Privatizing Personnel:
Bureaucratic Outsourcing & the Administrative Presidency

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Abstract

Why does the executive branch sometimes rely on bureaucrats to perform work and at other times rely on private sector contractors? I argue that the privatization of personnel is a bureaucratic management strategy used by the president in response to the political environment. Relative to bureaucrats, contractors confer three distinct advantages: speed (i.e., they are quicker to hire), control (i.e., they are more obsequious than merit-protected bureaucrats), and reduced visibility (i.e., they do not add to "Big Government"). These benefits make contractor labor attractive to presidents in agencies that are political priorities and during divided government. To test these arguments, I develop a novel measure of personnel privatization that combines data on contracts for government services with personnel spending across more than 70 agencies from 2001–2020. The findings suggest that contractors are used by the president to stealthily expand executive capacity and point to an under-appreciated avenue for executive aggrandizement.

Article II, Section I of the Constitution vests the "executive power" firmly in the hands of the president. While scholars disagree about the precise meaning of this clause, what is not disputed is that in order to carry out this constitutional responsibility the president needs implementation capacity. In civics classes across the country, this implementation power is understood to mean the bureaucrats that staff the executive branch. Yet, in recent decades a governance revolution has reshaped what implementation looks like across all levels of government. At the federal level, this transformation has involved an increasing reliance on private sector contractors to do government work, such that federal government contractors now vastly outnumber federal bureaucrats.[1]

Contractors are ubiquitous in federal agencies. And contrary to popular understanding, contractors do not just perform ministerial functions for government (Dooling and Potter, 2024); instead, they increasingly step in and provide governmental services that involve a high degree of skill (Taylor, 2019)—and often discretion too. For example, information technology services have been broadly exported to the private sector (Pahlka, 2023). While such services are often considered rote, scandals like the failed healthcare.gov launch or the case of national security leaker Edward Snowden serve as reminders that this work can be substantive too. And, recent research shows that, at some agencies, contractors are deeply integrated into rulemaking, an administrative process where agencies can create binding law. In these agencies, contractors assist with the technical and analytic

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[1]Indeed, one estimate puts the number of federal contractors at a three to one ratio to career bureaucrats (Light, 2018). There are, of course, other estimates of the number of contractors. Reporting by the *Washington Post* indicated that in 2010 the ratio of contractors to federal employees in the Department of Homeland Security was one to one (Priest and Arkin, 2010). And Schooner and Swan (2012) report that in Iraq and Afghanistan the number of contractor support personnel frequently exceeded the number of military personnel. Finally, one federal manager (in a non-defense agency) estimated that for some of the programs they oversee there was a "1 to 10 ratio of Feds versus contractors... maybe even more in some cases where the Feds are serving more as a team lead and as a manager of the [contractor] work." The manager concluded that "maybe it's not as balanced as it should be right now." Author Interview 22; see the Supporting Information (SI) for a discussion of the interview protocols followed in relation to this study.

aspects of rule development, and sometimes even write the first draft of regulatory texts that may become binding law (Dooling and Potter, 2024).

Despite their ubiquity, contractors do not fit neatly into our understandings of either the presidency or the administrative state. For instance, contractors are entirely omitted from counts of bureaucratic employees—a stock "control variable" in most studies of administrative agencies—and they are also not accounted for in theories of political control of the bureaucracy. In this paper, I argue that understanding the current arrangement of the total bureaucratic workforce—by which I mean the mix of career civil servants and service contractors that do the work of the federal government—is central to understanding how political and administrative power is exercised within the executive branch.

Taking the president's perspective, my argument highlights the relative merits of outsourced labor compared to bureaucratic labor. I focus on three distinct advantages conferred by contractors (as compared to bureaucrats): the relative speed with which contractors can be deployed; the relative obsequiousness that is precipitated by having to earn the next contract; and the fact that hiring contractors is harder to track and therefore does not visibly contribute to the growth of "Big Government." Together, these advantages suggest that when a president is trying to accomplish a policy priority, hiring contractors rather than bureaucrats can be advantageous. Further, the reduced visibility associated with contractors makes them a particularly attractive labor source during periods of divided government, when avoiding the appearance of growing an unpopular bureaucracy is particularly desirable and when the president still has priorities to accomplish. This political logic does apply equally across the administrative state, however; independent agencies are less susceptible to presidential pressure. Those agencies have greater control over their own staffing decisions and, I argue, should be less contractor-reliant in the first instance.

To test this account, I develop a novel dataset of agency spending on bureaucratic personnel and agency spending on service contractors. I then generate a measure of per-

sonnel privatization, the ratio of personnel spending allocated to contractors compared to personnel spending allocated to bureaucrats. Analyses using this measure show that independent agencies rely less on contractors and more on bureaucrats. In executive agencies prioritized by the president contractors are preferred to bureaucrats, and especially so under divided government. To evaluate the robustness of this argument, I consider whether the same factors motivate other types of procurement spending—namely spending on products purchased from the private sector. They do not, as expected.

This argument has two broad implications with respect to how contractors contribute to and may even enhance presidential power. First, research on the administrative state often focuses on how presidents struggle to control the bureaucracy (Lowande, 2018; Potter, 2019; Rudalevige, 2021; Prato and Turner, 2022). However, if the full size of the bureaucracy is not visible (and I argue that it is not) and the bureaucratic workforce is more readily controlled than existing theories allow (and I argue that it is), then existing theories of administrative power understate the president's influence over the bureaucracy. In short, the use of contractors in the administrative state is "executive aggrandizing" (Michaels, 2010, 719). Second, power struggles between Congress and the president are perennial, and the bureaucracy is sometimes a focal point of these struggles. However, the reduced visibility associated with contractors means that Congress is less able to observe and oversee this type of labor. The president does not suffer from this same limitation, suggesting that contractors may give the executive a strategic edge.

Unpacking Outsourced Government

From a normative perspective, the extent of the U.S. bureaucracy's reliance on contractors has potentially enormous consequences for democracy. Government procurement contracts involve billions in federal spending; in fiscal year (FY) 2021 alone, the U.S. government spent $392 billion on service contracts, with another $245 billion allocated to the acquisition of products (GAO, 2022). And because many contracting firms

are regular players in terms of campaign contributions to politicians (Fazekas, Ferrali and Wachs, 2022; Witko, 2011), outsourcing contributes to the growing role of money in American politics.[2] Additionally, outsourcing of bureaucratic labor to contractors (i.e., service contracting) contributes to what Mettler (2011) calls the "submerged state," or policies where government's role is obscured from the public; the implications of such policies, she argues, are declining trust in government, diminished capacity for citizens to form meaningful opinions about government, and, ultimately, the undermining of what citizenship in a democracy means.[3] Finally, some observers have raised concerns about whether broad-scale outsourcing erodes government's legitimacy (Verkuil, 2007), as well as its relationship with citizens (Cordelli, 2020). Like a weak muscle that begins to atrophy, reliance on contractors to perform public functions can diminish government's ability to govern and solve policy problems on its own.

The use of private sectors actors to fulfill the functions of government in not a new phenomenon, however. In the Republic's earliest days, private actors took on numerous government roles, including naval privateers, tax "ferrets," bounty hunters, and postal couriers (Michaels, 2018; Parrillo, 2013). However, as a professionalized administrative state arose through the course of the the 20th century, bureaucrats were catapulted into more central policymaking and implementation roles. While private sector contractors

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[2]I use the terms "outsourcing," "contracting out," and "contracting" to refer the phenomenon whereby government hires private sector actors—either for-profit or non-profit entities—to perform service work on its behalf. Outsourcing is one component of privatization, a broader term which also describes a government's reliance on the private sector, but which encompasses other activities such as asset sales and public-private partnerships.

[3]Consider, for example, the U.S. Department of Education's Direct Loan program, the student loan program that provided an estimated $91.3 billion in loans to U.S. college students in fiscal year 2022 (CRS, 2021). The agency does not service these loans directly, but instead contracts with nine different loan companies. The upshot is that when a student calls about a loan that is entirely underwritten by the U.S. government, they speak with a private contractor, rather than a government employee. Further, payments are sent to the service provider, not the Department of Education. It is easy to see how one might reasonably misattribute the sponsor of the loan in this situation.

emerged as important political actors in the decades following World War II, their role was largely concentrated in the defense sector (fulfilling President Eisenhower's parting prophesy of a "military industrial complex") or focused on providing goods and products to government.

Federal procurement today is vastly different from its earlier manifestations. The biggest change is perhaps the scale of the U.S. government's procurement and acquisition enterprise; today, procurement spending accounts for approximately 10% of U.S. GDP and about a quarter of government expenditures (OECD, 2021). Figure 1 below highlights two other notable trends in procurement spending. First—and contrary to the notion that government procurement centers on the acquisition of products like printers, syringes, and fighter jets—service spending far outstrips product spending. Second, among services, spending on white collar services—services that are of a professional or administrative nature—has steadily increased over time. Meanwhile, spending on blue collar services—services that involve manual labor—has held relatively constant.[4]

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[4]The Office of Personnel Management defines a position as white collar if "even if it requires physical work, [its] primary duty requires knowledge or experience of an administrative, clerical, scientific, artistic, or technical nature not related to trade, craft, or manual-labor work." (OPM, 2018, 4). Blue collar work is work that involves trade, craft or manual labor. I coded services into white collar and blue collar categories, following the definitions laid out by OPM.

Figure 1: Federal Procurement Spending Trends, FY 2001 - 2021
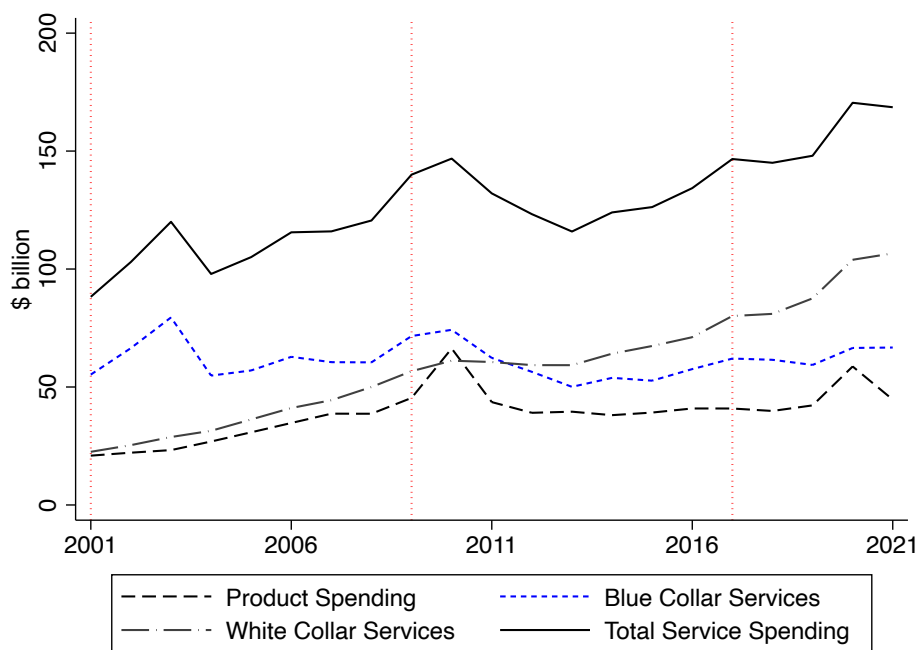
Notes: Author's analysis of data from the Federal Procurement Data System–Next Generation (FPDS). Spending reflects fiscal year (FY) 2020 dollars. Dotted vertical lines indicate shifts in presidential administrations. Procurement spending on services has outstripped procurement spending on products for the entirety of the period under study. In the last decade, spending on white collar services has exceeded spending on blue collar services.

At the same time that outsourcing has been increasing, the size of the federal workforce (i.e., bureaucrats in career positions) has remained the same relative size— roughly two million individuals—since about 1960 (DiIulio, 2014). This stasis persists despite massive increases in government spending and in government's responsibilities over that time period.

These topline trends highlight an important development in American politics: the emergence of a contracted-out bureaucratic service workforce. However, an aggregate focus masks important features of this development. For example, the Department of Defense (DoD) accounts for the lion's share of procurement spending—approximately 49% of service spending and 79% of product spending (GAO, 2022)—and, accordingly,

it has received the most attention from scholars (e.g., Avant, 2005; Minow, 2005; Stanger, 2009; Verkuil, 2007). However, to a greater or lesser degree, nearly all agencies outsource service work to the private sector. And on the bureaucratic side of the ledger, despite the absence of large-scale increases (or decreases) in the total number of bureaucratic positions, individual agencies regularly see movement in the size of their workforces, through new hires (Bolton, 2022) and employee exits (Doherty, Lewis and Limbocker, 2019; Richardson, 2019). Under the Trump administration, for instance, most agencies saw declines in the number of bureaucratic positions, but three agencies—the Department of Defense, the Department of Homeland Security, and the Department of Veterans Affairs—actually grew their permanent workforces (Libgober and Richardson, 2023). In short, pressures that push agencies towards either contract or bureaucrat labor do not land uniformly across the administrative state.

Presidential Administration of the Outsourced Bureaucracy

Historically, scholars of the administrative presidency have viewed management of the administrative state as central to the president's ability to achieve policy and political goals (Moe, 1985; Nathan, 1983; Neustadt, 1991(1960)). However, Donald Trump's attack on the bureaucracy—ranging from his frequent, pejorative references to the "Deep State" to ham-handed attempts "deconstruct" the administrative state (Skowronek, Dearborn and King, 2021)—highlighted gaps in theories about how presidents both use and manage the bureaucracy. Newer work addresses these gaps, pointing out, for instance, how bureaucrats can be an impediment—rather than an aid—to accomplishing presidential goals (Lowande, 2018; Potter, 2019; Prato and Turner, 2022; Rudalevige, 2021) and how presidents can use management tools like the appointment power in unconventional ways (Kinane, 2021; O'Connell, 2020; Piper, 2022).

Debates over the Trump administration's approach to managing the bureaucracy have also raised questions about how presidents positively build administrative capacity

and deploy administrative power. Jacobs, King and Milkis (2019, 465) explain that "[b]oth conservatives and liberals redeploy the State's activities as opposed to retrenching them." However, such investments are strategically—and not uniformly—applied. For instance, presidents build the federal workforce by requesting—and receiving—increases in Full-Time Equivalent (FTE) bureaucratic positions, but only in agencies that are strategically valuable (Bolton, 2022). And presidents also selectively bolster human capital in agencies, by quickly filling leadership positions and raising the profile of agencies that are political priorities (Bednar and Lewis, 2022).

The role of contractors in supplementing, supplanting, or expanding bureaucratic capacity has received little scrutiny in the literature. Yet, all presidents outsource bureaucratic labor to contractors. Most famously, President Reagan declared that "government is not the solution to our problem, government is the problem," renewing a push toward the private sector that continued long after his departure. President Clinton's 1992 campaign prominently featured a "Reinventing Government" initiative, which emphasized privatization and reliance on the private sector as a way of enhancing government services. His successor President George W. Bush promoted outsourcing through a "competitive sourcing" initiative that required competitions between contractors and bureaucrats to get the best "price" for government tasks. President Trump's attack on the "Deep State," which included a hiring freeze for new bureaucrats in 2017, also served to enhance government's reliance on contractor labor.

Recent Democratic presidents have made attempts to reduce the government's reliance on contractors, but these efforts have largely manifested rhetorically rather than fiscally. For instance, shortly after assuming office President Obama issued a memorandom to encourage service insourcing among agencies.[5] However, as Figure 1 reveals, service outsourcing levels only experienced a slight downward shift during Obama's term and were comparable, in inflation-adjusted terms, to outsourcing levels during the George W.

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[5]See Presidential Memorandum, Government Contracting, 74 Fed. Reg. 9755 (Mar. 4, 2009).

Bush administration. And President Biden has made efforts to scale back outsourcing, attempting to hire more career civil servants in the Internal Revenue Service and ordering the Department of Justice to stop renewing contracts with private prisons. However, early indicators suggest only moderate reductions in total outsourcing levels (GAO, 2022).

One reason for the scholarly neglect of contractors' role in the administrative presidency may be that presidents themselves rarely make hiring decisions relating to individual bureaucrats or particular service contracts.[6] However, the lack of direct intervention does not mean that presidents have no role. Instead, presidents strategically select appointees to lead government agencies and those appointees carry out the president's vision for governing. Labor decisions can be an important part of executing that vision. Further, budgetary decisions about whether to fund new FTEs or new contractor labor are closely overseen by the Office of Management and Budget (OMB), an agency within the Executive Office of the President that is charged with ensuring that the budget reflects the president's priorities. OMB's budgetary powers are not trivial; it controls what an agency can ask for in an upcoming budget and how the agency can spend money that has already been appropriated (see Pasachoff, 2015).[7]

Contractors as a Presidential Resource

In service of their broader political agendas, presidents need implementation capacity and, to obtain that capacity, they can sometimes rely on contractors rather than bureaucrats. Compared to bureaucratic labor, contractors offer several advantages, including *speed*, meaning they can rapidly grow an agency's human capital; *control*, meaning they

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[6]The literature on the political aspects of contracting focuses instead on the distributive politics of procurement or the potential for corruption in the awarding of government contracts. This view ignores the substance of what is purchased through service contracts: labor. However, one important exception to this rule is Michaels (2010, 2018), who provides careful consideration of the relationship between contractors and presidents.

[7]Famously, the 2019 decision to withhold funds from Ukraine—the subject of President Trump's first impeachment—was carried out through an OMB footnote issued as part of the budget execution process.

do not present the same management obstacles as bureaucrats; and *low visibility*, meaning their relatively minimal profile keeps them out of the political spotlight. I expand on these three features below.

With respect to *speed*, contractors can be onboarded much more quickly than bureaucrats. The competitive process associated with merit hiring is notoriously slow. New presidents looking to quickly build capacity in an agency therefore face considerable difficulties staffing up (Bednar, 2022). At the same time that merit hiring has remained mired in process, recent trends in procurement have streamlined the process for hiring service contractors.[8] As agency officials indicated in interviews, the result is that while it takes an agency about eight months to hire a new FTE, bringing new contractor labor on board takes only about three months (Author interview 19; Author interview 21).

While bureaucrats can be hard for presidents to *control*, contractors may enhance a president (or their appointee's) ability to direct the course of policy development and implementation in an agency. Execution of political imperatives necessarily rests on the ability—and willingness—of agency bureaucrats to implement directives as leaders intend. But bureaucrats are not always willing to carry out political directives. Indeed, bureaucrats have a host of tactics that can disrupt initiatives with which they disagree, including leaking information to the press, slow-rolling agency policies (Feinstein and Wood, 2021; Potter, 2019), and even outright disobedience (Nou, 2019). Merit protection further insulates recalcitrant bureaucrats from retribution.

Contractors, however, have a financial incentive to unquestioningly carry out the directives of their contracted employer. Unlike merit-protected civil servants, contractors' contracts can be discontinued or not renewed. As Michaels (2018, 117) explains, "[c]ontractors are motivated to be hired, anxious to be retained, and eager to be assigned

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[8]This streamlining includes several developments, including the emergence of government-wide contract "schedules" as a way to obtain off-the-shelf services, an increasing reliance on broad retainer contracts against which agencies can issue task orders (i.e., Indefinite Delivery/ Indefinite Quantity, or IDIQ, contracts), and the use of fast-track procurement authorities like Other Transaction Authority.

additional fee-generating responsibilities. They thus have every reason to internalize the agency chiefs' political priorities." Further, presidents have the ability to control contractors via formal directives. Executive orders and other unilateral actions can be targeted at contractors (Burrows and Manuel, 2011; Gitterman, 2013), often with the same policy goal as similar actions directed at bureaucrats.

Taken together, the relative speed and control benefits offered by contractors make contract labor attractive to presidents when they need an agency to accomplish an important project or carry out a policy that is central to the president's agenda. Of course, most of the time most agencies are subject to benign neglect by the president (Bednar and Lewis, 2022). Thus, presidents will find contractors most useful in agencies they have prioritized in some way (i.e., an agency whose help is required to carry out an item on the political agenda).

Turning to *visibility*, contractor labor is more obscured from public view than bureaucratic labor, a feature which can be strategically useful to the president at times. Although federal bureaucrats are readily countable, contractors are not. Each year, the president's budget request prominently displays the number of new FTEs that are being requested for each agency for that year. Congress holds annual hearings on agency budgets, scrutinizing these figures as well as other aspects of an agency's proposed budget. Further, the Office of Personnel Management provides detailed, publicly available data on federal employees' professional and demographic backgrounds.[9] The upshot of all of this transparency is that the size of the federal service at any point in time or in any particular agency is easily ascertained, and such figures regularly appear in media and government reports. In contrast, as I explain later in the data section, there is no standardized way of accounting for contract workers who do the work of government—even though according to most estimates there are far more government contractors than there are federal employees. Thus, it is not possible to ascertain precisely how many contractors work for the

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[9]See the FedScope website: `https://www.fedscope.opm.gov/`.

government at any one point in time.

Having access to a less visible labor source can be an asset to presidents of both parties, who face pressure to avoid *publicly* growing a bureaucracy that is unpopular. Attitudes about government—and especially trust in government—have declined precipitously in recent decades. Today both Democrat and Republican partisans view government "as egregiously ineffective and inexcusably profligate" (Lerman, 2019, 49). Such attitudes make the use of contractor labor a politically convenient resource, since presidents can deploy contractors—and enhance agency capacity—without drawing attention to the growing federal workforce. In short, hiring contractors fits into the "fiction that Big Government does not grow if the civil service does not" (Guttman, 2004, 41).

Given this "fiction," contractors will be especially advantageous to presidents trying to accomplish agenda items during periods of divided government. Under divided government, opposition lawmakers often deploy their institutional powers to weaken the president (Kriner and Schickler, 2016; McCarty and Razaghian, 1999; Noble, 2023). Presidents respond in kind, including by taking actions that are less visible or less likely to garner attention (Djourelova and Durante, 2022; Kaufman and Rogowski, 2023). With respect to bureaucratic labor, adding more bureaucrats can attract unwanted attention during divided government, as eager Hill staffers and attentive interest groups can observe this executive action. One need only consider the concerted attention Republicans gave to Joe Biden's hiring of new Internal Revenue Service agents, or, conversely, Democrats afforded to Donald Trump's hiring of new border and immigration officers at the Customs and Border Protection agency to see how the outparty can weaponize the hiring of bureaucratic employees. With the exception of scandals, contractors rarely garner the same level of congressional interest.[10]

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[10]Indeed, there is another reason that Congress may ignore or be complacent about agencies' contractor use: contracts may be a form of distributive politics. Resh and Lee (2022) argue that a form of "contract patronage" exists and show that contracting patterns are responsive to changes in Senatorial and presidential leadership.

Put simply, visible growth in the bureaucracy can be used against the incumbent president: growing counts of federal workers can be used as evidence that the current administration is wasteful and bloated and less visible contractors simply do not afford the same opportunity to opponents. Further, contractors' reduced visibility may grant the executive greater latitude to engage in policy actions that are less subject to scrutiny and oversight by Congress.[11]

This argument about the president's strategic use of privatized personnel also has an implication for independent agencies; because independent agencies are not subject to the same level of presidential oversight, they do not provide the same fodder for the executive's personnel machinations. Independent agencies are structured to have less interference from the president and this design effectively buffers the ability of presidents to steer agency policy choices (Arel-Bundock, Atkinson and Potter, 2015). For example, the Merit Systems Protection Board does not submit its budget to the OMB for approval, but instead submits its budget directly to Congress. This takes away a key *control* lever by which the president maneuvers spending over agency policy choices (Pasachoff, 2015). And the structure of the Federal Communications Commission obviates the usefulness of contractor *speed*. That agency is directed by five commissioners, who serve staggered five-year terms, and who are subject to a party-balancing requirement (i.e., no more than three commissioners can be from the same political party); given the divergent time horizons, staffing up to align with the current president's policy needs is less critical.

The relative autonomy granted to independent agencies should free them from interbranch battles over personnel levels. And, given their freedom when it comes to budgeting, hiring, and labor decisions, they should be less likely to rely on contractors in

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[11]More cynically, these conditions may also motivate the executive to use contractors to skirt statutory legal protections enacted by Congress (Michaels, 2010, 734-739). Relative to bureaucrats, contractors face fewer legal constraints with respect to sunshine and ethics restrictions (Dooling and Potter, 2022). For instance, contractors are largely excluded from Freedom of Information Act laws and are used in some contexts to bypass accountability and anti-corruption laws (Rich, 2022).

the first instance; instead, their independence allows them to staff up to levels appropriate to the work they conduct.

Three testable hypotheses follow from the discussion above. The institutional design of bureaucratic agencies should affect how agencies approach outsourcing of bureaucratic labor. While independent agencies do rely on contractors to perform services, they are not subject to the same pressure from the executive. Therefore, they rely on contractor labor to a lesser degree, as suggested by the first hypothesis:

> *H1. Independence Hypothesis.* Independent agencies will rely on contractors less than executive branch agencies.

Executive agencies, however, are subject to influence by the president. And contractors can be politically expedient to presidents in those agencies as indicated in the next two hypotheses:

> *H2a. Prioritization Hypothesis.* Agencies that are prioritized by the president will rely on contractor hiring over bureaucratic hiring.

> *H2b. Divided Prioritization Hypothesis.* Under divided government, the preference for hiring contractors over bureaucrats will be magnified in agencies prioritized by the president.

Measuring Personnel Privatization

Testing these hypotheses requires a measure of the extent to which an agency allocated resources to services performed by contractors in a given year versus hiring bureaucrats (career civil servants or political appointees) to do the same work. An obvious way to do this would be to count the number bureaucrats and compare that to the number of federal contractors. Data on federal employees is readily available, either as a count of the total number of persons or on a FTE basis. However, there is not comparable data on contractors, nor is there a standardized, agreed upon way to calculate the number of

persons or person-hours devoted to federal contract work.[12]

Given these data limitations, I compare dollars to dollars: agency spending on service contractors to agency spending on personnel salary.[13] To begin, I collect data on contract spending for services from the Federal Procurement Data System-Next Generation (FPDS). The FPDS is the front end of the federal government's procurement database; contracting officers input data into the back end of this system each time a new contract is initiated or an existing contract is amended. To distinguish procurement purchases for products from procurement purchases for services I rely on the "Product and Service Code" for each entry; for each contracting action this code denotes whether the contract was for a product, research and development, or a service. There are hundreds of codes to classify the various types of purchases; for example, code "R422" indicates "Professional Support: Market Research/Public Opinion (includes: Telephone and Field Interviews, Focus Testing, and Surveys) (service)", whereas code "8340" indicates the purchase of "Tents and Tarpaulins" (product). After disaggregating spending to services and products,

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[12]There have been a handful of attempts to deduce the number of contractors employed in the federal service. By statute (U.S.C. §2330a(c)), the Department of Defense publishes an annual "Inventory of Contracted Services," which catalogs certain of the agency's contractor-provided services. Historically, the ICS has provided an estimate of contractor person-hours (i.e, an estimate of contractor FTEs). However, the estimates rely on contractor self-reports and do not follow a standardized methodology for calculating labor hours. As a result, the ICS—and other similar attempts—have been roundly criticized for their accuracy, thoroughness, and reliability (see, e.g., GAO, 2017; Moore et al., 2017). Light (2018) has also developed propietary estimates of the numbers of federal contractors. His estimates compare federal FTEs to the "induced employment" of contractors (i.e., using contract spending data to estimate the number of contractor FTEs).

[13]Throughout the paper, all dollar amounts are adjusted to reflect real 2020 dollars. Some previous work has studied contractor reliance by studying the proportion of total procurement spending over total agency spending allocated. While perhaps appropriate in some contexts, these measures do not distinguish between procurement spending for services versus products, nor do they distinguish between agency spending for personnel versus spending allocated to all manner of other activities (grants, capital assets, interest payments, etc).

I then sum service spending entries for every agency in every year.

I pair this with data on personnel salary. These are individual salary data from the Office of Personnel Management's Central Personnel Data File (CPDF), which I aggregate to the agency-year level. These salary data cover the vast majority of personnel in the executive branch, but exclude entries from the DoD. As a result, DoD is omitted from the analyses that follow; this is a departure from prior work that focuses primarily on that agency, but it allows for insight into how outsourcing functions across the broader administrative state. Additionally, because contract spending includes spending for employee benefits, I also estimate benefit spending for each agency in each year.[14]

Putting these elements together yields an agency-year measure of personnel privatization, as specified in Equation 1:

$$Privatization\ Ratio_{it} = \frac{\text{Contractor service spending}_{it}}{\text{Agency personnel spending}_{it} + \text{Agency benefit spending}_{it}} \quad (1)$$

where i indicates the agency and t indicates the year.[15] Larger values of the *Privatization Ratio* indicate that the marginal personnel dollar is spent on contractors, rather than bureaucrats; it ranges from 0 to 12.74, with a mean value of 0.78 (std dev = 1.57).

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[14]Specifically, I determine the percent of dollars spent on employee benefits relative to dollars spent on agency salary according to budget object classifications included in the president's annual budget request. Because these are reported only at the department level, I calculate a department rate (or for independent agencies, an independent agency rate) and apply that rate to the agency for the year in question.

[15]One important question in creating the *Privatization Ratio* is whether it is best measured at the department level or the bureau level. Either is theoretically possible, but data constraints counsel toward a higher level of aggregation. Some departments report procurement and salary at the bureau level, but others centralize data reporting (and perhaps also the agency's procurement and hiring functions). For example, the Department of Energy, the Department of State, and the Department of Veterans Affairs do not disaggregate any of the relevant data. Nor do independent agencies. Thus, I opt for a department-level analysis, which allows for apples-to-apples comparisons across the administrative state.

Figure 2 shows *Privatization Ratio* over time for a select set of agencies.

Figure 2: Privatization Ratio for Select Agencies
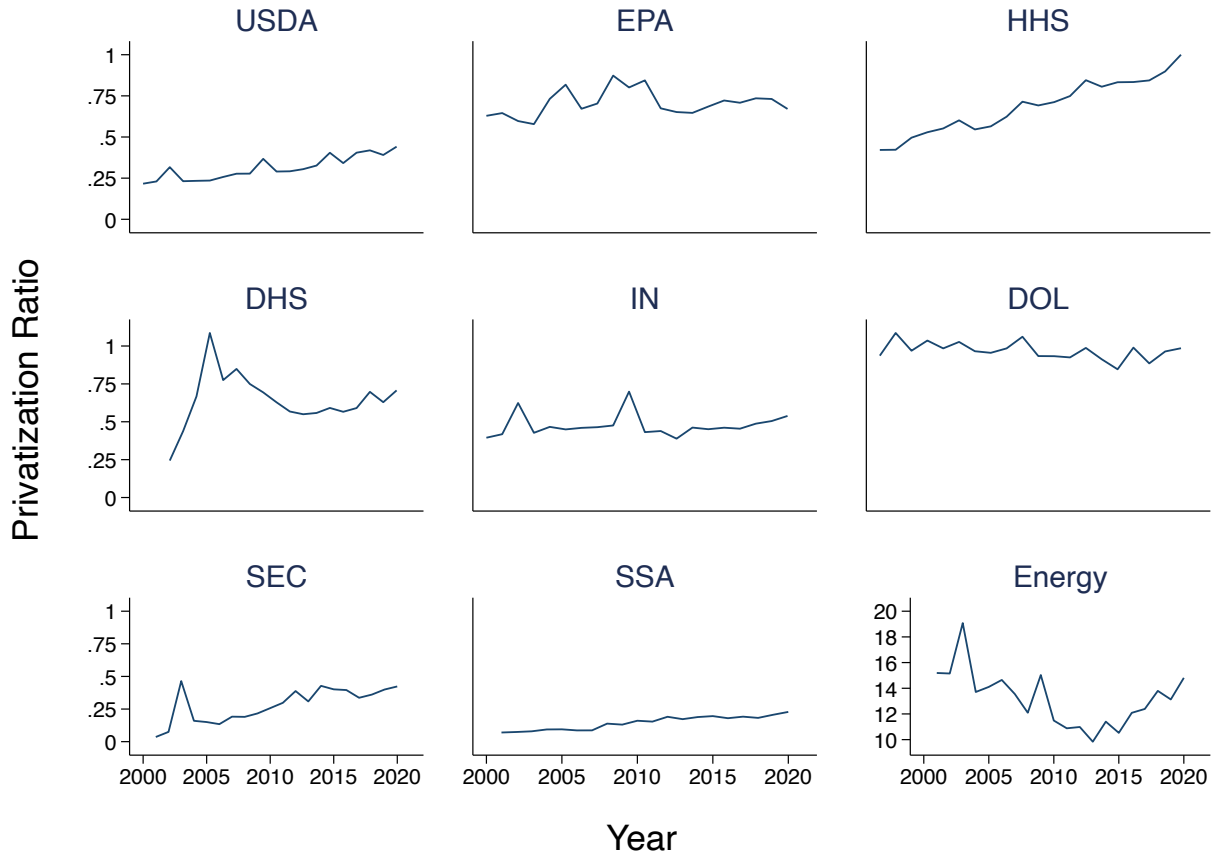
Notes: Figure shows values of *Privatization Ratio* for select agencies over time; larger (smaller) values indicate a bias towards contractors (bureaucrats). Agencies were selected for illustrative value and include: the Department of Agriculture (USDA); the Environmental Protection Agency (EPA); the Department of Health and Human Services (HHS); the Department of Homeland Security (DHS); the Department of the Interior (IN); the Department of Labor (DOL); the Securities and Exchange Commission (SEC); the Social Security Administration (SSA); and the Department of Energy. Note the different y-axis scaling for the Department of Energy.

Some agencies like the Department of Agriculture (USDA) and the Social Security Administration (SSA) maintained a relatively low level of personnel privatization over the time period under study (USDA mean = 0.31; SSA mean = 0.15). Meanwhile, other agencies have higher privatization ratios. For example, Verkuil (2017, 52) identifies both the Depart-

ment of Energy and the U.S. Agency for International Development as "contractor-driven agencies" and both have high privatization ratios (DOE mean = 13.20; USAID mean = 8.24).[16]

The *Privatization Ratio* time series spans 20 years (2001–2020). The measure captures the essential tradeoff between contractor and bureaucrat labor. However, like all quantitative measures of complex concepts, it is not without limitations. Notably, funds that go to service contractors can be directed to items beyond personnel salary, such as a firm's overhead or profit. Thus, contract spending is inflated, while the agency salary measure underreports spending on personnel, since it excludes funds allocated to unquantified personnel benefits like overtime and hazard pay. Despite these imperfections, both agency salary and service contract spending are highly correlated with the "true" value of this concept, were it possible to perfectly observe.

The first explanatory measure, *Independent*, captures whether or not an agency is considered independent from the executive. Historically, agency independence was considered a binary concept; however, recent scholars have conceptualized it along a continuum, with a variety of structural features determining where on the continuum a particular agency is located (e.g., Arel-Bundock, Atkinson and Potter, 2015; Selin, 2015). To evaluate the *Independent Agency* hypothesis I create a dichotomous measure of independence using two established measures of independence. Specifically, I code an agency as being independent if it scores among the upper quartile of Arel-Bundock, Atkinson and Potter's (2015) independence scores or the upper quartile of the first dimension of Selin's (2015) independence scores. This approach covers many agencies and allows for a clean hypothesis test, but it requires drawing a somewhat arbitrary cutoff; however, as I show in Table SI-2 the results are robust to the use of continuous measures.

I rely on two approaches to characterize whether an agency is a priority to the

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[16]Because the Department of Energy is an extreme outlier, I exclude it from most of the analyses in this paper; however, I consider the effects of this outlier later in Table SI-4.

president: money (budgets) and time (mentions in a speech). The first measure, *Policy Priority (Budget)* captures whether or not an agency's capacity is, financially speaking, in an expansion mode. Building on Kinane's (2021) budget-based measure of whether an agency is a priority, I create a ratio of an agency's current budget request to the average of the prior two fiscal year's requests.[17] Larger values indicate that the agency (and the president) are asking for a larger budget compared to that agency's historical record (i.e., the agency is a priority); values closer to zero and negative values indicate that the agency is less of, or not, a priority. Budgets are a particularly useful way to evaluate agency prioritization in the context of personnel privatization. A growing agency budget can indicate a demand for increased person-power, but it does not indicate how this labor should be allocated.

For a second measure of agency prioritization, I turn to State of the Union (SOTU) addresses. The president chooses which policy areas to highlight in this annual address before Congress and the nation; some policy problems are brought up because some exogenous shock has made an issue salient to the country and others are mentioned because the president has put the issue on their agenda. Either way, the policy issues that are covered in the SOTU map out the agenda for presidential attention in a given year. To link agencies to the SOTU, I begin by matching an agency's primary policy focus with one of the 23 major topic areas defined by the Policy Agendas Project (Jones, 2019). The Policy Agendas Project codes each SOTU according to these topics at the sub-sentence level. For each agency-topic-year, I then count the number of mentions by the president in that year's SOTU. The resulting variable *Policy Priority (SOTU)* is coded as "1" if the agency's topic area had an above average numer of mentions in that year's SOTU, and "0" otherwise.

To evaluate how personnel staffing responds to the political environment, I code instances of divided government. The variable *Divided* is an indicator that represents partisan conflict between the executive branch and Congress. Finally, in some model

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[17]My approach differs slightly in that Kinane (2021) takes the additional step of breaking these requests into three categories (expansion, neutral, and contraction).

specifications I include three control variables related to the fiscal and political climate an agency faces. First, *Spending % GDP* controls for the level of overall spending by the federal government in a year compared to the level of economic growth. Second, *Product Spending (ln)* measures the logged amount of procurement spending in agency i in year t, since the amount of money flowing through the agency's procurement pipeline for products may also affect service spending. Third, *Election Year* is a dichotomous indicator that takes a value of one in years when there is a presidential election. Descriptive statistics for all model variables are included in Table SI-1.

Evaluating the Role of Agency Independence

Do independent agencies rely on contractors to a lesser degree than executive agencies? Figure 3 plots the *Privatization Ratio* for both executive agencies and independent agencies. Visually this figure seems to provide preliminary support for the independence hypothesis, as independent agencies appear more biased toward bureaucrats, with the *Privatization Ratio* falling below one more frequently for those agencies than for executive agencies. This pattern persists for the entirety of the time period under study.

Figure 3: Personnel Privatization in Executive & Independent Agencies

Notes: Red dashed line indicates a ratio of one; values of the *Privatization Ratio* greater than one suggest a bias towards contractors over bureaucrats. Independent agencies tend to fall below the one line; executive agencies exhibit greater heterogeneity in personnel privatization.

This visual finding is further supported by the analysis in Table 1, which shows OLS models with the *Privatization Ratio* as the dependent variable. The unit of analysis is the agency-year; standard errors are clustered on the agency level.[18] As expected, the sign for *Independent* is negative and statistically significant, suggesting that independent agencies are less contractor-reliant than their executive counterparts with the marginal personnel dollar more likely to go to a bureaucrat than a contractor at those agencies. This finding holds in a baseline bivariate specification (Model 1), as well as with the addition

[18]I do not include agency fixed effects in these specifications, since the agency independence measure does not vary within agency.

of administration fixed effects (Model 2) and the addition of control variables (Model 3). In the preferred specification (Model 2), the ratio of contractor to bureaucrat reliance is reduced by 0.96 for independent agencies, which is almost two-thirds of a standard deviation in the dependent variable.

Table 1: Linear Regression Models of Personnel Privatization in Independent & Executive Agencies

	(1) Privatization Ratio	(2) Privatization Ratio	(3) Privatization Ratio
Independent	-0.957**	-0.961**	-0.608*
	(0.292)	(0.292)	(0.254)
Observations	1,352	1,352	904
R-squared	0.091	0.098	0.188
Number agencies	72	72	47
Administration FE	NO	YES	YES
Controls	NO	NO	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Privatization Ratio*, where larger (smaller) values indicate a greater reliance on contractors (bureaucrats). Robust standard errors clustered at the agency level are in parentheses. Two-tailed tests: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. FE = fixed effect.

Overall, these empirical results provide confirmation for the *Independence Hypothesis*. Building on this finding, in the next section exploring the effects of presidential prioritization on privatization levels, I restrict the analysis to executive branch agencies only, since these are the agencies most susceptible to presidential influence.

Evaluating the Role of Agency Prioritization

Turning to the next set of hypotheses, I assess the relationship between the president's prioritization of an agency and the level of contractor reliance. Again I estimate linear regression models of the *Privatization Ratio*, with standard errors clustered by agency. In alternate specifications, I include the two measures of agency prioritization: *Policy*

Priority (Budget) and *Policy Priority (SOTU)*. All models include agency fixed effects and administration fixed effects; this approach holds constant agency- and administration-specific factors, allowing for the evaluation of changes in prioritization within an agency over time.

Table 2 reports the results. Models 1–4 evaluate the prioritization hypothesis (H2a); the preferred specifications are Models 3 and 4. In Model 3, when an agency experiences a change in its budget from one standard deviation below the mean to one standard above the mean, the *Privatization Ratio* is expected to increase by 0.22. And, in Model 4, having an above average number of mentions in that year's SOTU is expected to result in an upward shift of 0.20. While these are not large effects by the scale of the *Privatization Ratio*, they nonetheless represent swings of millions of dollars being given to private contract firms. Overall the results are consistent with the idea then when a president needs to build capacity in a priority agency, contractors are often the first line of defense.

Table 2: Linear Regression Models of Personnel Privatization & Presidential Priorities

	(1) Priv. Ratio	(2) Priv. Ratio	(3) Priv. Ratio	(4) Priv. Ratio	(5) Priv. Ratio	(6) Priv. Ratio
Policy Priority (Budget)	0.364*** (0.077)		0.353*** (0.080)		0.215*** (0.033)	
Policy Priority (SOTU)		0.191* (0.077)		0.201* (0.085)		0.146 (0.109)
Policy Priority (Budget) × Divided					0.357* (0.149)	
Policy Priority (SOTU) × Divided						0.086 (0.112)
Divided Govt					-0.324 (0.176)	0.042 (0.048)
Observations	362	755	362	755	362	755
R-squared	0.084	0.043	0.092	0.068	0.102	0.069
Number of Agencies	19	38	19	38	19	38
Administration FE	YES	YES	YES	YES	YES	YES
Agency FE	YES	YES	YES	YES	YES	YES
Controls	NO	NO	YES	YES	YES	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Privatization Ratio*, where larger (smaller) values indicate a greater reliance on contractors (bureaucrats). Executive agencies only. Robust standard errors clustered at the agency level are in parentheses. Executive agencies only. Two-tailed tests: * p<0.05, ** p<0.01, *** p<0.001. FE = fixed effect.

Next, in Models 5 and 6 I focus on the effect of divided government on prioritization (H2b). The results show mixed support for the argument that under divided government prioritized agencies spend the marginal personnel dollar on contractors rather than bureaucrats. In Model 5, the interactive relationship between *Divided* and *Policy Priority (Budget)* is positive and the coefficient is statistically significant, as expected; Figure 4 further unpacks this results. It shows the marginal effects of divided government on agencies across the span of requested budget increases (or decreases); as an agency experiences greater budget expansion (i.e., it is more highly prioritized by the president), the privatization ratio is predicted to increase. Agencies that are deprioritized (i.e., are subject to

contraction) are more likely to rely on bureaucratic labor. This result is consistent with the hypothesized relationship between presidents, contractors, and and the political environment. However, turning to Model 6, the relationship between divided government and the SOTU priority measure is positive as expected, but does not achieve statistical significance.

Figure 4: Marginal Effects of Divided Government and Policy Priority (Budget)
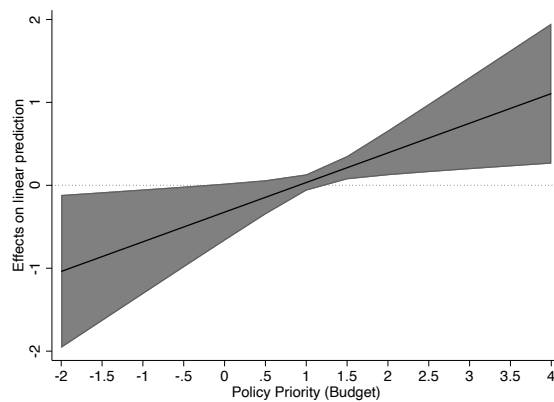
Notes: Figure shows the marginal effect of divided government on *Policy Priority (Budget)* from Model 5 in Table 2. Bars indicate 95% confidence intervals. Shaded area indicates 95% confidence intervals.

Stepping back, these results suggest that political factors guide personnel decisions about how to manage labor in executive agencies. The appendix includes a series of additional robustness checks, three of which I highlight here. First, I address time-specific factors by including cubic time polynomials, a flexible way to account for temporal variation and secular growth in outsourcing levels over time (Table SI-3). Second, I include the Department of Energy in the analyses (Table SI-4), which was excluded due its outlier status. Third, I reestimate the models in Table 2 on independent agencies only (see Table SI-5), demonstrating that the political mechanisms only meaningfully manifest in executive agencies.
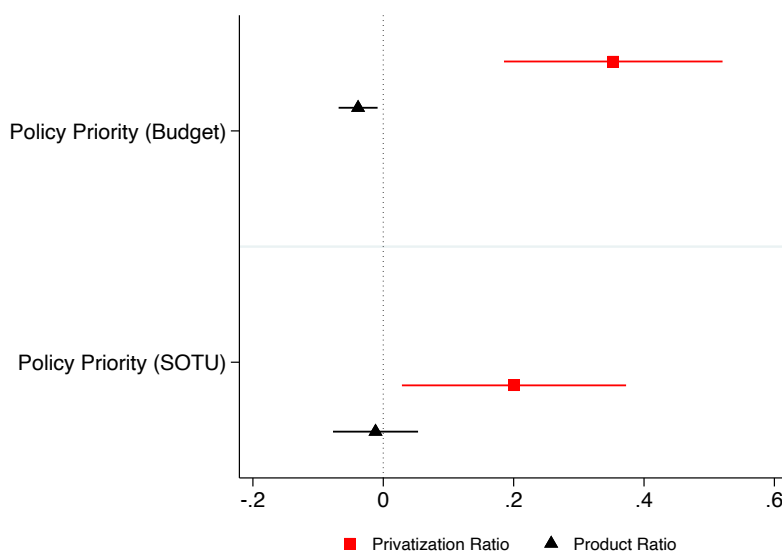
Testing an Alternate Mechanism

In order to increase confidence in the proffered mechanism, I apply further scrutiny to the argument by considering an alternate argument about procurement spending patterns. One critique of the findings about personnel privatization is that procurement spending might plausibly move in tandem with political factors for reasons that are orthogonal to the arguments made above. That is, political factors might move *all* procurement spending, making the effect on spending on contractor services epiphenomenal. Adopting the logic outlined above, where contracted labor helps presidents pursue policy objectives and avoid the appearance of "growing big government," the same effects should *not* manifest among purchases of products, which do not offer the same returns.

To evaluate this, I conduct a placebo population test, or "a test that replicates the core analysis in a different population" (Eggers, Tuñón and Dafoe, 2021, 4). Specifically, I calculate the *Product Ratio*, an agency's annual procurement spending on products—that is, the toilet paper, tents and tarpaulins, and tankers that are obtained for the government from the private sector—compared to agency personnel spending. Specifically, this is estimated as:[19]

$$Product\ Ratio_{it} = \frac{\text{Procurement product spending}_{it}}{\text{Agency personnel spending}_{it} + \text{Agency benefit spending}_{it}} \tag{2}$$

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[19]Similar results are obtained using logged spending on product procurement as the dependent variable.

Figure 5: Product Ratio Placebo Test

I then reestimate Models 3 and 4 in Table 2, substituting the *Product Ratio* for the *Privatization Ratio*. If procurement product spending is politically driven in the same ways as spending for service contracts, then the *Policy Priority (Budget)* and *Policy Priority (SOTU)* coefficients should both be positive and statistically significant. However, as the results in Figure 5 show (full model results are shown in Table SI-6), neither variable meets this expectation. *Policy Priority (Budget)* is negative and statistically significant, while *Policy Priority (SOTU)* is negative but not statistically significant. The overall takeaway then from this analysis is that the political effects outlined above do not apply to all types of government or procurement spending, but rather speak directly to service spending.

Conclusion

The decision to outsource government services is often construed as a matter of cost savings or efficiency gains—even though contractors are not necessarily a more ef-

ficient supplier of services, in terms of cost or speed. This emphasis on efficiency and administration obscures the political roots of many decisions involving contract labor. Far from a rounding error or an administrative detail, contractors are central to the contemporary bureaucracy. The current equilibrium of the federal workforce consists of a mix of bureaucrats and contractors, a setup that affords the president an opportunity to grow the executive branch in different ways. Bureaucrats are long-term additions that are highly visible, while contractors are relatively quick-adds that are not readily observable or countable. Because of this, presidents can deploy the workforce in strategic ways that enhance executive power.

Using a novel measure of the extent to which agencies are staffed by contractors rather than bureaucrats—the privatization ratio—I show that the different features associated with bureaucrats and contractors have at least two political implications for the executive. First, the tendency to use contractor labor over bureaucratic labor is exacerbated during divided government—but only for agencies that where the executive has agreed to allocate an increased budget for the agency. I show that these same effects do not manifest for independent agencies, suggesting that contractors are part of a broader strategic interaction between the Article I and Article II branches. I bolster these findings by considering whether these same political effects manifest in another type of procurement spending: spending on products. They do not, suggesting that the political effects I pinpoint are about services and their impact on the administrative state.

There are major implications to managing a government workforce in these ways. Most directly, the *total* federal workforce is much larger—and stealthier—than most observers realize. The size of the federal workforce the president oversees is much larger than the number of career civil servants that appear on paper. This means that the implementation capabilities of the executive are much greater than they seem, which is potentially troubling amid larger concerns about the aggrandizement of executive power. Notably, the analyses in this paper excludes the Department of Defense, the agency which receives

the most attention in conversations about outsourcing, suggesting a much larger pattern of influence for contractors. Further, in an age of extreme partisan polarization, some scholars have argued that bureaucrats serve as an effective bulwark against the partisan and politicizing forces of the presidency (Moynihan, 2022; Roberts, 2021). Contractors throw a wrench into this logic—because they serve in an "at will" capacity, they are eager to please the current leadership. Additionally, contractor turnover is high under new administrations suggesting there may be a trend towards "partisan procurement" (Dahlström, Fazekas and Lewis, 2021). Put simply, contractors may allow presidents to avoid the democratic protections imposed by a merit-based bureaucracy.

There are consequences for the labor market too. Although private sector contractors are often assumed to be higher paid than career bureaucrats, this is not always the case. Private sector workers have less job security than career civil servants. For example, during government shutdowns, contractors are the first to be furloughed (Sherman, 2019) and their contracts may not be renewed when government reopens. The result then is that contractors face more uncertainty than bureaucrats, a feature which, in turn, drives some of the differences in workplace incentives between the two types of labor discussed earlier. These repercussions span beyond the federal labor workforce, as outsourcing is an issue that extends to state and local governments (Potter, 2022).

Finally, extensive reliance on contractors invites more money to the political table. Entire literatures are devoted to understanding the implications of money in American politics, but this work is largely focused on campaign finance and lobbying and is centered on Congress. Having contractors do the work of bureaucrats opens the door to other types of influence, such as self-dealing for contractors who help agencies make policy decisions and then use that private information for financial advantage. Scholars should consider the inroads for political influence that service contractors have carved within the executive—and how such pathways might diverge from more traditional (and more observable) avenues for influence.

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Supporting Information

to accompany

Privatizing Personnel:
Bureaucratic Outsourcing & the Administrative Presidency

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A. Data Summary

Table SI-1: Descriptives Statistics for Model Variables

Variable	Mean	Std Dev	Min	Max
Privatization Ratio	0.783	1.572	0	12.737
Product Ratio	0.197	0.350	0	3.360
Independent	0.442	0.497	0	1
Policy Priority (Budget)	1.009	0.326	-2	4
Policy Priority (SOTU)	0.366	0.482	0	1
Divided	0.551	0.498	0	1
Spending % GDP	21.238	2.899	18.110	31.400
Product Spending (ln)	20.048	2.072	14.948	24.073
Election Year	0.251	0.434	0	1

B. Approach to Data Collection and Cleaning

B1. Interview Protocol

Throughout this paper, I quote from interviews conducted with 45 agency officials, contractors, and experts, all of whom were familiar with agency budgeting or agency contractor use for high-level services. These interviews were conducted from June 2021–January 2022 as part of a project on "Contractors in Rulemaking" commissioned by the Administrative Conference of the United States (ACUS) and approved by the University of Virginia's Institutional Review Board (UVA IRB-SBS #4467). Interviews were conducted jointly with a collaborator (Bridget Dooling, George Washington University) via Zoom or phone and were approximately one hour long. To protect interview subjects' anonymity and to be

consistent with the protocols established with IRB, I use gender neutral pronouns and do not identify the agency with which respondents are affiliated. I follow the standardized interview numbering protocol established in Dooling and Potter (2022).

B2. Coding Personnel Data

Personnel salary data were obtained from the Office of Personnel Management's (OPM) Central Personnel Data File (CPDF). To gauge bureaucratic salary spending, I aggregate salaries across all employees for each agency and each year. However, OPM redacts salary data for select personnel in sensitive or national security positions. While all agencies have redactions, some sensitive agencies (e.g., the Federal Bureau of Investigation) have proportionally more. To overcome this limitation, I impute the salary for redacted employees, supplanting the missing information with the mean salary for the individual's position and grade or, if those values are also redacted, the mean salary for employees in that agency. As noted in the text, the Department of Defense is excluded from the OPM salary data. I also exclude the Consumer Financial Protection Bureau from the analysis, since it did not report salary data for many years after it was created and the values for the years it did report were implausibly low (e.g., resulting in a *Privatization Ratio* greater than 400).

B3. Coding Procurement Spending Data

The data on procurement spending were obtained from the Federal Procurement Data System–Next Generation (FPDS, available online at www.usaspending.gov). The FPDS is the front end of the federal government's procurement database; contracting officers input data into the back end of this system each time a new contract is initiated or an existing contract is amended. This means that a new entry is created in the FPDS every time a contracting action occurs—from a vendor's change of address to the initiation of a multi-million dollar contract. The FPDS data begin in 2001; although there was an antecedent version of the FPDS that existed dating back to 1979, that version was less detailed and

prone to errors.

To distinguish products from services I rely on the "Product and Service" code for each entry; this variable is inputted for each contract award and denotes whether the contract was for a product, research and development, or a service. There are hundreds of codes for each type of action; for example, code "R422" indicates "Professional Support: Market Research/Public Opinion (includes: Telephone and Field Interviews, Focus Testing, and Surveys)" (service), whereas code "8340" indicates the purchase of "tents and tarpaulins" (product). After disaggregating spending to services and products, I then sum service spending entries for every agency in every year. I exclude deobligated funds from the totals, since the intent of the measure is to capture positive decisions about where to allocate monies.

C. Robustness Checks

Table SI-2: Independence Models Using Alternate Measures of Agency Independence

	(1) Privatization Ratio	(2) Privatization Ratio	(3) Privatization Ratio	(4) Privatization Ratio
AAP Independence	-2.053**		-1.216	
	(0.674)		(0.766)	
Selin Decision Independence		-0.431**		-0.016
		(0.158)		(0.188)
Selin Political Independence		-0.227		-0.335*
		(0.121)		(0.165)
Agency Ideology			-0.558	-0.463
			(0.347)	(0.334)
Spending % GDP			0.016	0.015
			(0.012)	(0.011)
Product Spending (ln)			0.051*	0.061**
			(0.024)	(0.022)
Election Year			-0.061	-0.064
			(0.067)	(0.065)
Observations	1,163	1,204	873	893
R-squared	0.108	0.127	0.185	0.205
Number of Agencies	60	64	45	46
Administration FE	YES	YES	YES	YES
Controls	NO	NO	YES	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Privatization Ratio*, where larger (smaller) values indicate a greater reliance on contractors (bureaucrats). Robust standard errors clustered at the agency level are in parentheses. Two-tailed tests: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. FE = fixed effect.

Arel-Bundock, Atkinson and Potter (2015) create a one dimensional continuous measure of agency independence ranging from 0 (more dependent) to 1 (more independent). Selin's (2015) measures of agency independence incorporate 50 agency traits. Specifically, she uses a Bayesian latent variable model to identify two dimensions of agency independence: decision-maker independence and policy independence, which range from just below zero (more dependent) to almost four (more independent).

Table SI-3: Evaluating Prioritization with Cubic Time Polynomials

	(1) Priv. Ratio	(2) Priv. Ratio	(3) Priv. Ratio	(4) Priv. Ratio	(5) Priv. Ratio	(6) Priv. Ratio
Policy Priority (Budget)	0.382*** (0.066)		0.377*** (0.066)		0.234*** (0.029)	
Policy Priority (SOTU)		0.175* (0.070)		0.194* (0.082)		0.140 (0.109)
Policy Priority (Budget) × Divided					0.356* (0.149)	
Policy Priority (SOTU) × Divided						0.098 (0.122)
Divided Govt					-0.366* (0.151)	-0.025 (0.042)
Observations	362	755	362	755	362	755
R-squared	0.103	0.051	0.110	0.073	0.119	0.074
Number of Agencies	19	38	19	38	19	38
Time Polynomials	YES	YES	YES	YES	YES	YES
Agency FE	YES	YES	YES	YES	YES	YES
Controls	NO	NO	YES	YES	YES	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Privatization Ratio*, where larger (smaller) values indicate a greater reliance on contractors (bureaucrats). Executive agencies only. Robust standard errors clustered at the agency level are in parentheses. Two-tailed tests: * p<0.05, ** p<0.01, *** p<0.001. FE = fixed effect.

Table SI-4: Linear Models of Privatization Ratio, Including the Department of Energy

	(1) Priv. Ratio	(2) Priv. Ratio	(3) Priv. Ratio	(4) Priv. Ratio	(5) Priv. Ratio
Independent	-1.270**				
	(0.419)				
Policy Priority (Budget)		0.328**		0.215***	
		(0.096)		(0.033)	
Policy Priority (SOTU)			0.144		0.117
			(0.097)		(0.109)
Policy Priority (Budget) × Divided				0.268	
				(0.219)	
Policy Priority (SOTU) × Divided					0.042
					(0.118)
Divided Govt				-0.305	0.026
				(0.224)	(0.049)
Spending % GDP		0.022	0.019	0.023	0.020
		(0.015)	(0.017)	(0.014)	(0.017)
Product Spending (ln)		0.187	0.057	0.189	0.056
		(0.194)	(0.029)	(0.198)	(0.029)
Election Year		-0.082	-0.084	-0.071	-0.098
		(0.071)	(0.081)	(0.047)	(0.072)
Observations	1,372	382	775	382	775
R-squared	0.086	0.057	0.055	0.060	0.055
Number of Agencies	73	20	39	20	39
Administration FE	YES	YES	YES	YES	YES
Controls	NO	YES	YES	YES	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Privatization Ratio*, where larger (smaller) values indicate a greater reliance on contractors (bureaucrats). Executive agencies only. Robust standard errors clustered at the agency level are in parentheses. Two-tailed tests: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. FE = fixed effect.

Table SI-5: Evaluating Prioritization on Independent Agencies Only

	(1) Privatization Ratio	(2) Privatization Ratio	(3) Privatization Ratio
Policy Priority (SOTU)	0.014	0.006	-0.057
	(0.024)	(0.024)	(0.095)
Divided Govt			0.010
			(0.025)
Policy Priority (SOTU)			0.084
× Divided			(0.116)
Observations	597	597	597
R-squared	0.092	0.172	0.179
Number of OPM2	34	34	34
Administration FE	YES	YES	YES
Agency FE	YES	YES	YES
Controls	NO	YES	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Privatization Ratio*, where larger (smaller) values indicate a greater reliance on contractors (bureaucrats). Independent agencies only. Robust standard errors clustered at the agency level are in parentheses. Two-tailed tests: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. FE = fixed effect.

Table SI-6: Evaluating Prioritization with Product Ratios

	(1) Product Ratio	(2) Product Ratio	(3) Product Ratio	(4) Product Ratio	(5) Product Ratio	(6) Product Ratio
Policy Priority (Budget)	-0.029 (0.017)		-0.039* (0.014)		-0.021* (0.009)	
Policy Priority (SOTU)		-0.014 (0.032)		-0.012 (0.032)		-0.019 (0.059)
Policy Priority (Budget) × Divided					-0.048*** (0.009)	
Policy Priority (SOTU) × Divided						0.015 (0.051)
Divided Govt					0.026 (0.021)	-0.016 (0.017)
Observations	362	755	362	755	362	755
R-squared	0.016	0.012	0.047	0.020	0.428	0.055
Number of Agencies	19	38	19	38	19	38
Administration FE	YES	YES	YES	YES	YES	YES
Agency FE	YES	YES	YES	YES	YES	YES
Controls	NO	NO	YES	YES	YES	YES

Notes: Table entries are OLS coefficients. The dependent variable is *Product Ratio*, where larger (smaller) values indicate a greater reliance on products (bureaucrats). Executive agencies only. Robust standard errors clustered at the agency level are in parentheses. Two-tailed tests: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. FE = fixed effect.