Elections, Ideology, and Turnover in the U.S. Federal Government

During the 2016 election year, one quarter of federal employees indicated they would consider quitting if Donald Trump were elected president (Katz 2016a). On the other hand, a prominent public sector union publicly endorsed Trump and worked actively for his election (Katz 2016b). This was the union's first ever endorsement of a presidential candidate. To one set of federal employees the prospect of a Trump presidency was an inducement to leave government and to another set a reason to stay. For both groups of civil servants, the election itself is a key career event, systematically influencing employee career choices.

One of the defining features of public sector employment is the regular change in executive leadership that coincides with the electoral cycle. Elections can bring dramatic changes in the work environments of federal employees, from refocusing the mission of the organizations to which federal employees give their time and labor to the basics of personnel policy (e.g., hiring freezes, new civil service rules). The public sector consequences of electoral politics are very important since significant departures can diminish the expertise in administrative agencies and damage the government's ability to carry out key functions.¹

Given the ubiquity of elections and their impact on the goals and mission of public sector workplaces, it is surprising how little is understood about the impact of administration transitions

Trevor 2011; Heavy et al. 2013; O'Toole and Meier 2003; Park and Shaw 2013; Shaw 2011).

¹ There is a large literature on this relationship in the private, not-for-profit, and public sectors

⁽see, e.g., Bolton, Potter, and Thrower 2016; Boylan 2004; Hancock et al. 2013; Hausknecht and

on turnover among career civil servants.² Indeed, the feature of public sector work that arguably distinguishes it most from work in other sectors is the regular presence of politics and elections in determining the leadership and direction of the organization. While important work has examined the influence of different factors on turnover in the civil service (e.g., work-life balance, communication, engagement), scholars have paid less attention to the influence of politics on turnover among public sector employees in the United States (see, however, Bertelli and Lewis 2013; Doherty et al 2016).³ Fewer still have examined how elections and transitions in particular influence the career choices of federal employees. While there is widespread acceptance of the role of elections in the careers of political appointees (see, e.g., Dickinson and Tenpas 2003; O'Connell 2009; Wood and Marchbanks 2008) and an important literature examining the relationships between appointees and career civil servants (Aberbach and Rockman 1976; Michaels 1997; Golden 2000; Heclo 1977; Resh 2015), little work examines how these career events shape the choices of civil servants.

There is a tension in modern democracy since civil service hiring, promotion, and departure are supposed to be insulated from politics, but civil servants may respond to politically-determined developments in these areas. While politicians have little direct influence on the careers of civil servants, they do indirectly shift the utility certain civil servants receive

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² There is, however, a robust literature on the causes and consequences of political appointee turnover in the public sector (see, e.g., Boyne et al. 2010; Dull and Roberts 2009; Dull et al. 2012; Hahm et al. 2014; O'Connell 2009; Wood and Marchbanks 2008).

³ For works exploring civil service turnover after government changes in other contexts see Akhtari et al. n.d.; Boyne et al. 2010; Christensen et al. 2014, Ennser-Jedenastik 2014a.

from serving in their jobs. In this paper we describe how elections alter public sector policy outputs and reorder patterns of influence within agencies. These disruptions predictably shape the career choices of civil servants that care about public policy and agency influence. We use new Office of Personnel Management data on the careers of federal employees between 1988 and 2011 to evaluate these effects. The results demonstrate that presidential transitions increase the departure rates of senior federal employees. Employee turnover is higher in liberal agencies under Republican presidents and conservative agencies under Democratic presidents. These effects are the largest for the most senior employees and at the start of new presidential administrations. These empirical findings validate the importance of elections for public sector personnel and have important implications for our understanding of presidential politics, public policy, and human capital in the federal government.

Political Dynamics and Employee Turnover

Given the importance of turnover for agency capacity and the successful implementation of public policy, scholars have carefully studied its causes and consequences. In particular, past research has focused on a number of organizational factors, features of employee job contexts, and individual characteristics that predict turnover. The organizational factors include characteristics of agencies themselves such as agency prestige, structure, management practices, and culture (Borjas 1982; Gailmard and Patty 2007; Kellough and Osuna 1995; Pitts et al. 2011; Wilson 1994). Scholars also argue that organizational features influence the non-monetary compensation employees receive from working in an agency (Grissom 2015).

Looking inside organizations, scholars have examined a number of features of the employee's job, including aspects of the work environment—e.g., training, diversity of the

workforce, engagement, clarity of goals, accountability—that influence departure choices (Bertelli 2007; Kim and Fernandez N.d.; Moynihan and Pandey 2007). Perhaps most visibly, they have examined how wage differentials, the structure of the labor contract (e.g., pay for performance; Bertelli 2007), unionization (Chen and Johnson 2014), and employee-agency fit in the larger labor market influence career choices (Bertelli and Lewis 2013; Cameron et al. 2015). Turnover choices are influenced by the expected stream of compensation inside and outside the agency. The gap between expected public and private sector wages is determined partly by whether employees' expertise is valued differentially in the public or private sector (Bertelli and Lewis 2013; Borjas 1982; Boylan 2004; Grissom et al. 2015; Ippolito 1987, Cameron et al 2016). Non-monetary forms of compensation controlled by the agency, such as group affinity or work-life balance, can also influence job satisfaction and the choice to stay or leave (e.g. Saltzstein et al. 2001).

The propensity to stay or leave varies by individual and is correlated with characteristics of employees themselves. For instance, researchers have explored the influence of age or experience (e.g., retirement eligibility, pension vesting), gender, and race on turnover (Ippolito 1987; Lewis 1991; Lewis and Park 1989; Moynihan and Landuyt 2008; Pitts et al. 2011). Scholars have also evaluated the impact of different individuals' public service motivation on factors related to turnover and turnover directly (see, e.g., Bright 2008; Caillier 2011; Gamassou 2015). These works provide a rich and complex picture of the different factors that influence turnover decisions across agencies, work groups, and individuals.

Despite the salience of politics for public sector work, few studies explore the ways in which politics itself influences turnover in the U.S. civil service. Important research examines how political intervention into administration and policy disagreement between career employees

and the administration influences turnover (Bertelli and Lewis 2013; Brehm and Gates 1997; Cameron et al. 2015; Gailmard and Patty 2007; Golden 2000; Richardson 2016; Wilson 1994). In this paper, we extend this work to examine how changes in the political environment brought about by elections and transitions of power influence the turnover decisions of career bureaucrats in a systematic manner. Examining the influence of elections on turnover has been difficult because observational data on individual employee careers has been limited and the existing survey data on employee careers and turnover intention is cross-sectional. In this paper, however, we make use of unique new observational data on all civilian employees working in non-defense agencies between 1988 and 2011 to examine this question systematically.

How Do Elections Influence Turnover Decisions?

The advent of a new presidential administration can lead to significant policy changes and alterations in employee influence within agencies. Major party candidates run on platforms promising policy changes. Candidates bolster their case with promises of governing with teams that will take power away from unelected bureaucrats. Almost all candidates promise to improve economy and efficiency in government, cutting expenses and improving performance. The actions that follow these promises have predictable effects on the stay or leave choices of federal employees. We delineate how elections influence these choices below and more formally in a decision theory framework in Appendix A.

What Civil Servants Want

Understanding the turnover decisions of career employees first requires a set of assumptions about the utility they derive from government service. We assume that bureaucratic

⁴ See Doherty et al. 2016 for an important exception.

utility depends upon three primary factors: pecuniary rewards (i.e., wages and benefits), the policy outputs of the agency relative to the employee's ideal policy, and the degree to which employees are able to influence policy. Specifically, we assume:

$$u_{ij} = \lambda_i \omega_{ij} - (1 - \lambda_i)(\hat{x}_a - x_i)^2$$

where bureaucrat i's utility in period j, is dependent upon their wages and benefits (ω_{ij}) , the squared ideological distance between the policy implemented by the agency and the bureaucrat's ideal point, and the degree to which individuals value wages and benefits over policy outcomes, which is increasing in $\lambda \in [0,1]$. In the public sector, particularly at the higher levels, individuals have influence over the policy choices of their agency. As such, the agency's ultimate policy, \hat{x}_a , is a function of a base agency ideal point (e.g., one chosen by the president) and the ideal point of the bureaucrat, weighted by the policy influence of the bureaucrat (which is increasing in $\alpha \in [0,1]$), so that $\hat{x}_a = \alpha_{ij}x_i + (1-\alpha_{ij})x_a$.

Within this formulation it is notable that, in addition to wages and benefits, we assume that federal employees care about policy. In this way civil servants are similar to other citizens except that working in government gives policy issues a salience rarely shared by other voters, particularly about issues in their own agencies. Further, federal employees often self-select into agencies on the basis of their own support for an agency's mission (e.g. Clinton et al. 2012; Kaufman 1960, 1981). This influences the composition of the workforce and the views of agency employees and engenders support for agency mission over any change a new administration might bring (Aberbach and Rockman 1976; Golden 2000; Kaufman 1960, 1981; Van den Steen 2010). For example, environmentalists are more likely to seek employment in the Environmental Protection Agency than the Office of Surface Mining. It is important to many employees in these agencies that the leadership makes choices that help the organization fulfill its mission (Hult and

Maranto 2010). The policy choices of the agency overall can have a significant influence on the attractiveness of public sector employment relative to other options.

Federal employees also value the ability to influence their workplace and its choices, particularly since agency actions involve the exercise of public authority. Indeed, a large body of research explores whether public sector employees are distinctive in the extent to which they are motivated by pro-social concerns or what scholars refer to as public service motivation (Perry and Wise 1990). The choices of federal employees become increasingly influential in their organizations as they advance in their careers and may also provide them some utility (e.g. Brehm and Gates 1997; Downs 1967; Gailmard and Patty 2007). However, the degree of delegated authority and policy input that career employees enjoy may be curtailed even for high level employees if administrations distrust careerists and cut them out of substantive processes (Heclo 1976; Resh 2015).

A public sector employee's stay or leave decision will be determined by how her utility for public sector work compares to life outside government. The basic structure of the utility outside government is the same except that the wages and benefits will be different and the bureaucrat will presumably have no influence over agency policy from outside of government. Significant shocks to the utility bureaucrats get from working in the public sector should influence departure rates in predictable ways.

Elections and Changes in Employee Utility

Presidential elections and transitions lead to both policy changes and disruptions in the allocation of influence within agencies. New presidents translate their electoral mandate into policy by asserting control of the executive establishment through agency review teams established during the transition and by bringing new decision makers into government (Jones

1998; Pfiffner 1996, 2010). These individuals, whether White House staff or political appointees in the executive branch, must decide whether to delegate important authority to continuing professional personnel.

Allowing career employees to make important decisions that will affect the administration's priorities can be difficult for new administrations, particularly when career professionals worked closely with a previous administration. Many presidents enter office wary that career bureaucrats are, as Nixon evocatively described, "...dug-in establishmentarians fighting for the status quo..." Some presidential appointees shut careerists out of key policy decisions or layer over them, pushing them further from the locus of decision-making, while others invite career professionals to participate in the top-level decisions depending upon levels of trust and shared preference (Light 1995; Lewis 2008; Nathan 1975; Pfiffner 1987; Resh 2015). This behavior, broadly characterized by the tools of the administrative presidency, has the effect of diminishing the policy control and influence of career employees.

Thus, career professionals on the receiving end of suspicion or marginalization by a new administration experience a dramatic change in their work life in a relatively short period of time. Career executives accustomed to deference and respect and empowered with authority are suddenly bypassed and excluded. For some agencies, the new administration will take these actions to stop existing policies and initiate new ones more congruent with the administration's preferences. This loss of policy control corresponds to a decreasing α in the equation above,

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⁵ Richard Nixon: "The President's News Conference," February 17, 1971. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. http://www.presidency.ucsb.edu/ws/?pid=3309.

making the overall utility for the bureaucrat increasingly negative. Holding the value of private sector work constant, we would expect that the dramatic effects of a new administration on both policy and influence will increase departures after elections.

H1—Elections: The election of a new president will increase departures among career executives.

However, the effect of a new administration will not be felt equally across the executive establishment. The impacts of transitions are most perceptible in agencies where the new administration wants to alter policy dramatically. There is significant variation across the government in the ideological orientations of agencies and their employees (e.g. Bertelli and Grose 2011; Chen and Johnson 2015; Clinton and Lewis 2008; Clinton et al. 2012). The election of a new liberal or conservative president will influence the policy choices of agencies differently depending upon the policy orientation of the agency, its employees, and its mission. For example, a new Republican president may instruct the Environmental Protection Agency to reduce regulatory burdens and rely on voluntary programs to reduce emissions or the release of pollutants. For other agencies, a new president may simply emphasize some agency priorities over others. A new Democratic president, for example, might instruct U.S. attorneys to be more attentive to election law violations that keep voters from the polls rather than violations that suggest fraudulent access to the polls. Given that career employees have policy preferences and often select into agencies with missions in line with those preferences, we would expect that ideological divergence between the new president and the general ideological orientation of the agency would lower the relative utility of government work and lead to higher turnover. For instance, in the equation above as the distance between \hat{x}_a and x_i increases, the policy utility the bureaucrat gets is increasingly negative, reducing the relative attractiveness of government work. In addition to impacting the utility of the bureaucrat directly through policy, the effects of ideological mismatch are likely also indirectly felt through their impact on policy control. In particular, a well-known result of principal-agent models is the "ally principle," which suggests that as preference divergence between principals and agents increases, principals delegate less often to agents and decrease agent discretion when doing so (see Bendor and Meirowitz 2004 for an overview). These theoretical results have been supported empirically in the study of the administrative presidency. For instance, Lewis (2008) demonstrates that politicization increases in ideologically divergent agencies. This suggests a further reason to expect a link between turnover and ideological mismatch.

H2—Agency Mismatch: The election of a new president will increase departures most in agencies that are an ideological mismatch with the new president.

If new administrations decrease the policy influence of career professionals or dramatically change policies in ways civil servants do not prefer, this should increase departures. Of course, the vast majority of bureaucrats have little influence over the policy choices of their agency. Further, most federal employees do not regularly interface with political appointees or other members of the administration. Because of this, the effects of an administration change will be most felt by bureaucrats with the greatest influence over and proximity to policy making (Aberbach and Rockman 2001; Golden 2000; Hult and Maranto 2010). Employees fitting this description will tend to be those that are nearest to the top of the managerial hierarchy in the agency, such as members of the career Senior Executive Service. This is not to say that the political dynamics we describe could not diffuse throughout an entire organization (e.g., Resh 2015). However, the effects of presidential transitions and new administrations will be *most*

perceptible to more senior individuals given their positions in the agency as well as the nature of their jobs.

H3—Lost Influence: The election of a new president will increase departures most among executives that had significant policy influence prior to the election. The effects of ideological mismatch will also be felt most among these individuals.

To be sure, individual bureaucrats may take alternative actions when dealing with a new administration. While we focus on turnover in this paper, other work suggests that employees may alter their behavior in different ways. Golden (2000) finds that in the Reagan-era bureaucracy many federal employees did not leave but rather remained in agencies, either speaking out and resisting changes or loyally (or passively) implementing the president's policies. This may be due to institutional loyalty, perceptions of the role of civil servants as politically neutral, or public spiritedness (e.g. DiIulio 1994; Rom 1996). If this is the predominant behavior of career employees, then we should not see the hypothesized effects in our analysis.

However, even if we do find that turnover increases in the ways our theory suggests, this is not to say there are no employees engaging in other behavior. Rather, what we expect to find is that, on average, employees are more likely to turnover when the conditions we identify in the theory prevail. While we cannot directly study the prevalence of these other behaviors (what Golden calls "voice" and "loyalty") with the dataset we employ in this paper, we nonetheless believe that studying this particular employee response, i.e. turnover, in the face of presidential transitions is an important contribution to our understanding of this dimension of bureaucratic capacity and its political dynamics. We turn now to an examination of our empirical hypotheses.

Data, Measurement, and Modeling

In order to evaluate these empirical hypotheses, we use data from the Office of Personnel Management's Central Personnel Data File (CPDF) and Enterprise Human Resources Integration system (EHRI) from 1988-2011. This dataset includes the personnel records from 3,511,824 employees that served in the federal government during the period of our study. The comprehensiveness of the data allows for the estimation of effects within relatively small segments of the government with confidence. The dataset includes important demographic indicators (including race, gender, and age) as well as human capital information. Information about an individual's work, including their occupation, salary, supervisory status, and their organization, is also in the dataset. Further, the records are longitudinal, allowing us to characterize an individual's career dynamics, and importantly, when they exit the federal government. The unit of analysis in our study is the employee-year, which reflects the structure of this dataset.

The key dependent variable that we examine in this analysis is turnover. We define an employee as turning over in a given year if it is the last one in which they appear in the CPDF-EHRI data. In the vast majority of cases, this corresponds to employee exit from the federal government. One caveat, however, is that if an employee transitions into a sensitive occupation as defined by OPM or to an agency that is not included in our dataset (e.g. the Central

⁶ This dataset does not include the Department of Defense, Navy, Army, and Air Force.

Additionally, individuals that work in classified roles, sensitive agencies, and sensitive occupations (as defined by OPM) are excluded. We also exclude all political appointees from the analyses in this paper.

Intelligence Agency or the Postal Service), they may be mistakenly coded as turning over.

Unfortunately, there is no way for us to distinguish these cases. However, there is not a clear reason to believe that this type of career transition is correlated with the key independent variables that we examine in this analysis or is a widespread enough phenomenon to merit concern about its potential to confound the results we report.

Elections, Mismatch, Lost Influence

To examine H1, we create a dummy variable that takes the value "1" in the first year of a presidential administration (i.e. 1989, 1993, 2001, and 2009) and is coded as "0" otherwise. One might also think that administration changes may vary in terms of their impacts on employees. In particular, changes in the party of the administration may be more likely to have the effects discussed above if appointees from a new party are more suspicious of careerists that were in government during the previous administration. Because of this, we also examine these partisan transitions (that is, 1993, 2001, and 2009) in an alternative analysis (Table B1).

We use agency ideology scores developed by Clinton and Lewis (2008) to evaluate H2. They are derived from surveys of experts on the federal bureaucracy who were asked to rate the ideology of a wide range of federal agencies as liberal, conservative, or neither during the period 1988-2005, which overlaps substantially with the period of our study. These ratings were then used in a multirater item response model to create ideology scores for each agency on a unidimensional scale. Following other work that uses these scores (e.g. Lewis 2008), we segment agencies into three groups – conservative (where the entire 95% credible interval of the ideology estimate is greater than zero), moderate (where the 95% credible interval includes zero), and liberal (where the 95% credible interval is wholly less than zero). Agencies are coded as being

"ideologically mismatched" if they are conservative during a Democratic presidency or if they are liberal during a Republican presidency.

We believe that these are the best ideal points for this application for a number of reasons. They capture the general ideological orientation of an agency and its mission and are designed to capture a long time period that substantially overlaps with our dataset. Ideal points based directly on the preferences of individuals within agencies (e.g. Bonica, Chen, and Johnson 2015; Chen and Johnson 2015; Clinton et al. 2012) are endogenous to behavior about whether to stay within or leave government. This would confound the results of the analyses below. Second, other ideal points (such as Clinton et al. 2012 and Bertelli and Grose 2011) do not have nearly the coverage in terms of time or agencies as those estimated by Clinton and Lewis (2008).

If elections and transitions are truly shaping the incentives of bureaucrats, the relationship between mismatch and turnover should be the largest in the initial years of a new administration. New presidential administrations are generally suspicious of the bureaucracy in the early years of power when presidents seek to move their agendas with the greatest vigor. To examine the possibility that the effects of ideological mismatch may be greater at the start of an administration, we estimate an additional set of models where we interact the mismatch variable with year of term indicators to allow the effect of mismatch to vary by year. Support for this auxiliary hypothesis would provide further evidence on the specific role of presidential transitions in influencing these dynamics.

H3 requires us to separate out employees that have differential levels of policy influence.

We do this by considering four groups of employees in all of the analyses below: the career

Senior Executive Service (SES), individuals in supervisory roles,⁷ General Schedule (GS) employees in grades 13-15, and all employees.⁸ We expect the career SES to have the most policy influence and work in closest proximity to political appointees and members of the president's administration. Therefore, we anticipate that they will evince the greatest levels of sensitivity to ideological mismatch and transitions. GS 13-15 employees as well as those in supervisory roles are less likely to have policy influence relative to the career SES, but they still may be involved in policy decisions and sometimes interface with administration officials. We expect that the final group, all employees, to be least sensitive to elections and ideology.

Controls

In addition to the key independent variables discussed above, we also include a number of control variables in our analyses that could also impact the propensity of employees to leave the government. First, we use the geographic location information in the OPM data to merge in

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⁷ The supervisor category is fairly broad and definitions have changed over time. We code individuals that are designated as "supervisor or manager," "supervisor (CSRA)," "management official (CSRA)," "leader," or "team leader" in the OPM dataset as supervisors in our analyses.

⁸ An alternative method would be to interact the Year 1 and Mismatch variables with indicators for each group, resulting in a specification with six interaction terms (and two omitted ones). We opt for this setup in order to ease interpretation, which would be made more difficult by the fact that these groups are not mutually exclusive. It also has the added benefit of allowing other coefficients to vary by group as well, lending greater flexibility to the analysis and relaxing equal coefficient assumptions across groups. The results of models with interactions, however, do corroborate those presented below.

data on the seasonally adjusted September unemployment rate in the states where employees work. We collected this data from the Bureau of Labor Statistics' Local Area Unemployment Statistics Reports for 1988-2011. Here, we use unemployment as a proxy for the strength of the local economy and labor demand in the area where an employee works. We expect that turnover is decreasing in this variable. We have also estimated models with other ways of accounting for the strength of the private sector labor market and wages, including fixed effects for combinations of more than 800 occupation codes with hundreds of geographic locations (see Tables B3 - B5 in Appendix B). The results in these specifications are similar to what is reported in the main text.

We control for demographic factors that have been shown or hypothesized to increase public sector turnover rates (e.g. Moynihan and Landuyt 2008). In all of the regression models reported below, we include the employee's age and its square. Additionally, all models include a dummy variable for whether or not an employee is a woman to capture any potential gender-based differences in turnover. We also include indicators for four racial groups identified by the Office of Personnel Management over time: American Indian/Alaska Native (abbreviated A.I./A.N. in the tables below); Asian; Black; and Hispanic. ¹⁰ The omitted category is White.

In addition to demographics, we also control for the level of education that an employee has attained in a given year. The original OPM CPDF-EHRI data divides education level into

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⁹ http://www.bls.gov/lau/

¹⁰ We use these categories in order to capture consistent racial categories over time. This requires us to aggregate some racial categories during some periods because of inconsistencies in how racial data has been collected by the federal government at different periods of time.

twenty-two different categories. In the analyses reported below we create a single, continuous measure of educational attainment that corresponds to the number of years past 12th grade completed by employees. This simplifies interpretations, but we also note that including these 22 categories as indicator variables or in a somewhat more aggregated form (e.g. high school, B.A., M.A., etc.) does not substantively alter the results that we report below.

Finally, all of the models incorporate two additional sets of fixed effects for the 416 agencies and the 803 distinct occupations. These fixed effects account for time invariant occupation and agency characteristics that may impact turnover, such as private-public wage differentials for given occupations or the premium placed on government experience in a given policy area or occupation.

Methods

To evaluate our hypotheses, we estimate a series of linear probability models, where the outcome variable is whether or not an employee chooses to leave in a given year. ¹¹ In order to account for duration dependence, we include a set of dummy variables for the number of years that an individual has been in government (i.e. tenure fixed effects). The estimates for these

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¹¹ We focus on the results of linear probability models primarily because of computational difficulties with Cox proportional hazards models and logistic regressions when using such a large dataset and large numbers of fixed effects for, in some cases, relatively small groups. These factors make the convergence of maximum likelihood estimators difficult and require substantial computing power for estimation. We do provide estimates from probit regressions with the same specification as those reported here as well as somewhat pared down Cox survival models in Tables B7 and B8, with results substantively similar to those reported here.

effects are akin to a baseline hazard rate in a survival model. Additionally, to capture any global time trends in departure rates, we include a cubic polynomial in time in all model specifications. ¹² Finally, in order to account for the correlated error structure and dependence that exists when observing the same employees in many different years, we cluster all standard errors at the employee level. Additional results, with clustering at the level of agencies, are available in Appendix B. The results are substantively similar to those reported here, though less precisely estimated for some coefficients for the "all employees" and "supervisors" sample frames. We now turn to describing the results of these analyses.

Results

Table 1, below, includes the results of the turnover models described above. All of the results are separated into four groups of employees – all employees, GS 13-15, supervisors, and career SES employees. We include coefficient estimates and t-values for all variables. Overall, the results show support for the three hypotheses although with some interesting nuance. There is a predictable increase in departures among the most senior civil servants after a presidential election. We have long observed how elections induce departures among political appointees but the results here reveal significant and underappreciated departures among civil servants as well. Notably, departure rates are higher in liberal agencies under Republican presidents and conservative agencies under Democratic presidents. The career choices of civil servants at the highest levels appear most responsive to changes in policy and influence stemming from

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¹² The results we report are robust to other functional forms for the time trend, including a linear trend or quadratic trend. The results are also not affected by excluding the time trend variable.

elections. Civil servants at lower levels are more insulated from changes brought by elections as expected. In fact, some changes may work to their benefit if the departure of their superiors opens up new job opportunities for them.

We begin with the results of our analyses relevant to testing H1. The estimated coefficients for the Year 1 variable provide the key test for this hypothesis. Recall, we predict that individuals will be more likely to depart during the first year of a new administration. We find support for this idea in two groups of employees – individuals in supervisory roles as well as career SES employees. Both are estimated to have higher levels of turnover in the first year of a new administration. Career SES employees seem to be most sensitive to a new president with an average increase of 1.6 percentage points in the first year of a new administration relative to other years. The number is significantly less for supervisory employees, though still in the expected direction – a 0.2 percentage point increase in the probability of turning over in transition years. To put this in perspective, this means the departure of an additional 528 supervisors and 100 members of Senior Executive Service (SES) in the first year of a new administration. The turnover rate in the SES is about 8.0% per year, corresponding to about 560 annual departures. This increases to 9.6% in the first year of a new administration, or about 660

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¹³ In other specifications, we examined whether the first year of the administration was associated with the highest turnover rates relative to other years (rather than just higher on average). In the case of career Senior Executives, all other years of administrations (i.e. 2-8) had significantly lower turnover rates. For supervisors, the second year of the administration actually was associated with the highest turnover rate, though the first year had a higher turnover rate than the average year (which corresponds to the reported effects).

people. Members of the SES are key managers in the executive establishment. They direct counterintelligence in the Department of Homeland Security and emergency response in the Federal Emergency Management Agency. Increased turnover in these types of positions may represent severe losses of human capital and institutional capacity in critical functions.

We see results in the opposite direction for the other two groups of employees that we examine – all and GS 13-15. In particular, turnover propensity is estimated to decrease by 0.1 percentage points for all employees, and by 0.4 percentage points for employees in GS grades 13-15. These latter two results are not consistent with our theoretical predictions, though for all employees the effect is very small. The Year 1 effect for GS 13-15 employees is substantively larger and gestures toward one possibility that is not captured by the theory. With high levels of churn in the career SES during the beginning of a new administration, there may be new opportunities for promotion for individuals directly below the Senior Executive Service level, leading GS 13-15 employees to stay in the government to vie for these new openings. 14

[Insert Table 1 about here.]

Now, we turn our attention to the results for the test of H2. Across all four groups, there is a positive and statistically significant estimated coefficient for the ideological mismatch variable. This is consistent with the hypothesis, suggesting that individuals' propensity for

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¹⁴ In addition to testing whether or not the first year of an administration is associated with increased turnover, we also examined whether partisan changes in administration had similar effects. We report the results of this analysis in Table B1 (in Appendix B). They are substantively identical to the ones that we report here. Indeed, the estimates for the effect of a change in presidential administration are larger for career SES members.

turnover is increased for employees in agencies with ideological orientations that differ from that of the presidential administration. In particular, the estimated increase in turnover propensity is 0.4 percentage points for all employees; 0.1 percentage points for employees in GS grades 13-15; 0.3 percentage points for employees that serve in supervisory capacities; and 0.6 percentage points for career senior executives in any given year of ideological mismatch relative to employees in agencies where there is no such mismatch. These effects are averaged across years of an administration and should be considered relative to baseline turnover propensities. The average levels of turnover for each of the four groups of employees in a given year from 1988-2011 is 6.2%, 4.4%, 5.5%, and 8.0% for all employees, GS 13-15, supervisors, and the career SES, respectively. Thus, for example, the 0.6 percentage point increase for career SES employees is a 7.5% increase in the baseline propensity for turnover. Furthermore, one must also consider that these effects are for any given year. Increased turnover propensities will compound over time to create much larger differential effects over the course of a four or eight-year administration. For example, the turnover rate in a mismatch agency is 6.6% each year rather than 6.2% in other agencies for all employees. In a 10,000 person agency, this is 40 more departures per year each year just because of ideological differences between the agency and the president. Overall, then, the results in Table 1 provide support for H2.

While the results in Table 1 give a sense of the mismatch effect averaged over the course of a president's term, they do not necessarily capture the temporal aspects of the mismatch effect that we would expect in the case that elections are playing a central role in structuring employee decisions about turnover. In particular, the mismatch effect might be most prominent in beginning years of a new administration and lessen over the course of a president's term. In order to assess this auxiliary hypothesis, we interacted the mismatch variable with indicator

variables for the year of president's term --i.e., 1 through 8--and the estimates are included in Table 2.

[Insert Figure 1 about here.]

[Insert Table 2 about here.]

Figure 1 plots the estimated effect of mismatch in a given year of a presidential administration based on the interaction models. As can be seen, the effect is concentrated at the beginning of presidential administrations. In particular, we observe the positive mismatch effect for all four groups being the greatest during the first three years of a president's administration, indicating that the temporal dynamics surrounding elections and transitions are driving behavior. Furthermore, these effect sizes are significantly larger in some cases than the average effect estimated in Table 1. For example, in the third year of a presidential administration, there is an increase of 1.85 percentage points in the probability a career SES employee will leave the federal government if they are in a mismatched agency relative to one who is not. This is a 23% increase from the baseline departure rate. After the first three years of an administration, however, the mismatch effect tends toward zero for all groups of employees that we examine. For two groups of employees, supervisors and career SES employees, the mismatch effect actually reverses somewhat substantially at least in some years during the second term. Though our theory does not shed light on this result, the pattern could suggest 1) career employees are more empowered by political appointees the longer they remain with an administration or 2) that the career employees that left have been replaced by careerists better able to work with the new administration (and who, by ideological compatibility, are less likely to leave). As before, career SES employees appear to be the most responsive to ideological mismatch, with the other three groups showing less pronounced effects, though still in the expected positive direction.

Turning now to Hypothesis 3, we do find hierarchy effects in our analysis of the turnover decision. In particular, career SES employees are most responsive to both ideological mismatches between their agency and the administration as well as to changes in administrations. This is strongly in line with our theoretical expectations. Career SES employees tend to serve at the upper echelons of the agency hierarchy and are the career employees that are most likely to interact with political appointees in terms of the substance of their work on a regular basis (see, for example, Resh 2015).

The effects are less pronounced when examining the other three groups. In particular, employees in grades 13-15 of the GS show the lowest sensitivity to ideological mismatches and are more likely to stay in government in the first year of a new administration. While slightly at odds with our theoretical expectations, both factors may be explained by the promotion-seeking conjecture discussed above. When high ranking positions, like those filled by members of the SES, become vacant, this opens up promotion opportunities for lower level employees. Supervisory employees have approximately equal sensitivity to mismatches as employees as a whole but are more likely to leave in the first year of administration, while all employees actually are more likely to stay in government after an administration transition. Thus, we find significant support for the lost influence hypothesis, with career SES employees appearing extremely sensitive to the political dynamics in the theory. Further down the leadership ladder of the agency, things tend to converge much more. This may suggest that the political effects we explore in this paper are less perceptible to these employees and/or there are other career concerns at play that cause employees to act differently than career SES employees in order to obtain promotions.

Finally, we turn to discussing some of the control variables in our analyses. First, we examine the extent to which economic concerns structure employee decision-making with respect to turnover. As discussed above, we proxy for the labor demand and wages that an employee could expect to earn with the local unemployment rate in the place where they work in a given year. As unemployment increases, we expect decreasing turnover propensity. For three of the four groups that we analyze we see results in line with this expectation. In particular, all employees, supervisors, and career SES employees are less likely to leave government as the unemployment rate in the state where they work increases. These effects are substantively large relative to the other ones that we estimate. For example, an increase of 1% in the unemployment rate in a given state decreases the probability of a career SES employee that state leaving the government by 0.2 percentage points. The unemployment variables ranges from 2.2% (Connecticut, September 2000) to 14% (Michigan, September 2009) in our dataset, so these effects can be quite substantively large. The results for GS 13-15 group of employees are out of line with our expectation. We estimate a positive correlation between unemployment and turnover for this group, though the effect size is significantly smaller in magnitude than what we estimate for the other three groups of employees. We also find that federal employees with higher levels of education and minority employees are generally less likely to depart in any given year than Whites. Further, we find that younger employees are less likely to depart.

More central to our purposes here, however, the estimates substantially confirm expectations. They reveal that presidential transitions increase the departure rates of federal employees, particularly in agencies whose views diverge from those of the new president and for employees higher in the hierarchy. In Appendix B, we include the results from a number of robustness checks and alternative model specifications that account for partisan dynamics in

administration changes (Table B1); more flexible accounting for age using age fixed effects (Table B2); and different ways of capturing the effects of local labor markets on turnover propensity (Tables B3, B4, and B5). Across all of these alternative models, we find results that are substantively similar to those reported in Table 1.

Discussion and Conclusion

Elections and partisan transitions are a central feature of American administration. They can bring about new policy directions and cast aside old ideas, lending dynamism and uncertainty to public policy. While presidents and their appointees cycle in and out of leadership roles in the executive branch, career officials are thought to play a stabilizing role, supporting new leaders but also providing continuity for agencies and their missions. This, in theory, allows for organizational effectiveness even in the face of changing policy priorities, giving new leaders the opportunity to implement their programs.

However, these career employees are not necessarily ideologically neutral actors, mechanically carrying out the will of their appointed leaders. Rather, they often have well-developed policy preferences and select into agencies that have missions congenial with their views. Thus, when presidents from parties opposed to an agency's ideological orientation come into office, there can be significant policy losses associated with implementing policy from the perspective of the employee. These dynamics are likely to be especially acute for employees higher in the administrative hierarchy and those who value policy and influence significantly. This reduced utility from their work in the government creates situations in which private sector employment (or other options, such as retirement) become more attractive to career employees.

In this way, elections and partisan changes can have important impacts on the career concerns of federal employees and potentially affect the capacity of organizations. By inducing elevated levels of turnover, particularly at the top of the administrative hierarchy, presidential transitions may lead to periods of diminished administrative capacity in critical positions of the government. These ideas form the backbone of the theoretical framework that we advance in this paper.

Our analysis confirms many of these empirical hypotheses. Indeed, employees working in agencies where is a significant divergence from the ideological outlook of the administration are more likely to leave in any given year. This effect is particularly large in the first three years of an administration and for the group of employees that has the most direct contact with the administration – career senior executives. This suggests that political disagreements can lead to churn at the top of the career civil service and create vacancies in critical agency positions.

Additionally, the first years of an administration are associated with higher average levels of turnover for employees across all agencies for career SES and supervisory employees, which is in line with the theoretical notion that civil servants from a previous administration are often viewed with suspicion by new political appointees and thus cut out of the policy process.

Further, we find some evidence that these effects are different for different groups of employees. In particular, the political dynamics we describe appear most perceptible to career Senior Executives, for whom we estimate the largest magnitude effects.

Overall, this paper makes a number of contributions to our understanding of politics and administration in the United States. First, it brings elections and ideology to the fore, demonstrating ways in which they can powerfully influence employee career concerns and decision-making about their labor. Second, we demonstrate that employees situated throughout

the agency hierarchy may be differentially responsive to these political factors. Finally, our analyses use administrative records to systematically study actual turnover, an improvement over work that has been forced to rely on turnover intention in surveys or small groups of employees due to data limitations.

These contributions also have implications beyond better understanding the political economy of federal careers. The results for the career SES in particular suggest that presidential transitions will be times of significant losses in human capital and institutional memory both at the career and political leadership levels. This implies important political and temporal dynamics for bureaucratic capacity in the U.S. federal government. At the time in which presidents are most eager to exploit their political capital and shift policy, they may find the administrative apparatus that they need to do this diminished in capacity. In this way we observe one possible mechanism through which the control-competence trade-off manifests. As presidents seek to exert control over agencies, it may induce turnover in key career positions and ultimately negatively impact agency performance (and the achievement of administration goals).

Several additional implications from our results raise a number of questions that could be profitably pursued in future work. First, as discussed above, the results for GS 13-15 employees raise a number of interesting issues surrounding hierarchy and the potentially different incentives that this group of workers faces. In particular, if career SES employees increase their turnover propensity in response to political factors, then this potentially opens up opportunities for other employees to advance. In that case, these two groups of employees could potentially behave in different ways in equilibrium. A more general theory of overall organizational dynamics and career concerns would be required to illuminate this possibility and would be a fruitful avenue of research.

Another area of potential interest concerns how elected officials and appointees might respond to negative reactions by careerists in order to stem personnel losses. If turnover, particularly at top levels of an organization, negatively impacts performance (at least in the short-term) then actors may employ some management strategies to mitigate the utility losses associated with turnover. Exploring how employee behavior affects administration incentives and how appointees respond in this context would be an important contribution to our understanding of the administrative presidency and public management.

Table 1: OLS Models of Turnover for Four Groups of Employees

Variable	Model 1	Model 2	Model 3	Model 4
Year 1	-0.001	-0.004	0.003	0.016
	(-8.08)	(-11.90)	(7.30)	(7.19)
Ideological	0.004	0.001	0.003	0.006
Mismatch	(26.08)	(3.81)	(9.37)	(2.69)
Unemployment	-0.001	0.001	-0.001	-0.003
Rate	(-20.45)	(0.86)	(-10.21)	(-4.32)
Female	-0.003	0.001	0.001	-3.99 x 10 ⁻⁴
	(-24.22)	(3.43)	(2.84)	(-0.21)
A.I./A.N.	-0.007	-0.005	-0.008	0.006
	(-14.71)	(-3.60)	(-6.39)	(0.51)
Asian	-0.010	-0.009	-0.009	-0.012
	(-31.67)	(-17.28)	(-10.83)	(-2.05)
Black	-0.006	-0.011	-0.009	-0.017
	(-39.15)	(-28.19)	(-21.93)	(-6.01)
Hispanic	-0.004	-0.003	-0.004	-0.007
	(-17.33)	(-4.32)	(-6.73)	(-1.38)
Age	-0.016	-0.014	-0.015	-0.012
	(-280.63)	(-87.21)	(-77.81)	(-7.23)
Age ²	2.00 x 10 ⁻⁴	1.70 x 10 ⁻⁴	1.93 x 10 ⁻⁴	1.47 x 10 ⁻⁴
	(305.06)	(94.00)	(91.56)	(9.22)
Education	-4.20 x 10 ⁻⁴	-1.15 x 10 ⁻⁴	-0.001	-0.002
	(-12.23)	(-1.62)	(-18.14)	(-3.26)
Tenure FE	Yes	Yes	Yes	Yes
Occupation FE	Yes	Yes	Yes	Yes
Agency FE	Yes	Yes	Yes	Yes
Cubic Trend	Yes	Yes	Yes	Yes
Group	All Employees	GS 13-15	Supervisors	Career SES
N	17,529,543	2,618,289	2,788,868	103,346

This table includes the estimated coefficients from turnover models for four groups of employees – all, GS 13-15, employees in a supervisory role, and career Senior Executive Service employees. T-ratios based on robust standard errors clustered by employee are reported in parentheses.

Table 2: Conditional Mismatch Effects

Variable	Model 1	Model 2	Model 3	Model 4
Ideological	0.004	-3.69 x 10 ⁻⁵	0.004	0.014
Mismatch	(13.08)	(-0.06)	(4.96)	(3.07)
Mismatch x	0.007	0.002	0.009	-0.002
Year 2	(15.12)	(2.56)	(9.32)	(-0.36)
Mismatch x	0.005	0.006	0.005	0.004
Year 3	(10.70)	(5.80)	(4.59)	(0.72)
Mismatch x	-0.002	0.001	-0.004	-0.011
Year 4	(-4.16)	(0.48)	(-3.59)	(-1.68)
Mismatch x	-0.006	0.001	-0.010	-0.033
Year 5	(-11.20)	(0.47)	(-7.93)	(-4.27)
Mismatch x	-0.006	-3.27×10^4	-0.006	-0.019
Year 6	(-12.12)	(-0.30)	(-4.93)	(-2.48)
Mismatch x	-0.005	0.001	-0.006	-0.017
Year 7	(-10.04)	(0.64)	(-4.92)	(-2.15)
Mismatch x	-0.001	0.002	-0.001	-0.012
Year 8	(-2.13)	(1.60)	(-1.00)	(-1.86)
All Controls	Yes	Yes	Yes	Yes
Tenure FE	Yes	Yes	Yes	Yes
Occupation FE	Yes	Yes	Yes	Yes
Agency FE	Yes	Yes	Yes	Yes
Cubic Trend	Yes	Yes	Yes	Yes
Group	All Employees	GS 13-15	Supervisors	Career SES
N	17,529,543	2,618,289	2,788,868	103,346

This table includes the estimated coefficients from the interaction between the mismatch variable and the indicators for the year of term for four groups of employees – all, GS 13-15, employees in a supervisory role, and career Senior Executive Service employees. All other variables that are used in Table 1 are also included in these specifications. T-ratios based on robust standard errors clustered by employee are reported in parentheses.

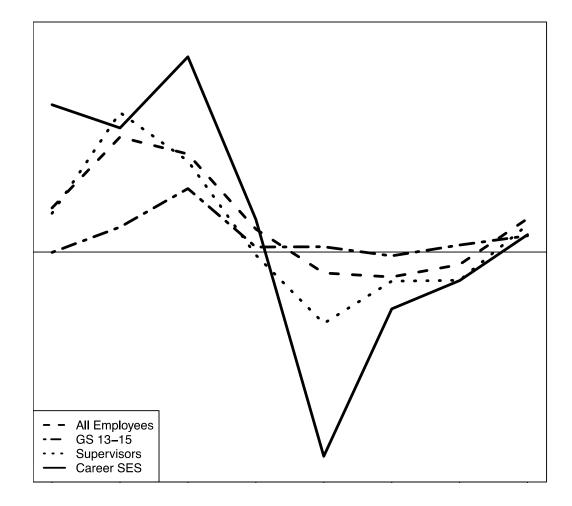


Figure 1. Ideological Mismatch Effect by Year of Term. This figure plots the interaction effects that we estimate in Table 2. The mismatch effect appears to be concentrated in the beginning of new administrations. In particular, the mismatch effect appears to be concentrated mostly in the first three years of a new administration, further demonstrating the role that elections and transitions have on employee turnover decisions.

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