

Where is Presidential Power? Action, Expectations, and Executive Discretion

Kenneth Lowande*
University of Michigan

Charles R. Shipan†
University of Michigan

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Abstract

Presidents' unilateral sway over policy has concerned scholars, practitioners, and the general public since the American Founding. Pending executive moves provoke media speculation about how much authority the president has to act. Though every theory of unilateral action presumes some level of discretion, measurement of this concept has lagged behind. We discipline these discussions by surveying academics and non-experts, using discrete choice experiments to estimate the latent level of discretion that contemporary U.S. presidents have in 54 policy areas. We use these measures to evaluate the conventional notion that presidents are more powerful in foreign affairs, as well as the previously untested proposition that discretion promotes unilateral executive action. Finally, we leverage a non-expert companion survey to measure the "expectations gap"—the dissonance created by what the public expects presidents to have power over and the legal limitations of their office. We present the first descriptive evidence that suggests this gap may be associated with presidents' own rhetoric.

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*Assistant Professor, Department of Political Science. Contact: lowande@umich.edu

†J. Ira and Nicki Harris Professor, Department of Political Science. Contact: cshipan@umich.edu

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Discretion is at the core of executive power. This discretion, which gives chief executives the freedom to decide how to carry out policy initiatives, shapes policy from the construction of border walls and the designation of national monuments to trade barriers and the public funding of abortion. Consequently, political observers in the United States frequently speculate about discretion in the shadow of pending actions, and calls to either rein in or expand presidents' discretion are as old as the American Founding—and continue today.¹

Despite its importance, basic questions about presidential discretion remain unexamined, and conventional assertions remain untested. Journalists often report on expert opinions regarding presidential discretion, but these reports are constrained to particular policies and are non-systematic.² The few efforts to measure this concept in the social sciences rely on divergent understandings of the source of authority, do not scale across policy areas, or are not specific to the authority of the chief executive. Moreover, every theory of presidential unilateralism predicts that discretion leads to more action (e.g., Howell 2003; Chiou and Rothenberg 2017), but this prediction has never been examined systematically.

We calculate and present estimates of presidential discretion over public policy derived from a survey of a panel of experts in the social sciences, humanities, and law. More specifically, we utilize a pairwise comparison approach, which leverages a method common in market research to calculate latent discretion across policy areas on a common scale. Sources of presidential discretion are varied—presidents may be enabled by ambiguous statutes, unexpended appropriations, the actions of presidential appointees in executive agencies, or the Constitution. Expert judgments implicitly account for this variation. In contrast to other approaches to measuring discretion, this pairwise comparison framework also allows us to provide estimates of uncertainty.³ Notably, our approach reduces informational demands by asking respondents to compare pairs of policy areas, which improves the precision of the estimates relative to other expert surveys.

We validate the estimates we obtain from this survey by examining their ability to organize key propositions in previous research on presidential power. Consistent with the “Two Presidencies” thesis, we find that presidents have more discretion in foreign—relative to domestic—policy (e.g., Wil-

¹Examples across time include Patrick Henry (1788), Woodrow Wilson (1885), and most recently, George Will (2019).

²For example, see Goitein, Elizabeth. 2019. “The Alarming Scope of the President’s Emergency Powers,” *The Atlantic*, January/February. See also the *Washington Post*’s dedicated podcast, “Can He Do that?”: <https://www.washingtonpost.com/podcasts/can-he-do-that/>

³In addition, as we discuss below, none of these other measures of discretion focus explicitly on the president.

davsky 1966; Canes-Wrone, Howell and Lewis 2008). Consistent with first-mover theories of presidential policymaking, we find that greater discretion is associated with more unilateral presidential initiatives in the contemporary era. These results are robust to alternative estimation strategies and multiple measures of presidential policy outputs.

We then extend our approach in order to capture what is sometimes called the “expectations gap,” which is the distance between the president’s discretion and the expectations of the public. We field an identical discretion survey of non-experts demographically representative of the United States. The difference in the resulting expert and non-expert discretion estimates provides the first systematic measures of how public expectations diverge from realized presidential power. We show this gap is associated with presidential statements: while expert ratings of discretion are correlated with *action*, non-expert ratings are correlated with *rhetoric*.

Our study of latent discretion also has implications for other critical debates regarding discretion. For example, research on American political institutions has argued that the delegation of policymaking authority promotes its use. We find evidence that the president’s discretion is associated with the exercise of unilateral power. Moreover, we add empirical nuance to this notion by showing that the relationship is likely non-linear. While moderate discretion is leveraged more than low discretion, presidents leverage high discretion orders of magnitude more than both.

Finally, our results raise important questions for scholarship on elections and political behavior. The view that presidents may be doomed to fall short of public expectations is widespread in public commentary (e.g., Nyhan 2009; Dickerson 2018) and scholarship (e.g., Lowi 1985). It has been put forth as an explanation for patterns of presidential approval (Waterman, Silva and Jenkins-Smith 2014) and the election of Donald Trump (Howell and Moe 2018). We add new insights to this line of studies. First, the expectations gap is not uniform or strictly negative. Some areas of public policy have wider gaps than others—and more importantly, for some policies the president has *greater* authority than the public anticipates. In politician-voter accountability relationships, both expectation deficits and expectation surpluses are theoretically feasible.

Second, we demonstrate an association between public expectations and presidential rhetoric. While we cannot adjudicate between the direction of this relationship in this present study, we raise two non-exclusive possibilities. The expectations gap may drive presidents to make promises for unilateral action they cannot keep. Alternatively, presidential rhetoric itself may build expectations. Considered in the context of campaign promises that increasingly include unilateral action as a central

feature, either possibility would present an important dynamic in the basic accountability relationship between the presidency and the public.

Delegation, Discretion, and the Separation of Powers

Discretion in a political setting is the authority to decide whether or not to take policy action, and if so, which action or policy to choose. In the American political system, this kind of discretion is enjoyed by a variety of policymakers, including presidents, federal bureaucrats, teachers, police officers, judges, and state governors. Though an American president is an elected chief executive whose exercise discretion has broad influence on policies and on other political actors, presidential discretion has mostly escaped systematic empirical investigation.

Presidents derive their discretion from a variety of sources, including explicit grants or useful ambiguities in the Constitution, and most importantly, delegation from Congress. The literature on delegation is vast and spans disciplines, but the stylized process is easy to summarize.⁴ Laws often do not (or cannot) spell out exactly how policy should be carried out. Legislators sometimes lack the necessary time or expertise (e.g., Landis 1938). They may prefer generalities to avoid making controversial decisions (Fox and Jordan 2011) or because they lack the expertise to develop higher quality policy. As a result, laws invariably include some imprecision that allows (or even asks) the executive branch to step in (VanSickle-Ward 2014). This process is ubiquitous. According to one recent estimate, more than 99% of all major US laws contain at least some delegation to government agencies (Clouser McCann and Shipan 2019). Problems and controversies arising from this basic fact motivate much research in the subfield of administrative law.

Theories of delegation often focus on determinants of the amount of authority that is delegated. Numerous studies argue that when a legislature delegates, it simultaneously can decide how much discretion for developing new policies should be attached to that grant of delegation (e.g., Epstein and O'Halloran 1999; Huber and Shipan 2002; Stephenson 2006). Presidents also can draw on other existing laws as a basis for policymaking authority, even if these laws do not specifically ask the president to take action. Thus, the *amount* of discretion varies across policy areas, because Congress has constrained the president in one area while allowing for greater discretion in another, or because the president recognizes other sorts of constraints (e.g., via courts, resource limitations, or personnel) on the use of

⁴For overviews see Moe (2012) and Cass (2017).

discretion.

Measuring Discretion

Given the importance of discretion to understanding policymaking across separate powers, how have scholars measured it? An initial answer is: they often do not. Sometimes they focus on the substitution of delegation at the federal level for delegation to the states (Clouser McCann 2016). Other times they turn their attention to other covariates of delegation, such as the spatial distance between policymakers (e.g., Shipan 2004). Relatedly, in studies of unilateral presidential policymaking scholars usually ignore the comparative static predictions related to discretion parameters.

Attempts to measure discretion typically have focused on the discretion afforded to and exercised by government agencies. Although we are interested in *presidential* discretion, which is conceptually and empirically distinct from *agency* discretion, the approaches of studies that measure agency discretion are informative. Epstein and O'Halloran (1999) conceive of discretion as the amount of delegation that a law gives minus the amount of constraints on that delegation. This first systematic measure of discretion enabled empirical tests of theories of delegation and highlighted the importance of procedural constraints (Franchino 2004). Most recently, Anastasopoulos and Bertelli (2019) extended this approach by leveraging supervised machine learning. Alternatively, Huber and Shipan (2002) argue the length of a law can serve as a useful proxy for the amount of discretion. This approach provided a measure more straightforward to compute, which has been used by a number of other studies (e.g., Randazzo, Waterman and Fine 2006; Randazzo, Waterman and Fix 2011; Clinton et al. 2012). Most recently, Bolton and Thrower (N.d.) develop a new approach to measuring discretion that relies on information that can be gleaned from appropriations bills. They conceive of discretion as the ratio of new budget authority to the number of pages of limitation riders (e.g., MacDonald 2010).

Existing approaches, however, have important limitations. Hand-coding legislation is difficult to replicate. Hand-coding third-party summaries of legislation relies on the assumption that the descriptions of delegation contained within the summaries are written in a consistent fashion over time. In the case of the *CQ Almanacs*, this consistency is unlikely because the yearly summaries have become shorter over time, in concert with a secular trend towards long, omnibus legislation. Moreover, though Anastasopoulos and Bertelli (2019) offers a scalable and replicable extension of this approach, it is still reliant on the initial hand-coding of third-party summaries. Word counts are valuable for compar-

isons *within* a policy area but are potentially problematic to use *across* policy areas. This approach also precludes the inclusion of omnibus legislation that spans multiple policy areas. While Bolton and Throver rightly recognize that appropriations can constrain agencies, ignoring the role of authorizing statutes seems likely to introduce bias. It is not clear why appropriations alone captures delegation, independent of the underlying authorizations that can themselves constrain or increase the discretion.

Most importantly, none of the measures above were intended to capture the discretion of a chief executive. In fact, some conflate procedural constraints on agencies with presidential discretion. Limitations riders and oversight provisions can privilege presidential influence over agency policymaking. Yet, by existing measures, the inclusion of these provisions would decrease estimates of discretion. This is an important omission in the U.S. context, since executive policymaking appears increasingly driven by the initiative of the elected head of the executive branch.

In summary, our goal is to provide estimates of *presidential* discretion, which we distinguish from the discretion afforded to executive branch agencies. Presidents can, of course, direct uninsulated agencies to take policy actions or suggest these actions to them; hence, agency discretion might comprise one component of presidential discretion. However, presidents also receive the authority to exercise discretion in a variety of other ways—for example, when Congress explicitly gives the president discretion, when ambiguous statutes allow presidents to claim authority and discretion, when the courts issue rulings that broaden the president’s ability to act, and when the Constitution provides for discretion. Thus, presidential discretion is a broader concept than agency discretion, one that is both different and conceptually distinct.⁵

⁵A further implication of this distinction is that we do not view our measure as a replacement for, or even directly comparable to, existing measures of agency discretion (see SI section B1). When we discuss our results, we also show that our measure is not correlated with other measures of discretion. In addition, we also assess the distinction between presidential and agency discretion by leveraging the fact that many agencies exist outside of the executive branch, and that these agencies, by virtue of their formal independence from both branches, get to exercise greater discretion over policymaking. If our respondents are simply attributing agency discretion to presidents, then we would expect to find that for the policy areas where independent agencies have authority, our respondents would always rate presidents as having high levels of discretion. As we will show, this is not the case.

Measuring Presidential Discretion with Experts

As the diversity of measures already discussed suggests, existing scholarly work generally conceives of discretion as some combination of legal authority, resources, and constraints. Because of the difficulty in accurately capturing each of these aspects of discretion, it is especially difficult to develop a measure that is comparable across policy areas. Some areas of public policy, for example, might rely on a free hand written into law or an implicit deference granted by the Constitution. Others might rely on the raw number of available personnel and funds to determine the ultimate discretion available to a president.

Expert ratings are particularly suited to capturing concepts that, like executive discretion, are latent and thus inherently difficult to measure with observable data. Not surprisingly, political scientists have increasingly turned to expert surveys to measure a range of latent political concepts, such as the ideology of government agencies (Clinton and Lewis 2008), judicial independence (Feld and Voigt 2003), the positions of political parties (Ray 1999; Laver 1998), legislative power (Fish and Kroenig 2009; Chernykh, Doyle and Power 2017), and democracy itself (Treier and Jackman 2008). Most involve variants of item response models, which leverage multiple raters who are each given a list of items to place on a scale. For example, Clinton and Lewis (2008) asked a set of experts to rate government agencies on a scale containing three options: slant liberal, slant conservative, and neither (with a fourth option of “I don’t know” also available). Similarly, other studies, such as Lindstädt, Proksch and Slapin (2018), have asked experts to place items on a Likert scale.

We instead ask experts to make a series of paired comparisons. Though this approach is almost one hundred years old and has been widely applied across the social sciences (Thurstone 1927; Bradley and Terry 1954; Louviere, Flynn and Carson 2010; Carson and Czajkowski 2014), it has only recently seen application in political science as a means of efficiently coding texts (e.g., Carlson and Montgomery 2017; Benoit, Munger and Spirling 2019). As Carlson and Montgomery note, paired comparisons simplify coders’ tasks by replacing the rating of each item along a latent scale with a series of binary, discrete choices. In our context, this involves a simple judgment: given two policy areas, in which does the president have more discretion? This approach improves the quality of the resulting measures by reducing the cognitive burden on raters.

Our process involves five steps, which we elaborate in the following sections:

1. Define a set of public policy areas.
2. Identify a set of subject matter experts.
3. Define discretion.
4. Present each expert with twenty pairs of randomly selected policies, and ask the expert to select the policy area in each pair over which the president has more discretion.
5. Estimate a random utility model to recover the latent level of discretion in each policy area, relative to others.

This approach has a variety of appealing features that address some of the limitations of past measures of discretion. It provides estimates of uncertainty. It spans a cross section of the policymaking landscape in the U.S. and beyond. It is not sensitive to individual hand-coders, or arbitrary changes in secondary sources. It identifies the specific actor thought to enjoy discretion—the president, whose discretion is unaddressed by past work on the topic. Finally, by leveraging the opinions of experts, it implicitly incorporates numerous sources of discretion (e.g., statutory language, appropriations, the Constitution). On their own, any of these would provide an incomplete description of the concept.

Topic Selection. To begin our task of measuring the president’s discretion, we first need to identify the relevant set of policy areas. To do so, we turned to the Comparative Agendas Project (CAP), which categorizes the vast domain of public policy into 21 broad areas, such as Civil Rights, Health, Defense, and Foreign Trade, then further subdivides each of those broader categories into a series of more specific subtopics.⁶ The category of Health, for example, is disaggregated into subcategories that include Health Insurance Availability and Costs, Prescription Drug Coverage and Costs, Abortion Policy, Substance Abuse Prevent and Treatment, and more. We selected the policy topics from each category in which the president is involved in implementing or setting policy. One advantage of utilizing this rating scheme is that the resulting measures of presidential discretion are easily merged with numerous other political event and text datasets.

We selected 54 separate topics for inclusion in our survey. Specifically, for each major topic, we determined whether limiting a policy area to a single major topic would obscure heterogeneity in policymaking authority. Agricultural policymaking, for example, includes diverse and separate functions such as direct payments to farmers and ranchers, export promotion, and food inspection, so we identified and included these subtopics, rather than just the broader major topic. We generally used the

⁶The master codebook can be found at: <https://www.comparativeagendas.net/pages/master-codebook>

same labels for a policy area as the CAP, but in a few cases we changed or simplified the labels to make the subject of the policy area clearer for both experts and non-experts. A complete list of the topics and label changes appears in Table A1 of the Supplementary Information (SI).

Expert Selection. We sought experts with specialized knowledge of policymaking by American presidents and the executive branch. Here, we drew upon several sources. First, we turned to the Presidents and Executive Politics section of the American Political Science Association. From this section we identified experts by looking at lists of section officers, award committees, and award winners. We then turned to journals, beginning with *Presidential Studies Quarterly* and then examining more general journals, to identify scholars who had written on these topics. Next, we supplemented these two approaches by sending out inquiries to scholars who publish on these topics, asking them for suggestions of other scholars with expertise on presidential policymaking. Because we wanted to reach beyond political science to the disciplines of law, economics, history, and public policy, we especially used this approach to identify scholars in those fields. Ultimately, we identified 33 of these scholars by referral.

Our final panel included 173 scholars. Of the experts we contacted, 126 completed the survey, for a response rate of 76%, which is in line with what other expert surveys report.⁷ The majority of these respondents—74 of them—come from the discipline of political science. But we also had respondents from the fields of law (39), economics (2), history (8), and public policy (6).⁸

Definition of Discretion. The survey presented experts with the following prompt:

Presidents can use their legal authority as the head of the executive branch to change policy without Congress. In some cases, they have a great deal of discretion, or freedom, to change existing policies and create new ones. In others, their ability to use executive actions to change or create policy is more limited.

The implied definition of discretion has several critical components, meant to prime a distinct concept without constraining the considerations raters bring to their choices. First, it defines discretion as

⁷Clinton and Lewis (2008), the closest in subject matter to our study, report a response rate of 70%.

⁸In addition to making the paired comparisons, the respondents also identified the policy areas in which they have special expertise and provided us with their partisan identification. Using publicly available sources, we also coded their discipline, the year in which they received their degrees, and other professional information.

the freedom to change policy that results from the president operating as the head of the executive branch. Second, it explicitly mentions action independent of Congress, which is central to how scholars and the public think about executive unilateralism. Moreover, as we explain further when discussing the companion survey of non-experts, priming “without Congress” is important for excluding non-executive driven policy change.

Finally, one additional concern is the temporal relevance of the resulting measure. A score that did not limit the time period in question would face two issues. First and most obviously, many of the topics we present did not exist during the administrations of John Quincy Adams or Grover Cleveland. Second, the choices of contemporary experts will likely be subject to some degree of recency bias, implicitly rendering these scores relevant to only the contemporary era. For these reasons, we explicitly prompt experts with the previous four presidents: Bill Clinton, George W. Bush, Barack Obama, and Donald Trump.⁹ Overall, then, our measure is static. Although this means that we cannot use it to assess changes in presidential discretion over time, or to measure presidential discretion in earlier eras, these limitations are outweighed by the benefits of being able to measure discretion over policies that have been important in recent years and to avoid confounding assessments of discretion with evaluations of specific presidents.

Implementation. Each respondent was asked to compare twenty pairs of randomly selected terms. More specifically, we presented each respondent with two policy areas—for example, National Parks and Monuments versus Media and Broadcast Industry Regulation—and asked them to identify the item in each pair over which the president has more discretion. Policy areas were sampled without replacement within pairs, but with replacement across pairs. It was not possible for a comparison to present the same policy area in one pair, but policy areas could appear more than once across the set of twenty pairs. Figure A1 presents a sample screenshot.

The expert survey was fielded through email invitations sent by the authors beginning March 27, 2019. Follow up email reminders were sent two weeks later to those who had yet to respond. Responses were received between March 28 and May 28, with the vast majority arriving within one week of our request. Some scholars responded by choosing not to participate, and several others did not

⁹Prompting these four presidents also provides an even partisan split. We discuss the potential benefits of this in our section on the public companion survey.

complete the survey. Table A2 shows some minor differences across invited and completed surveys by gender and seniority, but these are not statistically distinguishable by conventional standards. Overall, these figures—in addition to the high response rate—suggest to us that this expert panel is broadly representative of the subject field.

Estimation. We estimate a random utility model to obtain discretion scores. Following Carlson and Montgomery (2017), we model the probability of a paired selection with parameters for our latent measure and respondent quality. Specifically, the probability that topic j is selected over topic i is a function of the discretion of each topic (d_j, d_i), weighted by the quality of rater k , q_k , such that:

$$P(y_{ijk} = j) = \frac{\exp(q_k(d_j - d_i))}{1 + \exp(q_k(d_j - d_i))}$$

In this framework, respondent quality can be thought of as the degree to which a respondent agrees with other respondents. We estimate these models in RStan with diffuse priors (Carpenter et al. 2017). These baseline estimates treat all respondents the same, incorporating no background or demographic characteristics.

There are, of course, numerous potential alternatives to this model. One is to exclude respondent quality parameters so the model above is equivalent to a standard Bradley-Terry model (Bradley and Terry 1954). Another is to include exogenous regressors to predict respondent quality. We forgo the latter for now because investigating hypotheses regarding respondent quality are not necessary to address our research question. These data might be useful, for example, for investigating partisan determinants of response, but these are not central to understanding latent presidential power. However, it is clear that all raters are not equally qualified to answer such questions. As we report in section A3 of the SI, there is variation in the incidence of transitivity violations across experts. All parametric, probabilistic choice models assume some form of stochastic transitivity, which itself is not empirically verifiable. But some raters are more internally inconsistent than others. This implies that some effort to model respondent quality—whatever its determinants—is necessary.¹⁰ This suggests that the quality parameters, q_k , are appropriate. As another alternative, we also present simple, non-parametric

¹⁰Clinton and Lewis (2008), for example, estimate a similar parameter justified on the basis that experts vary in the degree to which they observe the latent quality of each item. We think of q_k similarly, as a measure of the relevant expertise of the individual scholar.

scores that represent the probability a topic is selected. In general, given the straightforward structure of the task, we have found the rank-order of discretion by topic does not significantly change across estimation strategy. We report results for these supplementary estimates in the SI.

Presidential Discretion

We report baseline estimates of presidential discretion in Figure 1. They exhibit strong face validity. Experts identify issues like immigration, trade, intelligence, and defense as highly discretionary. Presidents' constitutional prerogative in war-making is seen to grant them considerable discretion, while Congress has largely delegated presidents the unilateral authority to revise tariff schedules. In contrast, issues like abortion, gun control, and monetary policy appear in the lowest quartile. Abortion and gun control are largely matters of state control, and subject to prevailing legal precedents that limit the opportunity for intervention.

Furthermore, initial diagnostic checks suggest that the scores and procedure perform well. Notably, these scores are not driven by whether agencies have substantial discretion over a policy area. We examined this possibility in two ways, both of which we elaborate on in section B1 of the SI. First, we compared our measure of presidential discretion to existing measures of agency discretion. As the figures and discussion in the SI show, we find that our measure of presidential discretion is orthogonal to both a statute-based measure and an appropriations-based measure.

Second, we consider policies that fall under the purview of independent agencies. By virtue of their location outside the executive branch, these agencies are formally independent of both Congress and the president and thus can be assumed to have some degree of discretion over policy areas within their jurisdictions. While there are some policy areas where the president is seen as having a high level of discretion over policies that are covered by independent agencies—for example, Government Purchasing, which is handled by the independent General Services Administration (GSA) and Export Promotion and Regulation, where the Export-Import Bank plays a significant role—there are many other areas where independent agencies exercise substantial discretion but our experts code presidents as having limited discretion. Table B6 reports a complete listing of policy areas and independent agencies jurisdictions. Given the lack of a relationship between the policy areas that fall under the jurisdiction of independent agencies, other ratings of agency discretion, and our ratings of *presidential* discretion, we are confident that our measures are not simply capturing agency discretion.

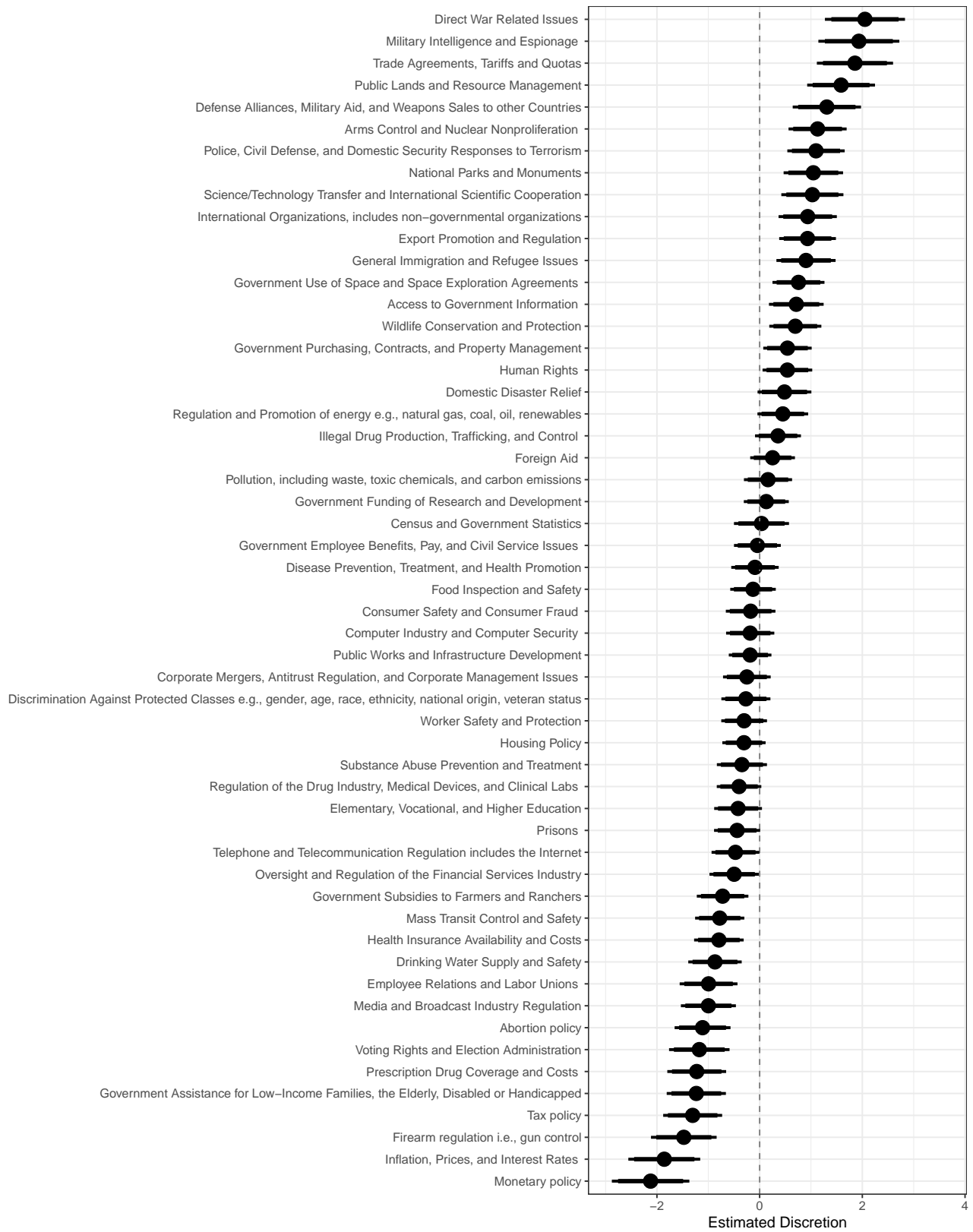


Figure 1 – Expert Estimates of Presidential Discretion. Sample includes 126 U.S. scholars in political science, history, economics, and law.

Of course, these estimates are useful for more than just basic descriptions of stylized accounts of policy areas. Thus, we validate them by assessing two common hypotheses about the American presidency. The first is related to the “Two Presidencies” thesis; the second to the theory of unilateral action.

The “Two Presidencies” Thesis. The basic proposition of the two presidencies thesis, first articulated by Wildavsky (1966), is that presidents tend to have “much greater success” in foreign affairs relative to domestic (162). Evaluations of this notion over the next forty years were decidedly mixed, with most research finding a time-bound effect (e.g., Cohen 1982*a*; Fleisher and Bond 2000). Most importantly, the logic of the president’s comparative boost in influence remained mostly unstated until Canes-Wrone, Howell and Lewis (2008). Notably, the critical components of this logic are themselves standard reasons for delegation. That is, presidents enjoy first-mover authority in foreign affairs, they face fewer collective action problems relative to Congress, and they are better informed and have incentives to care about international affairs. Each of these reasons contributes to a straightforward proposition: presidents should have greater discretion in foreign affairs.

Our estimates reinforce this notion. As Figure 2 indicates, policy areas reasonably classified under the umbrella of foreign affairs tend to be ranked higher in presidential discretion (i.e., as ones in which presidents have more discretion). In Figure 2, we have rank ordered the policy areas to reduce the likelihood of the difference being driven by outliers like war and military intelligence, but the results are unchanged across latent trait estimation strategy or when using the continuous scores.

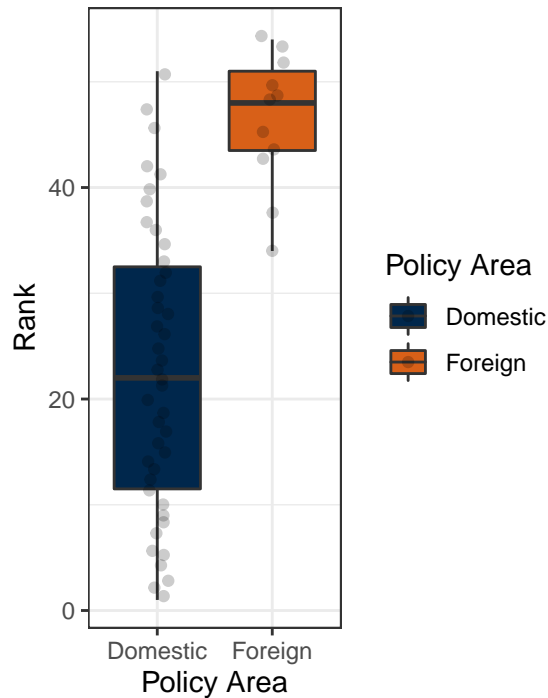


Figure 2 – The Two Presidencies Thesis. Higher rank indicates *more* discretion. Arms control, defense alliances, war, exports, foreign aid, refugees and immigration, human rights, international organizations, military intelligence, responses to terrorism, and trade agreements were classified as foreign policy areas. Points jittered to prevent over-plotting.

Unilateral Presidential Action. In contemporary scholarship, theories of unilateral action are critical for understanding policymaking by presidents. Moreover, the basic intuition of unilateral action has been articulated by presidents, candidates, and voters. Presidents are seen as first-movers capable of changing the status quo, especially in the face of gridlock in Congress. Formal theories of unilateral action incorporate several key elements of this stylized narrative, with the president modeled as a first-mover and Congress’s ability to respond limited by super-majoritarian veto-override requirements (e.g., Howell 2003; Chiou and Rothenberg 2014).

Comparative statics associated with changes in actor preferences are the analytical focus of most theoretical work. This focus is, in part, a function of the relative ease of measuring ideological disagreement or divided government. Thus, several decades of research on unilateral action have established empirical associations between the issuance of various presidential directives and political covariates like the size of the majority party, the ideological distance between the president and Congress, polarization, and divided government.¹¹

Nonetheless, assumptions about presidential discretion are critical to understanding unilateral ac-

¹¹Earlier work has been well summarized by Krause (2009), but recent examples include Fine and Warber (2012), Dickinson

tion. In Howell (2003), a discretion region enforced by the Supreme Court explicitly limits the policy gain associated with unilateral action. More recently, Chiou and Rothenberg (2017) demonstrate that limits on the direction and degree of presidents' proposal power play a critical role in predicting outcomes. Because discretion is typically modeled as an exogenous parameter that determines the set of alternative policies available to a president, more discretion implies more opportunities for unilateral action. In the standard spatial framework, this relationship is notably robust to any distribution of status quos. Thus, it requires no secondary assumptions and presents an opportunity for an additional test of the underlying theory.

Measuring unilateral action on the part of presidents is uniquely difficult among American political institutions. Unlike legislation, regulations, or judicial decisions, the numerous formal and informal initiatives generated by presidents are not subject to any standardized record-keeping scheme. There are at least two dozen classes of documents that bear the president's signature and are the administrative means of unilateral action (Relyea 2005). Worse still, some notable actions—like Deferred Action for Childhood Arrivals, or No Child Left Behind waivers—appear to be classic examples of presidential initiatives, but cannot be traced to a formal presidential directive. Moreover, collecting and aggregating these myriad sources of potential action raises the issue of including orders that are insignificant or do not fit the standard spatial model of policy change (Mayer and Price 2002; Howell 2005; Chiou and Rothenberg 2014). For this reason, we leverage multiple measures to assess the connection between discretion and unilateral action.

We first use raw counts of executive orders maintained by the CAP. To address the question of significance, we next utilize scores estimated by Chiou and Rothenberg (2014), who aggregate the ratings of retrospective and contemporary sources with a hierarchical item-response model. We subset the CAP executive order list to the set with a significance score greater than 0.5, which includes slightly more than the top quartile of orders. Finally, to address the potential omission of non-executive order initiatives, we use estimates of total unilateral action from Lowande (2019). These totals include all directives published in the *Compilation of Presidential Documents* from 1992 through 2018, along with unclassified national security directives, and presidentially-driven regulatory or enforcement initiatives mentioned in law reviews.

Overall, we find that discretion is positively associated with these measures of unilateral action.

and Gubb (2016), and Chiou and Rothenberg (2017).

We report this series of correlations and bivariate relationships in Table 1 and Figure 3. The typical magnitude of this effect is around two additional significant orders during the 1992-2018 period for a standard deviation movement in discretion.¹² This relationship is robust to non-parametric specifications of discretion (i.e., rank-transformation and mean selection scores), as well as analyses that take into account the uncertainty of the discretion scores by inverse error weighting.

Data Source	Outcome	r	95% Conf. Int.
Comparative Agendas Project	Pre-1992 Exec. Orders	0.19	(-0.08, 0.43)
	Post-1992 Exec. Orders	0.29	(0.03, 0.52)
	All Exec. Orders	0.21	(-0.06, 0.45)
Chiou and Rothenberg (2014)	Pre-1992 Sig. Orders	0.30	(0.01, 0.51)
	Post-1992 Sig. Orders	0.32	(0.06, 0.54)
	All Sig. Orders	0.32	(0.06, 0.55)
Lowande (2019)	Total Actions	0.52	(0.27, 0.7)

Table 1 – Discretion is Positively Associated with Presidential Action. Executive order counts come from the Comparative Agendas Project; executive order counts from Chiou and Rothenberg (2014) were generated by setting a significance threshold of 0.5; estimates of total unilateral action come from (Lowande 2019), and includes all directives, as well as non-directive actions like regulations and informal orders. Includes random utility model estimates of discretion.

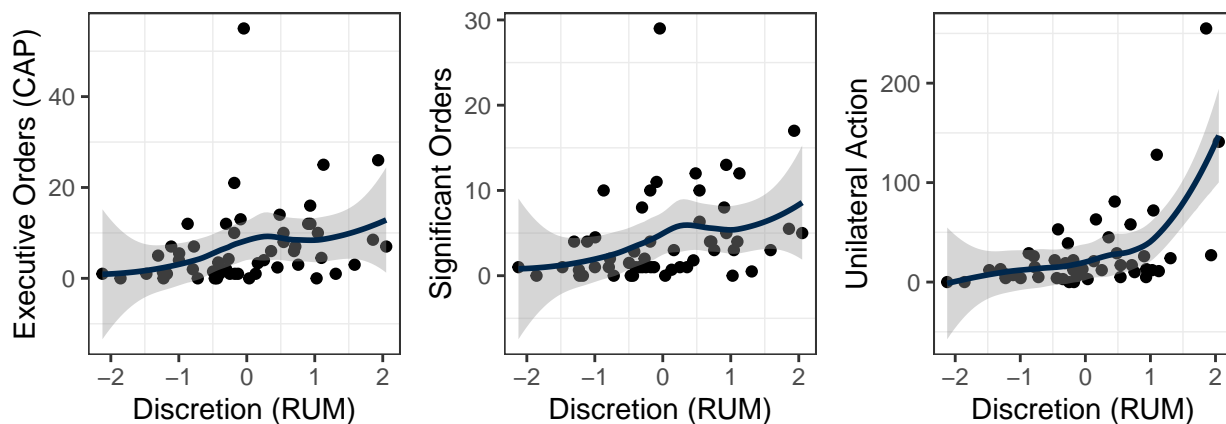


Figure 3 – Presidential Discretion and Unilateral Action by Policy Area, 1992-2018. Executive order counts (left plot) come from the Comparative Agendas Project; executive order counts (center plot) from Chiou and Rothenberg (2014) were generated by setting a significance threshold of 0.5; estimates of total unilateral action (right panel) come from Lowande (2019), and include all directives, as well as non-directive actions like regulations and informal orders. Includes random utility model (RUM) estimates of discretion.

This relationship is also robust to different measures of unilateral action. The relationship is stronger as insignificant orders are removed and other types of directives beyond executive orders are in-

¹²We forgo the presentation of regression estimates, since the hypothesis does not include a point prediction and because some measures indicate the relationship is non-linear, mostly driven by war, intelligence, and trade.

cluded.¹³ All revisions to trade barriers occur via proclamation, which are included in this measure and improves its relative fit with the discretion scores. Finally, it is reassuring that the relationship between unilateral action and discretion weakens prior to 1992, which suggests that the time horizon provided to experts as a part of the definition of discretion was informative.

In summary, our new measure of presidential discretion comports with stylized accounts of the concept and usefully organizes observed cases of unilateral action over the previous four presidencies. We next demonstrate that our method can capture an undertheorized and elusive phenomenon: the public expectations gap.

The Expectations Gap

Our approach to estimating presidential discretion sheds light on what is known as the public “expectations gap.” The upward trend in public expectations of the presidency, which has been noted by observers since the Progressive Era, is most clearly articulated by Lowi (1985). As Lowi noted, the president’s “responsibilities are so pressing and so close to unmeetable that the president must have contingency plans to make up the difference between expectations and realities” (173). As a result, it is conventionally believed this gap is to blame for downward trends in approval ratings within administration (Waterman, Silva and Jenkins-Smith 2014). More broadly, the presidential expectations gap is an extreme example of a collection of stylized facts observed by scholarship on political behavior and accountability. Research consistently shows examples of attribution error in policymaking on the part of voters (e.g., Gomez and Wilson. 2001; Malhotra and Kuo 2008; Ruder 2014; Bisgaard 2015), with people tending to hold presidents responsible for outcomes they may have no direct control over (e.g., Sirin and Villalobos 2011; Kane 2016; Clifford, Flynn and Nyhan 2019).

In light of this research, we advance two related arguments. First, we extend considerations for the expectations gap to all areas of public policy. Typically, work on the presidential expectations gap and attribution error more broadly are limited to generic evaluations of the economy or character, which

¹³Note, however, that the strong correlation with unilateral action in the third panel is partly due to the exclusion of mismatched topics and the inclusion of trade barrier revisions that occur via proclamation. Specifically, this measure of unilateral action is disaggregated by questions related to the National Political Awareness Test (NPAT) administered by Project Votesmart, which do not perfectly match CAP topics. This means one outlier category—government operations—is excluded.

produces several related limitations. Most obviously, some areas of policy with important implications for the accountability relationship between presidents and the public have no direct connection to the economy. This means, for example, whether the public expects presidents to have sway over specific issues like firearm regulation, abortion, and LGBT rights is absent from past research.

Second, we argue that the exclusive focus on expectations *deficits* implies a misleading asymmetry. By limiting scholarly attention to areas where presidents apparently fall short, past research implies a uniform deficit across all policy. Yet there are theoretical reasons why both expectation deficits *and* surpluses should exist. Studies of attribution error, for example, imply that partisan bias motivates the degree to which the public rewards presidents for good conditions and punishes them for bad. Suppose, for example, Republicans observe a Republican president tightening wildlife protections. Republicans are generally thought to oppose enhanced protections for wildlife, and favor loosening environmental restrictions for businesses. Thus, partisan bias might motivate an expectation surplus, as the co-partisan respondent may downplay the president's responsibility to remain consistent. More generally, basic limitations in political knowledge in the mass public imply some areas of policy will offer presidents more discretion than the public expects. For these reasons, we investigate the expectations gap in public policy by redeploying our survey with a sample of non-experts.

Public Survey. Fielding a non-expert survey comparable to our expert survey produced several challenges. First, initial pre-tests that we report in the SI (section A1) suggested that as much as 20% of respondents we reached using MTurk were not human. Consequently, we selected an alternative vendor, Lucid, because of its investment in the removal of bots and web-crawlers from its online workforce.¹⁴ Our public survey was fielded by Lucid from March 15-18, 2019.

Second, we wanted to ensure that our non-expert respondents would share a common definition of the concept of discretion after reading the prompt. More specifically, we were concerned that the prompt might confuse non-expert respondents new to the term. We therefore pre-tested several different prompts by randomly assigning these prompts and then comparing respondent performance on the task of selecting examples of presidents using discretion from a list. We report these pre-test results in the SI (see section A1), but overall, the final prompt guides most respondents to correct examples of

¹⁴Coppock and McClellan (2019) suggest Lucid supplies samples that are more suitable for social scientific inquiry, relative to other convenience sample sources like MTurk. Respondents were paid based on terms set by Lucid.

presidents' use of discretion. Respondents with this prompt selected correct answers 68% of the time and incorrect ones 22% of the time. The phrase "without Congress" appeared to be most helpful in guiding respondents to the concept in question.

Third, we sought to exclude low-performing respondents *ex post*. After representative quotas were reached, responses to an open-ended attention check question (Figure A2) in the Lucid sample were examined for patterns indicating non-attentive or bot respondents. This led to twelve respondents being replaced. In addition, we dropped respondents who revealed they had misunderstood the definition of discretion, namely, those who thought of it as the noun form of the word "discreet." After removing respondents that failed our attention check by these definitions, our sample included 303 raters. Again, section A1 of the SI provides details.

Finally, another potential issue is that non-expert respondents, particularly those who are paid, might click through the task to complete it as quickly as possible. This does not produce bias, but like bot responses, it increases noise and would render policy areas less distinguishable. We performed several diagnostic checks to ensure this was not the case. We found that response times were comparable across samples. Median total response time was 4.23 and 4.37 minutes for experts and laypersons, respectively, which means that both sets of respondents spent about 13 seconds per comparison. In addition, in both the pre-tested samples and final samples, neither experts or non-experts were significantly more likely to select the righthand topic, which was adjacent to the "Next" button in the survey (Figure A1). For this reason, we believe differences in the resulting measures are a function of expertise, not an artifact of the relative level of care taken by respondents.

As Table 2 suggests, the subjects were broadly representative of the U.S. voting age population in terms of party identification, age, sex, and education. Though the sample is somewhat younger and more credentialed, the deviation is sufficiently minor that re-weighting the raters does not significantly alter the rank-order of the resulting discretion estimates.

		Sample	U.S. Voters
Party ID	Democrat	0.34	0.33
	Independent	0.37	0.37
	Republican	0.27	0.26
Sex	Female	0.50	0.53
	Male	0.50	0.47
Education	Some High School	0.03	0.15
	High School	0.25	0.27
	Some College	0.37	0.27
	BA or Higher	0.37	0.31
Age	18-24	0.10	0.09
	25-34	0.16	0.15
	35-44	0.18	0.15
	45-64	0.36	0.36
	65+	0.20	0.25

Table 2 – Public sample compared to the population of eligible U.S. voters. U.S. voter party ID data come from Pew Research (<https://www.people-press.org/2018/03/20/party-identification-trends-1992-2017/>); other demographic data obtained from the 2018 current population survey of the Census Bureau.

The scholar and public samples differ in ways beyond their degree of expertise. Of course, all expert respondents have a graduate credential of some kind (most often, a J.D. or Ph.D.). In addition, the expert sample underrepresents women and non-Democratic party identifiers, relative to the general public. Both of these facts are broadly reflective of trends in academia, not our choice of experts. Scholars in the fields of political science and law tend to be more politically liberal (Chilton and Posner 2014; Rom 2019), and women make-up about one-fourth of the Presidents and Executive Politics section of the American Political Science Association (Reid and Curry 2019). The over-representation of Democrats reported in Figure A3 is comparable to estimates that Democrats outnumber Republicans roughly 8:1 in the law and the social sciences fields. Notably, one recent survey of executive politics scholars that asked respondents to rank presidents has been critiqued as politically biased (see Rottinghaus and Vaughn 2017; Azari 2018). Our survey specifically primes memories of both Republican and Democratic presidents and the scope of power that presidents exercise across policy areas. For this reason, we believe that potential for partisan bias influencing the results of the expert survey is minimal.

Expected Discretion. We present public estimates of presidential discretion in Figure 4. Most of the estimates pass an initial face validity test. The top decile includes immigration, trade, war, and military aid, while the bottom decile includes abortion. Not surprisingly, expert and public estimates are positively but weakly correlated.

In addition, differences in the statistical properties of the estimates coincide with conventional understandings of expertise. As Figures 1 and 4 suggest, the public is more divided on what the president has discretion over, which renders the policy areas less distinguishable. In the expert ratings, variance in the estimates is higher (0.93 v. 0.89) and their standard errors are lower (0.27 v. 0.31), relative to the public. In addition, the public tends to be more inconsistent, both within rater and in the aggregate. Table A3 and Figure A4 in the SI show a higher incidence of transitivity violations in the public, relative to experts. We interpret these results as general confirmation of what is gained from experts' shared understanding of some underlying phenomenon (as reflected by reduced uncertainty and increased internal consistency). Naturally, the increased specificity among experts also means that there are more statistically distinguishable differences across policy areas. For example, in the expert survey, Human Rights is about 0.54 and Oversight of Financial Services is -0.5, yet they are statistically distinguishable. But in the Public survey, Arms Control is about 0.54 while Corporate Mergers is -0.5, yet their confidence intervals overlap.

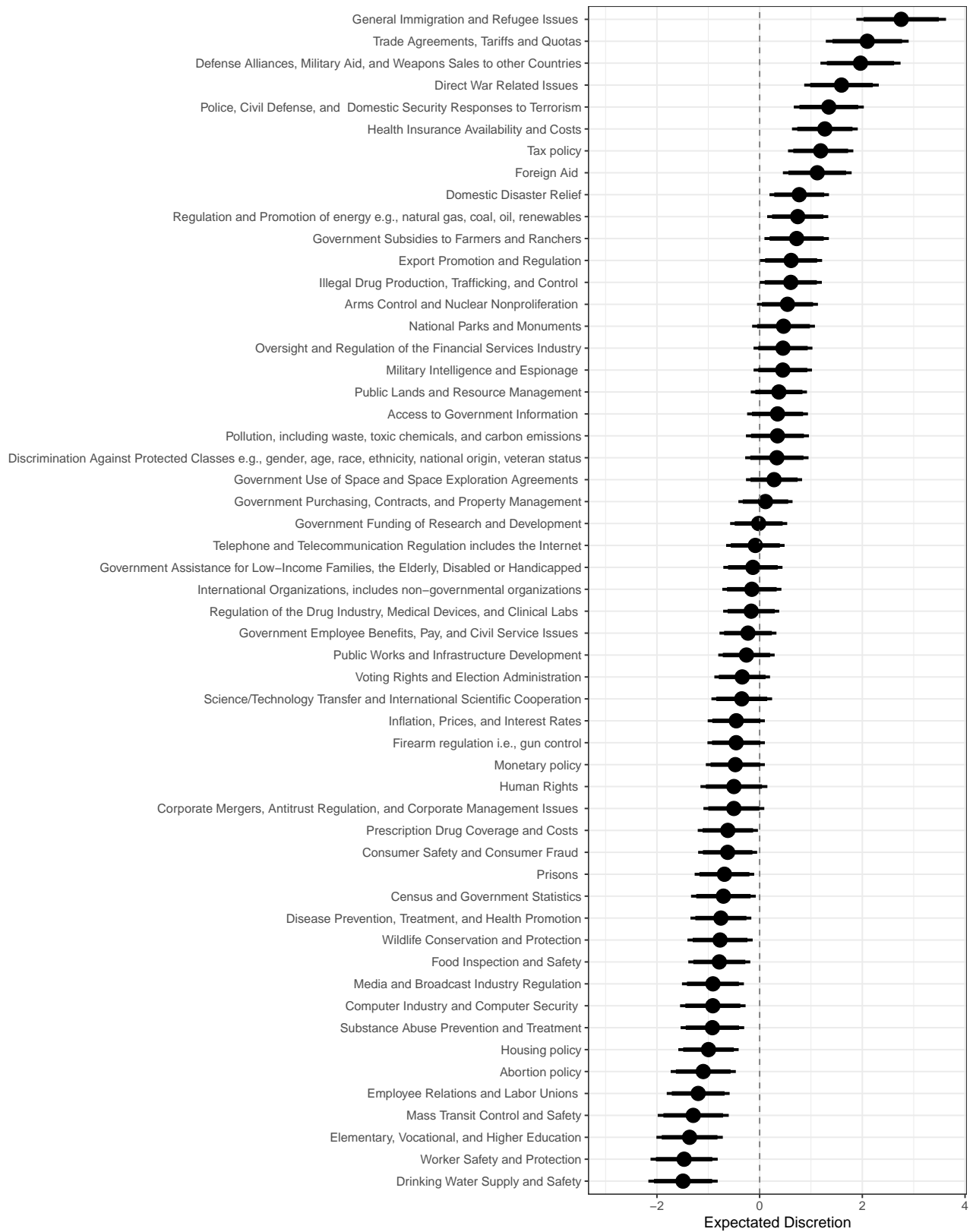


Figure 4 – Public Estimates of Presidential Discretion. Sample includes a representative sample of 301 U.S. citizens.

Expectations Gap, Actions, and Rhetoric. Finally, we leverage these estimates to investigate the expectations gap. Figure 5 reveals some initial findings and observations. To render these scores more comparable, we apply rank-transformation. Policy areas that appear in the upper left quadrant are areas in which the public believes the president has substantially more discretion than experts say they do. Most obviously, these are domestic issues. Again, there is relative agreement that presidents are powerful in foreign affairs. In addition, each of these gap-issues—some of which we have labeled—are salient political topics that have appeared in the news because of some policy change. The key misconception seems to be the source and scale of that change. Tax policy and Wall Street regulation have been dramatically overhauled in recent years—but by Congress. Payments to farmers have occurred—but these payments are relatively minor, and the president’s scope is fairly limited. These examples suggest that the expectations gap is due, in part, to a recency bias generated by thinking about the important issues of the day.

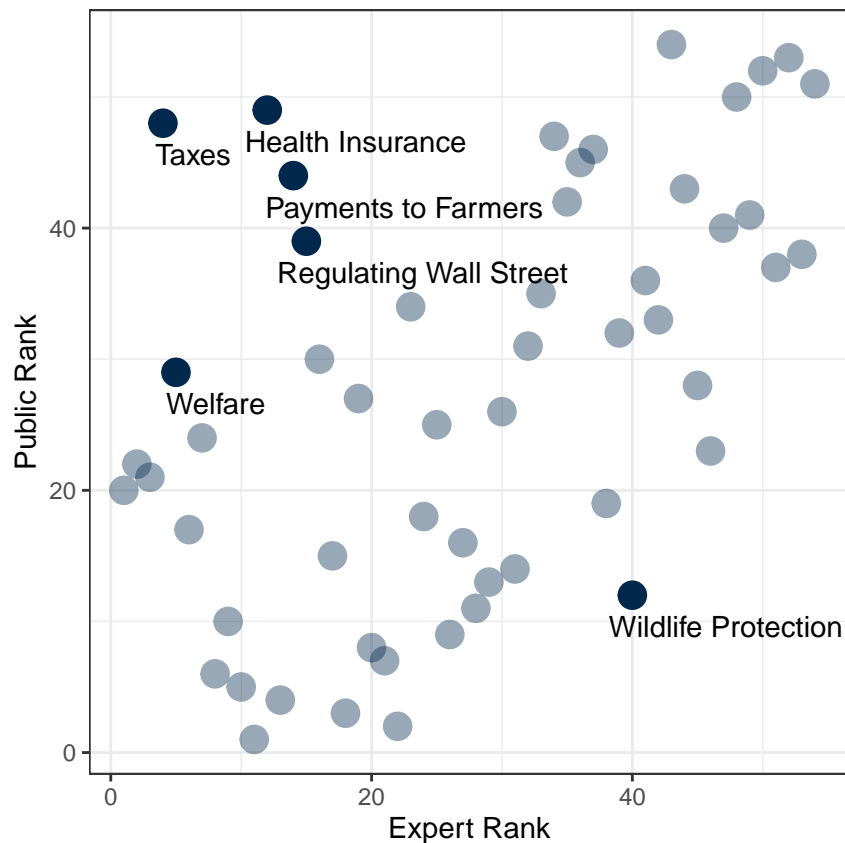


Figure 5 – The Expectations Gap in Public and Expert Discretion Estimates. Higher rank indicates *more* discretion. Discretion estimates obtained from separate random utility models.

To investigate this issue more systematically, we again examine presidential behavior during the

contemporary period. Scholarship on the American presidency has consistently utilized the State of the Union Address to systematically capture the president’s policy agenda (e.g., Cohen 1982*b*, 2012). Thus, we use the same set of measures of presidential initiatives, along with a measure of presidential rhetoric collected from SOTU addresses, and compare these to our measure of discretion. Specifically, we examine topic mentions in presidents’ State of the Union Addresses from 1992 to 2018. The CAP classifies each statement between punctuation as mentioning a major topic and a subtopic. Although our previous measures capture what presidents have done, mentions in the SOTU capture what presidents talk about.

Table 3 and Figure 6 show that presidential statements—but not actions—are strongly correlated with public expectations of discretion. The strength of this relationship, is again greatest in the contemporary (post-1992) period that we explicitly referred to in the survey prompt, as seen by the much higher correlations between executive statements and public expectations shown in Table 3. Furthermore, as the bivariate plots in Figure 6 suggest, this finding is driven largely by the top five topics in SOTU addresses: war, taxes, inflation, nuclear nonproliferation, and healthcare. These topics account for most presidential attention in the contemporary period, and the public expects the president to have high discretion over these policy areas. In contrast, unilateral action is not associated with public expectations of discretion. Again, these relationships are robust to a non-parametric approach of estimating expectations (SI, Table B5 and Figure B6). Finally, it is worth noting that SOTU mentions are *not* correlated with expert ratings of presidential discretion. Table 3, for example, shows little evidence of a relationship between executive orders or significant orders and public expectations, while showing a significant relationship between president statements and public expectations; and Figure 6 shows a similar pattern.

Data Source	Outcome	<i>r</i>	95% Conf. Int.
Comparative Agendas Project	Pre-1992 Exec. Orders	0.08	(-0.19, 0.34)
	Post-1992 Exec. Orders	0.05	(-0.22, 0.31)
	All Exec. Orders	0.08	(-0.2, 0.34)
Chiou and Rothenberg (2014)	Pre-1992 Sig. Orders	0.15	(-0.12, 0.4)
	Post-1992 Sig. Orders	0.07	(-0.2, 0.33)
	All Sig. Orders	0.13	(-0.14, 0.38)
Comparative Agendas Project (SOTU)	Pre-1992 SOTU	0.30	(0.03, 0.52)
	Post-1992 SOTU	0.51	(0.28, 0.68)
	All SOTU	0.41	(0.17, 0.61)

Table 3 – Public expectations are positively associated with State of the Union speech topics. Executive order and SOTU speech counts come from the Comparative Agendas Project. Public expectations is estimated with a random utility model.

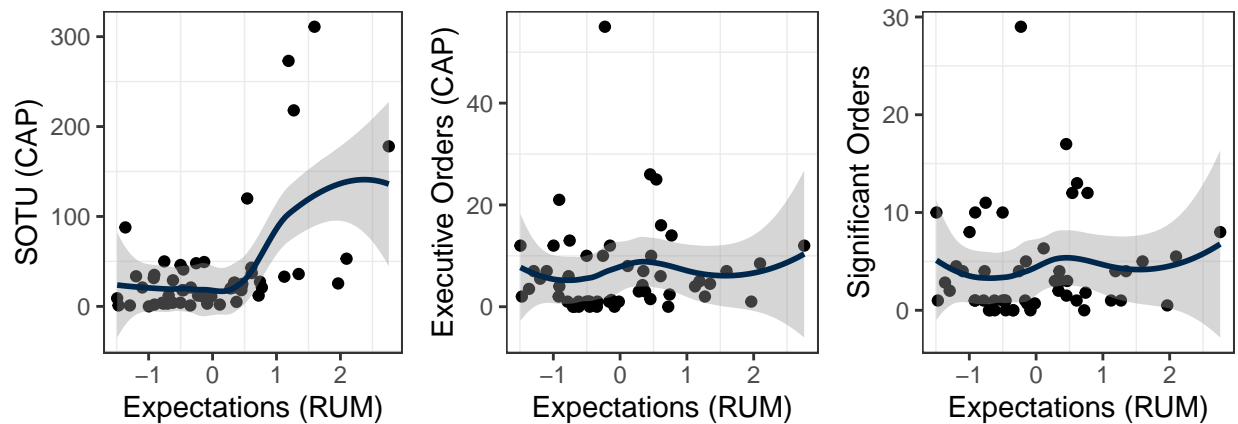


Figure 6 – Public Expectations, Unilateral Action, and the SOTU by Policy Area, 1992-2018. State of the Union mentions (left plot) come from the Comparative Agendas Project; executive order counts (right plot) from Chiou and Rothenberg (2014) were generated by setting a significance threshold of 0.5. Discretion is estimated with a random utility model (RUM).

Discussion

Policymaking in modern democracies cannot be understood without considering the discretion of chief executives. In American politics, the stakes of this discretion are high. Whether over 700,000 immigrants maintain temporary legal status, whether utilities must use carbon-capture technology, or whether Chinese imports slow to a trickle, all feasibly depend on the whims of the president. Though contemporaneous reporting speculates about the legality of presidential moves, scholars have long known that the discretion to act is not random. By providing novel estimates of presidential discretion, our study demonstrates this strategic process has produced a policy arena with variation in presidents’ opportunities for action. Moreover, this effort has four core payoffs:

First, our approach to estimating presidential discretion has general and broad implications for expert surveys as a methodology for uncovering latent concepts. Using discrete choice experiments on both expert and non-expert panels has several appealing features. They are not time consuming for respondents and permit incomplete exposure to all items within raters. These features mean that the number of items—in this case, policy areas—can be increased without decreasing the likelihood of completion or limiting the reliability of the measure. In addition, the simplicity of each micro-task renders non-expert companion surveys more plausibly valid and directly comparable. This allows researchers to ask a straightforward, but often overlooked question: what have they *gained* by leveraging

the opinions of experts, relative to non-experts?

Second, we provide the first systematic estimates of discretionary authority available to the President of the United States. Existing means of measuring discretion either do not take stock of all sources of discretionary authority, are difficult to apply across areas of policy, are difficult to replicate, or do not model uncertainty. Furthermore, none of these approaches can be applied directly to the chief executive, as opposed to executive agencies more broadly.

Third, we demonstrate that our estimates are associated with observed behavior in ways that support theories of the presidency. We find that experts are united in their assessment that the president enjoys more discretion in foreign policy, relative to domestic policy. In addition, we found support for the proposition that discretion is associated with action, a relationship that holds across numerous measures of both discretion and action. These patterns are descriptive, but they lend support to each theory and demonstrate the validity of the measures.

Fourth, we shed new light on a phenomenon critical to the accountability relationship between the president and the public: the “expectations gap.” Most importantly, we provide the first systematic estimates of the presidential expectations gap across a nearly comprehensive cross-section of policy-making. We also provide the first evidence that the expectations gap is not a uniform deficit. Past research has focused mostly on the inability of the president to directly influence economic indicators, but we show that while expectation deficits exist in some areas, expectation surpluses exist in others. This recognition of the dual nature of the expectations gap may have important implications for executive accountability. In effect, it provides systematic evidence of the context that incentivizes presidents to develop “contingencies”—as Lowi put it—while leaving other policies within their scope unchanged.

Finally, it is notable that the expectations of the public are associated with presidential statements, whereas the expectations of scholars are associated with action. This asymmetry raises two distinct possibilities. First, gaps in expectations may drive presidents to make doomed promises. Alternatively, presidential statements themselves may generate unrealistic expectations. Naturally, these possibilities are not mutually exclusive and cannot be reliably sorted with our cross-sectional data.

These applications lay the groundwork for future studies. Most obviously, decomposing the potentially endogenous relationship between presidential rhetoric and public expectations would advance our understanding of presidential action. In addition, with further surveys and more nuanced random utility models, our method can be redeployed to investigate both the individual-level and topic-level

determinants of the expectations gap. One initial direction relevant to the existing research on attribution error and bias is to estimate the effect of partisanship on expected presidential discretion. These directions may lead to more systematic understanding of the gap between the president's power and the public's expectations.

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Supporting Information (Online)

Where is Presidential Power?

Kenneth Lowande and Charles Shipan

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B.1	Comparison with Agency Discretion Measures	A8

A Survey Information and Diagnostics

A.1 Pre-testing

Prior to fielding the survey, we ran a series of pre-tests. In particular, we wanted to make sure that the meaning of the questions and terms were clear to everyone taking the survey, but especially to non-experts. Each pre-test provided a description of the concept of “discretion” followed by a prompt for the respondent to select correct examples of its use from a selection of four choices. The four choices were

- A. President George H. W. Bush pushing for education reform in Congress.
- B. President George H. W. Bush pardoning officials implicated in the Iran-Contra scandal.
- C. President George H. W. Bush signing legislation that increased taxes and reduced the deficit.
- D. President George H. W. Bush ordering government agencies to treat Puerto Rico as a state.

with B and D as correct uses of the term, and A and C incorrect uses of the term. Our initial pre-test, fielded on 400 MTurk respondents, used the following definition:

Presidents can use their position as the head of the executive branch to change policy. In some cases, they have a great deal of discretion, or freedom, to change existing policies and create new ones. In others, their discretion to change or create policy is more limited.

This initial test revealed only suggestive evidence that non-experts could accurately grasp the concept: respondents selected correct answers on average 61% of the time, but selected at least one wrong answer 45% of the time. Moreover, about 20% of the survey failed an attention check at the end of the survey, or included responses to an open-ended question that suggested they were not human. In the second pre-test, which we fielded on the Prolific platform, we randomly assigned 600 respondents to one of three definitions of discretion. The key difference in these definitions was the first sentence, which is italicized in the definition above. The three conditions were:

1. Presidents can use their position as the head of the executive branch to change policy.
2. Presidents can use their legal authority as the head of the executive branch to change policy.
3. Presidents can use their legal authority as the head of the executive branch to change policy without Congress.

Overall, accuracy in this sample was higher, with correct answers selected 68% of the time, and wrong answers selected 35% of the time. Moreover, there were significant differences in respondents exposed to the third definition, relative to the others. More specifically, there was a reduction in the frequency of incorrect answers, decreasing from 35% to 22%. We inferred that the inclusion of the words “without Congress” was an important cognitive cue for non-experts, helping them to identify the concept we had in mind. This informed our selection of the final question wording, indicated in Figure A1.

Finally, we pre-tested the full pairwise comparison version of the survey on a sample of 300 U.S. respondents who were representative in terms of gender, age, education, and party identification. This sample was obtained through Lucid, an online workforce platform. One potential concern of a pairwise comparison approach is that respondents might simply click the left or right choice as quickly as possible to receive payment. If this is the case, we would expect to see left-right response distributions that deviate markedly from a simulated coin flip, with some respondents simply selecting all lefts or rights. Reassuringly, in this final pre-test, the response distributions were not distinguishable from a coin flip, and no respondent seemed to have clicked through on one side or the other.



Presidents can use their legal authority as the head of the executive branch to change policy without Congress. In some cases, they have a great deal of **discretion**, or freedom, to change existing policies and create new ones. In others, their ability to use executive actions to change or create policy is more limited.

For the following pair of policy areas, please click on the policy that recent presidents (i.e., Bill Clinton, George W. Bush, Barack Obama, and Donald J. Trump) have had **greater discretion** to change through executive action. (1 of 20)

Defense Alliances, Military Aid, and Weapons Sales to other Countries

Health Insurance Availability and Costs



Figure A1 – Survey Instrument



Earlier in this survey, we gave you a definition of executive "discretion," by which we meant the freedom to act without Congress. To help us understand your answers, can you tell us who you would rank as the U.S. president who has used the most discretion, and why? (Click the arrow when finished.)



Figure A2 – Attention Check

Discretion Topic	Major Topic (CAP)	Sub-Topic Name-Change or Creation?
Inflation, Prices, and Interest Rates	Economic Policy	No
Monetary policy	Economic Policy	Yes
Tax policy	Economic Policy	No
Voting Rights and Election Administration	Civil Rights and Civil Liberties	Yes
Access to Government Information	Civil Rights and Civil Liberties	Yes
Discrimination Against Protected Classes	Civil Rights and Civil Liberties	Yes
Firearm regulation (i.e. gun control)	Civil Rights and Civil Liberties	Yes
Health Insurance Availability and Costs	Healthcare	No
Regulation of the Drug Industry, Medical Devices, and Clinical Labs	Healthcare	No
Disease Prevention, Treatment, and Health Promotion	Healthcare	No
Prescription Drug Coverage and Costs	Healthcare	No
Abortion policy	Healthcare	Yes
Substance Abuse Prevention and Treatment	Healthcare	Yes
Government Subsidies to Farmers and Ranchers	Agriculture	Yes
Food Inspection and Safety	Agriculture	No
Worker Safety and Protection	Labor	No
Employee Relations and Labor Unions	Labor	No
Elementary, Vocational, and Higher Education	Education	Yes
Regulation and Promotion of energy	Energy	Yes
General Immigration and Refugee Issues	Immigration	No
Mass Transit Control and Safety	Transportation and Infrastructure	Yes
Public Works and Infrastructure Development	Transportation and Infrastructure	No
Illegal Drug Production, Trafficking, and Control	Criminal Justice	No
Prisons	Criminal Justice	No
Police, Civil Defense, and Domestic Security Responses to Terrorism	Criminal Justice	No
Government Assistance for Low-Income Families, the Elderly, or Disabled	Welfare	Yes
Housing Policy	Housing	No
Corporate Mergers, Antitrust Regulation, and Corporate Management Issues	Consumer Protection	No
Domestic Disaster Relief	Consumer Protection	No
Consumer Safety and Consumer Fraud	Consumer Protection	No
Oversight and Regulation of the Financial Services Industry	Consumer Protection	Yes
Military Intelligence and Espionage	Defense	No
Arms Control and Nuclear Nonproliferation	Defense	No
Direct War Related Issues	Defense	No
Defense Alliances, Military Aid, and Weapons Sales to other Countries	Defense	No
Government Use of Space and Space Exploration Agreements	Science and Technology	No
Science Technology Transfer and International Scientific Cooperation	Science and Technology	No
Telephone and Telecommunication Regulation	Science and Technology	No
Newspaper, Publishing, and Broadcast Industry Regulation	Science and Technology	No
Computer Industry and Computer Security	Science and Technology	No
Government Employee Benefits, Pay, and Civil Service Issues	Government Operations	No
Census and Government Statistics	Government Operations	No
Government Funding of Research and Development	Government Operations	Yes
Government Purchasing, Contracts, and Property Management	Government Operations	Yes
Trade Negotiations, Disputes, Tariffs/Quotas, and Agreements	Trade and Diplomacy	Yes
Export Promotion and Regulation	Trade and Diplomacy	Yes
Foreign Aid	Trade and Diplomacy	No
Human Rights	Trade and Diplomacy	No
International Organizations, including Non-governmental Organizations	Trade and Diplomacy	No
Drinking Water Supply and Safety	Environment and Public Lands	No
National Parks and Monuments	Environment and Public Lands	No
Pollution, including waste, toxic chemicals, and carbon emissions	Environment and Public Lands	No
Wildlife Conservation and Management	Environment and Public Lands	Yes
Public Lands and Resource Management	Environment and Public Lands	Yes

Table A1 – Discretion and Comparative Agendas Topics

A.2 Sample Statistics

	Population	Sample
N	173	130
Junior	0.1	0.123
Female	0.22	0.192
Law	0.28	0.277
Political Science	0.6	0.615
History	0.08	0.077
Terminal Degree (median)	1993	1994

Table A2 – Expert sample compared to the subject pool of executive politics scholars across law, political science, and history. Terminal degree, demographic, and career information obtained through public searches of expert webpages and vitae.

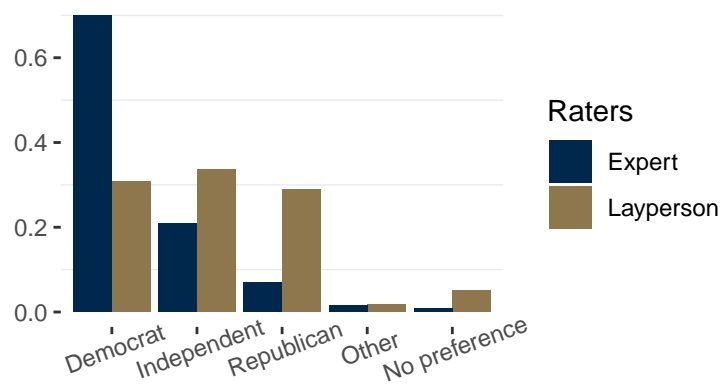


Figure A3 – Expert panel sample relative to the layperson sample and the general public. Includes only experts who completed the survey and excludes three who would not report partisanship.

A.3 Stochastic Transitivity

Probabilistic choice models like the one we employ typically assume some form of stochastic transitivity. This assumption is not empirically verifiable. However, counting the incidence of violations provides a descriptive measure of expert and public inconsistency. For our purposes, it is one way to assess what is gained by consulting experts over laypersons. We report aggregate and within-rater violations in Table A3 and Figure A4, respectively.

According to Table A3, the incidence of aggregate transitivity violations in the public sample are higher, relative to the expert sample. For a set of choice probabilities P , if $P_{ij} \geq 0.5$ and $P_{jk} \geq 0.5$, then weak stochastic transitivity is defined as $P_{ik} \geq 0.5$, moderate as $P_{ik} \geq \min(P_{ij}, P_{jk})$, and strong as $P_{ik} \geq \max(P_{ij}, P_{jk})$ (Wickelmaier 2019). Within-rater violations in Figure A4 are also instructive. On average, experts select one fewer pairwise choice that violates transitivity.

Sample	Assumption	Error Ratio	Mean Dev.
Experts	Weak	0.21	0.47
	Moderate	0.30	0.60
	Strong	0.32	0.74
Public	Weak	0.14	0.24
	Moderate	0.39	0.28
	Strong	0.52	0.38

Table A3 – Stochastic transitivity violations are more common among the public, relative to experts. Reports the error ratios and mean deviation from the minimum probability for which transitivity would hold for weak, moderate, and strong transitivity (e.g., Choisel and Wickelmaier 2007; Suppes et al. 2006), in expert and public samples.

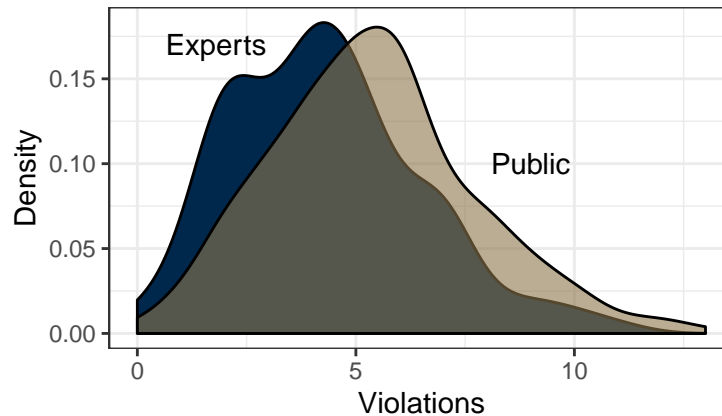


Figure A4 – Within-rater incidence of transitivity violations is higher among the public, relative to experts. Reports density plots for the incidence of transitivity violations for the relational topic graph unique to each rater.

Finally, in the main text of the paper, we report scores estimated separately based on the stated assumption that the discretion scales among experts and laypersons will differ. One way to examine whether this assumption is appropriate is to examine goodness-of-fit across choice models that do and do not constrain the discretion parameters to be the same across experts and laypersons. When we do this, we can confidently reject the hypothesis of no difference between expert and public scales ($p < 0.0000$).

B Additional Results

Data Source	Outcome	r	95% Conf. Int.
Comparative Agendas Project	Pre-1992 Exec. Orders	0.18	(-0.09, 0.43)
	Post-1992 Exec. Orders	0.28	(0.01, 0.51)
	All Exec. Orders	0.20	(-0.07, 0.45)
Chiou and Rothenberg (2014)	Pre-1992 Sig. Orders	0.28	
	Post-1992 Sig. Orders	0.32	(0.05, 0.54)
	All Sig. Orders	0.31	(0.04, 0.53)
Lowande (2019)	Total Actions	0.49	(0.24, 0.68)

Table B4 – Discretion (Non-parametric) is positively associated with action. Executive order counts come from the Comparative Agendas Project; estimates of all unilateral action come from (Lowande 2019), and includes all directives, as well as non-directive actions like regulations and informal orders. Discretion is a topic’s mean selection score.

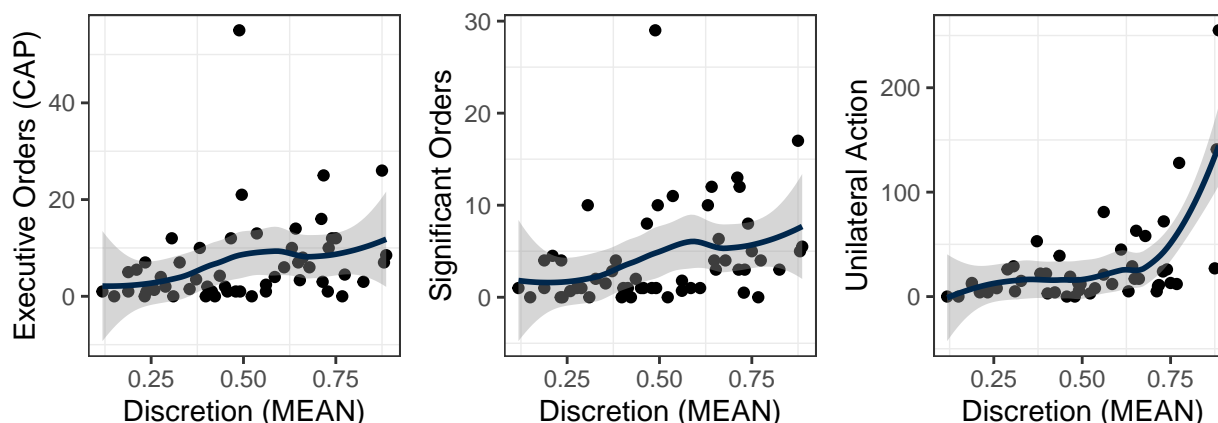


Figure B5 – Presidential Discretion and Unilateral Action by Policy Area, 1992-2018. Executive order counts (left plot) come from the Comparative Agendas Project; executive order counts (center plot) from Chiou and Rothenberg (2014) were generated by setting a significance threshold of 0.5; estimates of total unilateral action (right panel) come from (Lowande 2019), and include all directives, as well as non-directive actions like regulations and informal orders. Discretion is a topic’s mean selection score.

Data Source	Outcome	r	95% Conf. Int.
Comparative Agendas Project (EO)	Pre-1992 Exec. Orders	0.09	(-0.18, 0.35)
	Post-1992 Exec. Orders	0.06	(-0.21, 0.32)
	All Exec. Orders	0.09	(-0.19, 0.35)
Chiou and Rothenberg (2014)	Pre-1992 Sig. Orders	0.16	(-0.12, 0.41)
	Post-1992 Sig. Orders	0.09	(-0.19, 0.35)
	All Sig. Orders	0.14	(-0.13, 0.39)
Comparative Agendas Project (SOTU)	Pre-1992 SOTU	0.25	(-0.01, 0.49)
	Post-1992 SOTU	0.50	(0.27, 0.68)
	All SOTU	0.38	(0.13, 0.59)

Table B5 – Public expectations are positively associated with State of the Union speech topics. Executive order and SOTU speech counts come from the Comparative Agendas Project. Public expectations are estimated by taking a topic’s mean selection.

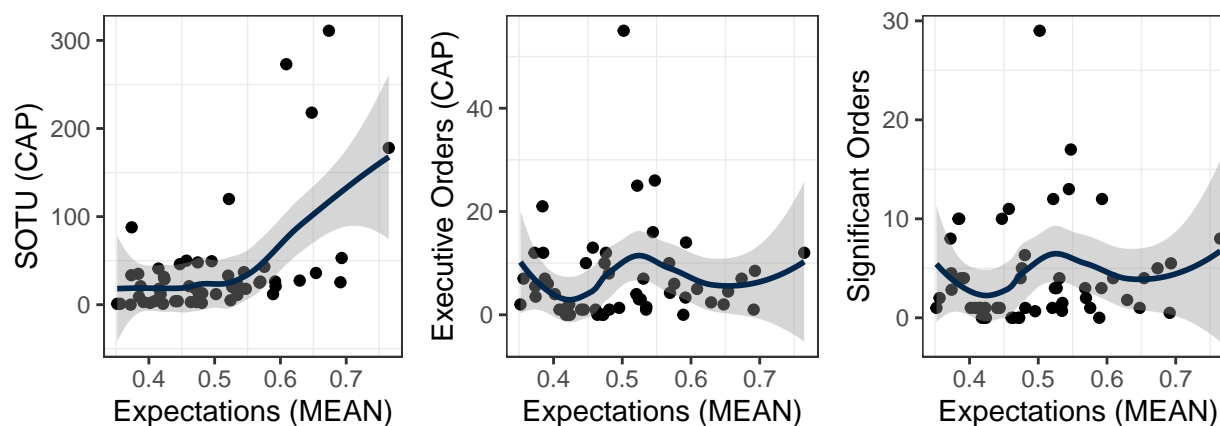


Figure B6 – Public Expectations, Unilateral Action, and the SOTU by Policy Area, 1992-2018. State of the Union mentions (left plot) come from the Comparative Agendas Project; executive order counts (right plot) from Chiou and Rothenberg (2014) were generated by setting a significance threshold of 0.5. Public expectations are estimated by taking a topic’s mean selection.

B.1 Comparison with Agency Discretion Measures

One potential concern with our measure of presidential discretion is that it might simply reproduce existing measures of executive branch discretion. To investigate this, we compared our measure to summary measures constructed from two studies.

Epstein and O’Halloran (1999) construct a “discretion ratio,” which is the proportion of Congressional Quarterly summary provisions of a major law that delegate to an agency, less a percentage multiplier that is greater when more constraint provisions are present. Because these data were never made available beyond the study’s authors, we use a replication conducted by Lowande (2014), which updates their list to 2012, and summarize this discretion ratio by policy area. We report these results and compare them with our measure in Figure B7.

Bolton and Thrower (N.d.) report a measure based on annual appropriations bills to agencies, dividing this by the number of pages of limitation riders (as a proxy for constraints). We assign agencies to a principal area of policy, and again take the average discretion. We report these comparisons in B8. In both cases, agency discretion is orthogonal to presidential discretion. Moreover, B7 illustrates a basic problem of discretion measures that use coding of bill summaries. Fewer provisions implies more imprecision in discretion scores, which varies by policy area, and is unmodeled.

Finally, we examined the rank order of policy areas and the distribution of independent agencies with authority over that area. Our concern was that some combination of independence and discretion could recover our estimates. That is, an independent agency with high discretion might explain a low presidential discretion rating. As Table B6 suggests, this is not the case, with policy areas covered by independent agencies corresponding to both low and high values of presidential discretion. Overall, these comparisons suggest to us that our measures recover a unique, latent concept that is largely intractable to account for with either appropriations or statutes.

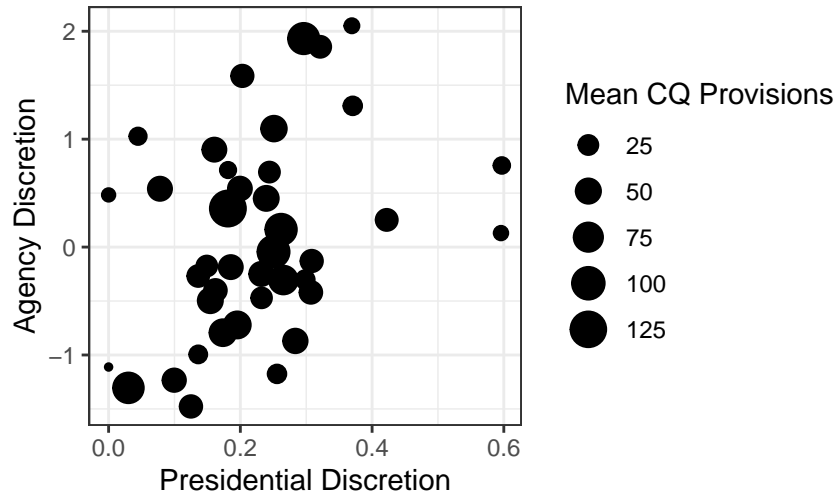


Figure B7 – Agency discretion (Epstein and O’Halloran 1999) measure is orthogonal to presidential discretion, and based on variable information. Plots agency discretion and presidential measures, with point size determined by the mean number of Congressional Quarterly Almanac summary provisions agency discretion measures are based on. Based on a replication and extension of Epstein and O’Halloran (1999) of major laws from 1947-2012, conducted by Lowande (2014).

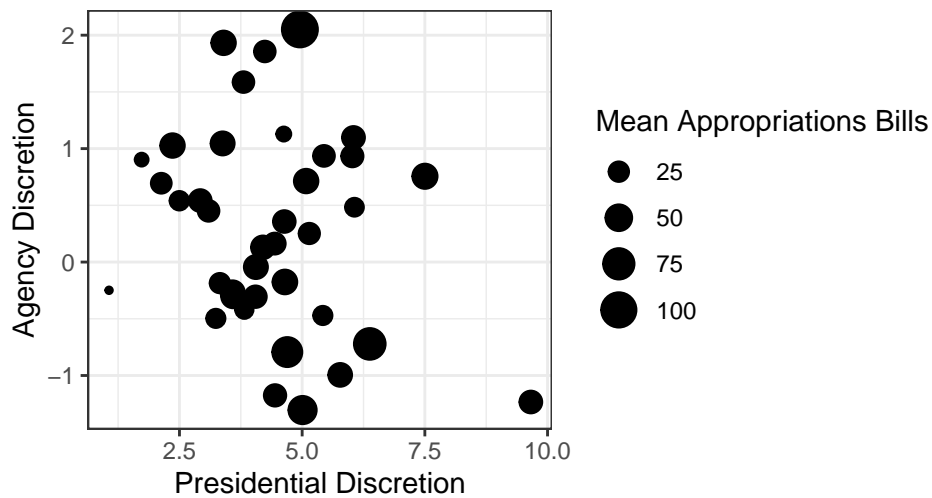


Figure B8 – Agency discretion (Bolton and Thrower N.d.) measure is orthogonal to presidential discretion. Plots agency discretion and presidential measures, with point size determined by the mean number of appropriations bills within topic from 1992-2014, as measured by Bolton and Thrower (N.d.).

Rank	Policy Area	Independent, Non-Executive Agencies with		
		Strong Authority	Some Authority	Advisory Authority
1	Direct War Related Issues			
2	Military Intelligence and Espionage			
3	Trade Agreements and Barriers		USTDA	ITC
4	Public Lands and Resource Management			
5	Defense Alliances, Military Aid, and Weapons Sales			
6	Arms Control and Nuclear Nonproliferation			
7	Police, Civil Defense, and Terrorism			
8	National Parks and Monuments			
9	Science/Technology Transfer			
10	International Organizations			
11	Export Promotion and Regulation	Ex-Im Bank	USTDA	
12	General Immigration and Refugee Issues			
13	Government Use of Space			
14	Access to Government Information			
15	Wildlife Conservation and Management			
16	Government Purchasing, Contracts, and Property	GSA		
17	Human Rights			
18	Domestic Disaster Relief		SBA	
19	Regulation and Promotion of energy	FERC		
20	Illegal Drug Production, Trafficking, and Control			
21	Foreign Aid		USAID, DFC	
22	Pollution			
23	Government Funding of Research and Development			
24	Census and Government Statistics			
25	Government Employee Benefits, Pay, and Civil Service	OPM, FLRA		
26	Disease Prevention, Treatment, and Health Promotion			
27	Food Inspection and Safety			
28	Consumer Safety and Consumer Fraud	CPSC, FTC	CFPB	
29	Computer Industry and Computer Security			
30	Public Works and Infrastructure Development	TVA		
31	Corporate Mergers, Antitrust, and Management	FTC		
32	Discrimination Against Protected Classes	EEOC		
33	Worker Safety and Protection	OSHR		
34	Housing Policy		FHFA	
35	Substance Abuse Prevention and Treatment			
36	Drug, Medical Device, and Clinical Lab Regulation			
37	Elementary, Vocational, and Higher Education			
38	Prisons			
39	Telecommunication Regulation	FCC		
40	Oversight and Regulation of Financial Services	CFPB	FHFA	
41	Government Subsidies to Farmers and Ranchers		FCA	
42	Mass Transit Control and Safety	NTSB		
43	Health Insurance Availability and Costs			
44	Drinking Water Supply and Safety			
45	Employee Relations and Labor Unions	NLRB	FMCS	
46	Media and Broadcast Industry Regulation	FCC		
47	Abortion policy			
48	Voting Rights and Election Administration		FEC	EAC, USCCR
49	Prescription Drug Coverage and Costs			
50	Assistance for Low-Income, the Elderly, or Disabled			
51	Tax policy			
52	Firearm regulation			
53	Inflation, Prices, and Interest Rates	Fed		
54	Monetary policy	Fed		

Table B6 – Agency independence is orthogonal to presidential discretion. Independent agencies drawn from <https://pitt.libguides.com/usgovinfo/independentagencies>. Agency “independence” can be thought of as a continuous concept (Selin 2015). However, because our purpose is to provide a substantive diagnostic check on our results, we use a dichotomous classification. Naturally, the agencies above tend to be rated as more independent by Selin.