

**Agencies in Turmoil?**  
**The Impact of Leadership Vacancies on Federal Regulatory Policy Reporting\***

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At the end of his first year in office, the Trump presidency had fewer nominations and confirmations and more turnover than any of the last five administrations (Partnership for Public Service 2018; Tenpas 2018). As a result, the Trump Administration has an unusually large number of vacancies in key positions throughout the executive branch. Some worry that these vacancies, even when filled on an interim basis by career civil servants, cause problems for government performance. As put by Max Stier, president and CEO of the Partnership for Public Service, those filling vacant positions on a temporary basis “are the proverbial substitute teacher; everyone knows you’re not around for the long term. Whatever decisions you make aren’t going to necessarily stick. You’re not likely to take the long-term view or handle the most difficult issues.”<sup>1</sup>

While the sheer number of vacancies in the Trump Administration is relatively unique in the modern presidential era, the problem of vacant positions is hardly a new one. Scholars view presidential appointments to positions of leadership in federal agencies as a key mechanism by which presidents can control the bureaucracy. However, the average agency head serves slightly over three years, making turnover in agency leadership a widespread problem for all presidents. General theoretical consensus in the literature is that this turnover negatively affects agency performance, yet only a few scholars have put this widely-held assumption to an empirical test.

In this paper, we explore the relationship between the number of vacancies in federal agency leadership and government performance. Using a new dataset of federal agency reporting to the Unified Agenda, we find that vacancies do influence government performance.

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<sup>1</sup> Keith, Tamara. 2017. “Trump Leaves Top Administration Positions Unfilled, Says Hollow Government By Design.” National Public Radio (October 12, 2017).

## **The Consequences of Vacancies in Agency Leadership**

Scholars commonly identify appointments to federal agencies as one of the key ways by which the President can control the bureaucracy (e.g. Dickinson and Rudalevige 2004; Golden 2000; Lewis 2008; Moe 1985; Resh 2015; Wood and Waterman 1994). Political appointments serve to influence the ideological and policy concentrations of federal agencies; appointees play an important role in tapping career civil servant expertise, providing agencies with new vision and ideas, and counteracting agency that may be contrary to presidential prerogatives (Bilmes and Neal 2003; Krause, Lewis, and Douglas 2006; Lewis 2009).

Although political appointees are potentially an important asset to the president, the government faces a problem of turnover, as the average appointee serves only 2.5 years and the average agency head serves 3.2 years (Dull and Roberts 2009). Leadership of federal agencies is more volatile than leadership in the private sector, with the average CEO tenure being 5-7 years (Kelman and Nyers 2011; Lewis 2012). Yet, continuity in public service is important, as it takes time for individuals to learn how government agencies function both in law and politics (e.g. Dull and Roberts 2009; Hecl 1977). General consensus is that short tenures, turnover in power, and vacancies in leadership all lead to worsened agency performance (Bertelli and Lewis 2012; Dull and Roberts 2009; Lewis 2007, 2012; Mendelson 2015; O'Connell 2008, 2015). Leaders that are in office for a short period of time can focus only on short-term initiatives, rather than on long term goals (Lewis 2012). As a result, career civil servants can lack direction and/or receive conflicting directives (O'Connell 2008).<sup>2</sup> Taken together, academic scholarship paints a clear and unified picture of the negative ramifications of turmoil in agency leadership. Yet, while there is a robust literature on both the causes and consequences of turnover in the public sector

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<sup>2</sup> Scholarship examining the private sector comes to similar conclusions (e.g. Adams, Almeida, and Ferreira 2005; Day and Lord 1988; Lieberman and O'Connor 1972; Mackey 2007; Thomas 1988).

(e.g. Bertelli 2007; Bertelli and Lewis 2012; Brehm and Gates 1997; Grissom, Viano, and Selin 2016; Lee and Whitford; Lewis 1991; Pitts, Marvel, and Fernandez 2011; Romzek 1990; Wise and Tschirhart 2002), few scholars have explored what happens to agency performance when key individuals leave government service and their positions remain unfilled.

Theoretically, scholars assume that vacancies negatively impact the ability of federal agencies to make important policy decisions, either because vacancies prevent the agency from operating with a long-term view or because vacancies affect agency leadership's knowledge and/or political capital (see, e.g., Hecl 1977; McCarty and Razaghuwan 1999; Michaels 1997). Vacancies create a vacuum of leadership with no official claiming the status of appointment to push the president's agenda (Mendelson 2015). Without a confirmed advocate for the agency, vacancies have been found to decrease the resources available to agencies and to increase turnover within management throughout the agency (Mendelson 2015). Empirical evidence suggests vacancies exacerbate inaction, as federal agencies typically initiate fewer regulatory programs in the beginning of presidential administrations, when the number of vacancies is the greatest (O'Connell 2008).

Furthermore, when policy leadership is lacking, there may be increased confusion within the organization (Light 1995; O'Connell 2008). Politically appointed officials oversee the actions of career civil servants and symbolically represent the president's policy priorities. Without a confirmed official, civil servants may remain unsure of the direction being taken by the president's administration (O'Connell 2008). Similarly, career civil servants may engage in actions with less deliberate effort in anticipation that policy directives will change with new leadership (O'Connell 2008).

Scholars to date have addressed a broad range of issues and mechanisms that theoretically give cause to worry about the effect of vacancies on agency performance. The detrimental impact of vacancies ranges from lack of resources, direction, and status. However, further work is needed to empirically assess the relationship between vacancies and bureaucratic performance and to explore whether the effects of vacancies are equal across all the entire executive branch.

### **Protecting an Agency from Turmoil**

While scholars have taken a one-size fits all approach to the effects of vacancies, it is likely that not all agencies are influenced equally by vacancies in agency leadership. Under certain circumstances, vacancies at the top may not affect the performance of career bureaucrats and the agency as a whole. In particular, agencies with a technical focus, routinization, and high level of intra-agency delegation to career civil servants will suffer less of a negative effect from leadership vacancies.

First, employees in agencies with a technical and apolitical focus likely need less involvement or leadership from the administration to carry out tasks. These types of agencies see less policy change from one administration to the next and thus career civil servants are unlikely to face confusion during periods of absence of leadership. For example, the National Transportation Safety Board is an independent agency tasked with investigating every civil aviation accident and significant accidents in other modes of transportation in the United States by determining the probable cause of the accidents. This apolitical, technical task leaves less need for the guidance of an agency head.

Second, certain agencies perform routine tasks that require very little deviation from the ordinary way of conducting business.<sup>3</sup> As tasks become habitual within an agency and there is a standard operating procedure from year to year, changes in leadership might have relatively little effect – the career civil servants who perform most tasks within the agency continue on with their procedures as usual, regardless of leadership (see Mendelson 2015). For example, the U.S. Mint and U.S. Postal service perform a routinized task that changes little over time or with new presidential administrations. These tasks likely do not vary with changes in agency leadership. However, if there is variability in the tasks being performed and more subjective decision-making is required, agency leadership takes on an increased role.

Finally, some agencies delegate more authority to civil servants (Nou 2017). A small group of scholars have documented that delegation to career civil servants can protect the agency from the effects of leadership turnover (Mendelson 2015). Career civil servants are viewed as a stabilizing force that provides continuity to the agency, even as the leadership of the agency may frequently change (Bolton, de Figuiredo, and Lewis 2016). The Census Bureau is an example of an agency with a mainly civil servant workforce in charge of its operations. Former Census Bureau Director, John Thompson, addressed this point saying: “The Census only really has three political positions... Beyond that, everything else is a career position... The people who are going to conduct the census are career people” (Meraji 2017).

In summary, we take an important step forward by outlining the types of agencies that may be shielded from the impact of vacancies on the agency’s performance. Specifically, leadership vacancies may affect agencies with a technical focus, routinization, and high level of

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<sup>3</sup> It is worth mentioning that the amount of deviation from the “regular way” of doing things could also be due to the agency’s legal discretion.

intra-agency delegation to career civil servants less than those agencies without these characteristics.<sup>4</sup>

### **Measuring Agency Performance**

Evaluating and comparing agency performance across the bureaucracy can be challenging because of the incredible diversity of policymaking in the executive branch. This diversity makes it difficult to find indicators of performance that are comparable across agencies. In measuring performance, scholars have examined revenue forecasts (e.g., Krause and Douglas 2005; Krause, Lewis, and Douglas 2006), Performance and Accountability Reports (e.g. Lee and Whitford 2012), scores from OMB's Program Assessment Rating Tool (PART) (e.g., Gilmour and Lewis 2006; Lewis 2007, 2008; Gallo and Lewis 2012), and federal employee surveys (e.g., Bewer and Selden 2000; Lewis 2008). However, all of these measures have a political component or rely on agency self-evaluation as opposed to more objective evaluation of policy implementation.

In order to evaluate agency performance when implementing policy, we examine federal agency reporting to the Unified Agenda. Briefly, the Unified Agenda is meant to serve as a central, systematic process for agencies to report their proposed activities. The collection and centralization of regulatory plans is designed to provide government transparency and to alert interested stakeholders about pertinent government regulations. President Carter first mandated a formal regulatory planning process under Executive Order 12044. In that Order, he directed each executive agency to publish at least semiannually an agenda of significant regulation under development or review. Two years later, Congress passed the Regulatory Flexibility Act, which, *inter alia*, was designed to supplement Carter's Executive Order, statutorily require each agency

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<sup>4</sup> We recognize that all of these characteristics may be related to each other, and hope to explore this possibility in future iterations of this paper.

to publish a semiannual regulatory agenda, and expand the requirement to include all federal agencies (including independent agencies). President Reagan replaced Carter's Order with Executive Order 12291 to expand the regulatory agenda to include all proposed regulations, and President Clinton placed the Office of Management and Budget's Office of Information and Regulatory Affairs in charge of compiling all agencies' plans into one Unified Agenda. Since then, the regulatory planning process has remained largely unchanged.<sup>5</sup>

Using the Unified Agenda to examine agency performance is desirable because almost every agency engages in rulemaking to interpret and implement statutory policy.<sup>6</sup> Yet, despite the attractiveness of evaluating agency compliance with regulatory procedures as a measure of performance, there is little empirical scholarship on the quality of the regulatory process. Those scholars who have examined the regulatory process tend to look at the timing of rulemaking (Gersen and O'Connell 2009; Kerwin and Furlong 1992, 2011; Mashaw 1994; Yackee and Yackee 2010) or an agency's responsiveness to public comments (Yackee and Yackee 2006; McKay and Yackee 2007; Naughten et al 2009; Boehmke, Gailmard, and Patty 2013). Certainly, these aspects of regulation are important for understanding policy implementation and democratic accountability. However, these analyses fall short of providing a comprehensive view of agency performance.

Not only is the Unified Agenda a nice test of agency performance because of its application to all agencies, but identifying patterns in agency reporting to the Unified Agenda is substantively important for democratic accountability. The Administrative Procedure Act

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<sup>5</sup> The one exception being President Trump's Executive Order 13771, which specified that (a) for fiscal year 2017, whenever an executive department or agency proposes or promulgates a new regulation, it must identify at least two existing regulations to be repealed and (b) beginning with fiscal year 2018, agencies must include additional regulatory cost and saving submissions in the regulatory plans required by Order 12866.

<sup>6</sup> The Federal Administrative Procedure Act, and the requirement to publish in the Unified Agenda, applies broadly to all agencies in the federal government except Congress, the courts, and the government of the District of Columbia and U.S. territories and possessions. 5 U.S.C. §§ 551(1); 601(a) (2018).



requires that all agencies publish notice of proposed rulemaking and final rules in the Federal Register.<sup>7</sup> Yet, many agencies make important policy decisions before notice is provided in the Federal Register, and some suggest that there is less room for negotiation with an agency once publication occurs (Kerwin and Furlong 2011; Nou 2016). The Unified Agenda provides an opportunity for political principals and interested stakeholders to influence policy earlier in the regulatory process. Yet, in their study of rulemaking disclosure of 40 agencies, Nou and Stiglitz (2016) find that only 28 percent of all rules and 70 percent of significant rules were reported in the Unified Agenda at the proposed rule stage. This presents a significant hurdle for outside parties to overcome and an obstruction to governmental transparency.

In order to explore agency adherence to the regulatory process, we constructed a dataset of 149 federal executive agencies' reports to the Unified Agenda and to the Federal Register. We obtained our list of agencies using the decision rule of Lewis and Selin (2012, 2018), defining agency as any federal executive instrumentality directed by one or more political appointees nominated by the President and confirmed by the Senate (the instrumentality itself, rather than its bureaus, offices or divisions).<sup>8</sup> We then searched every publication of the Unified Agenda from 1998 to 2017 for all Notice of Proposed Rulemakings (NPRMs) and final rules reported by each agency in our dataset. Finally, we searched the Federal Register from 1998 to 2017 for NPRMs and final rules by the same agencies.<sup>9</sup>

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<sup>7</sup> 5 U.S.C. § 553 (2018). There are a few exceptions to this process. Interpretative rules, general statements of policy, or rules of agency organization and rules for which the agency finds good cause that notice and public procedure are impracticable, unnecessary, or contrary to the public interest need not be published under these procedures. § 553(b) (2018). Additionally, policies involving the military and foreign affairs functions of the United States or matters relating to agency management or personnel, or to public property, loans, grants, benefits, or contracts are excepted from the process. § 553(a) (2018).

<sup>8</sup> Future versions of this paper will include rulemaking from all politically important bureaus.

<sup>9</sup> Much more work needs to ensure that we correctly matched up each rule and to account for rule-specific factors in our analysis below. However, as a first step for the purposes of this preliminary paper, we simply report counts of rules reported in both the Unified Agenda and the Federal Register in Figure 1 and percentages of reporting in Table 1.

A cursory examination of the simple count of regulatory reporting in our dataset suggests that agencies report far less to the Unified Agenda than they do to the Federal Register. Figure 1 graphs the total NPRMs and final rules reported in both publications. For the agencies in our dataset across all years, an average of 1331 NPRMs are reported in the Unified Agenda, compared to 1873 in the Federal Register. The difference in reporting for final rules is even more drastic, with an average of 1170 final rules reported in the Unified agenda per year and over 3000 in the Federal Register.

**Figure 1. Total NPRMs and Final Rules in the Unified Agenda vs Federal Register**

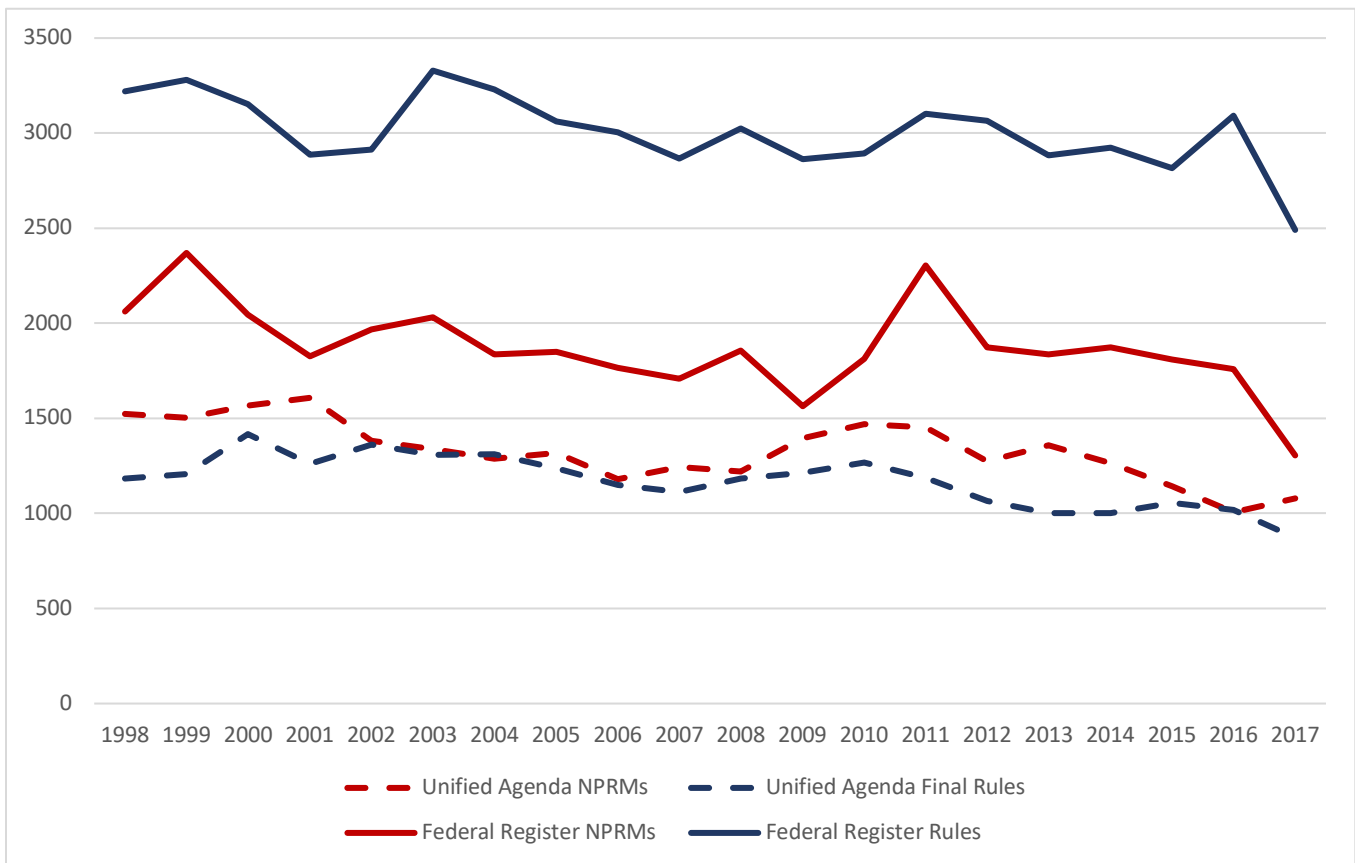


Figure 1 suggests that agencies report far fewer NPRMs and final rules to the Unified Agenda than they do to the Federal Register. In order to explore possible reasons for this stark difference, including the effects of vacancies on regulatory reporting, we estimate models of the

percentage of NPRMs and Final Rules that are reported in the Unified Agenda prior to being reported in the Federal Register.

### **Estimating the Effects of Vacancies**

First, we simply explore the correlation between regulatory reporting to the Unified Agenda and vacancies, and account for factors that may influence agency performance.

We collected data on vacancies from the Government Accountability Office (GAO) files for the Clinton, Bush, and Obama Administrations.<sup>10</sup> While future iterations of this paper will account for the percentage of vacancies in all key leadership positions, in this paper we merely include an indicator of whether or not the position at the head of the agency was vacant at some point during the year. In total, from 1998 to 2015, there were 136 vacancies at agency head positions across 41 different agencies in our dataset. The two agencies with the most vacancies (8) were the Corporation for National and Community Service and the Office of Management and Budget, followed by the Department of the Treasury, National Endowment for the Arts, and the Postal Regulatory Commission (each with 7) and the Department of Commerce, Office of Government Ethics, and Peach Corps (each with 6). 108 agencies reported no vacancies at the head of the agency.

Because scholarship on agency performance has suggested that certain agency characteristics are associated with lower performance, we also account for politicization and the insulation of agencies from political principals. Politicizing federal programs has consequences for bureaucratic performance (Gallo and Lewis 2012; Gilmour and Lewis 2006; Ingraham, Thompson, and Eisenberg 1995; Lewis 2007, 2008; Resh 2015) and may similarly influence

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<sup>10</sup> Federal law requires each executive agency to submit to the Comptroller General of the United States and to each House of Congress notification of a vacancy in key leadership positions. 5 U.S.C. § 3349 (2018). There appeared to be a large amount of missing vacancies data reported to the GAO for 2016 and 2017, thus we do not include those years in our models.

agency reporting to the Unified Agenda. Thus, we include a measure of politicization. We follow Lewis (2008) and define politicization as the ratio of appointed personnel – Senate-confirmed personnel, non-career members of the Senior Executive Service (SES), limited-term members of the SES, and Schedule C personnel – to non-seasonal full-time permanent staff.

In contrast, since the famous Supreme Court decision *Humphrey's Executor v. United States*, there has been a historical notion that independent agencies are bodies “of experts ‘appointed by law and informed by experience.’”<sup>11</sup> These bodies of experts are charged with regulating in important policy areas and there is a sense that independent agencies promote impartiality and policy continuity (e.g., Barkow 2010; Breger and Edles 2000, 2014; Brown and Candeub 2010; Wood and Waterman 1991). Yet, despite the general consensus that insulated agencies produce better policy, there has been little empirical exploration of insulated agency performance with respect to regulation. In order to measure an agency’s insulation from politics, we use Selin’s (2015) estimates of structural independence. These estimates fall on two dimensions, which correspond to the two ways agency structure can vary. The first dimension, the Decision Makers dimension, accounts for the statutory limitations placed on who may serve in an agency’s key leadership positions. High estimates indicate that an agency’s statute provides for a combination of things such as expert personnel, fixed terms, multiple member boards, and party balancing requirements. The second dimension of structural independence, the Political Review dimension, accounts for structural features that limit political influence in an agency’s policy process. Statutes that place limits on principals’ centralized review procedures not only allow agencies to make policy decisions without concern over political interference, but also limit the channels of information to political principals regarding administrative policy.

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<sup>11</sup> *Humphrey's Executor v. United States*, 295 U.S. 602, 624 (1935).

We also account for two agency characteristics that may influence the ability of an agency to report to the Unified Agenda. We include a measure of the total number of rules in a given year the agency promulgated. It may be that agencies that promulgate more rules have more procedures in place for routine reporting. Alternatively, the sheer amount of rulemaking an agency could overwhelm agency resources, so that reporting becomes less of priority as the agency prioritizes substance over procedure. We also account for agency resources by including the natural log of the total number of employees in an agency in a given year.

Finally, agency reporting to the Unified Agenda may be strategic. Previous research has indicated that agency reporting is sensitive to the presence of unified or divided government; agencies are less likely to publicly report their regulatory activities when at least one house of Congress is controlled by a different party than the president (Nou and Stiglitz 2016). As such, we include an indicator of the presence of divided government.

Table 1 reports models of the percentage of NPRMs and Final Rules reported in the Unified Agenda estimated using ordinary least squares with yearly fixed effects and robust standard errors clustered on agency. Interestingly, in both models, having a vacancy at the top is correlated with an increase in in the percent of NPRMs and Final Rules reported to the Unified Agenda, although the substantive effects are relatively small. In times of divided government, and holding other variables at their means, moving from an agency with no vacancy to one with a vacant head increases reporting by .3 percent for both NPRMs and final rules. This may suggest that reporting to the Unified Agenda has a political component, and without a permanent presidentially nominated, Senate confirmed political appointee directing the agency, agencies are more likely to follow regulatory procedure.

**Table 1. Analysis of the Percent of NPRMs and Final Rules Reported in the Unified Agenda**

	<b>NPRM Reporting</b>	<b>Final Rule Reporting</b>
	<b>Coef. (Std. Err.)</b>	<b>Coef. (Std. Err.)</b>
<b>Vacant Head</b>	0.279* (0.140)	0.315* (0.183)
<b>Politicization</b>	-0.526 (0.553)	-0.293* (0.168)
<b>Decision Maker Insulation</b>	-0.306** (0.101)	-0.080 (0.059)
<b>Policy Review Insulation</b>	-0.032 (0.078)	-0.024 (0.050)
<b>Total Rules</b>	-0.003** (0.001)	-0.002** (0.000)
<b>Employment (logged)</b>	0.124** (0.054)	0.081** (0.033)
<b>Divided Government</b>	0.207 (0.196)	-0.147 (0.127)
<b>Constant</b>	0.215 (0.471)	0.141 (0.283)
<b>Observations</b>	708	772
<b>R<sup>2</sup></b>	0.232	0.595

Notes: \*p<0.10, \*\*p<0.05

The idea that reporting may have a political component is also supported by the estimates of the relationship between reporting and politicization and the insulation of key decision makers in an agency. The percentage of NPRM reporting to the Unified Agenda (while imprecisely estimated) is negatively correlated with a high level of politicization and the percentage of final rules reported by agencies is negatively and statistically correlated with a high level of politicization.

Additionally, the percentage of NPRM reporting is negatively and statistically correlated with greater insulation of key agency decision makers, suggesting that agencies with a combination of statutory characteristics such as expert personnel, fixed terms, multiple member

boards, and party balancing requirements may be less willing to participate in a politicized regulatory planning early in the process.

### **Conclusions and Next Steps**

Our preliminary analysis has implications for scholars who are interested in the correlation between vacancies and government performance and transparency, although in different ways than initially anticipated. When an agency's head leadership position is vacant, agencies are more likely to report their rules as part of the Unified Agenda's regulatory planning process. Additionally, politicization and the political insulation of key decision makers within an agency are negatively correlated with reporting. These initial findings suggest that the reporting process is political and may be more transparent under certain circumstances. Political principals and stakeholders who are interested in influencing regulation may have an easier time obtaining information from agencies that are less politicized and do not have a permanent agency head, allowing principals and stakeholders the opportunity for influence earlier in the policy development process.

Additionally, our analysis has important implications for the scholars who use the Unified Agenda to understand federal regulatory policy (e.g. Acs and Cameron 2013; Balla 2014; Balla and Wright 2003; Gersen and O'Connell 2009; Shapiro 2007; Yackee 2011; Yackee and Yackee 2006). Our examination of the total number of rules reported in the Unified Agenda suggests that less than 39 percent of final rules are reported. If agencies routinely underreport to the Unified Agenda, and particularly if scholars rely on the Unified Agenda to evaluate final rulemaking, then scholarship evaluating regulation may be significantly and substantively biased.

Of course, our preliminary analysis is just that – preliminary. Our next steps include estimating more precise models of individual rule reporting that will allow us to account for rule-

specific characteristics such as complexity, economic significance, and public salience. In addition, we plan to expand our dataset to include politically important bureaus, to evaluate the relationship between all vacancies in key leadership positions within an agency and that agency's reporting, and to evaluate statistically the precise mechanisms we theorized may moderate the effects of vacancies on agency regulatory reporting.



## References

- Acs, Alex and Charles M. Cameron. 2013. "Does White House Regulatory Review Produce a Chilling Effect and 'OIRA Avoidance' in the Agencies?" *Presidential Studies Quarterly* 43(3):443-467.
- Adams, Renee B., Heitor Almeida, and Daniel Ferreira. 2005. "Powerful CEOs and Their Impact on Corporate Performance." *The Review of Financial Studies* 18(4):1403-1432.
- Balla, Steven J. 2014. "Political Control, Bureaucratic Discretion, and Public Commenting on Agency Regulations." *Public Administration* 93(2):524-538.
- Balla, Steven J. and John R. Wright. 2003. "Consensual Rule Making and the Time it Takes to Develop Rules." In, *Politics, Policy, and Organizations: Frontiers in the Scientific Study of Bureaucracy*, George A. Krause, and Kenneth J. Meier, eds. Ann Arbor, MI: University of Michigan Press.
- Barkow, Rachel E. 2010. "Insulating Agencies: Avoiding Capture Through Institutional Design." *Texas Law Review* 89(?):15-79.
- Bertelli, Anthony M. 2007. "Determinants of Bureaucratic Turnover Intention: Evidence from the Department of Treasury." *Journal of Public Administration Research and Theory* 17(2):223-245.
- Bertelli, Anthony M. and David E. Lewis. 2012. "Policy Influence, Agency-Specific Expertise, and Exit in the Federal Service." *Journal of Public Administration Research and Theory* 23(2):223-245.
- Bilmes, Linda J. and Jeffrey R. Neal. 2003. "The People Factor: Human Resources Reform in Government." In, *For the People: Can We Fix Public Service?*, J.D. Donahue and J. S. Nye, Jr., eds., Washington, DC: Brookings Institution Press.
- Boehmke, Frederick J., Sean Gilmard, and John W. Patty. 2013. "Business as Usual: Interest Group Access and Representation Across Policy-Making Venues." *Journal of Public Policy* 33(1):3-33.
- Bolton, Alexander, John M. de Figueiredo, and David E. Lewis. 2016. "Elections, Ideology, and Turnover in the U.S. Federal Government." *Working Paper*.
- Brehm, John and Scott Gates. 1997. *Working, Shirking, and Sabotage: Bureaucratic Response to a Democratic Public*. Ann Arbor, MI: University of Michigan Press.
- Brewer, Gene A. and Sally Coleman Selden. 2000. "Why Elephants Gallup: Assessing and Predicting Organizational Performance in Federal Agencies." *Journal of Public Administration Research and Theory* 10(4):685-711.
- Breger, Marshall J. and Gary J. Edles. 2000. "Established by Practice: The Theory and Operation of Independent Federal Agencies." *Administrative Law Review* 52():1111-.
- Breger, Marshall J. and Gary J. Edles. 2014. *Independent Agencies in the United States: Law, Structure, and Politics*. New York, NY: Oxford University Press.
- Brown, Keith S. and Adam Candeub. 2010. "Partisans and Partisan Commissions." *George Mason Law Review* 17(3):789-822.
- Carey, Maeve P. and Kathryn A. Francis. 2017. "The Trump Administration and the Unified Agenda of Federal Regulatory and Deregulatory Actions." *Congressional Research Service*.
- Day, David V. and Robert G. Lord. 1988. "Executive Leadership and Organizational Performance: Suggestions for a New Theory and Methodology." *Journal of Management* 14(3):453-464.

- Dickinson, Matthew J. and Andrew Rudalevige. 2004. "Presidents, Responsiveness, and Competence: Revisiting the 'Golden Age' at the Bureau of the Budget." *Political Science Quarterly* 119(4):633-654
- Dull, Matthew and Patrick S. Roberts. 2009. "Continuity, Competence, and the Succession of Senate-Confirmed Agency Appointees, 1989-2009." *Presidential Studies Quarterly* 39(3):432-453.
- Durant, Robert F. and William G. Resh. 2009. "Presidential Agendas, Administrative Strategies, and the Bureaucracy." In, *The Oxford Handbook of the American Presidency*, George C. Edwards and William G. Howell, eds. New York, NY: Oxford University Press.
- Gallo, Nick and David E. Lewis. 2012. "The Consequences of Presidential Patronage for Federal Agency Performance." *Journal of Public Administration Research and Theory* 22(2):219-243.
- Gersen, Jacob E. and Anne Joseph O'Connell. 2009. "Hiding in Plain Sight? Timing and Transparency in the Administrative State." *The University of Chicago Law Review* 76(3):1157-1214.
- Gilmour, John and David E. Lewis. 2006. "Political Appointees and the Competence of Federal Program Management." *American Politics Research* 34(1):22-50.
- Golden, Marissa Martino. 2000. *What Motivates Bureaucrats?: Politics and Administration During the Regan Years*. New York, NY: Columbia University Press.
- Grissom, Jason A., Samantha L. Viano, and Jennifer L. Selin. 2016. "Understanding Employee Turnover in the Public Sector: Insights from Research on Teacher Mobility." *Public Administration Review* 76(2):241-251.
- Hecl, Hugh. 1977. *A Government of Strangers: Executive Politics in Washington*. Washington, DC: Brookings Institution.
- Ingraham, Patricia W., James R. Thompason, and Elliot F. Eisenberg. 1995. "Political Management Strategies and Political/Career Relationships: Where are We Now in the Federal Government?" *Public Administration Review* 55(3):263-272.
- Kerwin, Cornelius M. and Scott R. Furlong. 1992. "Time and Rulemaking: An Empirical Test of Theory." *Journal of Public Administration Research and Theory* 2(2):113-138.
- Kerwin, Cornelius M. and Scott R. Furlong. 2011. *Rulemaking: How Government Agencies Write Law and Make Policy*, 4th Ed. Washington, DC: CQ Press.
- Krause, George A. and James W. Douglas. 2005. "Institutional Design versus Reputational Effects on Bureaucratic Performance: Evidence from U.S. Government Macroeconomic and Fiscal Projections." *Journal of Public Administration Research and Theory* 15(2):281-306.
- Krause, George A., David E. Lewis, and James W. Douglas. 2006. "Political Appointments, Civil Service Systems, and Bureaucratic Competence: Organizational Balancing and Gubernatorial Revenue Forecasts in the American States." *American Journal of Political Science* 50(3):770-787.
- Lee, Soo-Young and Andrew B. Whitford. 2008. "Exit, Voice, Loyalty, and Pay: Evidence from the Public Workforce." *Journal of Public Administration Research and Theory* 18(4):647-671.
- Lee, Soo-Young and Andrew B. Whitford. 2012. "Assessing the Effects of Organizational Resources on Public Agency Performance: Evidence from the US Federal Government." *Journal of Public Administration Research and Theory* 23(3):1-26.

- Lewis, David E. 2007. "Testing Pendleton's Premise: Do Political Appointees Make Worse Bureaucrats?" *Journal of Politics* 69(4):1073-1088.
- Lewis, David E. 2008. *The Politics of Presidential Appointments*. Princeton, NJ: Princeton University Press.
- Lewis, David E. 2009. "Revisiting the Administrative Presidency: Policy, Patronage, and Agency Competence." *Presidential Studies Quarterly* 39(1):60-73.
- Lewis, David E. 2012. "The Contemporary Presidency: The Personnel Process in the Modern Presidency." *Presidential Studies Quarterly* 42(3):577-596.
- Lewis, Gregory B. 1991. "Turnover and the Quiet Crisis in the Federal Civil Service." *Public Administration Review* 51(2):145-155.
- Lieberson, Stanley and James F. O'Connor. 1972. "Leadership and Organizational Performance: A Study of Large Corporations." *American Sociological Review* 37(2):117-130.
- Light, Paul C. 1995. *Thickening Government: Federal Hierarchy and the Diffusion of Accountability*. Washington, DC: Brookings Institution Press.
- Mackey, Alison. 2008. "The Effect of CEOs on Firm Performance." *Strategic Management Journal* 29(12):1357-1367.
- Mashaw, Jerry L. 1994. "Improving the Environment of Agency Rule-making: An Essay on Management, Games and Accountability." *Law and Contemporary Problems* 57(2):185-257.
- McCarty, Nolan and Rose Razaghian. 1999. "Advice and Consent: Senate Responses to Executive Branch Nominations, 1885-1996." *American Journal of Political Science* 43(4):1122-1143.
- McKay, Amy and Susan Webb Yackee. 2007. "Interest Group Competition on Federal Agency Rules." *American Politics Research* 35(3):336-357.
- Mendelson, Nina A. 2015. "The Uncertain Effects of Senate Confirmation Delays in the Agencies." *Duke Law Journal* 64(8):1571-1606.
- Meraji, Shereen M. 2017. "Could A Census Without A Leader Spell Trouble in 2020?" *NPR*, July 15. <http://www.npr.org/sections/codeswitch/2017/07/15/536908867/could-a-census-without-a-leader-spell-trouble-in-2020> (July 23, 2017).
- Michaels, Judith E. 1997. *The President's Call: Executive Leadership from FDR to George Bush*. Pittsburgh, PA: University of Pittsburgh Press.
- Moe, Terry M. 1985. "The Politicized Presidency." In, J.E. Chubb and P.E. Peterson, eds., *The New Direction in American Politics*. Washington, DC: Brookings.
- Naughton, Keith, Celeste Schmid, Susan Webb Yackee, and Xueyong Zhan. 2009. "Understanding Commenter Influence During Agency Rule Development." *Journal of Policy Analysis and Management* 28(2):258-277.
- Noe, Jennifer and Edward H. Stiglitz. 2016. "Strategic Rulemaking Disclosure." *Southern California Law Review* 89(4):733-793.
- O'Connell, Anne Joseph. 2008. "Vacant Offices: Delays in Staffing Top Agency Positions." *Southern California Law Review* 82(5): 913-1000.
- O'Connell, Anne Joseph. 2015. "Shortening Agency and Judicial Vacancies through Filibuster Reform? An Examination of Confirmation Rates and Delays from 1981 to 2014." *Duke Law Journal* 64(8):1645-1716.

- Pitts, David W., John Marvel, and Sergio Fernandez. 2011. "So Hard to Say Goodbye? Turnover Intention among U.S. Federal Executives." *Public Administration Review* 71(5):751-760.
- Resh, William G. 2015. *Rethinking the Administrative Presidency: Trust, Intellectual Capital, and Appointee-Careerist Relations in the George W. Bush Administration*. Baltimore, MD: Johns Hopkins University Press.
- Romzek, Barbara S. 1990. "Employee Investment and Commitment: The Ties That Bind." *Public Administration Review* 50(3):374-382.
- Shapiro, Stuart. 2007. "Presidents and Process: A Comparison of the Regulatory Process Under the Clinton and Bush (43) Administrations." *Journal of Law and Politics* 23(3):233-282.
- Tenpas, Kathryn Dunn. 2018. "Why Is Trump's Staff Turnover Higher than the 5 Most Recent Presidents?" Brookings Institution Report.
- Thomas, Alan Berkeley. 1988. "Does Leadership Make a Difference to Organizational Performance?" *Administrative Science Quarterly* 33(3):388-400.
- Wood, B. Dan and Richard W. Waterman. 1991. "The Dynamics of Political Control of the Bureaucracy." *American Political Science Review* 85(3):801-828.
- Wood, B. Dan and Richard W. Waterman. 1994. *Bureaucratic Dynamic: The Role of Bureaucracy in a Democracy*. Boulder, CO: Westview Press.
- Yackee, Jason Webb and Susan Webb Yackee. 2006. "A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy." *The Journal of Politics* 68(1):128-139.
- Yackee, Jason Webb and Susan Webb Yackee. 2010. "Administrative Procedures and Bureaucratic Performance: Is Federal Rulemaking Ossified?" *Journal of Public Administration Research and Theory* 20(2):261-282.
- Yackee, Susan Webb. 2011. "The Politics of Ex Parte Lobbying: Pre-proposal Agenda Building and Blocking During Agency Rulemaking." *Journal of Public Administration Research and Theory* 22(2):373-393.

## Appendix

Table 1A presents descriptive statistics for the variables in our analysis.

**Table 1A. Descriptive Statistics**

	<b>Obs.</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>
<b>Precent NPRM Report</b>	893	0.858	1.243	0.000	17.000
<b>Percent Final Rule Report</b>	992	0.451	0.630	0.000	5.500
<b>Vacant Head</b>	1847	0.074	0.261	0.000	1.000
<b>Politicization</b>	4313	0.038	0.164	0.000	3.000
<b>Dec. Maker Insul.</b>	5573	0.031	0.940	-0.792	2.353
<b>Pol. Rev. Insul.</b>	5573	0.025	0.870	-0.990	3.819
<b>Rules</b>	2151	27.936	85.275	0.000	709.000
<b>Employment (logged)</b>	3987	6.912	2.563	0.000	13.717
<b>Divided Governmet</b>	6162	0.650	0.477	0.000	1.000