We study presidential patronage as a form of distributive politics. To do so, we introduce comprehensive data on supervisory personnel in the executive branch between 1925 and 1959 and link each bureaucrat to the congressional representative from their home district. We identify testable hypotheses regarding the impact of electoral considerations, partisanship, and legislative support on the distribution of bureaucratic appointments across districts. Results from a variety of fixed-effects estimation strategies are consistent with several forms of presidential patronage. Our results provide initial evidence about the mechanisms through which patronage appointments are administered in the executive branch and illustrate how presidential politics affects the composition of the federal government.

Effective use of the personnel system is a key component of presidents' influence over the bureaucracy. For example, presidents can often advance their policy agendas (e.g., Moe 1985) and electoral interests (e.g., Lewis 2008) by appointing political allies to bureaucratic positions. The allocation of bureaucratic positions, however, is a perennial source of controversy, as critics often allege bias, mismanagement, and nepotism when they perceive that presidents have elevated political or personal connections over qualifications and expertise. The findings from recent scholarship suggest that these concerns may not be without merit (e.g., Gallo and Lewis 2012; Hollibaugh 2015b; Lewis (2008), however, for discussion about how the latter may jeopardize the former.)
Hollibaugh, Horton, and Lewis 2014), and presidents are often responsive to partisan and electoral factors when distributing other resources over which they have discretion (e.g., Berry, Burden, and Howell 2010; Berry and Gersen 2017; Hudak 2014; Kriner and Reeves 2015; Lowande, Jenkins, and Clarke 2018; Napolio 2021; Reeves 2011). Given the vast reservoir of bureaucratic positions that can be filled at the discretion of presidents and their department heads, understanding the criteria by which this discretion is exercised is important for understanding how presidents exert control over the bureaucracy and its outputs.

In this article, we study presidential patronage as a form of distributive politics.2 Patronage considerations have been omnipresent for American presidents, including both in the era of the spoils system (e.g., James 2000; Skowronek 1982) and in contemporary politics (Lewis 2008). Previous studies have made important progress in identifying when presidents award bureaucratic positions to political appointees (e.g., Hollibaugh 2015b; Hollibaugh, Horton, and Lewis 2014; Lewis 2008) and how the Senate evaluates executive branch nominations to positions requiring confirmation (e.g., Hollibaugh and Rothenberg 2021; McCarty and Razaghian 1999). However, this scholarship has paid less attention to how presidents distribute bureaucratic positions across political constituencies or the patronage mechanisms that affect their allocation.

Based on this framework, we identify testable hypotheses regarding the impact of electoral considerations, partisanship, and legislative support on the geographic distribution of bureaucratic appointments. We provide some initial tests of these hypotheses with new individual-level data on supervisory and administrative personnel who worked in the United States executive branch between 1925 and 1959. To our knowledge, these are the most comprehensive data to date that have been assembled to characterize the composition of the federal bureaucracy. Using these data, we construct a panel data set that contains the allocation of appointments to residents of each congressional district for each year in our data.

Results from a variety of fixed-effects estimation strategies are consistent with several forms of presidential patronage. First, we find that a state's electoral context is strongly associated with its representation in the federal bureaucracy. States that are competitive in the Electoral College received systematically greater numbers of bureaucratic appointments. Second, we establish a link between a congressional representative's support for the president's legislative agenda and the allocation of bureaucratic appointments to their district's residents. Additional analyses suggest that these patterns are somewhat weaker for appointments in agencies related to national defense and international affairs than they are for other bureaucratic units.

Our argument and findings make three primary contributions. First, in contrast with scholarship that investigates patronage by studying the backgrounds of individual appointees (Hollibaugh, Horton, and Lewis 2014) or distinguishing individuals on the

2. We characterize patronage as a system in which (some) positions in the federal workforce are allocated at the discretion of political leaders—here, presidents and their administrations—according to political criteria (see, e.g., Stokes 2009). This characterization is somewhat different from scholarship that has evaluated patronage based on whether individual bureaucrats are political appointees rather than career civil servants (see, e.g., Gallo and Lewis 2012; Hollibaugh, Horton, and Lewis 2014; Lewis 2008).
basis of how they obtained bureaucratic positions (Gallo and Lewis 2012; Lewis 2008), we examine how the distribution of appointments across political constituencies reflected presidents' incentives to allocate patronage. At a general level, our approach allows us to study the potential mechanisms by which patronage appointments may be distributed. Second, we contribute to scholarship on distributive politics at the federal level by focusing on the allocation of public sector employment opportunities. These employment opportunities may also convey policy influence to the degree that bureaucrats shape regulatory outcomes and exercise discretion in their positions. Third, we contribute to scholarship on patronage in contexts outside the United States (e.g., Colonnelli, Prem, and Teso 2020; Pierskalla and Sacks 2020). This research program documents the effects of political connections on bureaucratic employment, to which we contribute new evidence from the United States.

Presidents and Patronage

Nearly all presidents have confronted demands for patronage appointments. According to Johnson and Libecap (1994, 104), for instance, “the President [is] the key figure in the allocation of patronage,” which conveys to presidents by virtue of their position as head of the executive branch. In his historical account of administrative law, Mashaw (2012, 293) argues that effectively wielding the patronage power enabled presidents to exert “broad control over administrative affairs.” Dispensing patronage was among the most important and time-consuming tasks performed by nineteenth-century presidents. As Bryce (1995 [1888], Vol. I, 61) remarked, Abraham Lincoln confronted “a rising tide of office-seekers” while James Garfield “was engaged almost incessantly in questions of patronage.” Patronage concerns were not relegated to the nineteenth century, however; as Lewis (2008) details, patronage is central to modern presidents’ control of the bureaucracy and is an important source of leverage.

The power to dispense patronage provides presidents with several key institutional and political advantages. First, it allows presidents to distribute largesse in the form of federal jobs to their copartisan supporters (see, e.g., Hollibaugh, Horton, and Lewis 2014). During the period between the Gilded Age and World War II, James (2000, 27) explains, “patronage was crucial to the maintenance of party discipline… [and] allowed legislators and their local and state party organizations to consolidate their hold on the locality.” Patronage was a key mechanism by which nineteenth-century presidents helped broker and maintain national party coalitions from a patchwork of state and local parties (Galvin 2014; Rogowski 2015; Skowronek 1992). Even in the contemporary era, “[t]he shrewd distribution of patronage provides presidents a means of governing more effectively by holding diverse party factions together” (Lewis 2008, 8).³

Second, patronage can be a valuable bargaining chip in negotiations between presidents and Congress. Particularly in earlier periods of history, legislators desired

³. See also Lewis (2009).
patronage appointments as a means of fulfilling the wishes of local parties by placing loyalists in administrative positions. As Robert La Follette (1915, 3), representative and senator from Wisconsin, recalled,

The recalcitrant legislator will have no difficulty in construing the ominous silence which enshrouds the whole subject of patronage when he attempts to discuss recommendations for appointments which he has filed in due course. He will be sorely tempted to yield to the Executive on legislation for he is harried early and late by the party demand from his state or district for the change in political tenure expected to follow a change in administration.

Presidents were well placed to help legislators accommodate these wishes—at a price. By strategically leveraging control over patronage appointments, presidents could grant them in exchange for legislator's support on a key item on the president's policy agenda or deny them to legislators who were insufficiently loyal to the president. James (2000, 27) and Gailmard and Patty (2013, 116) both cite Franklin Roosevelt as a particularly successful example of a president who used patronage in exchange for congressional support on potentially controversial initiatives.

Third, patronage appointments are useful to presidents for securing electoral support from grateful recipients and their allies (Hollibaugh, Horton, and Lewis 2014, 1024). Individuals who receive valuable federal appointments are likely to express their gratitude by voting for the president who appointed them. Appointees with extensive partisan and/or professional networks may be especially well positioned to generate electoral rewards for the president in exchange for their position. Thus, presidents have incentives to use patronage positions so that they are given to individuals who can help bolster the president's subsequent electoral standing.

Fourth, patronage appointments allow presidents to exercise control over the bureaucracy and, by extension, its outputs. Even as presidents have become more independent from party organizations (Milkis 1993), distributing appointments to partisan allies allows presidents to fill bureaucratic positions with individuals who are likely to share the president's political views and priorities. In this way, the strategic use of patronage can assist presidents in accomplishing their programmatic goals (Lewis 2008).

An extensive literature documents the importance of patronage to U.S. presidents and the administrative state (a small selection includes Carpenter 2001; James 2000; 2006; Lewis 2008; Skocpol 1992; Skowronek 1982). This scholarship supports the claim that presidents have distributed bureaucratic positions at least in part on the basis of patronage considerations and illustrates the political logic underlying presidents' efforts to politicize executive branch appointments (Lewis 2008; Moe 1985). Yet existing research provides relatively little evidence that establishes a systematic relationship between presidential politics and the composition of the federal bureaucracy or the mechanism(s) by which such a relationship exists. We take some initial steps toward addressing these questions, as the answers to them have the capacity to shed new light on presidents' efforts to control bureaucratic personnel and, ultimately, bureaucratic output.
The Distributive Politics of Patronage

We conceptualize the allocation of patronage as a quintessentially distributive phenomenon. Presidents and their administrations have monopoly control over a class of valuable employment positions in the federal government. In turn, they make strategic decisions about how to distribute patronage appointments given their political incentives. Just as presidents may distribute material federal resources in ways that reflect their political priorities and electoral goals (e.g., Berry, Burden, and Howell 2010; Kriner and Reeves 2015; Rogowski 2016), the framework of distributive politics focuses our attention on how federal positions are allocated and to what political constituencies.

An office seeker's success in securing bureaucratic appointments would likely be associated with the president's incentives to distribute those positions. The discussion above suggested several testable hypotheses about the nature of these incentives that point to distinct patterns in which they are distributed. First, the allocation of appointments could follow the president's electoral logic. In this case, two sets of political constituencies most likely would stand to benefit: constituencies in which the presidential election was closely contested and/or constituencies that have provided strong electoral support. In the former case, a president may calculate that awarding valuable bureaucratic appointments may help make the difference in the next election. In the latter case, the president may provide bureaucratic appointments as a reward to constituencies who supported the president at high levels, and perhaps as a condition of future electoral support. In both instances, we would expect that competitive constituencies and strongly supportive constituencies both would receive larger shares of patronage appointments relative to constituencies who provided lower levels of electoral support.

Second, presidents may use patronage as a bargaining chip with members of Congress as part of their efforts to pass their legislative agendas. Allocating patronage appointments to office seekers recommended by a legislator who is nominally opposed to a particular legislative proposal may entice the legislator to support the president's initiative. Similarly, withholding influence over appointments to legislators who consistently oppose the president's agenda may either cause those legislators to revisit their policy positions or else place those legislators' future electoral prospects in jeopardy by virtue of their inability to place key figures in bureaucratic positions.

4. While it is possible that patronage could be an issue in general elections through opportunities for credit claiming and the like, patronage likely was more important for legislators as a means of satisfying state and local party organizations (see, e.g., Wilson 1961, 371). During the 1930s, for instance, as members of the Byrd Organization, most of Virginia's congressional delegation opposed President Franklin D. Roosevelt's New Deal policies. In response, Roosevelt considered withholding patronage opportunities from them as a means of undermining their political support at home (Koeniger 1982). According to Key (1949, 33–34), Virginia New Dealers believed that the denial of patronage to the Byrd Organization would support their efforts to wrest control of the party machine. While Roosevelt ultimately did not substantially intervene in Virginia state politics, these accounts express a clear logic that relates the allocation of patronage to individual members of Congress and their success in maintaining support from the party.
Third, presidents may privilege the recommendations of copartisan members of Congress. As previous research shows (Berry, Burden, and Howell 2010; Rogowski 2016), presidential copartisans are often the recipients of greater shares of distributive resources. This may allow members of the president's party to accrue the political and electoral rewards from exercising influence over the composition of the bureaucracy. Moreover, presidents may simply have more trust in their own copartisans, rather than members of the opposite party, to recommend individuals for appointments within the executive branch in ways that reflect the president's agenda and priorities. Though these three possibilities are not necessarily mutually exclusive, they do suggest that the distribution of bureaucratic positions could follow several different logics.

Our efforts to distinguish between them empirically have several important implications for the literature. First, to the extent that a constituency's political alignment with the president is associated with its representation among federal bureaucrats, this pattern may be inconsistent with the theory of representative bureaucracy (e.g., Kingsley 1944), as these political predictors of bureaucratic personnel reduce the correspondence between the characteristics of federal bureaucrats and the public they serve. Second, and related, to the extent that the composition of the bureaucracy has implications for the decisions made and outputs produced by the executive branch, how patronage is administered affects which constituencies benefit from the president's influence over personnel. Third, while previous literature has studied the prevalence and distribution of political appointees in federal bureaucracies (e.g., Lewis 2008) and has evaluated the Senate's response to presidential nominations to high-level executive branch positions (Hollibaugh and Rothenberg 2021; McCarty and Razaghian 1999), it remains largely unclear whether and how patronage considerations might affect the president's choice to nominate or appoint particular individuals. Fourth, and finally, scholars have studied distributive politics extensively in the context of federal spending and other public goods (Berry, Burden, and Howell 2010; Fiorina 1974; Rogowski 2016; Stein and Bickers 1994), yet it is unclear whether those insights apply similarly to the allocation of valuable bureaucratic positions—itself a distributive phenomenon.

Data

We study the predictors of bureaucratic appointments in the context of the expansion in the size and scope of federal government that occurred in the years surrounding the Great Depression and World War II and its aftermath. We do so using data we collected from the Official Register of the United States in two-year intervals between 1925 and 1959. The Official Register was published biennially from 1817 and became an annual publication in 1925 until it was no longer published after 1959.5 The original publications have been digitized and are available online, and we collected

5. The exception was 1935, when no volume was published. In its place, we use the 1936 volume to correspond with the appropriate congressional biennium.
information about each bureaucrat listed in them using both automated and manual techniques. Entries included each individual’s place of birth, title, department or agency in which they are employed, site of employment, and salary. Most importantly for our purposes, the *Official Register* also includes information on each employee’s place of legal residence at the time of their appointment, including state and congressional district.

While the time frame we study is a function of data availability, it is also a substantively important period in the history of the American bureaucracy. The Great Depression “was a major watershed in the establishment of an economically interventionist national state” (Skocpol and Finegold 1982, 255) and brought about “rapid expansion of both the federal government’s size and the depth of its involvement in both the national economy and society writ large” (Gailmard and Patty 2013, 115). Bureaucratic transformation was further egged on by the exigencies of World War II and the Cold War that followed (Galambos 1987). The temporal focus of our study thus bridges literatures on the emergence of federal bureaucracy around the turn of the twentieth century (e.g., Carpenter 2001; Skowronek 1982) and that focus primarily on the modern bureaucratic state (e.g., Lewis 2004; 2008).

The data contained in our study represent individuals who served in bureaucratic positions and likely had some measure of policy-making influence. Volumes of the *Official Register* published between 1925 and 1959 contained the names of all persons “occupying administrative and supervisory positions” in the federal government at the time of publication. Prior to 1925, the *Official Register* published a nearly exhaustive accounting of individuals who worked in federal positions. By 1921, this resulted in the publication of approximately 258,000 names, which did not include the 324,000 individuals employed by the Postal Service. The more selective reporting during the period under study suggests that the appointments contained in our data represent individuals whose efforts and decisions had material consequences for administrative performance.6

Figure 1 shows the biennial number of executive branch bureaucrats in our data. Here, we display executive branch bureaucrats who belonged to one of the largest executive branch agencies at the time as listed in the *Official Register*. Our sample period covers a time of great expansion for the executive branch, during which the number of administrative and supervisory positions grew by more than 600%. The data show a period of steady but limited growth during the Great Depression and New Deal. By contrast, we see a sharp uptick in employment during World War II (with most of the wartime growth coming in 1941–1943 following the American entrance into the war), followed by several large post war expansions between 1947 and 1949, 1949 and 1951, and 1955 and 1957.

To better understand the distribution of growth across agencies composing these patterns, Figure 2 shows the number of employees across selected departments and other bureaucratic units. Altogether, the displayed departments account for about 75% of the administrators and supervisors contained in our data in the median year in our sample.

6. Table SA.1 in the supporting information shows the most common positions in our data set, which are chiefs, directors, and executives of various offices and departments.
The overall pattern of governmental expansion is seen in agency-specific trends as well, with additional growth coming from newly created and restructured agencies during our sample period. For example, expansion in the 1930s and early 1940s is driven by gradual increases in several long-standing departments, including Interior, Justice, and State. During and after World War II, employment increased in both defense departments (e.g., Departments of War, Navy, and the Veterans Administration) and also domestic and regulatory agencies (e.g., Departments of Labor, Agriculture, and Commerce). Finally, we see that increased bureaucratic employment also reflected the creation of several large agencies during this period, such as the Department of Health, Education, and Welfare (created in 1953) and the restructuring of the Department of Defense (renamed in 1949).

Dependent Variable

We use the data displayed in Figures 1 and 2 to study the relationship between a geographic unit's political characteristics and the distribution of bureaucratic positions. As we noted above, our data include each bureaucrat's state of legal residence and home congressional district. We characterize the total number of bureaucrats from each congressional district for each biennium in our data.\(^7\) We then linked these counts to the political characteristics of each district and the representative elected from it.

\(^7\) It is possible, of course, that positions varied in importance to presidents and members of Congress, as some positions may come with greater policy-making discretion and/or rates of pay. While the information contained in the *Official Register* does not permit us to distinguish which positions had greater autonomy or influence, the data do allow us to distinguish positions based on their pay structure. As we describe below, our main results are robust to using this information as a means of distinguishing positions that may have been more valuable to presidents and legislators.
We linked bureaucrats listed in the *Official Register* to their congressional district if they lived in a single-member U.S. House district in one of the 48 contiguous states. Thus, we excluded the handful of bureaucrats who were legal residents of a country outside the United States, residents of Washington, DC, and those who lived in one of

**FIGURE 2.** Administrative and Supervisory Personnel across Departments, 1925–1959.
its territories. During the period under study, it was not uncommon for states with more than a single seat to elect some or all of their representatives from the state at large.\(^8\) Residents of such states effectively lived in multimember districts, which complicates efforts to link a particular bureaucrat to a specific district and representative. This challenge is especially acute in states that elected all of their representatives at large, as was the case for a number of states in the 73rd Congress (including Kentucky, Minnesota, Missouri, North Dakota, and Virginia), as there is no clear way to link a bureaucrat to a single representative. Therefore, these states and the bureaucrats who called them home are omitted from our analysis. In our main analyses, we retain bureaucrats from states that elected most of its representatives in numbered districts but elected several more in at-large elections (e.g., in the 73rd Congress, Illinois elected 25 of its seats through districted seats while its two additional seats were chosen by the state at large), though we demonstrate that our findings are robust to this decision. In all, we matched 183,370 bureaucrats to an individual congressional district, which represents about 71% of the 257,414 bureaucrats included in the raw data collected from the \textit{Official Register}. Thus, the data used in our analysis are a panel of congressional districts and years, where the unit of analysis is a district \(i\) in (biennial) year \(t\). Our panel data include 94\% (7,353 of 7,830) of the congressional seats in each congress during this period, with the omitted districts resulting largely from the at-large districting considerations described above.

Figure 3 shows the distribution of bureaucratic appointments across congressional districts for each year in the data. We display the logged (plus one) number of positions per district due to the negative skew of the distributions, as a small number of districts received an extremely large number of appointments, and we employ this characterization in our regression models below.\(^9\) Overall, the average district in our data was home to 25 bureaucrats, though this figure varied widely across time. For example, the average number of appointments in 1925 was 7, which had increased to 55 by 1959. The figure shows that the number of appointments also varied significantly across districts within each year. We leverage this variation to study how the political characteristics of a particular congressional district were associated with the number of appointments given to its residents.

It is unlikely, of course, that presidents themselves were directly involved in selecting the personnel under their employ in the executive branch. While presidents take interest in nominating individuals to serve in Cabinet-level positions, there are simply too many posts for presidents to personally vet and select the individuals who work in the many thousands of positions that are supervised by the department heads.\(^10\)

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8. Though beyond the scope of our inquiry, this phenomenon is likely to have had implications for distributive outcomes; see Ashworth and Bueno de Mesquita (2006) and Rogowski (2017).

9. These districts appear to be concentrated around the metropolitan Washington, DC, area. As we discuss below, our main results are robust to excluding Maryland and Virginia from our models.

10. Of course, presidents are also not directly involved in the line-item allocation of other federal resources, such as grants and outlays (Berry, Burden, and Howell 2010; Kriner and Reeves 2015), yet the distribution of these resources can still be informative about the nature of presidential influence and the incentives to which presidents respond.
Yet presidents confront political pressures from a variety of directions, and they are unlikely to satisfy them all. Identifying whether the allocation of bureaucratic positions systematically favors some jurisdictions over others provides an indirect indication of how presidents and their administrations manage and prioritize over those pressures.

Independent Variables

We include a series of variables to evaluate the variety of ways through which patronage may be distributed. First, we account for the state electoral context of each district. Presidents may have incentives to provide disproportionate patronage opportunities to districts in states that are competitive in the Electoral College and in states that provided strong electoral support. Following Kriner and Reeves (2015), we create indicators for Swing and Core states, respectively, where swing states were won by fewer than 10 percentage points in the last presidential election and core states were won by 20 percentage points or more.11

Second, we account for characteristics of congressional representatives that may structure the incentives for presidents to bestow patronage appointments to residents of their districts.\textsuperscript{12} Patronage appointments may be used to reward legislators for their support for the president's policy agenda or as an inducement for legislators to do so. Thus, we include each representative's \textit{Presidential support score} in a given congress, which we aggregated from the annual support scores available from Lewis et al. (2021).\textsuperscript{13} The scores range between 0 and 1 and characterize the proportion of the time a legislator supported the president's position on roll-call votes where the president's position is known. Following Edwards (1985), scores are calculated for all legislators who cast votes on at least half of the roll-call votes that are associated with presidential positions. These measures are imperfect since presidents' agendas vary across time and strategic presidents and party leaders may avoid legislative votes for presidential agenda items for which there is likely to be insufficient support. Moreover, in some congresses, only a small number of roll-call votes were associated with presidential positions.\textsuperscript{14} Despite their limitations, however, presidential support scores appear to be the best available measures for characterizing legislators' support for presidential priorities during the period under study.

We also include a measure of each representative's partisan alignment with the president. Some scholarship indicates that presidential copartisans receive greater distributive outlays relative to other legislators (e.g., Berry, Burden, and Howell 2010; Rogowski 2016). Thus, we include an indicator for \textit{Presidential copartisan}, which has a value of one if the legislator is from the same party as the current president and zero otherwise.

Third, we account for characteristics of legislators that may be associated with their success in securing patronage appointments for their constituents. To the extent that patronage may be allocated, at least in part, as a means of exchanging valuable patronage resources in exchange for votes (e.g., Groseclose and Snyder 1996), legislators with more moderate ideological orientations may represent easier bargaining targets for presidents hoping to use patronage as enticement for supporting their legislative items. Following Alexander, Berry, and Howell (2016), we include a measure of each representative's ideological distance from the median legislator in the House. We use legislators' NOMINATE scores (Lewis et al. 2021), which are constant across their careers, to construct \textit{Distance from floor median}. Changes in the values of this measure for a given legislator reflect changes in the ideological composition of the House; for example, as the composition of the House moves in a liberal (conservative) direction, a

\begin{itemize}
  \item \textsuperscript{12} In the case of districts that were served by multiple representatives in a given congressional term, due to retirement, death, resignation, or the like, we use the characteristics of only the first representative.
  \item \textsuperscript{13} These data were obtained from https://voteview.com/static/articles/presidential_support_scores/house_presidential_support.csv on September 13, 2021.
  \item \textsuperscript{14} There are only five votes with presidential positions in the 70th Congress, seven votes in both the 71st and 72nd congresses, and eight votes in the 78th Congress. All other congresses have 10 or more votes.
\end{itemize}
conservative legislator would be farther (closer) to the House median.\textsuperscript{15} Legislators from competitive seats may also have particular incentives to procure patronage appointments for their district, as these positions may allow them to demonstrate their effectiveness and influence. Thus, we include an indicator, Competitive seat, that distinguishes congressional representatives who previously won their seats by fewer than 10 percentage points.\textsuperscript{16} Finally, we account for a legislator's experience in office, as longer-serving incumbents may be better able to secure appointments for their constituents. Seniority indexes the number of years a legislator has served in the House as of a given congress.\textsuperscript{17}

**Empirical Strategy**

We use linear regression to estimate the degree to which the allocation of bureaucratic appointments across congressional districts reflected potential mechanisms of presidential patronage. Following previous approaches to studying the distribution of federal resources (e.g., Berry, Burden, and Howell 2010; Berry and Fowler 2016; Kriner and Reeves 2015; Rogowski 2016), the dependent variable is the logged number of appointments (plus one) filled by residents of congressional district \(i\) in year \(t\).\textsuperscript{18} Our models contain each of the explanatory variables described above. If districts located in states that are competitive in the Electoral College received larger shares of appointments, we would expect the coefficient estimate for Swing state to be positive. Similarly, we would expect a positive coefficient for Core state if districts in states that provided strong support for the president received larger numbers of appointments. If representatives who support the president's legislative agenda at higher rates received greater numbers of appointments, we expect a positive coefficient for Presidential support score; likewise, if presidents privileged their legislative copartisans, we expect a positive coefficient for Presidential copartisan. If more ideologically extreme legislators receive fewer appointments for their districts than centrists, we expect a negative coefficient for Distance from floor median. Finally, if legislators representing competitive districts and greater seniority receive greater shares of appointments, we expect positive coefficients for Competitive seat and Seniority, respectively.

\textsuperscript{15} Likewise, changes in a district's value of Distance from floor median could also reflect changes in that district's House representation. For example, if a district replaces an ideologically extreme legislator with a centrist legislator, the value of Distance from floor median would decrease if the ideological orientation of the House median legislator otherwise remained the same.

\textsuperscript{16} These data come from ICPSR study #3371, “Database of [United States] Congressional Historical Statistics, 1789–1989.”

\textsuperscript{17} These data come from ICPSR study #7803, “Roster of United States Congressional Officeholders and Biographical Characteristics of Members of the United States Congress, 1789–1996.”

\textsuperscript{18} We prefer this approach rather than using count models because it allows us to evaluate the coefficients as the proportionate change in the allocation of positions given changes in the values of the covariates. This also allows us to compare the magnitudes of these changes to the results from other research that studies the effects of similar covariates on the distribution of federal resources. Fortunately for our approach, only a small number (about 1\%) of congressional districts during this period were not represented by any bureaucrats in our data.
We report estimates from four model specifications that account for a variety of potential threats to inference. Model 1 includes the above variables and fixed effects for each congress. This specification estimates the average association between appointment patterns and each of the explanatory variables while accounting for secular trends in the number of appointments. Our remaining three models include a variety of unit fixed effects in addition to Congress fixed effects. In Model 2, we add state fixed effects to account for time-invariant characteristics of states that could be associated with variation in bureaucratic appointments. With this specification, the coefficients are estimated using within-state variation in each of the independent variables. Models 3 and 4 include high-dimensional effects to more rigorously address potential confounding. These models represent our most preferred specifications. Model 3 replaces state fixed effects with legislator fixed effects. This specification accounts for the characteristics of individual legislators that may be associated with the number of appointments allocated to their district. For example, if some legislators have greater ability than others to extract patronage positions from the presidential administration, this unobserved ability parameter could confound the estimates of our explanatory variables in a more naive model. Model 4 includes fixed effects for congressional districts that are specific to each redistricting cycle.19 This specification accounts for attributes of districts that are associated with the appointment of individuals from those districts to bureaucratic positions net of the other explanatory variables included in our models. For example, some districts are sites of research centers, party offices, colleges and universities, state capitals, and other sites that may increase the number of appointments allocated to their residents, and these factors may confound our attempt to isolate the effects of the explanatory variables noted above. While we cannot fully rule out the possibility of omitted confounders in this setting, the degree to which we obtain consistent results across the various models increases confidence in our inferences. In all our models, we estimate standard errors clustered on state.

Results

Table 1 reports the results of the regression models described above. Overall, we find consistent evidence in support for several mechanisms of presidential patronage. First, the coefficient for Swing state is consistently positive and statistically significant, indicating that districts located in competitive states in the Electoral College received systematically larger numbers of bureaucratic appointments. The coefficients from Models 3 and 4 indicate that districts in swing states received about 10% more appointments than other districts. We find some evidence that districts in core partisan states received larger shares of appointments, as the coefficients are positive across the four models. However, the estimates are less precise and smaller in magnitude than the coefficients for swing states, and they are not statistically distinguishable from zero in Models 3 or 4.

We also find some evidence of a relationship between a representative's support for the president's policy agenda and the number of appointments allocated to their district.

19. Redistricting dates were obtained from Lewis et al. (2013).
The coefficients for Presidential support score are consistently positive and are statistically significant in each model except Model 2. This finding provides evidence that the political relationship between a district's legislator and the president is associated with the allocation of bureaucratic appointments to that district. We note two caveats in our interpretation, however. First, the magnitude of the relationship is relatively small. Based on the coefficient estimate in Model 4, a district whose legislator increased their support of the president's legislative agenda by one standard deviation (equivalent to an increase of about 0.25 in the proportion of presidential policy positions supported by a legislator) would receive about 1.7% more appointments \((0.067/4 = 0.017)\). Second, because our measures of presidential support and bureaucratic appointments are measured contemporaneously within the same congress, our analysis does not allow us to distinguish whether the increased allocation of appointments was a means of garnering legislative support for future presidential initiatives or in exchange for support on previous votes. Presidential support is likely to be correlated across time, however, and our findings suggest that legislators who have supported and/or will support the president's policy positions receive greater numbers of bureaucratic appointments for residents of their districts.
We find less evidence that the distribution of appointments is systematically influenced by the other variables in our models. The coefficients for Presidential copartisan are consistently small in magnitude and inconsistently signed, and none of them is statistically distinguishable from zero. In combination with the results for the electoral variables discussed above, this finding may indicate that presidents allocate distributive resources on the basis of a constituency’s political characteristics rather than the characteristics of legislators who represent those districts (see Dynes and Huber 2015).

The models also provide limited evidence that centrists received greater shares of appointments than extremists. The coefficient for Distance from floor median is negative and statistically significant in Models 1 and 2, which is consistent with the hypothesis that districts represented by extreme legislators received systematically fewer numbers of appointments (see, e.g., Alexander, Berry, and Howell 2016). However, the coefficients in Models 3 and 4 are positive, small in magnitude, and not statistically significant. These patterns suggest that the results from Models 1 and 2 are confounded by some characteristic of legislators and/or districts rather than represent the independent effect of legislator extremism on appointments. A similar interpretation applies to Competitive seat; while it is significant and positive in Models 1 and 2, it is near to zero and not statistically significant in Models 3 and 4, indicating no relationship between seat marginality and the provision of bureaucratic positions. Finally, the results provide no evidence that more senior legislators received greater numbers of positions; instead, the results from the within-legislator specification Model 3 suggest that the relationship is negative.

The results reported above are robust to several additional analyses. First, while our analyses above focused on the political characteristics of House members, we estimated additional models to account for the political characteristics of a state’s Senate delegation. To do so, we created two indicators for the partisan affiliation of the state's senators that distinguished states where both senators or neither senator shared the president's party.20 Neither indicator is statistically significant, however, and their inclusion does not meaningfully change the results reported above.

Second, we reestimated our models while omitting states with multiple House seats and that elected any of their representatives through at-large elections.21 Excluding these districts reduces our sample size of districts to 6,360. However, we continue to find support for our main results. The coefficients for Swing state and Presidential support score are consistently positive and statistically significant, while we find no evidence that the other factors are systematically associated with the allocation of positions.

Third, as we noted above, a small number of districts in Maryland and Virginia received an extremely large number of appointments. We reestimated our models and omitted these states.22 Their exclusion does not meaningfully affect our coefficient estimates or inferences.

Fourth, we accounted for legislators’ positions on a comprehensive set of House committees. Using data from Canon, Nelson, and Stewart (1998) and Nelson (1993), we

20. Results are shown in Table SA.2 in the supporting information.
21. Results are shown in Table SA.3 in the supporting information.
22. Results are shown in Table SA.4 in the supporting information.
created indicators for whether a district's legislator served on one of the 37 unique committees that operated during the period under study. The inclusion of these indicators does not meaningfully change our primary conclusions.\(^{23}\) We also find little evidence that committee membership is associated with shares of bureaucratic positions. Even committees believed to provide greater political influence to legislators, including Ways and Means, Rules, and Appropriations (Groseclose and Stewart 1998), exhibit no association with the distribution of bureaucratic positions.\(^{24}\) These results thus are consistent with Berry and Fowler's (2016, 706) conclusion from an examination of the distribution of outlays that "the influence of committee positions on federal spending is far more limited than previously thought."

Fifth, and finally, we reestimated our models while focusing only on salaried positions in the data. About 89% of the employees in our data were paid via annual salaries; the remaining 11% were paid on a more ad hoc basis or according to the length of time they worked. The latter positions may have been less appealing to employees and thus less valuable to presidents and legislators given the greater uncertainty over pay. We continue to find support for our substantive conclusions when characterizing the dependent variable as the number of salaried positions across districts.\(^{25}\)

Our results provide new evidence about the use of presidential patronage in distributing bureaucratic appointments across congressional districts. We show that both electoral considerations and legislators' support for presidential policy views are associated with increased representation of a congressional district in bureaucratic positions. As head of the executive branch, presidents made use of bureaucratic appointments to reflect their electoral and legislative interests a half-century or more after the passage of civil service reform.

### Variation across Bureaucracies

In a final set of analyses, we explore potential heterogeneity across agency type. Due to the universal scope of the *Official Register*, our data contain information on bureaucrats from sources as varied as the Atomic Energy Commission, the Department of State, and the Railroad Retirement Board. The politics of distributing personnel to congressional districts may be more or less closely aligned with political incentives for agencies with different purposes. This may particularly be true for defense-focused agencies, for example, where distribution may be more removed from direct political incentives than nondefense agencies. We speculate that the domain of national defense may provide bureaucrats with fewer opportunities to administer policy in a parochial fashion, and presidents may place particular emphasis on insulating defense-related positions from partisan policies.

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23. Results are shown in Table SA.5 in the supporting information.

24. The only committees with statistically significant and positive coefficients are the Printing Committee and the Railways and Canals Committee. However, these committees existed for only a short time during the period under study, with only 38 and 12 legislators, respectively, in our data who served on them. Thus, we are reluctant to make much of this finding.

25. Results are shown in Table SA.6 in the supporting information.
We classify the largest departments and agencies into three groups based on their primary governmental purpose. Our coding scheme is based loosely on Lewis (2004), who distinguishes regulatory agencies in the contemporary era (47 agencies, including the Federal Loan Agency, the Federal Trade Commission, and the Home Owners Loan Corporation). We further distinguished agencies concerned with national defense and international affairs (17 agencies, including the Departments of Defense, Navy, War, and the Panama Canal Zone Government). The remaining units were classified as administering domestic policy (22 agencies, such as the Departments of Agriculture, Commerce, Justice, and Labor). Complete details about our classification scheme are shown in Table SA.7 in the supporting information.

Using this coding system, we estimate our primary model specifications separately for each of the three agency types. Our results are shown in Table 2 and are largely consistent with those from Table 1. The coefficient on Swing state is positive and statistically significant for both regulatory and domestic agencies, and it indicates that districts in these states receive 11 to 12% more appointments in these agencies compared to states that are not competitive in the Electoral College. For defense

<table>
<thead>
<tr>
<th>Dependent Variable: log (1 + Number of Positions)</th>
<th>Regulatory</th>
<th>Domestic</th>
<th>Defense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swing state</td>
<td>0.108*</td>
<td>0.120*</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.038)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Core state</td>
<td>0.144*</td>
<td>0.084</td>
<td>0.042</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.045)</td>
<td>(0.034)</td>
</tr>
<tr>
<td>Presidential support score</td>
<td>0.066</td>
<td>0.067</td>
<td>0.077*</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.034)</td>
<td>(0.033)</td>
</tr>
<tr>
<td>Presidential copartisan</td>
<td>−0.021</td>
<td>−0.017</td>
<td>−0.045*</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.022)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Distance from floor median</td>
<td>0.135*</td>
<td>0.029</td>
<td>−0.017</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.043)</td>
<td>(0.063)</td>
</tr>
<tr>
<td>Competitive seat</td>
<td>0.040*</td>
<td>0.001</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.013)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Seniority (years)</td>
<td>−0.002</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Congress fixed effects</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>District-by-cycle fixed effects</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Observations</td>
<td>7,353</td>
<td>7,353</td>
<td>7,353</td>
</tr>
</tbody>
</table>

Note: Entries are linear regression coefficients with standard errors clustered on states in parentheses. The dependent variable is the logged (plus one) number of biennial bureaucratic appointments to individuals from a representative’s district.

*p < .05 (two-tailed tests).

We classify the largest departments and agencies into three groups based on their primary governmental purpose. Our coding scheme is based loosely on Lewis (2004), who distinguishes regulatory agencies in the contemporary era (47 agencies, including the Federal Loan Agency, the Federal Trade Commission, and the Home Owners Loan Corporation). We further distinguished agencies concerned with national defense and international affairs (17 agencies, including the Departments of Defense, Navy, War, and the Panama Canal Zone Government). The remaining units were classified as administering domestic policy (22 agencies, such as the Departments of Agriculture, Commerce, Justice, and Labor). Complete details about our classification scheme are shown in Table SA.7 in the supporting information.

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26. We identified the governmental purpose of 88 of the bureaucratic units in our data. Altogether, 85% of the bureaucrats in our data worked for an agency or a department to which we applied our coding scheme.
agencies, however, the coefficient estimate is near to zero (0.007), providing no evidence of a relationship. Districts in core states also receive significantly larger shares of appointments to regulatory agencies compared with other states, but this variable is not distinguishable from zero for the other two types of agencies.

The coefficients on Presidential support score are similar in magnitude across each agency type. However, it is statistically significant at $p < .05$ only for defense agencies, and it falls just short of conventional levels of significance for regulatory ($p < .057$) and defense agencies ($p < .055$). The magnitudes of the coefficients suggest that one standard deviation in a legislator's support for the president's legislative positions is associated with about a 2% increase in appointments for the legislator's constituents.

In general, the results in Table 2 indicate that districts located in politically relevant states or served by representatives who have supported the president's policy positions receive more bureaucratic appointments. Taken as a whole, the results suggest that the distribution of appointments to defense bureaucracies are less responsive to a president's electoral incentives than for regulatory and domestic agencies. Our findings do not support the claim, however, that politics stops at the water's edge in the context of appointments to defense bureaucracies; instead, we find the allocation of defense-related appointments to a district's constituents is associated with the political relationship between that district's legislator and the president.

**Conclusion**

Our results provide evidence consistent with several potential mechanisms of presidential patronage. Overall, our findings suggest the importance of electoral and constituency-based factors in the allocation of positions across congressional districts. Constituencies that are more electorally valuable to presidents generally received larger shares of federal appointments. Our results also indicate the importance of patronage as a bargaining chip between presidents and legislators. Congressional districts with legislators who supported a president's agenda at higher rates received systematically greater representation in the federal bureaucracy. These findings contribute to a growing literature that demonstrates how presidents use their institutional positions to respond to their political incentives (e.g., Berry, Burden, and Howell 2010; Kriner and Reeves 2015; Lowande, Jenkins, and Clarke 2018; Napolio 2021; Rogowski 2016) and illustrate how control of personnel allows presidents to distribute positions in ways that benefit them politically.

We wish to be cautious in interpreting some of our findings. Many standard accounts of patronage and clientelism emphasize the primacy of political criteria over merit-based criteria in the appointment of bureaucratic officials. Our data do not contain a systematic measure of each appointee's quality. While previous research has leveraged creative data sources to study bureaucratic performance on the basis of how bureau heads were selected (e.g., Gallo and Lewis 2012; Hollibaugh 2015a; Lewis 2007), systematically measuring the ex ante quality of individuals who were appointed to bureaucratic positions—along with those who were not, to facilitate comparisons—is a vexing challenge for the field. Thus, our results do not indicate
that the individuals in our data did not have the relevant qualifications for the positions in which they worked. Identifying under what conditions individual appointees are chosen on the basis of merit rather than political connections, however, remains an important goal for research in this area.

Our analyses have several other important limitations and provide opportunities for additional research. First, it is not clear whether our findings generalize to other time periods. Though patronage incentives have been present for much, if not all, of American history, they may have taken different forms in different historical contexts. For example, state and local party machines may have been the primary drivers of patronage in earlier periods of history, while in more recent periods it may be driven more by personalistic connections. These are only speculations, yet they suggest caution in extrapolating our results and encourage future research to explore variation in the nature of patronage incentives across time. Second, our analyses are highly aggregated, and congressional districts are not the only geographic units across which patronage patterns can be assessed. Research conducted at a more granular level—for example, by evaluating employment patterns at the level of specific individuals and positions (for a particularly good example in the context of Brazil, see Colonnelli, Prem, and Teso 2020)—may be especially fruitful. Third, within a given context or agency, presidents likely have varying incentives to distributive patronage (see, e.g., Hollibaugh, Horton, and Lewis 2014). Future research could explore how patronage distribution varies with a president's issue agenda, the attractiveness of bureaucratic positions to potential officeholders (based on, for instance, compensation or the capacity for policy influence), and the relationship between Congress and the president.

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Supporting Information

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