Combining Patronage and Merit in Public Sector Recruitment

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When do politicians in developing democracies prioritize meritocratic recruitment over patronage hiring for public sector jobs? I distinguish between low- and high-skilled positions and argue that the former are valuable for sustaining party machines, while manipulating the latter can undermine state performance. Accordingly, politicians will interfere to ensure their copartisans are hired to low-skilled jobs but select bureaucrats for high-skilled positions based on meritocratic criteria. I test my argument using novel bureaucrat-level data from Ghana ($n = 17,942$) and leverage a change in the governing party to investigate hiring patterns. The results suggest that partisan bias is confined to low-ranked jobs. The findings shed light on the mixed effects of electoral competition on patronage identified in prior studies: competition may dissuade politicians from interfering in recruitment to high-ranked positions but encourage them to hire partisans for low-ranked positions.

Whether civil servants are hired based on merit or political criteria has broad implications for state capacity and the overall health of democracy (Geddes 1994; Grzymala-Busse 2007; O'Dwyer 2006). Patronage recruits are likely to be less competent and also not essential to the running of the state. This type of hiring can place an unnecessary strain on the public purse, and undermine investment in other vital areas, such as capital infrastructure. It can also perpetuate a broader clientelistic political economy. Once hired, copartisan bureaucrats can help politicians allocate scarce public resources in suboptimal ways.[1] Partisan appointees may also worsen the provision of public services (Colonnelli, Prem, and Teso 2017) and increase levels of corruption (Oliveros and Schuster 2018).

Given these high stakes, it is important to understand when politicians in developing democracies are more likely to rely on meritocratic versus partisan recruitment. Prior research has not been able to adequately address this question because, by using changes in legislation to signal the onset of meritocracy (Geddes 1994), it treats the concept of meritocracy as dichotomous. Other research similarly assumes the question away by portraying postcolonial states as neopatrimonial, a situation in which all public sector jobs are often assumed to be distributed politically (Bayart 1993; Chabal and Daloz 1999; Van de Walle 2001).

Despite this dominant narrative, in practice most countries lie on a continuum between complete meritocracy and wholesale partisan interference (Grindle 2012). I build on this insight and consider when the benefits of patronage hiring are outweighed by the costs. I theorize that the costs of noncompetitive recruitment vary across public sector positions, and therefore that politicians may support meritocratic recruitment for some posts and actively interfere in hiring for others. Meddling in hiring for professional positions, such as budget analysts, engineers, and planning officers, is costly to politicians. It can hurt incumbents electorally because it can impact state performance. In contrast, interference in low-ranking public sector jobs, such as sanitation officers, laborers, and security guards, poses a lower risk to state performance. Furthermore, politicians can award low-ranked positions to party brokers in order to sustain party machines. In many developing countries party brokers lack the necessary educational background to succeed in high-ranked positions. In short, incumbent politicians in developing democracies can pursue a dual strategy of hiring bureaucrats for high-skilled jobs based on meritocratic criteria and

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1. See Golden and Min (2013) for a review of the literature on distributive politics and partisan bias in the allocation of public resources.

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bureaucrats for low-skilled positions according to partisan criteria.

To test my argument, I assembled unique data on the universe of over 40,000 bureaucrats working in 200 local governments in Ghana, a stable democracy in West Africa. Such fine-grained data from a developing country are often not available or are very hard to obtain, which is why only a handful of studies has been able to use similar microlevel data.[2] Electoral politics in Ghana are dominated by the National Democratic Congress (NDC) and the New Patriotic Party (NPP). Since the restoration of democracy, the country's national elections have become increasingly competitive. The NDC won the 2008 presidential election—the focus of this article—by less than half a percent.[3] In the analysis, I exploit this change in the ruling party to investigate hiring patterns.

The data on bureaucrats include information on the hiring date of each employee. I use the first term (2005–8) as a baseline for comparison with hiring patterns in the second term (2009–12). My study sample consists of all bureaucrats hired during these two terms ($n = 17{,}942$). If the conventional wisdom of blanket patronage hiring is correct, we would expect the new ruling party to favor its copartisans for all positions, at the expense of opponents. The data include information on bureaucrats' individual characteristics. In the analysis, I use bureaucrats' ethnicity and home region as proxies for their likely partisanship.[4]

Disaggregating the data between high-skilled and low-skilled positions, I find no evidence of partisan hiring for high-skilled positions. High-skilled recruits also become better qualified over time, which suggests a preference for competence. Conversely, a change in ruling party is associated with a 10 percentage point increase in the probability that a copartisan will be hired to a low-skilled post. This increase is equivalent to about 635 extra public sector jobs being awarded to government copartisans, at the cost of over US$3 million over a four-year term.[5] Because the data only contain information on local bureaucrats, this bias likely represents a fraction of the aggregate number of partisan hires during the study period. While the analysis does not confirm that such bias led to the appointment of bureaucrats who were not qualified to take low-ranked posts, it does suggest that bureaucrats' identity influenced who the new governing party hired.

My theory suggests that politicians reward party brokers for their support by securing low-skilled jobs for them. I combine quantitative and qualitative data to substantiate this claim. The qualitative evidence suggests that grassroots brokers in Ghana are motivated to work for parties in return for material benefits, including public sector jobs. The data also provide evidence of strategic hiring: politicians allocate more new jobs to districts where brokers attract new voters.

This article makes three contributions. First, the results contribute to the literature on public sector development. It is one of the first empirical studies in political science to use administrative data to document trends in public sector hiring practices in a developing country (see also Hassan 2016; Pierskalla and Sacks 2019). My theoretical approach also sheds light on what appear to be inconsistent findings regarding the effect of electoral competition on patronage hiring. While many scholars assert that competition can promote meritocracy (Geddes 1994; Ting et al. 2013), others find that competition can encourage clientelism, and swell the ranks of the public sector (Driscoll 2017; Lindberg 2003; Pierskalla and Sacks 2019). My theory suggests that electoral competition may have both of these effects: it may dissuade politicians from interfering in hiring for high-ranked positions, while encouraging them to recruit partisans to low-ranked positions.

Second, I advance the literature on measuring meritocracy. Past studies have primarily used either legislation (Geddes 1994) or surveys of experts or bureaucrats (Kopecký 2011; Sigman 2015) to measure this concept. My approach —which combines bureaucrat-level data with a change in the ruling party—is more objective than survey-based methods. Furthermore, the data allow us to analyze de facto practices rather than de jure protocols.

Third, I contribute to the burgeoning empirical literature on party brokers (Calvo and Murillo 2013; Larreguy, Marshall, and Querubin 2016; Stokes et al. 2013). My work complements prior studies that show brokers often hold or seek to obtain public sector positions (Oliveros 2016) and advances this literature by considering the types of jobs that brokers are likely to hold.

THEORY OF DUAL HIRING: COMBINING MERIT AND PATRONAGE

Governments in low-income countries dedicate about a third of public budgets to bureaucrats' salaries (Clements

2. The empirical study of bureaucratic recruitment in developing countries is a burgeoning field in political science and economics. Relevant papers include Colonnelli et al. (2017), Hassan (2016), Iyer and Mani (2012), Pierskalla and Sacks (2019), Sigman (2015), and Xu (2018).

3. The NDC won with 50.2% of votes, compared to 49.8% for NPP.

4. In the section on coding civil servants' partisanship, I discuss how I infer partisanship from these two variables.

5. The total number of bureaucrats hired to low-skilled positions between 2009 and 2012 was 6,359. See table C.1. To calculate the cost of 635 bureaucrats, I assume a (conservatively low) monthly salary of US$100.

et al. 2010).[6] In African countries, the wage bill is often the government's single biggest expense: it represents 55% of public expenditure in Kenya, 45% in Ghana, and over 33% in South Africa.[7] While the seminal literature on the African state suggests that governments distribute most public sector jobs on the basis of political criteria (Bayart 1993; Chabal and Daloz 1999), these claims have not been tested empirically since the reintroduction of multiparty elections in the early 1990s. In this article, I develop a theory of when politicians in developing democracies prioritize meritocratic recruitment over patronage hiring for public sector jobs.

Benefits to politicians of distributing low-skilled public sector positions to partisans

I propose that the costs and benefits of patronage hiring to politicians in developing democracies vary according to the type of public sector job. Certain types of jobs are especially valuable to politicians. In particular, politicians who operate in clientelistic polities will value public sector jobs that they can award to grassroots party brokers. Awarding jobs to brokers has a multiplier effect on votes: the politician gains the support of the broker and her clients. US party leaders used jobs in the postal service and customs houses to build and sustain party machines during the nineteenth century (Carpenter 2001). For example, in Chicago, political parties distributed jobs to precinct captains who worked to get out the vote and dispense private goods to citizens (Wilson 1961).[8]

Historical accounts of the US transition toward meritocracy suggest that it took decades for low-ranking jobs outside the capital to be taken out of the hands of politicians. Patronage was sustained for most field positions and top administrative jobs in the capital (Skowronek 1982, 69). Post offices employing over 50 persons were subject to the Pendleton Act of 1883. However, in 1896 there were still 76,000 fourth-class postmaster positions that were not covered by the act and were therefore available for parties to distribute to loyalists (Skowronek 1982, 72). In contrast, clerical jobs based in the capital were easy for politicians to give up.

The practice of awarding public sector jobs to those who can mobilize voters on behalf of the incumbent party has been documented in other contexts. O'Dwyer (2006) argues that in new Eastern European democracies, citizens were demobilized after years of communist rule such that mass parties with fee-paying memberships are not possible. He maintains that incumbent politicians instead give public sector jobs to party activists (529). Callen, Gulzar, and Rezaee (2020) argue that politicians in Pakistan provide patronage to doctors because they act as important political mediators in rural areas at election time. An original survey of party brokers in Argentina shows that 30% of brokers have public sector jobs (Stokes et al. 2013, 99). In Africa, scholars argue that politicians create new local-level units precisely so they can distribute new administrative and political positions to local brokers (Hassan and Sheely 2017) and party supporters (Green 2010).[9]

While party brokers have significant leadership skills and valuable ties to local elites (Brierley and Nathan 2020), in developing countries they are often not particularly well educated. Indeed, many intermediaries work for parties for the material benefits they can extract to supplement their incomes (Bob-Milliar 2012). A survey of grassroots party brokers in Ghana shows that they are "characteristically very youthful but poorly educated or without formal education" (Bob-Milliar 2012, 670). Thus, politicians can usually only reward them with low-skilled positions.[10] Because middle-class citizens with university degrees have fewer financial incentives to work for parties, they are less likely to become brokers. In summary, politicians in developing democracies who want to sustain party machines will seek to exercise control over hiring for low-skilled jobs in the public sector, which they can use to reward grassroots party brokers.

Costs to politicians of distributing high-skilled public sector positions to partisans

While the benefits of patronage appointments include the ability to extract loyalty and campaign work from public officials, patronage hiring also has at least two important costs. First, it can lead to the inefficient functioning of the state. Second, as the size of the public sector grows, interfering in recruitment processes becomes increasingly time intensive for politicians. These costs to politicians are likely to be greater for high-skilled jobs than for low-skilled jobs, which can incentivize politicians to recruit professional bureaucrats on the

6. See table A.1.

7. On Kenya, see Aljazeera (2014); on Ghana, see Africa Confidential (2018); and on South Africa, see BusinessTech (2018).

8. In the United States, another major benefit of patronage hiring was the contributions (or assessments) that office holders gave to the party, which constituted 2%–10% of their salaries (Johnson and Libecap 1994, 15).

9. Similarly, Gottlieb et al. (2018) argue that incumbent parties create new administrative units to coopt strong community brokers in areas where the party is not already strong. While they do not suggest that local government jobs are distributed directly to brokers, they imply that the incumbent party uses local government units to mobilize votes via community-level brokers.

10. The jobs that party brokers can reasonably perform will vary according to the country's level of development. In richer countries, where the average level of education will be higher than in poorer countries, brokers may be educated enough to hold mid-ranked positions in the bureaucracy.

basis of meritocratic criteria.[11] In developing democracies, politicians often retain discretionary control over bureaucrats' careers, which they can leverage to influence their work. Such discretion allows politicians to get the best of both worlds: high levels of competence and loyalty.

Regarding state performance, recruiting bureaucrats to high-skilled jobs on the basis of partisan, as opposed to meritocratic, criteria can lead to hiring less competent bureaucrats. Partisan recruits are likely to underperform their duties and to be more corrupt (Oliveros and Schuster 2018). Indeed, meritocratic recruitment has been identified as the most important factor in improving bureaucratic performance (Rauch and Evans 2000). Bureaucratic underperformance can lead to macroeconomic instability and the inefficient delivery of public services. Politicians are likely to be concerned with poor state performance if voters consider government performance when voting.

Evidence suggests that even in relatively clientelistic polities, some voters consider economic management and public service delivery when they vote. The incumbent party's ability to deliver on macroeconomic policies has been shown to be an important determinant of vote choice in multiple regions, including in Africa (Bratton, Bhavnani, and Chen 2012), Latin America (Lewis-Beck and Ratto 2013; Roberts and Wibbels 1999), and Eastern Europe (Roberts 2008). Performance voting has also been demonstrated in individual African countries such as Zambia (Posner and Simon 2002), Ghana (Hoffman and Long 2013; Lindberg and Morrison 2008; Youde 2005) and South Africa (Ferree 2006; Mattes and Piombo 2001).[12] Regarding development outcomes, voters prefer politicians who deliver local public infrastructure such as roads, schools, and health clinics (Carlson 2015; Harding 2015; Ofosu 2019; Weghorst and Lindberg 2013).

Electoral pressures on politicians to deliver development, combined with the difficulty of instituting wholesale meritocratic recruitment practices, can lead politicians to establish bureaucratic "pockets of efficiency" (Geddes 1994). These national-level agencies operate outside the federal bureaucracy and recruit personnel on the basis of merit (61). Applying this argument to the local level—the empirical focus of this article—politicians may also have an incentive to recruit competent bureaucrats to work in local governments to efficiently deliver local public goods and services to voters. Given the smaller size of the workforce in local governments, the marginal value of a highly trained bureaucrat is higher in local government offices compared to the national bureaucracy.

Politicians' concerns about the potential electoral reward (or punishment) of better state performance are likely to be intensified in competitive—or increasingly competitive—democratic environments. The positive relationship between electoral competition and the adoption of meritocratic reforms has been demonstrated both theoretically (Geddes 1991; Ting et al. 2013) and empirically (Geddes 1994; Grindle 2012; Grzymala-Busse 2007; Ting et al. 2013).[13] Geddes (1991) argues that when two political parties are roughly equally popular, it becomes advantageous for the incumbent to adopt reforms in order to capture the electoral benefits of instituting meritocracy. Grzymala-Busse (2007) argues that robust competition leads to monitoring by opponents. As a result, governing parties avoid exploitative state practices to preemptively protect against opposition criticism. In short, electoral incentives can encourage merit-based hiring due to the resulting gains (or losses) in incumbent vote share.

A second cost to politicians of interfering in high-skilled public sector positions is the time it takes to distribute and monitor these appointments. Urbanization and industrialization lead to an increase in the size of the public sector, and bureaucratic tasks become increasingly complex. As the public sector gets larger it becomes more costly for politicians to manage recruitment processes. As the number of positions increases, politicians are required to spend more time ensuring that these positions are filled by loyalists. At some point, the time politicians spend interfering in hiring processes outweighs the benefits. Scholars of the United States have argued that the growth in the size of the federal labor force was "the overriding factor that changed the way in which federal politicians viewed patronage" (Johnson and Libecap 1994, 13).

The costs of patronage hiring on politicians' time are likely to be greater for high-skilled positions than for low-skilled jobs. This is because politicians can delegate the recruitment

11. My argument does not apply to top positions in the public sector such as heads of executive agencies and ambassadors, which remain patronage appointments in most countries (Fisman and Golden 2017, 39). Unlike other public sector positions, these top-tier jobs are usually not subject to tenure.

12. For example, Posner and Simon (2002) find that "regardless of background, respondents who expressed dissatisfaction with the economy were 10–15 percentage points less likely to vote for [President] Chiluba than their more satisfied counterparts" (319). Hoffman and Long (2013) conclude in Ghana that "demographic and ethnic factors are far less important than respondents' beliefs about the parties, candidates, the NPP's performance, and economic conditions" (139).

13. In contrast to this literature, one can reasonably argue that electoral competition can lead incumbents to prefer an inefficient bureaucracy to an efficient one because, should the incumbents lose office, their opponent can use a highly efficient bureaucracy against them in the future. However, incumbents must weigh this potential should they lose, to the incentive they have to take steps to remain in office. In situations where the likelihood of remaining in office is strengthened by performing well, politicians are likely to prioritize strengthening the state.

of personnel for low-skilled positions to local party organizations, which can identify grassroots brokers who are suitable for these roles. It may be harder for local party elites to identify relevant people for high-skilled positions. Instead, politicians can delegate the recruitment of bureaucrats for high-skilled positions to other bureaucrats, who will then organize competitive examinations, develop interview procedures, and establish minimum qualification standards for each job. After bureaucrats have developed rules for meritocratic hiring it becomes more difficult for politicians to intervene. Such interventions are likely to be visible, which can generate criticism from other civil servants, political opponents or from nongovernmental organizations, and result in negative media coverage.

Finally, there is an overlooked reason why politicians may have an incentive to prioritize professional competence over partisan loyalty: politicians often continue to be able to influence the work of bureaucrats even when they do not hire their copartisans. Empirical research from India and Ghana suggests that politicians may be willing to allow competitive recruitment to high-skilled positions because they know they can still interfere in bureaucrats' careers to influence their behavior (Brierley 2020; Iyer and Mani 2012). Despite highly competitive examinations to enter the top ranks of the civil service in India, for example, politicians continue to influence the actions of civil servants through their control over geographic transfers (Iyer and Mani 2012; Wade 1982). Politicians can use transfers, or the threat of transfers, to influence outcomes such as where new local public goods are placed. This suggests that politicians can recruit highly educated bureaucrats to high-skilled positions without stymieing their attempts to politicize the distribution of state resources.

In summary, performance voting incentivizes politicians to develop a preference for hiring competent professionals. This preference will intensify as electoral competition increases because small electoral gains or losses become politically consequential. Pressure on politicians to delegate bureaucratic recruitment to other bureaucrats will also occur as states become larger and more complex. Because politicians can delegate the recruitment of bureaucrats for low-skilled jobs to party machines, pressures on politicians will be more significant for high-skilled positions. Finally, politicians are likely to feel more comfortable delegating recruitment to high-skilled positions to other bureaucrats because they have additional tools—besides hiring—that they can leverage to control the work of bureaucrats once appointed. This article tests the hypothesis that politicians in clientelistic democracies are more likely to hire public employees on the basis of partisan loyalty for low-skilled jobs rather than for high-skilled positions.

GHANA'S ELECTORAL ENVIRONMENT AND SCOPE CONDITIONS OF THE ARGUMENT

I evaluate my argument using a novel data set of bureaucrats who work in local governments in Ghana. Ghana's electoral system has supported three peaceful transitions of executive power (in 2000, 2008, and 2016). Two political parties dominate the electoral landscape, the NPP and NDC. National elections are competitive and have become increasingly so since democracy was reinstituted in 1992. I focus on the 2008 election, which the NDC won by a margin of less than 0.5% of the votes. This election followed two prior elections that saw a significant decrease in the margin of victory of the presidential victor; while in the 2000 election the NPP presidential candidate won by a margin of 14%, this dropped to 8% in 2004.[14]

My argument of a dual hiring strategy has two central scope conditions. First, politicians must have a preference to govern a state that functions at least reasonably well. This preference encourages them to recruit bureaucrats for high-ranked jobs based on nonpartisan criteria. This preference is likely to be intensified in competitive electoral environments because the electoral rewards (or punishment) for delivering (not delivering) economic stability or development have greater consequences; incumbents may be ousted.[15] Second, politicians must mobilize electoral support through grassroots brokers. This condition is likely to hold in developing democracies where parties rely on direct personal contact to rally voters. As organizationally strong political parties are likely to rely more on partisan as opposed to community brokers (Baldwin 2013; Gottlieb 2017), the pressure to reward party brokers with public sector jobs is expected to be higher in countries with organizationally strong political parties.

Ghana is a case in which there is evidence of performance voting and high levels of electoral competition. Furthermore, both of the two major political parties are organizationally strong and rely on party brokers to mobilize support (Bob-Milliar 2012; Brierley and Nathan 2020; Ichino and Nathan 2013). Regarding performance voting, many scholars have argued that in Ghana, "popular evaluations of government performance trump the pervasive tugs of language and tribe" (Bratton et al. 2012, 30). For example, Lindberg and Morrison (2008, 121) conduct an open-ended survey and differentiate between evaluative and nonevaluative motivations for vote choice and conclude that "evaluative voting behavior is by far the most common stance in Ghana." Similarly, Jeffries (1998,

14. The NDC won the 2012 election by a margin of 3%.

15. High levels of electoral competition may be present in countries with both stable and more fluid party systems.

205) argues that "the basis for the NDC's victory [in 1996] was laid by its economic and developmental policies," most importantly the Rawlings government's provision of development projects. The influential role of economic performance on voters' attitudes and eventual vote choice has also been demonstrated through quantitative analyses of both the 2000 and 2008 elections (Hoffman and Long 2013; Youde 2005).

Political power in Ghana is decentralized to 216 local governments: one local government per district.[16] Local governments are responsible for the development of districts, including the provision of basic infrastructure and public works and services. The president appoints a district chief executive (akin to a mayor) to head each local government, in consultation with the local branch of the ruling party. Thus, all mayors are members of the ruling party, regardless of the partisanship of the majority of voters in the district. Each local government has a political and a bureaucratic arm. This articles focuses on the bureaucratic arm. Once appointed, local bureaucrats—in both high-skilled and low-skilled positions—have security of tenure.

DATA SET OF LOCAL BUREAUCRATS AND MEASUREMENT

The data set includes employee-level information of civil servants working in 199 of Ghana's 216 local governments who were in active employment in 2015.[17] Over 40,000 bureaucrats are included in the data. I restrict the analysis to bureaucrats hired between 2005 and 2012, which leaves a total of 17,942 recruits. The mean number of workers per district is 191. In theory, all local government employees should be included. While the data are as comprehensive as possible, some gaps remain.[18] To analyze hiring patterns, I use information of the date that each bureaucrat was hired to work in the local bureaucrat. This date reflects the first recruitment date of each bureaucrat.

All candidates for local government jobs are recruited through a centralized hiring process that requires candidates to submit a generic application form to the local government secretariat offices in the capital city, Accra.[19] Candidates can submit these applications at any time, but many applicants apply following mass-hiring advertisements that the government places in national newspapers. Interviews with staff at the Local Government Secretariat suggest that mass hiring is the modal type of hiring, as opposed to hiring for individual positions as they become available.

Candidates applying for positions that I code as high-skilled (planning officers, budget officers, engineers, accountants, and economists) are typically recruited using interviews and exams. Candidates recruited to low-skilled positions (sanitation officers, laborers, security guards and drivers) do not sit formal exams. Anecdotal evidence suggests that these candidates are employed through interviews, as well as upon recommendation from local governments to the national secretariat. Recommendations from local governments are prone to partisan influence because mayors are political appointees and thus copartisan with the national government. In addition to direct recommendations, which likely reveal a candidates partisanship, during the hiring process, politicians and bureaucrats who engage in recruitment can use informational cues—names and home town and region—to infer the likely partisanship of each potential new hire.

Measuring levels of meritocracy with administrative data

I use the bureaucrat data combined with a change in the governing party to assess patronage versus meritocratic hiring. If hiring were purely meritocratic, changes in the governing party should not influence the types of bureaucrats who are hired. Conversely, swings in who gets hired as power changes hands would indicate non-merit-based hiring. An additional advantage of using administrative data is that it also permits the disaggregation of civil servants across different departments and different types of positions to investigate which types of jobs or departments are isolated from interference. This approach thus allows me to assess my theory. One challenge of using administrative data is the need to first code the inferred partisanship of each bureaucratic recruit.

Coding civil servants' partisanship

The ideal data set with which to assess the theory would include the partisanship of each bureaucrat at the time of hiring. However, the act of collecting such data would implicate the government in discriminatory practices and is therefore unavailable. Instead of relying on a partisanship variable, I use the available data to create two proxies of partisanship. First, I code partisanship using the ethnic group of each bureaucrat.

16. Local governments are known as district, municipal, or metropolitan assemblies, with classifications based on the population of the district.

17. These data were compiled by Ghana's Ministry of Local Government and Rural Development and the Local Government Service in partnership with consultants hired by the European Union.

18. One omission is that the top bureaucrat in a district (the district coordinating director) is often excluded.

19. While local governments can recruit temporary workers and pay them using their own internally generated revenues, they are not able to recruit permanent employees.

Second, I use their home region.[20] The former approach complements recent empirical work on bureaucrats in Africa that also uses individuals' ethnic group to determine partisanship (Hassan 2016). The results that follow are robust to using either measure.[21] In the main analysis, I focus on the results based on individual ethnicity as this is potentially a more precise categorization of individual partisanship.[22]

As ethnicity was not a variable in the bureaucrat-level data, I coded ethnicity based on the first and last names of each worker. Names were first split into name fragments, which were then coded into one of seven ethnic groupings by multiple research assistants in Ghana.[23] After matching names to ethnic groupings, I use Afrobarometer survey data to link ethnic groups to political parties.[24] Based on these data I code bureaucrats who are Akans as pro-NPP.[25] I code both Ewe and Northern ethnic groups as being aligned with the NDC.[26]

Regarding the second proxy, I identify party strongholds as home regions where the majority of citizens voted for the same party across both elections I analyze.[27] I code pro-NDC bureaucrats as those whose home region is Northern, Volta, Upper West or Upper East, and pro-NPP bureaucrats as those from either the Ashanti or Eastern regions.

EMPIRICAL STRATEGY

To assess evidence of partisan bias in public sector hiring, I use the change in Ghana's ruling party following the December 2008 elections. The NDC's John Evans Atta-Mills won the 2008 presidential election, and his party won a majority of seats in the parliament. Ghana's alternation in 2008 can be used as a cut point around which to investigate potential changes in bureaucratic hiring. If bureaucrats are recruited on the basis of their partisan ties, we would expect to see significant changes in the partisanship of bureaucrats who were hired after the new party came to power. Specifically, if this is the case, we should expect to find a drop in the share of pro-NPP bureaucrats hired after 2008 and a corresponding increase in the share of pro-NDC bureaucrats hired. My main hypothesis predicts that any increase in pro-NDC hires would be confined to low-skilled positions.

To investigate the relationship between bureaucrats' partisanship and the ruling party, I run the following logistic regression model:

$$\text{logit}(p_i) = \beta_0 + \beta_1 \text{Period 2}_i + \beta_2 \text{Low-skilled}_i + \beta_3 \text{Period 2} \times \text{Low-skilled}_i + \beta_4 \mathbf{X}_i + \epsilon_i.$$

Here p_i is a dummy variable that takes the value 1 when the bureaucrat is aligned with the NDC (NPP). Period 2 identifies the second hiring period after the change in the ruling party following the 2008 election. Low-skilled$_i$ is a dummy variable that takes the value 1 when the position is low ranking and 0 otherwise. I code positions using information on the job title of each bureaucrat. All positions are classified as either high-skilled or low-skilled.

A summary list of positions and how they are coded is presented in table B.1 (tables A.1, B.1–B.5, C.1, E.1, E.2, G.1–G.3, H.1, J.1–J.3, L.1, M.1, and P.1 are available online). The process of classifying the positions is subjective. My aim was to code low-skilled positions as those that it would be uncontroversial to describe as such.[28] Tables B.2–B.5 show the job titles, frequencies, and coding for all positions. The data also contain information on the gender, age, and highest educational level of each bureaucrat. Thus, $\mathbf{X}_i$ is a matrix that contains these control variables.

20. Home regions refer to where bureaucrats say they "come from"; typically these regions are where individuals have familial roots.

21. I replicate the results using home region in the appendix, available online.

22. For example, the NPP is dominant in the Ashanti region, which is the most populous region in the country. While 75% of the population in the Ashanti region are Akans (who are aligned with the NPP), 25% belong to other ethnic groups. As this example shows, using home region potentially misclassifies individuals.

23. The ethnic groupings are as follows: Akan (non-Fante), Akan, Fante, Ewe, Ga-Dangme, Guan, and Northern. The dictionary that I create builds on one made by Noah Nathan.

24. Specifically, I use data from rounds 3–6. I do not use data from rounds 1 and 2 because they did not ask which party the respondent would vote for if the election were held tomorrow. I drop respondents who did not answer this question, including those who refused to answer or answered "don't know."

25. See table E.1.

26. Ethnicity does not perfectly align with partisanship; not all Akans (Ewes/Northerners) support the NPP (NDC). There could be concern that measurement error biases in favor of finding evidence of patronage hiring in instances in which some Ewe and Northern bureaucrats who are coded as being Pro-NDC are in fact supporters of the opposition. However, there is just as likely to be measurement error in the other direction: some of the Akans hired by the NDC that are coded as NPP supporters will in fact be NDC supporters, leading me to underestimate patronage hiring. Ex ante, there is no reason to expect that bias in one direction will be more substantial than in the other.

27. Table E.2 displays the election results disaggregated by region. The NDC captured the majority of votes in the Volta, Northern, Upper West, and Upper East regions, while the NPP received the majority of the votes in the Ashanti and Eastern regions.

28. In app. sec. L, I rerun the analysis varying the classifications of a number of positions where the classification may be considered controversial. The results are robust to these reclassifications. I also conduct the analysis dropping one position at a time to check that the results are not driven by recruitment to a single position; again the results remain robust.

Additional information on civil servant database

While the bureaucrat-level data that I analyze are unusually rich, one drawback is that they were collected at a single point in time (in June 2015). Therefore, I do not have information about bureaucrats who were hired and vacated their positions before the data were collected.[29] One concern is that pro-NPP bureaucrats hired by the NPP government resigned when the NDC came to power in 2008. The effect of this attrition would be to diminish the likelihood that I would find evidence of partisan hiring under NDC rule. This is because pro-NPP bureaucrats, some of whom drop out of the data, would appear to compose a smaller share of those hired by the NPP. Correspondingly, pro-NDC bureaucrats would appear to compose a larger share of those hired in the first period.

There are three reasons why this type of attrition might be unlikely. First, civil service jobs are valuable to workers because they offer financial stability in the form of a monthly paycheck, benefits, and an assured pension. Civil servants can also ask politicians for help when they face emergencies. Therefore it is unlikely that an employee would give up their job just because they did not support the new ruling party. Second, while bureaucrats may be unhappy with the change in government, they are likely to anticipate that their preferred party will not be out of office for too long. Indeed, Ghana has seen alternations of power between the two major parties every eight years since its return to democracy in 1992. Third, if it were the case that bureaucrats resigned en masse following the 2008 elections, the data should show a spike in hiring in 2009 (or 2010) to make up for the deficit of workers. Figure D.1 (figs. D.1, F.1, I.1, K.1, N.1, O.1, and Q.1 are available online) plots the total number of hires per year between 2005 and 2012 and shows that there were fewer hires in 2009 and 2010 than in 2008. These figures indicate that there was not a mass departure from the bureaucracy after the 2008 election.

RESULTS

Descriptive analyses

To assess my argument, I first present descriptive data that display the characteristics of bureaucrats hired across the two electoral periods. Second, I conduct a series of logistic regressions that control for a number of important potential confounding variables that may influence hiring.

Table 1 shows the share of NDC and NPP bureaucrats hired in both periods and presents the results of a difference-in-means test. Bureaucrats' partisanship is coded based on their ethnicity.[30] The results show a positive and statistically significant increase in the share of NDC bureaucrats hired to low-skilled positions in the second period (4.56 percentage points, $p = .000$). The results also display a statistically significant reduction in the share of NPP bureaucrats hired for low-skilled positions (−4.83 percentage points). The change in the governing party is not associated with any changes in the share of NDC or NPP bureaucrats hired to high-skilled positions (shown by the insignificant p-values). Overall, the aggregate data lend initial support to the main hypothesis—that the NDC government favored its copartisans when selecting candidates for low-skilled positions. In addition, the new government appears to disfavor NPP bureaucrats for low-skilled positions.

Table 1. Difference-in-Means Test (Ethnic Group Coding)

	Period 1 (% of hires)	Period 2 (% of hires)	Difference	p
NDC bureaucrat:				
Low-skilled	35.25	39.81	4.56	.000
High-skilled	33.69	32.29	−1.4	.164
NPP bureaucrat:				
Low-skilled	44.55	39.72	−4.83	.000
High-skilled	48.68	48.25	−.43	.687

Note. NDC = National Democratic Congress; NPP = New Patriotic Party.

In figure 1, I categorize bureaucrats into three types: pro-NDC, pro-NPP, and swing. The swing category indicates bureaucrats who do not belong to a politically aligned ethnic group.[31] Each plot displays the share of hires in each category per year. Figure 1*A* displays trends for high-skilled positions, while figure 1*B* displays trends for low-skilled positions. The dotted lines indicate the change in the ruling party in December 2008.

Figure 1*A* provides evidence that the partisanship of bureaucrats recruited to high-skilled positions is fairly static across the two electoral periods. Under both governments, the largest share of new hires was from the main ethnic group aligned with the NPP—the Akans. This makes sense because the Akans are the largest single ethnic group in the country. Consistent with table 1, the change in governing party does not appear to alter hiring patterns for high-skilled jobs.

29. This is the first database of employees working in local governments in Ghana, which makes it impossible to consult older databases.

30. Table H.1 displays the same test with bureaucrats coded by home region. The main result of partisan bias for low-skilled positions is consistent in both tables.

31. The unaligned ethnic groups are Fanti, Ga-Dangme, and Guan.

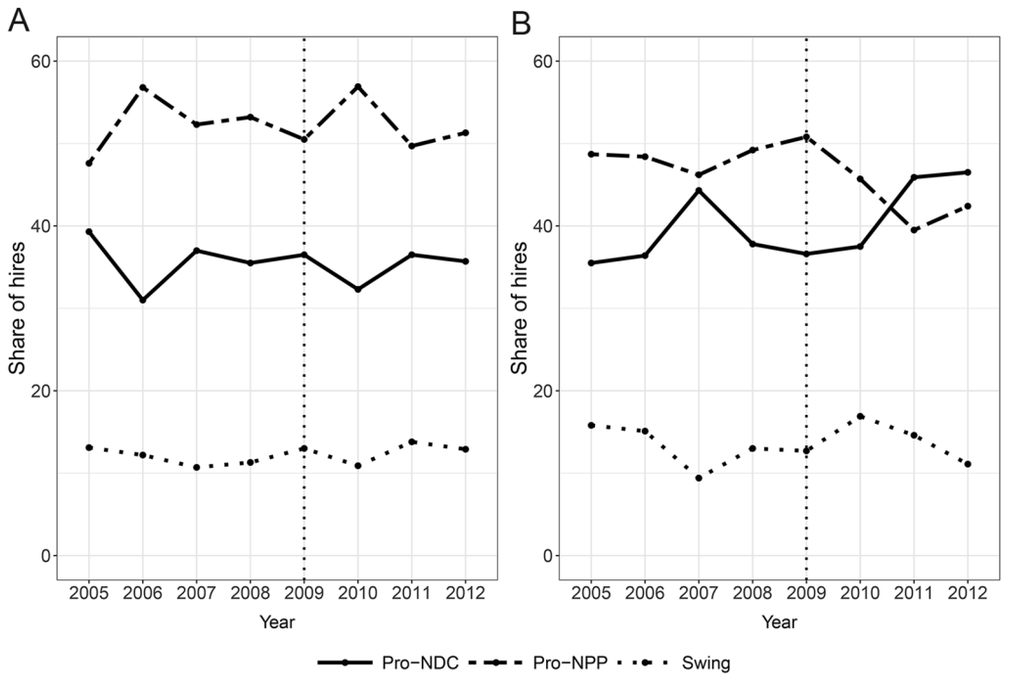

Figure 1. Share of bureaucrat types across two electoral periods (2005–8, 2009–12). Employees are categorized as pro-NDC, pro-NPP, or swing. Each plot displays the share of new hires from each group. Bureaucrats are coded according to their ethnic group. *A*, Trends for high-skilled positions; *B*, trends for low-skilled positions. The dotted line corresponds to the election of the NDC in December 2008. NDC = National Democratic Congress; NPP = New Patriotic Party.

Figure 1*B* presents the trend for low-skilled positions. In contrast to high-skilled jobs, there was a steady increase in the share of NDC bureaucrats hired for low-skilled positions after the NDC government was elected at the end of 2008. The size of the increase was 10 percentage points over the period, from 36.5% at the start of their term to 46.5% by the end of the term. The data also suggest that much of this increase took place at the direct expense of NPP candidates, who experienced a corresponding decline in hires.[32] When the NPP were in office they also appear to have increasingly hired Pro-NPP and swing bureaucrats to low-skilled positions in the run up to the December 2008 election. This was potentially a strategy to secure their victory or a result of the expectation that they may soon be out of office. In short, the yearly trends complement the aggregate results in table 1 and suggest partisan hiring for low-skilled positions.

Evidence of meritocratic hiring for high-skilled positions. The relatively static pattern of hiring among different types of bureaucrats for professional positions across various governing parties suggests that nonpartisan criteria drive recruitment to high-skilled positions. Two additional pieces of evidence lend support to the claim that bureaucrats are hired on the basis of their merits and suitability for these high-ranked positions.[33]

First, recruits to high-skilled jobs become increasingly well qualified: the share of new hires who hold bachelor's degrees increases nearly every year from about 8% in 1975 to 60% in 2012 (see fig. F.1). Restricting this analysis to the two hiring periods in question, 35% of people recruited to high-skilled jobs by the NPP government (2004–8) held either a bachelor's or master's degree, compared to 55% for NDC government hires (2008–12). This suggests that as access to tertiary education expanded in Ghana, the government recruited increasingly well-qualified applicants.

Second, recruitment through competitive procedures also became increasingly common. A separate survey that I conducted with 864 local bureaucrats in high-skilled positions revealed that the vast majority were selected through

32. Fig. I.1 displays the same plot with bureaucrats coded according to their home region. The results remain the same, with a sharp increase in bureaucrats with traits that aligned them with the NDC supporters hired after the change in governing party.

33. The ideal way to investigate meritocracy is to collect individual-level data on the pool of applicants, as well as data on who is eventually hired. I was not able to obtain data on the pool of applicants across this period of time. To my knowledge, there are no studies of African bureaucracies that perform such an analysis. An important exception in the context of Latin America is Dal Bó, Finan, and Rossi (2013), who do obtain data on the applicant pool.

Table 2. Logistic Regression Predicting Hiring of Partisan Bureaucrats across Each Time Period

	NDC Bureaucrat (1)	Swing Bureaucrat (2)	NPP Bureaucrat (3)
Change in ruling party	−.154***	.119	.083
	(.059)	(.092)	(.056)
Low-skilled	−.129	.202	.010
	(.094)	(.135)	(.084)
Change in ruling party × low-skilled	.614***	−.187	−.434***
	(.103)	(.150)	(.094)
Observations	9,780	9,068	9,780
Log likelihood	−6,111.116	−3,284.289	−6,725.204

Note. Regressions control for gender, age at time of hiring, and highest level of education. Bureaucrats' partisanship is coded according to their ethnicity. Change in the ruling party follows Ghana's December 2008 election, which resulted in the NDC coming to office. Standard errors in parentheses. NDC = National Democratic Congress; NPP = New Patriotic Party.
* $p < .1$.
** $p < .05$.
*** $p < .01$.

competitive processes (Brierley 2020).[34] Restricting the analysis to the two hiring periods, 33% of bureaucrats hired by the NPP government took a competitive exam, while 92% had an interview. This compares to 67% who took a competitive exam and 96% who had an interview under the NDC government.[35] Overall, while the results do not point conclusively to meritocracy, they suggest that when the NDC government came to office after the 2008 election, it used increasingly meritocratic hiring criteria to select highly educated individuals through increasingly competitive procedures.

Regression analyses

A series of regression analyses adds further credibility to the results presented above (table 2). In these models, the dependent variables are dummy variables that indicate bureaucrats' partisan type. Column 1 predicts pro-NDC bureaucrats, column 2 predicts swing bureaucrats, and column 3 predicts pro-NPP bureaucrats. The two main explanatory variables are a dummy variable that distinguishes between the two hiring periods—the change in ruling party—and an indicator of whether the job is low-skilled. A positive coefficient on the interaction term would indicate that the new ruling party distributed more low-skilled than high-skilled posts to their copartisans. In these models, I hold constant gender, age, and highest level of education.[36]

In table 2 column 1, the coefficient on the variable that indicates a change in the ruling party is negative. This suggests that a change in the ruling party is associated with an overall decrease in the likelihood of a pro-NDC bureaucrat being hired to a high-skilled position. The next coefficient indicates the relationship between low-skilled jobs and being a pro-NDC bureaucrat; it is also negative. The coefficient on the interaction term is the key quantity of interest. The positive sign on this term shows that the change in government is associated with an increase in the likelihood of a pro-NDC bureaucrat being hired for a low-skilled position. This coefficient is statistically significant below the 1% level. Figure 2 illustrates the substantive significance of this result.

Table 2 column 2 displays the results of the same model specification with swing bureaucrats as the dependent variable. None of the coefficients are statistically significant, which suggests that the change in the ruling party did not affect hiring patterns for politically nonaligned bureaucrats.

Finally, table 2 column 3 displays the results of the same model specification with pro-NPP bureaucrats as the dependent

34. These bureaucrats worked in a random sample of eighty local governments across the country. This survey took place in 2015 and 2016.

35. I acknowledge that the conduct of interviews and exams does not ensure meritocracy. I do not have data on how candidates performed in these assessments. Furthermore, candidates' performance, especially in interviews, is somewhat subjective. However, the fact that the NDC government hired more candidates following interviews and exams suggests two things. First, it suggests a move toward meritocracy. Second, the delegation of hiring processes from politicians to bureaucrats: bureaucrats conduct these processes and evaluate candidates.

36. Many bureaucrats did not indicate their highest level of education. In the appendix, I present the same results controlling only for gender and age, and the results remain the same. In table J.1 the number of observations increases by roughly 8,000 bureaucrats.

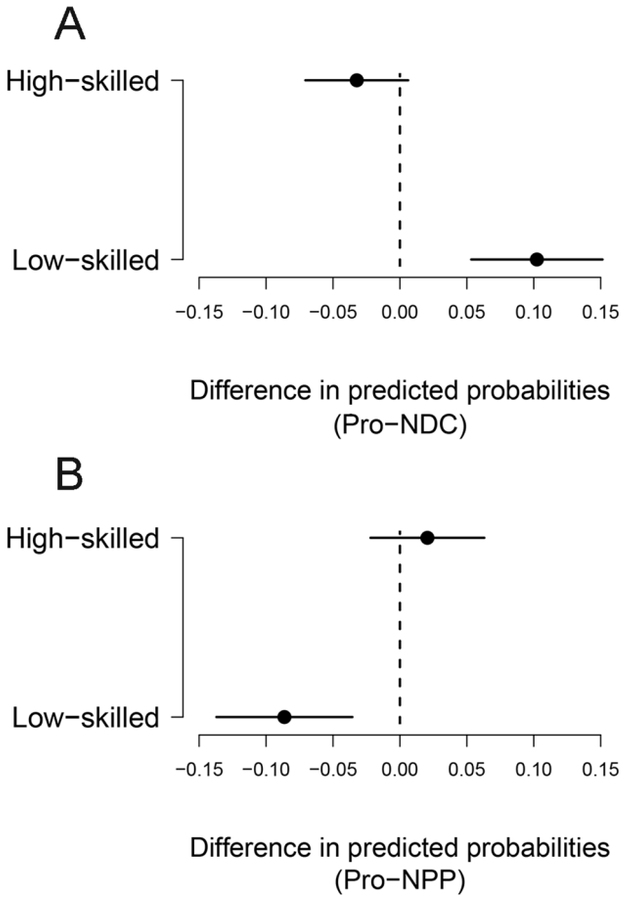

Figure 2. Difference in the predicted probability of a pro-NDC and pro-NPP bureaucrat being hired in each term (2005–8 and 2009–12), disaggregated by job type into low-skilled and high-skilled positions. These predicted probabilities are calculated using the coefficients in table 2, columns 1 and 2. NDC = National Democratic Congress; NPP = New Patriotic Party.

variable. The first coefficient is positive, although not statistically significant. This suggests that the NDC government did not demonstrate partisan bias when recruiting to high-skilled positions; they continued to hire pro-NPP bureaucrats into these positions. However, there is a negative and statistically significant coefficient on the interaction term, which suggests that NPP bureaucrats were less likely to be hired for low-skilled positions.

Figure 2 displays the substantive significance of the results. I calculate the predicted probabilities of a pro-NDC bureaucrat being hired to (*a*) a high-skilled position and (*b*) a low-skilled position in the two time periods. Figure 2 shows the difference in these predicted probabilities and the associated 95% confidence intervals.

Figure 2*A* demonstrates that the change in government is not associated with a change in the likelihood of pro-NDC workers being hired for high-skilled positions. In other words, there is no evidence of discriminatory partisan hiring for high-skilled jobs. In contrast, pro-NDC bureaucrats were 10 percentage points more likely to be hired for low-skilled positions after the NDC came to power at the end of 2008. These results support the first hypothesis and demonstrate that the regression results are substantively important.

Figure 2*B* suggests that when the NDC was in power, it was less likely to hire pro-NPP bureaucrats to low-skilled positions. The change in predicted probabilities is about 8 percentage points. The NDC government was neither more nor less likely to hire pro-NPP bureaucrats for high-skilled positions. In summary, the results suggest that the partisanship of bureaucrats did not influence who got hired for high-skilled positions, but did influence selection into low-skilled positions.

An alternative argument to the one that I present is that, besides the change in ruling party, something else occurred that affected hiring patterns. Experts on Ghanaian politics, for example, might point to the creation of 32 new districts and corresponding local governments, in February 2008 (10 months before the election).[37] If these new districts were concentrated in areas where the NDC were electorally dominant, one could argue that the new ruling party were disproportionately hiring pro-NDC bureaucrats into low-skilled positions to staff these new local offices. However, this argument is an unlikely explanation of the results because the new districts were not concentrated in regions that I code as being *Pro-NDC*. Indeed, only 10 of the new local governments (28%) were in the three northern regions or in the Volta region.

A similar change occurred in 2012, when the NDC government created another 46 districts. In this case, a larger share of the new local governments were in the regions that I code as being *Pro-NDC* (44%). As a robustness check, I rerun the analysis dropping all hires made after June 28, 2012 (the date the new districts were created). The results are robust to this specification (see table J.3).

Another rival argument is that the patterns I find result from an under supply of available educated citizens from ethnic groups that are aligned with the NDC government. This would imply that the NDC government had no choice but to hire educated citizens from either nonaligned ethnic groups or from groups aligned to the NPP. Table G.1 displays evidence that there was a roughly equal available supply of highly educated citizens aligned with either party. Specifically, I estimate that there were a total of approximately 247,470 NDC-aligned citizens with higher levels of education compared to 271,700 NPP-aligned citizens. The NDC government recruited a total of 5,940 professionals into the local

37. The total number of districts went from 138 to 170 (see Ayee 2013).

bureaucrats during their first term in office after the 2008 election (see table C.1). Thus, the data suggest that had the NDC wanted to hire copartisans to these positions there was a large enough supply of competent individuals.[38]

Evidence that low-skilled positions are given to party intermediaries

The above results suggest that the new NDC government recruited copartisans into low-skilled positions after they came to office in 2008. In this section, I present quantitative and qualitative evidence that politicians in Ghana reward party brokers with low-skilled positions in the public sector, including in local governments.

What motivates party brokers to work for the party machine? Citizens in Ghana believe that brokers work for parties in return for material benefits. A country-specific question in the 2012 Afrobarometer asked citizens why they thought party intermediaries work for parties. Roughly 60% of Ghanaians responded that they do so because "they expect material rewards after winning political power" (Armah-Attoh 2017, 2).[39] The brokers themselves admit that they work for parties because of the selective incentives they offer, including jobs (Bob-Milliar 2012). Bob-Milliar (2012, 677) explains, "throughout the Fourth Republic, party foot-soldiers have demanded openly to be rewarded by their respective parties for their activism." Pertinent to this article is whether low-skilled jobs in local governments are rewarded to party intermediaries.

I subset the data to analyze the share of pro-NDC hires to various low-skilled positions between 2008 and 2012. Positions that had large shares of copartisans include environmental assistants (65% of all hires), watch guards (55%), and disaster management officers (39%).[40] These findings are consistent with accounts from Ghanaian scholars and journalists who have also noted, for example, that local disaster management jobs are often distributed to party intermediaries. One reporter explains that disaster management "has been known to be a den for political appointees with governments recruiting its supporters to the organization even though they have little or no experience in disaster management" (Peace FM Online 2017). In summary, the results are consistent with scholarly and journalistic accounts, as well as with public opinion, that parties in Ghana reward intermediaries with low-skilled public sector jobs.

What types of districts get low-skilled hires? The literature on patronage suggests that parties distribute public sector jobs to loyal supporters as rewards for their work in getting out the votes (Robinson and Verdier 2013). If politicians do distribute jobs as rewards we might expect to see more hires to low-skilled positions in districts where the party experienced significant increases in their vote share compared to the prior election. Such a result would indicate that the incumbent party is strategic in their distribution of appointments; rewarding brokers who brought them votes.

The results support this interpretation of low-skilled jobs being distributed as rewards. Table 3 displays a positive correlation between the number of hires to low-skilled jobs and district-level changes in the vote share of the NDC. The data are aggregated at the district level, such that the dependent variable is the number of hires to low-skilled positions per district. The data are restricted to the four-year electoral term after the NDC came to power following the December 2008 election in order to analyze hires made by the NDC government.[41] The main independent variable is the change in the vote share of the incumbent party between the 2004 and 2008 elections.

Columns 1–3 in table 3 consider all hires to low-skilled jobs. Columns 4–6 consider hires who belong to ethnic groups aligned with the ruling party. All regressions include region fixed effects. Column 1 shows a positive and statistically significant association between change in the ruling party vote share and the number of hires to low-skilled positions. Column 4 also shows a positive association between change in ruling party vote share and the number of pro-NDC hires, although this coefficient is not statistically significant.[42] Columns 2 and 4 control for both the type of local government and the population of the district.[43] Including these variables significantly improves the fit of the model, and these variables are highly predictive: municipal and metropolitan districts have more hires.[44] In columns 5 and 6 the coefficient on change in NDC votes share also

38. A final rival argument is that the patterns that I find are the result of changes in the supply of recruits, rather than a change in demand for certain types of workers. However, given the immense value of having a public sector job, and the fact that individuals do not have to pay to apply, I do not expect that pro-NPP recruits would stop applying after the change in government.

39. In comparison, about one-third (31%), believe brokers toil for their party because "they believe in their programs."

40. See table M.1.

41. There is significant variation in the number of hires per district, ranging from 1 to 613 recruits, with a mean of 29 and a median of 22 per district.

42. The *p*-value on this coefficient is .17.

43. Local governments in Ghana are categorized as district, municipal, or metropolitan assemblies based on the population of the district.

44. The negative coefficient on the population coefficient is most likely because the type of local government already accounts for the variation in population across districts.

Table 3. Predictors of the Number of Hires to Low-Skilled Positions (2009–12)

	Total Hires			Pro-NDC Hires		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ in NDC vote share	36.146**	24.995**	22.492**	18.471	10.453*	12.215*
	(16.660)	(10.595)	(10.807)	(13.391)	(6.080)	(6.180)
Metropolitan		168.005***	165.177***		161.024***	163.029***
		(12.578)	(12.805)		(7.136)	(7.246)
Municipal		16.318***	15.576***		8.473***	8.978***
		(2.359)	(2.444)		(1.345)	(1.386)
log(Population)		−3.328	−4.164*		−1.526	−.901
		(2.038)	(2.163)		(1.169)	(1.244)
Electricity share			8.799			−6.326
			(7.688)			(4.417)
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	157	157	157	152	152	152
R^2	.151	.667	.670	.254	.851	.853
Adjusted R^2	.093	.637	.638	.201	.837	.838

Note. Unit of analysis is the district. Change in National Democratic Congress (NDC) vote share is measured between the 2004 and 2008 elections using constituency-level data from the parliamentary elections. Control variables (population and electricity share) are from Ghana's 2010 Housing and Population Census. Standard errors in parentheses.
* $p < .1$.
** $p < .05$.
*** $p < .01$.

becomes statistically significant (at the .1 level). Columns 3 and 6 also include the share of houses with electricity, which serves as a proxy for urbanization. Again, the coefficient of interest remains significant and positive. Substantively, the results suggest that a district where the party saw a 10 percentage point increase in vote share would get five more hires than a district that saw a 10 percentage point decrease in ruling party vote share (see fig. Q.1 for a plot of the marginal effect of vote share). Overall, this analysis points to the strategic allocation of low-skilled positions to reward party intermediaries who rallied support for the new incumbent party.[45]

Is there evidence that recruits to low-skilled positions are embedded in the communities they are hired to work in? Finally, I focus on one characteristic of party brokers that is essential for them to perform their roles—their embeddedness in the community. I use the distance that each officer works from her hometown as a proxy for entrenchment. I assess whether bureaucrats in low-skilled positions work in local governments closer to their home towns than bureaucrats in high-skilled positions. To clarify, each district has one set of local government offices where all bureaucrats work. These offices are located in the district capitals. Thus, workplace locations are constant across both groups of bureaucrats. Working close to one's hometown is not sufficient evidence that a bureaucrat in a low-skilled position is a broker. However, it is likely to be a necessary condition, and thus evidence of a difference across job type lends further credibility to my argument.

I use the hometown variable in the data set to identify the town that bureaucrats view as their "home," which typically refers to the place where they have familial roots. I geocode the locations of district capitals and home towns and calculate the distance between the two for each bureaucrat in the data.[46] The results show that the median distance between home town and work location is significantly lower for bureaucrats in low-skilled compared to high-skilled positions.[47] The median distance from their hometown is 36 kilometers for low-skilled and 92 kilometers for high-skilled

45. Table P.1 presents the same analyses with Pro-NPP hires as the dependent variable. These results show that there is no relationship between the change in NDC vote share and the number of Pro-NPP hires.

46. I geocode locations using search requests to the Google Maps API using the *ggmap* package in *R*. Google Maps does not include every town in Ghana. I obtain complete matches (i.e., both hometown and district capital) for 74% of the bureaucrats hired in the study period ($N = 13,283$ bureaucrats).

47. See fig. N.1.

jobs.[48] Figure O.1 focuses on a few select positions to further demonstrate these differences. The results show that budget officers, planning officers, and assistant directors work, on average, much farther from their home communities than drivers, laborers, and disaster management assistants. The median distance from hometown is 19 kilometers for laborers, 21 kilometers for drivers, and 28 kilometers for disaster assistants, compared to 151 kilometers for budget officers, 161 kilometers for planning officers, and 174 kilometers for assistant directors.

These results lend further credence to my theory in two ways. First, they show that bureaucrats working in high-skilled positions are unlikely to be party brokers, suggesting instead that they are hired based on nonpartisan criteria. Second, and conversely, the results provide evidence that bureaucrats in low-skilled positions could work as party intermediaries. Working close to one's hometown allows partisan recruits to mobilize support for the incumbent by utilizing their social ties with local communities and local party elites. Brokers employed in the district government may be particularly effective intermediaries, as they can help citizens access the state and can distribute state resources to local voting blocs (Auerbach and Thachil 2018).

CONCLUSION

The improvement of bureaucratic capacity is essential to enhancing state capacity in developing democracies. Accordingly, who the state hires into the public sector has broad implications for development. Many governments spend the bulk of public expenditure on public sector salaries. This article assesses meritocratic versus patronage hiring in the context of Ghana. I theorize that the costs to politicians of competitive hiring are not constant across positions. Conceptualizing meritocracy as a continuous variable, I do not ask whether jobs are distributed on the basis of merit but which jobs are awarded competitively. I theorize that politicians in clientelistic democracies will be more willing to relinquish control over hiring for high-skilled jobs than they will be for low-skilled positions in the public sector. Politicians reward party brokers who mobilize on their behalf with these low-skilled jobs.

I analyze an original individual-level data set on the universe of bureaucrats working across about 200 local governments in Ghana. As party affiliation is not a variable in the data set, I code bureaucrats' partisanship based on their ethnicity and home region. I use a change in the ruling party following Ghana's 2008 elections to compare patterns of hiring under two opposing parties. The results suggest that politicians are more likely to interfere in hiring for low-skilled jobs than high-skilled jobs: there is a 10 percentage point increase in the probability of a copartisan being hired to a low-skilled position after the change in government.

My theory highlights the problems of using legislation to measure meritocracy (Geddes 1994; Ting et al. 2013). Merit legislation has been shown to be neither necessary nor sufficient to ensure nonpartisan hiring recruitment (Schuster 2017). Indeed, weak rule-of-law and legal loopholes mean that politicians regularly make partisan appointments in spite of merit laws (Meyer-Sahling 2006). The results suggest the need for continuous measures of patronage and meritocracy. As an alternative to a legislative analysis, I propose measuring levels of patronage using administrative data on the composition of public workforces.

The findings also shed light on the mixed results in the literature on the effect of competition on patronage hiring. Driscoll (2017) finds that electorally competitive districts have more local government employees in Ghana. He similarly argues that politicians exchange these—mainly low-skilled—positions with party activists. Pierskalla and Sacks (2019) show that the introduction of elections increased the number of teachers employed in Indonesia. In contrast, much of the seminal literature on the state suggests that electoral competition can constrain runaway state building and incentivize politicians to support meritocracy (Geddes 1994; O'Dwyer 2006). My results suggest that electoral competition can have both of these effects.

This study has significant implications for future research on the public sector. As new data become available, it would be fruitful to replicate the analysis in other contexts. Similar bureaucrat-level data can be used to assess meritocracy in other countries, and across different public sector departments. Importantly, my results suggest the need to distinguish between different types of jobs in such analyses in order to assess more nuanced hypotheses regarding the effects of democracy on meritocratic versus patronage hiring practices.

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48. Given the skewed distribution, the median is the most appropriate measure of average trends.

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