Insecure Senate Partisan Majorities as a Constraint on Presidential Appointment Powers:

Theory and Evidence from Confirmed Executive Appointees, 1987-2020

Jason S. Byers[†] University of Connecticut

and

George A. Krause‡ University of Georgia

Version 2.9

Draft as of June 2, 2025

- † Assistant Professor, Department of Political Science, University of Connecticut. Storrs, Connecticut 06269. jason.byers@uconn.edu.
- ‡ Alumni Foundation Distinguished Professor of Public Administration, Department of Public Administration and Policy, School of Public and International Affairs, University of Georgia, 280G Baldwin Hall, Athens, GA 30602. gkrause@uga.edu. *Corresponding Author*.

Keywords: Executive Appointment Powers; Senate Confirmation; Executive Branch Policy Cohesion; Insecure Partisan Majorities; Separation of Powers; Structural Econometric Methods

^{*} An earlier version of this paper was presented at the 2025 Midwest Political Science Association Meetings, Chicago, IL. April 3-6, 2025; and SPIA Methods Colloquium at the University of Georgia. We thank Jamie Carson, Lauren Mattioli, and seminar participants in the SPIA Methods Colloquium for constructive comments. All errors remain our own.

ABSTRACT

Executive appointment power rests with a president's ability to appoint executive branch officials aligned with their policy interests. A theory is advanced positing that both modern U.S. presidents and Senate confront greater uncertainty as Senate partisan majorities weaken, and therefore, confirmed executive appointees exhibit greater ideological divergence from presidents. Applying structural econometric methods, this logic is evaluated analyzing 4,835 PAS confirmed executive appointees between 1987-2021. Insecure Senate partisan majorities are positively associated with ideological divergence between presidents and executive appointees. Yet, this evidence is asymmetric, with insecure Senate partisan opposition majorities providing a more effective ideological check on presidents than the ideological benefits being conferred to presidents as their party's Senate majorities become more secure. The findings not only underscore the limits of presidential influence when the same party controls the executive appointment process, but also the constraints imposed by robust Senate minority parties on presidents seeking executive branch policy cohesion.

INTRODUCTION

Although modern U.S. presidents consolidate executive powers to exert control over policymaking and administrative systems, they often fail to attain such unity of the executive branch as proscribed by Alexander Hamilton in *Federalist 70*. In practice, the modern U.S. executive branch reflects the fragmented exercise of governmental authority. Presidents rely upon the actions of appointed executive branch officials to ensure policies consistent with administration objectives (e.g., Aberbach and Rockman 2000; Krause 2009; Lewis 2008; Lowande 2024; Resh 2015; Rudalevige 2021). Yet, seeking unity in executive branch governance through appointed officials represents a major challenge for U.S. presidents (e.g., Kennedy and Rudalevige 2025; Krause and Dupay 2009; Krause 2022; Heclo 1977; Lowande 2018; Moe 1985). Presidential efforts at executive branch cohesion through the power of appointment are enhanced when their party has majoritarian control over legislative institutions (e.g., Coleman 1999; Hollibaugh and Rothenberg 2017, 2018; Lewis 2011; Ostrander 2016; cf. Hollibaugh and Krause 2023, 2024). In fact, modern presidents struggle to achieve executive branch policy cohesion for governance purposes – even in presence of unified partisan control of democratic institutions (Krause and Dupay 2009).

In this study, we seek to analyze how the nature of Senate partisan majorities affects the extent that presidents can staff PAS executive appointed positions with individuals whose policy interests more closely align to their own. We assert that modern presidents encounter insecure partisan majorities (IPMs) in the Senate that act to constrain presidents' ability to staff the executive branch with ideologically-aligned policy loyalists. IPMs connote when the majority party has a tenuous hold on power that can be easily lost in the subsequent election cycle due to small seat margins and/or fragile seats that were won by a small plurality of voters — i.e., "toss-up" legislative seats (see also, Lee 2016; Curry and Lee 2020). IPMs offer reduced incentives for bipartisan compromise, and greater incentives to engage in 'partisan combat' that emphasizes partisan-based position-taking, advertising, and credit claiming activities over bipartisan

compromise and governance due to high levels of uncertainty surrounding the near future partisan control of legislative institutions (Lee 2016; Curry and Lee 2020; Gelman 2019). In turn, the Senate requires presidents to concede ideological slack in executive appointees requiring Senate confirmation. That is, narrow Senate partisan majorities do not empower presidents by exploiting a fractured legislative environment incapable of effective collective governance (e.g., Howell and Moe 2016), but rather yield negative institutional spillover effects that constrain presidents' ability to secure Senate confirmation of more ideologically congruent executive branch officials.

The proposed theory is empirically evaluated using data from the 100th through 117th Congresses (1987-2020) on 4,835 U.S. federal PAS (presidential-appointed, Senate-confirmed) executive appointees with ideological estimates derived from the widely adopted DIME political campaign contributions database (Bonica 2024). Because existing IPM studies limit their focus to legislative policymaking and the internal operation of legislative institutions (Lee 2016; Curry and Lee 2020; Gelman 2019; Crosson, et al. 2021), this study offers a novel lens into understanding the consequences of IPMs for interbranch politics. In addition, this study provides much needed attention to analyzing the variation involving ideological convergence between presidents and their own confirmed PAS executive appointees. Instead, existing scholarship on U.S. executive appointment politics focuses on the length of the confirmation process (Christenson, et al. nd; Hollibaugh and Rothenberg 2018; Krause and Byers 2022, nd; McCarty and Razaghian 1999; Ostrander 2016), or the political calculus underlying individual Senators' confirmation votes or collective confirmation outcomes (Bonica, Chen, and Johnson 2014; Nokken and Sala 2000).

Employing structural econometric methods which explicitly account for endogeneity bias, the statistical evidence is consistent with the theory proposed in this study. Specifically, the

¹ A notable exception is Bertelli and Grose's (2011) analyses of the agency budget implications relating to ideological congruence between presidents and cabinet secretaries for 15 departments between 1991-2004.

evidence reveals that insecure Senate majorities reduce ideological alignment between presidents and their confirmed executive appointees. These effects are asymmetric — weak Senate partisan majorities favoring the president offer lesser ideological congruence from PAS confirmed executive appointees relative to such ideological benefits obtained from weak Senate partisan opposition majorities. Both the theory and evidence question the core assumption that 'binary' partisan control of the Senate ensures confirmation of ideologically congruent executive appointees that redound to the policy benefit of presidents. Further, this logic and evidence also challenges the implied wisdom that more favorable partisan seat balances in the president's favor necessarily translates into greater success confirming more ideologically congruent executive nominees.

On a broader level, this study yields two major implications for the study of American political institutions within a separation of powers framework. First, although legislative instability attributable to IPMs induces policymaking paralysis within legislatures (Lee 2016; Curry and Lee 2020; Gelman 2019), it also shapes both the character and capacity of executive branch governance. In addition, the emergence of IPMs in Congress over the past few decades, coupled with both the logic and evidence offered in this study, offers a new rationale for the parallel emergence of temporary and vacant executive branch positions (e.g., Kinane 2021; O'Connell 2020; Piper 2022), coupled with the expansion and empowerment of Schedule C and Non-Career SES executive branch positions that do not require Senate confirmation (Lewis 2008, 2011; Hollibaugh and Rothenberg 2024). IPMs impact on PAS executive appointments offer presidents further incentive to both centralize and politicize executive branch governance via alternative channels.

CONFIRMATION OF EXECUTIVE NOMINATIONS: MOTIVATIONS & STYLIZED FACTS

Executive appointments enable presidents to translate achieve policy goals via executive branch governance. For presidents seeking to maximize policy cohesion within the executive branch, a key element is selecting appointees who adhere to administration policy goals (Lewis 2008; Moe 1985). Although presidents do obtain benefits from policy expertise in choosing

executive appointees (e.g., Hollibaugh 2015; Krause and O'Connell 2016, 2019; Lewis 2008; Waterman and Ouyang 2020), policy congruence between presidents and their executive appointees is necessary for executive branch cohesion and responsiveness to transpire (Hollibaugh, Horton, and Lewis 2014; Krause and Byers 2022; Krause and O'Connell 2016).²

Presidents do appoint individuals based on a variety of considerations (Bonica, Chen, and Johnson 2015; Hollibaugh and Rothenberg 2018), yet ensuring effective executive branch policy cohesion requires president's to obtain confirmation of leadership appointees in PAS positions with shared policy interests (Hollibaugh and Rothenberg 2018; Krause 2009; Krause and O'Connell 2016; Lewis 2008; Lowande 2018). Individuals serving in these PAS positions exercise substantial authority to both design and implement executive branch policies (e.g., Aberbach and Rockman 2000; Heclo 1977; Kennedy and Rudalevige 2025; Lowande 2024; Resh 2015; Rudalevige 2021). Executive appointees who are ideologically congruent with the president are more likely to advance and safeguard the administration's policy agenda. When the Senate's policy preferences align with those of the president, legislators are more likely to support the president's nominees and broader policy direction (Coleman 1999; Lewis 2011). Unified partisan governments also enable presidents to exercise greater discretion in filling vacancies with ideologically aligned loyalists, thereby increasing their influence over agency operations (Kinane 2021; Lowande and Rogowski 2021; Piper 2022). Therefore, unified partisan government is widely viewed as affording presidents with the most favorable institutional conditions for implementing their policy priorities.

Figure 1 presents the stylized facts regarding the confirmation process through time by depicting the confirmation rate of PAS executive nominees from the 100th Congress (1987-88) through the 116th Congress (2019-2020) covering six presidential administrations from Reagan

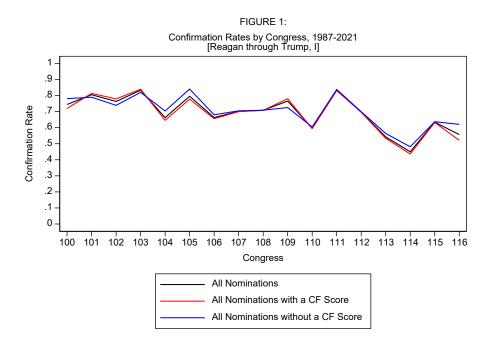
² Alternatively, presidents display strong incentives to obtain reliable appointees, and not necessarily greater policy congruence (e.g., Hollibaugh and Krause 2023, 2024).

through Trump, 1. This covers an era when the appointment process became contentious due to the onset of legislative gridlock reflected by declining legislation, coupled with both changing norms and incentives regarding the more vigorous and contentious exercise of the Senate's advise and consent powers (see Mackenzie 2001: 22-24, 27-36). Figure 1 displays relatively high confirmation rates, yet nomination does not guarantee confirmation. The unconfirmed rate of executive nominees (computed as 1 – confirmation rate) reveals that the highest unconfirmed rate is approximately 52% in the 114th Congress (2015-2017) during the final years of the Obama presidency when Republicans had majority control of the U.S. Senate. The lowest unconfirmed rate is 18% in the 111th Congress during the first two years of the Obama presidency when Democrats enjoyed a relatively sizable partisan seat advantage in the U.S. Senate. Overall, the confirmation rates are strikingly similar between those PAS executive nominees with Bonica (2024) CF scores (70.10%) versus those lacking CF scores (71.25%), a difference of 1.15%. Interestingly, confirmation rates are numerically similar under unified or divided partisan control of the executive appointment process [+1.39% UPC-DPC difference among all executive nominations in this sample; +2.50% (-0.90%) UPC-DPC difference among executive nominees possessing (lacking) a CF score ideal point estimate].3 A nontrivial proportion of PAS executive nominees are not confirmed, thus indicating that the Senate is able to thwart presidential efforts at staffing this critical subset of executive branch positions. The nontrivial rate of PAS executive nominees not being confirmed is actually a conservative estimate of the Senate's formal advise and consent powers since it excludes instances where the Senate voiced opposition to potential nominees informally considered that were not formally submitted to the Senate.

³ Confirmed executive nominees are 0.031 units (4.37% of a standard deviation) more ideologically divergent from their appointing presidents compared to unconfirmed executive nominees.

FIGURE 1

Confirmation Rates of PAS Executive Nominees: Total Sample and by CF Score Status Subsamples, 1987-2021 [Reagan – Trump, 1]



Second, **Figure 1** uncovers a secular decline in confirmation rates through time, with greater amplitude in the post-2005 (109th Congress) era. This is an intriguing data pattern when one considers efforts to facilitate the confirmation of executive nominees with the passage of the Federal Reform Vacancy Act of 1998 (Brannon 2025), and later, the adoption of the 'nuclear option' in November 2013 to reduce Senate cloture thresholds for such positions to a simple majority vote (Heitshusen 2013). Finally, the data indicate that executive nominees making political campaign contributions have confirmation rates that do not differ from those who refrain from this type of political activity. The confirmation rates between those nominees with CF ideological scores, based on making FEC registered political campaign contributions (Bonica 2024), and those lacking CF ideological scores due to an absence of such campaign contributions (28.72% of the overall sample), exhibit extremely similar temporal patterns in relation to total confirmation rates (= 0.995 and 0.970, respectively). Hence, political campaign contributions do not appear to affect the prospects for being confirmed by the Senate for a PAS executive branch position.

APPOINTMENT POWERS UNDER INSECURE SENATE PARTISAN MAJORITIES

Existing research finds that presidents obtain more compliant appointees during times of unified partisan control of the executive appointment process (Krause and O'Connell 2019; Hollibaugh and Krause 2024; Lewis 2011; Ouyang, Haglund, and Waterman 2017), while also enhancing agent reliability when both branches exhibit ideological convergence (Hollibaugh and Krause 2024). This because a partisan-aligned Senate has an incentive to afford considerable discretion to presidents' efforts in obtaining executive branch cohesion. Conversely, when presidents and the Senate exhibit policy conflict, the Senate exercises their powers to both vigorously vet and constrain presidents' appointment authority (Hollibaugh and Rothenberg 2017, 2018; Kinane 2021; Krause and Byers 2022, **nd** McCarty and Razaghian 1999; Ostrander 2016).

Not all manifestations of a unified (or divided) executive appointment process, however, afford presidents with the same opportunities to shape the staffing of PAS executive branch positions. Rather, presidents must adapt to the extent that insecure partisan majorities (IPMs) in the Senate constrain presidential appointment choices. Greater IPMs yield an increasingly stark tradeoff confronting presidents – a desire to nominate executive branch officials with similar ideological policy predispositions while securing Senate confirmation. This tradeoff becomes steeper as Senate partisan majorities become more insecure, and hence, confirmation prospects become more uncertain. Presidents thus strategically nominate, on average, less ideologically congruent executive nominees for PAS positions to secure confirmation. This is a valid presidential appointment strategy since the Senate confirmation process has become extremely difficult for executive nominees facing both greater burdens and demands from this process (e.g., Labiner and

⁴ Our use of the term *insecurity* refers to the precariousness of the majority's hold on power, with even partisan splits. Greater insecurity of partisan majorities exacerbates uncertainty regarding confirmation outcomes resulting from member defections or procedural mechanisms that thwart executive appointments.

Light 2001: 238-243; Loomis 2001: 163-167; Working Group on Streamlining Executive Nominations 2012). Due to swift PAS executive turnover rates, these problems compound the president's challenges when it comes to effectively staffing these positions that are responsible for conveying administration policy goals to civil servants (Mendelsohn 2015). When confirmation prospects exhibit greater uncertainty, presidents are more inclined to offer ideological concessions by appointing executive branch officials who are more ideologically distant from them. Conversely, when Senate partisan majorities become more secure, presidents face less uncertainty, and hence, need not to concede ideological slack in appointments.

This logic is rooted in how insecure partisan majorities can shape the separation of power politics reflected in the executive appointment process. If insecure partisan majorities make bipartisan cooperation and agreement more tenuous since the stakes are higher for attaining a partisan advantage (Lee 2016: 3), then it naturally follows that party unity will be strengthened while bipartisanship suffers. That is, stronger "in-party" (president's party) versus "out-party" (opposition party to the president) tensions occur under intense partisan competition (Lee 2016: 179). The collective action consequences of insecure partisan majorities are exacerbated in an era of high levels of elite partisan polarization, thus making bipartisanship requisite for effective collective outcomes (Curry and Lee 2020). As Senate partisan majorities become more insecure, presidents will experience greater difficulty getting their executive nominations confirmed by the Senate. Presidents will respond to this situation by nominating more ideologically divergent (i.e., moderate) executive nominees that will have an easier time being confirmed by the Senate. Because IPMs make Senate partisan control more volatile, Senators may fear they will lose the ability to oversee executive branch agencies beyond the current Congress cycle. Hence, this raises the stakes of confirmation, and thus paradoxically makes the Senate less willing to reject more ideologically divergent (moderate) nominees serving under a future shift in partisan control of the Senate.

Because gridlock both within and between the branches arises from insecure partisan majorities, exacerbated by non-majoritarian procedures which empower individual Senators and the minority party, the Senate has difficulty ensuring that confirmed executive appointees will be responsive to their policy and administrative concerns *ex* post. The logic advanced here presumes that insecure partisan majorities reduce executive branch cohesion by requiring presidents to appoint 'confirmable' executive nominee positions that are less ideologically proximate to themselves. This logic leads to the hypotheses:

H1: Executive appointee ideological divergence to the president is **rising** as Senate presidential partisan opposition majorities become more robust.

H2: Executive appointee ideological divergence to the president is <u>declining</u> as Senate presidential partisan aligned majorities become more secure.

H1 predicts that executive appointee ideological congruence to the president falls as their Senate partisan majority becomes less secure, while H2 predicts that executive appointee ideological congruence to the president increases as the president's party control over the executive appointment process in the Senate is strengthened. An implication of H1 and H2 is that presidents obtain less ideological congruence, on average, from PAS executive appointees as Senate partisan majorities become increasingly insecure. Conversely, presidents' ability to get more ideologically congruent executive appointees confirmed, on average, is enhanced as Senate partisan majorities become more secure (i.e., greater partisan opposition/support to the president).

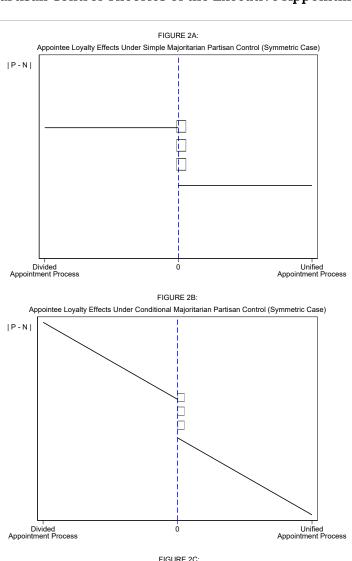
In **Figure 2** below, the testable implications of the proposed theory are compared alongside two competing sets of predictions reflecting conventional wisdom on the topic. **Figure 2A** characterizes the executive appointee ideological divergence a president obtains under a simple majoritarian partisan control perspective. According to this perspective, when the president's party enjoys majority status, the former obtains a *fixed* reduction in ideological distance from executive

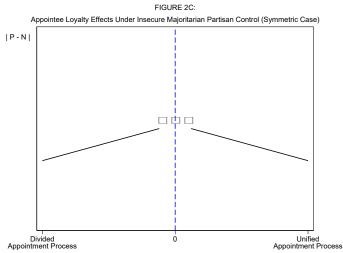
appointees compared to when the Senate is controlled by the opposition party. This is denoted as a vertical intercept shift that signifies a one-time reduction of the absolute ideological distance between a president and nominee when the president's party enjoys unified control over the executive appointment process compared to when they do not. This perspective infers that secure/insecure Senate partisan majorities do not impact the executive appointment process. Figure 2B presents a conditional majority partisan control logic that also accounts for the relative strength of the president's party in the Senate within each partisan control regime. Besides discrete differences in appointee ideological divergence posited in the simple majoritarian perspective, reductions in opposition majorities, as well as increases in presidential partisan majorities, are associated with presidents' obtaining less ideological divergence from their executive appointees. This relationship is monotonically increasing in the numerical power of president's party controlling the Senate. That is, insecure Senate partisan opposition majorities benefit presidents' efforts at obtaining less ideologically divergent executive appointees.

Figure 2C represents the predictions of the proposed theory that Senate IPMs constrain presidential appointments. One notices that the relationship between Senate majority opposition/ president's party and absolute distance between a president and their confirmed nominee is non-monotonic unlike in both the simple majoritarian and conditional majoritarian perspectives.

Simply, presidents are not always accruing less ideological divergence from executive appointees as their party becomes stronger in the Senate. Rather, presidents obtain greater ideological divergence from executive appointees as their party becomes an increasing threat to the opposition majority party in the Senate (*upward sloping curve*) consistent with H1, while obtaining less ideologically divergent appointees as the presidents' partisan majority grows (*downward sloping curve*) consistent with H2. Thus, presidents obtain more ideological divergence from executive appointees as Senate partisan majorities become increasingly insecure. Next, we turn our attention to the data and empirical strategy used to evaluate these testable hypotheses.

 ${\begin{tabular}{l} {\bf FIGURE~2}\\ {\bf Alternative~Partisan~Control~Theories~of~the~Executive~Appointment~Process\\ \end{tabular}}$





DATA AND EMPIRICAL STRATEGY

Our sample consists of 4,835 PAS confirmed executive appointees between 1987-2021 [Reagan through Trump I executive confirmations] in 208 federal agencies [agency-level average = 23.25 observations: (4,835 / 208)]. The data from January 20, 1987- May 24, 2012 come Ostrander (2015), as well as updated by the authors at [https://www.congress.gov/]. The outcome variable of interest is the absolute ideological distance between presidents and confirmed executive appointees based on the Bonica (2024) CF ideological scores for each institutional actor (| Pcf Score - Ncf Score|]. The mean absolute ideological distance is 0.688, with a median equal to 0.379, a standard deviation of 0.71, an interquartile range of 0.993, a minimum value of 0, and a maximum value of 2.847. This measure contains some degree of positive skewness (1.12) while exhibiting mesokurtosis that is approximate to a normal distribution (2.95). Larger (Smaller) values of this dependent variable indicate greater (lesser) appointee ideological divergence from the president.

The primary covariates of interest pertain to the extent that the president's party has partisan control of the U.S. Senate. The first measure, *Partisan Seat Balance*, is simply the partisan seat advantage in the Senate enjoyed by the president, with more negative values connoting an increasingly divided executive appointment process since greater partisan opposition to the president exists; with more positive values indicating an increasingly unified executive appointment process due to greater strength of the presidents' party majoritarian control of this

⁵ The overall sample of confirmed and unconfirmed PAS total executive nominees is 6,783 in 226 federal agencies [agency-level average = 30.01 observations: (6,783 / 226)]. The sample of unconfirmed PAS executive nominees is 1,948 in 226 federal agencies [agency-level average = 11.60 observations: (1,948 / 168)]. Later, the sensitivity analysis conducted on the total sample of 6,783 PAS confirmed executive nominees is summarized (see **Appendix C** for additional details).

⁶ The descriptive statistics for the variables analyzed in the structural econometric models appears in **Table A1** located in **Appendix A**).

chamber; and value closer to zero indicate insecure partisan majorities either opposed to the president (negative values) or aligned with the president (positive values).⁷

Although the partisan seat balance measure is an obvious way to evaluate measure the extent that Senate partisan majorities are insecure, it cannot properly ascertain the extent that a partisan advantage is safe since it does not factor in the relative closeness (margin) of individual Senate election contests (Feigenbaum, Fouirnaies, and Hall 2017: 282). For a given partisan seat balance, the closeness of individual Senate election outcomes will exacerbate insecure partisan majorities since it will make a majority (and minority) party's control over the institution more tenuous compared to when larger electoral margins transpire for a given partisan seat balance. To evaluate how IPMs in the U.S. Senate influence presidential appointments to U.S. executive branch positions, three partisan seat distance metrics are employed, alongside partisan seat balances.

Following Feigenbaum, Fouirnaies, and Hall (2017), all three of our measures minimize the distance between a vector in $\chi \subset \mathbb{R}^d$ to a surface χ . Where we are trying to find, "the distance from a vector of the K closest losses where K is the number of seats needed to win the majority, to the origin." (Feigenbaum, Fouirnaies, and Hall 2017: 281). The *uniform partisan swing distance* measures the minimum vote swing required to flip partisan control of the Senate. This measure computes the closest loss margin required for the number of Senate seats needed to alter the partisan majority in this chamber. This distance measure is calculated as x_j^{US} . This seat distance measure evaluates the spatial distance required for the president's party to attain a Senate majority is equal to the j^{th} closest opposition party member's losing electoral margin for a Senate general election contest, where j^{th} represents the Senate partisan seat deficit in terms of the president's

⁷ Kernel density plots of Senate partisan seat balances (see **Appendix A**: *Figure A3*) reveal the presence of (more) secure majorities in the postwar period predating our analysis: 1947-1986 (80th–99th Congresses) compared to period of interest covering 1987-2021 (100th –116th Congresses).

party. Negative values reflect the extent that the president's partisan opposition in the Senate is secure while positive values are indicative of the robustness of the president's partisan majority in the Senate. As the uniform partisan swing distance measures move closer towards zero, partisan majorities become increasingly less secure. This measure is distinct, yet in the spirit of a 'distance-to-majority' simulated measures which measure the average vote shock necessary to shift partisan control of a legislative assembly (Fiva, et al. 2018; Feigenbaum, Fouirnaies, and Hall 2017: Note 22).

Euclidean partisan seat distance captures the minimum Euclidean seat distance between the spatial coordinates of the partisan seat distance and an evenly split Senate partisan balance of power (defined at 0 in **Figures 2A–2C**). Specifically, Euclidean partisan seat distance captures the "straight-line" distance between the current seat margins and an evenly split Senate. It summarizes electoral vulnerability across multiple seats using squared differences, treating the closeness of each race as a spatial coordinate. The Euclidean partisan seat distance is computed as $x_j^E = \sum x_{ji}^2$ — which is simply the square root of the partisan seat electoral loss (win) margin raised to the mt^h power, where m is the partisan seat deficit (advantage) of the president's party when holding minority (majority) party status in the Senate. As with the previous partisan seat balance and uniform swing distance measures, smaller negative or positive values indicate more insecure partisan majorities since it takes less for partisan control of the Senate to take place.

The Manhattan (i.e., minimum rectilinear) distance measure of partisan seat insecurity in the Senate represents a more sensitive cumulative-based measure of partisan control vulnerability compared to the Euclidean partisan seat distance measure. This is because the Manhattan distance measure involves summing the absolute value of each partisan seat's vote margin in the Senate, while the Euclidean distance measure squares such margins. The Manhattan partisan seat distance measure is given by $x_j^R = \sum |x_{ji}|$, and hence, is computed similarly to Euclidean partisan seat distance, except that it computes the sum of the absolute difference in the spatial coordinates between the Senate partisan seat distance and an evenly split Senate partisan balance of power.

Although each of the three partisan seat distance measures are based on a minimum distance principle in terms of the partisan control of executive appointment processes space (i.e., running variable) in relation to evenly split Senate partisan balance of power (i.e., treatment boundary), they might differ somewhat based on specific applications (Feigenbaum, Fouirnaies, and Hall 2017: 280, e.g., see also, Wong et al. 2013). Although these measures are highly correlated for the entire series, they differ somewhat when one considers analyzing the non-boundary values of these measures as separate piecewise linear segments for divided and unified partisan control over the executive appointment process. Specifically, the bivariate piecewise linear correlations between the uniform partisan swing and Euclidean partisan seat distance measures (divided partisan control regime: 0.938, unified partisan control regime: 0.942) are relatively stronger than those between uniform swing and Manhattan partisan seat distance measures (divided partisan control regime: 0.862, unified partisan control regime: 0.886). Further, the Manhattan partisan seat distance measure has considerable more variability compared to the other seat distance measures, especially the uniform partisan swing distance measure.

This issue is graphically depicted using kernel density plots in **Figure 3.** These plots that the Manhattan partisan seat distance measure (denoted by the green shaded plots) contains the most variability based on the coefficient of variation (CoV $_{MSD < 0} = -0.641$; CoV $_{MSD > 0} = 0.763$), followed by the Euclidean partisan seat distance measure – denoted by the blue shaded plots (CoV $_{ESD < 0} = -0.546$; CoV $_{ESD > 0} = 0.611$), while the uniform partisan swing seat distance measure – denoted by the red shaded plots – contains the least variability (CoV $_{USSD < 0} = -0.483$; CoV $_{USSD > 0} = 0.489$). In

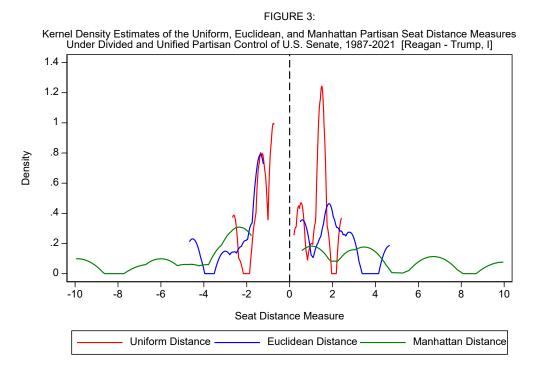
⁸ These correlations range between 0.955 (uniform partisan swing and Manhattan partisan seat distance measures) and 0.984 (uniform partisan swing and Euclidean partisan seat distance measures).

⁹ The correlations between the Euclidean and Manhattan measures are 0.981 and 0.982, respectively.

¹⁰ Coefficient of variation is computed as: CoV = [standard deviation / mean]*100.

FIGURE 3

Kernel Density Plots of Alternative Seat Distance Measures Under Divided Versus Unified Partisan Control of the Executive Appointment Process, 1987-2021 [Reagan – Trump, 1]



comparative terms, the percentage difference in these coefficient of variation statistics is nontrivial, as the Manhattan partisan seat distance measures are relatively larger by 32.71% and 56.03% compared to the uniform partisan swing seat distance measure, and also by 17.40% and 24.88% compared to the Euclidean partisan seat distance measure. This empirical pattern is hardly surprising that the Manhattan distance measures yield 'noisier' measures since it calculates distance using a grid approach; whereas, Euclidean distance is computed simply as a straight-line distance between two points. Therefore, it is not safe to presume that these three seat distance measures will provide substantively identical results.

Several control variables are also accounted for in predicting variations involving executive appointee ideological divergence to the president. Executive appointees to ideological ally and

¹¹ These comparative percentage differences are given by $[(CoV_{MSD} - CoV_{MESD/USSD})] * (CoV_{MESD/USSD})] * 100$.

opposition agencies should exhibit lower levels of ideological divergence from the president than compared to moderate agencies in the baseline group (signified by negative coefficients) based on a 95% Bayesian credibility binary classification of the ideological scores proposed by Clinton and Lewis (2008). In the former case, it is easier to obtain more ideologically congruent executive appointees for those public agencies whose policy missions serve key partisan constituent groups since a deeper talent pool exists for political executives in these settings (e.g., Education Department for Democratic Presidents, Commerce Department for Republican presidents). At the same time, however, presidents also have strong strategic incentives to appoint individuals who are more in sync with their administration's goals as a means of wrestling greater control away from federal agencies whose policy missions run counter to their ideological-based policy interests (e.g., Hollibaugh, Horton, and Lewis 2014; Krause and O'Connell 2019). Because political appointees chosen to serve in upper-echelon agency positions (i.e, cabinet level, deputy cabinet secretary, director/administrator, assistant secretary, undersecretary, and appointment to major boards/commission) should exhibit less ideological divergence from the president than those in lower-echelon political executives (i.e., all other remaining agency positions) since the former are not only more organizationally powerful within agencies, but also more proximate to presidents (Krause and O'Connell 2016: 916-917; see also, Krause, Lewis, and Douglas 2006: 772-773).

Executive appointees chosen to serve in executive agencies should exhibit less ideological divergence to presidents than counterparts selected to serve in independent agencies since the latter types of agencies have institutional features which limit the influence of appointments in several ways, such as staggered terms, partisan balancing requirements, constraints on removal authority, and budgetary and policy clearance authority (Selin 2015; Selin and Lewis 2015). Finally, major policy agencies are politically contentious along ideological and partisan lines; whereas, this is not the case for other agencies (Richardson 2024). As a result, executive appointees' ideological

divergence from a president should be lower for individuals chosen to serve in major policy agencies compared to counterparts serving in non-major policy agencies.

Identification Strategy

Modeling the statistical relationships of interest to evaluate our theory is challenging since one cannot assume that the institutional conditions associated with the executive appointment process are exogenous to presidential appointment decisions. If a presidents' appointment calculus for obtaining loyal executive officials is strategic, then it is apt to be endogenously determined by the political conditions posed by the Senate confirmation process. For example, one would expect that those executive nominees chosen and confirmed by presidents would be non-randomly assigned when partisan control of the Senate is tenuous. This statistical problem of endogenous manipulation of presidential choices under insecure partisan majorities for both divided and unified executive appointment processes is supported by regression discontinuity design (RDD) density manipulation tests (see **Appendix A**, **Table A2**). RDD designs assume exogeneity of the running variable that can be evaluated using such tests (e.g., Cattaneo, et al. 2018; Eggers, et al. 2018). The consequence of this statistical bias is straightforward. Any slope or intercept parameter estimates corresponding to the piecewise regressions and threshold discontinuity intercept involving the partisan seat balance or seat distance covariates will be plagued with endogeneity bias if handled with standard regression (e.g., OLS, Tobit) or RDD methods.

A structural econometric modeling strategy is proposed to address these problems. This approach incorporates endogeneity bias from these partisan seat balance and distance running variables in two distinct forms represented by our theory – the pair of linear piecewise segments predicting the relationship between insecure partisan majorities and president-appointee

¹² Further complicating matters is that RDD density-based manipulation tests may be biased towards showing support in favor of satisfying this exogeneity assumption (Fitzgerald 2025).

ideological divergence in both times of divided and unified executive appointment processes, respectively. This is reflected by the three-equation structural econometric model below:

$$Y_{i} = \boldsymbol{\alpha}_{0} + \overbrace{\boldsymbol{\alpha}^{*} + \boldsymbol{\beta}_{DPC} X_{i}^{DPC} + \boldsymbol{\beta}_{UPC} X_{i}^{UPC}}^{Partisan Majorities} + \sum_{k=1}^{Controls} \boldsymbol{\gamma} Z_{ki} + \boldsymbol{\varepsilon}_{i}$$

$$\tag{1}$$

$$X_{i}^{DPC} = \boldsymbol{\theta}_{0} + \sum_{m=1}^{m} \boldsymbol{\theta}_{m} W_{mi}^{DPC} + \boldsymbol{\mu}_{i}^{DPC}$$

$$(2)$$

$$X_{i}^{UPC} = \phi_{0} + \sum_{m=1}^{m} \theta_{m} W_{mi}^{UPC} + \mu_{i}^{UPC}$$
(3)

The covariates of interest in the outcome equation (Y_i) are the Senate partisan seat margin/distance 'running' measures associated with each piecewise linear segment noted above (X_i^{DPC} , X_i^{UPC}) and the corresponding discontinuity intercept between divided and unified executive appointment processes (α^{\prime}), plus a vector of control variables defined above focusing on agency and position type considerations which might impact the degree of shared ideological policy preferences with the appointing president (Z_{k1}), and a residual term (ε_I). The respective running covariates each have their own regression function, which are predicted by a vector of covariates posited to impact presidential appointments indirectly through the extent that Senate partisan majorities are unfavorable/favorable to the president during the Senate appointment process (W_{mI}), plus respective disturbance terms for each endogenous regressor equation (μ_i^{DPC} , μ_i^{UPC}).

The vector of covariates in this pair of endogenous covariate regression equations are posited to indirectly influence a president's ability to obtain policy congruence from executive appointees confirmed by the Senate. However, this effect is manifested through the Senate partisan seat margin and distance measures representing the degree of insecurity for Senate partisan majorities under a divided and unified partisan control of the executive appointment process.

Senate Party Polarization is the absolute difference in party mean 1st dimension DW-NOMINATE

scores (Lewis, et al. 2025). Senate party polarization will be positively associated [+] with more insecure Senate partisan majorities opposing the president, as well as more secure partisan majorities favoring the president's party [+]. Simply, presidents benefit from polarization that can undermine partisan opposition majorities when the executive appointment process is divided, while it imposes costs on presidents when their party enjoys majority status (unified executive appointment process). Seasoned committee chairs should be both more attractive and impactful as partisan majorities become more insecure due to the nature of interparty chamber conflict (Ba, Schneider, and Sullivan 2022; Berry and Fowler 2016, 2018; Bonica, Chen, and Johnson 2015; Krause and Byers 2025). Committee chair experience should thus be positively correlated with insecure Senate partisan majorities under intense inter-party competition, and hence, exhibit positive [+] and negative [-] coefficients for the divided and unified executive appointment processes, respectively. Finally, the civilian executive nominations workload will be more robust Senate IPMs become less secure. This is because presidents can leverage both the threat and use of alternative appointment strategies, including the use of temporary/acting officials (Kinane 2021; O'Connell 2020), to get their executive nominees confirmed in politically uncertain times. The hypothesized coefficients should be positive [+] and negative [-] for predicting the Senate partisan seat margins/distances under each respective type of executive appointment process.

Prior confirmation can redound to the benefit of presidents when partisan control of the executive appointment process is weaker under both divided and unified partisan control regimes. Executive nominees who were previously confirmed by the Senate for an executive branch position are more likely to be confirmed for their current position when partisan seat balances/distances are relatively more unfavorable to presidents under each partisan appointment regime (that is, a negatively-signed coefficient in each endogenous regressor equation: [—], [—]). Institutional changes involving the executive branch positions covered by the Federal Reform Vacancies Act (FVRA) of 1998 used to expedite the confirmation of select agency positions is posited to be

positively associated with partisan seat balances/distances that are relatively more favorable to presidents under each partisan appointment regime (that is, a positively-signed coefficient in each endogenous regressor equation: [+], [+]). Although the FVRA provides guidelines for succession in the event of vacancies, presidents may unilaterally fill these positions with any previously confirmed PAS official (Miller and Piper 2024; O'Connell 2020). Presidents can, therefore, can install appointees who are more closely aligned with their ideological and policy preferences (Kinane 2021; Lowande and Rogowski 2021; Piper 2022) Finally, the Senate decision to lower the cloture threshold on executive nominees to a simple majority as of November 21, 2013 (termed the 'nuclear option') should benefit presidents when Senate partisan majorities become more insecure (that is, a negatively-signed coefficient in each endogenous regressor equation: [+], [-]).

The modeling of endogeneity bias in the structural econometric model denoted by equations (1)—(3) is rooted in control function methods (see Wooldridge 2015 for an excellent overview) that explicitly estimate the correlations between the outcome equation residuals and the residuals from each respective endogenous regressor equation – i.e., $\rho_{\rm l}\left(\boldsymbol{\varepsilon}_i,\boldsymbol{\mu}_i^{DPC}\right)$ and $\rho_2\left(\boldsymbol{\varepsilon}_i,\boldsymbol{\mu}_i^{UPC}\right)$, and also accounts for cross—correlation between the pair of endogenous regressor equations – i.e., $\rho_3\left(\boldsymbol{\mu}_i^{DPC},\boldsymbol{\mu}_i^{UPC}\right)$. Because the outcome variable of interest (absolute difference between presidents and executive appointee's CF scores) is bounded at zero by definition, we employ a left-censored Tobit type model specification. The full log-likelihood function that is maximized to estimate equations (1)—(3) as a structural econometric model is given as:

$$\ln L = \sum_{i \in L} w_i \ln \phi_1^* \left(-\infty, r_{ui}, \sigma_{1|c}^2 \right)
+ \sum_{i=1}^N X_i^{DPC} - \ln \phi_m \left(X_{mi}^{DPC} - \sum_{m=1}^m \theta_m W_{mi}^{DPC}; \Sigma_m \right)
+ \sum_{i=1}^N X_i^{UPC} - \ln \phi_m \left(X_{mi}^{UPC} - \sum_{m=1}^m \theta_m W_{mi}^{UPC}; \Sigma_m \right)$$
(4)

Equation (4) is jointly estimated using full information maximum likelihood (FIML) methods with robust standard errors cluster-adjusted by agency. With a fully identified structural model, the statistical estimates of interest capable of estimating the severity of endogeneity bias to ensure that the model estimates are valid for statistical inference. Next, we present the empirical findings from these models estimated using different types of measures to analyze the impact of insecure partisan majorities on the extent that confirmed executive appointees' policy preferences diverge from presidents.

EMPIRICAL FINDINGS

The complete set of regression estimates generated from the structural econometric models with different partisan seat balance and seat distance measures appears in **Table 1**. The boundary intercept shift coefficient estimates indicate that presidents do not benefit from greater executive appointee loyalty when their party transitions from being a strong Senate minority party to a weak Senate majority party. In fact, these point estimates are not only the incorrect sign, but also estimated with considerable imprecision ($p \ge 0.341$). More insecure Senate partisan majorities

¹³ These FIML models are estimated using the *eintreg* command within the ERMs suite in **Stata 18**.

¹⁴ This null finding for the boundary intercept coefficient estimates is generally supported in the alternative model specifications analyzed in the **Appendix**. In some exceptional instances, the coefficient sign is opposite of expectations (**Appendix B**: *Table B1*; **Appendix C**: *Table C1*). When considering an alternative quadratic

are positively associated with lower levels of executive appointee loyalty to the president. As expected, the Manhattan distance estimates exhibit much larger standard errors than compared to the partisan seat balance, uniform swing and Euclidean partisan distance measures. This finding is likely attributable to the nature of the Manhattan distance measure exhibiting both more variability and noise compared to the other measures (see earlier discussion revolving around **Figure 3**).

The control covariates in the outcome equation capturing agency and position-specific differences in executive appointee loyalty to the president largely conform to expectations. Executive agencies and upper-echelon political executives tend to be associated with higher levels of appointee loyalty to presidents compared to independent agencies and lower-echelon political executives, respectively. Presidential-aligned agencies to presidents also tend to be associated with higher levels of appointee loyalty to presidents compared to moderate agencies. Executive appointees in both presidential-opposed and major policy agencies fail to exhibit higher levels of presidential loyalty compared to moderate agencies and non-major policy agencies, respectively.

Several of the exogenous covariates in the endogenous regressor equations have the correct hypothesized sign while also estimated with statistical precision. Most notably, executive appointees who have been previously confirmed by the Senate tend to be more common when the Senate partisan opposition is strong (divided partisan control regime), and when the president's party has a weak majority (unified partisan control regime). Conversely, Senate party polarization benefits the president's party in terms of favorable partisan seat balances and distances within both divided and unified executive appointment processes. The Senate's executive civilian nomination workload is more robust as Senate partisan majorities become less secure, but this pattern is more consistent and compelling during unified partisan control of the executive appointment process.

polynomial functional form for the partisan seat balance/distance measures, a rise in ideological affinity to the president is observed at this boundary consistent with expectations (**Appendix D:** *Table B1*).

TABLE 1

Full Information Maximum Likelihood (FIML) Model Estimates of Confirmed Presidential Appointments to Executive Branch Positions, 1987–2021 Reagan — Trump, I]

Appointments to Executive Branch Positions, 1987—2021 Reagan — Trump, IJ Model 1 Model 2 Model 3 Model 3 Model 3 Model 3 Model 3 Model 3 Model 4 Model 4 Model 4 Model 4 Model 5 Model 4 Model 5 Model 6 Model 6 Model 6 Model 6 Model 7 Model 8 Mode							
Variable	[Seat Margin]	[Uniform]	[Euclidian]	Model 4 [Manhattan]			
	[Scat Margin]	[Olimorin]	[Euchdian]	[Maimattan]			
President CF Score - Executive Nominee CF Score							
Boundary Intercept Shift	0.048	0.030	0.040	0.009			
Divided versus Unified Partisan Control [-]	(0.051)	(0.065)	(0.059)	(0.053)			
Senate Partisan Seat Margin/Distance:	0.054***	0.454***	0.455^{*}	0.226			
Divided Partisan Control [+]	(800.0)	(0.119)	(0.198)	(0.750)			
Senate Partisan Seat Margin/Distance:	-0.053^{***}	-0.123^*	-0.148 ⁺	-0.053			
Unified Partisan Control [–]	(0.009)	(0.060)	(0.088)	(0.320)			
President-Agency Ideological Alignment [–]	-0.078^{*}	-0.068^*	-0.070^{*}	-0.069^*			
	(0.032)	(0.031)	(0.032)	(0.032)			
President-Agency Ideological Opposed [–]	0.036	0.013	0.013	0.012			
	(0.033)	(0.039)	(0.039)	(0.041)			
Executive Agency [–]	-0.204^{***}	-0.214^{***}	-0.212^{***}	-0.211^{***}			
	(0.030)	(0.033)	(0.033)	(0.040)			
Upper-Echelon Position [–]	-0.058*	-0.047+	-0.043+	-0.039			
	(0.024)	(0.025)	(0.025)	(0.027)			
Major Policy Agency [–]	0.023	0.026	0.024	0.023			
	(0.028)	(0.030)	(0.030)	(0.030)			
Intercept	1.254***	1.176***	1.412***	1.381			
	(0.084)	(0.116)	(0.293)	(2.119)			
Senate Partisan Seat Margin/Distance:							
<u>Divided Partisan Control</u>							
Nuclear Option [+]	-0.263	0.130**	0.087	0.064			
rucical option[1]	(0.240)	(0.045)	(0.069)	(0.826)			
Federal Vacancies Reform Act [+]	0.218	0.062	0.085	0.087			
reactar vacanetes retermined [1]	(0.170)	(0.040)	(0.057)	(0.218)			
Civilian Nominations Workload [+]	-0.000004	0.00008*	-0.000005	-0.0001			
0.,a	(0.00009)	(0.00003)	(0.00005)	(0.0001)			
Chair Experience [+]	0.036**	0.005	0.006	0.014			
	(0.012)	(0.003)	(0.004)	(0.035)			
Prior Confirmation [—]	-0.803^{***}	-0.214^{***}	-0.292^{***}	-0.531			
	(0.181)	(0.041)	(0.075)	(0.802)			
Senate Party Polarization [+]	37.906***	2.642***	4.124***	7.914***			
	(0.848)	(0.168)	(0.266)	(1.599)			
Intercept	-32.570***	-2.895***	-4.128***	-7.709 ***			
	(0.723)	(0.156)	(0.281)	(2.085)			

Senate Partisan Seat Margin/Distance:				
<u>Unified Partisan Control</u>				
Nuclear Option [—]	-3.739***	-0.246***	-0.343**	-0.233
Nuclear Option []	(0.740)	(0.065)	(0.104)	(0.284)
Federal Vacancies Reform Act [+]	0.004	0.316***	0.405***	0.782***
rederar vacancies herorin rice [1]	(0.383)	(0.043)	(0.078)	(0.184)
Civilian Nominations Workload [-]	-0.001^{***}	-0.0001^{***}	-0.0002^{***}	-0.001^{***}
	(0.0001)	(0.00002)	(0.00003)	(0.00008)
Chair Experience [—]	0.023	-0.001	-0.002	-0.012
[]	(0.017)	(0.003)	(0.003)	(0.010)
Prior Confirmation [-]	-1.234***	-0.187***	-0.308^{***}	-0.534***
	(0.310)	(0.033)	(0.051)	(0.125)
Senate Party Polarization [+]	27.676***	4.462***	8.240***	17.140***
,	(2.281)	(0.267)	(0.461)	(1.041)
Intercept	-13.294^{***}	-2.122^{***}	-4.059^{***}	_8.588 ^{***}
•	(1.570)	(0.189)	(0.302)	(0.696)
	•		•	•
Equation Residual Variances and Correlations:				
$oldsymbol{\sigma}_{oldsymbol{arepsilon}_i}$	0.516***	0.554***	0.715***	0.789
$oldsymbol{c}_i$	(0.024)	(0.031)	(0.187)	(1.976)
	12.869***	0.531***	1.583***	
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{DPC}}$	(0.309)	(0.022)	(0.074)	7.621*** (0.398)
_	36.103***	0.491***	1.475***	7.289***
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{UPC}}$	(0.814)	(0.009)	(0.031)	(0.177)
(DDC)	-0.067*	-0.343***	-0.544***	-0.604
$oldsymbol{ ho}_{\!1}ig(oldsymbol{arepsilon}_{\!i},oldsymbol{\mu}_{\!i}^{\!D\!F\!C}ig)$	(0.034)	(0.083)	(0.154)	(1.138)
$oldsymbol{ ho}_1 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{DPC} \Big) \ oldsymbol{ ho}_2 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC} \Big)$	0.184***	-0.173***	-0.173***	-0.154
$oldsymbol{ ho}_2(oldsymbol{arepsilon}_i,oldsymbol{\mu}_i^{OPC})$				
((0.059)	(0.050)	(0.040)	(0.113)
$ ho_3(\mu_i^{DPC},\mu_i^{UPC})$	0.537***	0.662***	0.559***	0.457***
	(0.012)	(0.009)	(0.009)	(0.011)
Observations	4,835	4,835	4,835	4,835
AIC	(F 70(40	20 422 00	40.000.06	FC 022 01
AIC	65,706.48	28,433.88	40,008.86	56,022.91
BIC	65,894.51	28,621.91	40,196.88	56,210.93
Bid	03,074.31	20,021.71	40,170.00	30,210.73
Wald Outcome Model Test Statistic	126.28***	92.82***	67.83***	37.09***
77 474 0 4000 170 401 7 000 0 44400 1	[0.000]	[0.000]	[0.000]	[0.000]
	[0.000]	[3.000]	[0.000]	[3.000]
Joint F Test for Instrument Validity (DPC)	2713.97***	1402.63***	1179.51***	1053.23***
,	[0.000]	[0.000]	[0.000]	[0.000]
	[5.000]	[0]	[0]	[2.300]
Joint F Test for Instrument Validity (UPC)	361.14***	1608.17***	1766.27***	1568.52***
	[0.000]	[0.000]	[0.000]	[0.000]
	[]	[]	[]	[]

Notes: Entries are extended regression estimates. Agency-clustered robust standard errors appear inside parentheses. $p \le 0.10$ $p \le 0.05$ $p \ge 0.01$ $p \ge 0.001$.

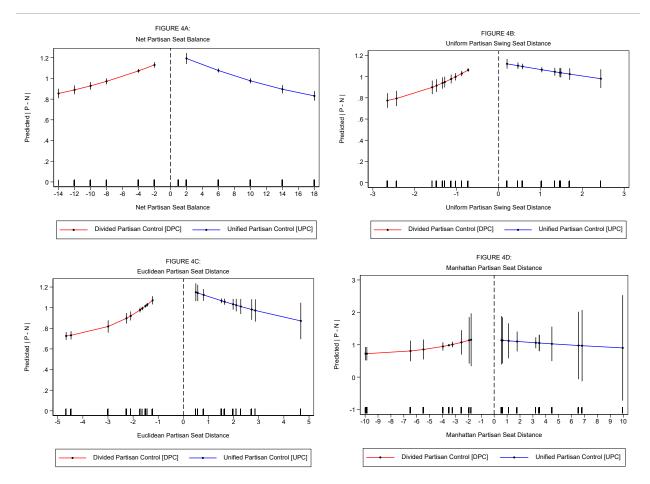
More FVRA exempt positions are filled when the president's partisan seat balances and distances improve within the Senate only when the president experiences unified partisan control of the executive appointment process. Similarly, the nuclear option to lower Senate cloture thresholds in the executive appointment process has been utilized more (less) when a president enjoys weak (strong) unified partisan control of this process. The residual correlation estimates listed at the bottom of **Table 1** uncover substantial amounts of endogeneity bias that are properly controlled for in these structural models when evaluating the statistical relationship between Senate partisan seat balances/distances and the ideological affinity between presidents and their executive appointees.

Figure 4 displays the impact of the marginal slope effects, based on the observed range of non-zero values for each partisan control regime, on predicted values of absolute ideological distance between president and executive appointee's CF scores. These estimates indicate that more insecure Senate partisan majorities are generally associated with lower appointee loyalty to presidents. Based on visual inspection, not only are the slopes different from one another (i.e., not parallel to one another), but they also indicate that the robust Senate opposition partisan minorities are more effective at constraining presidents from appointing more loyal political executives than compared to weak Senate majorities favoring the president's party.

Figure 5 offers a precise numerical assessment regarding how insecure Senate partisan majorities reduce presidential loyalty associated with executive appointees based on distinctions between divided and unified partisan control regimes. The first set of tests evaluate whether the estimated partisan majority slope effects are equal across partisan control regimes (denoted by purple solid circles). These tests estimate the appointee loyalty difference when the opposition party in the Senate attains majority status and the president's party has majoritarian control over

FIGURE 4

Substantive Marginal Slope Effects of Insecure Senate Partisan Majorities on Executive Appointee Loyalty to the President: Divided and Unified Executive Appointment Processes, 1987—2021 [Reagan — Trump, I]



this institution. ¹⁵ The marginal slope differential effects are statistically significant between these partisan appointment regimes and statistically significant from zero at $p \le 0.01$ for the partisan seat balance (**Model 1**), uniform partisan swing (**Model 2**), and Euclidean seat distance measures (**Model 3**), while failing to attain statistical significance for the Manhattan seat distance measure (p = 0.201). The imprecision of the latter estimate is likely the result of the noisy empirical distribution

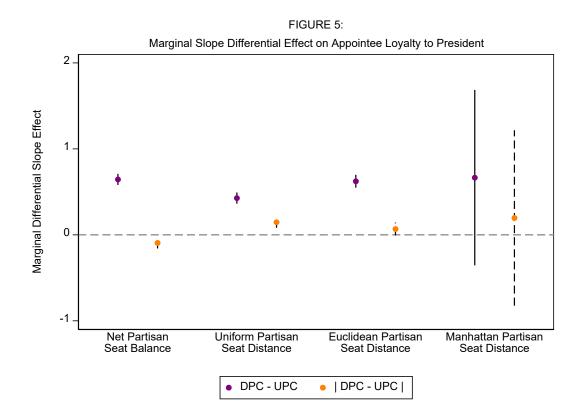
¹⁵ These marginal slope differential effects are calculated as respective observed minimum to maximum increase in the respective seat balance/distance measures for a given partisan appointment regime.

between 0.428 (Model 2) and 0.665 (Model 4). In relative terms, these substantial effect sizes range from 15% (Model 3) to 23.39% (Model 4) of the observed range of the absolute ideological distance between presidents and executive appointees based on their respective CF scores. Taken together with the Figure 4 estimates, one can infer that robust Senate partisan opposition majorities are more effective at reducing executive appointee loyalty to presidents than weak Senate presidential party majorities are at enhancing presidential loyalty from the executive appointment process. This finding challenges the presumptive view denoted in Figure 2A that presidents receive only an intercept-level shift of greater appointee loyalty based on the distinction between unified and divided partisan control of the executive appointment process. This evidence is incompatible with the view that presidents obtain appointee loyalty benefits that are monotonically increasing in their own party's favorable partisan seat balance or distance within the Senate chamber (see Figure 2B).

Although the theory proposed here is agnostic regarding partisan majority slope symmetry (cf. **Figure 2C** for a stylized case), the empirical evidence is decidedly mixed regarding this issue. The right-hand side point estimate (denoted by orange solid circles) focuses on the estimated absolute appointee loyalty difference between divided and unified when the opposition party enjoys a Senate majority and the president's party has majoritarian control over this institution. Interestingly, the absolute marginal slope differential effect for the partisan seat balance measure (**Model 1**) is statistically discernible from zero (0.089, p = 0.007). The partisan seat distance measures, which account for the closeness of general elections when calculating the insecurity of partisan majorities, reveal asymmetric slopes for the uniform partisan swing (**Model 2**) and Euclidean partisan seat distance measures (**Model 3**) at conventional significance levels. These respective substantive effect sizes are 0.147 and 0.069 – which is 5.163% and 2.388% of the observed range of the absolute ideological distance between presidents and their executive exist between divided and unified executive appointees. Although these might appear as small effects, the

FIGURE 5

Substantive Marginal Slope Differential Effect of Insecure Senate Partisan Majorities on Executive Appointee Policy Divergence to the President: Divided and Unified Executive Appointment Processes, 1987–2021 [Reagan – Trump, I]



asymmetry involving executive appointment processes should be attenuated since the theory proposed here posits that insecure partisan majorities will result in less appointee loyalty as president's party becomes a stronger minority party, while obtaining greater appointee loyalty as this party becomes a stronger majority party. Once again, the Manhattan partisan seat distance measures uncover sizable effect sizes (0.196, 6.884%) yet are highly imprecise (p=0.706). Although these latter estimates hint at the Senate's greater facility for parlaying insecure partisan opposition majorities to reduce executive appointee loyalty to presidents compared to tenuous majorities favoring the president's party to enhance loyalty to the president, the lack of statistical precision renders these findings inconclusive.

Summary of Sensitivity Analyses

A series of sensitivity checks are performed to evaluate the FIML model estimates reported that reveal provide considerable support for **H1** and **H2**. Single-equation Tobit models that ignore endogeneity bias are analyzed in Appendix B (Single-Equation Tobit Model Estimates of Outcome *Equation*). Although the results of primary interest exhibit similar patterns to the FIML model estimates, the models subject to endogeneity bias exhibit a downward bias towards zero, thus being more susceptible to Type II inferential errors. Analysis is also conducted combining both confirmed and unconfirmed executive nominees to assess whether the primary conclusions vary when one considers the entire pool of PAS executive nominees (see Appendix C: FIML Model Estimates — Both Confirmed and Unconfirmed PAS Executive Nominees). This evidence generally shows that insecure Senate partisan majorities have similar substantive impacts and inferences on executive branch cohesion predicted by our theory irrespective whether all PAS executive appointees or only those confirmed to these positions. In Appendix D (Quadratic Polynomial Senate Partisan Seat *Margin/Distance Model Specifications*), the reported model specifications based on a linear piecewise functional form for the partisan seat balance/distance covariates are re-assessed using a quadratic polynomial functional form (p = 2). Except for the estimated relationship of insecure Senate partisan majorities on constraining presidential appointments based on ideological affinity, these core results are robust to these alternative piecewise functional form choices.

It is possible that insecure Senate partisan majority slope effects within partisan control regimes systematically differ based on the type of agency and positions served by executive appointees. These heterogenous treatment effects are analyzed by adding a fourth equation to the structural model system that separately analyzes each of the control covariates in the outcome equation by allowing for endogenous treatment effects (see **Appendix E**: *Heterogenous Slope Treatment Effects by Agency Type and Position*). In 43 out of a possible 48 instances, the null of slope equality between various treatment groups cannot be rejected at conventional significance

levels (see **Table E1**). In four exceptional instances, the slope effect is greater for PAS executive appointees serving in executive agencies than compared to independent agencies (*Uniform & Euclidean Partisan Swing Distance Models*), while this slope effect is greater for individuals serving in major policy agencies relative to those in non-major policy agencies for each of the three partisan seat distance measures. Since heterogeneous slope effects arise only in the presence of a Senate partisan opposition majority, robust Senate minority party's ability to obtain greater ideological concessions on confirmed executive appointees is limited to those agencies that the president has the most leverage in terms of both institutional and policy control.

DISCUSSION

Insecure partisan majorities arise when strong prospects exist for political parties to flip majoritarian control of legislative chambers (Curry and Lee 2020; Lee 2016). As a result, intense partisan-based political competition for institutional control alters incentives by placing a premium on the "...the quest for partisan political advantage......by investing more effort to promote their own party's image and undercut that of the opposition." (Lee 2016: 2). This study has attempted to extend this line of inquiry by considering the implications of insecure legislative partisan majorities for separation of powers politics involving the executive branch. Specifically, a theory and corroborative empirical evidence helps us understand how insecure Senate partisan majorities shape the character of executive branch governance through appointment powers.

Insecure Senate partisan majorities generate intense competition over executive appointees, while also creating greater uncertainty for presidents seeking to obtain confirmation for their nominees in an era where a sizable proportion are effectively rejected by the Senate.

Conversely, as Senate partisan majorities become more secure, presidents are more successful at obtaining ideological congruence from executive appointees since Senate inter-party competition is weakened. This perspective offers a novel perspective regarding how the separation of powers conditions shape presidential appointments, and by extension, executive branch governance. Both

our logic and evidence indicate that presidents do not unequivocally benefit from having their party enjoy majority status in the Senate. In fact, presidents are in the most advantageous position to obtain more loyal executive appointees when presidents face robust opposition or strong support from Senate partisan majorities. The evidence also uncovers that this impact is asymmetric due to more robust Senate partisan opposition offering a stronger constraint on presidential appointment powers than the benefits obtained from narrow Senate majorities in favor of the president's party. One possible explanation for this finding is that out-partisans legislators' policy disagreement with presidents is increasing in the electoral vulnerability of legislators (Alexander and Jacobs 2024).

Two additional potential explanations might also explain these asymmetric findings given the unique nature of the Senate confirmation process. First, because sole institutional powers to advise and consent presidential appointments rests with the Senate, this institution may have a greater incentive to act as a rampart to executive branch authority compared to when both the House and Senate offer distinct veto points for presidential action. This is due to Senators being more politically insulated from conflict with presidents, and its electoral repercussions, relative to House members due to a long electoral time horizon, coupled with representing more diverse constituencies. In addition, much less is at stake in electoral terms in the realm of top-level presidential appointed positions within the executive branch compared to legislative policymaking delivering policy and programmatic benefits to constituents. Lee's (2016: 165) analysis of debt-ceiling votes, which involve the risk shutting down the U.S. federal government, seemingly shifts electoral risk more heavily towards the majority party under unified party government since citizen accountability attributions will be much clearer than compared to divided party government. The consequences of this asymmetry of insecure Senate partisan majorities might compel presidents to make ideological compromises on their preferred executive nominees.

¹⁶ Lee (2016: 172) finds that majority party size predicts House debt ceiling votes, but not in the Senate.

The broader implications of this study offer important novel insights for understanding modern American political institutions. First, insecure partisan majorities in legislatures exert negative institutional spillover consequences that constrain presidents' ability to secure Senate confirmation of more ideologically congruent executive branch officials. This extends existing research that confines its focus to analyzing the impact of insecure partisan majorities on legislative organization and policymaking (Curry and Lee 2020; Lee 2016; Gelman 2019; but see Alexander and Jacobs 2024), Second, this study counters the broadly accepted wisdom of the inherent institutional advantages that presidents enjoy at the expense of Congress (e.g., Howell and Moe 2016; Moe 1985) by demonstrating that presidents are unable to take advantage of the severe collective actions problems posed by insecure Senate partisan majorities to obtain greater executive branch policy cohesion and bureaucratic accountability. Instead, presidents are institutionally weakened since they obtain PAS senior level executive appointees who, on average, are ideologically more distant from them. Finally, presidential efforts at centralization and politicization coincide with the emergence of insecure legislative partisan majorities in an era of insecure partisan majorities in Congress. Therefore, it is hardly coincidental that presidential staffing of executive branch positions has focused on both the prevalence and significance of temporary and vacant executive branch positions (e.g., Kinane 2021; O'Connell 2020; Piper 2022), expanding Schedule C and Non-Career SES executive branch positions exempt from Senate confirmation (Lewis 2008, 2011), and allocating greater executive authority to non-PAS executive appointees holding lower level executive branch positions (Hollibaugh and Rothenberg 2024).

Although the scope conditions of this study are necessarily restricted to the U.S. federal executive appointment process, future research on American governmental institutions would greatly benefit from analyzing both the interbranch and intergovernmental level consequences of insecure legislative partisan majorities on democratic governance that extend beyond the halls of Congress.

REFERENCES

- Aberbach, Joel D., and Bert A. Rockman. 2000 *In the Web of Politics: Three Decades of the US Federal Executive*. Brookings Institution Press: Washington D.C.
- Alexander, Lukas K., and Nicholas F. Jacobs. 2023. "Presidential Participation and Legislative Cooperation in the U.S. Senate, 1993-2021." *Congress & The Presidency* 50(3): 291-316
- Ba, Heather-Leigh Kathryn, Brandon Schneider, Terry L. Sullivan. 2022. "The Longer You Wait, The Longer It Takes: Presidential Transition Planning and Appointment Politics." *Congress & The Presidency* 49(1): 84-115.
- Berry, Christopher R., and Anthony Fowler. 2016. "Cardinals or Clerics? Congressional Committees and the Distribution of Pork." *American Journal of Political Science* 60(July): 692-708.
- Berry, Christopher R., and Anthony Fowler. 2018. "Congressional Committees, Legislative Influence, and the Hegemony of Chairs." *Journal of Public Economics* 158(February): 1-11.
- Bertelli, Anthony M., and Christian R. Grose. 2011. "The Lengthened Shadow of Another Institution? Ideal Point Estimates for the Executive Branch and Congress." *American Journal of Political Science* 55(4): 766-780.
- Bonica, Adam. 2024. "Database on Ideology, Money in Politics, and Elections: Public version 4.0"

 [Computer file]. Stanford, CA: Stanford University Libraries.

 https://data.stanford.edu/dime.
- Bonica, Adam, Chen Jowei, and Tim Johnson. 2015. "Senate Gate-Keeping, Presidential Staffing of "Inferior Offices," and the Ideological Composition of Appointments to the Public Bureaucracy." *Quarterly Journal of Political Science* 10(1): 5-40.
- Brannon, Valerie C. 2025. "The Vacancies Act: A Legal Overview." *Congressional Research Service Report R 44997.* Washington, D.C.: Congressional Research Service.
- Cattaneo, Matias D., Michael Jansson, and Xinwei Ma. 2018. "Manipulation Testing Based on Density Discontinuity." *The Stata Journal* 18(1): 234-261.

- Clinton, Joshua D., and David E. Lewis. 2008. "Expert Opinion, Agency Characteristics, and Agency Preferences." *Political Analysis* 16(1):3-20.
- Coleman, John J. 1999. "Unified Government, Divided Government, and Party Responsiveness." *American Political Science Review* 93(4): 821-835.
- Crosson, Jesse, Alexander C. Furnas, Tim LaPira, and Casey Burgat. 2021. "Partisan Competition and the Decline in Legislative Capacity Among Congressional Offices." *Legislative Studies Quarterly* 46(3): 745-789.
- Curry, James M., and Frances E. Lee. 2020. *The Limits of Party: Congress and Lawmaking in a Polarized Era*. Chicago, IL: University of Chicago Press.
- Eggers, Andrew C., Ronny Freier, Veronica Grembi, and Tommaso Nannicini. 2018. "Regression Discontinuity Designs Based on Population Thresholds: Pitfalls and Solutions." *American Journal of Political Science* 62(1): 210-229.
- Feigenbaum, James, Alexander Fouirnaies, and Andrew B. Hall. 2017. "The Majority Party

 Disadvantage: Revising Theories of Legislative Organization." *Quarterly Journal of Political*Science 12(3): 269-300.
- Fitzgerald, Jack. 2025. "Manipulation Tests in Regression Discontinuity Design: The Need for Equivalence Testing." *MetaArXiv.* doi:10.31222/osf.io/2dgrp_v1. (*Accessed Date: May 30, 2025*)
- Fiva. Jon H, Ollie Folke, and Rune J. Sorensen. 2018. "The Power of Parties: Evidence from Close Municipal Elections in Norway." *Scandinavian Journal of Economics* 120(1): 3-20.
- Gelman, Jeremy. 2019. "In Pursuit of Power: Competition for Majority Status and Senate Partisanship." *Party Politics* 25(6): 782-793.
- Heclo, Hugh A. 1977. *A Government of Strangers: Executive Politics in* Washington. Washington, D.C.: Brookings Institution.

- Heitshusen, Valerie. 2013. "Majority Cloture for Nominations: Implications and the "Nuclear"

 Proceedings." *Congressional Research Service Report R 43331*. Washington, D.C.:

 Congressional Research Service.
- Hollibaugh Jr., Gary E., Gabriel Horton, and David E. Lewis. 2014. "Presidents and Patronage." *American Journal of Political Science* 58(4): 1024-1042.
- Hollibaugh Jr., Gary E. 2015. "Naïve Cronyism and Neutral Competence: Patronage, Performance, and Policy Agreement in Executive Appointments." *Journal of Public Administration**Research and Theory 25(2): 341-372.
- Hollibaugh Jr., Gary E., and Lawrence S. Rothenberg. 2017. "The When and Why of Nominations:

 Determinants of Presidential Appointments." *American Politics Research* 45(2): 280-303.
- Hollibaugh Jr., Gary E., and Lawrence S. Rothenberg. 2018. "The Who, When, and Where of Executive Nominations: Integrating Agency Independence and Appointee

 Ideology." *American Journal of Political Science* 62(2): 296-311.
- Hollibaugh Jr., Gary E., and George A. Krause. 2023. "Legislative Responses to Shared Executive Authority: How the Prospects for Executive Branch Coordination Affect Congressional Budgetary Authority Under Separated Powers." *Presidential Studies Quarterly* 53(3): 334-353.
- Hollibaugh Jr., Gary E., and George A. Krause. 2024 "Executive Appointee Reliability under Separated Powers: Presidential Loyalty Among Leaders of U.S. Federal Agencies." *Journal of Political Institutions and Political Economy* 5(3): 415-441.
- Howell, William G., and Terry M. Moe. 2016. *Relic: How Our Constitution Undermines Effective Government and Why We Need a More Powerful Presidency.* New York: Basic Books.
- Kinane, Christina, M. 2021. "Control without Confirmation: The Politics of Vacancies of Presidential Appointments." *American Political Science Review* 115(May): 599-614.

- Krause, George A. 2009. "Organizational Complexity and Coordination Dilemmas in US Executive Politics." *Presidential Studies Quarterly* 39(1): 74-88.
- Krause, George A. 2022. "Solving Collective Action Problems under Separated and Shared Powers:

 The Benefits of Consolidating Executive Budgetary Powers, 1895-1940." *Journal of Politics*84(May): 753-766.
- Krause, George A., David E. Lewis, and James W. Douglas. 2006. "Political Appointments, Civil Service Systems, and Bureaucratic Competence: Organizational Balancing and Executive Branch Revenue Forecasts in the American States." *American Journal of Political Science* 50(3): 770-787.
- Krause, George A., and Brent Dupay. 2009. "Coordinated Action and the Limits of Presidential Control Over the Bureaucracy: Lessons from the George W. Bush Presidency." An original essay in the edited book volume *President George W. Bush's Influence over Bureaucracy and Policy: Extraordinary Times, Extraordinary Powers.* Colin Provost and Paul Teske, eds. New York: Palgrave.
- Krause, George A., and Anne Joseph O'Connell. 2016. "Experiential Learning and Presidential Management of the US Federal Bureaucracy: Logic and Evidence from Agency Leadership Appointments." *American Journal of Political Science* 60(4): 914-931.
- Krause, George A., and Anne Joseph O'Connell. 2019. "Loyalty–Competence Trade-Offs for Top US Federal Bureaucratic Leaders in the Administrative Presidency Era." *Presidential Studies Quarterly* 49(3): 527-550.
- Krause, George A., and Jason S. Byers. 2022. "Confirmation Dynamics: Differential Vetting in the Appointment of US Federal Agency Leaders." *The Journal of Politics* 84(2): 1189-1201.
- Krause, George A., and Jason S. Byers. **nd**. "Executive Deference or Legislative Constraint? Senate Committees and the Exercise of Decentralized Authority over U.S. Executive Nominations."

 **Journal of Political Institutions and Political Economy (*Forthcoming*).

- Labiner, Judith M., and Paul C. Light. 2001. "Appointments Past and Future: How Presidential

 Appointees View the Call to Service." (Chapter 8: Pages 231-253) In *Innocent Until*Nominated: The Breakdown of the Presidential Appointment Process. G. Calvin Mackenzie,
 Editor. Washington, D.C.: Brookings Institution.
- Lee, Frances E. 2016. *Insecure Majorities: Congress and the Perpetual Campaign*. Chicago, IL: University of Chicago Press.
- Lewis, David E. 2007. "Testing Pendleton's Premise: Do Political Appointees Make Worse Bureaucrats?" *The Journal of Politics* 69(4): 1073-1088.
- Lewis, David E. 2008. "The Evolution of the Institutional Presidency: Presidential Choices,

 Institutional Change, and Staff Performance." *Presidential Leadership: The Vortex of Power.*Edited by Bert A. Rockman and Richard W. Waterman.
- Lewis, David E. 2009. "Revisiting the Administrative Presidency: Policy, Patronage, and Agency Competence." *Presidential Studies Quarterly* 39(1): 60-73.
- Lewis, David E. 2011. "Presidential Appointments and Personnel." *Annual Review of Political Science* 14(1):47-66.
- Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, and Luke Sonnet.

 2025. *Voteview: Congressional Roll-Call Votes Database*. https://voteview.com/
- Loomis, Burdett. 2001. "The Senate: An "Obstacle Course" for Executive Appointments?" (Chapter 5: Pages 160-172) In *Innocent Until Nominated: The Breakdown of the Presidential Appointment Process.* G. Calvin Mackenzie, Editor. Washington, D.C.: Brookings Institution.
- Lowande, Kenneth. 2018. "Delegation or Unilateral Action?" *The Journal of Law, Economics, and Organization* 34(1): 54-78.
- Lowande, Kenneth. 2024. *False Front: The Failed Promise of Presidential Power in a Polarized Age.*Chicago, Illinois: University of Chicago Press.

- Lowande, Kenneth, and Jon C. Rogowski. 2021. "Presidential Unilateral Power." *Annual Review of Political Science 2*4(1): 21-43.
- Mackenzie, G. Calvin. 2001. "The State of the Presidential Appointment Process." (Chapter 1: Pages 1-49) In *Innocent Until Nominated: The Breakdown of the Presidential Appointment Process.* G. Calvin Mackenzie, Editor. Washington, D.C.: Brookings Institution.
- McCarty, Nolan, and Rose Razaghian. 1999. "Advice and Consent: Senate Responses to Executive

 Branch Nominations 1885-1996." *American Journal of Political Science* 43(October): 11221143.
- Mendelsohn, Nina. 2015. "The Uncertain Effects of Senate Confirmation Delays in the Agencies." *Duke Law Journal* 64(8): 1571-1606.
- Miller, David R., and Chris Piper. 2024. "Acting(s) Without Consequence: The (Lack of) Public Costs for Vacancies and Acting Officials." *Presidential Studies Quarterly* 54(2): 144-161.
- Moe, Terry M. 1985. "The Politicized Presidency." *New Directions in American Politics*.

 John E. Chubb and Paul E. Peterson, editors. pp. 235-271. Washington, D.C.: Brookings
 Institution Press.
- Nokken, Timothy P., and Brian R. Sala. 2000. "Confirmation Dynamics: A Model of Presidential Appointments to Independent Agencies." *Journal of Theoretical Politics*. 12(1): 91-112.
- O'Connell, Anne Joseph. 2020. "Actings." Columbia Law Review 120(3): 613-728.
- Ostrander, Ian, 2015, "Replication Data for: The Logic of Collective Inaction: Senatorial Delay in Executive Nominations." https://doi.org/10.7910/DVN/IYZWUD. Harvard Dataverse (V1).
- Ostrander, Ian. 2016. "The Logic of Collective Inaction: Senatorial Delay in Executive Nominations." *American Journal of Political Science* 60 (October): 1063-1076.
- Ouyang, Yu, Evan T. Haglund, and Richard W. Waterman. 2017. "The Missing Element: Examining the Loyalty-Competence Nexus in Presidential Appointments." *Presidential Studies Quarterly* 47(1): 62-91.

- Piper, Christopher. 2022. "Presidential Strategy Amidst the "Broken" Appointments Process." *Presidential Studies Quarterly* 52(4): 843-874.
- Resh, William G. 2015. *Rethinking the Administrative Presidency: Trust, Intellectual Capital, and Appointee—Careerist Relations in the Goerge W. Bush Administration.* Baltimore, MD: Johns Hopkins University Press.
- Richardson, Mark D. 2024. "Characterizing Agencies' Political Environments: Partisan Agreement and Disagreement in the U.S. Executive Branch." *The Journal of Politics* 86(3): 1110-1114.
- Ross, William G. 1998. "The Senate's Constitutional Role in Confirming Cabinet Nominees and Other Executive Officers." *Syracuse University Law Review* 48(3): 1123-1222.
- Rudalevige, Andrew. 2021. *By Executive Order: Bureaucratic Management and the Limits of Presidential Power*. Princeton University Press: Princeton, New Jersey.
- Selin, Jennifer L. 2015. "What Makes an Agency Independent?" *American Journal of Political Science* 59(4): 971-987.
- Selin, Jennifer L., and David E. Lewis. 2015. "Political Control and the Forms of Agency Independence." *George Washington Law Review* 83(1): 1487.
- Waterman, Richard W., and Yu Ouyang. 2020. "Rethinking Loyalty and Competence in Presidential Appointments." *Public Administration Review* 80(5): 717-732.
- Wong, Vivian C., Peter M. Steiner, and Thomas D. Cook. 2013. "Analyzing Regression-Discontinuity

 Designs with Multiple Assignment Variables: A Comparative Study of Four Estimation

 Methods." *Journal of Educational and Behavioral Statistics* 38(2): 107-141
- Wooldridge, Jeffrey M. 2015. "Control Function Methods in Applied Econometrics." *The Journal of Human Resources* 50(2): 420-445.
- Working Group on Streamlining Executive Nominations. 2012 (November). Streamlining

 Paperwork for Executive Nominations: Report toe the President and Chairs and Ranking

 Members of the Senate Committee on Homeland Security & Government Affairs and the

Senate Committee on Rules & Administration. Washington, D.C: Executive Office of the U.S. President of the United States.

https://www.oge.gov/web/oge.nsf/0/018B7C7EC03481F5852585B6005A1306/\$FILE/24 3ff5ca6d384f6fb89728a57e65552f3.pdf (Accessed Date: May 30, 2025)

ONLINE APPENDIX

The Loyalty Premium:

How Insecure Senate Partisan Majorities Constrain Presidential Appointment Powers

- 1. <u>ONLINE APPENDIX A</u>: Descriptive Statistics, RDD Density Manipulation Test Results, and Comparison of Partisan Seat Balances and Distances in the Postwar Era (1947-1986, 1987-2021)
- 2. ONLINE APPENDIX B: Single-Equation Tobit Model Estimates of Outcome Equation
- 3. ONLINE APPENDIX C: FIML Model Estimates Both Confirmed and Unconfirmed PAS Executive Nominees
- 4. <u>ONLINE APPENDIX D</u>: FIML Model Estimates *Quadratic Polynomial Senate Partisan Seat Margin/Distance Model Specifications*
- 5. <u>ONLINE APPENDIX E</u>: FIML Model Estimates *Heterogeneous Slope Treatment Effects By Agency Type and Position*

ONLINE APPENDIX A:

Descriptive Statistics, RDD Density Manipulation Test Results, and Comparison of Partisan Seat Balances and Distances in the Postwar Era (1947-1986, 1987-2021)

Table A1

Descriptive Statistics
(Outcome Equation: Full Sample; Divided & Unified Partisan Control Regime Subsamples)

Variable	Mean	SD	Min	Max	Source
President CF Score - Nominee CF Score (Lower Bound) (abscafall_ll)	0.689	0.710	0.001	2.847	Calculated by authors from information obtained from Bonica (2024) ⁱ
President CF Score - Nominee CF Score (Upper Bound) (abscafall_uc)	0.688	0.710	0	2.847	Calculated by authors from information obtained from Bonica (2024)
Boundary Intercept Shift Divided versus Unified Partisan Control (int_zero_rseatnew)	0.611	0.487	0	1	Calculated by authors
Senate Partisan Seat Margin/Distance: Divided Partisan Control (rseatnew_sdneg): [N = 1,877]	-8.515	3.253	-14	-2	Calculated by the authors from Senate Partisan Seat Margins ⁱⁱ
Senate Partisan Seat Margin/Distance: Unified Partisan Control (rseatnew_sdpos): [N = 2,958]	8.185	6.318	1	18	Calculated by the authors from Senate Partisan Seat Margins
President-Agency Ideological Alignment (idpresally)	0.252	0.434	0	1	Created by the authors from Clinton and Lewis (2008) ⁱⁱⁱ
President-Agency Ideological Opposed (idpresoppose)	0.237	0.425	0	1	Created by the authors from Clinton and Lewis (2008)
Executive Agency (exec_agency)	0.693	0.461	0	1	Created by the authors from Ostrander (2016)iv
Upper-Echelon Position (hightier)	0.774	0.417	0	1	Created by the authors from Ostrander (2016)
Major Policy Agency (policy_majagency)	0.355	0.478	0	1	Calculated by authors from information obtained from congress.gov ^v
		<u>Seat l</u>	Margin/l	<u>Distance</u>	: <u>Divided Partisan Control</u>
Nuclear Option (nuclear)	0.043	0.203	0	1	Congressional Record ^{vi}
Federal Vacancies Reform Act (FVRA)	0.141	0.348	0	1	Congressional Record https://www.govinfo.gov/content/pkg/USCODE-2006-title5-partIII-subpartB-chap33-subchapIII-sec3345.pdf
Civilian Nominations (kv_workload)	3239.314	740.273	1992	4655	Created by the authors from Senate.gov ^{vii}
Chair Experience (chair_experience_1)	19.863	9.088	2	45	Congressional Directory ^{viii} , Congress.gov ^{ix} , BioGuide ^x & Senate.gov ^{xi} , Krause and Byers (2024)

Prior Confirmation (priorconfirm)	0.179	0.383	0	1	Ostrander (2016)
Senate Party Polarization (polarization)	0.707	0.074	0.611	0.814	DW-NOMINATExii
		<u>Seat</u> :	Margin/	Distance	: Unified Partisan Control
Nuclear Option (nuclear)	0.224	0.417	0	1	Congressional Record
Federal Vacancies Reform Act (FVRA)	0.321	0.467	0	1	Congressional Record https://www.govinfo.gov/content/pkg/USCODE-2006-title5-partIII-subpartB-chap33-subchapIII-sec3345.pdf
Civilian Nominations (kv_workload)	3195.078	755.057	1805	5374	Created by the authors from Senate.gov
Chair Experience (chair_experience_1)	20.685	8.494	2	37	Congressional Directory, Congress.gov, BioGuide & Senate.gov, Krause and Byers (2024)
Prior Confirmation (priorconfirm)	0.132	0.338	0	1	Created by the authors from Ostrander (2016)
Senate Party Polarization (polarization)	0.789	0.060	0.685	0.880	DW-NOMINATE

<u>Note:</u> Descriptive Statistics for endogenous regressor subsamples are based on partisan seat margins (which varies slightly based on the partisan seat/distance measure under investigation).

TABLE A2

RDD Manipulation Test Statistics for Partisan Seat Balance/Distance Measures

Method	Model 1	Model 2	Model 3	Model 4
	[Seat Margin]	[Uniform]	[Euclidian]	[Manhattan]
Conventional	28.779***	-17.786***	-22.519***	-8.963***
	[0.000]	[0.000]	[0.000]	[0.000]
Robust	-6.7495***	-8.102***	-23.603***	-8.210***
	[0.000]	[0.000]	[0.000]	[0.000]
Observations	4,835	4,835	4,835	4,835

FIGURE A1/TABLE A3

Kernel Density Plots and Descriptive Statistics: Partisan Seat Balance Measures (80th-99th Congresses [1947-1986] versus 100th-111th Congress [1987-2021]

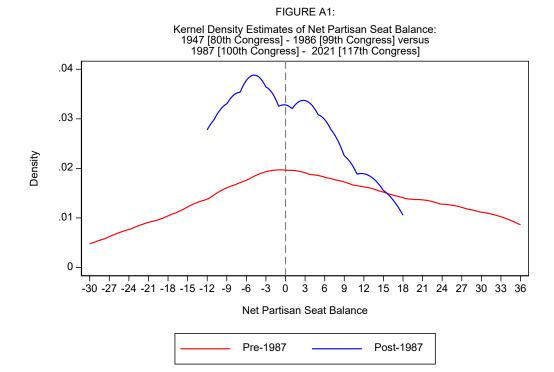


TABLE A3

<u>Descriptive Statistics</u>									
Time Period	Mean	SD	Min	Max					
Pre-1987	5.1	18.394	-30	36					
Post-1987	-0.114	9.061	-12	18					
Difference in Means, Standard Deviation, and EDF Tests									
T-test	5.214								
(Difference in Means)	[0.118]								
F-Test	2.030***								
(Difference in Standard Deviations)	[0.0001]								
Pre-1987		0.200							
		[0.225	5]						
Post-1987		-0.250)						
		[0.097	']						
Combined		0.250)						
Kolmogorov-Smirnov		[0.194	<u> </u>						

ONLINE APPENDIX B:

Single-Equation Tobit Model Estimates of Outcome Equation

Appendix B reports the estimates from Tobit single-equation models predicting the absolute ideological distance between presidents and PAS executive appointees. These models do not consider endogeneity bias resulting from the Senate partisan seat margin and distance covariates. This is a serious problem given the RDD density manipulation tests (see Table A2 in **Appendix A**), coupled with the substantial and statistically discernible residual correlations involving the outcome equation and endogenous regressor equation errors (see bottom of Table 1 in manuscript, and Tables B1, C1, D1, and D1-D4 in the Online Appendix). The results for Senate partisan seat margin model (Model B1) reveal substantively similar patterns, but more modest estimates compared to the FIML model estimates reported in **Table 1** of the manuscript, as well as those reported in Appendix C, D, and E (Tables B1, C1, D1, E1-E4). These effects are the correct hypothesized sign in relation to H1 and H2, yet are also more attenuated for the Senate partisan distance seat measures in Model B2/Figure B2, Model B3/Figure B3, and Model B4/Figure B4. The divided partisan control slope estimates are only the correct sign and distinct from zero for the Senate partisan seat margin covariate (Model B1), while the unified partisan control slope is also the correct sign and statistically discernible from zero at p \leq 0.100 for **Models B1-B3**. Taken together, these single-equation Tobit model estimates evaluating our theory's key empirical predictions (H1 & H2) yield a downward bias towards zero.

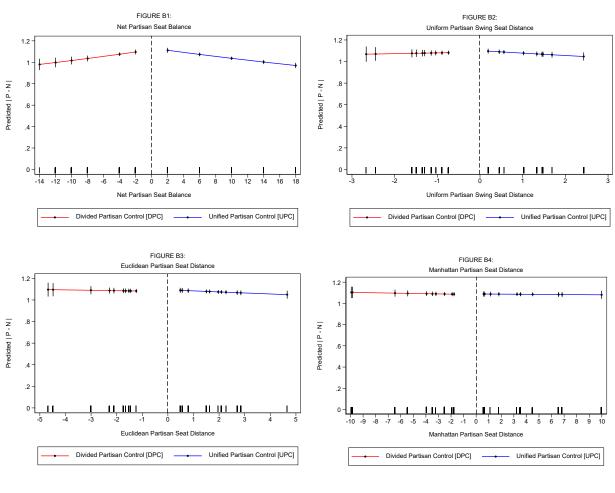
TABLE B1

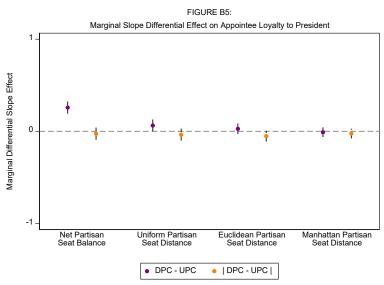
Tobit Single—Equation Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I]

	7-2021 [Reagan- Model B1	Model B2	Model B3	Model B4
Variable	[Seat Margin]	[Uniform]	[Euclidian]	[Manhattan]
President CF Score - Executive Nominee CF Score				
Boundary Intercept Shift	0.036	0.162**	0.177***	0.148***
Divided versus Unified Partisan Control	(0.053)	(0.057)	(0.046)	(0.039)
Senate Partisan Seat Margin/Distance:	0.019**	0.013	-0.007	-0.004
Divided Partisan Control	(0.006)	(0.033)	(0.016)	(0.006)
Senate Partisan Seat Margin/Distance:	-0.018***	-0.042^{*}	-0.018 ⁺	-0.001
Unified Partisan Control	(0.002)	(0.020)	(0.011)	(0.005)
President-Agency Ideological Alignment	-0.083**	-0.071^{*}	-0.072^{*}	-0.072^{*}
	(0.031)	(0.031)	(0.031)	(0.031)
President-Agency Ideological Opposed	0.036	0.017	0.017	0.016
	(0.032)	(0.038)	(0.038)	(0.039)
Executive Agency	-0.202^{***}	-0.208^{***}	-0.209^{***}	-0.211^{***}
	(0.030)	(0.031)	(0.031)	(0.031)
Major Policy Agency	0.032	0.028	0.028	0.027
	(0.027)	(0.028)	(0.028)	(0.028)
Upper-Echelon Position	-0.045	-0.042 ⁺	-0.042^{+}	-0.043^{+}
	(0.023)	(0.024)	(0.024)	(0.024)
Intercept	0.961***	-0.357***	0.754^{***}	0.754
	(0.058)	(0.116)	(0.045)	(0.039)
Observations	4,835	4,835	4,835	4,835
AIC	10,229.53	10,289.34	10,209.49	10,293.10
BIC	10,294.37	10,354.17	10,355.32	10,357.93
Wald Outcome Model Test Statistic President _{CF Score} – Executive Nominee _{CF Score}	181.29*** [0.000]	134.23*** [0.000]	133.07*** [0.000]	131.59** [0.000]

FIGURES B1-B5

Substantive Marginal Slope Effects Under Divided and Unified Partisan Control Regimes (B1—B4: cf. Figure 4 in Manuscript) & Corresponding Marginal Slope Differential Effects (B5: cf. Figure 5 in Manuscript): Single-Equation Tobit Models





ONLINE APPENDIX C:

FIML Model Estimates — Both Confirmed and Unconfirmed PAS Executive Nominees

Appendix C reports the estimates from a PAS sample of observations that include both confirmed and unconfirmed executive nominees. This sensitivity analyses is performed to evaluate the sensitivity of the reported model estimates restricted to only confirmed PAS executive appointees since confirmed individuals represent the actual loyalty obtained by presidents from the Senate confirmation process. These model estimates appearing in **Table C1** are strikingly similar – and somewhat larger in magnitude – compared to the results reported in the manuscript (**Table 1**) for the Senate partisan seat margin (**Model C1**, cf. **Model 1**), uniform partisan swing seat distance (Model C2, cf. Model 2), and Euclidean partisan seat distance model (Model C3, cf. Model 3). However, the Manhattan partisan seat distance model has coefficients which flips coefficient signs opposite of the hypothesized relations (Figure C4), but remains estimated with considerable imprecision (Model C4, cf. Model 4). Notwithstanding the Manhattan partisan seat distance model (Model 4), these estimates are substantively similar to the reported model estimates comprised only of confirmed PAS executive appointees. Therefore, these findings generally indicate that insecure Senate partisan majorities have similar substantive impacts and inferences on executive branch cohesion predicted by our theory irrespective whether if all PAS executive appointees or only those confirmed to these positions.

TABLE C1

Full Information Maximum Likelihood (FIML) Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I]

(Both Confirmed and Unconfirmed PAS Executive Nominees)

Variable	Model 1	Model 2	Model 3	Model 4
variable	[Seat Margin]	[Uniform]	[Euclidian]	[Manhattan]
President CF Score - Executive Nominee CF Score				
Boundary Intercept Shift	0.035	0.050	0.071	0.125*
Divided versus Unified Partisan Control [-]	(0.038)	(0.059)	(0.057)	(0.056)
Senate Partisan Seat Margin/Distance:	0.064***	0.506***	0.654+	-0.635
Divided Partisan Control [+]	(0.009)	(0.124)	(0.372)	(0.484)
Senate Partisan Seat Margin/Distance:	-0.074^{***}	-0.179*	-0.273	0.322
Unified Partisan Control [–]	(0.014)	(0.077)	(0.202)	(0.223)
President-Agency Ideological Alignment [-]	-0.069^*	-0.064^{*}	-0.066^{*}	-0.072^{*}
	(0.030)	(0.031)	(0.032)	(0.030)
President-Agency Ideological Opposed [–]	0.006	-0.009	-0.009	0.00006
- · · · · · · · · · · · · · · · · · · ·	(0.032)	(0.035)	(0.036)	(0.034)
Executive Agency [–]	-0.156^{***}	-0.165^{***}	-0.162^{***}	-0.153^{***}
	(0.029)	(0.031)	(0.031)	(0.030)
Upper-Echelon Position [–]	-0.057^{*}	-0.049^{+}	-0.047^{+}	-0.057^{*}
	(0.025)	(0.025)	(0.026)	(0.025)
Major Policy Agency [–]	0.033	0.032	0.033	0.025
, , , , , , , , , , , , , , , , , , , ,	(0.028)	(0.028)	(0.028)	(0.027)
Intercept	1.315***	1.194***	1.688***	-1.212
	(0.091)	(0.123)	(0.568)	(1.443)
Senate Partisan Seat Margin/Distance: Divided Partisan Control				
Nuclear Option [+]	-0.431^{*}	0.157***	0.145*	-0.363
• • •	(0.197)	(0.039)	(0.063)	(0.284)
Federal Vacancies Reform Act [+]	0.169	0.076+	0.108*	0.458***
	(0.152)	(0.040)	(0.052)	(0.093)
Civilian Nominations [+]	0.0001+	0.00007*	-0.00002	-0.0002^{***}
	(0.00006)	(0.00002)	(0.00006)	(0.00004)
Chair Experience [+]	0.038***	0.001	0.001	-0.009^*
	(0.010)	(0.002)	(0.003)	(0.004)
Prior Confirmation [—]	-0.708^{***}	-0.211^{***}	-0.252**	-0.277^{+}
	(0.162)	(0.035)	(0.088)	(0.158)
Senate Party Polarization [+]	38.548***	2.642***	3.989***	7.435***
	(0.732)	(0.161)	(0.231)	(0.714)
Intercept	-33.574***	-2.879^{***}	-3.954***	-6.767***
	(0.578)	(0.128)	(0.269)	(0.463)

Senate Partisan Seat Margin/Distance: Unified Partisan Control				
Nuclear Option [—]	-3.016***	-0.144***	-0.163+	0.021
	(0.466)	(0.053)	(0.088)	(0.196)
Federal Vacancies Reform Act [+]	0.208	0.306***	0.401***	0.777***
	(0.329)	(0.037)	(0.066)	(0.165)
Civilian Nominations [—]	-0.001***	-0.0001^{***}	-0.0002***	-0.0004^{***}
	(0.0001)	(0.00002)	(0.00002)	(0.00006)
Chair Experience [—]	0.012	-0.002	-0.005	-0.016^*
D	(0.015)	(0.002)	(0.003)	(0.007)
Prior Confirmation [—]	-0.883***	-0.151***	-0.235***	-0.446***
Canada Danta Dalania di an [1]	(0.261)	(0.030)	(0.046)	(0.108)
Senate Party Polarization [+]	25.288***	4.093***	7.415***	15.233***
Intercent	(1.870) -12.691***	(0.221) $-2.034***$	(0.374) $-3.772***$	(0.867) -7.876***
Intercept				
	(1.181)	(0.151)	(0.232)	(0.528)
Equation Residual Variances and Correlations:				
$oldsymbol{\sigma}_{oldsymbol{\mathcal{E}}_i}$	0.588***	0.570***	0.991	3.035
,	(0.051)	(0.039)	(0.564)	(3.929)
$oldsymbol{\sigma}_{oldsymbol{\mu}^{DPC}}$	12.522***	0.559***	1.688***	8.104***
μ_i^{BC}	(0.266)	(0.018)	(0.064)	(0.339)
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{UPC}}$	34.527***	0.478***	1.390***	6.902***
μ_i	(0.984)	(800.0)	(0.031)	(0.180)
$a \left(c u^{DPC} \right)$	-0.023	-0.368***	-0.665***	0.810***
$oldsymbol{ ho}_{ m l}ig(oldsymbol{arepsilon}_i,oldsymbol{\mu}_i^{DPC}ig)$	(0.029)	(0.075)	(0.166)	(0.120)
$oldsymbol{ ho}_2 ig(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC}ig)$	0.356***	-0.153***	-0.158***	-0.008
$P_2(\mathbf{z}_i, \mathbf{\mu}_i)$	(0.070)	(0.045)	(0.036)	(0.057)
$oldsymbol{ ho}_3 \Big(oldsymbol{\mu}_i^{DPC}, oldsymbol{\mu}_i^{UPC}\Big)$	0.503***	0.663***	0.567***	0.462***
$\rho_3(\mu_i, \mu_i)$	(0.012)	(0.007)	(0.007)	(800.0)
Observations	6,783	6,783	6,783	6,783
AIC	92,037.99	40,017.88	56,033.39	78,507.55
BIC	92,235.83	40,215.73	56,231.23	78,705.39
Wald Outcome Model Test Statistic	54.25***	55.64***	49.31***	55.43***
Train Outcome Flouer Lest buttistic	[0.000]	[0.000]	[0.000]	[0.000]
	[մ.ԾԾ]	[մ.մմմ]	լս.սսսյ	[մ.մմմ]
Joint F Test for Instrument Validity (DPC)	3461.68***	1549.03***	1430.71***	649.49***
joiner receipt modernment valually (D1 a)	[0.000]	[0.000]	[0.000]	[0.000]
	[0.000]	[0.000]	[0.000]	[0.000]
Joint F Test for Instrument Validity (UPC)	388.09***	1850.06***	2221.82***	1837.42***
, - mor records moralitation (of d)	70.000	[0.001	[0.000]	[0.000]

[0.000]

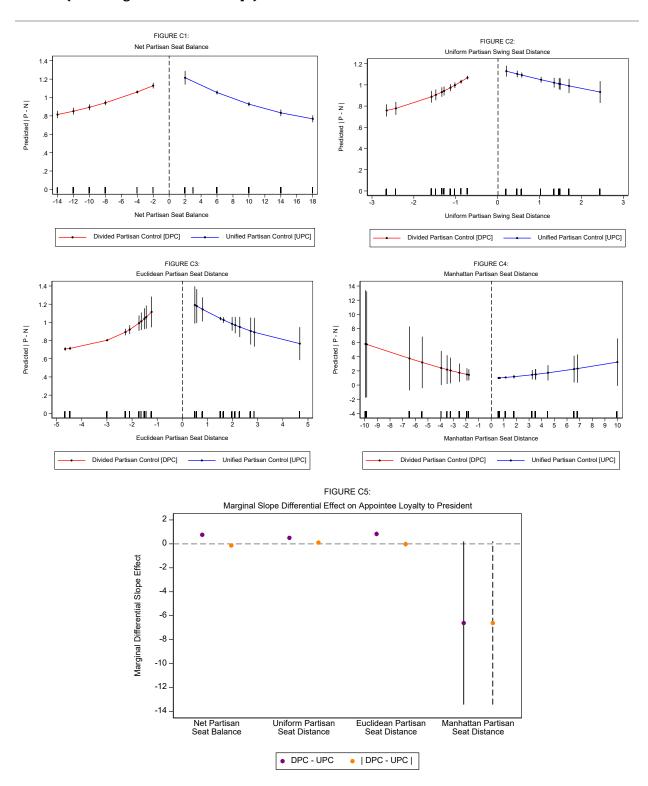
[0.000]

[0.000]

[0.000]

FIGURES C1-C5

Substantive Marginal Slope Effects Under Divided and Unified Partisan Control Regimes (C1—C4: cf. Figure 4 in Manuscript) & Corresponding Marginal Slope Differential Effects (C5: cf. Figure 5 in Manuscript): Confirmed & Unconfirmed PAS Executive Nominees



ONLINE APPENDIX D:

Quadratic Polynomial Senate Partisan Seat Margin/Distance Model Specifications

Appendix D analyzes the sensitivity of the reported model results based on a linear piecewise first-order polynomial (p=1) relationship between Senate partisan seat balance/distance and the absolute ideological distance between presidents and their confirmed PAS executive appointees. We estimate a comparable set of model specifications based on a quadratic piecewise second-order polynomial (p=2) relationship to evaluate the sensitivity of evidence in support of both H1 and H2 when we an alternative functional form is employed. We do not undertake an analysis with higher-order polynomials ($p \ge 3$) since these are prone to yielding biased and noisy slope and intercept shift estimates, coupled with poor coverage of confidence intervals in RDD designs, and the design analyzed in this study (e.g., see Gelman and Imbens 2019).1

The evidence in **Figures D1**-**D5** reveal that the results based on the piecewise quadratic estimates (p=2) are substantively similar compared to the estimates reported in the manuscript predicated on piecewise linear estimates (p=1) in most instances. One notable exception is that the estimates for the Manhattan partisan seat distance models based on the quadratic polynomial are noticeably more precise compared to the parallel estimates reported in the manuscript (**Figure D5**, **Model D4**; cf. **Figure 5**, **Model 4**). In short, the choice between a linear versus quadratic piecewise functional form has no substantive bearing on the empirical conclusions drawn from the manuscript regarding the impact of insecure Senate partisan majorities on constraining presidential appointments based on ideological affinity.

¹ Andrew Gelman and Guido W. Imbens. 2019. "Why High-Order Polynomials Should Not Be Used in Regression Discontinuity Designs." *Journal of Business and Economics Statistics* 37(3): 447-456.

TABLE D1

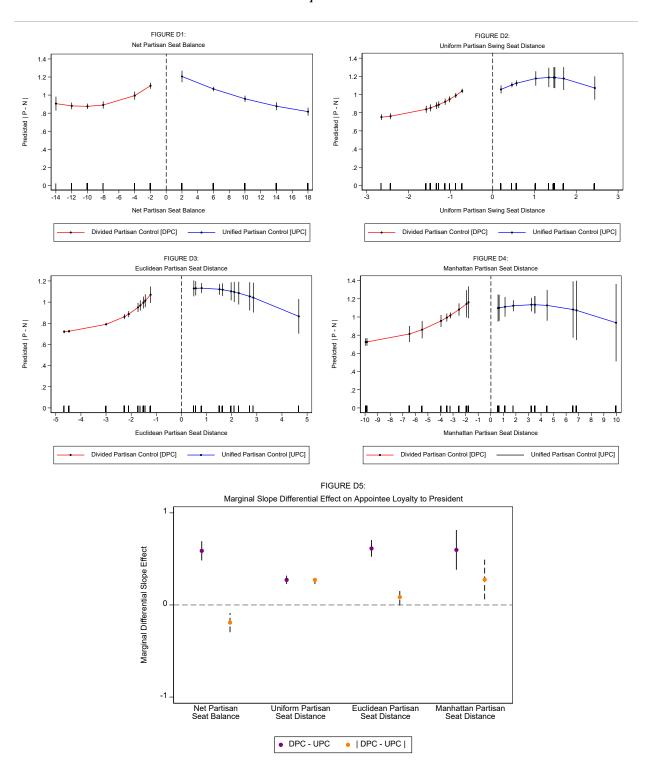
Full Information Maximum Likelihood (FIML) Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I] (Quadratic Polynomial Senate Partisan Seat Margin/Distance Model Specifications)

Quadratic Folynoimal Senate Fart	Model 1	Model 2	Model 3	Model 4
Variable	[Seat Margin]	[Uniform]	[Euclidian]	[Manhattan]
President CF Score - Executive Nominee CF Score				
Boundary Intercept Shift	-0.196^*	-0.667**	-0.594^{***}	-0.160
Divided versus Unified Partisan Control [–]	(0.093)	(0.223)	(0.177)	(0.130)
Senate Partisan Seat Margin/Distance:	0.162***	1.007***	0.898***	0.212
Divided Partisan Control [+]	(0.037)	(0.245)	(0.225)	(0.205)
Senate Partisan Seat Margin/Distance:	-0.067^{***}	0.476**	0.067	0.059
Unified Partisan Control [–]	(0.016)	(0.178)	(0.112)	(0.076)
Senate Partisan Seat Margin/Distance:	0.008**	0.123*	0.053**	-0.002
Divided Partisan Control ²	(0.003)	(0.054)	(0.020)	(0.004)
Senate Partisan Seat Margin/Distance:	0.0004	-0.175^{***}	-0.040^{***}	-0.009^{***}
Unified Partisan Control ²	(0.0004)	(0.047)	(0.012)	(0.002)
President-Agency Ideological Alignment [–]	-0.079^*	-0.082^{*}	-0.081^{*}	-0.077^{*}
	(0.033)	(0.033)	(0.032)	(0.032)
President-Agency Ideological Opposed [–]	0.035	0.021	0.018	0.015
	(0.032)	(0.035)	(0.036)	(0.039)
Executive Agency [–]	-0.205^{***}	-0.230^{***}	-0.214^{***}	-0.215^{***}
	(0.030)	(0.033)	(0.033)	(0.032)
Upper-Echelon Position [–]	-0.057^{*}	-0.060^{*}	-0.046 ⁺	-0.043 ⁺
	(0.025)	(0.026)	(0.025)	(0.025)
Major Policy Agency [–]	0.023	0.018	0.023	0.020
	(0.029)	(0.030)	(0.030)	(0.030)
Intercept	1.552***	1.559***	1.931***	1.352*
	(0.127)	(0.193)	(0.302)	(0.548)
Senate Partisan Seat Margin/Distance:				
<u>Divided Partisan Control</u>				
Nuclear Option [+]	-0.265	0.107*	0.057	-0.080
Nuclear Option [+]	(0.238)	(0.044)	(0.064)	(0.245)
Federal Vacancies Reform Act [+]	0.221	0.039	0.064	0.070
rederal vacancies kelorin Act [+]	(0.169)	(0.041)	(0.052)	(0.121)
Civilian Nominations [+]	-0.000003	0.00007**	0.000009	-0.00006
Givinan Nominations [T]	(0.00008)	(0.00007	(0.00004)	(0.00007)
Chair Experience [+]	0.035**	0.005+	0.006	0.016
Guan Experience [T]	(0.012)	(0.003)	(0.004)	(0.013)
Prior Confirmation [—]	-0.801^{***}	-0.195***	-0.252***	-0.523*
Thor commination []	(0.181)	(0.038)	(0.062)	(0.220)
Senate Party Polarization [+]	37.918***	2.769***	4.304***	8.307***
behate rarey rotatization [1]	(0.846)	(0.161)	(0.242)	(0.600)
Intercept	-32.570***	-2.988***	-4.295***	-8.170***
тист серс				
	(0.722)	(0.140)	(0.225)	(0.498)

Senate Partisan Seat Margin/Distance:				
Unified Partisan Control				
Nuclear Option [—]	-3.644***	-0.252***	-0.344***	-0.235
• •	(0.729)	(0.061)	(0.101)	(0.236)
Federal Vacancies Reform Act [+]	-0.081	0.298***	0.395***	0.771***
	(0.384)	(0.044)	(0.076)	(0.179)
Civilian Nominations [—]	-0.001^{***}	-0.0001^{***}	-0.0002***	-0.0005***
	(0.0001)	(0.00002)	(0.00004)	(0.00007)
Chair Experience [—]	0.021	-0.001	-0.002	-0.011
	(0.017)	(0.002)	(0.003)	(0.008)
Prior Confirmation [—]	-1.164^{***}	-0.170^{***}	-0.288^{***}	-0.515^{***}
	(0.312)	(0.030)	(0.048)	(0.105)
Senate Party Polarization [+]	27.511***	4.546***	8.303***	17.232***
	(2.316)	(0.263)	(0.455)	(1.038)
Intercept	-13.384^{***}	-2.176***	-4.111***	-8.722***
	(1.566)	(0.186)	(0.298)	(0.680)
Equation Residual Variances and Correlations:				
σ	0.534***	0.616***	0.872***	0.798
$oldsymbol{\sigma}_{oldsymbol{arepsilon}_i}$	(0.033)	(0.045)	(0.204)	(0.447)
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{DPC}}$	12.869***	0.532***	1.583***	7.608***
μ_i^{\ldots}	(0.309)	(0.022)	(0.074)	(0.383)
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{UPC}}$	37.079***	0.491***	1.475***	7.290***
$\mu_i^{s,c}$	(0.878)	(0.009)	(0.031)	(0.178)
a(a, DPC)	-0.052	-0.466***	-0.655***	-0.622^{*}
$oldsymbol{ ho}_{ m l} \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{DPC}\Big)$	(0.039)	(0.070)	(0.093)	(0.256)
$oldsymbol{ ho}_2 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC} \Big)$	0.248***	-0.326***	-0.256^{***}	-0.214^{***}
$oldsymbol{ ho}_2ig(oldsymbol{arepsilon}_i,oldsymbol{\mu}_iig)$	(0.072)	(0.054)	(0.039)	(0.055)
O (JDPC JUPC)	0.519***	0.663***	0.559***	0.457***
$oldsymbol{ ho}_3 \left(oldsymbol{\mu}_i^{DPC}, oldsymbol{\mu}_i^{UPC} ight)$	(0.013)	(0.009)	(0.009)	(0.010)
Observations	4,835	4,835	4,835	4,835
AIC	65,954.23	28,406.23	39,983.21	56,000.31
BIC	66,155.22	28,607.22	40,184.20	56,201.30
Wald Outcome Model Test Statistic	95.14***	102.30***	89.04***	86.18***
	[0.000]	[0.000]	[0.000]	[0.000]
Joint F Test for Instrument Validity (DPC)	2732.72***	1409.81***	1192.87***	1024.84***
	[0.000]	[0.000]	[0.000]	[0.000]
Joint F Test for Instrument Validity (UPC)	337.59***	1571.64***	1793.62***	1645.67***
	[0.000]	[0.000]	[0.000]	[0.000]

FIGURES D1-D5

Substantive Marginal Slope Effects Under Divided and Unified Partisan Control Regimes (D1-D4: cf. Figure 4 in Manuscript) & Corresponding Marginal Slope Differential Effects (D5: cf. Figure 5 in Manuscript): Quadratic Polynomial Senate Partisan Seat Margin/Distance Model Specifications



ONLINE APPENDIX E:

FIML Model Estimates – *Heterogeneous Slope Treatment Effects*(By Agency Type and Position)

In **Appendix E**, statistical results are presented from a series of structural econometric models which permit each control variable in the outcome equation to serve as endogenous treatment effect. This requires estimating a fourth equation in the structural econometric model analyzing endogenous treatment effects by comprised of (1) president-agency ideological composition, (2) position hierarchy, (3) structural design, and (4) policy importance. These estimates can be found in **Tables E2–E5**. These model estimates are similar compared to those reported in **Table 1** found in the manuscript, with the following exception. The slope effects under unified partisan control tend to be both smaller and estimated less precisely for models employing either Uniform Partisan Swing or Euclidean distance measures. This pattern might be attributable to reducing the statistical power of tests by splitting these slope estimates into subgroups.

In 43 out of a possible 48 instances, the null of slope equality between various treatment groups cannot be rejected at conventional significance levels (see **Table E1**). In four exceptional instances, the slope effect is greater for PAS executive appointees serving in executive agencies than compared to independent agencies (*Uniform & Euclidean Partisan Swing Distance Models*), while this slope effect is greater for individuals serving in major policy agencies relative to those in non-major policy agencies for each of the three partisan seat distance measures. Since heterogeneous slope effects arise only in the presence of a Senate partisan opposition majority, robust Senate minority party's ability to obtain greater ideological concessions on confirmed executive appointees is limited to those agencies that the president has the most leverage in terms of both institutional and policy control.

TABLE E1

Estimating Slope Differences for Heterogeneous Treatment Groups: By Control Covariates
(President—Agency Ideology/Position Hierarchy/Structural Design/Policy Importance)

Estimated Coefficient Difference	Partisan Seat	Uniform Partisan	Euclidean Partisan	Manhattan Partisan
	Balance	Swing Distance	Seat Distance	Seat Distance
Aligned DPC – Moderate DPC	-0.011	0.046	0.014	0.002
	[0.361]	[0.471]	[0.635]	[0.865]
Opposition DPC - Moderate DPC	-0.005	0.018	0.013	0.005
	[0.721]	[0.798]	[0.717]	[0.714]
Opposition DPC - Aligned DPC	0.006	-0.027	-0.001	0.003
	[0.636]	[0.581]	[0.972]	[0.799]
Aligned UPC —Moderate UPC	0.005	-0.023	0.016	0.011
	[0.435]	[0.648]	[0.620]	[0.412]
Opposition UPC - Moderate UPC	-0.001	-0.030	-0.009	-0.003
	[0.933]	[0.512]	[0.691]	[0.740]
Opposition UPC - Aligned UPC	-0.005	-0.007	-0.025	-0.014
	[0.293]	[0.891]	[0.415]	[0.268]
High Tier DPC —Low Tier DPC	0.005	0.011	0.008	0.007
	[0.704]	[0.831]	[0.780]	[0.557]
High Tier UPC —Low Tier UPC	0.003	0.025	0.005	0.0003
	[0.534]	[0.523]	[0.783]	[0.970]
Executive DPC —Independent DPC	-0.019+	0.110+	0.053+	0.019
	[0.097]	[0.083]	[0.092]	[0.131]
Executive UPC —Independent UPC	0.001	-0.021	-0.014	-0.008
	[0.863]	[0.675]	[0.599]	[0.491]
Major Policy Agency DPC –	-0.0003	0.157*	0.067*	0.024
Non-Major Policy Agency DPC	[0.985]	[0.011]	[0.032]	[0.225]
Major Policy Agency DPC -	0.006	-0.064	-0.008	0.002
Non-Major Policy Agency DPC	[0.305]	[0.156]	[0.707]	[0.909]

Note: These estimated slope differences are computed from point estimates appearing in **Tables E2–E5**. Red cell entries indicate statistically discernible slope differences between treatment groups under divided partisan control regimes. $p \le 0.10$ $p \le 0.05$.

TABLE E2

Full Information Maximum Likelihood (FIML) Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I] (Heterogeneous Treatment Effects: Moderate/Aligned/Opposition Agency Positions)

Variable	Model 1 [Seat Margin]	Model 2 [Uniform]	Model 3 [Euclidian]	Model 4 [Manhattan]
President CF Score — Executive Nominee CF Score				
Boundary Intercept Shift Divided versus Unified Partisan Control (Moderate Agencies)	-0.0003 (0.080)	-0.006 (0.099)	0.042 (0.076)	0.014 (0.063)
Boundary Intercept Shift Divided versus Unified Partisan Control (Aligned Agencies)	0.132+ (0.072)	-0.001 (0.112)	0.006 (0.101)	-0.013 (0.085)
Boundary Intercept Shift Divided versus Unified Partisan Control (Opposed Agencies)	0.081 (0.085)	0.000 (0.100)	0.027 (0.085)	-0.002 (0.069)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Moderate Agencies)	0.062*** (0.011)	0.438*** (0.110)	0.400** (0.151)	0.278 (0.245)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Aligned Agencies)	0.050*** (0.010)	0.484*** (0.110)	0.414** (0.153)	0.280 (0.247)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Opposed Agencies)	0.056*** (0.012)	0.457*** (0.104)	0.413** (0.149)	0.283 (0.245)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Moderate Agencies)	-0.051*** (0.011)	-0.025 (0.122)	-0.091 (0.091)	-0.061 (0.105)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Aligned Agencies)	-0.047*** (0.010)	-0.048 (0.119)	-0.075 (0.084)	-0.049 (0.101)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Opposed Agencies)	-0.052*** (0.011)	-0.055 (0.119)	-0.100 (0.090)	-0.064 (0.105)
Executive Agency (Moderate Agencies) Executive Agency (Aligned Agencies) Executive Agency (Opposed Agencies) Upper-Echelon Position (Moderate Agencies) Upper-Echelon Position (Aligned Agencies)	-0.168*** (0.036) -0.325*** (0.086) -0.107 (0.122) 0.032 (0.038) 0.073 (0.059)	-0.179*** (0.038) -0.340*** (0.088) -0.135 (0.129) 0.038 (0.039) 0.086 (0.066)	-0.176*** (0.038) -0.343*** (0.090) -0.134 (0.128) 0.038 (0.039) 0.093 (0.067)	-0.175*** (0.039) -0.339*** (0.091) -0.129 (0.130) 0.035 (0.038) 0.098 (0.070)
Upper-Echelon Position (Opposed Agencies)	0.032 (0.079)	-0.014 (0.084)	-0.017 (0.085)	-0.018 (0.088)

Major Policy Agency	-0.057	-0.055	-0.054	-0.051
(Moderate Agencies)	(0.041)	(0.038)	(0.039)	(0.038)
Major Policy Agency	0.064	0.061	0.066	0.065
, , ,				
(Aligned Agencies)	(0.051)	(0.053)	(0.052)	(0.053)
Major Policy Agency	-0.159***	-0.129*	-0.126*	-0.128^*
(Opposed Agencies)	(0.045)	(0.051)	(0.051)	(0.052)
President-Agency Ideological Moderate	1.485***	1.316***	1.489***	1.701^*
resident rigency ideological moderate	(0.140)	(0.165)	(0.267)	(0.755)
Dragidant Agangy Idealogical Alignment	1.001***	0.995***	1.150***	1.315
President-Agency Ideological Alignment	(0.131)	(0.165)	(0.272)	(0.723)
Described Association of the Control	0.866***	0.767***	0.965***	1.138
President-Agency Ideological Opposed	(0.147)	(0.209)	(0.276)	(0.660)
<u>Senate Partisan Seat Margin/Distance:</u> <u>Divided Partisan Control</u>				
	-0.267	0.135**	0.091	0.110
Nuclear Option [+]	(0.245)	(0.047)	(0.073)	(0.223)
	0.232	0.077+	0.127+	0.211
Federal Vacancies Reform Act [+]	(0.172)	(0.044)	(0.075)	(0.187)
	-0.000006	0.00008**	0.00001	-0.0001
Civilian Nominations [+]				
	(0.00008)	(0.00002)	(0.00004)	(0.00009)
Chair Experience [+]	0.035**	0.005+	0.007	0.015
r [.]	(0.012)	(0.003)	(0.005)	(0.014)
Prior Confirmation [—]	-0.789^{***}	-0.209***	-0.293^{***}	-0.582**
11101 001111111111111111111111111111111	(0.175)	(0.042)	(0.072)	(0.213)
Senate Party Polarization [+]	37.951***	2.588***	3.997***	7.388***
Schatc rarty rolarization [1]	(0.842)	(0.202)	(0.346)	(0.952)
Intercent	-32.593***	-2.876***	-4.103^{***}	-7.390***
Intercept	(0.713)	(0.168)	(0.296)	(0.902)
Senate Partisan Seat Margin/Distance:				
<u>Unified Partisan Control</u>				
	-3.676***	-0.238***	-0.332**	-0.218
Nuclear Option [—]	(0.799)	(0.069)	(0.110)	(0.253)
	-0.229	0.323***	0.418***	0.807***
Federal Vacancies Reform Act [+]	(0.399)	(0.043)	(0.077)	(0.173)
	-0.001^{***}	-0.0001^{***}	-0.0002***	-0.001^{***}
Civilian Nominations [-]				
• •	(0.0001)	(0.00002)	(0.00003)	(0.00007)
Chair Experience [-]	0.018	-0.001	-0.002	-0.011
F []	(0.019)	(0.002)	(0.003)	(0.008)
Prior Confirmation [—]	-1.130^{***}	-0.178^{***}	-0.292^{***}	-0.546^{***}
Thor commination []	(0.267)	(0.034)	(0.054)	(0.105)
Senate Party Polarization [+]	28.319***	4.445***	8.234***	17.102***
Schatc Larty Lolarization [T]	(2.680)	(0.281)	(0.471)	(1.076)
Intercent	-13.766^{***}	-2.116^{***}	-4.069^{***}	-8.577^{***}
Intercept	(1.730)	(0.196)	(0.305)	(0.674)

President-A	gency	Ideological	Position

Female	0.109+	0.119^{*}	0.118^{*}	0.123^{*}
	(0.059)	(0.054)	(0.055)	(0.051)
	0.382+	0.375+	0.377+	0.348
Federal Vacancies Reform Act	(0.215)	(0.221)	(0.221)	(0.219)
Civilian Nominations	0.00001	0.00002	0.00001	0.000003
	(0.00005)	(0.00005)	(0.00005)	(0.00005)
	0.011	0.080	0.060	0.007
First 90 Days	(0.164)	(0.145)	(0.148)	(0.007)
Equation Residual Variances and Correlations:				
σ	0 [7(***	0 (27***	0.720***	1.020

$oldsymbol{\sigma}_{oldsymbol{arepsilon}_i}$	0.576***	0.627***	0.739***	1.028
	(0.036)	(0.069)	(0.147)	(0.840)
G	12.869***	0.531***	1.582***	7.619***
$oldsymbol{\sigma_{oldsymbol{\mu}_i^{DPC}}}$	(0.309)	(0.022)	(0.075)	(0.381)
G 1773	37.078***	0.491***	1.475 ^{***}	7.289***
$oldsymbol{\sigma_{oldsymbol{\mu}_i^{UPC}}}$	(0.885)	(0.009)	(0.031)	(0.178)
$\mathcal{L}(\mathcal{L}, DPC)$	-0.088*	-0.355***	-0.504^{***}	-0.666*
$oldsymbol{ ho}_{ m l}ig(oldsymbol{arepsilon}_i,oldsymbol{\mu}_i^{DPC}ig)$	(0.044)	(0.065)	(0.118)	(0.277)
$oldsymbol{ ho}_2 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC}\Big)$	0.180**	-0.217**	-0.197^{***}	-0.176**
$p_2(\mathbf{\epsilon}_i, \mathbf{\mu}_i)$	(0.068)	(0.073)	(0.056)	(0.066)
$\mathcal{L}(\mathcal{L}DPC,\mathcal{L}UPC)$	0.519***	0.662***	0.559***	0.457***
$oldsymbol{ ho}_3\Big(oldsymbol{\mu}_i^{DPC},oldsymbol{\mu}_i^{UPC}\Big)$	(0.013)	(0.009)	(0.009)	(0.011)
$oldsymbol{ ho}_4{\left(oldsymbol{arepsilon}_i,oldsymbol{ u}_i^{ET} ight)}$	0.381***	0.370**	0.334**	0.304**
$P_4(\mathbf{z}_i, \mathbf{v}_i)$	(0.100)	(0.115)	(0.104)	(0.106)
$oldsymbol{ ho}_{5}ig(oldsymbol{v}_{i}^{ET},oldsymbol{\mu}_{i}^{DPC}ig)$	0.028	0.011	0.007	-0.001
$\rho_{5}(\mathbf{r}_{i}, \mathbf{p}_{i})$	(0.030)	(0.035)	(0.035)	(0.035)
$oldsymbol{ ho}_6 \Big(oldsymbol{v}_i^{ET}, oldsymbol{\mu}_i^{UPC}\Big)$	0.087	0.031	0.046^{+}	0.044^{*}
	(0.080)	(0.030)	(0.026)	(0.022)
Observations	4,835	4,835	4,835	4,835
AIC	75,811.68	38,309.13	49,880.09	65,846.92
DIC	7642506	20 (22 24	50.204.25	66 104 05
BIC	76,135.86	38,633.31	50,204.27	66,184.07
	1847.64***	1399.62***	1363.54***	1062.73***
Wald Outcome Model Test Statistic	[0.000]	[0.000]	[0.000]	[0.000]
	[0.000]	[0.000]	[0.000]	[0.000]
	2700.58***	1529.91***	1403.42***	1210.69***
Joint F Test for Instrument Validity (DPC)	[0.000]	[0.000]	[0.000]	[0.000]
	[0.000]	[0.000]	[0.000]	[0.000]
V	327.15***	1621.60***	1773.06***	1639.64***
Joint F Test for Instrument Validity (UPC)	[0.000]	[0.000]	[0.000]	[0.000]
	14.38**	13.95**	13.83**	13.57**
Joint F Test for Instrument Validity (ET)	[0.006]	[0.007]	[0.007]	[800.0]

TABLE E3

Full Information Maximum Likelihood (FIML) Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I]

(Heterogeneous Treatment Effects: Low Tier/High Tier Agency Positions)

Variable	Model 1 [Seat Margin]	Model 2 [Uniform]	Model 3 [Euclidian]	Model 4 [Manhattan]
President CF Score — Executive Nominee CF Score				
Boundary Intercept Shift Divided versus Unified Partisan Control (Lower-Echelon)	0.053 (0.067)	-0.007 (0.075)	0.023 (0.065)	0.019 (0.088)
Boundary Intercept Shift Divided versus Unified Partisan Control (Upper-Echelon)	0.022 (0.089)	-0.027 (0.088)	0.020 (0.077)	-0.007 (0.080)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Lower-Echelon)	0.055*** (0.009)	0.425*** (0.116)	0.395* (0.175)	0.064 (0.266)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Upper-Echelon)	0.059*** (0.011)	0.436*** (0.119)	0.403* (0.178)	0.071 (0.266)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Lower-Echelon)	-0.052*** (0.010)	-0.032 (0.067)	-0.087 (0.080)	0.030 (0.102)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Upper-Echelon)	-0.049*** (0.009)	-0.007 (0.073)	-0.082 (0.084)	0.031 (0.104)
President-Agency Ideological Alignment (Lower-Echelon) President-Agency Ideological Alignment	-0.142*** (0.030) -0.009	-0.128^{***} (0.029) -0.009	-0.131^{***} (0.029) -0.008	-0.129^{***} (0.031) -0.009
(Upper-Echelon) President-Agency Ideological Opposed (Lower-Echelon)	(0.053) 0.057+ (0.034)	(0.056) 0.029 (0.047)	(0.056) 0.029 (0.048)	(0.055) 0.034 (0.054)
President-Agency Ideological Opposed (Upper-Echelon) Executive Agency	-0.026 (0.053) $-0.143***$	-0.040 (0.058) $-0.152***$	-0.040 (0.058) -0.151 ***	-0.038 (0.060) -0.149 ***
(Lower-Echelon) Executive Agency (Upper-Echelon)	(0.032) -0.294*** (0.053)	(0.034) -0.299*** (0.055)	(0.034) $-0.297***$ (0.056)	(0.034) -0.285^{***} (0.054)
Major Policy Agency (Lower-Echelon) Major Policy Agency	0.031 (0.031) -0.019	0.035 (0.032) -0.019	0.033 (0.033) -0.020	0.034 (0.032) -0.017
(Upper-Echelon) Lower-Echelon	(0.049) 1.260***	(0.050) 1.149***	(0.050) 1.331***	(0.053) 0.934
Upper-Echelon	(0.090) 1.235*** (0.153)	(0.123) 1.039*** (0.152)	(0.269) 1.236*** (0.274)	(0.767) 0.803 (0.784)

<u>Senate Partisan Seat Margin/Distance:</u> <u>Divided Partisan Control</u>				
Nuclear Option [+]	-0.253	0.134***	0.098	-0.226
1 [-1	(0.244)	(0.045)	(0.073)	(0.859)
Federal Vacancies Reform Act [+]	0.230	0.075+	0.125*	0.157
	(0.168)	(0.040)	(0.063)	(0.177)
Civilian Nominations [+]	-0.000006 (0.0008)	0.00007**	0.000007	-0.00009
	0.036**	(0.00002) 0.005 ⁺	(0.00005) 0.007	(0.0001) 0.019
Chair Experience [+]	(0.012)	(0.003^{+})	(0.005)	(0.019)
	-0.806***	-0.213***	-0.297***	-0.687^*
Prior Confirmation [—]	(0.180)	-0.213 (0.041)	(0.075)	(0.286)
	37.854***	2.588***	3.967***	7.999**
Senate Party Polarization [+]	(0.890)	(0.183)	(0.301)	(1.612)
_	-32.528***	-2.873***	-4.072^{***}	-7.872**
Intercept	(0.756)	(0.170)	(0.302)	(0.793)
Senate Partisan Seat Margin/Distance:	, ,		,	
<u>Unified Partisan Control</u>				
No along Oution []	-3.649***	-0.223***	-0.313**	-0.150
Nuclear Option [—]	(0.703)	(0.064)	(0.104)	(0.273)
Federal Vacancies Reform Act [+]	-0.189	0.326***	0.422***	0.809**
rederal vacancies Reform Act [+]	(0.390)	(0.041)	(0.077)	(0.180)
Civilian Nominations [—]	-0.001^{***}	-0.0001^{***}	-0.0002^{***}	-0.001^{**}
Civinan Nonmacions []	(0.0001)	(0.00001)	(0.00003)	(0.00007
Chair Experience [—]	0.020	-0.001	-0.002	-0.009
chan Experience []	(0.017)	(0.002)	(0.003)	(0.009)
Prior Confirmation [—]	-1.212^{***}	-0.180^{***}	-0.300^{***}	-0.549**
	(0.306)	(0.032)	(0.050)	(0.155)
Senate Party Polarization [+]	27.815***	4.386***	8.133***	16.904**
, [.]	(2.259)	(0.271)	(0.459)	(1.072)
Intercept	-13.460*** (1.567)	-2.076^{***} (0.194)	-3.999*** (0.302)	-8.553** (0.718)
Upper-Echelon Executive Nominees	(1.557)	(0.131)	(0.002)	(01, 10)
P. 1	0.036	0.048	0.045	0.049
Female	(0.073)	(0.075)	(0.074)	(0.073)
Federal Vacancies Reform Act	0.859***	0.855***	0.856***	0.860***
rederal vacancies Reform Act	(0.215)	(0.213)	(0.213)	(0.210)
Civilian Naminations	-0.00005	-0.00004	-0.00004	-0.00005
Civilian Nominations	(0.00004)	(0.00004)	(0.00004)	(0.00004
First On Davis	0.887***	0.936***	0.925***	0.912***
First 90 Days	(0.166)	(0.157)	(0.158)	(0.157)
Intercept	-0.528^*	-0.555^*	-0.544^{*}	-0.509^*
mercept	(0.217)	(0.225)	(0.220)	(0.225)

Equation Residual Variances and Correlations:				
$oldsymbol{\sigma}_{oldsymbol{arepsilon}_i}$	0.520***	0.563***	0.676***	0.544**
σ_i	(0.023)	(0.033)	(0.145)	(0.191)
	12.869***	0.531***	1.582***	7.591***
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{DPC}}$	(0.309)	(0.022)	(0.074)	(0.383)
_	37.073***	0.491***	1.475***	7.291***
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{UPC}}$	(0.878)	(0.009)	(0.031)	(0.177)
- (DPC \	-0.087*	-0.355***	-0.515***	-0.267
$oldsymbol{ ho}_{\!1}\!\left(\!oldsymbol{arepsilon}_{\!i},oldsymbol{\mu}_{\!i}^{DPC} ight)$	(0.037)	(0.080)	(0.150)	(0.770)
- (UPC)	0.178**	-0.233***	-0.215^{***}	-0.220***
$oldsymbol{ ho}_2 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC}\Big)$	(0.063)	(0.051)	(0.041)	(0.058)
a (,,DPC ,,UPC)	0.519***	0.662***	0.559***	0.457***
$oldsymbol{ ho}_3\Big(oldsymbol{\mu}_i^{DPC},oldsymbol{\mu}_i^{UPC}\Big)$	(0.013)	(0.009)	(0.009)	(0.010)
$oldsymbol{ ho}_4{\left(oldsymbol{arepsilon}_i,oldsymbol{v}_i^{ET} ight)}$	0.122+	0.171^{*}	0.154*	0.221**
$P_4(\mathbf{z}_i, \mathbf{v}_i)$	(0.065)	(0.076)	(0.063)	(0.071)
$oldsymbol{ ho}_5ig(oldsymbol{v}_i^{ET},oldsymbol{\mu}_i^{DPC}ig)$	-0.003	0.014	-0.006	-0.008
$P_5(v_i, \mu_i)$	(0.024)	(0.029)	(0.028)	(0.032)
$oldsymbol{ ho}_6 \left(oldsymbol{v}_i^{ET}, oldsymbol{\mu}_i^{UPC} ight)$	0.002	-0.038	-0.027	-0.022
	(0.027)	(0.027)	(0.024)	(0.021)
Observations	4,835	4,835	4,835	4,835
AIC	71,665.23	34,126.07	45,710.02	61,699.91
BIC	71,950.51	34,411.35	45,995.30	61,998.16
W. 110	2758.90***	1927.02***	1463.00***	1946.58***
Wald Outcome Model Test Statistic	[0.000]	[0.000]	[0.000]	[0.000]
	[]	[0.000]	[0.000]	[ologo]
A CONTRACT OF THE CONTRACT OF	2478.23***	1285.54***	1089.43***	1023.89***
Joint F Test for Instrument Validity (DPC)	[0.000]	[0.000]	[0.000]	[0.000]
			_	
Joint F Test for Instrument Validity (UPC)	356.13***	1532.01***	1712.26***	1556.83***
joiner reserve instrument valuaty (or c)	[0.000]	[0.000]	[0.000]	[0.000]
	126.26***	133.38***	131.58***	129.74***
Joint F Test for Instrument Validity (ET)	[0.000]	[0.000]	[0.000]	[0.000]

TABLE E4
Full Information Maximum Likelihood (FIML) Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I] (Heterogeneous Treatment Effects: Independent/Executive Agency Positions)

Variable	Model 1 [Seat Margin]	Model 2 [Uniform]	Model 3 [Euclidian]	Model 4 [Manhattan]
President CF Score — Executive Nominee CF Score				
Boundary Intercept Shift Divided versus Unified Partisan Control (Independent Agency)	-0.042 (0.093)	0.141 (0.104)	0.149 (0.091)	0.119 (0.113)
Boundary Intercept Shift Divided versus Unified Partisan Control (Executive Agency)	0.097+ (0.058)	-0.082 (0.071)	-0.042 (0.064)	-0.050 (0.081)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Independent Agency)	0.069*** (0.010)	0.355*** (0.128)	0.374* (0.187)	0.059 (0.353)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Executive Agency)	0.049*** (0.009)	0.465*** (0.110)	0.426* (0.181)	0.078 (0.354)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Independent Agency)	-0.053*** (0.011)	-0.038 (0.088)	-0.094 (0.094)	0.029 (0.137)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Executive Agency)	-0.052*** (0.009)	-0.059 (0.074)	-0.108 (0.085)	0.021 (0.140)
President-Agency Ideological Alignment (Independent Agency) President-Agency Ideological Alignment	0.015 (0.079) -0.110***	0.023 (0.082) -0.100***	0.022 (0.081) -0.102**	0.022 (0.083) -0.100***
(Executive Agency) President-Agency Ideological Opposed (Independent Agency)	(0.031) -0.044 (0.096)	(0.032) -0.035 (0.102)	(0.033) -0.035 (0.101)	(0.035) -0.026 (0.107)
President-Agency Ideological Opposed (Executive Agency) Upper-Echelon Position	0.031 (0.034) 0.064	0.005 (0.041) 0.062	0.004 (0.043) 0.063	0.008 (0.047) 0.061
(Independent Agency) Upper-Echelon Position (Executive Agency)	(0.057) -0.089*** (0.023)	(0.058) -0.083*** (0.025)	(0.058) $-0.078**$ (0.025)	(0.058) -0.071^{**} (0.024)
Major Policy Agency (Independent Agency) Major Policy Agency	0.041 (0.044) -0.005	0.051 (0.045) -0.017	0.050 (0.045) -0.019	0.048 (0.046) -0.010
(Executive Agency) Independent Agency	(0.029) 1.367*** (0.106)	(0.029) 0.984*** (0.135)	(0.031) 1.208*** (0.276)	(0.033) 0.854 (0.997)
Executive Agency	1.027*** (0.092)	1.034*** (0.131)	1.224*** (0.284)	0.780 (1.041)

<u>Senate Partisan Seat Margin/Distance:</u> <u>Divided Partisan Control</u>				
Nuclear Ontion [1]	-0.243	0.135**	0.100	-0.207
Nuclear Option [+]	(0.260)	(0.047)	(0.072)	(1.125)
Federal Vacancies Reform Act [+]	0.236	0.075+	0.123+	0.161
rederal vacancies Reform Act [+]	(0.171)	(0.043)	(0.067)	(0.191)
Civilian Nominations [+]	-0.000005	0.00007^*	0.000002	-0.0001
Civilian Nonlinations [+]	(800008)	(0.00003)	(0.00005)	(0.0001)
Chair Experience [+]	0.036**	0.005 +	0.007	0.019
Ghan Experience [1]	(0.012)	(0.003)	(0.005)	(0.012)
Prior Confirmation [—]	-0.815^{***}	-0.213^{***}	-0.299^{***}	-0.694^{*}
riior commination []	(0.177)	(0.042)	(0.077)	(0.336)
Senate Party Polarization [+]	37.765***	2.593***	3.962***	7.935*
	(0.901)	(0.181)	(0.301)	(2.040)
Intercept	-32.467***	-2.872***	-4.050***	-7.814**
<u> </u>	(0.713)	(0.152)	(0.283)	(1.030)
Senate Partisan Seat Margin/Distance: <u>Unified Partisan Control</u>				
Nuclear Option [—]	-3.857***	-0.241***	-0.351***	-0.221
Nuclear Option [—]	(0.859)	(0.066)	(0.107)	(0.276)
Federal Vacancies Reform Act [+]	-0.265	0.321***	0.409***	0.789*
reactar vacancies reform her [1]	(0.409)	(0.045)	(0.083)	(0.189)
Civilian Nominations [—]	-0.001^{***}	-0.0001^{***}	-0.0002^{***}	-0.001*
Givinan Hommadons []	(0.0001)	(0.00002)	(0.00003)	(0.00007)
Chair Experience [-]	0.020	-0.001	-0.002	-0.009
Ghan Experience []	(0.017)	(0.003)	(0.003)	(0.009)
Prior Confirmation [—]	-1.073^{***}	-0.182^{***}	-0.292^{***}	-0.532^*
rrior communation []	(0.288)	(0.034)	(0.054)	(0.179)
Senate Party Polarization [+]	29.142***	4.452***	8.317***	17.241*
	(2.766)	(0.289)	(0.500)	(1.161)
Intercept	-14.359*** (1.790)	-2.117***	-4.115***	-8.750**
Executive Agency Nominees	(1.789)	(0.196)	(0.312)	(0.761)
G ,	-0.131	-0.128	-0.129	-0.121
Female	(0.085)	(0.086)	(0.086)	(0.083)
	2.362***	2.337***	2.350***	2.348*
Federal Vacancies Reform Act	(0.238)	(0.232)	(0.232)	(0.232)
	-0.0001+	-0.000+	-0.0001 ⁺	-0.000^{*}
Civilian Nominations	(0.00006)	(0.000)	(0.00005)	-0.000 (0.000)
	1.022***	1.083***	1.055***	1.073**
First 90 Days	(0.222)	(0.218)	(0.222)	(0.218)
	0.564+	0.550+	0.562+	0.571+
Intercept	(0.310)	(0.309)	(0.311)	(0.306)

Equation Residual Variances and Correlations:				
$oldsymbol{\sigma}_{oldsymbol{arepsilon}_i}$	0.521***	0.548***	0.672***	0.531+
<i>-1</i>	(0.025)	(0.029)	(0.152)	(0.272)
_	12.869***	0.531***	1.582***	7.592***
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{DPC}}$	(0.309)	(0.022)	(0.074)	(0.391)
~	37.089***	0.491***	1.475***	7.290***
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{UPC}}$	(0.888)	(0.009)	(0.031)	(0.177)
a (a uDPC)	-0.082^*	-0.344***	-0.519***	-0.276
$oldsymbol{ ho}_{ m l} \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{DPC}\Big)$	(0.038)	(0.080)	(0.154)	(1.025)
$oldsymbol{ ho}_2 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC}\Big)$	0.193**	-0.208***	-0.197^{***}	-0.201**
$oldsymbol{ ho}_2ig(oldsymbol{arepsilon}_i,oldsymbol{\mu}_iig)$	(0.061)	(0.053)	(0.042)	(0.067)
$oldsymbol{ ho}_3\Big(oldsymbol{\mu}_i^{DPC},oldsymbol{\mu}_i^{UPC}\Big)$	0.519***	0.662***	0.559***	0.457***
$P_3(\mu_i, \mu_i)$	(0.013)	(0.009)	(0.009)	(0.010)
$oldsymbol{ ho}_4{\left(oldsymbol{arepsilon}_i,oldsymbol{v}_i^{ET} ight)}$	0.105^{*}	0.036	0.048	0.094
$P_4(o_l, v_l)$	(0.050)	(0.065)	(0.056)	(0.059)
$oldsymbol{ ho}_5 \Big(oldsymbol{v}_i^{ET}, oldsymbol{\mu}_i^{DPC}\Big)$	-0.014	0.011	-0.006	-0.010
$PS(r_i, P_i)$	(0.032)	(0.042)	(0.038)	(0.040)
$oldsymbol{ ho}_6 \Big(oldsymbol{v}_i^{ET}, oldsymbol{\mu}_i^{UPC}\Big)$	0.107+	0.019	0.051	0.044
, ,	(0.056)	(0.047)	(0.049)	(0.045)
Observations	4,835	4,835	4,835	4,835
AIC	70,684.29	33,180.46	44,750.11	60,761.72
BIC	70,969.57	33,465.74	45,035.39	61,047.00
W.110	3694.77***	2763.94***	1940.65***	3227.02***
Wald Outcome Model Test Statistic	[0.000]	[0.000]	[0.000]	[0.000]
	[]	[oloco]	[0.000]	[oloco]
I COMPANY (DDC)	2648.51***	1392.65***	1086.27***	1027.89***
Joint F Test for Instrument Validity (DPC)	[0.000]	[0.000]	[0.000]	[0.000]
	,	. ,	. ,	. ,
Joint E Tost for Instrument Validity (UDC)	367.27***	1557.82***	1701.45***	1506.62***
Joint F Test for Instrument Validity (UPC)	[0.000]	[0.000]	[0.000]	[0.000]
	121.98***	125.60***	125.23***	127.32***
Joint F Test for Instrument Validity (ET)	[0.000]	[0.007]	[0.000]	[0.000]

TABLE E5

Full Information Maximum Likelihood (FIML) Model Estimates of Presidential Appointments to Executive Branch Positions, 1987-2021 [Reagan—Trump, I] (Heterogeneous Treatment Effects: Non-Major Policy/Major Policy Agency Positions)

Variable	Model 1	Model 2	Model 3	Model 4
	[Seat Margin]	[Uniform]	[Euclidian]	[Manhattan]
President CF Score — Executive Nominee CF Score				_
Boundary Intercept Shift Divided versus Unified Partisan Control (Non-Major Policy Agency)	0.135 (0.102)	0.189+ (0.107)	0.205* (0.093)	0.173 (0.599)
Boundary Intercept Shift Divided versus Unified Partisan Control (Major Policy Agency)	0.008	-0.042	-0.026	-0.035
	(0.059)	(0.067)	(0.061)	(0.306)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Non-Major Policy Agency)	0.055***	0.320*	0.378+	-0.156
	(0.013)	(0.133)	(0.194)	(1.780)
Senate Partisan Seat Margin/Distance: Divided Partisan Control (Major Policy Agency)	0.055***	0.477***	0.444*	-0.132
	(0.009)	(0.113)	(0.187)	(1.766)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Non-Major Policy Agency)	-0.057***	-0.045	-0.119	0.139
	(0.011)	(0.083)	(0.098)	(0.715)
Senate Partisan Seat Margin/Distance: Unified Partisan Control (Major Policy Agency)	-0.051*** (0.009)	-0.109 (0.070)	-0.127 (0.090)	0.140 (0.723)
President-Agency Ideological Alignment	-0.088	-0.111	-0.102	-0.095
(Non-Major Policy Agency)	(0.064)	(0.068)	(0.066)	(0.088)
President-Agency Ideological Alignment	-0.076*	-0.065+	-0.067+	-0.053
(Major Policy Agency) President-Agency Ideological Opposed (Non-Major Policy Agency)	(0.035) -0.001 (0.064)	(0.034) 0.009 (0.070)	(0.035) 0.017 (0.072)	(0.045) 0.032 (0.081)
President-Agency Ideological Opposed	0.037	0.009	0.008	0.029
(Major Policy Agency)	(0.038)	(0.043)	(0.045)	(0.078)
Upper-Echelon Position	0.024	0.038	0.035	0.074
(Non-Major Policy Agency) Upper-Echelon Position (Major Policy Agency)	(0.073) -0.067^{**} (0.024)	(0.072) -0.060^* (0.025)	(0.071) -0.056^* (0.026)	(0.224) -0.037 (0.125)
Executive Agency (Non-Major Policy Agency) Executive Agency	-0.159^{***} (0.044) -0.224^{***}	-0.167^{***} (0.044) -0.245^{***}	-0.166^{***} (0.045) -0.243^{***}	-0.142^* (0.063) -0.174
(Major Policy Agency) Non-Major Policy Agency	(0.038)	(0.040)	(0.040)	(0.124)
	1.247***	0.926***	1.196***	0.767
	(0.130)	(0.136)	(0.267)	(4.699)
Major Policy Agency	1.303***	1.277***	1.469***	0.083
	(0.095)	(0.127)	(0.293)	(5.148)

Senate Partisan Seat Margin/Distance: Divided Partisan Control				
Nuclear Option [+]	-0.214 (0.254)	0.140*** (0.047)	0.106 (0.071)	-0.626 (1.928)
Federal Vacancies Reform Act [+]	0.235 (0.170)	0.070+ (0.042)	0.106+ (0.064)	0.082 (0.966)
Civilian Nominations [+]	-0.000001 (0.00008)	0.00007* (0.00003)	-0.0000003 (0.00005)	-0.0001 (0.001)
Chair Experience [+]	0.036** (0.012)	0.005+ (0.003)	0.007 (0.005)	0.010 (0.121)
Prior Confirmation [—]	-0.803^{***} (0.182)	-0.215^{***} (0.041)	-0.296^{***} (0.073)	-0.674 (1.352)
Senate Party Polarization [+]	37.664*** (0.876)	2.571*** (0.180)	3.965*** (0.295)	8.825 (7.760)
Intercept	-32.423*** (0.720)	-2.857*** (0.158)	-4.044*** (0.283)	-8.051** (1.325)
<u>Senate Partisan Seat Margin/Distance:</u> <u>Unified Partisan Control</u>				
Nuclear Option [—]	-3.741*** (0.796)	-0.236*** (0.065)	-0.331** (0.106)	-0.195 (1.333)
Federal Vacancies Reform Act [+]	-0.176 (0.399)	0.320*** (0.043)	$0.411^{***} $ (0.079)	0.867+ (0.457)
Civilian Nominations [-]	-0.001^{***} (0.0001)	-0.0001^{***} (0.00002)	-0.0002^{***} (0.00003)	-0.001^{*} (0.00009
Chair Experience [—]	0.018 (0.018)	-0.001 (0.003)	-0.002 (0.003)	-0.005 (0.009)
Prior Confirmation [—]	-1.204*** (0.305)	-0.186^{***} (0.033)	-0.307^{***} (0.052)	-0.619 (0.511)
Senate Party Polarization [+]	28.199*** (2.561)	4.412*** (0.267)	8.179*** (0.461)	16.638* (3.681)
Intercept	-13.694*** (1.689)	-2.093*** (0.186)	-4.023*** (0.295)	-8.439* (2.156)
Major Policy Agency Nominees				
Female	-0.148^{*} (0.075)	-0.153^{*} (0.076)	-0.153* (0.077)	-0.028 (0.081)
Federal Vacancies Reform Act	1.207*** (0.321)	1.195*** (0.315)	1.199*** (0.316)	0.974* (0.396)
Civilian Nominations	-0.0001^{***} (0.00005)	-0.0001^{***} (0.00005)	-0.000^{***} (0.000)	-0.0001
First 90 Days	0.199 (0.227)	0.266 (0.228)	0.258 (0.229)	0.247 (0.257)
Intercept	1.042*** (0.264)	1.047*** (0.275)	1.043*** (0.276)	1.023* (0.287)

Equation Residual Variances and Correlations:				
$oldsymbol{\sigma}_{oldsymbol{arepsilon}_i}$	0.521*** (0.025)	0.549*** (0.029)	0.689*** (0.165)	0.785 (3.143)
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{DPC}}$	12.870*** (0.309)	0.531*** (0.022)	1.583*** (0.074)	7.590*** (0.443)
$oldsymbol{\sigma}_{oldsymbol{\mu}_i^{U\!P\!C}}$	37.077*** (0.881)	0.491*** (0.009)	1.475*** (0.031)	7.293*** (0.171)
$oldsymbol{ ho}_{ m l} \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{DPC}\Big)$	-0.073^* (0.036)	-0.342*** (0.082)	-0.529^{***} (0.152)	0.254 (3.933)
$oldsymbol{ ho}_2 \Big(oldsymbol{arepsilon}_i, oldsymbol{\mu}_i^{UPC} \Big)$	0.198** (0.061)	-0.186^{***} (0.053)	-0.183^{***} (0.044)	-0.235 (0.712)
$ ho_3\left(oldsymbol{\mu}_i^{DPC},oldsymbol{\mu}_i^{UPC} ight)$	0.519*** (0.013)	0.662*** (0.009)	0.559*** (0.009)	0.456*** (0.020)
$oldsymbol{ ho}_4{\left(oldsymbol{arepsilon}_i,oldsymbol{v}_i^{ET} ight)}$	0.075 (0.073)	0.003 (0.075)	0.032 (0.072)	0.597 (0.953)
$ ho_{5}\left(oldsymbol{v}_{i}^{ET},oldsymbol{\mu}_{i}^{DPC} ight)$	-0.046 (0.030) 0.058	-0.040 (0.037) -0.034	-0.054 (0.034) -0.022	-0.036 (0.108) -0.033
$oldsymbol{ ho}_6 \left(oldsymbol{v}_i^{ET}, oldsymbol{\mu}_i^{UPC} ight)$	(0.048)	(0.038)	(0.039)	(0.065)
Observations	4,835	4,835	4,835	4,835
AIC	70,626.94	33,106.93	44,683.16	60,686.24
BIC	70,912.22	33,392.21	44,968.44	60,971.52
Wald Outcome Model Test Statistic	4194.61*** [0.000]	2262.58*** [0.000]	1589.02*** [0.000]	434.98*** [0.000]
Joint F Test for Instrument Validity (DPC)	2632.70*** [0.000]	1250.01*** [0.000]	1000.18*** [0.000]	777.13*** [0.000]
Joint F Test for Instrument Validity (UPC)	349.11*** [0.000] 21.76***	1530.62*** [0.000] 21.56***	1692.64*** [0.000] 20.88***	1380.28*** [0.000] 12.04***
Joint F Test for Instrument Validity (ET)	[0.000]	[0.000]	[0.000]	[0.000]

- viii The Congressional Directory, which includes Senate Committee Information for each Congress, was employed to create a list of all committee members on relevant committees and their experience between 1987-2021.
- ix Members full experience in the Senate was calculated from member bios using in Congress.gov. "Members." https://www.congress.gov. (For Senate Member Bio Information).
- ^x The Biographical Directory of the United States Congress". https://bioguideretro.congress.gov. was employed to assess Senate Member Bio Information on those leaving Congress early or joining a Congress in the middle of a session and understand who was serving on committees.
- xi Additionally, information from Senate.gov was employed to determine which Senators were appointed during the middle of terms and who they replaced Senate.gov "Appointed Senators (1913-Present)". https://www.senate.gov/senators/AppointedSenators.htm. Retrieved on August 04, 2020; and members who changed parties during their tenures: Senate.gov "Senators Who Changed Parties During Senate Service (Since 1890)."

https://www.senate.gov/artandhistory/history/common/briefing/senators changed parties.htm. Retrieved on August 04, 2020. Changes occurring within a Congress were checked the Congressional Directory in the "Notes" section.

xii DW-NOMINATE scores were downloaded from VoteView on May 4, 2020—source: Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, and Luke Sonnet. 2020. *Voteview: Congressional Roll-Call Votes Database*. https://voteview.com/. Retrieved on May 04, 2020. NOMINATE scores for Senators and Presidents between 1987-2021 are employed to construct a measure of the absolute distance between the Senate Committee members and the President.

¹ Bonica, Adam. 2024. Database on Ideology, Money in Politics, and Elections: Public version 4.0 [Computer file]. Stanford, CA: Stanford University Libraries. https://data.stanford.edu/dime.

ii https://www.senate.gov/history/partydiv.htm. For the other distance measures that we utilize, we follow: Feigenbaum, James J., Alexander Fouirnaies, and Andrew B. Hall. 2017. "The Majority-Party Disadvantage: Revising Theories of Legislative Organization." *Quarterly Journal of Political Science*. 12(3): 269-300.

iii Clinton, Joshua D., and David E. Lewis. 2008. "Expert Opinion, Agency Characteristics, and Agency Preferences." *Political Analysis*. 16(1): 3-20.

iv Ostrander, Ian. 2016. "The Logic of Collective Inaction: Senatorial Delay in Executive Nominations." *American Journal of Political Science*. 60(4): 1063-1076.

v This information was obtained for the agencies, for each nominee, from congress.gov.

vi https://www.congress.gov

vii https://www.senate.gov/legislative/ResumesofCongressionalActivity1947present.htm