward corruption for personal, but not political, gain. Bureaucrats hired through personal connections are likely to identify more strongly with their own and their families’, friends’, and kin’s objectives and norms. In many developing countries, “the very nature of personhood is grounded in relationships with family [and] kin-group” (Orjuela, 2014; Smith, 2001, p. 349). Personal connection-based hiring—that is hiring based on pre-existing personal ties—selects bureaucrats with greater identification with the objectives and norms of their friends and family networks.

Receiving a job through personal connections may be expected to further reinforce bureaucrats’ affective attachment to and identification with these networks (cf. Orjuela, 2014). Norms of reciprocity oblige such bureaucrats to engage in corruption for personal gain—that is, gain which accrues to themselves and which can be shared with family and kin. A large literature on “amoral familism” and kinship has underscored the strength of these reciprocal norms within narrow circles of relatives and friends (Banfield, 1958; Platteau, 2000; Tabellini, 2008). As a
result, bureaucrats are more likely to prioritize their private interests, and those of their family and friends, over the public interest, leading to greater corruption for personal gain.

They are also likely to face greater incentives to do so. Friends and family within government exercised public power to grant them a personal benefit through an act of favoritism (a public sector job). Such friends and family might also be able to use their public powers beyond recruitment decisions to protect their appointee’s job when engaging in corruption for personal gain, or pressure them into such corruption to maintain their jobs on pain of social exclusion (Olivier De Sardan, 1999).

It seems plausible to hypothesize:

**Hypothesis 2 (H2):** Bureaucrats hired through personal connections are more likely to engage in corruption for personal gain.

By contrast, we would not expect personal connection-based hiring to increase corruption for political gain. Bureaucrats hired through personal connections do not owe their jobs to political patrons. They thus need not engage in corruption for political gain to retain benefits or employment, nor do they identify (more) with a political patron.

Our hypotheses come with two intuitive scope conditions. First, we would only expect political connections to be associated with corruption for political gain among bureaucrats whose political patrons are still in office. Even in politicized states, bureaucratic tenure often exceeds the tenure in office of politicians (e.g., Schuster, 2016). Where political patrons who hired bureaucrats through political connections are no longer in office, we would expect the motives of these bureaucrats for political corruption to be curtailed. Bureaucrats are less likely to identify as servants of politicians other than their political patrons and would not face similar incentives to engage in corruption for political gain (cf. Oliveros, 2021). We thus hypothesize:

**Hypothesis 3 (H3):** The association between political connection-based hiring and corruption for political gain is moderated by whether the political patrons who hired bureaucrats are still in office.

By contrast, corruption for personal gain should be unrelated to the tenure of political patrons. Instead, Weber himself argued that public servants only identify with public service where they are hired based on merit and paid enough for “economic security” (Weber, 1978, p. 963). In the absence of economic security provided by sufficient salaries, bureaucrats may need to engage in corruption to provide for themselves and their families. In prior studies, this is a core mechanism linking low public sector pay to higher corruption (see Meyer-Sahlin et al., 2016). We build on this to develop **H4.** We argue that insufficient pay results in incentives to engage in personal corruption because of need and that these incentives overwhelm identification with public service. As a result, with insufficient pay, bureaucrats prioritize personal (i.e., corruption) over public interest irrespective of merit-based or connections-based recruitment. As such, we expect the relationship between personal connection-based hiring and corruption for personal benefit to be most prevalent among bureaucrats with sufficient salaries. This logic suggests an important moderator of **H2:**

**Hypothesis 4 (H4):** The association between personal connection-based hiring and corruption for personal gain is moderated by whether bureaucrats are paid enough to sustain their households.
By contrast, the association between politicized recruitment and corruption for political gain—which does not immediately aid bureaucrats in providing for their households—should not be conditioned by bureaucratic pay.

3 | METHOD AND DATA

To assess our hypotheses, we collected data from 6400 bureaucrats. Prior studies underscore that the large within-country diversity in bureaucratic behavior threatens the validity of inferences from national-level data (Gingerich, 2013). Individual-level survey data from multiple countries can mitigate this concern.

To address external validity concerns with individual-level data, our survey sample comprises bureaucrats in central governments in five countries in two regions (Africa and Asia): Ghana, Malawi, Uganda, Bangladesh, and Nepal. Our case selection thus provides for heterogeneous developing country contexts: different regional contexts, low and middle income, democratic and (partially) autocratic, and medium and high corruption perception (Appendix A). We return to the limitations of this strategy in our discussion.

In each country, we surveyed comparable populations: bureaucrats in central government across levels of hierarchy (from administrative assistance to management) with administrative roles in the broadest sense (excluding, for instance, teachers, doctors, policemen, or military personnel).

While we focused on comparable survey populations, the weakness of personnel management systems in developing countries precluded strictly representative samples (cf. Dumas & Lafuente, 2016). In most of our surveyed countries, governments do not have complete staff lists. As a result—and similar to several prior studies (see, e.g., Meyer-Sahling et al., 2016; Oliveros & Schuster, 2018)—we lacked the requisite survey frames for representative surveys of bureaucrats.

Instead, we had to rely on informal quota sampling to ensure, in each country, the sampling of bureaucrats across a range of central government institutions, ranks in hierarchy, contract types, job functions, ages, and education levels. Sampling was based primarily on contacting government institutions, with an effort to stratify the sample across central government institutions. Subsequently, local enumerators conducted face-to-face interviews with between 1048 (Bangladesh) and 1601 (Ghana) respondents per country (between February and December 2017).

This sampling strategy yielded a diverse set of bureaucrats across countries (Table 1). In the three countries for which we have some data to assess representativeness (Ghana, Bangladesh, Bangladesh, and Nepal).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Survey sample demographics by country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>Ghana</td>
</tr>
<tr>
<td>Percentage female</td>
<td>Ghana</td>
</tr>
<tr>
<td>Percentage university graduated</td>
<td>Ghana</td>
</tr>
<tr>
<td>Percentage managers</td>
<td>Ghana</td>
</tr>
<tr>
<td>Percentage technical-professional</td>
<td>Ghana</td>
</tr>
<tr>
<td>Percentage administrative support</td>
<td>Ghana</td>
</tr>
<tr>
<td>Mean age (in years)</td>
<td>Ghana</td>
</tr>
</tbody>
</table>
and Uganda) our sample roughly approximates our survey population in gender and education (Ghana), gender and rank (Bangladesh) and age (Uganda) (Appendix B).

Our key measures are recruitment through personal and political connections, corruption for personal and political gain and, for our scope conditions (H3 and H4), perceived salary sufficiency and when the respondent was hired. We pre-tested our survey measures through cognitive interviews with at least 10 bureaucrats in each country. Our cognitive interviews suggest that the intended meaning of our key measures was well-understood by respondents.

To assess personal and political connection-based recruitment, we asked respondents how important it has been for them to have (1) friends, family members or other personal connections and (2) connections to a politician or someone with links to political parties or politicians to get their first public sector job. Respondents assessed these two questions on a 0 (not at all important) to 6 (very important) scale.

To assess H3, we asked respondents when they were recruited into the public sector. We subsequently coded whether the governing party/ies was/were in power at the time of recruitment to measure whether the political patron of a bureaucrat hired through political connections remains in power. This is, of course, a proxy, as political patrons may have changed even when governing parties remained the same. If this is the case, however, it biases inferences against H3. To assess H4, we asked respondents about the extent to which they agree with the statement “My salary is sufficient to maintain my household” on a 5-point scale from 0 ('Strongly disagree') to 4 ('Strongly agree').

To assess personal and political connection-based recruitment, we asked respondents how important it has been for them to have (1) friends, family members or other personal connections and (2) connections to a politician or someone with links to political parties or politicians to get their first public sector job. Respondents assessed these two questions on a 0 (not at all important) to 6 (very important) scale.

To assess H3, we asked respondents when they were recruited into the public sector. We subsequently coded whether the governing party/ies was/were in power at the time of recruitment to measure whether the political patron of a bureaucrat hired through political connections remains in power. This is, of course, a proxy, as political patrons may have changed even when governing parties remained the same. If this is the case, however, it biases inferences against H3. To assess H4, we asked respondents about the extent to which they agree with the statement “My salary is sufficient to maintain my household” on a 5-point scale from 0 ('Strongly disagree') to 4 ('Strongly agree').

To measure corruption for personal and political gain, we implemented two list experiments. Directly asking about highly sensitive behavior—such as corruption—risks underreporting. List experiments can reduce such bias (Gonzalez-Ocantos et al., 2012; Rosenfeld et al., 2016). To obtain more truthful estimates, respondents are asked to count the total number of items on a list that applies to them (rather than identifying individual items). A randomly assigned control group only receives non-sensitive items in their list. A treatment group receives the sensitive item in addition to these non-sensitive items. This protects individual respondents, as individual responses to the sensitive item cannot be identified though responses can be modeled in the aggregate. The main limitation is much greater statistical inefficiency of estimates.

We applied this method to measure corruption for personal gain and corruption for political gain:

[Corruption for personal gain] "Public servants sometimes receive offers in the course of their work life or daily activities. Below is a list of hypothetical offers. Please indicate how many (not which) of them you would accept:

A. If I were offered a better paid job in exchange for taking on broader responsibilities at work, I would accept it
B. If I were offered a public sector job in a region I do not know well, I would accept it
C. If I were offered the opportunity to teach evening classes at university about my field of work, I would accept it
D. [Treatment] If I were offered money or a personal present in exchange for helping someone through my position, I would accept it"

[Corruption for political gain] "In regards to stakeholders outside your organization, how many of the following activities have you undertaken in the past 5 years?

A. You helped a colleague with the completion of a task
B. You helped write a report for an international organization
C. You helped your manager with an important assignment for your organization
D. [Treatment] You helped divert government resources to a party or person with political links

To avoid design effects, we randomized the order of items and included, in each list, an item which avoids floor effects (item A.) and an item which avoids ceiling effects (item B.) (see Blair & Imai, 2012). Appendix D contains the response distributions to our list experiments, suggesting that floor and ceiling effects are not present for most respondents. To further mitigate design effects, we randomly assigned respondents to each list separately.  

Our two treatment measures were understood in the intended manner by respondents in pre-tests. However, though our cognitive interviews do not suggest this interpretation, we cannot rule out that respondents redistribute personal corruption gains to politicians. If they do so, however, this biases our measure against our hypotheses.

Our list experiments are designed to counter social desirability bias through indirect questioning. By contrast, our measures of connections are direct, leading to a possibility that those measures are more affected by social desirability bias and are underestimating connections. This could lead to concerns about common method variance in our estimates. However, many respondents do report the influence of connections in their recruitment in response to a direct question. Moreover, the protected nature of our list experiment helps protect our regression estimates from common method variance stemming from social desirability bias (Rosenfeld et al., 2016). Finally, it is not clear how common method variance could yield differential effects of connections or the interaction effects we observe.

In our analyses, we control for a range of factors which prior studies had associated with bureaucratic corruption or which may enhance corruption opportunities (see, e.g., Dahlström, Lapuente, and Teorell, 2012; Oliveros & Schuster, 2018; Rauch & Evans, 2000; Van Rijckeghem & Weder, 2001): gender, age (in years), type of contract (temporary vs. permanent), rank in hierarchy (assistant vs. professional-technical vs. managerial), and whether the respondent’s position offers particular corruption opportunities (whether the respondent handles funds on the job and has contact with citizens), as well as country fixed effects (see Appendix C for summary statistics). We model list experiment responses with the maximum likelihood estimator—“list regression” below—from Blair and Imai (2012).

4 | RESULTS

We first present descriptive statistics and highlight important findings relative to the existing literature. Subsequently, we present regression results and assess our hypotheses.

4.1 | Descriptive data

As illustrated in Figure 1, a greater proportion of bureaucrats found personal rather than political connections important to obtain their first public sector job. On average, personal connections were at least somewhat important (scoring at least 1 on a scale of 0–6) to almost twice as many bureaucrats (49%) as political connections (25%). This underscores the importance of studying personal connections in developing country bureaucracies.
As discussed, political and personal connections may coincide. In our sample, political and personal connection-based recruitment are indeed positively correlated ($r = 0.45$), and about 22% of respondents had at least some help from both personal and political connections to get their first public sector job. They might thus have political friends and family, or support from friends and family and politicians. To tease associations apart, we control for both personal and political connection-based recruitment simultaneously.

Figure 2 shows estimates for the share of bureaucrats engaging in corruption for personal and political gain as measured by our list experiments. Between 19% (Ghana) and 44% (Malawi) of respondents are willing to engage in corruption for personal gain; and between 5% (Ghana) and 36% (Malawi) have engaged in corruption for political gain.

Finally, we assess the relationship between our list experiment estimates for corruption for personal and political gain. We find a small and insignificant association. A list regression of corruption for personal gain on corruption for political gain—including country intercepts—yields a statistically insignificant estimate of 0.04. This indicates that analyzing bureaucratic corruption tout court may miss important differences between varieties that do not tend to be pursued by the same bureaucrats.
4.2 Regression results

We present our regression results in five steps. First, we provide estimates of connection-based hiring without controlling for political and personal connections simultaneously. Subsequently, we add simultaneous controls. Third, we assess our theorized scope conditions. Fourth, we assess robustness through placebo tests. Finally, we provide suggestive mechanism evidence.

When not controlling for both personal and political connection-based recruitment simultaneously (Table 2), we seemingly find undifferentiated associations, significant at least at the 5% level: personal and political connections each are positively associated with corruption for personal gain (models 1 and 2) and corruption for political gain (models 3 and 4).

Yet this analysis may disguise the differential impacts of personal and political connections, since they are not mutually exclusive. To disentangle types of connections, we look at each net of the other. We thus include both personal and political connection-based recruitment simultaneously in list regressions (Table 3). As hypothesized in H1, we find political connection-based recruitment positively and significantly (at the 5% level) associated with corruption for political gain, but not corruption for personal gain (Model 6). Contrary to H2, we do not find a clear association between personal connection-based recruitment and corruption for personal gain (Model 5). Consistent with our argument, however, personal connections are not significantly associated with corruption for political gain either.

Models with a full set of controls replicate these findings (Appendix Table E,E.2) albeit with political connections associated with political corruption at the 10% level only and thus providing more suggestive evidence for H2. These findings indicate that connections and corruption do not seem to be straightforwardly associated across respondents. However, this conclusion masks
heterogeneity in the associations between connections in recruitment and corruption consistent with H3 and H4.

To assess H3, we next estimate whether the association between political connection-based recruitment and corruption for political gain is conditional on whether the government who hired the bureaucrat remained in office when the survey was taken. As illustrated in Figure 3, we find evidence that political connections are positively associated with corruption for political gain only among bureaucrats originally hired under the current incumbent. The marginal effect estimate of political connections among bureaucrats hired under the current incumbent is 0.51 and significant at the 1% level, contrasting an estimate close to zero for other bureaucrats ($p = 0.95$). With our full model controls (Table 4), we estimate an interaction term of relatively substantive size, albeit significant only at the 10% level (due in part to the unavoidable inefficiency of the list regression estimator). The marginal effects of political connections on corruption for political gain are 0.27 ($p = 0.01$) for bureaucrats hired by incumbents and $-0.02$ ($p = 0.88$) for bureaucrats hired by others. Even this difference, however, is significant only at the 10% level and should be interpreted with some caution.

**TABLE 2** Estimates for connection-based hiring and corruption for political and personal gain

<table>
<thead>
<tr>
<th></th>
<th>Model 1 (personal corruption)</th>
<th>Model 2 (personal corruption)</th>
<th>Model 3 (political corruption)</th>
<th>Model 4 (political corruption)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal connection-based recruitment</td>
<td>0.11* (0.05)</td>
<td>0.23*** (0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political connection-based recruitment</td>
<td>0.13* (0.05)</td>
<td>0.24*** (0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>$-0.51$ (0.36)</td>
<td>$-0.35$ (0.36)</td>
<td>0.34 (0.67)</td>
<td>0.33 (0.67)</td>
</tr>
<tr>
<td>Malawi</td>
<td>0.90* (0.41)</td>
<td>0.90* (0.41)</td>
<td>2.90*** (0.63)</td>
<td>2.73*** (0.62)</td>
</tr>
<tr>
<td>Nepal</td>
<td>$-1.04$** (0.39)</td>
<td>$-0.70$† (0.38)</td>
<td>$-0.34$ (0.76)</td>
<td>0.09 (0.75)</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.50 (0.35)</td>
<td>0.58 (0.35)</td>
<td>$-0.36$ (0.84)</td>
<td>$-0.44$ (0.83)</td>
</tr>
<tr>
<td>Intercept</td>
<td>$-1.52$*** (0.30)</td>
<td>$-1.57$*** (0.30)</td>
<td>$-3.94$*** (0.62)</td>
<td>$-3.72$*** (0.60)</td>
</tr>
<tr>
<td>N</td>
<td>6352</td>
<td>6321</td>
<td>6340</td>
<td>6309</td>
</tr>
</tbody>
</table>

Note: List regression estimates with robust standard errors in parentheses.

$† p < 0.100, * p < 0.050, ** p < 0.010, *** p < 0.001.$

**TABLE 3** Estimates for connection-based hiring and corruption for political and personal gain

<table>
<thead>
<tr>
<th></th>
<th>Model 5 (personal corruption)</th>
<th>Model 6 (political corruption)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political connection-based recruitment</td>
<td>0.08 (0.06)</td>
<td>0.17* (0.08)</td>
</tr>
<tr>
<td>Personal connection-based recruitment</td>
<td>0.08 (0.05)</td>
<td>0.11 (0.08)</td>
</tr>
<tr>
<td>Ghana</td>
<td>$-0.44$ (0.37)</td>
<td>0.22 (0.67)</td>
</tr>
<tr>
<td>Malawi</td>
<td>0.88* (0.42)</td>
<td>2.80*** (0.63)</td>
</tr>
<tr>
<td>Nepal</td>
<td>$-0.88$* (0.40)</td>
<td>$-0.06$ (0.76)</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.59 (0.35)</td>
<td>$-0.36$ (0.84)</td>
</tr>
<tr>
<td>Intercept</td>
<td>$-1.62$*** (0.30)</td>
<td>$-3.90$*** (0.61)</td>
</tr>
<tr>
<td>N</td>
<td>6302</td>
<td>6291</td>
</tr>
</tbody>
</table>

Note: List regression estimates with robust standard errors in parentheses.

$† p < 0.100, * p < 0.050, ** p < 0.010, *** p < 0.001.$
As shown in Table 4, we find stronger support for H4: that the association between personal connection-based recruitment and corruption for personal gain depends on the economic security of respondents. In support of this claim, we find a positive and significant (at the 5% level) interaction between personal connection-based hiring and the perceived economic security of respondents. The marginal effects of personal connections on corruption for personal gain are above zero for bureaucrats scoring one or more, and significantly so for bureaucrats scoring two or more, on the 0–4 salary sufficiency indicator (see Appendix F for a marginal effect plot). Both findings for H3 and H4 in Table 4 replicate if both interaction terms are introduced simultaneously (Appendix E, Models E9 and E14), though the evidence for H4 is somewhat stronger (at the 5% level) in these models.

In sum, in support of H3 and H4, our data suggest that personal connection-based recruitment is associated with more corruption for personal gain when salaries are sufficient to sustain respondents’ households, whereas—more suggestively—political connection-based recruitment is associated with more corruption for political gain when recruiting incumbents are still in office.

We conducted a series of placebo checks to further probe our claims. First, bureaucrats might become embedded in corrupt networks as they rise to managerial ranks or rise in years of service. As a result, connections at the time of their recruitment may matter increasingly less for their decisions. Moreover, there is a risk that this dynamic is what our tests of H3 and H4 capture. To examine this possibility, we ran list regressions interacting connections in recruitment with managerial rank and years of service (Appendix Table E.E.6). We did not find evidence from these models that bureaucratic seniority (in rank or years of service) influences the relationship between connections in recruitment and corruption, enhancing confidence that our results support H3 and H4.

FIGURE 3 Associations from list regressions of political connection-based hiring on corruption for political gain, split by whether the party or parties hiring the respondent is in office.
As additional placebos for H3, we find no significant interaction between personal connection-based recruitment and being recruited by the incumbent government when predicting corruption for either personal or political gain. Nor do we find an interaction between political connection-based recruitment and being recruited by the incumbent government on corruption for personal gain (Appendix Table E,E.3).

Conversely, for H4, we find no significant association when interacting political connection-based recruitment and salary sufficiency and predicting corruption for either personal or political gain. Nor do we find an interaction between personal connection-based recruitment and salary sufficiency on corruption for political gain (Appendix Table E,E.4).

These placebo checks enhance confidence that personal and political connections may motivate different forms of corruption, and that their effects depend on whether political patrons remain in office and bureaucrats have sufficient salaries to maintain their households.

Finally, we provide suggestive evidence for our theorized mechanism: that hiring based on political and personal connections leads to differential bureaucratic identities and incentives—and thus motivations. For instance, as noted, personal connection-based hiring can be motivated by nepotism (benefiting friends and family) without political aims and linkages. To provide suggestive mechanism evidence, we assess whether political and personal connection-based hiring are associated with (1) having worked for a political party and (2) prioritizing professional norms.

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>The conditional relationships between connections-based hiring and corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 10 (personal corruption)</td>
</tr>
<tr>
<td>Political connection-based recruitment</td>
<td>0.06 (0.07)</td>
</tr>
<tr>
<td>Personal connection-based recruitment</td>
<td>−0.03 (0.07)</td>
</tr>
<tr>
<td>Personal connection-based recruitment × Salary sufficiency</td>
<td>0.08* (0.04)</td>
</tr>
<tr>
<td>Political connection-based recruitment × Incumbent hire</td>
<td></td>
</tr>
<tr>
<td>Incumbent hire</td>
<td>0.03 (0.29)</td>
</tr>
<tr>
<td>Salary sufficiency</td>
<td>−0.34** (0.13)</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>−0.19 (0.25)</td>
</tr>
<tr>
<td>Rank: Manager</td>
<td>−0.98** (0.38)</td>
</tr>
<tr>
<td>Rank: Professional</td>
<td>−0.27 (0.27)</td>
</tr>
<tr>
<td>Contacts with citizens</td>
<td>0.50 (0.31)</td>
</tr>
<tr>
<td>Task: Handles funds</td>
<td>−0.06 (0.28)</td>
</tr>
<tr>
<td>Age</td>
<td>−0.00 (0.01)</td>
</tr>
<tr>
<td>Temporary contract</td>
<td>0.54 (0.36)</td>
</tr>
<tr>
<td>University education</td>
<td>−0.49 (0.32)</td>
</tr>
<tr>
<td>Ghana</td>
<td>−0.58 (0.47)</td>
</tr>
<tr>
<td>Malawi</td>
<td>1.19* (0.51)</td>
</tr>
<tr>
<td>Nepal</td>
<td>−0.84‡ (0.48)</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.50 (0.48)</td>
</tr>
<tr>
<td>Intercept</td>
<td>−0.85 (0.64)</td>
</tr>
<tr>
<td>N</td>
<td>5647</td>
</tr>
</tbody>
</table>

*Note: List regression estimates with robust standard errors in parentheses.*

\[p < 0.100, *p < 0.050, **p < 0.010, ***p < 0.001.\]
over political directives when the two are in conflict. As detailed in Appendix E (Table E.5), political connection-based hiring is positively and significantly associated (at the 1% level) with having worked for a political party and with a belief that complying with political directives is more important than following professional norms when the two are in conflict. Personal connection-based hiring is not positively related to either. These findings provide suggestive evidence that political connections select different types of bureaucrats (namely those who are more likely to have political backgrounds) than hiring based on personal connections, and that political recruits have, as theorized, differential, more political motivations (namely to prioritize political directives).

In sum, our data suggest that political recruits may engage in more corruption for political gain, but not personal gain—albeit only where their political patrons remain in office. Vice versa, bureaucrats hired through personal connections engage in more corruption for personal (but not political) gain—albeit only where their pay is sufficient to maintain their households and they could thus, as Weber (1978) had argued, identify with public service in the first place.

5 | CONCLUSIONS AND IMPLICATIONS

Hundreds of studies have assessed why some bureaucracies are more corrupt than others (Gans-Morse et al., 2018). Yet, scholars have paid little attention to varieties of bureaucratic corruption and to why some bureaucrats engage in corruption for personal gain, yet others for political gain. As we showed in this paper, (1) bureaucrats who engage in corruption for political gain frequently do not engage in corruption for personal gain, and vice versa; (2) bureaucratic corruption for personal and political gain can have differential determinants—and thus plausibly different remedies; and (3) prior studies of bureaucratic corruption cannot explain these varieties of bureaucratic corruption Our findings have four important implications for the study of developing country states.

First, our findings underscore the importance of studying varieties of bureaucratic corruption in government (cf. Bussell, 2012, 2015; Gans-Morse et al., 2014). In light of our data, we ought to be studying not only the varying actors engaged in corruption, but also the different forms of corruption available to the same actors (bureaucrats in our instance) and the circumstances under which they pursue them.

Different forms of corruption by the same type of actor, driven by different motives, are likely to have different remedies. Political principals, for instance, might well be persuaded to rein in personal connection-based hiring in bureaucracy given that such recruits are prone to engage in corruption for personal—but not political—enrichment. At the same time, we could expect political principals to resist attempts to curb the recruitment of political allies into bureaucracy, given that such recruits are more likely to engage in corruption for political gain. Studying only the extent—rather than varieties—of bureaucratic corruption risks misdiagnosing political principals’ incentives for reform, and thus risks prescribing ineffective remedies.

Second, our findings underscore the importance of supplementing research on political clientelism and bureaucratic politicization with a research agenda on nepotism in bureaucracy. The prevalence of personal—rather than political—connections in developing country bureaucracies, and what consequences they have, are understudied relative to how important our data indicate that they are. In our surveys, a larger share of bureaucrats obtained their jobs through personal rather than political connections. Moreover, we find evidence suggesting that the consequences of personal and political connections in recruitment are not the same. Of course, studies
of patrimonial government often view patrimonialism as the penetration of state organization by kin, clan, or other personal networks (e.g., Fukuyama, 2014). Yet they rarely seek to differentiate the political from the personal. As we have noted, the two are not mutually exclusive. Yet, they may matter differentially—raising the need for more systematic research, particularly on personal networks, over and above political patronage.

Third, our study nuances our understanding of politicization more broadly by showing that its effects may be moderated by whether appointing patrons remain in power. Our findings suggest that the departure of political patrons changes bureaucratic behavior: bureaucrats hired through political connections no longer engage in corruption for political gain when their patrons leave office.

Finally, our study adds to research on the effects of bureaucratic pay on corruption. In studies to-date, this association is contested. Studies have shown that higher bureaucratic pay reduces corruption (Dong & Torgler, 2013; Van Rijckeghem & Weder, 2001); enhances corruption (Karahan et al., 2006; Navot et al., 2016); has no effect on corruption (Dahlström, Lapuente, and Teorell, 2012; Rauch & Evans, 2000; Treisman, 2007); or only reduces corruption where bureaucrats are being monitored and sanctioned (Di Tella & Schargrodsky, 2003). Our findings suggest that this contestation can be expected. Whether pay reduces corruption depends on how bureaucrats are recruited, and the type of corruption assessed. Higher pay may reduce corruption for personal—but not political—benefit, where it is accompanied by merit-based recruitment.

While we believe these findings make important contributions, our study is not without limitations. First, as noted, our surveys are not necessarily representative of central governments in all five countries. While we have no a priori reason to believe that our sampling biases our inferences, it remains for future research to see whether they hold with more representative survey data.

Second, conceptually political and personal connections may overlap, meaning our measures of one may capture aspects of the other. While this issue presents a caveat to our descriptive inference about the (greater) prevalence of personal connections in public sector recruitment, it does not inflate our regression estimates in models conditioning on both types of connections. If anything, measurement might bias our estimates against finding differential effects of personal and political connection-based recruitment—and thus makes our hypothesis test a harder one.

Moreover, our use of list experiments comes with a cost. They ask about corruption for personal and political gain of respondents generally. As a result, we do not differentiate different forms of corruption for personal and political gain—such as bribery or embezzlement. In short, while we examine varieties of corruption, we are not able to examine varieties of varieties of corruption.

Due to their design, list experiments are statistically inefficient, which means our findings are subject to uncertainty. Our findings regarding H3 are only significant at the 10%-level in models with the full set of controls and should thus be subjected to future examination before strong conclusions are drawn.

Third, our data only provide suggestive, indirect evidence for our theorized incentives and identity mechanisms. Recent research on political clientelism suggests that both incentives as well as norms and identities are likely to sustain the relationship between political patrons and their (bureaucratic) clients (see, e.g., Lawson & Greene, 2014). It is thus plausible that both mechanisms are at work simultaneously. It remains for future studies to assess that.

Fourth, our inferences are based on partial correlations. While our placebo checks enhance confidence in our findings, future research could usefully test whether our findings hold when personal and political connections in hiring are (quasi-)experimentally assigned. For instance,
close municipal elections could be exploited for regression discontinuity designs for causal estimates of exogenously induced variation in political and personal hiring, provided measures of corruption for political and personal gain across a large number of municipal organizations can be obtained. Data for these designs are, however, hard to come by.

Lastly, our evidence is limited to five countries in Asia and Africa. The diversity and unusual size and scope of our country samples arguably goes a long way toward suggesting external validity. This is not to say that our argument travels to all contexts. Where the costs of engaging in corruption are prohibitively high for bureaucrats—for instance due to strong monitoring and sanction mechanisms—connection-based hiring may be less likely to affect corruption (Schuster et al., 2020). Our external validity is thus limited to contexts in which bureaucrats do engage in personal and political corruption with relative frequency. Moreover, our evidence comes from five countries in Africa and Asia; whether our findings travel further remains an empirical question.

ACKNOWLEDGMENTS
The authors contributed equally to this article. The authors would like to thank government counterparts in Nepal, Bangladesh, Uganda, Malawi and Ghana for enabling this research; the British Academy-UK Department for International Development (DFID) Anti-Corruption Evidence Program for funding for this research; and the dozens of research assistants and collaborators in Nepal, Bangladesh, Uganda, Malawi and Ghana who contributed to this project. The authors have no conflict of interest to report. Ethics approval was obtained at the University of Nottingham. Anonymized data will be made available at https://dataverse.harvard.edu/.

DATA AVAILABILITY STATEMENT
An anonymized version of the dataset—which, to protect respondent anonymity and comply with GDPR, only includes a reduced set of demographic variables and removes the institution identifier— will be made available at https://dataverse.harvard.edu/ with publication of the article.

ENDNOTES
1 We conceptualize kin in this paper as extended family and clan networks, rather than larger ethnic groups.
2 Our data comes from a ten-country survey of bureaucrats in developing countries. The five countries included in this paper fit the criteria of having a permissive environment for bureaucratic corruption. In the remaining five countries (Chile, Brazil, Estonia, Albania, and Kosovo), the share of bureaucrats engaging in corruption was not significantly different from zero, as measured by our list experiments. This does not, of course, mean that corruption does not exist in these countries—only that our measures are not efficient enough to detect it. Country-level corruption measures place these five countries among those with relatively lower corruption. In the Corruption Perceptions Index, for instance, the average ranking of the five countries included in the paper is 118, while the five countries in which our list experiments are unable to detect statistically significant levels of bureaucratic corruption rank on average 66.
3 As a result, response rates are difficult to calculate. We did, however, obtain a nearly 100% compliance rate from bureaucrats asked to participate.
4 Doing so enables us to test whether assignment to one list affects responses to the other. We found no evidence of this.
5 Moreover, our treatments vary in measuring intent (corruption for personal gain) and behavior (corruption for political gain). Intent, of course, frequently predicts behavior, yet need not do so (Ajzen and Fishbein, 1980). While this is a limitation of our design, the choice was deliberate. Measuring personal corruption intent enables us to isolate the effect of connection-based recruitment from opportunity (being offered money or a personal present). In the case of corruption for political gain, however, opportunity arguably presupposes a prior link.
with the politician. As such, connections might be tied to opportunities and a measure which does not presuppose these connections is more appropriate. While this approach has advantages and downsides, it is unlikely to bias our core results. To do so, personal connection-based hiring would need to trigger corruption intent, but not behavior, whereas political connection-based hiring would need to trigger corruption behavior but not intent.

6 For readability and ease of interpretation of the descriptive statistics, we dichotomize the connections variables in Figure 1. In the regression analyses, the full 0–6 scale is used without any dichotomization.

7 The analysis splits our sample on whether respondents were recruited under the current incumbent party’s or parties’ rule and runs separate list regressions on each subsample. It omits country fixed effect due to limited variation in incumbency hires in Uganda.

8 We measure whether respondents have worked for a political party with the question “During the last 10 years, have you worked full-time for any of the following organizations?” with “Political party” as one of the response options.

9 We measure whether respondents prioritize political directives over professional norms with the question “When political directives conflict with professional norms, following professional norms is more important to me than complying with political directives.” (On a 5-point scale from “Strongly disagree” to “Strongly agree”). We only fielded this item in our African countries.

10 In fact, once controlling for political connections, personal connection-based hiring is significantly negatively related to prioritizing political directives.

REFERENCES


**SUPPORTING INFORMATION**

Additional supporting information can be found online in the Supporting Information section at the end of this article.