

ORIGINAL ARTICLE

A foot out the door: what drives bureaucratic exit into lobbying careers?

Alexander Bolton¹ and Joshua McCrain² 

¹Emory University, Atlanta, GA, USA and ²University of Utah, Salt Lake City, UT, USA
Corresponding author: Joshua McCrain; Email: josh.mccrain@utah.edu

(Received 6 May 2022; revised 17 February 2023; accepted 15 June 2023)

Abstract

The revolving door is a potential mechanism of private influence over policy. Recent work primarily examines the revolving of legislators and their staff, with little focus on the federal bureaucracy. To analyze decisions to turnover into lobbying, we develop an argument emphasizing the (1) policy expertise acquired from federal employment; (2) the proximity of employees to political decision-making; and (3) the agency policymaking environment. Leveraging federal personnel and lobbying data, we find the first two factors predict revolving whereas the policymaking environment has an inconsistent impact. We highlight the importance of studying selection into lobbying for estimating casual effects of lobbyist characteristics on revenue and contribute to the literature on bureaucratic careers and the nature of private influence in policymaking.

Keywords: American politics; political economy; public policy

Lobbying is an activity through which private interests can impact the policymaking process. In 2020 alone, groups spent nearly \$3.5 billion lobbying Congress and the executive branch. Lobbying accounts for the largest portion of firm involvement in the political process, dwarfing the amounts spent in electoral politics (Milyo *et al.* 2000; Ansolabehere *et al.* 2003; Bonica 2016). Lobbying activity naturally generates questions among scholars and political observers about who lobbyists are, when they lobby, how they influence the policy process, and whether they are able to skew policies away from the public interest.

Of particular interest are revolving door lobbyists—that is, individuals who move from lobbying into government or vice versa. In the most pernicious telling, agents of industry are invited into government and shape policies counter to the public interest while other employees are incentivized to do the same in hopes of lucrative post-government jobs. Government employees-turned-lobbyists trade on their connections and expertise to gain access to policymakers that ordinary citizens never could. Whether these normative nightmares are reality is a subject of considerable debate, but there is little debate about the ubiquity of the revolving door phenomenon. In this paper, we analyze executive branch employees that turnover into the lobbying profession. This focus both illuminates the dynamics of revolving in an understudied venue and highlights features of the selection process into lobbying that should be accounted for in studies attempting to discern its effects.

Two examples from our dataset illustrate common revolving door dynamics. In 2009, Stephanie Murphy was appointed by President Obama as the Director for Agricultural Affairs in the Office of the US Trade Representative, where she stayed until 2014. She subsequently joined Monsanto as a Director for Government Affairs and registered as a lobbyist. A similar

case is that of Chris Bertram, appointed by Obama to be the Assistant Secretary for Budget and Programs for the Department of Transportation, where he oversaw all matters associated with the department's budget. After leaving federal service, he started a lobbying firm specializing in airline and railroad regulatory policy.

Such stories are common in both congressional and bureaucracy revolving door lobbying. However, although a growing scholarly literature examines the careers and lobbying behavior of former congressional members and staffers (e.g., Blanes *et al.* 2012; Cain and Drutman 2014; McCrain 2018; Shepherd and You 2020), comparatively little research studies the factors driving the revolving door in the executive branch. This is notable given the prevalence of executive branch lobbying and lobbying after the passage of legislation (e.g., De Figueiredo and Tiller *n.d.*; Dwidar 2022; Haeder and Yackee 2015; You 2017; Ban and Young You 2019). Moreover, there are reasons to expect the dynamics of revolving differ for executive employees. Their relatively long-lived careers and specialized experiences contrast with the shorter tenures, more general issue portfolios, and lower average salaries for congressional staff (which are frequently cited as the reason staff look to leave Capitol Hill—see, e.g., Congressional Management Foundation 2012). Linking literatures on the careers and activities of executive branch employees and lobbying firms and clients, we develop an account of employee career concerns focused on three factors to understand which employees are most likely to lobby after leaving government: (1) the expertise and experience acquired in their jobs; (2) their proximity to political decision-making in agencies; and (3) the policy activity in their agencies during their tenure.

To evaluate the correlation of each factor with turnover into lobbying, we leverage and combine several data sources to study the post-government employment of executive branch employees covered by the Lobbying Disclosure Act in the George W. Bush and Obama administrations. This group of employees (called “covered” employees) is a well-defined population within government and is legally mandated to disclose their previous governmental positions when filing lobbying reports.¹ Covered employees are a mix of political appointees and career officials responsible for developing, shaping, and administering public policy across the government. Understanding their career incentives is vital for questions of government capacity and reforms related to the revolving door. From this population of over 15,000 bureaucrats, we identify 692 unique lobbyists, about 6.5 percent of all covered employees that exit the government in this time frame. However, for some agencies a significant portion of their total workforce ultimately register as lobbyists. For example, about 19 percent of all covered Office of the US Trade Representative employees that exit during the years of our study become registered lobbyists.

We uncover several empirical regularities confirming aspects of the theoretical argument. Individuals with more experience and technical expertise and that served higher in the administrative hierarchy are most likely to become lobbyists. We also find evidence suggesting the importance of political experience in driving lobbying choices: ex-political appointees, former Executive Office of the President employees, and individuals with experience in agency headquarters are more likely to lobby. Thus, proximity to political decision-making and agency leadership appear valued by lobbying clients. We also find less consistent evidence linking turnover into lobbying and agency policy activity, though the results generally suggest greater regulatory activity during an individual's tenure increases the likelihood of turnover into lobbying. These findings persist even when taking into account the multiple exit choices that confront bureaucrats in any given year (i.e., stay in government, exit into lobbying, exit into other industries).

Overall, these analyses provide insights into the dynamics of the revolving door in the executive branch. Numerous studies examine the turnover behavior of public employees, identifying factors that make them more and less likely to leave government at any point in time. Most of this research is unable to track the post-government employment decisions of these employees.

¹Compliance with this mandate is relatively high. GAO estimates about 81 percent of former covered officials include the required information. See: <https://www.gao.gov/assets/gao-19-357.pdf>.

This is problematic given, as we show, factors determining turnover may depend on the post-government career options employees choose. Additionally, our results suggest the selection into lobbying is tied to many factors also thought to impact value within the lobbying industry, which has implications for interpreting previous results in the literature. For example, empirical models of the value of lobbying connections may yield biased estimates when ignoring the process that drives selection into lobbying. Better understanding the factors related to which employees go into lobbying (and their correlations with common measures of expertise and connections) is essential for analysts seeking to estimate what drives lobbyist value.

1. Background and theoretical framework

Previous work on revolving door lobbying centers on (1) whether post-government employment incentives affect policymaking (Gormley 1979; Cohen 1986; Che 1995; de Haan *et al.* 2015; Shepherd and You 2020); and (2) the characteristics of lobbyists that are valuable to their clients, with a particular focus on the relative role of expertise and connections (e.g., Blanes *et al.* 2012; Bertrand *et al.* 2014; McCrain 2018). Less attention has been paid, however, to the individual- and agency-level factors that contribute to individuals' propensity to turnover from the public service into lobbying.

Although scholars have to some degree probed the correlates of turning over into lobbying for members of Congress and their staffers (e.g., Cain and Drutman 2014; Lazarus *et al.* 2016; Egerod 2021), less is known about the executive branch revolving door and the selection of former officials into post-government lobbying careers. Some studies (e.g., LaPira and Thomas 2017) do include samples of executive branch lobbyists from specific time frames, but they tend to focus on their lobbying behavior rather than their selection into lobbying. Previous work also tends to look at executive branch employees as a single group or divides them along coarse lines (e.g., White House staff versus every other agency), which precludes fine-grained analyses of agency- or policy-level factors that might influence the decision to revolve (or the value of lobbyists to firms).

Moreover, there are reasons to suspect the dynamics of revolving differ for congressional and executive employees: executive branch officials tend to be older than congressional staffers, serve in government for longer (especially career employees),² and have more focused policy experiences. A long line of related work examines turnover decisions in the US executive branch (e.g., Doherty *et al.* 2019; Richardson 2019; Bolton *et al.* 2021); however, these studies typically neglect the question of what employees do after leaving government.

While it is ultimately the decision of bureaucratic officials as to whether or not they turnover into lobbying, their calculus depends substantially on the needs of lobbying clients and firms seeking to hire ex-federal employees. What these actors value has implications for the expected returns a former bureaucratic official can reap. To be sure, bureaucrats will consider many factors in their turnover decision-making—including the value they place on public service, their ability to influence policymaking in the agency versus in the private sector, and the policies an administration actually wants them to work on (see, e.g., Bolton *et al.* 2021). On the margins, however, their decisions will be influenced by their outside options. For this reason, we center our theoretical framework on what lobbying firms and clients value from former employees, as this will impact federal employees' decision-making, all else equal.

In general, the literature highlights two sources of lobbyist value. First, connections to current policymaking officials help lobbyists “get their foot in the door,” allowing them to disseminate policy information to resource-constrained policymakers (Austen-Smith and Wright 1992, 1994; Schnakenberg 2016). Personal relationships may also be valuable in engendering trust

²McCrain (n.d.) finds that only 50 percent of congressional staff have careers longer than two years. The Office of Personnel Management reports that over 50 percent of executive branch employees have careers longer than 13 years.

between lobbyists and their targets, facilitating lobbyists' ability to "subsidize" policymakers' efforts (e.g., Hall and Deardorff 2006). Second, the literature emphasizes the importance of expertise in the lobbying process. Lobbyists with greater policy knowledge and understanding of the policy process will be better able to generate relevant persuasive information, present it credibly to policymakers, and provide "insurance" to clients (Blanes *et al.* 2012; Bertrand *et al.* 2014; LaPira and Thomas 2017; Ban *et al.* 2019). Conceptually, connections and expertise are distinct, but in reality they likely reinforce one another and mutually contribute to the value a lobbyist brings to their clients. By studying who enters into lobbying, their backgrounds, and when they choose to become a lobbyist we can glean insights into specific aspects of individuals' experiences in government that may, taken together, comprise the concepts of expertise and connections emphasized in previous work. This of importance not just for understanding the question of who becomes lobbyists but also for understanding their subsequent actions and value. In the discussion section, we argue that researchers must take into account the decision to enter into lobbying—the selection stage—if their objective is to analyze what predicts individual lobbyist behavior.

We consider three sets of attributes that may enhance connections and expertise and thus increase the value of employees to lobbying firms and revolving at the margins: individual human capital, personal proximity to political leadership, and the policy activity of the agency in which they work. The boundaries between these three categories are clearly porous, but they nonetheless serve as useful conceptual buckets for considering the different types of assets valued by lobbying clients. We now consider each in turn.

1.1 Policy- and agency-centered experience and expertise

First, we discuss the policy- and agency-centered experience and expertise that may make former employees valuable lobbyists. This includes a variety of factors, including both knowledge of the agency, its processes, and its personnel, as well as expertise in the policy environment and understanding how to argue persuasively for policies that clients seek to implement or stop.

To begin, individuals with long-lived careers have an awareness of their organization's processes, understanding when influence can be best exerted and the appropriate individuals in the agency on which to focus influence effort. This is a specific type of knowledge that makes lobbyists with government backgrounds unique among the broader subset of lobbyists (LaPira and Thomas 2014).

Due to their experience in the agency it is more likely ex-agency lobbyists will have personal relationships with important decision-makers, facilitating contacts and interpersonal trust between the lobbyist and agency officials. These connections are an important aspect of lobbying (Bertrand *et al.* 2014), and employees that have worked in agencies for any substantial period of time will undoubtedly build at least some degree of connections with their coworkers. Of course, not all employees will have connections that are of central concern to lobbying clients, however, on the margins these connections will give employees-turned-lobbyists insights into who in an agency should be contacted and perhaps even make them more likely to secure the time and attention of policymakers responsible for shaping policies.

Moreover, experience in agencies often results in policy expertise that can prove valuable to lobbying clients, both in designing feasible policy proposals and communicating private information credibly with agency officials. Though agencies are often portrayed as founts of expertise (at least relative to Congress), they nonetheless face substantial uncertainty regarding the policy and political implications of their choices for the industries they regulate that lobbyists might mitigate through information transmission (see, e.g., Baron and Myerson 1982; Laffont and Tirole 1986; McCarty 2017; Libgober 2020). Thus, the shared background, experiences, and relationships with agency officials can help lobbyists to both get their foot in the door and provide an often-needed informational subsidy to agency officials.

Of course, not every position in an agency is one in which individuals can develop this agency- or policy-specific expertise. For instance, an employee that worked on writing regulations and technical policy issues has more valuable experiences (from the perspective of a lobbying firm) than information technology specialists or administrative assistants in the agency. In general, we would expect this agency- and policy-specific expertise to arise most frequently, for instance, among employees that are close to the policymaking process, higher in the administrative hierarchy, and in more technically and administratively oriented positions.

1.2 Proximity to political decision-making

Second, the proximity of employees-turned-lobbyists to political decision-making during their federal service is also valuable to clients. Knowledge of the political dimensions of policymaking is distinct from the policy expertise former employees might develop in their jobs. This *political* expertise may entail, among other things, an understanding of the political equities in a policy-making process and the incentives of political decision-makers, personal relationships with political officials, and a working familiarity with the broader political environment in which the agency operates. These give lobbyists important insights both into the process of policymaking as well as the political arguments that are most likely to persuade an agency's top decision-makers. They might also have special insights into or relationships with key oversight officials in Congress and the White House whose buy-in is necessary for agencies to make certain decisions. Several aspects of both individuals' experiences and the existing political environment may contribute to a potential lobbyists' value in terms of navigating the political process.

First, they themselves may have been political appointees and thus have first-hand experience with these issues. Moreover, many career employees serve adjacent to key political decision-makers, depending on their place in the political hierarchy and whether they work in agency headquarters or the field. Other agency-level factors, such as its degree of politicization or proximity to the White House, may likewise give employees familiarity and experience with the political dimensions of administration and policymaking. These types of work experiences all serve to enhance the political (and financial) value of lobbyists for their clients. It may often be the case that policy expertise is closely related to the political insights a bureaucrat may gain from their work (especially since both are likely increasing as one's position exists higher up in the hierarchy of an organization). We do not suggest otherwise, but wish to draw a distinction here between the substantive policy knowledge and expertise individuals may develop through their training and experience and their insights into the political dimensions of policymaking that arise by virtue of their workplace and the positions they hold.

Finally, we acknowledge that some aspects of an individuals' political value to lobbying clients may be context-dependent. For example, when the party in control of the presidency shifts, individuals' connections to key policymakers (especially in appointed positions) are likely to decrease as appointees leave government. However, if connections are not the only source of a lobbyists' political value, and political insight is more generically applicable, then there might be little relationship between the partisan context of the executive branch and the likelihood of turning over into lobbying.

1.3 Agency policy activity

Finally, specific features of agencies and their activities may also create particularly high demand for former employees in the influence sector. First, if an agency was productive in creating new policies over the course of an employee's tenure, they may have accrued valuable knowledge about the intricacies of policies that have already been promulgated and whose implementation has begun. This is especially true for policy areas where there are flexible standards rather than bright line rules or with highly technical compliance requirements. In theoretical work on the revolving

door, such knowledge is taken to be highly valuable to lobbying clients because it allows ex-employees to use their firsthand knowledge to aid other actors in extracting benefits from agencies (e.g., Che 1995; Zheng 2015). Thus, the more productive an agency has been, the more demand there will be for employees that have insights into an agency's policies and implementation of them.

Note that this differs subtly from the more generalized policy domain knowledge that an employee might gain from working in an agency. Here, we are talking about the insights that an employee has into an agency's specific existing policies that were promulgated during the employee's tenure. Demand for these employees should be positively related to an agency's past policy production. The more general type of policy expertise that we discussed in the section "Policy- and Agency-Centered Experience and Expertise" is focused on the broader understanding of the policy environment—its challenges, possible approaches, and their possible effects. With this type of expertise, an employee's value to a lobbying client does not necessarily increase with past policy production, as it is more prospective, oriented toward new policy changes a client seeks or wishes to block.

Similarly, agencies working in policy areas with concentrated benefits and/or costs may stimulate private influence activities and thus produce demand for ex-employee connections and expertise. For example, work experience in an agency that distributes many grants or contracts or makes decisions on topics like trade may be especially lucrative. Previous work suggests these distributive decisions are the subject of substantial lobbying by firms (Dusso *et al.* 2019).

In sum, certain features of federal agency employment are likely to be in high demand from lobbying firms and their clients eager to influence bureaucratic policymaking. The policy and process expertise employees glean, their understanding of and proximity to the politics of policy choices, and the agency's policy activities all serve to enhance these former employees' connections, expertise, and knowledge and thus their value to lobbying clients. These factors, we argue, will on the margins increase the likelihood of post-government employment for employees with attributes and experiences that match these demands. We now turn to evaluating these arguments empirically.

2. Data and empirical strategy

2.1 Bureaucratic personnel and lobbying data

Our universe of bureaucratic personnel comes from the Office of Personnel Management (OPM) administrative data, initially obtained by BuzzFeed through a Freedom of Information Act request and released publicly. The original data include all personnel records in our time frame of interest, 2000–2016.³ We subset the data for this paper to civilian employees who fall under the "covered" status for executive branch employees, as designated by the Lobbying Disclosure Act (LDA): (1) Schedule C employees; (2) employees of the Executive Office of the President; or (3) Executive Level I through V employees. The first group are all appointees of the president, while groups 2 and 3 are a combination of career and appointed officials. We focus on this subset because they are required to report previous government experience in lobbying disclosures and occupy important political and policy roles in the government. The resulting dataset consists of 15,750 unique bureaucratic personnel.

Out of the 15,750 personnel, we identified 9,620 unique covered employees who left the government during the period 2000–2015. These are the individuals we study in our empirical

³For details, see: <https://www.buzzfeednews.com/article/jsvine/sharing-hundreds-of-millions-of-federal-payroll-records>. While the BuzzFeed release is extensive, it does exclude some employees (particularly those serving in security and law enforcement roles). The most consequential omission for our analysis is of employees who work in the White House Office, which is primarily composed of direct advisers and assistants to the president.

analyses.⁴ For these individuals, we possess a variety of individual-level information, which we use in the analyses that follow, including their salary, age range (in five year ranges), education attainment, their appointment type, their tenure in the federal government, and whether or not their position is classified as “professional” (i.e., requiring specialized education and training) or “administrative.”⁵

Correctly linking ex-federal employees from this personnel dataset to lobbying records is critical for empirically evaluating our theoretical framework. First, we acquired and cleaned lobbying disclosure reports from the data provider Legistorm over the time period 2001–2020. These reports, which are mandated by the LDA, detail a variety of information including the lobbying registrant, lobbying client, individual lobbyist names, and an unstructured field in which individuals who were “covered” government employees must note their experience.⁶ Our goal with these data was to identify, as accurately as possible, as many lobbyists as possible who previously worked in the executive branch.⁷

Generating the matches between the personnel data and the LDA-mandated reports (i.e., the revolving door lobbyists) involved a multi-stage process, described in full in the Appendix. We do want to emphasize that we took particular care to ensure that we were generating as few false positives *and* negatives as possible in matching of these datasets. This included manually examining over 52,000 raw observations in the lobbying data to identify as large a universe as possible for matches to the personnel data. We then manually checked any resulting match between the LDA data and the OPM data. We were ultimately able to identify 962 bureaucrats who later entered into lobbying (later subset to just under 700 for analyses because of the year constraints on our analysis). Taken together, this dataset comprises the largest sample used to date in the analysis of revolving door executive branch employees.

Figure 1 displays the temporal variation in new lobbying registrations by individuals among covered employees, showing more registrations during the Bush years, relatively fewer in the Obama Administration, and a sharp increase once Trump took office. In Figure 2 we display the percentage of lobbyists by federal agency, based on the total number of covered employees in each agency, demonstrating substantial heterogeneity by agency in terms of both the raw number of lobbyists and the percentage of covered employees who left the agency and become lobbyists. For instance, the Office of Management and Budget and the Department of Transportation have similar numbers of employees who registered as lobbyists—roughly 70. However, the former sees only 6.1 percent of its covered employees become lobbyists while the latter sees nearly 23 percent of its covered employees register.

In Figure 3 we display a similar quantity disaggregated by unique issue areas.⁸ There is substantial heterogeneity based on the specific policy areas of agencies, suggestive of variable policy-specific demand for lobbyists. Those with general backgrounds coming from an agency’s Office of the Secretary are the most common (perhaps due to their proximity to political leadership). Politically salient issues such as health are relatively under-represented in revolving door lobbying among covered employees.

⁴We omit employees leaving prior to 2000 because the Legistorm data begin in 2001. We end the analysis in 2015 because the BuzzFeed data end in 2016 and we are unable to determine if employees have departed in or after that year.

⁵We note that this is more information than is available for congressional staff, specifically age and education level.

⁶See: https://lobbyingdisclosure.house.gov/amended_lda_guide.html.

⁷Other work also uses the LDA reports to identify executive branch lobbyists. For example, LaPira and Thomas (2017) sample all LDA reports from 2008 and identify lobbyists with previous White House or general executive branch experience. In addition to providing a broader time horizon, we also work to match individuals to agencies. This has the benefit of allowing us to discern whether their experience in agencies or different policy areas impacts their career decision-making and also allows us to link directly to their career records so we can assess the selection process into the revolving door, which is not possible with previous datasets.

⁸Following Bolton *et al.* (2015), we assign one or more Comparative Agendas Project policy codes to agencies based on their mission statements. See: <https://www.comparativeagendas.net/pages/master-codebook> (accessed 1 October 2021).

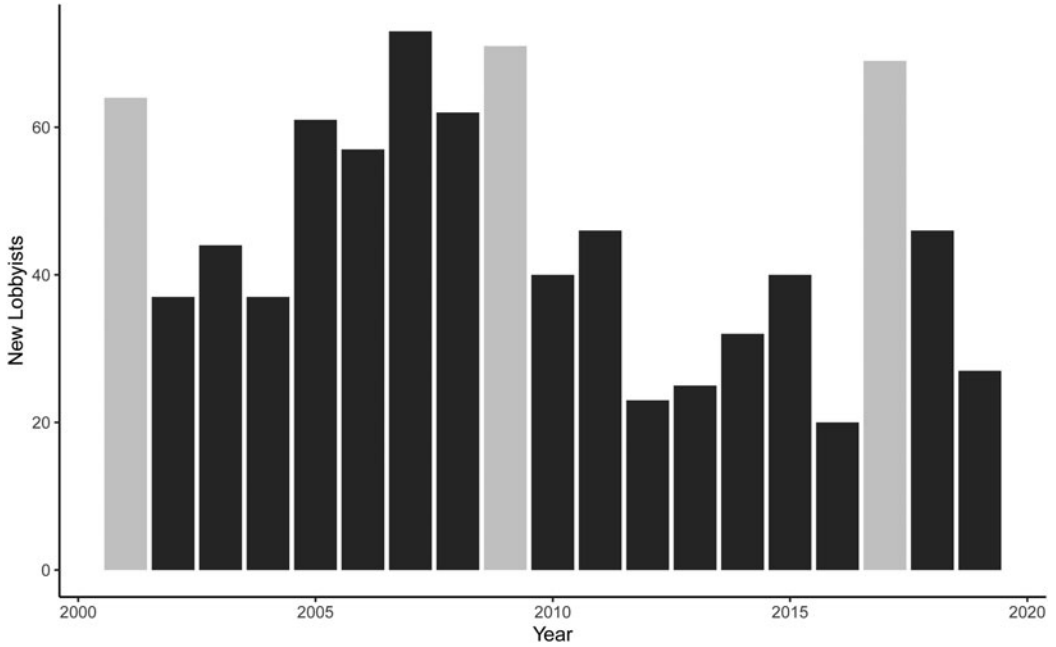


Figure 1. New lobbyist registrations by year.

Note: This figure plots new lobbyist registrations by year. Light-shaded bars are the first years of a new presidential administration.

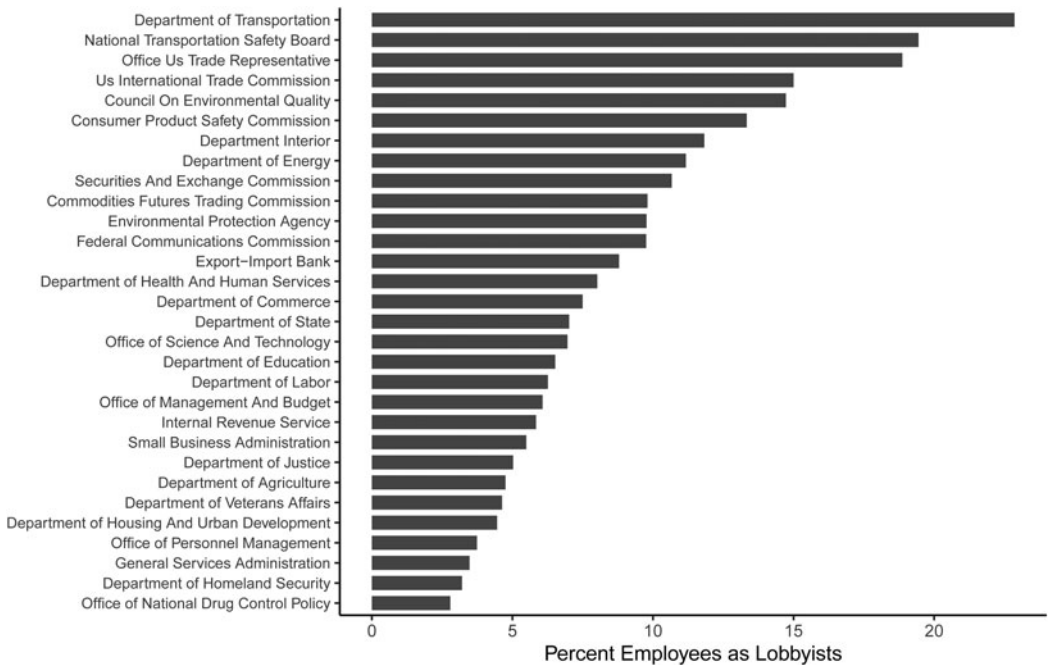


Figure 2. Lobbyists by agency.

Note: This figure plots the top 25 agencies by the percentage of the employees in the agency who became lobbyists in our sample.

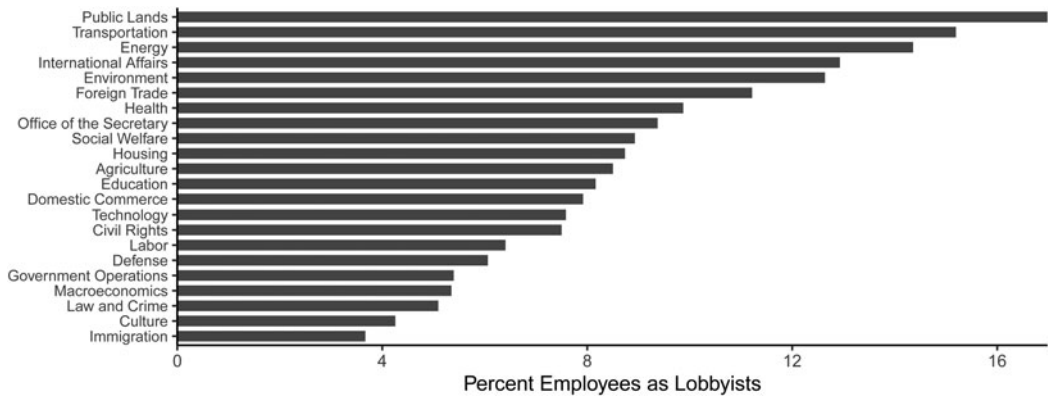


Figure 3. Lobbyists by issue area.

Note: This figure plots the percentage of lobbyists from each issue area based on the number of agency employees designated in that issue area.

2.2 Measurement

The primary relationships of interest in our theoretical account are how personal human capital characteristics and features of their agency experience co-vary with the individual-level propensity to register as a lobbyist. We construct measures for our analyses using features of the OPM data, agency characteristics from the Unified Agenda and other sources, and the lobbying disclosure data. We classify these variables into three broad categories: policy and agency expertise and experience, proximity to political decision-making, and agency activity.⁹

2.2.1 Policy and agency experience and expertise

We code two indicator variables that capture the type of position held by the bureaucrat based on their federally designated occupation category: *Professional Position* and *Administrative Position*, each are set to one to match an individual's respective occupation. These are mutually exclusive. Individuals in "professional" positions typically are engaged in technical and scientific features of the policymaking and implementation processes, whereas those classified as "administrative" by OPM tend to hold management positions that require analytical, research, and writing skills. The estimated effects of these variables are relative to all other employees (i.e., those that fall into the blue collar, clerical, other white collar, and technical categories).

Additionally, we use features of the OPM data to determine the length of an employee's tenure in the government (*Agency Tenure*) and their salary in their final year of service (*log Pay*),¹⁰ which is adjusted for inflation and logged.¹¹ Finally, we determine if the employee is a *Career SES* employee based on their appointment type listed in the OPM data. These careerists in the Senior Executive Service are near the top of the agency hierarchy and typically have specialized policy and administrative experience and expertise.¹² Examples of career

⁹Per our discussion of the porousness of these three concepts, we recognize that some of our measures may arguably tap into more than one concept. While we initially group our statistical analyses by concept, we do consider them all together as well. The general stability across the results suggests the assignment of any given factor to one of the three concepts is not driving any substantive conclusions about specific factors.

¹⁰Note that OPM records the pay for some employees as zero in some years. We leave these observations in the main analyses, but note that dropping them or omitting pay altogether does not substantively affect our conclusions (see Table A7).

¹¹Appendix Table A6 reports models with a quadratic term for tenure, finding no substantive difference with its inclusion.

¹²Given that we restrict attention to covered employees, the career SES employees in our analyses are employees of EOP agencies.

SES positions include the Director of Macroeconomic Forecasting for the Council of Economic Advisers or the Assistant US Trade Representative for China Affairs in the Office of the US Trade Representative.

2.2.2 Proximity to political decision-making

Next, we code variables capturing the political nature of an employee's position. First, we code DC, VA, MD as an indicator the employee's duty station was located in the broader Washington, DC area since individuals in these locations are more likely to be at agency headquarters.¹³ We then code four other dummy variables intended to capture the proximity of an employee's work to political leadership: Executive Office of the President (EOP), PAS Appointment, Non-Career SES or Schedule C Appointment. The latter three constitute the three primary types of political appointees in the federal government (Lewis 2008). These variables are coded by the agency the employee works in (for EOP employees) and the appointment type field in the OPM data for Schedule C appointees and non-career SES employees.¹⁴ The OPM data do not include an indicator for whether an individual is a PAS appointee, so we matched the names and agencies of employees in the OPM data to a list of Senate confirmed appointees from [congress.gov](https://www.congress.gov) to identify PAS appointees.¹⁵ Note it is possible for the same individual to be in more than one of these categories (e.g., a Schedule C or PAS appointee in an EOP agency).

To determine Party Difference, we first identify the year an individual was appointed/hired for their position and determine their party alignment based on the party of presidential administration. This variable takes on a value of "1" if the party in power is the same as the one under which they began their public service, and "0" otherwise. This is clearly an imperfect proxy of an individual's partisanship in relation to the president's. However, for some covered employees—politically appointed Schedule C and PAS employees—it is likely a close indicator of shared partisanship with the president.¹⁶

2.2.3 Agency activity variables

We merge in several external data sources to construct measures of agency rulemaking, budgets, and lobbying activity to characterize an agency's policymaking environment. Using the Unified Agenda, we construct counts of the number of economically significant rules on an agency's agenda in a given year and take the natural logarithm (\log Econ. Significant Rules).¹⁷ We construct a similar count based on our issue area classifications to account for regulatory activity in the broader policy area. This may be relevant if lobbying clients also value policy expertise that is not necessarily agency-specific. We also consider models in Appendix Table A3 that include broader windows of regulatory activity (i.e., three years) to capture the agency's recent behavior in the employee's tenure. The results are broadly similar to those we present in the main text.

We also use the OMB's Public Budget Database to create the variable *Grants/Outlays*, which is a ratio of the amount of grants an agency is responsible for to total federal outlays.

¹³It is also true that the lobbying industry is also centered in these areas, so employees already living in these areas may have lower transaction costs for taking these positions than employees working in field offices. This is an important limitation of the measure.

¹⁴The EOP indicator is perfectly collinear with agency-fixed effects, so we cannot estimate a separate effect for EOP in those models. The impact of serving in an EOP agency is therefore absorbed into the fixed effects. Not all EOP employees turn over with presidential administration changes.

¹⁵From the universe of all PAS individuals since 1985, 14,076 unique appointments, we match 1554 to the OPM data. In total, 97 percent of these matches are to EX pay plan employees, lending validity to the matching process.

¹⁶We explore heterogeneity in the effects of this variable in Appendix Table A4 and discuss it further in the next section.

¹⁷The Unified Agenda identifies pending regulatory actions for each agency on a semi-annual basis. Rules are deemed economically significant when they have an economic impact in excess of \$100 million.

Agencies that have greater discretion over handing out grants may be attractive lobbying targets if clients seek them. This measure captures the relative importance of distributive activity in an agency's mission.¹⁸

Finally, we include *Agency Lobbying Activity*, a factor score comprised of three individual measures from the lobbying disclosure data: (1) the total (logged) lobbying revenue associated with lobbyists who revolved from a given agency in a given year; (2) the total number of firm lobbyists from a given agency in a given year; and (3) the total number of lobbyists registering lobbying activity from a given agency in a given year. These measures capture the demand side of the lobbying market which may feed into an individual's propensity to leave for lobbying.¹⁹

3. Analysis and results

We conduct two primary analyses. The first focuses on employees that leave government, estimating whether our variables of interest are related to their propensity to lobby. The second compares leavers to individuals that stay in government to account for selection into leaving government in the first place. Overall, our predictors of going into lobbying post-government are similar across all the analyses.

First, we model the probability an individual i becomes a lobbyist after leaving government as compared to others leaving government for alternate options as a function of individual human capital characteristics, aspects of the individual and agency's political environment, and the agency's rulemaking activity and budget. We estimate the outcome, a binary 0–1 indicator for whether the individual becomes a lobbyist, using a series of logistic regressions (with ordinary least squares results reported in the Appendix):

$$Pr(\text{Lobbyist}_i) = f(\text{Expertise_and_Experience}_i, \text{Political_Proximity}_i, \text{Agency_Traits}_j, \gamma_t, \delta_j, \epsilon_i) \quad (1)$$

where *Expertise_and_Experience* are individual bureaucrat i 's agency and policy experience and expertise characteristics, discussed above; *Political_Proximity* are characteristics of the employee's proximity to political decision-making; and *Agency_Traits* are characteristics of agency j in year t , such as rulemaking and budgets. γ_t is a year-fixed effect (for the individual's last year in government) to absorb common time-based shocks, such as those affecting broad federal or lobbying labor markets, and δ_j is an agency or issue area fixed effect. These capture all time-invariant feature of policy areas (e.g., complexity or technological features of policy areas) and agencies (e.g., independence from political decision-makers or organizational structures).²⁰ Finally, ϵ is an individual specific error term.²¹

In our second empirical test, we estimate multinomial logistic regression panel models that assess the likelihood of employees to choose among three outcomes: to stay in government in a given year, to leave government and lobby, or to leave government and not lobby. In these

¹⁸In the Appendix, we also use the numerator of this measure—the total amount of grants for a given agency-year. We prefer the proportion measure since it does capture the concept of relative importance of distributive activity.

¹⁹We also examined models with each of these variables entered separately, and the results we report here are substantively similar. Given the high correlations among them and the fact they all are meant to capture the same underlying concept, we report measures based on this scale.

²⁰Importantly, agencies may fall into multiple issue areas, allowing the inclusion of time-invariant agency characteristics in those models which are not included in agency-fixed effects models (e.g., whether the agency is part of the Executive Office of the President). Indeed, the agency-fixed effects absorb substantial unobserved (time-invariant) variation that might produce heterogeneity in lobbying propensity. For instance, if there is simply little demand in the lobbying industry for individuals with backgrounds from a certain agency, these models will account for that lack of demand. Similarly, this will account for one agency producing asymmetrically more lobbyists given its size, estimating the probability *within* agency.

²¹Because some of our variables of interest vary at the organization level, we also estimate models with robust standard errors clustered by agency in the Appendix. In general, the inferences are unchanged.

models, the unit of observation is the employee-year for all covered executive branch employees in our dataset.

These models help to account for potential selection problems in the choices of individuals to leave or stay in government that may confound the relationships between our covariates of interest and the likelihood an individual registers as a lobbyist versus engaging in other post-government endeavors. Given these models include observations of the same employees over multiple years and most of our key theoretical variables are assigned at the individual level, we cluster our standard errors by employee in these analyses. The omitted outcome is staying in government.

3.1 Results

We first consider the results of the logistic regression analyses in Table 1. Models 1 and 2 display results regressing whether an employee leaves for lobbying on the experience and expertise

Table 1. Probability of becoming lobbyist

	Pr(Become lobbyist)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Professional Position	1.163** (0.5282)	1.370** (0.5425)					1.534** (0.6341)	1.636** (0.6544)
Administrative Position	1.129** (0.5025)	1.170** (0.5105)					1.399** (0.6031)	1.493** (0.6159)
Agency Tenure	0.0062 (0.0064)	0.0049 (0.0072)					0.0029 (0.0078)	0.0044 (0.0083)
log Pay	1.018*** (0.2544)	1.053*** (0.2765)					0.7645** (0.3767)	0.7092* (0.3982)
Career SES	-0.1537 (0.3887)	-0.7596* (0.3993)					-0.4753 (0.4052)	-0.5529 (0.4106)
Non-Career SES	1.703*** (0.2760)	1.198*** (0.2977)					1.353*** (0.3062)	1.412*** (0.3171)
Party Difference			0.3711*** (0.0907)	0.3807*** (0.0925)			0.2636** (0.1081)	0.2468** (0.1099)
DC, VA, MD			1.246*** (0.3619)	1.351*** (0.3643)			1.834*** (0.6340)	2.143*** (0.6442)
Executive Office of the President			0.8000*** (0.2030)				1.246*** (0.2916)	
PAS Appointee			1.057*** (0.1910)	1.023*** (0.2011)			0.9765*** (0.2177)	1.049*** (0.2286)
Schedule C Appointment			0.2048 (0.1765)	0.1005 (0.1846)			0.5018** (0.2233)	0.5190** (0.2342)
log Econ. Significant Rules (Agency)					0.2587*** (0.0708)	0.1129 (0.0968)	0.3611*** (0.0884)	0.2112** (0.1016)
log Econ. Significant Rules (Issue Area)					-0.0365 (0.1231)	0.0430 (0.0868)	-0.0306 (0.1257)	0.0225 (0.0892)
Agency Lobbying Activity					0.4178*** (0.0736)	-0.1780 (0.1364)	0.2721*** (0.0982)	-0.1552 (0.1383)
Grants/Outlays					-0.3988 (0.3331)	-0.8157*** (0.3068)	-0.5974* (0.3572)	-0.8525*** (0.3110)
Observations	9404	8640	9620	8862	6737	6119	6598	5957
Year-fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Agency-fixed effects		✓		✓		✓		✓
Issue Area-fixed effects	✓		✓		✓		✓	

Note: The unit of analysis is the individual federal employee in a given year. The outcome is a 0 or 1 indicator for whether the individual becomes a lobbyist. Agency Lobbying Activity is a factor score of a combination of variables, described in detail in the text. Executive Office of the President dummy variable is absorbed by agency-fixed effects.

variables, models 3 and 4 examine the political variables, models 5 and 6 consider the agency activity variables in isolation, and models 7 and 8 combine the variables for all three groups in the same models. The results for all variables are quite stable across specifications, so we will focus our discussion on the full models (7 and 8).

Turning first to the experience and expertise variables, we see that, in general, our theoretical expectations are borne out by the regression results with some exceptions. Individuals serving in professional and administrative occupations within agencies are significantly more likely to enter into lobbying upon leaving government relative to those in other occupational categories. Holding other variables at their means, moving from a non-professional to professional position is associated with a nearly fivefold increase in the probability of lobbying (3.8 to 15.3 percent) and moving from a non-administrative to administrative position is associated with a similarly magnified probability of lobbying (1.5 to 5.7 percent), all else equal (based on model 7).

On the other hand, career SES employees appear, if anything, *less* likely to go into lobbying, despite their typically high levels of policy and management expertise and government experience. There could be a number of explanations for this effect. One possibility is these individuals tend to be long-lived career federal officials and are older on average (52 for career SES versus 39 for all other employees in our sample). It is possible when they leave government they tend to retire completely or simply enter professions more focused on the policy work they have committed their careers to rather than influence *per se*. However, this is only speculation at this point since we are only able to observe one post-government career path. We can only say that they are less likely than other covered officials to become lobbyists.

Pay also appears to be positively correlated with the likelihood of lobbying, though the impact is more muted than for position types. In particular, we find that moving from the average level of pay in our dataset to one standard deviation above it moves the probability of lobbying from 4.5 to 7.6 percent.

Note, there may be some concerns that pay is post-treatment relative to some of the other variables (e.g., position classification). While this would not affect our inferences about pay, it could impact our inferences about other variables. In Table A7, we omit the pay variable and find doing so has little impact on the substantive inferences we report here, except one important exception—the impact of agency tenure. In the specification without pay, we find that tenure is positively correlated with the likelihood of lobbying, while it is not significant after accounting for pay.

Moving to the political variables, we again find general confirmation of theoretical framework, though with some nuance. First, we see that political appointees have higher than average rates of lobbying after leaving government, with predicted probability of lobbying being 10.0 percent for PAS appointees, 5.5 percent for Schedule C appointees, and 15.1 percent for non-career SES appointees (versus 3.0 percent for all others exiting government, holding other variables at their means). Similarly, employees in more politically connected workplaces (i.e., the EOP and DC capital region) are also more likely to go into lobbying. The predicted probability of lobbying is 9.6 percent for EOP employees versus 3.0 percent for all others, while DC/MD/VA employees lobby at a rate of 4.7 percent versus 0.8 percent for employees outside the region.

The main discrepancy between our predictions and the empirical results concerns the party difference variable. The positive impact of party difference is somewhat counterintuitive relative to the existing work on the value of political connections in the lobbying literature. It is possible this represents the likelihood that individuals turnover after an administration ends (as Fig. 1 clearly demonstrates). To better assess potential heterogeneity in the association of party difference and lobbying, we report models in the Appendix (Table A4) where party difference and administration difference is interacted with a dummy variable for appointee (i.e., non-career SES, Schedule C and PAS). Because appointees typically leave government during transitions (which in our time frame all feature party switches) they may be disproportionately likely to enter lobbying while another party controls the executive branch. We find that appointees are in fact most likely to leave when there is a change in administration, particularly when a different

party is in power. This is in line with the idea that appointees are forced out due to administration changes, which could account for the overall average positive result.²²

Finally, we find more mixed results for our theoretical conjectures about agency activity and turnover into lobbying. There is an expected positive correlation between the number of economically significant regulations an agency promulgates in an individual's last year and their likelihood of leaving, however, there is no significant correlation between regulatory productivity in the general policy area and the probability of leaving. This is suggestive of the idea that it the experiences in specific organizations and with specific policies rather than general policy domain expertise that is driving turnover into lobbying (at least in the regulatory space).

We do not find consistent results across the models about the impact of general agency lobbying activity on the propensity to turnover into lobbying, especially after including agency-fixed effects in the model (which is our preferred specification for identifying the impact of this variable; more on this below). Finally, we find that employees in agencies in which greater parts of the budget are associated with grants have lower than average turnover rates, which is out of line with our theoretical conjectures.

In [Table 2](#) we display the predicted probabilities from model 7 of these results. To get a sense of the magnitude of the predictions, we show how the predicted probability changes when moving from the mean to the mean plus one standard deviation for a given variable when it is continuous, or from 0 to 1 in the case of a binary variable. All other variables are held at their sample means to calculate these marginal effects. This table makes clear that the magnitude of many of these coefficients is substantively meaningful. Further, in line with the regression results reviewed earlier, the largest substantive changes appear to manifest for the individual-level experience and expertise and political proximity variables.

The models discussed up to this point have considered only employees that have left government. However, this may not reflect the career choice set federal employees face, which could lead to selection concerns in our analysis. In particular, at any given time, employees may choose to stay in government, they may choose to leave government and pursue non-lobbying careers, or they may be turnover into lobbying. To assess whether our results are sensitive to accounting for this additional choice, we consider now multinomial logistic regressions that account for this trichotomous choice environment faced by federal employees.

[Table 3](#) displays the results of these analyses for the full models. Given that our previous models compare the propensity for leavers to lobby or not, in these analyses, our omitted outcome is staying in government. Compared to this alternate outcome, we see that the predictors of turnover into lobbying are substantively very similar to what we estimated when examining only individuals that leave government. Some of the estimated effects for some of the human capital variables (most notably, salary) are less precisely estimated than in the first analysis. We report predicted probabilities of turning over into lobbying in a given year at different levels of our key variables in [Table 2](#).²³

The most notable difference our two analyses concerns the estimates for the lobbying activity variable. Specifically, the estimated coefficients for the lobbying activity variable are negative and statistically significant in the panel models, suggesting that when there is more lobbying related to a given agency employees are, on average, more likely to stay in government versus turnover into lobbying. This is in contrast to the results from the previous models, where the impact of lobbying activity was positive (at least in some specifications). To better assess what might be driving

²²In a related set of analyses, presented in Appendix Table A8, we analyze whether changes to lobbying regulations either brought on by law changes or administration changes alter individual probabilities of becoming a lobbyist (more discussion on these laws is in the Appendix as well). We find no evidence that on average these policy changes altered the results presented here.

²³Note that these probabilities are smaller than those in the logistic regression because here we are examining the likelihood of turnover into lobbying in any given year of government service, whereas the previous analysis considered only individuals that had already made the choice to leave government.

Table 2. Predicted values—probability of turnover into lobbying

Model Variable	Logistic regression		Multinomial logit regression	
	Prediction (low)	Prediction (high)	Prediction (low)	Prediction (high)
Professional Position	0.04 (0.03, 0.05)	0.15 (0.01, 0.30)	0.017 (0.016, 0.019)	0.053 (−0.001, 0.107)
Administrative Position	0.01 (0.00, 0.03)	0.06 (0.04, 0.07)	0.008 (0.002, 0.014)	0.025 (0.016, 0.034)
Agency Tenure	0.04 (0.04, 0.05)	0.05 (0.04, 0.06)	0.019 (0.018, 0.021)	0.019 (0.016, 0.022)
Career SES	0.04 (0.04, 0.05)	0.03 (0.01, 0.05)	0.020 (0.018, 0.021)	0.010 (0.003, 0.018)
Ln(Salary)	0.04 (0.04, 0.05)	0.08 (0.04, 0.11)	0.018 (0.016, 0.020)	0.026 (0.017, 0.035)
Party Difference	0.04 (0.03, 0.05)	0.05 (0.04, 0.06)	0.017 (0.015, 0.019)	0.022 (0.019, 0.025)
DC/VA/MD	0.01 (0.00, 0.02)	0.05 (0.04, 0.05)	0.002 (−0.000, 0.004)	0.021 (0.019, 0.023)
Schedule C Appt.	0.03 (0.02, 0.04)	0.05 (0.04, 0.07)	0.014 (0.011, 0.016)	0.030 (0.022, 0.038)
PAS Appointee	0.04 (0.03, 0.05)	0.10 (0.06, 0.14)	0.017 (0.015, 0.019)	0.036 (0.023, 0.048)
Non-Career SES	0.04 (0.04, 0.05)	0.15 (0.07, 0.23)	0.019 (0.017, 0.020)	0.099 (0.057, 0.014)
Ln(Economically Sign. Rules)	0.04 (0.04, 0.05)	0.06 (0.05, 0.08)	0.019 (0.017, 0.020)	0.022 (0.019, 0.025)
Ln(Economically Sign. Rules) (Issue Area)	0.04 (0.04, 0.05)	0.04 (0.03, 0.06)	0.019 (0.018, 0.021)	0.019 (0.016, 0.022)
Grants/Outlays	0.04 (0.04, 0.05)	0.04 (0.03, 0.05)	0.020 (0.018, 0.022)	0.017 (0.015, 0.019)
Lobbying Activity	0.07 (0.07, 0.08)	0.09 (0.08, 0.11)	0.024 (0.021, 0.028)	0.014 (0.013, 0.016)

This table shows predicted values as probabilities using the coefficients from Tables 1 and 3. The low and high values are set to 0 and 1 for binary variables; for continuous variables they are set to the mean and mean plus one-standard deviation respectively. The prediction columns correspond to the predicted probabilities generated from a move from the low to the high value. Each prediction is generated by setting the other variables to their sample means for the logistic regression and observed values for the multinomial logistic regression. The 95 percent confidence interval is in parentheses under each estimate.

this negative effect, we disaggregated our *Agency Lobbying Activity* measure into its component parts (Appendix Table A2). The only of the three variables with a negatively signed estimate is the number of registered lobbyists from the agency in a given year. While not conclusive, this result is consistent with the possibility that market saturation may help to explain negative effect. That is, when there are already many active lobbyists from an agency in a given year, the excess demand for lobbyists from that agency may be low.²⁴

Overall, these results help to assuage concerns that the results we report are driven by selection of who remains in government versus who leaves.

4. Discussion

The revolving door between government and the influence industry is a reality of contemporary American governance. Experience in government allows employees to learn about policy and regulatory regimes, to develop relationships with individuals responsible for formulating and approving policies, and to gain an understanding of the political environments in which agencies

²⁴This is an interesting result to compare to the Egerod (2021) study of strategic exit of legislators into lobbying, which finds legislators are likely strategic based on contemporaneous lobbying activity, but in the opposite direction of what we find. Additional research on the timing of exit into lobbying by government personnel would shed more light onto these differences.

Table 3. Leaving versus leaving for lobbying

	Leave	Leave for lobbying	Leave	Leave for lobbying
Professional Position	-0.234* (0.094)	1.239* (0.623)	-0.288** (0.093)	1.160 + (0.631)
Administrative Position	-0.285*** (0.082)	1.124 + (0.596)	-0.293*** (0.080)	1.159 + (0.602)
Agency Tenure	-0.013*** (0.002)	-0.010 (0.007)	-0.008*** (0.002)	-0.004 (0.008)
log Salary	-0.197*** (0.028)	0.665 + (0.390)	-0.220*** (0.029)	0.619 (0.405)
Career SES	-0.107 (0.112)	-0.601 (0.376)	-0.222* (0.112)	-0.717 + (0.375)
Party Difference	0.054 (0.034)	0.302** (0.102)	0.046 (0.034)	0.274** (0.103)
DC, VA, MD	0.468*** (0.094)	2.397*** (0.667)	0.533*** (0.093)	2.765*** (0.638)
Executive Office of the President	0.060 (0.091)	1.276*** (0.270)		
PAS Appointee	0.150 + (0.079)	0.903*** (0.199)	0.057 (0.093)	0.812*** (0.225)
Schedule C Appointment	0.782*** (0.071)	1.143*** (0.225)	0.693*** (0.081)	1.019*** (0.246)
Non-Career SES	1.032*** (0.155)	2.209*** (0.275)	0.906*** (0.149)	2.210*** (0.271)
log Econ. Significant Rules (Agency)	0.038 (0.027)	0.440*** (0.079)	0.003 (0.035)	0.189* (0.092)
log Econ. Significant Rules (Issue Area)	-0.133*** (0.040)	-0.00003 (0.125)	-0.051 + (0.030)	0.026 (0.081)
Agency Lobbying Activity	-0.299*** (0.026)	-0.193** (0.063)	-0.742*** (0.059)	-0.693*** (0.093)
Grants/Outlays	-0.096 (0.091)	-0.828* (0.335)	-0.096 (0.095)	-0.954*** (0.273)
Observations	25,293	25,293	25,277	25,277
Fixed effects	Policy Area	Policy Area	Agency	Agency

Note: *p < 0.1, **p < 0.05, ***p < 0.01, ****p < 0.001.

operate and where political leverage points exist. As such, individuals with these experiences are highly valued by lobbying firms and clients seeking to influence the policy process.

In this paper, we examine the propensity of executive branch employees to transition from government into lobbying. We focus on the expertise individuals develop in government; their proximity to political decision-making; and the policymaking and lobbying environments during their tenures. When individuals have greater policy expertise and responsibility, served in (or close to) political leadership in an agency, or were employed during bursts of policymaking activity, we expect greater levels of turnover into lobbying.

In line with these predictions, we find that indicators of individuals' experience and expertise acquired through government experience as well as their proximity to political leadership and decision-making are strong indicators of the propensity to turnover into lobbying. Contrary to our expectations, we find less evidence the agency policymaking environment (at least as it pertains to regulation and grant distribution) impacts the likelihood of becoming a lobbyist. These arguments and results have implications for the existing literature on lobbying and the revolving door as well as for studying the dynamics of bureaucratic careers in the USA.

The idea of studying selection effects in lobbying in general is not novel. Existing work considers, for instance, when firms choose to lobby (Richter *et al.* 2009). Others study individual traits that lead legislators to enter into lobbying (Lazarus *et al.* 2016) or macro labor market features that produce more or less legislators transitioning into lobbying (Strickland 2020; Egerod 2021). These macro features are just one piece of an individual's career concerns, however,

and we might expect the career behavior of elected officials differs from unelected bureaucratic officials. Very little knowledge exists on what drives these individuals' selection into lobbying careers based on the combination of individual characteristics, human capital, and the broader political environment. This relative inattention of the literature has implications for empirical practice in this area. In Figure 4 we attempt to clarify how this process is depicted in existing research, and how only focusing on the "outcomes stage" may lead to problematic inferences.

For example, in one strand of research (e.g., McCrain 2018), the outcome is the initial lobbying revenue of the revolving door lobbyist, predicted by individual-level human capital. In the process in this figure, such studies ignore the selection stage (outlined by a dashed box, with outcome node *b*) which is a moderator of the relationship between human capital and revenue. Another strand of the literature (e.g., Blanes *et al.* 2012) focuses on how shocks to an individual lobbyist (node *e*), such as the sudden loss of political connections, influences the individual's lobbying activity, such as their ability to generate revenue (node *f*).

Ignoring selection is not necessarily problematic if we can assume the process generating entry into lobbying is unrelated to the expectations about earnings or shocks and their impacts on lobbying activity—though bypassing this stage does limit our understanding of substantively interesting heterogeneity. Inferences may be affected, however, if the decision to enter lobbying is in fact related to these future expectations. In this case, omitting the selection stage introduces an unadjusted confounder into the empirical model, resulting in bias. Our results suggest this is likely to be the case.

For example, certain characteristics or backgrounds of employees (e.g., their political values or educational training) may lead them to make particular policy decisions while in government and simultaneously drive them to the influence sector, inflating statistical relationships between policy choices and career choices, rendering them spurious.

Similarly, the decisions of individuals to enter into lobbying are potentially made based on calculations with regard to the possible pecuniary rewards for their skills and experiences (represented by the two-way arrow between the selection and outcome stages), creating a selection issue in estimating the impacts of those skills and experiences on lobbying revenue. For example, if only individuals who believe they can earn substantial sums enter into lobbying, we will overestimate the returns to government service for lobbyists. Moreover, we may underestimate the impact of the specific connections or skills because of this selection process. For example, if only individuals that served in a high-ranking executive position can garner lobbying contracts, then low-

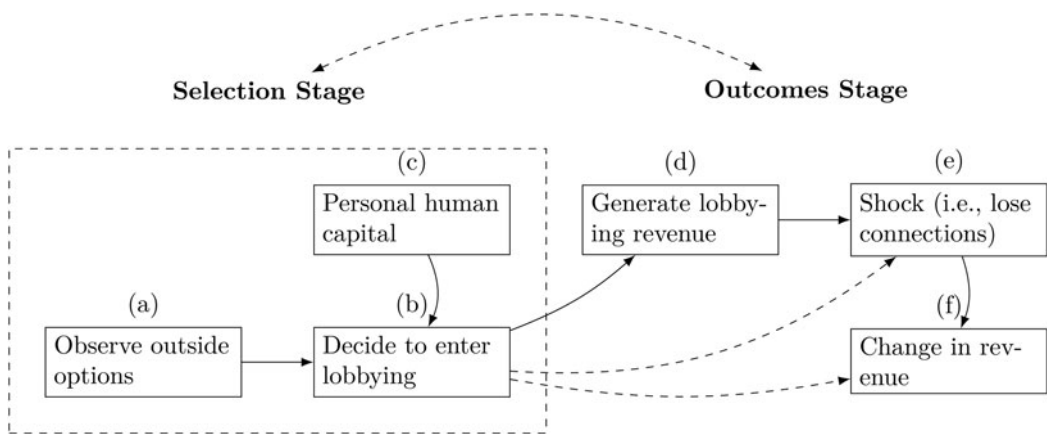


Figure 4. Stylized model. *Note:* This figure plots a stylized causal process that underlies common empirical lobbying research. Solid arrows are the normal hypothesized relationships while the dashed arrows are hypothesized relationships we propose in this paper.

ranking officials will rationally select out of lobbying. This limits the variation in experiences we observe and depresses the correlation between place in the hierarchy and lobbying revenue. Given these possibilities, the stakes of understanding what drives specific individuals from government into a lobbying career is crucial for empirical studies of lobbying hoping to make inferences about what characteristics or experiences are valued by lobbying clients.

5. Conclusion

The revolving door between government and lobbying is ubiquitous in American policymaking. Our work in this paper on understanding which executive branch employees turnover into lobbying has implications for the literatures on lobbying and the executive branch broadly. This fills several important theoretical and empirical gaps in previous work on lobbying in Congress.

Premised on the idea of informational and subsidy lobbying (Austen-Smith and Wright 1992; Hall and Deardorff 2006), findings from research on the revolving door in Congress suggest high demand for congressional staff with connections and policy expertise (Blanes *et al.* 2012; Cain and Drutman 2014; McCrain 2018). Recent work also suggests lobbyists use their government experience to provide “insurance” to clients in uncertain policy environments through access and policy knowledge (LaPira and Thomas 2017; Ban *et al.* 2019). From the bureaucratic revolving door perspective, the relatively small and inconsistent relationships between agency policy activity and shared partisanship and entry into lobbying is suggestive of a somewhat different relationship, where individual career concerns, expertise, and experiences—for example, policy experience or employment type—drive the propensity to revolve.

Additional work in this area would facilitate drawing comparisons directly between the revolving door for congressional staff and that for other government employees. Though the lobbying behavior of congressional staff are more commonly studied, we have little knowledge on the particular circumstances that lead them into lobbying—as discussed previously, these could be important factors in the inferences we draw on their value as lobbyists, and more fundamentally what they do as lobbyists. Our findings do shed some light on some commonalities. For instance, bureaucrats with a more direct proximity to policymaking are more likely to become lobbyists; this is also true among congressional staff, where chiefs of staff—the most senior positions in a member office—are also likely to leave for lobbying (they also tend to have the highest salaries; McCrain 2018). An unknown quantity in congressional revolving door lobbying is the relationship between specialization and revolving. A benefit of the OPM data is clear measurement of the degree of specialization through both position type and possession of a graduate degree; this is much harder to uncover for congressional staff. Further, this relationship is of substantive interest given theoretical work suggesting individuals with opportunities to specialize in policy areas of interest are more likely to stay in government (Gailmard and Patty 2007).

The results also illuminate the career paths bureaucrats take upon leaving office. While a large literature has tracked turnover and its political and organizational determinants in the bureaucracy, far less work examines the destinations of individuals leaving the federal government and the predictors of those decisions. We show here there are strong relationships between the experiences individuals have on the job and their likelihood of becoming a registered lobbyist.

Finally, the results shed some light on the normative questions surrounding the revolving door. We confirm intuitions that high-level officials in the government do indeed see lobbying as a potential lucrative employment option. However, of the potential federal executive employees covered by the LDA, only a small fraction actually end up lobbying. Additionally, our results suggest some (qualified) optimism for the question of whether the incentives provided by the revolving door skew policy outcomes. In particular, the strongest evidence that emerges in our paper suggests it is an individual’s experiences, expertise, and the nature of their position that is most likely to lead them to lobbying after government service. The broader agency policy environment and output appear much less influential. In this sense, investing in policy and political

experience rather than altering policy production may be seen as a better path for securing a lucrative lobbying position. This may alleviate concerns about the revolving door in the bureaucracy as a mechanism of agency capture. Of course, we are examining only the productivity of agencies; future work ought to also consider the content of the policies produced as well to more fully address this question.

We can also use the results to help reason through potential reforms aimed at slowing the revolving door, such as increasing employee salaries to blunt the allure of lucrative lobbying work. We find employees with higher salaries in government are more likely to be lobbyists after exiting government. If sectoral wage gaps are driving turnover into lobbying (and are highest for those earning the highest public salaries), then these reforms make some sense. Salary-based reforms are precisely what congressional reformers have recently implemented in attempting to mitigate the draw of lobbying within the congressional staff work force. However, if salaries are reflective of some residual effect of serving in a high-level role (after, e.g., controlling for occupation type), then it is not clear increasing salaries (to levels the government might plausibly consider) will have a meaningful impact on turnover behavior. Further research would also benefit in studying the relative importance in salary as an indicator of lobbying propensity for bureaucrats relative to legislators and their staff.

Overall, this paper sheds new light on the turnover decisions of federal employees, particularly as they pertain to exit into lobbying. We find important new evidence about the selection into the influence industry and the importance of individuals' experiences in government that drive those decisions. The consequences of our argument and evidence speak to many literatures in political science and public administration as well as important normative questions in American governance. Important new questions also arise that might be profitably pursued. For instance, more detailed information about individuals' work experiences (e.g., who exactly they are "connected" to, the specific types of projects they worked on, etc.) might yield further insights into the types of experiences that are especially valued in the lobbying industry. Additionally, we have only examined a subset (albeit an important one) of federal employees that are covered under the LDA. Linking records to the broader workforce is challenging but may provide additional understanding of the selection into lobbying. These questions and others will help to illuminate the dynamics of the revolving door and its impact on American government.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/psrm.2023.45>. To obtain replication material for this article, <https://doi.org/10.7910/DVN/MCYUKY>

Acknowledgments. We are grateful to Benjamin Egerod, Dave Lewis, David Miller, Christina Kinane, Sandy Gordon, and participants at the MPSA and APSA Annual Meetings as well as the Vanderbilt Evolving Executive Conference for helpful comments and feedback.

References

- Ansolabehere S, De Figueiredo JM and Snyder JM** (2003) Why is there so little money in US politics?. *The Journal of Economic Perspectives* **17**, 105–130.
- Austen-Smith D and Wright JR** (1992) Competitive lobbying for a legislator's vote. *Social Choice and Welfare* **9**, 229–257.
- Austen-Smith D and Wright JR** (1994) Counteractive lobbying. *American Journal of Political Science* **38**, 25–44.
- Ban P and Young You H** (2019) Presence and influence in lobbying: evidence from Dodd-Frank. *Business and Politics* **21**, 267–295.
- Ban P, Palmer M and Schneer B** (2019) From the Halls of Congress to K Street: government experience and its value for lobbying. *Legislative Studies Quarterly* **44**, 713–752.
- Baron DP and Myerson RB** (1982) Regulating a monopolist with unknown costs. *Econometrica* **50**, 911–930.
- Bertrand M, Bombardini M and Trebbi F** (2014) Is it whom you know or what you know? An empirical assessment of the lobbying process. *The American Economic Review* **104**, 3885–3920.
- Blanes i Vidal J, Draca M and Fons-Rosen C** (2012) Revolving door lobbyists. *The American Economic Review* **102**, 3731–3748.
- Bolton A, Potter RA and Thrower S** (2015) Organizational capacity, regulatory review, and the limits of political control. *The Journal of Law, Economics, and Organization* **32**, 242–271.

- Bolton A, de Figueiredo JM and Lewis DE** (2021) Elections, ideology, and turnover in the U.S. Federal Government. *Journal of Public Administration Research and Theory* **31**, 451–466.
- Bonica A** (2016) Avenues of influence: on the political expenditures of corporations and their directors and executives. *Business and Politics* **18**, 367–394.
- Cain BE and Drutman L** (2014) Congressional staff and the revolving door: the impact of regulatory change. *Election Law Journal* **13**, 27–44.
- Che Y-K** (1995) Revolving doors and the optimal tolerance for agency collusion. *The RAND Journal of Economics* **26**, 378–397.
- Cohen JE** (1986) The dynamics of the ‘revolving door’ on the FCC. *American Journal of Political Science* **30**, 689–708.
- Congressional Management Foundation** (2012) Life in Congress: Job Satisfaction and Engagement of House and Senate Staff. http://www.congressfoundation.org/storage/documents/CMF_Pubs/life-in-congress-job-satisfaction-engagement.pdf.
- De Figueiredo JM and Tiller EH** (n.d.) The Structure and Conduct of Corporate Lobbying: How Firms Lobbying the Federal Communications Commission. *Journal of Economics & Management Strategy*. Forthcoming.
- de Haan E, Kedia S, Koh K and Rajgopal S** (2015) The revolving door and the SEC’s enforcement outcomes: initial evidence from civil litigation. *Journal of Accounting and Economics* **60**, 65–96.
- Doherty KM, Lewis DE and Limbocker S** (2019) Executive control and turnover in the senior executive service. *Journal of Public Administration Research and Theory* **29**, 159–174.
- Dusso A, Holyoke TT and Schatzinger H** (2019) The influence of corporate lobbying on federal contracting. *Social Science Quarterly* **100**, 1793–1809.
- Dwidar MA** (2022) Coalitional lobbying and intersectional representation in American rulemaking. *American Political Science Review* **116**, 301–321.
- Egerod BCK** (2021) The lure of the private sector: career prospects affect selection out of Congress. *Political Science Research and Methods* **10**, 722–738.
- Gailmard S and Patty JW** (2007) Slackers and zealots: civil service, policy discretion, and bureaucratic expertise. *American Journal of Political Science* **51**, 873–889.
- Gormley W** (1979) A test of the revolving door hypothesis on the FCC. *American Journal of Political Science* **23**, 665–683.
- Haeder SF and Yackee SW** (2015) Influence and the administrative process: lobbying the US president’s office of management and budget. *American Political Science Review* **109**, 507–522.
- Hall RL and Deardorff AV** (2006) Lobbying as legislative subsidy. *American Political Science Review* **100**, 69–84.
- Laffont J-J and Tirole J** (1986) Using cost observation to regulate firms. *Journal of Political Economy* **94**, 614–641.
- LaPira TM and Thomas HF** (2014) Revolving door lobbyists and interest representation. *Interest Groups & Advocacy* **3**, 4–29.
- LaPira TM and Thomas HF** (2017) *Revolving Door Lobbying: Public Service, Private Influence, and the Unequal Representation of Interests*. Lawrence, KS: University Press of Kansas.
- Lazarus J, McKay A and Herbel L** (2016) Who walks through the revolving door? Examining the lobbying activity of former members of congress. *Interest Groups & Advocacy* **5**, 82–100.
- Lewis DE** (2008) *The Politics of Presidential Appointments*. Princeton, NJ: Princeton University Press.
- Libgober BD** (2020) Strategic proposals, endogenous comments, and bias in rulemaking. *Journal of Politics* **82**, 624–656.
- McCarthy NM** (2017) The regulation and self-regulation of a complex industry. *Journal of Politics* **79**, 1220–1236.
- McCrain JM** (2018) Revolving door lobbyists and the value of congressional staff connections. *The Journal of Politics* **80**, 1369–1383.
- McCrain Joshua** (n.d.) Human capital on Capitol Hill. Working Paper, presented at MPSA Annual Meeting. Available at <http://joshuamccrain.com/wp-content/uploads/2021/04/McCrain-Human-Capital.pdf>.
- Milyo J, Primo D and Groseclose T** (2000) Corporate PAC campaign contributions in perspective. *Business and Politics* **2**, 75–88.
- Richardson MD** (2019) Politicization and expertise: exit, effort, and investment. *Journal of Politics* **81**, 878–891.
- Richter BK, Samphantharak K and Timmons JF** (2009) Lobbying and taxes. *American Journal of Political Science* **53**, 893–909.
- Schnakenberg KE** (2016) Informational lobbying and legislative voting. *American Journal of Political Science* **61**, 129–145.
- Shepherd ME and You HY** (2020) Exit strategy: career concerns and revolving doors in Congress. *American Political Science Review* **114**, 270–284.
- Strickland JM** (2020) The declining value of revolving-door lobbyists: evidence from the American states. *American Journal of Political Science* **64**, 67–81.
- You HY** (2017) Ex post lobbying. *The Journal of Politics* **79**, 1162–1176.
- Zheng W** (2015) The revolving door. *Notre Dame Law Review* **90**, 1265–1308.